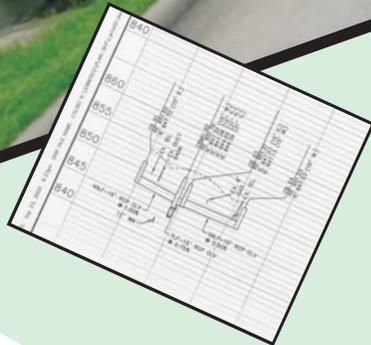


2004 MUNICIPAL SCREENING BOARD DATA



Storm Sewer



Unit Prices

JUNE, 2004



Memo

State Aid for Local Transportation
395 John Ireland Boulevard
Mail Stop 500
St. Paul, MN 55155-1899

Office Tel.: 651 296-3011
Fax: 651 282-2727

Date: May 4, 2004

To: Municipal Engineers
City Clerks

From: R. Marshall Johnston *Marshall*
Manager, Municipal State Aid Needs Unit

Subject: 2004 Municipal Screening Board Data booklet

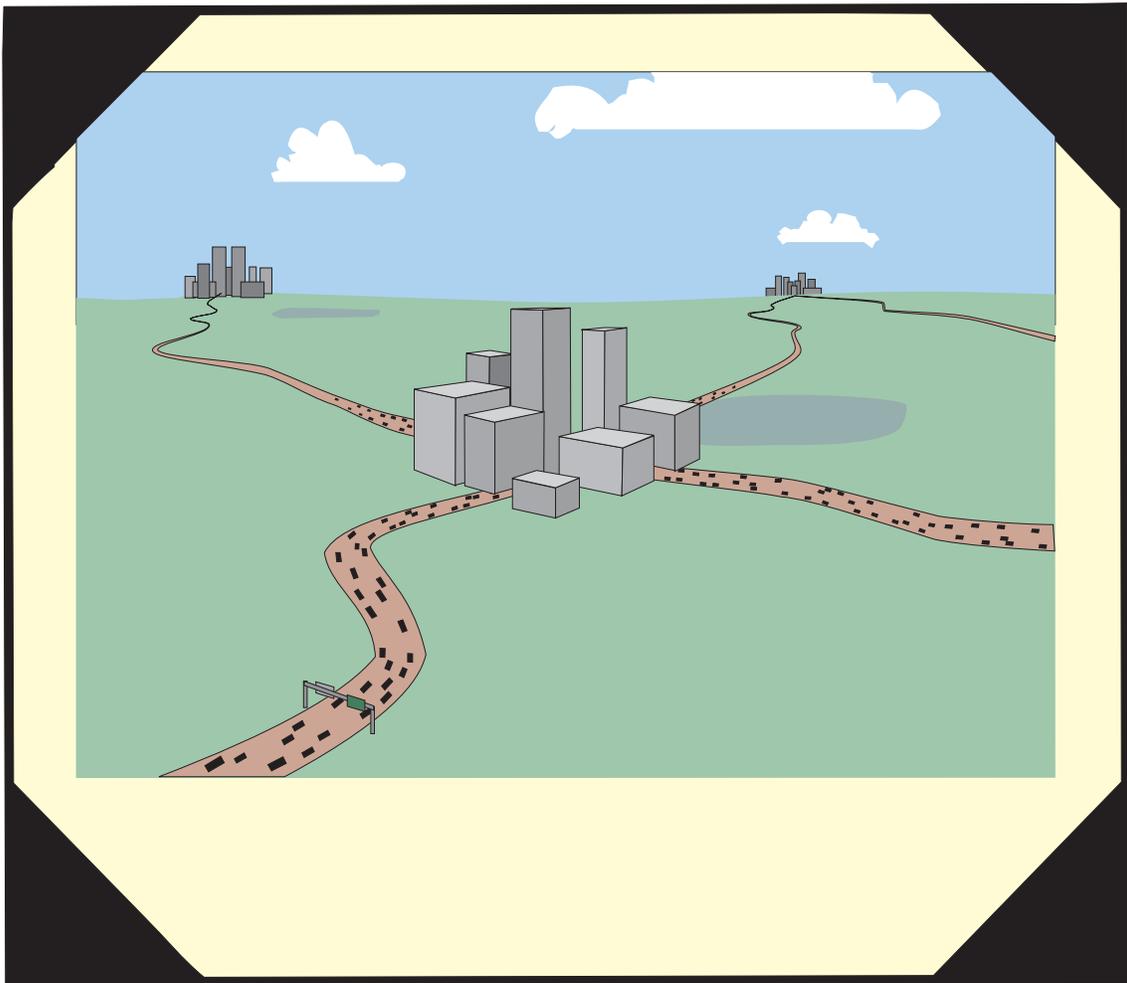
Enclosed is a copy of the June 2004 Municipal Screening Board Data booklet.

The data included in this report will be used by the Municipal Board at its June 1st and 2nd, 2004 meeting to establish unit prices for the 2004 Needs Study that is used to compute the 2005 apportionment. The Board will also review other recommendations of the Needs Study Subcommittee as outlined in their minutes. The Needs Study Subcommittee minutes are found on pages 17 and 18.

Should you have any suggestions or recommendations regarding the data in this publication, please refer them to your District Screening Board Representative or call me at (651) 296-6677.

This report is distributed to all Municipal Engineers and when the municipality engages a consulting engineer, either a copy is also sent to the municipal clerk or a notice is emailed stating that it is available for either printing or viewing at www.dot.state.mn.us/stateaid.

This report is also available for either printing or viewing on the State Aid web site. Go to www.dot.state.mn.us/stateaid and follow the links to the report.



If you have a scenic picture or photo, new or historical that represents your city, that could be used for a future book cover, please send it to:

Mark Channer
MSAS Needs Unit
395 John Ireland Blvd. MS 500
St. Paul, MN 55155
Phone: (651) 282-2657
Fax: (651) 282-2727
Mark.Channer@ dot.state.mn.us

Maybe you don't like some of the covers. Maybe you just want to show off your city. For any reason, if you would like to see something different on the cover of your MSAS books, we would appreciate your ideas!

Thank you to those that have already contributed!

2004 MUNICIPAL SCREENING BOARD

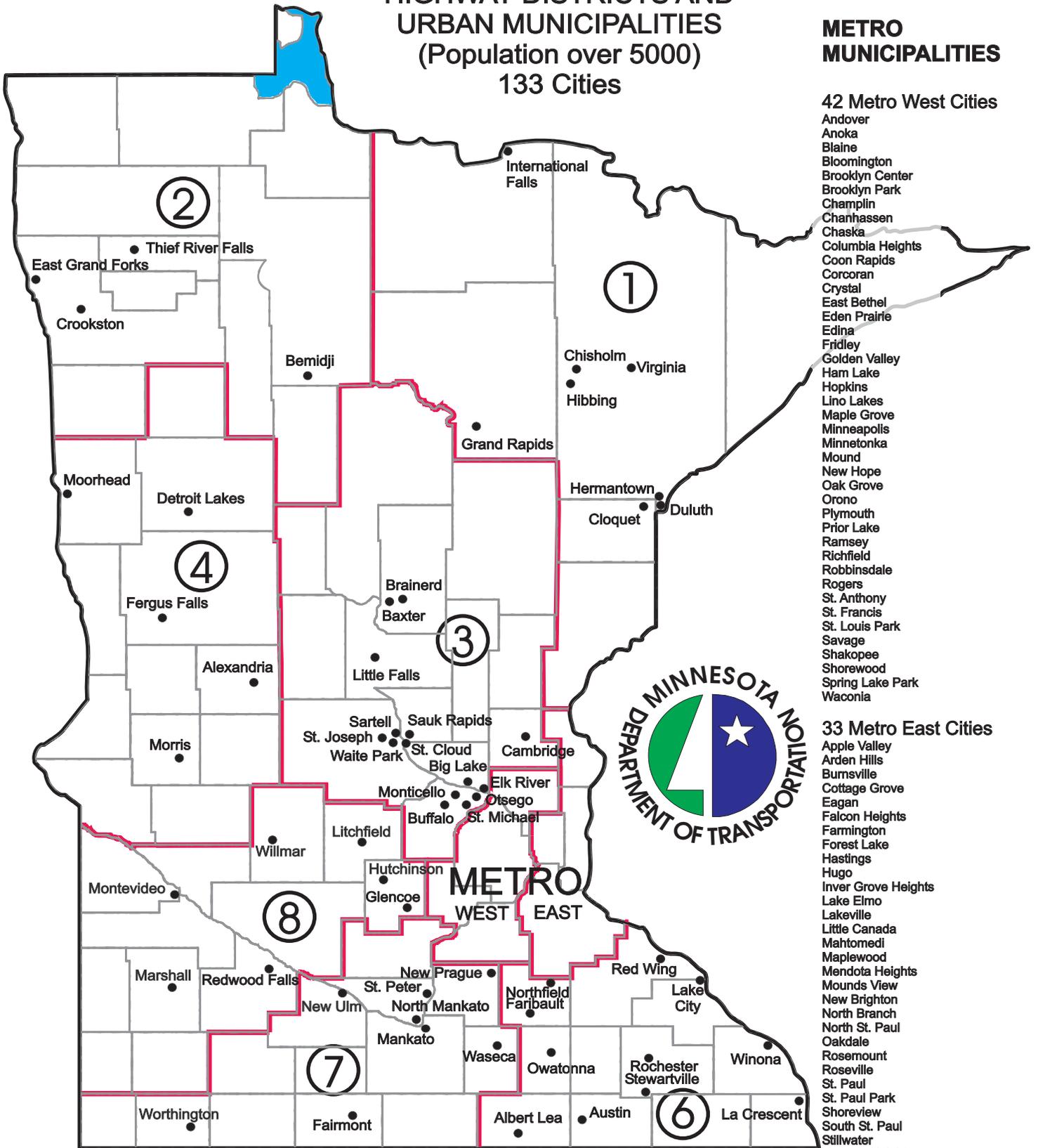
TABLE OF CONTENTS

Map of Highway Districts and Urban Municipalities.....	1
2004 Municipal Screening Board.....	2
Subcommittees Appointed by the Commissioner.....	3
Minutes of Screening Board Meeting- October 21 & 22, 2003.....	4-16
Minutes of the Needs Subcommittee - April 13, 2004.....	17-18
Unit Price Recommendations to the 2004 Screening Board.....	19-20
Maintenance Needs History.....	21
<u>MUNICIPAL STATE AID STREET UNIT PRICES AND GRAPHS</u>	22
Unit Price Study.....	24
25 Year Construction Needs for Each Individual Costruction Item.....	25
Excavation.....	26-28
Aggregate Shouldering.....	29-30
Curb & Gutter Removal #2104.....	31-33
Sidewalk Removal #2105.....	34-36
Concrete Pavement Removal #2106.....	37-38
Tree Removal #2101.....	39-42
Class 5 Gravel Base #2211.....	43-45
Bituminous.....	46-51
Curb & Gutter Construction #2531.....	52-54
Sidewalk Construction #2521.....	55-57
2003 Unit Prices by District.....	58-59
Previous St. Sewer, Lighting, Signals, Railroad Costs.....	60
2003 Storm Sewer Costs Mn/DOT Hydraulics Section.....	61
Railroad Crossing Costs Mn/DOT Railroad Operations.....	62
2004 Special Drainage Costs Mn/DOT Estimating Unit.....	63-64
2004 CSAH Gravel Surface Unit Price.....	65-66
2003 Bridge Construction Costs	67-73
Railroad Bridges Over Highways.....	74
<u>OTHER TOPICS</u>	75
Five Year History of Storm Sewer Needs.....	77
Storm Sewer Needs packet for Needs Study Subcommittee.....	78-92
General Fund Advances.....	94-98
Relationship of Construction Balance to Construction Allotment.....	99-100
Apportionment Rankings.....	101-103
Local Road Research Board Report.....	104
County Highway Turnback Policy.....	105-106
Status of Municipal Traffic Counting.....	107-109
Current Resolutions of the Municipal Screening Board.....	110-119

STATE OF MINNESOTA

HIGHWAY DISTRICTS AND URBAN MUNICIPALITIES (Population over 5000) 133 Cities

METRO MUNICIPALITIES



42 Metro West Cities

- Andover
- Anoka
- Blaine
- Bloomington
- Brooklyn Center
- Brooklyn Park
- Champlin
- Chanhassen
- Chaska
- Columbia Heights
- Coon Rapids
- Corcoran
- Crystal
- East Bethel
- Eden Prairie
- Edina
- Fridley
- Golden Valley
- Ham Lake
- Hopkins
- Lino Lakes
- Maple Grove
- Minneapolis
- Mnetonka
- Mound
- New Hope
- Oak Grove
- Orono
- Plymouth
- Prior Lake
- Ramsey
- Richfield
- Robbinsdale
- Rogers
- St. Anthony
- St. Francis
- St. Louis Park
- Savage
- Shakopee
- Shorewood
- Spring Lake Park
- Waconia

33 Metro East Cities

- Apple Valley
- Arden Hills
- Burnsville
- Cottage Grove
- Eagan
- Falcon Heights
- Farmington
- Forest Lake
- Hastings
- Hugo
- Inver Grove Heights
- Lake Elmo
- Lakeville
- Little Canada
- Mahtomedi
- Maplewood
- Mendota Heights
- Mounds View
- New Brighton
- North Branch
- North St. Paul
- Oakdale
- Rosemount
- Roseville
- St. Paul
- St. Paul Park
- Shoreview
- South St. Paul
- Stillwater
- Vadnais Heights
- West St. Paul
- White Bear Lake
- Woodbury

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JUNE, 2004

2004 MUNICIPAL SCREENING BOARD

screening board stuffScreening Board June 2004.xls

20-Apr-04

OFFICERS			
Chair	Mike Metso	Duluth	(218) 723-3278
Vice Chair	Maria Hagen	St. Louis Park	(952) 924-2687
Secretary	Stephen Gaetz	St. Cloud	(320) 255-7241

MEMBERS				
District	Served	Representative		
1	3	John Suihkonen	Hibbing	(218) 262-3486
2	2	Dave Kildahl	Crookston, T R Falls	(218) 281-6522
3	2	Bret Weiss	Monticello	(763) 541-4800
4	1	Jeff Kuhn	Morris	(320) 762-8149
Metro-West	1	Craig Gray	Anoka	(763) 576-2781
6	1	Jeff Johnson	Owatonna	(507) 444-4350
7	3	Tim Loose	St. Peter	(507) 625-4171
8	2	Dave Berryman	Montevideo	(320) 269-7695
Metro-East	3	Chuck Ahl	Maplewood	(651) 770-4552
(Three Cities		Mike Metso	Duluth	(218) 723-3278
of the		Paul Ogren	Minneapolis	(612) 673-2456
First Class)		Paul Kurtz	Saint Paul	(651) 266-6203

ALTERNATES			
District			
1		Tom Pagel	Grand Rapids (218) 326-7625
2		Brian Freeburg	Bemidji (218) 759-3576
3		Terry Maurer	Elk River (651) 644-4389
4		Robert Zimmerman	Moorhead (218) 299-5390
Metro-West		Sue McDermott	Prior Lake (952) 447-4230
6		Vacant	
7		Fred Salisbury	Waseca (507) 835-9700
8		Glen Olson	Marshall (507) 537-6774
Metro-East		Deb Bloom	Roseville (651) 490-2200

2004 SUBCOMMITTEES

The Screening Board Chair appoints one city Engineer, who has served on the Screening Board, to serve a three year term on the Needs Study Subcommittee.

The past Chair of the Screening Board is appointed to serve a three year term on the Unencumbered Construction Fund Subcommittee.

NEEDS STUDY SUBCOMMITTEE	UNENCUMBERED CONSTRUCTION FUNDS SUBCOMMITTEE
<p>Steve Koehler, Chair New Ulm (507) 359-8245 Expires in 2004</p> <p>Melvin Odens Willmar (320) 235-4202 Expires in 2005</p> <p>Shelly Pederson Bloomington (952) 563-4870 Expires in 2006</p>	<p>David Jessup, Chair Woodbury (651) 714-3593 Expires in 2004</p> <p>Thomas Drake Faribault (507) 334-2222 Expires in 2005</p> <p>Lee Gustafson Minnetonka (952) 939-8200 Expires in 2006</p>

2003 MUNICIPAL SCREENING BOARD
Fall Meeting Minutes
October 21 & 22, 2003

I. Opening by Municipal Screening Board Chair Lee Gustafson.

The 2003 Fall Municipal Screening Board Meeting was called to order at 1:05 p.m. on October 21, 2003.

A. Chair Gustafson introduced:

Himself – Lee Gustafson, Minnetonka - Chair, Municipal Screening Board
Mike Metso, Duluth - Vice Chair, Municipal Screening Board
Julie Skallman, Mn/DOT- Director, State Aid for Local Transportation Division
Marshall Johnston, Mn/DOT- Manager, Municipal State Aid Needs Unit
Ken Ashfeld, Maple Grove - Chair, Unencumbered Construction Funds Subcommittee and Past Chair, Municipal Screening Board
Tim Schoonhoven, Alexandria – Chair, Needs Study Subcommittee
David Jessup, Woodbury - Past Chair, Municipal Screening Board
Tom Drake, Red Wing – Past Chair, Municipal Screening Board
Maria Hagen, St. Louis Park - Secretary, Municipal Screening Board

The Secretary conducted the roll call of members. All were present as follows:

District 1	John Suihkonen	Hibbing
District 2	Dave Kildahl	Crookston, Thief River Falls
District 3	Bret Weiss	Monticello
District 4, Alt.	Jeff Kuhn	Morris
Metro-West	Shelly Pederson	Bloomington
District 6	Tim Murray	Faribault
District 7	Tim Loose	St. Peter
District 8	Dave Berryman	Montevideo
Metro-East	Chuck Ahl	Maplewood
Duluth	Mike Metso	
Minneapolis	Paul Ogren	
St. Paul	Paul Kurtz	

The Chair recognized the following Screening Board Alternates:

Metro-West	Craig Gray	Anoka
District 8	Randy Peterson	Northfield

B. The Chair recognized the following Department of Transportation personnel:

Mark Gieseke	Program Delivery Engineer
Diane Gould	Manager, County State Aid Needs
Lou Tasa	District 2 State Aid Engineer
Merle Earley	District 4 State Aid Engineer
Steve Kirsch	District 6 State Aid Engineer
Doug Haeder	District 7 State Aid Engineer
Tom Behm	District 8 State Aid Engineer
Mark Channer	Asst. Manager, MSAS Needs Unit
Dan Erickson	Metro State Aid Division

C. The Chair also recognized the following others in attendance:

Jim Vanderhoof	St. Paul
Klara Fabry	Minneapolis
Heidi Hamilton	Minneapolis
Larry Veek	Minneapolis
Dave Sonnenberg	SEH, Inc.

Bob Brown, Metro District State Aid Engineer, and Rick Kjonaas, Deputy State Aid Engineer, attended the Wednesday morning meeting.

II. 2003 Municipal State Aids Needs Report

The Chair suggested that the entire report be reviewed and discussed on Tuesday, and any action required be taken on Wednesday morning. This would give all members a chance to informally discuss the various items Tuesday evening.

A. The June 2003 Screening Board Minutes were presented for approval (Pages 16-25).

Motion by Weiss / seconded by Ogren that the minutes be approved. Motion carried without opposition.

Johnston began his review of the 2003 Municipal State Aid Needs Report with a comment regarding the preface which requires the Screening Board to recommend the annual construction needs to the Commissioner of Transportation.

Johnston noted that there are currently 134 cities eligible for Municipal State Aid apportionment. This total includes three new cities that were recently added - St. Joseph, New Prague and Rogers.

B. 2002 Screening Board and Subcommittee Members (Pages 12-13).

Johnston reviewed the current membership on the Screening Board and the subcommittees.

C. Review of Unencumbered Construction Funds Subcommittee Matters (Pages 26-38).

Johnston reviewed matters addressed by the Unencumbered Construction Funds Subcommittee (UCFS) at their August 2003 meeting, noting that Ken Ashfeld, UCFS Chair, was available for any explanation of their recommendations. The UCFS reviewed several different positive adjustments, and are recommending the following two revisions to current adjustments:

1. Revision to the Unencumbered Construction Account Needs Adjustment:

Johnston stated that this change was recommended because, currently, a city with a general fund advance receives no adjustment. A city with an account balance receives a negative adjustment for that amount, but a city with an advance does not receive a positive adjustment for the amount advanced. This change would allow a positive adjustment for general fund advances, similar to bonding. Weiss commented that he felt this should have been a part of the program since the advance option was implemented and feels that District 3 is in favor of approving this adjustment. Ahl commented that Metro Division discussed this last week and is generally in favor although the reaction was mixed. He also feels that this is important to encourage advancing; put the money where it's going to be used. Gustafson asked Johnston if this would be a difficult change to implement in the system. Johnston said that it wouldn't. Suihkonen stated that District 1 was not in favor of this adjustment because it negatively impacted even those cities that are living within their apportionment. Berryman stated that District 8 was in favor but that there was vocal opposition. Murray, District 6, said that they had unanimous support. Kuhn, District 4, stated that they had more in support than against it. Loose, District 7, said that there was general approval for the adjustment although a concern was raised that some cities have "difficult" councils and therefore shouldn't be penalized, but that this might be an opportunity to have a discussion with your Council.

Gustafson summarized the discussion stating that there appeared to be general consensus in favor of the adjustment and noted that this item would come before the group for a vote tomorrow. Ashfeld commented that advancing funds is similar to bonding with 0% interest, therefore, this is another "tool in the toolbox" available to cities for funding options. Schoonhoven stated that saving up for a project was often used by small cities as an argument. Weiss suggested revisiting the general fund advancement amount, i.e. 4 or 5 times a cities apportionment. Gustafson asked Weiss to prepare draft wording for consideration at tomorrow's meeting.

2. Low Balance Incentive:

Johnston noted that this incentive was graphically represented on page 31. He also noted a correction on the graphic that should show \$26M being distributed "out". This recommendation is a revision to the new Excess Balance adjustment going into effect for the 2004 allocation. Under this recommended modification, cities with

high balances (greater than 3x their annual apportionment) would be redistributed to cities with low balances (less than 1x their annual apportionment).

Sonnenberg questioned whether adjustments could still be made by cities that will affect these amounts. Johnston responded that payment requests received by the DSAE by December 1 would be deducted from the year end balance, but requests received between December 1 and December 31 could not be guaranteed to be deducted from the year end balance. Also, that the balances as of 12/31 would be used to determine the final amounts to be reapportioned.

Weiss stated that District 3 was generally in favor but questioned why the adjustment was for the full amount-feels this is too harsh. Berryman agreed stating that they had been split over this but that if the adjustment was made it should only be for the amount greater than 3x the apportionment. Murray said that District 6 was unanimously in favor of this but felt that there should be an opportunity to plead a case in special circumstances. Suihkonen and Kuhn reported that their districts were in favor of the adjustment. Kildahl stated that District 2 was in favor of the adjustment but additional discussion was warranted.

Ahl said that the question on the table was how the redistribution should be calculated not whether or not it should be done. Ogren questioned what the thought process was on determining how to redistribute the dollars to those cities with a balance of less than 1. Ashfeld responded that the committee felt that it should be given to those cities that are in a position to spend it. Johnston reviewed an example of how this adjustment would affect the city of Brainerd. Page 36 shows the estimated adjustment to each city if both of these measures were implemented and the two handouts show the estimated effects of each adjustment individually.

D. Review Minutes and Recommendations of the Needs Study Subcommittee (Pages 39-40).

Johnston stated that two items were discussed by the Subcommittee at their Sept. 2003 meeting, noting that Tim Schoonhoven, NSS Chair, was available for any explanation of their recommendations.

1. Storm Sewer Needs:

Johnston said that currently, if storm sewer is in place, a city can only generate needs for partial storm sewer. Complete storm sewer needs are allowed by the DSAE on a case-by-case basis due to age, condition, capacity, etc. The subcommittee recommended no change to the current procedure. Schoonhoven stated that many options are available but that the committee felt that the current system is workable with discretion given to the DSAE.

Ahl said that Metro had discussed this and would prefer a uniform standard across the state where a life cycle is established but still retains DSAE discretion.

Suihkonen said that Dist. 1 felt there was no need for change; things are probably more uniform than people think. Metso said that he felt the standard shouldn't be based on life cycle alone. Behm stated that he questions capacity, age, & condition before making a decision.

2. Widening Needs:

Johnston explained the current practice for establishment of widening needs: 0-10 years: no widening needs; 10-20 years: with DSAE approval; > 20 years: full needs.

There have been cases where traffic or other situations have changed such that certain roadway segments have met the requirements for Widening Needs prior to reaching their useful life. Ashfeld questioned whether needs would still be generated if a variance was issued for a particular segment. Johnston responded that variances are not tracked in the system, so it is likely needs would be generated. The recommendation from the subcommittee is to revise the language slightly to clarify intent.

General discussion took place on the merits of the language revisions. Gustafson stated that action on this item would take place at tomorrow's meeting.

E. Theoretical Population Apportionment (Pages 41-49).

Johnston reviewed the information provided on Page 41, noting that Dayton was "on the bubble" with a population of just around 4,700. A determination will be made by the Attorney General's office of their 2000 adjusted census figures. Depending on the results of this decision, Dayton's pending allocation (which was computed and set aside until the dispute was resolved) will either be given to them or redistributed. Johnston also noted that the population apportionment is estimated at \$16.08 per person. Overall, there was an increase in population of over 50,000 between 2003 & 2004.

F. Effects of the 2003 Needs Study Update (Pages 50-53).

Johnston reviewed the effects of the 2003 Needs Study update, noting that the unadjusted needs increased by \$145M or 5.44%. Total needs are \$2.8B.

G. Mileage, Needs and Apportionment (Pages 54-56).

Johnston reviewed this section of the Needs Report, noting that the needs apportionment for 2004 is estimated at \$19.32 per \$1,000 of needs. This is the lowest apportionment since 1961.

H. 2003 Itemized Tabulation of Needs (Pages 57 & Pocket).

Johnston provided a brief overview of the Tabulation of Needs, noting that Crookston had the highest needs cost per mile (\$1,634,010), and Lake Elmo had the lowest needs cost per mile (\$414,299). Overall, 5 cities exceed \$1.2M per mile and 5 cities have an average cost per mile less than \$500,000.

I. Comparison of Needs (Page 61).

Johnston reviewed the comparison of needs between 2002 and 2003, noting that street lighting increased the most due to the change in the percentage of deficient segments.

J. Tentative 2004 Construction Needs Apportionment (Pages 62-69).

Johnston reviewed this section of the Needs Report, highlighting the various adjustments made.

K. Adjustments to the Construction Needs (Pages 73-88 & Handout).

Marshall Johnston reviewed Adjustments to 2003 Construction Needs, including the following areas:

- Unencumbered Construction Fund Balance Adjustment – the balance of \$99M will likely decrease before the end of the year
- Excess Unencumbered Construction Fund Balance Adjustment (based on 8/31/03 balance the balance of \$26M will likely decrease before the end of the year).
- Bond Account Adjustment – if Column D is 0, no adjustment.
- Unamortized Bond Account Adjustment – Metso questioned Lakeville’s off-system adjustment. Discussion took place regarding whether or not non-MSA system disbursements should be taken as a positive adjustment. Ahl felt that County State Aid system or Trunk Highway system should still be considered “on system”; he feels the column heading is incorrect. General consensus was that the State Aid system means MSA, CSAH, or Trunk Highways. Gustafson stated that this can be clarified with minor wording adjustments to the resolution or it can be referred to the UCFS for discussion. Metso felt that the existing wording in the resolution is adequate but it could be enhanced.
- Non-Existing Bridge Adjustment. – noting that Woodbury has one additional bridge; Johnston will review an after-the-fact adjustment due to wide fluctuations in cost.
- ROW Adjustment – noting that this is an after-the-fact adjustment of \$72.5M and represents the largest adjustment to the needs.
- Individual Adjustments – Robbinsdale, Maple Grove, & Brainerd
- TH Turnback Maintenance (22.3 miles eligible).

L. Construction Needs Recommendations to the Commissioner (Pages 89-91).

Johnston noted that Page 89 contained a copy of the recommendation letter to be signed tomorrow by the Board members and sent to the Commissioner of Transportation with minor adjustments.

M. Theoretical Total Apportionment, Comparison, and Apportionment Rankings (Pages 92-101).

Johnston reviewed this section of the Needs Report, noting that the tentative total apportionment is \$109.0 million. Johnston noted that cities with the highest tentative apportionment per needs mile were very urban in nature (Minneapolis and St. Paul), and cities with the lowest tentative apportionment per needs mile were very rural in nature (Lake Elmo, Rogers, and Corcoran).

N. Other Topics (Pages 105-123).

- Certified Complete MSAS systems

Johnston noted that four cities have certified their MSAS systems as complete and can spend the population portion of their apportionment on their local roads.

- General Fund Advance – status and guidelines

Johnston summarized the limits for general fund advancement based on a city's annual construction allotment. He noted that the guidelines were revised in June to include wording specifying that advancement for federal projects must also be eligible for State Aid financing. Gustafson stated that revisions to these guidelines would be considered tomorrow.

- Administrative Account

Johnston briefly reviewed the Administrative Account, noting that 1.5-% of the total funds available is set aside for administrative purposes. The unspent remainder each year is returned for redistribution.

Skallman commented on a desire for direction from the Board to increase the administrative account from 1.5-% to 2%. This action would require legislative approval. The Counties are considering a similar proposal and Skallman would prefer to take action on both at the same time. The additional funding would go towards special efforts such as training, special requests, etc. She is looking for examples. Pederson stated that it should be designated for something specific and something of benefit to all, i.e. technician certification classes. Murray said that the feedback he heard was that this seemed to be putting the cart before the horse – no one is opposed but they need to know what it will be used for first. Weiss stated that D3 was noncommittal. Skallman said that this request was in order to be able to respond to the requests she receives throughout the year for printing costs, special classes, etc. Recently, due to comments made by Cities and Counties, they were able to add a person to facilitate permitting. Shoonhoven stated that everyone would probably agree that training is needed, however, redistribution of a limited pot means money is being taken away from streets which are funded at the lowest level possible.

Gustafson felt that more input should be received from the group perhaps by discussing this at the CEAM Winter meeting. Further discussion took place. Motion by Ahl / seconded by Ogren that this item be referred to the CEAM Executive Board for further study. Motion passed without opposition.

- Research Account

Johnston briefly reviewed the Research Account history, noting that ½ of 1% is historically set aside in this account, and that a motion will be required to set the amount for 2003.

- County Highway Turnback Policy

Johnston commented that questions on the turnback policy should be referred to the DSAE as the policy is complex.

- Screening Board Resolutions

Johnston noted that the current screening board resolutions are included in the rear of the book.

III. Chair Gustafson called for any other subjects the representatives or audience would like presented. None were offered.

IV. Chair Gustafson requested a motion for adjournment until Wednesday morning, at which time formal action would be taken on those items before the Board.

Motion by Weiss / seconded by Pederson that the meeting be adjourned until 8:30 a.m. on Wednesday. Motion passed without opposition.

Wednesday Morning Session

The Municipal Screening Board was reconvened by Chair Gustafson at 8:40 a.m. on October 22, 2003.

Gustafson reminded everyone that a joint meeting with the County Engineers Executive Committee was scheduled for 10:00 a.m.

I. Formal Actions by the 2003 Municipal Screening Board

1. Needs and Apportionment Data (Pages 41-101).

Motion by Ahl / seconded by Kildahl to approve the Needs and Apportionment Data as presented with minor adjustments to the final amounts. Motion carried without opposition.

The original of the letter to the Commissioner on page 89 was subsequently signed by all Screening Board members.

2. Research Account (Page 111).

Motion by Weiss / seconded by Pederson to approve the following resolution:

Be it resolved that an amount of \$544,962 (not to exceed ½ of 1% of the 2003 MSAS apportionment sum of 108,992,464) shall be set aside from the 2004 Apportionment fund and be credited to the Research Account.

Motion carried without opposition.

3. Revised Unencumbered Construction Fund Balance adjustment (Pages 28-30, 36-38, 40 and yellow handout).

Motion by Ahl / seconded by Murray to approve the following resolution:

That for the determination of Apportionment Needs, a city with a positive unencumbered construction fund balance as of December 31st of the current year shall have that amount deducted from its 25-year total Needs. A municipality with a negative unencumbered construction fund balance as of December 31st of the current year shall have that amount added to its 25-year total Needs.

Motion carried without opposition.

4. Low Balance Incentive (Pages 31-38, green and blue handout).

Motion by Pederson / seconded by Ahl to approve the following resolution:

That the amount of the Excess Unencumbered Construction Fund Balance Adjustment shall be redistributed to the Construction Needs of all municipalities

whose December 31 construction fund balance is less than 1 times their January construction allotment of the same year. This redistribution will be based on a city's prorated share of its Unadjusted Construction Needs to the total Unadjusted Construction Needs of all participating cities times the total Excess Balance Adjustment.

Motion carried without opposition.

5. Revise Widening Resolution (Pages 39-40 and green handout).

Motion by Weiss / seconded by Metso to approve the following resolution:

That if the construction of a Municipal State Aid Street is accomplished, only the Construction Needs necessary to bring the segment up to State Aid Standards will be permitted in subsequent Needs after 10 years from the date of the letting or encumbrance of force account funds. For the purposes of the Needs Study, these shall be called Widening Needs. Widening Needs shall continue until reinstatement for complete Construction Needs is initiated by the Municipality.

Motion carried without opposition.

6. Storm Sewer Needs (Page 39).

Ahl opened the discussion by making a motion to refer this item back to the Needs Study Subcommittee for establishment of an appropriate life cycle that is consistent with other life cycles in place. This motion was seconded by Weiss.

Gustafson opened the floor for discussion. Kildahl commented that this may hinder the committee and would instead recommend sending it back to the committee without a specific task. Sonnenberg felt that the important issue was equity and consistency. Life cycle is not necessarily a means of determining effective life, but more for establishing that consistency. Metso questioned other life cycles in place. Johnston replied that only bridges are done in this way, on a 35-year cycle. Schoonhoven stated that we're really looking at a 40-year cycle – 20 years with no needs and 20 years with needs. Discretion between partial and full needs seems to be the question. Doing away with partial needs simplifies the process and eliminates the discretion. This might be more equitable but less representative of the system. Drake questioned whether the computer software would need to be modified. Johnston said that it would, but they could wait and make several changes at once using a consultant. Murray stated that the percentage of storm sewer needs is underrepresenting what's being spent currently. If you receive full needs at 20 years, is this more in line with actual spending? Johnston suggested that Kjonaas or Skallman sit in on the discussion if this is referred back to the Needs subcommittee. Skallman stated that several DSAEs could attend as well and give their perspective on the issue. Metso agrees with subcommittee's recommendation to leave system as is, but feels that if we are going to do something, it should be done on a consistent basis. He described the example of base, which is eligible for full needs after 20 years, but his city

is not necessarily replacing it on that time frame. Reinstating full needs in line with the rest of the roadway provides consistency.

Gustafson called for a vote on the motion. Motion carried without opposition.

7. Bond Account Adjustment (Page 80 & 121).

Drake stated that the intent of the bond account was to reduce needs, if you spend dollars off of the system without reducing needs, you're not doing that. Skallman stated that the current language is consistent with the Board's previous action regarding advancements. Ahl commented that the demand on cities is coming from "off system". Gustafson said that this language is being considered merely to clarify the point to State Aid staff.

Motion by Ahl / seconded by Metso to include additional language in the resolution as follows:

Bond account money spent off the Municipal State Aid, CSAH or Trunk Highway 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.

Schoonhoven replied that he feels this is contrary to the system – you're generating needs that aren't a part of your MSA system. Per Kjonaas, prior to 1996, there was that exception and recommended additional wording in the final paragraph of the resolution. Metso stated that the confusion is coming from our definition of State Aid system. Gustafson said that this motion is confirming the method that Johnston has used since 1996. So, since 1996, cities have been getting a positive adjustment for spending their dollars off of the MSA system; before 1996, it was a negative adjustment. Metso questioned why a city would be penalized for spending dollars on the State Aid system? According to Skallman all of this needed to be tracked, and it was changed in the early 1990's. Murray felt that this is more of an offset, not a penalty; and feels that its good to have some discretion because sometimes it's the only funding source available. Metso felt that this was a larger issue related to negative adjustment for bonds and advancements. Murray clarified that he believes in being able to use dollars on the State Aid system, he just feels that it shouldn't receive a positive adjustment. Weiss recommended keeping it simple; if you get a positive adjustment for the bonds, you get it for advancements.

Motion carried with Murray in opposition.

8. MSAS General Fund Advances modifications (Pages 108-109).

Motion by Pederson / seconded by Loose to approve the following guidelines wording modifications (amended by Weiss):

The October 2002 Screening Board discussed the possibility of revising the limits that a smaller city may advance, revising the payback period for larger cities, and allowing General Fund Advances on Federal projects. It was explained that any changes were ultimately an administrative decision by the State Aid Engineer with any input and

discussion by the Screening Board being taken into consideration. The Screening Board ~~recommended that the limits a smaller city can advance be raised to \$1,000,000, allowing~~ allows all cities up to 3 5 years to pay back the advance, and to allow advances on Federal projects. After discussing it with State Aid Finance, the following revisions will go into effect for advances from the ~~2003~~ 2004 allocation:

~~Cities with a construction allotment of \$1,000,000 or less can now advance up to three~~ a cumulative maximum of five times its previous year's construction allotment or ~~\$1,000,000~~ \$4,000,000, whichever is less when advancing for Municipal State Aid projects. (Fig. I 5-892.563 in the State Aid manual).

~~Cities with a construction allotment of more than \$1,000,000 can now advance up to its~~ previous year's construction allotment up to a maximum of \$3,000,000, when advancing for Municipal State Aid projects. (Fig. I 5-892.563 in the State Aid manual).

Gustafson commented that this wording change was in response to concerns expressed by small cities and cities with an apportionment of about \$900,000 that the current system was not adequate. This motion appears to address these issues.

Kildahl questioned whether the language should also be amended to apply to all of the State Aid system or the Municipal State Aid system as written, per the previous discussion. Weiss supports amending the language to make it apply to the entire State Aid system. Schoonhoven feels that the point at hand is the amount of advancement but that the issue of whether or not this should be clarified/amended to include non-MSA projects should be brought before the districts for further discussion. Skallman said that the dollars can be allocated to your regular MSA account or your advancement account at a city's discretion. Ashfeld commented that the state and county make the argument that cities should participate in the regional system due to local users. If a city couldn't use the regional system, they would need to construct a parallel route to accommodate them. You would have a need to build that – therefore, the regional system is a “need” in your community. Drake said that we're just dividing up the 9% in a different way – the MSA system is growing every year. Gustafson stated that the objective is to lower the overall account balance.

Gustafson called for a vote on the motion. Motion carried without opposition.

II. Legislative Update

Gustafson described the Transportation Utility bill and the latest information on this effort by the League of Minnesota Cities and CEAM. The intent is to provide legislators and cities with the same message over and over again. This will be done using several promotional pieces which will be developed by a consultant. All of these materials will be sent to City Engineers so that they can make individual contacts with their legislators and/or inform their Councils. One-on-one meetings are also planned with each of the Transportation Committee members.

III. Comments by Julie Skallman and other Mn/DOT personnel

Julie Skallman had nothing to report at this time.

IV. Chair Gustafson thanked Schoonhoven, Chair of the Needs Study Subcommittee, and Ken Ashfeld, Chair of the Unencumbered Construction Funds Subcommittee.

V. Chair Gustafson thanked the past Chairs for their time and appearance at the meeting – Tom Drake, Ken Ashfeld and David Jessup.

VI. Chair Gustafson commented that this was the last meeting for representatives from Districts 4, 6, and Metro-West. He thanked them for their service.

VII. Chair Gustafson noted that the date and location of the 2004 Spring Screening Board meeting has been tentatively set for June 1 & 2, 2004 at Cragun's.

VIII. Chair Gustafson requested a motion for adjournment.

Motion by Berryman / seconded by Pederson to adjourn. Motion carried without opposition.

Respectfully submitted,



Maria A Hagen, P.E.
MSA Screening Board Secretary
City Engineer – St. Louis Park

Needs Study Subcommittee Meeting Minutes 4/13/04

The Needs Study Subcommittee (NSS) held a meeting on April 13, 2003 at the City Hall in Hutchinson: Members present were Chairman Steve Koehler- New Ulm; Melvin Odens Willmar; and Shelly Pederson-Bloomington- Also attending were Marshall Johnston; Rick Kjonaas; and Mark Channer of State Aid. The purpose of the meeting was to review the Unit Price Study, make recommendations and to review Storm Sewer Needs (life-cycle). Chairman Steve Koehler called the meeting to order at 10:20 P.M.

Marshall began the discussion with a brief introduction and history on the unit price study. Mark then went on to explain how the information is gathered, which projects are chosen and how the data is computed. The group then reviewed and discussed the methods of computing unit prices and the importance of the study.

The subcommittee's recommended unit prices to be used in the 2005 needs computation are shown on the attached summary sheet. Several unit price items were increased by a factor of 3% +/-, some unit prices were left as is based on the unit price study average or the 5-year average and some were raised more due to the projected increased fuel costs.

The NSS discussed the additional item of Storm Sewer Needs (life-cycle) referred to it by the Municipal Screening Board at the Fall 2003 meeting.

The following excerpt is taken from the second day of the October 2003 Municipal Screening Board meeting:

Motion from fall 2003: Ahl opened the discussion by making a motion to refer this item back to the Needs Study Subcommittee for establishment of an appropriate life cycle that is consistent with other life cycles in place. Weiss seconded this motion.

Discussion from fall 2003:

Gustafson opened the floor for discussion. Kildahl commented that this may hinder the committee and would instead recommend sending it back to the committee without a specific task. Sonnenberg felt that the important issue was equity and consistency. Life cycle is not necessarily a means of determining effective life, but more for establishing that consistency. Metso questioned other life cycles in place. Johnston replied that only bridges are done in this way, on a 35-year cycle. Schoonhoven stated that we're really looking at a 40-year cycle – 20 years with no needs and 20 years with needs. Discretion between partial and full needs seems to be the question. Doing away with partial needs simplifies the process and eliminates the discretion. This might be more equitable but less representative of the system. Drake questioned whether the computer software would need to be modified. Johnston said that it would, but they could wait and make several changes at once using a consultant. Murray stated that the percentage of storm sewer needs is underrepresenting what's being spent currently. If you receive full needs at 20 years, is this more in line with actual spending? Johnston suggested that Kjonaas or Skallman sit in on the discussion if this is referred back to the Needs subcommittee. Skallman stated that several DSAEs could attend as well and give their perspective on

the issue. Metso agrees with subcommittee's recommendation to leave system as is, but feels that if we are going to do something, it should be done on a consistent basis. He described the example of base, which is eligible for full needs after 20 years, but his city is not necessarily replacing it on that time frame. Reinstating full needs in line with the rest of the roadway provides consistency.

Gustafson called for a vote on the motion. Motion carried without opposition.

The NSS discussed the following possible life-cycles while still allowing DSAE discretion for special cases:

- Generate complete storm sewer Needs after 20 years, similar to other roadway Needs items
- Generate partial or complete Needs at a predetermined number of years, 20, 40 on a deficient segment
- Generate complete storm sewer Needs on a different time frame than other Needs items
- After the Fact storm sewer Needs
- Leave the storm sewer Needs as is

The committee also discussed the items brought up in the excerpt above and data from a questionnaire "Criteria used by DSAE's to approve complete storm sewer needs where there is existing storm sewer".

The DSAE's are using a Report 7, with submitted justification that complete Needs are warranted, to approve complete storm sewer Needs. This may be due to the system being undersized, or worn out or other special condition.

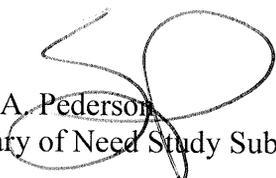
From the past screening board discussions it seemed that equity and consistency are the most important factors.

Many of these options are complex to implement for either MNDOT or the City Engineers. The NSS feels that it is best to keep it simpler and that the DSAE's are doing a fair job.

It was the consensus of the NSS that none of the life cycle scenarios discussed provided an improved system of generating Needs and for that reason the NSS stands behind the previous recommendation that the Storm Needs calculations remain as they presently are. If so directed by the Screening Board, the NSS will further evaluate this matter.

The present policy is to allow only partial Storm Sewer Needs on roadways with in-place storm sewer, unless the city can justify to the satisfaction of the DSAE that complete Storm Sewer Needs are justified.

Meeting adjourned at 2:05 PM.


Shelly A. Pederson
Secretary of Need Study Subcommittee

**2004 UNIT PRICE RECOMMENDATIONS
USING 2003 UNIT PRICES**

nmsas/excel/2004/June 2004 Book/unit price recommendations.xls

22-Apr-04

Needs Item		2003 Need Prices	Subcommittee Suggested Prices for 2004	Screening Board Recommended Prices For 2004
Grading (Excavation)	Cu. Yd.	\$3.80	\$4.00	
Aggregate Shoulders #2221	Ton	13.40	13.40	
Curb and Gutter Removal	Lin.Ft.	2.60	2.60	
Sidewalk Removal	Sq. Yd.	5.50	5.50	
Concrete Pavement Removal	Sq. Yd.	5.40	5.40	
Tree Removal	Unit	225.00	235.00	
Class 5 Base #2211	Ton	7.30	7.65	
Bituminous Base #2350	Ton	31.00	33.00	
Gravel Surface #2118	Ton	5.35	5.67	
Bituminous Surface #2350	Ton	31.00	33.00	
Curb and Gutter Construction	Lin.Ft.	8.00	8.25	
Sidewalk Construction	Sq. Yd.	23.50	24.00	
Storm Sewer Adjustment	Mile	82,700	83,775	
Storm Sewer	Mile	257,375	262,780	
Special Drainage - Rural	Mile	37,400	40,000	
Street Lighting	Mile	80,000	80,000	
Traffic Signals	Per Sig	124,000	124,000	
Signal Needs Based On Projected Traffic				
Projected Traffic	Percentage	X Unit Price =	Needs Per Mile	
0 - 4,999	.25	\$124,000 =	\$31,000	\$31,000
5,000 - 9,999	.50	124,000 =	62,000	62,000
10,000 & Over	1.00	124,000 =	124,000	124,000
Right of Way (Needs Only)	Acre	93,000	93,000	
Engineering	Percent	20	20	
Railroad Grade Crossing				
Signs	Unit	1,000	1,000	
Pavement Marking	Unit	750	750	
Signals (Single Track-Low Speed Unit		120,000	150,000	
Signals & Gate (Multiple				
Track - High & Low Speed)	Unit	160,000	187,500	
Concrete Xing Material(Per Track Lin.Ft.		1,000	1,000	
Bridges				
0 to 149 Ft.	Sq. Ft.	70.00	74.00	
150 to 499 Ft.	Sq. Ft.	70.00	74.00	
500 Ft. and over	Sq. Ft.	70.00	74.00	
Railroad Bridges				
over Highways				
Number of Tracks - 1	Lin.Ft.	9,300	9,600	
Additional Track (each)	Lin.Ft.	7,750	8,000	

ANNUAL MAINTENANCE NEEDS COST

The prices below are used to compute the maintenance needs on each segment. Each street, based on its existing data, receives a maintenance need. This amount is added to the segment's street needs. The total statewide maintenance needs based on these costs in 2003 was \$23,270,288 or 0.82% of the total Needs. For example, An urban road segment with 2 traffic lanes, 2 parking lanes, over 1,000 traffic, storm sewer and one traffic signal would receive \$9000 in maintenance needs per mile.

EXISTING FACILITIES ONLY

	2003 NEEDS PRICES		SUBCOMMITTEE SUGGESTED PRICES		SCREENING BOARD RECOMMENDED PRICES	
	Under 1000 ADT	Over 1000 ADT	Under 1000 ADT	Over 1000 ADT	Under 1000 ADT	Over 1000 ADT
Traffic Lane Per Mile	\$1,500	\$2,500	\$1,550	\$2,575		
Parking Lane Per Mile	1,500	1,500	1,550	1,550		
Median Strip Per Mile	500	980	515	1,000		
Storm Sewer Per Mile	500	500	515	515		
Per Traffic Signal	500	500	515	515		
Normal M.S.A.S. Streets Minimum Allowance Per Mile	5,000	5,000	5,150	5,150		

"Parking Lane Per Mile" shall never exceed two lanes, and is obtained from the following formula:

$$(\text{Existing surface width minus (the \# of traffic lanes} \times 12)) / 8 = \# \text{ of parking lanes.}$$

Existing # of Traffic lanes	Existing Surface Width	# of Parking Lanes for Maintenance Computations
2 Lanes	less than 32'	0
	32' - 39'	1
	40' & over	2
4 Lanes	less than 56'	0
	56' - 63'	1
	64' & over	2

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A HISTORY OF THE ANNUAL MAINTENANCE NEEDS COSTS

(COMPUTED ON EXISTING MILEAGE ONLY)

22-Apr-04

Year	Traffic Lane Per Mile		Parking Lane Per Mile		Median Strip Per Mile		Storm Sewer Per Mile		Per Traffic Signal		Minimum Allowance Per Mile	
	Under 1000 ADT	Over 1000 ADT	Under 1000 ADT	Over 1000 ADT	Under 1000 ADT	Over 1000 ADT	Under 1000 ADT	Over 1000 ADT	Under 1000 ADT	Over 1000 ADT	Under 1000 ADT	Over 1000 ADT
1986	\$300	\$500	\$100	\$100	\$100	\$200	\$100	\$100	\$100	\$100	\$1,000	\$1,000
1987	300	500	100	100	100	200	100	100	100	100	1,000	1,000
1988	600	1,000	200	200	200	400	200	200	400	400	2,000	2,000
1989	1,200	2,000	1,200	1,200	400	800	400	400	400	400	4,000	4,000
1990	1,200	2,000	1,200	1,200	400	800	400	400	400	400	4,000	4,000
1991	1,200	2,000	1,200	1,200	400	800	400	400	400	400	4,000	4,000
1992	1,200	2,000	1,200	1,200	400	800	400	400	400	400	4,000	4,000
1993	1,320	2,200	1,320	1,320	440	880	440	440	440	440	4,400	4,400
1994	1,320	2,200	1,320	1,320	440	880	440	440	440	440	4,400	4,400
1995	1,320	2,200	1,320	1,320	440	880	440	440	440	440	4,400	4,400
1996	1,320	2,200	1,320	1,320	440	880	440	440	440	440	4,400	4,400
1998	1,320	2,200	1,320	1,320	440	880	440	440	440	440	4,400	4,400
1999	1,360	2,260	1,360	1,360	450	900	450	450	450	450	4,500	4,500
2000	1,400	2,300	1,400	1,400	460	910	460	460	460	460	4,600	4,600
2001	1,450	2,400	1,450	1,450	480	950	480	480	480	480	4,800	4,800
2002	1,450	2,400	1,450	1,450	480	950	480	480	480	480	4,800	4,800
2003	1,500	2,500	1,500	1,500	500	980	500	500	500	500	5,000	5,000
2004												

THESE MAINTENANCE COSTS ARE USED IN COMPUTING NEEDS .

ALL MAINTENANCE COSTS FOR COMMON BOUNDARY DESIGNATIONS AND APPROVED ONE WAY STREETS ARE COMPUTED USING THE LENGTH REPORTED IN THE NEEDS STUDY.

UNIT PRICES



AND GRAPHS

UNIT PRICE STUDY

The unit price study was done annually until 1997. In 1996, the Municipal Screening Board made a motion not to conduct the unit price study in 1997. There were no changes in the unit prices in 1997. The Screening Board made a motion not to do the unit price study in 1999 but to apply a construction cost index against the 1998 prices. In order to adjust the prices in 1999 due to increases, the Needs Unit arrived at a cost index based on 9 items used in the needs for the past 10 unit price studies.

The quantities and unit prices used in this unit price study are compiled from the on system MSAS projects that were let and a 'State Aid Payment Request' form was received by the State Aid Division in 2003. There were a minimum of 141 on system projects and 58 off system projects let in 2003 for which we received a Payment Request. The state average of the on system prices and quantities are used by the Needs Study Subcommittee and the Municipal Screening Board to determine the prices to be used in the 2004 needs study. These prices will be applied against the quantity tables located in the State Aid Manual Figs. C & D 5-892.820 to compute the 2005 construction (money) needs apportionment.

Both MN/DOT and State Aid bridges are used so that more bridges determine the unit price. In addition to normal bridge materials and construction costs, prorated mobilization, bridge removal and riprap costs are included if these items are included in the contract. Traffic control, field office, and field lab costs are not included.

MN/DOT hydraulic office furnished a recommendation of costs for storm sewer construction and adjustment based on 2003 construction costs. Special drainage costs are computed for rural roadways by the MN/DOT estimating unit based on the length and number of culverts per mile detailed by the Screening Board.

MN/DOT railroad office furnished a letter detailing railroad costs from 2003 construction projects.

Due to lack of data, a study is not done for traffic signals, maintenance, and engineering. Every segment, except those eligible for THTB funding, receives needs for traffic signals, engineering, and maintenance. The unit prices used in the 2003 needs study are found in the Screening Board resolutions included in this booklet.

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

27-Apr-04

ITEM	2002 APPORIONMENT NEEDS COST	2003 APPORIONMENT NEEDS COST	DIFFERENCE	2003 % OF THE TOTAL
Grading	\$172,796,705	\$183,487,977	\$10,691,272	6.50%
Special Drainage	5,860,378	5,361,166	(499,212)	0.19%
Storm Sewer Adjustment	61,585,152	63,307,677	1,722,525	2.24%
Storm Sewer Construction	227,244,632	229,035,824	1,791,192	8.11%
Curb & Gutter Removal	28,006,020	29,793,067	1,787,047	1.06%
Sidewalk Removal	20,214,891	21,273,076	1,058,185	0.75%
Pavement Removal	53,405,020	55,122,549	1,717,529	1.95%
Tree removal	10,232,640	12,983,400	2,750,760	0.46%
SUBTOTAL GRADING	\$579,345,438	600,364,736	\$21,019,298	21.26%

Gravel Base #2211	\$308,837,592	\$325,914,098	17,076,506	11.54%
Bituminous Base #2350	249,329,490	262,835,050	13,505,560	9.31%
SUBTOTAL BASE	\$558,167,082	588,749,148	\$30,582,066	20.85%

Gravel Surface #2118	\$137,757	\$134,815	(\$2,942)	0.00%
Bituminous Surface #2350	236,170,200	247,636,308	11,466,108	8.77%
Surface Widening	1,137,510	1,612,837	475,327	0.06%
SUBTOTAL SURFACE	\$237,445,467	\$249,383,960	\$11,938,493	8.83%

Gravel Shoulders #2221	\$2,967,289	\$2,687,510	(\$279,779)	0.10%
SUBTOTAL SHOULDERS	\$2,967,289	\$2,687,510	(\$279,779)	0.10%

Curb and Gutter	\$141,136,028	\$149,481,344	\$8,345,316	5.29%
Sidewalk	196,422,674	207,930,560	11,507,886	7.36%
Traffic Signals	170,594,100	178,144,290	7,550,190	6.31%
Street Lighting	139,139,520	155,188,000	16,048,480	5.50%
Retaining Walls	18,582,030	18,837,579	255,549	0.67%
SUBTOTAL MISCELLANEOUS	\$665,874,352	\$709,581,773	\$43,707,421	25.13%

TOTAL ROADWAY	\$2,043,799,628	\$2,150,767,127	\$106,967,499	76.16%
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Bridge	\$122,244,066	\$131,441,230	\$9,197,164	4.65%
Railroad Crossings	48,993,500	51,640,250	2,646,750	1.83%
Maintenance	22,138,974	23,270,288	1,131,314	0.82%
Engineering	443,007,532	466,769,642	23,762,110	16.53%
SUBTOTAL OTHERS	\$636,384,072	\$673,121,410	\$36,737,338	23.84%

TOTAL	\$2,680,183,700	\$2,823,888,537	\$143,704,837	100.00%
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MSAS UNIT PRICE STUDY EXCAVATION - CUBIC YARD

CITY NAME	No. Of Projects	TOTAL QTY.	TOTAL COST	AVERAGE UNIT PRICE
District 1				
Duluth	5	54,187	\$373,395	\$6.89
Grand Rapids	2	12,710	40,330	3.17
Hermantown	1	26	112	4.30
Hibbing	1	15,440	46,320	3.00
Virginia	1	58,596	168,896	2.88
District 1 Total	10	140,959	\$629,052	\$4.46

District 2				
East Grand Forks	1	8,531	\$38,901	\$4.56
Thief River Falls	2	120	540	4.50
District 2 Total	3	8,651	\$39,441	\$4.56

District 3				
Brainerd	2	11,524	\$66,988	\$5.81
Little Falls	3	4,801	14,403	3.00
Monticello	2	13,520	40,420	2.99
Otsego	2	55,000	233,750	4.25
Sartell	1	25,056	81,432	3.25
St. Cloud	2	28,443	157,307	5.53
St. Michael	1	60,874	190,499	3.13
Waite Park	1	19,006	113,601	5.98
District 3 Total	14	218,224	\$898,399	\$4.12

District 4				
Alexandria	3	4,804	\$13,211	\$2.75
Moorhead	2	113,024	368,159	3.26
District 4 Total	5	117,828	\$381,370	\$3.24

Metro West				
Andover	2	494	\$1,530	\$3.10
Anoka	2	2,720	19,040	7.00
Bloomington	2	42,924	291,280	6.79
Brooklyn Park	2	42,592	87,953	2.07
Champlin	2	6,314	31,381	4.97
Chaska	2	20,900	84,200	4.03
Coon Rapids	3	4,396	28,941	6.58
East Bethel	1	4,658	24,455	5.25
Ham Lake	1	1,180	11,859	10.05
Hopkins	1	3,132	34,949	11.16
Lino Lake	1	19,500	178,425	9.15
Minneapolis	2	15,015	161,783	10.77
Plymouth	1	1,330	21,413	16.10
Savage	1	38,500	107,800	2.80
Shorewood	1	1,000	11,200	11.20
St. Francis	1	4,784	11,523	2.41
Metro West Total	25	209,439	\$1,107,731	\$5.29

MSAS UNIT PRICE STUDY EXCAVATION - CUBIC YARD

CITY NAME	No. Of Projects	TOTAL QTY.	TOTAL COST	AVERAGE UNIT PRICE
District 6				
Albert Lea	1	929	\$6,039	\$6.50
Austin	2	3,720	14,880	4.00
Northfield	2	3,238	15,429	4.76
Owatonna	2	613	6,743	11.00
Rochester	3	28,403	98,049	3.45
Winona	2	11,789	38,314	3.25
District 6 Total	12	48,692	\$179,454	\$3.69

District 7				
Fairmont	1	7,298	\$62,033	\$8.50
Worthington	1	4,214	21,070	5.00
District 7 Total	2	11,512	\$83,103	\$7.22

District 8				
Hutchinson	4	61,896	\$254,957	\$4.12
Montevideo	1	4,191	15,088	3.60
Redwood Falls	1	9,300	41,850	4.50
Willmar	2	7,080	29,948	4.23
District 8 Total	8	82,467	\$341,843	\$4.15

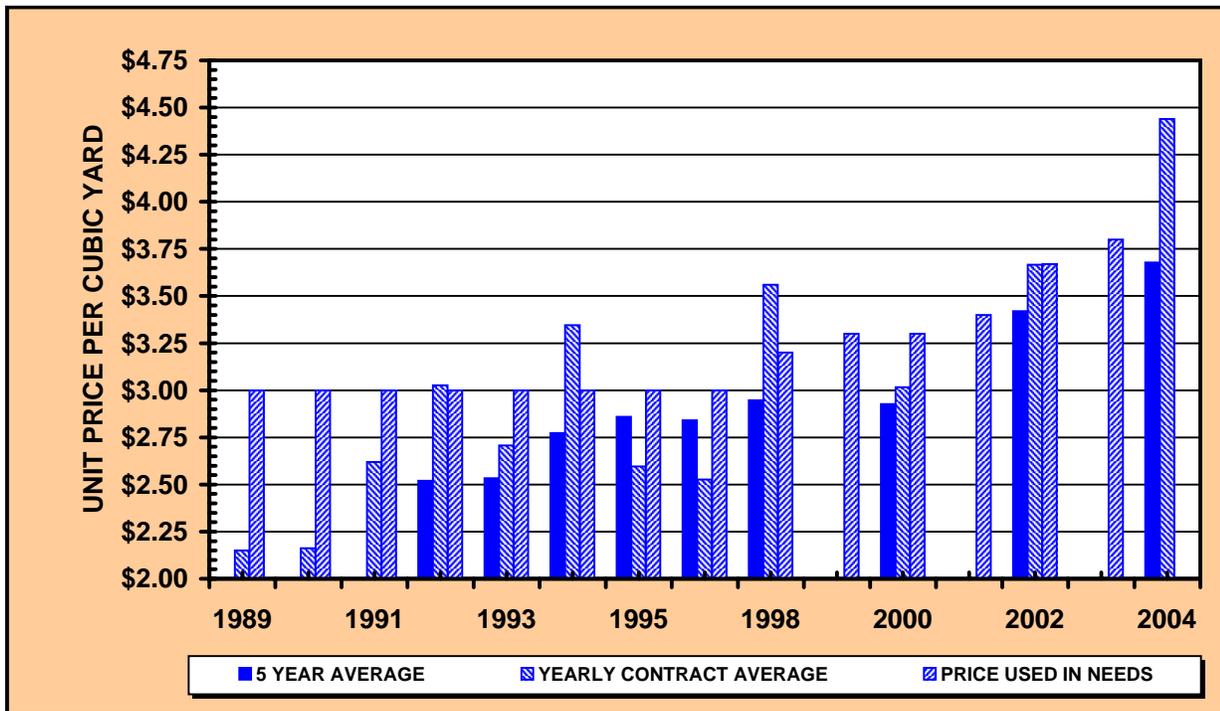
Metro East				
Apple Valley	2	58,350	\$91,733	\$1.57
Arden Hills	1	14,569	110,725	7.60
Burnsville	2	2,375	25,358	10.68
Eagan	3	2,470	32,110	13.00
Maplewood	1	8,951	74,700	8.35
Mendota Heights	1	255	14,484	56.80
New Brighton	1	700	5,600	8.00
Oakdale	2	28,826	178,403	6.19
Rosemount	2	26,417	131,094	4.96
Roseville	2	268	1,742	6.50
St. Paul	7	37,959	196,748	5.18
Metro East Total	24	181,140	\$862,696	\$4.76

District Totals				
District 1 Total	10	140,959	\$629,052	\$4.46
District 2 Total	3	8,651	39,441	4.56
District 3 Total	14	218,224	898,399	4.12
District 4 Total	5	117,828	381,370	3.24
Metro West Total	25	209,439	1,107,731	5.29
District 6 Total	12	48,692	179,454	3.69
District 7 Total	2	11,512	83,103	7.22
District 8 Total	8	82,467	341,843	4.15
Metro East Total	24	181,140	862,696	4.76

STATE TOTAL	103	1,018,912	\$4,523,089	\$4.44
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EXCAVATION



NEEDS YEAR	NO. OF CITIES	QUANTITY	TOTAL COST	YEARLY AVERAGE CONTRACT PRICE	PRICE USED IN NEEDS	5 YEAR AVERAGE CONTRACT PRICE
1989	70	1,406,108	\$3,024,233	\$2.15	\$3.00	-
1990	65	1,263,652	2,733,063	2.16	3.00	-
1991	67	1,260,768	3,303,493	2.62	3.00	-
1992	70	1,243,656	3,764,822	3.03	3.00	\$2.52
1993	64	1,105,710	2,994,010	2.71	3.00	2.53
1994	65	1,484,328	4,965,339	3.35	3.00	2.77
1995	59	1,317,807	3,419,869	2.60	3.00	2.86
1996	68	1,691,036	4,272,539	2.53	3.00	2.84
1998	60	919,379	3,273,588	3.56	3.20	2.95
1999					3.30	
2000	56	1,157,353	3,490,120	3.02	3.30	2.93
2001					3.40	
2002	50	893,338	3,275,650	3.67	3.67	3.42
2003					3.80	
2004	56	1,018,912	4,523,089	4.44		3.68

SUBCOMMITTEE'S RECOMMENDED PRICE FOR THE 2004 NEEDS STUDY IS \$4.00 PER CU. YD.

Note: There was no Unit Price Study in years 1997,1999, 2001 and 2003. Therefore, we used the total of the past five year's costs divided by the total of the past five year's quantities for the 5-Year Average.

MSAS UNIT PRICE STUDY AGGREGATE SHOULDERS - TON

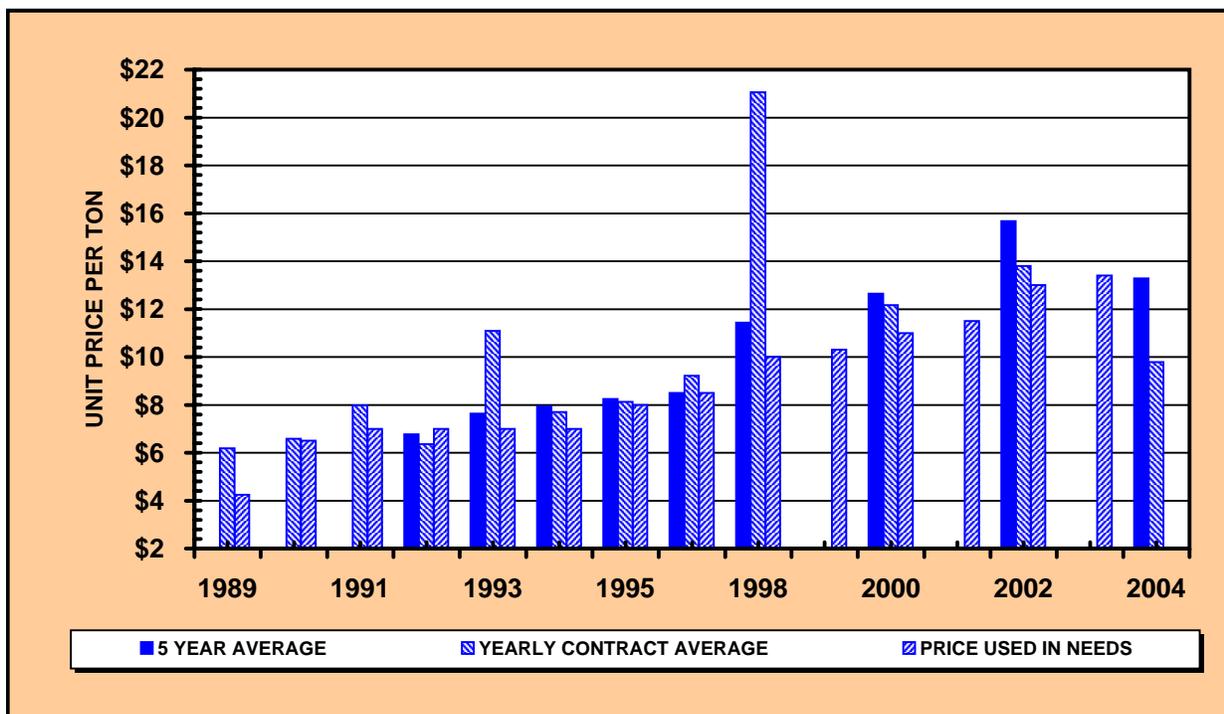
CITY NAME	No. Of Projects	TOTAL QTY.	TOTAL COST	AVERAGE UNIT PRICE
District 4				
Hermantown	1	10	\$320	\$32.00
District 1 Total	1	10	\$320	\$32.00

District 6				
Alexandria	3	280	\$2,520	\$9.00
District 4 Total	3	280	\$2,520	\$9.00

District Totals				
District 1 Total	1	10	\$320	\$32.00
District 4 Total	3	280	2,520	9.00

STATE TOTAL	4	290	\$2,840	\$9.79
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AGGREGATE SHOULDERING



NEEDS YEAR	NO. OF CITIES	QUANTITY	TOTAL COST	YEARLY AVERAGE CONTRACT PRICE	PRICE USED IN NEEDS	5 YEAR AVERAGE CONTRACT PRICE
1989	7	3485	\$21,554	\$6.18	\$4.25	-
1990	6	3714	24,444	6.58	6.50	-
1991	3	2334	18,624	7.98	7.00	-
1992	7	6285	39,992	6.36	7.00	\$6.77
1993	7	803	9,423	11.09	7.00	7.64
1994	4	999	7,691	7.70	7.00	7.94
1995	8	4923	40,009	8.13	8.00	8.25
1996	6	3067	28,277	9.22	8.50	8.50
1998	2	60	1,263	21.05	10.00	11.44
1999					10.30	
2000	4	621	7,557	12.17	11.00	12.64
2001					11.50	
2002	7	3365	46,422	13.80	13.00	15.67
2003					13.40	
2004	2	290	2,840	9.79		13.29

SUBCOMMITTEE'S RECOMMENDED PRICE FOR THE 2004 NEEDS STUDY IS \$13.40 PER TON

Note: There was no Unit Price Study in years 1997,1999, 2001 and 2003. Therefore, we used the total of the past five year's costs divided by the total of the past five year's quantities for the 5-Year Average.

MSAS UNIT PRICE STUDY CURB & GUTTER REMOVAL - LINEAR FEET

CITY NAME	No. Of Projects	TOTAL QTY.	TOTAL COST	AVERAGE UNIT PRICE
District 1				
Duluth	5	33,103	\$66,282	\$2.00
Grand Rapids	2	3,030	4,073	1.34
Hermantown	1	294	441	1.50
Hibbing	1	3,996	7,992	2.00
Virginia	1	24,099	14,324	0.59
District 1 Total	10	64,522	\$93,112	\$1.44

District 2				
Thief River Falls	2	1,260	\$6,300	\$5.00
District 2 Total	2	1,260	\$6,300	\$5.00

District 3				
Brainerd	2	10,869	\$21,397	\$1.97
Elk River	1	480	1,440	3.00
Little Falls	3	2,594	7,783	3.00
Monticello	2	1,000	2,500	2.50
Otsego	2	70	140	2.00
Sartell	1	200	420	2.10
St. Cloud	2	14,069	19,532	1.39
St. Michael	1	200	730	3.65
Waite Park	1	205	308	1.50
District 3 Total	15	29,687	\$54,250	\$1.83

District 4				
Alexandria	6	4,807	\$13,407	\$2.79
Moorhead	2	2,950	10,648	3.61
District 4 Total	8	7,757	\$24,055	\$3.10

Metro West				
Andover	1	325	\$650	\$2.00
Anoka	2	4,290	8,580	2.00
Bloomington	2	7,800	8,403	1.08
Brooklyn Park	2	1,660	3,329	2.01
Champlin	4	3,737	6,185	1.66
Chaska	2	700	2,450	3.50
Coon Rapids	3	3,552	11,584	3.26
East Bethel	1	240	360	1.50
Hopkins	1	5,478	14,517	2.65
Lino Lakes	1	280	700	2.50
Minneapolis	2	12,937	32,084	2.48
Minnetonka	1	852	3,152	3.70
Savage	1	800	2,400	3.00
Shorewood	1	100	415	4.15
St. Francis	1	174	265	1.52
Metro West Total	25	42,925	\$95,074	\$2.21

MSAS UNIT PRICE STUDY CURB & GUTTER REMOVAL - LINEAR FEET

CITY NAME	No. Of Projects	TOTAL QTY.	TOTAL COST	AVERAGE UNIT PRICE
District 6				
Austin	1	2,600	\$1,950	\$0.75
Northfield	2	4,814	8,431	1.75
Owatonna	2	210	473	2.25
Red Wing	1	460	2,990	6.50
Rochester	1	180	900	5.00
District 6 Total	7	8,264	\$14,744	\$1.78

District 7				
Fairmont	1	4,512	\$15,792	\$3.50
Worthington	1	4	36	10.00
District 7 Total	2	4,516	\$15,828	\$3.51

District 8				
Hutchinson	4	10,904	\$29,688	\$2.72
Marshall	2	228	1,484	6.51
Montevideo	1	60	180	3.00
Redwood Falls	1	3,002	8,256	2.75
Willmar	3	2,035	5,338	2.62
District 8 Total	11	16,229	\$44,945	\$2.77

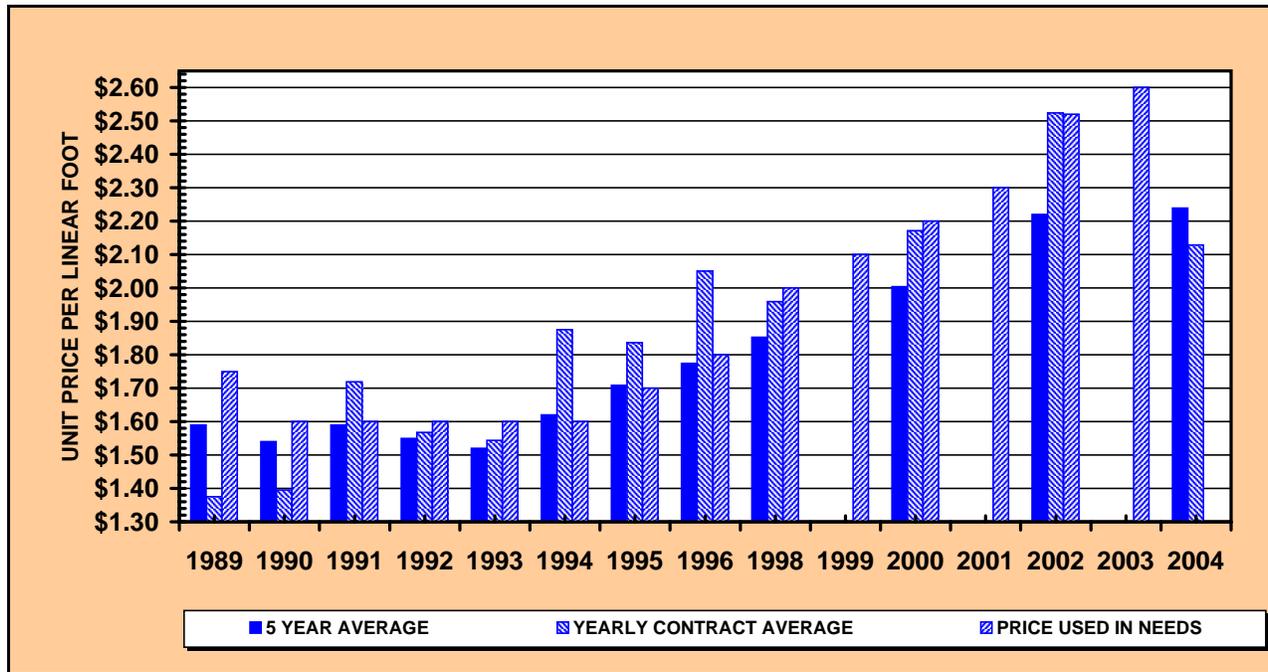
Metro East				
Apple Valley	7	4,400	\$15,008	\$3.41
Arden Hills	1	197	296	1.50
Burnsville	3	5,602	19,127	3.41
Eagan	3	1,905	6,858	3.60
New Brighton	1	1,170	3,510	3.00
Oakdale	2	1,875	3,118	1.66
Rosemount	2	3,431	13,723	4.00
Roseville	2	590	2,213	3.75
South St. Paul	3	101	455	4.50
St. Paul	6	3,666	9,198	2.51
Metro East Total	30	22,937	\$73,503	\$3.20

District Totals				
District 1 Total	10	64,522	\$93,112	\$1.44
District 2 Total	2	1,260	6,300	5.00
District 3 Total	15	29,687	54,250	1.83
District 4 Total	8	7,757	24,055	3.10
Metro West Total	25	42,925	95,074	2.21
District 6 Total	7	8,264	14,744	1.78
District 7 Total	2	4,516	15,828	3.51
District 8 Total	11	16,229	44,945	2.77
Metro East Total	30	22,937	73,503	3.20

STATE TOTAL	110	198,097	\$421,810	\$2.13
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CURB & GUTTER REMOVAL #2104



NEEDS YEAR	NO. OF CITIES	QUANTITY	TOTAL COST	YEARLY AVERAGE CONTRACT PRICE	PRICE USED IN NEEDS	5 YEAR AVERAGE CONTRACT PRICE
1989	64	211,446	\$290,721	\$1.37	\$1.75	\$1.59
1990	38	215,935	301,389	1.40	1.60	1.54
1991	59	207,105	355,996	1.72	1.60	1.59
1992	58	152,992	239,845	1.57	1.60	1.55
1993	56	118,793	183,378	1.54	1.60	1.52
1994	59	309,891	581,256	1.88	1.60	1.62
1995	51	209,177	384,029	1.84	1.70	1.71
1996	62	142,362	291,935	2.05	1.80	1.77
1998	63	150,083	294,046	1.96	2.00	1.85
1999					2.10	
2000	53	114,421	248,505	2.17	2.20	2.00
2001					2.30	
2002	42	103,074	260,173	2.52	2.52	2.22
2003					2.60	
2004	54	198,097	421,810	2.13		2.24

SUBCOMMITTEE'S RECOMMENDED PRICE FOR THE 2004 NEEDS STUDY IS \$2.60 PER LIN. FT.

Note: There was no Unit Price Study in years 1997, 1999, 2001 and 2003. Therefore, we used the total of the past five year's costs divided by the total of the past five year's quantities for the 5-Year Average.

MSAS UNIT PRICE STUDY SIDEWALK REMOVAL - SQUARE YARD

CITY NAME	No. Of Projects	TOTAL QTY.	TOTAL COST	AVERAGE UNIT PRICE
District 1				
Duluth	4	6,921	\$19,198	\$2.77
Virginia	1	10,330	21,593	2.09
District 1 Total	5	17,251	\$40,791	\$2.36

District 2				
Thief River Falls	1	44	\$440	\$10.00
District 2 Total	1	44	\$440	\$10.00

District 3				
Brainerd	2	9,617	\$20,014	\$2.08
Elk River	1	268	1,208	4.50
Little Falls	3	3,077	13,846	4.50
St. Cloud	1	4,451	14,021	3.15
District 3 Total	2	17,413	\$49,088	\$2.82

District 4				
Alexandria	4	91	\$1,233	\$13.50
Moorhead	2	189	806	4.25
District 4 Total	6	281	\$2,039	\$7.26

Metro West				
Andover	1	17	\$310	\$18.00
Anoka	2	1,100	3,960	3.60
Bloomington	2	1,580	9,012	5.70
Brooklyn Park	1	841	4,921	5.85
Champlin	2	1,100	4,950	4.50
Chaska	1	22	200	9.00
Coon Rapids	1	39	350	9.00
Minneapolis	2	7,502	51,312	6.84
Minnetonka	1	45	756	16.80
Metro West Total	13	12,246	\$75,771	\$6.19

District 6				
Albert Lea	1	13	\$119	\$9.00
Austin	1	350	1,733	4.95
Northfield	2	179	1,613	9.01
Rochester	1	114	456	4.00
District 6 Total	5	656	\$3,921	\$5.97

MSAS UNIT PRICE STUDY SIDEWALK REMOVAL - SQUARE YARD

CITY NAME	No. Of Projects	TOTAL QTY.	TOTAL COST	AVERAGE UNIT PRICE
District 7				
Fairmont	1	2,475	\$18,930	\$7.65
Worthington	2	40	392	9.90
District 7 Total	3	2,514	\$19,322	\$7.69

District 8				
Hutchinson	2	4,711	\$22,895	\$4.86
Marshall	2	172	2,048	11.91
Montevideo	1	14	125	9.00
Redwood Falls	1	11	100	9.00
Willmar	2	136	610	4.50
District 8 Total	8	5,044	\$25,778	\$5.11

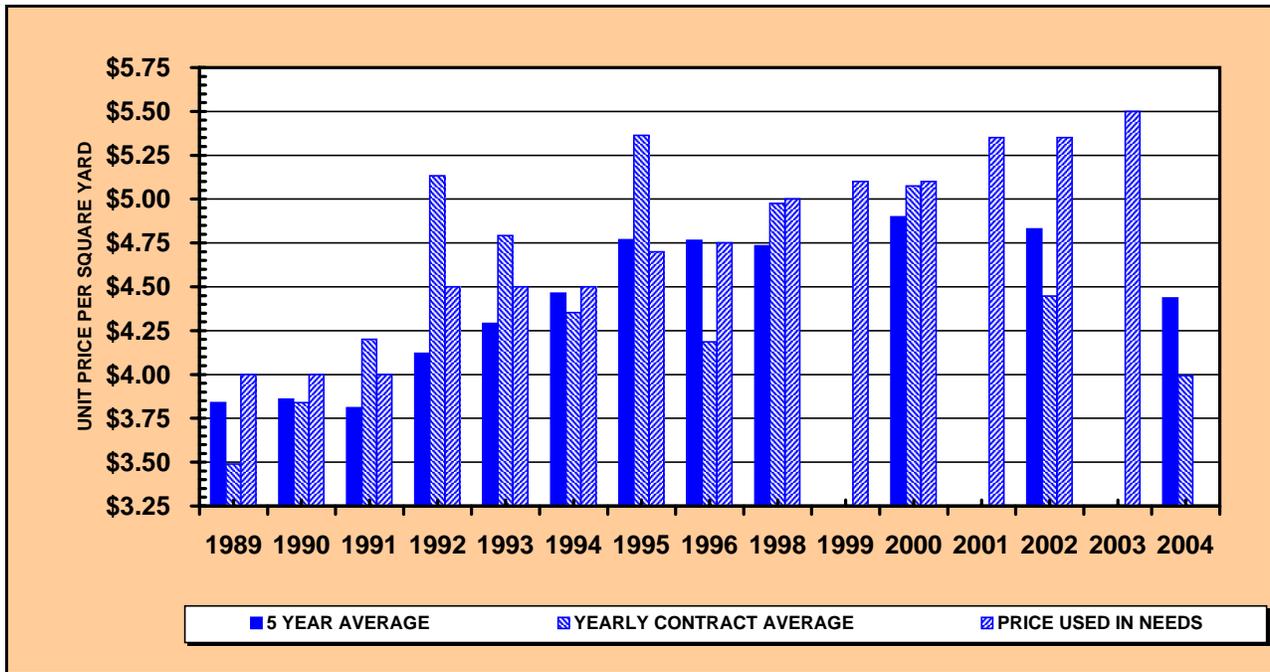
Metro East				
Apple Valley	5	210	\$3,420	\$16.29
Burnsville	2	3,199	13,402	4.19
Maplewood	1	276	552	2.00
Roseville	2	17	300	18.00
South St. Paul	1	18	161	9.00
St. Paul	6	5,892	24,895	4.22
Metro East Total	17	9,612	\$42,730	\$4.45

District Totals				
District 1 Total	5	17,251	\$40,791	\$2.36
District 2 Total	1	44	440	10.00
District 3 Total	2	17,413	49,088	2.82
District 4 Total	6	281	2,039	7.26
Metro West Total	13	12,246	75,771	6.19
District 6 Total	5	656	3,921	5.97
District 7 Total	3	2,514	19,322	7.69
District 8 Total	8	5,044	25,778	5.11
Metro East Total	17	9,612	42,730	4.45

STATE TOTAL	60	65,062	\$259,880	\$3.99
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SIDEWALK REMOVAL #2105



NEEDS YEAR	NO. OF CITIES	QUANTITY	TOTAL COST	YEARLY AVERAGE CONTRACT PRICE	PRICE USED IN NEEDS	5 YEAR AVERAGE CONTRACT PRICE
1989	46	77,633	\$270,831	\$3.49	\$4.00	\$3.84
1990	41	50,017	192,021	3.84	4.00	3.86
1991	43	71,868	301,912	4.20	4.00	3.81
1992	45	57,606	295,735	5.13	4.50	4.12
1993	40	43,017	206,147	4.79	4.50	4.29
1994	39	54,206	235,995	4.35	4.50	4.46
1995	34	73,172	392,401	5.36	4.70	4.77
1996	46	49,759	208,305	4.19	4.75	4.77
1998	41	36,967	183,894	4.97	5.00	4.73
1999					5.10	
2000	37	44,143	224,067	5.08	5.10	4.90
2001					5.35	
2002	28	42,436	188,701	4.45	5.35	4.83
2003					5.50	
2004	35	65,062	259,880	3.99		4.44

SUBCOMMITTEE'S RECOMMENDED PRICE FOR THE 2004 NEEDS STUDY IS \$5.50 PER SQ.YD.

Note: There was no Unit Price Study in years 1997,1999, 2001 and 2003. Therefore, we used the total of the past five year's costs divided by the total of the past five year's quantities for the 5-Year Average.

**MSAS UNIT PRICE STUDY
CONCRETE PAVEMENT REMOVAL - SQUARE YARD**

CITY NAME	No. Of Projects	TOTAL QTY.	TOTAL COST	AVERAGE UNIT PRICE
District 1				
Duluth	5	13,572	\$45,556	\$3.36
Hermantown	1	168	672	4.00
Virginia	1	76,677	121,812	1.59
District 1 Total	7	90,417	\$168,040	\$1.86

District 2				
Brainerd	2	30,790	\$174,982	\$5.68
Little Falls	1	147	737	5.00
Sartell	1	17	65	3.85
St. Cloud	1	159	954	6.00
District 3 Total	5	31,113	\$176,738	\$5.68

District 4				
Alexandria	2	182	\$2,867	\$15.75
Moorhead	1	13	94	7.20
District 4 Total	3	195	\$2,960	\$15.18

Metro West				
Coon Rapids	2	1,005	\$6,784	\$6.75
Hopkins	1	2,113	18,802	8.90
Lino Lakes	1	172	\$772	4.50
Metro West Total	4	3,289	\$26,358	\$8.01

District 6				
Albert Lea	1	12,721	\$58,516	\$4.60
Austin	2	13,520	52,728	3.90
Owatonna	1	9	76	8.40
Rochester	1	492	3,444	7.00
District 6 Total	5	26,742	\$114,764	\$4.29

District 7				
Fairmont	1	11,050	\$65,601	\$5.94
Worthington	2	6,972	26,145	3.75
District 7 Total	3	18,022	\$91,746	\$5.09

District 8				
Hutchinson	2	135	\$967	\$7.17
Willmar	2	2,545	11,965	4.70
District 8 Total	4	2,680	\$12,932	\$4.83

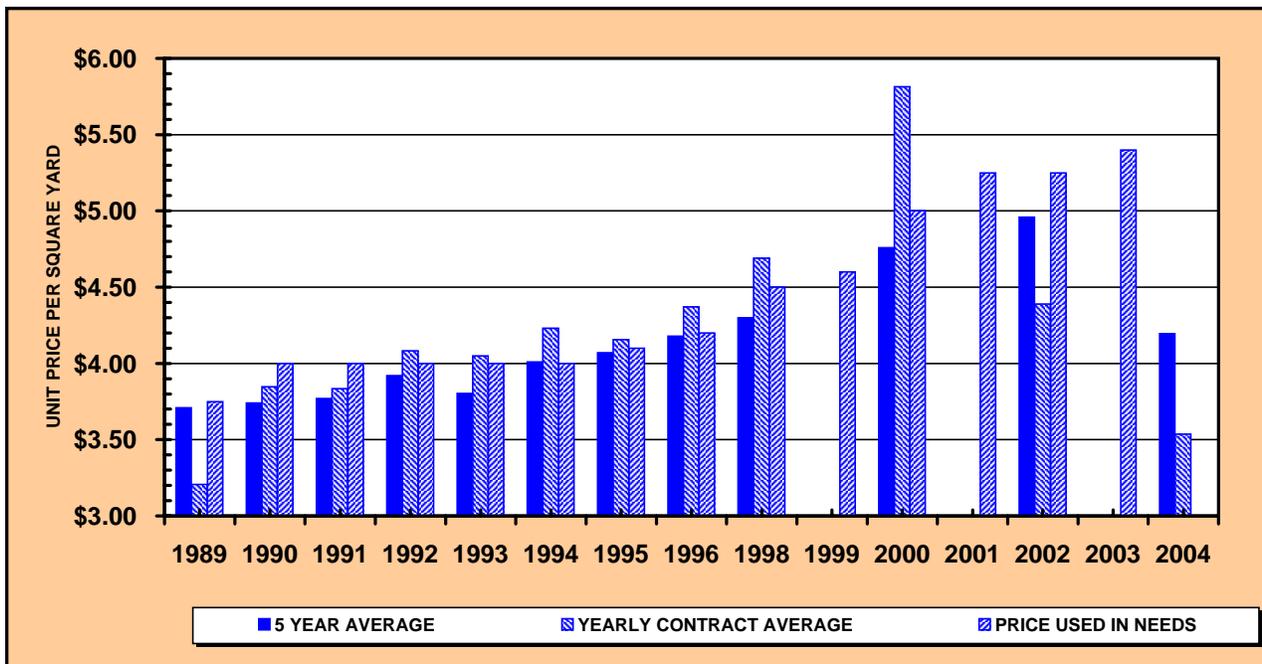
Metro East				
Oakdale	1	20	\$100	\$5.00
Rosemount	1	70	703	10.00
St. Paul	4	16,127	73,002	4.53
Metro East Total	6	16,217	\$73,805	\$4.55

District Totals				
District 1 Total	7	90,417	\$168,040	\$1.86
District 3 Total	5	31,113	176,738	5.68
District 4 Total	3	195	2,960	15.18
Metro West Total	4	3,289	26,358	8.01
District 6 Total	5	26,742	114,764	4.29
District 7 Total	3	18,022	91,746	5.09
District 8 Total	4	2,680	12,932	4.83
Metro East Total	6	16,217	73,805	4.55

STATE TOTAL	37	188,676	\$667,342	\$3.54
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CONCRETE PAVEMENT REMOVAL #2106



NEEDS YEAR	NO. OF CITIES	QUANTITY	TOTAL COST	YEARLY AVERAGE CONTRACT PRICE	PRICE USED IN NEEDS	5 YEAR AVERAGE CONTRACT PRICE
1989	44	276,630	\$886,757	\$3.21	\$3.75	\$3.71
1990	27	88,278	339,571	3.85	4.00	3.74
1991	27	108,995	418,053	3.84	4.00	3.77
1992	23	98,752	403,278	4.08	4.00	3.92
1993	26	190,259	770,477	4.05	4.00	3.80
1994	26	185,066	782,965	4.23	4.00	4.01
1995	27	81,258	337,753	4.16	4.10	4.07
1996	28	78,122	341,385	4.37	4.20	4.18
1998	24	110,941	520,259	4.69	4.50	4.30
1999					4.60	
2000	15	68,760	399,759	5.81	5.00	4.76
2001					5.25	
2002	17	64,918	284,994	4.39	5.25	4.96
2003					5.40	
2004	23	188,676	667,342	3.54		4.19

SUBCOMMITTEE'S RECOMMENDED PRICE FOR THE 2004 NEEDS STUDY IS \$5.40
PER SQ. YD.

Note: There was no Unit Price Study in years 1997, 1999, 2001 and 2003. Therefore, we used the total of the past five year's costs divided by the total of the past five year's quantities for the 5-Year Average.

MSAS UNIT PRICE STUDY TREE REMOVAL - CLEARING

CITY NAME	No. Of Projects	TOTAL QTY.	TOTAL COST	AVERAGE UNIT PRICE
District 1				
Duluth	4	81	\$22,463	\$277.33
Grand Rapids	1	8	800	100.00
Virginia	1	14	2,212	158.00
District 1 Total	6	103	\$25,475	\$247.33

District 3				
Brainerd	2	7	\$3,352	\$478.80
Little Falls	2	28	3,920	140.00
Monticello	1	6	1,800	300.00
Sartell	1	10	850	85.00
St. Cloud	2	38	7,850	206.58
Waite Park	1	1	75	75.00
District 3 Total	9	90	\$17,847	\$198.30

District 4				
Alexandria	1	1	\$150	\$150.00
Moorhead	1	3	1,500	500.00
District 4 Total	2	4	\$1,650	\$412.50

Metro West				
Anoka	2	8	\$2,000	\$250.00
Bloomington	2	45	5,700	126.67
Brooklyn Park	2	61	3,760	61.64
Coon Rapids	1	13	3,575	275.00
Lino Lakes	1	139	13,900	100.00
Minneapolis	1	6	3,365	560.76
Minnetonka	1	5	1,300	260.00
Metro West Total	10	277	\$33,600	\$121.30

District 6				
Albert Lea	1	19	\$1,900	\$100.00
Northfield	1	3	630	210.00
Owatonna	1	1	160	160.00
Rochester	1	28	14,000	500.00
District 6 Total	4	51	\$16,690	\$327.25

District 7				
Worthington	1	1	\$500	\$500.00
District 7 Total	1	1	\$500	\$500.00

District 8				
Hutchinson	2	11	\$2,750	\$250.00
Redwood Falls	1	5	375	75.00
District 8 Total	3	16	\$3,125	\$195.31

Metro East				
Arden Hills	1	159	\$31,700	\$200.00
Burnsville	2	17	3,875	227.94
Maplewood	1	75	11,250	150.00
Oakdale	1	10	750	75.00
Rosemount	2	44	11,933	269.66
Metro East Total	7	305	\$59,508	\$195.27

MSAS UNIT PRICE STUDY TREE REMOVAL - GRUBBING

CITY NAME	No. Of Projects	TOTAL QTY.	TOTAL COST	AVERAGE UNIT PRICE
District 1				
Duluth	4	83	\$7,939	\$95.65
Grand Rapids	1	8	800	100.00
Virginia	1	14	1,232	88.00
District 1 Total	6	105	\$9,971	\$94.96

District 3				
Brainerd	2	7	\$1,609	\$229.89
Little Falls	2	28	3,920	140.00
Monticello	1	6	1,050	175.00
Sartell	1	10	850	85.00
St. Cloud	2	52	6,225	119.71
Waite Park	1	1	75	75.00
District 3 Total	9	104	\$13,729	\$132.01

District 4				
Alexandria	1	4	\$600	\$150.00
Moorhead	1	3	600	200.00
District 4 Total	2	7	\$1,200	\$171.43

Metro West				
Anoka	2	8	\$1,200	\$150.00
Bloomington	2	45	5,700	126.67
Brooklyn Park	2	61	2,703	44.31
Coon Rapids	1	13	2,535	195.00
Lino Lakes	1	139	4,865	35.00
Minneapolis	1	6	3,044	507.36
Mnettonka	1	5	950	190.00
Metro West Total	10	277	\$20,997	\$75.80

District 6				
Albert Lea	1	19	\$1,425	\$75.00
Northfield	1	3	375	125.00
Owatonna	1	1	120	120.00
Rochester	1	28	5,600	200.00
District 6 Total	3	51	\$7,520	\$147.45

District 7				
Worthington	1	1	\$350	\$350.00
District 7 Total	1	1	\$350	\$350.00

District 8				
Hutchinson	2	11	\$2,750	\$250.00
Redwood Falls	1	5	250	50.00
District 8 Total	3	16	\$3,000	\$187.50

Metro East				
Arden Hills	1	111	\$8,288	\$75.00
Burnsville	2	17	2,075	122.06
Maplewood	1	60	9,000	150.00
Oakdale	1	10	500	50.00
Rosemount	2	44	4,210	95.14
St. Paul	3	9	4,500	500.00
Metro East Total	10	251	\$28,573	\$113.95

MSAS UNIT PRICE STUDY TREE REMOVAL - CLEARING

CITY NAME	No. Of Projects	TOTAL QTY.	TOTAL COST	AVERAGE UNIT PRICE
District Totals				
District 1 Total	6	103	\$25,475	\$247.33
District 3 Total	9	90	17,847	198.30
District 4 Total	2	4	1,650	412.50
Metro West Total	10	277	33,600	121.30
District 6 Total	4	51	16,690	327.25
District 7 Total	1	1	500	500.00
District 8 Total	3	16	3,125	195.31
Metro East Total	7	305	59,508	195.27

TOTAL CLEARING	42	847	\$158,394	\$187.06
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MSAS UNIT PRICE STUDY TREE REMOVAL - GRUBBING

CITY NAME	No. Of Projects	TOTAL QTY.	TOTAL COST	AVERAGE UNIT PRICE
District Totals				
District 1 Total	6	105	\$9,971	\$94.96
District 3 Total	9	104	13,729	132.01
District 4 Total	2	7	1,200	171.43
Metro West Total	10	277	20,997	75.80
District 6 Total	3	51	7,520	147.45
District 7 Total	1	1	350	350.00
District 8 Total	3	16	3,000	187.50
Metro East Total	10	251	28,573	113.95

TOTAL GRUBBING	44	812	\$85,340	\$105.13
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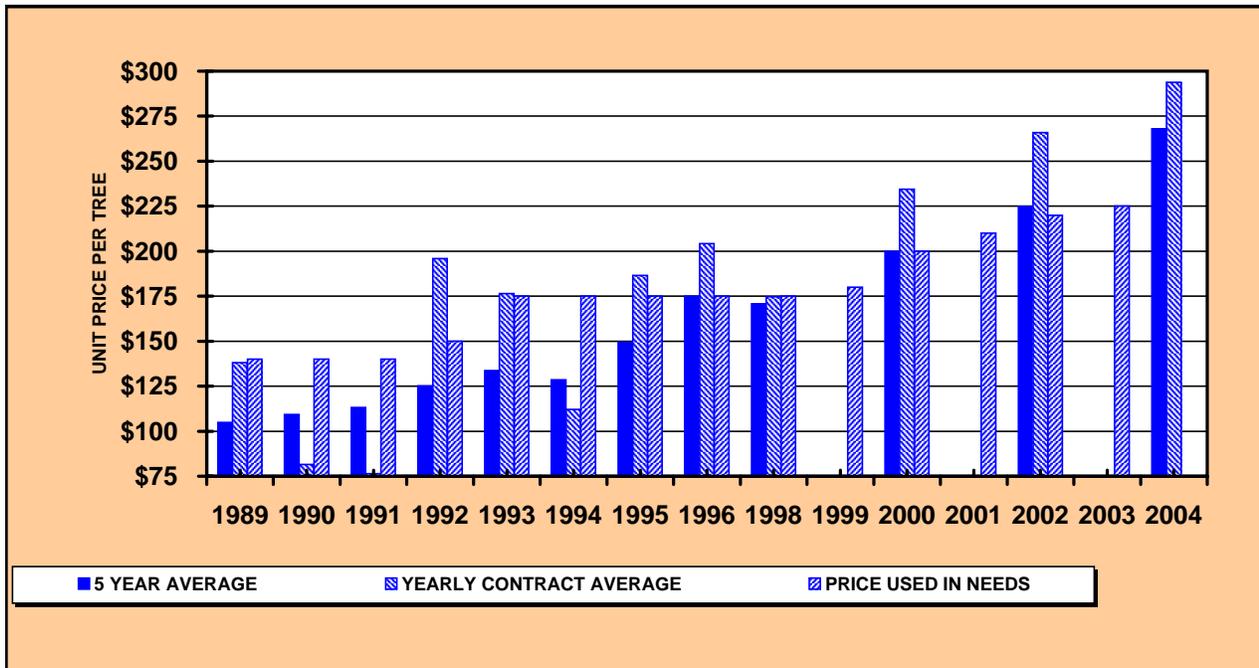
CLEARING AND GRUBBING ARE COMBINED TO COMPUTE TREE REMOVAL

CITY NAME	No. Of Projects	TOTAL QTY.	TOTAL COST	AVERAGE UNIT PRICE
TOTAL CLEARING	42	847	158,394	\$187.06
TOTAL GRUBBING	44	812	85,340	\$105.13
TOTAL		1,659	243,734	\$146.96

1659/2=829.5 TREES				
AVERAGE COST PER TREE = \$243,734/829.5 = \$293.83				

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TREE REMOVAL #2101



NEEDS YEAR	NO. OF CITIES	QUANTITY	TOTAL COST	YEARLY AVERAGE CONTRACT PRICE	PRICE USED IN NEEDS	5 YEAR AVERAGE CONTRACT PRICE
1989	40	884	\$122,030	\$138.04	\$140.00	\$104.88
1990	37	1,659	135,381	81.60	140.00	109.35
1991	35	1,869	142,888	76.45	140.00	113.19
1992	39	867	169,797	195.84	150.00	125.11
1993	34	853	150,442	176.37	175.00	133.66
1994	35	1,876	210,444	112.18	175.00	128.49
1995	41	1,136	211,912	186.54	175.00	149.48
1996	33	783	159,884	204.19	175.00	175.03
1998	28	779	136,044	174.64	175.00	170.78
1999	-	-	-	-	180.00	-
2000	24	593	138,966	234.34	200.00	199.93
2001	-	-	-	-	210.00	-
2002	21	625	166,204	265.93	220.00	224.97
2003	-	-	-	-	225.00	-
2004	31	830	243,734	293.83	-	268.08

SUBCOMMITTEE'S RECOMMENDED PRICE FOR THE 2004 NEEDS STUDY IS \$235.00 PER TREE

Note: There was no Unit Price Study in years 1997,1999, 2001 and 2003. Therefore, we used the total of the past five year's costs divided by the total of the past five year's quantities for the 5-Year Average.

MSAS UNIT PRICE STUDY AGGREGATE BASE 2211 - TONS

CITY NAME	No. Of Projects	TOTAL QTY.	TOTAL COST	AVERAGE UNIT PRICE
District 1				
Duluth	6	9,429	\$183,471	\$19.46
Grand Rapids	2	4,458	38,974	8.74
Hermantown	1	22	330	15.00
Hibbing	1	7,120	74,760	10.50
Virginia	1	123,092	548,862	4.46
District 1 Total	11	144,121	\$846,398	\$5.87

District 2				
East Grand Forks	1	143	\$5,087	\$35.57
Thief River Falls	2	140	770	5.50
District 2 Total	3	283	\$5,857	\$20.69

District 3				
Brainerd	2	19,313	\$174,448	\$9.03
Elk River	1	640	9,600	15.00
Monticello	2	3,510	35	0.01
Otsego	2	29,600	223,083	7.54
Sartell	1	9,761	108,640	11.13
St. Cloud	2	12,555	212,576	16.93
St. Michael	1	28,988	188,422	6.50
District 3 Total	11	104,367	\$916,803	\$8.78

District 4				
Alexandria	3	6,486	\$27,800	\$4.29
Moorhead	2	17,735	269,140	15.18
District 4 Total	5	24,221	\$296,940	\$12.26

Metro West				
Andover	2	430	\$5,628	\$13.09
Anoka	2	3,304	38,987	11.80
Bloomington	2	15,692	211,514	13.48
Brooklyn Park	2	17,455	165,080	9.46
Champlin	2	4,185	100,440	24.00
Chaska	2	13,155	153,914	11.70
Coon Rapids	2	582	4,889	8.40
East Bethel	1	1,757	21,383	12.17
Ham Lake	1	1,606	16,060	10.00
Hopkins	2	1,671	38,304	22.92
Lino Lakes	1	12,000	81,600	6.80
Minneapolis	2	9,485	114,769	12.10
Minnetonka	1	1,460	19,637	13.45
Plymouth	1	475	10,640	22.40
Savage	1	35,500	333,700	9.40
Shorewood	1	3,200	42,880	13.40
St. Francis	1	1,411	9,126	6.47
Metro West Total	26	123,368	\$1,368,549	\$11.09

MSAS UNIT PRICE STUDY AGGREGATE BASE 2211 - TONS

CITY NAME	No. Of Projects	TOTAL QTY.	TOTAL COST	AVERAGE UNIT PRICE
District 6				
Albert Lea	1	1,841	\$24,854	\$13.50
Austin	2	7,100	62,125	8.75
Northfield	2	3,456	25,441	7.36
Owatonna	2	458	5,038	11.00
Red Wing	2	2,930	30,765	10.50
Rochester	3	18,185	235,568	12.95
Winona	2	3,166	65,695	20.75
District 6 Total	14	37,136	\$449,485	\$12.10

District 7				
Fairmont	1	2,280	\$29,640	\$13.00
Worthington	1	2,004	44,088	22.00
District 7 Total	2	4,284	\$73,728	\$17.21

District 8				
Hutchinson	4	37,869	\$295,382	\$7.80
Montevideo	1	4,150	29,050	7.00
Redwood Falls	1	5,000	30,000	6.00
Willmar	2	11,400	92,910	8.15
District 8 Total	8	58,419	\$447,342	\$7.66

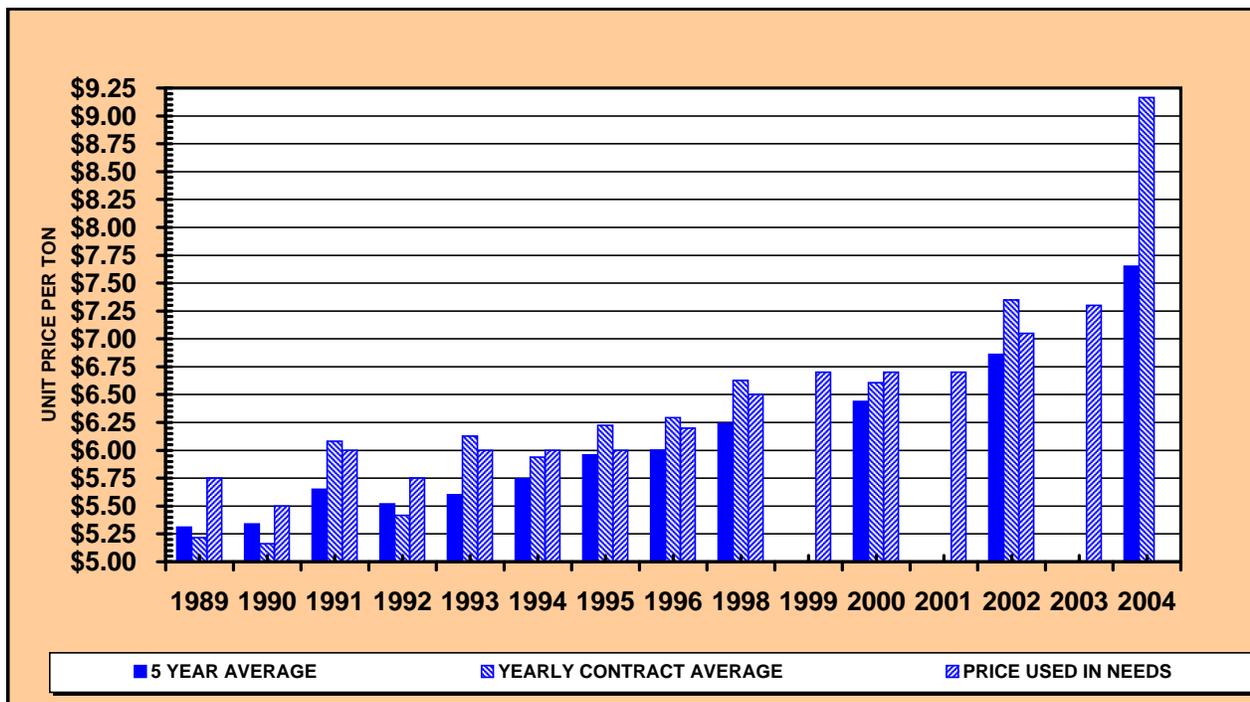
Metro East				
Apple Valley	4	9,720	\$73,745	\$7.59
Arden Hills	1	6,642	79,777	12.01
Burnsville	2	4,005	45,280	11.31
Eagan	3	577	8,655	15.00
Maplewood	1	10,175	91,575	9.00
Mendota Heights	1	215	3,204	14.90
New Brighton	1	40	344	8.60
Oakdale	2	10,812	98,188	9.08
Rosemount	2	20,927	217,296	10.38
Roseville	1	110	1,430	13.00
South St. Paul	1	850	6,375	7.50
St. Paul	7	12,881	221,834	17.22
Metro East Total	26	76,954	\$847,702	\$11.02

District Totals				
District 1 Total	11	144,121	\$846,398	\$5.87
District 2 Total	3	283	5,857	20.69
District 3 Total	11	104,367	916,803	8.78
District 4 Total	5	24,221	296,940	12.26
Metro West Total	26	123,368	1,368,549	11.09
District 6 Total	14	37,136	449,485	12.10
District 7 Total	2	4,284	73,728	17.21
District 8 Total	8	58,419	447,342	7.66
Metro East Total	26	76,954	847,702	11.02

STATE TOTAL	106	573,153	\$5,252,804	\$9.16
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CLASS 5 AGGREGATE BASE #2211



NEEDS YEAR	NO. OF CITIES	QUANTITY	TOTAL COST	YEARLY AVERAGE CONTRACT PRICE	PRICE USED IN NEEDS	5 YEAR AVERAGE CONTRACT PRICE
1989	70	648,988	\$3,385,938	\$5.22	\$5.75	\$5.31
1990	68	715,922	3,696,421	5.16	5.50	5.34
1991	70	553,874	3,368,664	6.08	6.00	5.65
1992	69	650,835	3,525,629	5.42	5.75	5.52
1993	60	621,247	3,807,092	6.13	6.00	5.60
1994	70	660,174	3,921,230	5.94	6.00	5.75
1995	61	491,608	3,060,585	6.23	6.00	5.96
1996	68	593,314	3,733,431	6.29	6.20	6.00
1998	67	470,633	3,118,365	6.63	6.50	6.24
1999					6.70	
2000	58	680,735	4,498,220	6.61	6.70	6.44
2001					6.70	
2002	52	527,592	3,877,688	7.35	7.05	6.86
2003					7.30	
2004	58	573,153	5,252,804	9.16		7.65

SUBCOMMITTEE'S RECOMMENDED PRICE FOR THE 2004 NEEDS STUDY IS \$7.65 PER TON

Note: There was no Unit Price Study in years 1997, 1999, 2001 and 2003. Therefore, we used the total of the past five year's costs divided by the total of the past five year's quantities for the 5-Year Average.

MSAS UNIT PRICE STUDY BITUMINOUS

CITY NAME	No. Of Projects	TOTAL QTY.	TOTAL COST	AVERAGE UNIT PRICE
District 1				
Duluth	7	35,166	\$1,033,885	\$29.40
Grand Rapids	2	4,124	166,363	40.34
Hermantown	1	528	14,124	26.75
Hibbing	1	4,245	145,915	34.37
District 1 Total	11	44,063	\$1,360,287	\$30.87

District 2				
East Grand Forks	1	611	\$32,857	\$53.78
Thief River Falls	2	10,920	307,081	28.12
District 2 Total	3	11,531	\$339,938	\$29.48

District 3				
Brainerd	2	11,699	\$352,451	\$30.13
Elk River	1	530	29,680	56.00
Little Falls	3	3,166	95,776	30.25
Monticello	2	4,400	162,950	37.03
Otsego	2	11,200	349,351	31.19
Sartell	1	7,821	237,678	30.39
St. Cloud	2	15,747	558,576	35.47
St. Michael	1	3,726	108,054	29.00
Waite Park	1	10,648	373,660	35.09
District 3 Total	15	68,937	\$2,268,176	\$32.90

District 4				
Alexandria	6	13,265	\$320,150	\$24.13
Moorhead	2	17,814	700,385	39.32
District 4 Total	8	31,079	\$1,020,535	\$32.84

Metro West				
Andover	2	380	\$13,479	\$35.47
Anoka	2	1,987	61,512	30.96
Bloomington	2	13,208	578,770	43.82
Brooklyn Park	2	14,570	471,403	32.35
Champlin	4	9,405	352,643	37.50
Chaska	2	5,855	179,690	30.69
Coon Rapids	3	7,969	277,933	34.88
East Bethel	1	1,550	56,982	36.76
Ham Lake	1	1,182	40,053	33.89
Hopkins	2	4,161	156,054	37.50
Lino Lakes	1	4,050	130,383	32.19
Minneapolis	2	23,671	869,946	36.75
Minnetonka	1	14,667	362,201	24.69
Plymouth	1	575	24,523	42.65
Savage	1	11,400	354,360	31.08
Shorewood	1	20,930	725,944	34.68
St. Francis	1	1,157	26,059	22.51
Metro West Total	29	136,717	\$4,681,932	\$34.25

MSAS UNIT PRICE STUDY BITUMINOUS

CITY NAME	No. Of Projects	TOTAL QTY.	TOTAL COST	AVERAGE UNIT PRICE
District 6				
Albert Lea	1	15	\$1,980	\$132.00
Austin	2	262	12,816	48.92
Northfield	2	3,906	119,495	30.59
Owatonna	1	10	526	52.60
Red Wing	2	2,110	93,851	44.48
Rochester	3	7,659	284,021	37.08
Winona	2	3,547	147,130	41.48
District 6 Total	13	17,509	\$659,818	\$37.68

District 7				
Fairmont	1	7,270	\$312,784	\$43.02
Worthington	2	2,670	121,151	45.37
District 7 Total	3	9,940	\$433,935	\$43.66

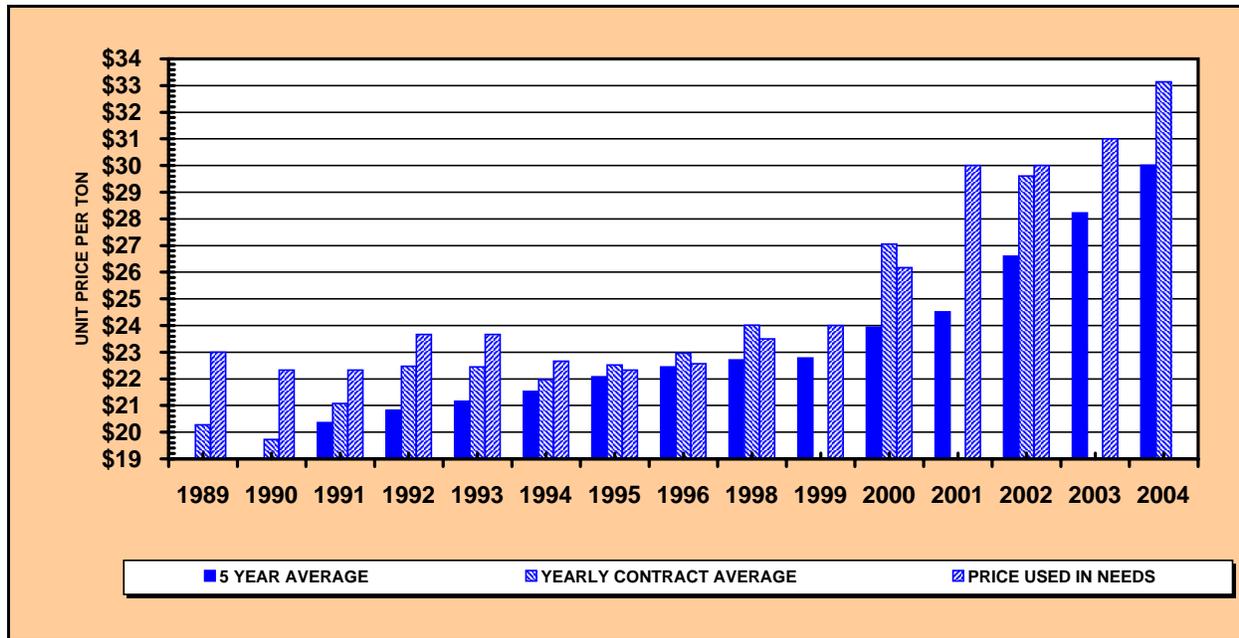
District 8				
Hutchinson	4	14,951	\$456,526	\$30.53
Marshall	7	7,643	257,687	33.72
Montevideo	1	1,650	49,432	29.96
Redwood Falls	1	2,650	100,688	38.00
Willmar	3	13,360	331,385	24.80
District 8 Total	3	40,254	\$1,195,717	\$29.70

Metro East				
Apple Valley	7	9,720	\$304,137	\$31.29
Arden Hills	1	2,816	94,074	33.40
Burnsville	3	15,514	521,455	33.61
Eagan	3	5,422	195,343	36.03
Maplewood	1	2,100	70,900	33.76
Mendota Heights	1	90	11,153	123.93
New Brighton	1	1,380	43,329	31.40
Oakdale	2	13,875	437,041	31.50
Rosemount	2	12,908	440,015	34.09
Roseville	2	3,063	105,429	34.42
South St. Paul	3	4,913	147,214	29.96
St. Paul	6	27,775	899,531	32.39
Metro East Total	32	99,576	\$3,269,621	\$32.84

District Totals				
District 1 Total	11	44,063	\$1,360,287	\$30.87
District 2 Total	3	11,531	339,938	29.48
District 3 Total	15	68,937	2,268,176	32.90
District 4 Total	8	31,079	1,020,535	32.84
Metro West Total	29	136,717	4,681,932	34.25
District 6 Total	13	17,509	659,818	37.68
District 7 Total	3	9,940	433,935	43.66
District 8 Total	3	40,254	1,195,717	29.70
Metro East Total	32	99,576	3,269,621	32.84

STATE TOTAL	117	459,606	\$15,229,960	\$33.14
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BITUMINOUS



NEEDS YEAR	NO. OF CITIES*	QUANTITY	TOTAL COST	YEARLY AVERAGE CONTRACT PRICE	PRICE USED IN NEEDS	5 YEAR AVERAGE CONTRACT PRICE
1989	70	631,506 ¹	12,802,798 ²	\$20.27 ³	\$23.00 ⁴	
1990	68	599,083 ¹	11,821,216 ²	19.73 ³	22.33 ⁴	
1991	70	613,163 ¹	12,925,191 ²	21.08 ³	22.33 ⁴	20.37 ⁵
1992	69	519,900 ¹	11,685,503 ²	22.48 ³	23.67 ⁴	20.83 ⁵
1993	66	598,566 ¹	13,434,379 ²	22.44 ³	23.67 ⁴	21.16 ⁵
1994	70	692,066 ¹	15,208,681 ²	21.98 ³	22.67 ⁴	21.53 ⁵
1995	61	601,173 ¹	13,535,386 ²	22.51 ³	22.33 ⁴	22.08 ⁵
1996	68	540,860 ¹	12,419,802 ²	22.96 ³	22.57 ⁴	22.45 ⁵
1998	67	505,372 ¹	12,132,901 ²	24.01 ³	23.50 ⁴	22.71 ⁵
1999				0.00 ³	24.00 ⁴	22.78 ⁵
2000	51	434,005 ¹	11,739,821 ²	27.05 ³	26.17 ⁴	23.94 ⁵
2001				0.00 ³	30.00 ⁴	24.52 ⁵
2002	50	371,198 ¹	10,989,206 ²	29.60 ³	30.00 ⁴	26.60 ⁵
2003					31.00 ⁴	28.23 ⁵
2004	60	459,606	15,229,960	33.14		30.01

SUBCOMMITTEE'S RECOMMENDED PRICE FOR THE 2004 NEEDS STUDY IS \$33.00 PER TON

Note: There was no Unit Price Study in years 1997, 1999, 2001 and 2003. Therefore, we used the total of the past five year's costs divided by the total of the past five year's quantities for the 5-Year Average.

* Used highest number of cities from the **BITUMINOUS - PAST YEARS COMBINED** pages

¹ Combined the quantities from the four previous tables together.

² Combined the total costs from the four previous tables together.

³ Total Costs divided by quantity.

⁴ Average of the Price Used in Needs from the four previous tables.

⁵ Used past 5 year's costs divided by the past 5 year's quantity.

BITUMINOUS - PAST YEARS COMBINED

In 2001, the Screening Board decided to combine all bituminous and use a single unit price. This worksheet combines all bituminous types (2331, 2341 and 2350, 2361) from past years and combines them together.

BITUMINOUS BASE OR SURFACE #2331

N:\MSAS\EXCEL\UNIT PRICE\UNIT PRICE BREAK OUT.XLS Bit - Past Years Combined

NEEDS YEAR	NO. OF CITIES	QUANTITY	TOTAL COST	YEARLY AVERAGE CONTRACT PRICE	PRICE USED IN NEEDS	5 YEAR AVERAGE CONTRACT PRICE
1989	70	316,333	\$5,793,245	\$18.31	\$21.00	\$19.87
1990	68	313,022	5,517,034	17.63	20.00	19.19
1991	70	349,058	6,952,316	19.92	20.00	19.09
1992	69	358,244	7,739,246	21.60	22.00	19.48
1993	60	243,491	4,791,236	19.68	22.00	19.43
1994	70	265,414	5,339,712	20.12	21.00	19.79
1995	61	190,763	3,791,009	19.87	20.00	20.24
1996	68	188,898	4,000,168	21.18	20.50	20.49
1998	67	183,962	4,197,677	22.82	21.50	20.73
1999					22.00	
2000	48	152,926	3,954,123	25.86	25.50	22.43
2001					30.00	
2002	29	60,040	1,726,266	28.75	30.00	25.81
2003						27.30

BITUMINOUS SURFACE #2341

NEEDS YEAR	NO. OF CITIES	QUANTITY	TOTAL COST	YEARLY AVERAGE CONTRACT PRICE	PRICE USED IN NEEDS	5 YEAR AVERAGE CONTRACT PRICE
1989	58	144,986	\$3,119,592	\$21.52	\$24.00	\$23.14
1990	44	127,267	2,707,906	21.28	23.50	22.83
1991	48	125,102	2,804,228	22.42	23.50	22.31
1992	31	77,735	1,873,836	24.11	24.50	22.48
1993	66	160,587	3,825,967	23.82	24.50	22.63
1994	52	201,120	4,584,015	22.79	23.50	22.88
1995	58	190,983	4,448,398	23.29	23.50	23.29
1996	65	169,911	4,023,193	23.68	23.60	23.54
1998	60	158,320	3,895,038	24.60	24.50	23.64
1999					25.00	
2000	51	137,663	3,792,496	27.55	26.50	24.78
2001					30.00	
2002	28	63,693	1,879,624	29.51	30.00	27.22
2003						

BITUMINOUS - PAST YEARS COMBINED

BITUMINOUS SURFACE #2341 & 2350

NEEDS YEAR	NO. OF CITIES*	QUANTITY	TOTAL COST	YEARLY AVERAGE CONTRACT PRICE	PRICE USED IN NEEDS	5 YEAR AVERAGE CONTRACT PRICE
1989	58	144,986	\$3,119,592	\$21.52	\$24.00	\$23.14
1990	44	127,267	2,707,906	21.28	23.50	22.83
1991	48	125,102	2,804,228	22.42	23.50	22.31
1992	31	77,735	1,873,836	24.11	24.50	22.48
1993	66	160,587	3,825,967	23.82	24.50	22.63
1994	52	201,120	4,584,015	22.79	23.50	22.88
1995	58	190,983	4,448,398	23.29	23.50	23.29
1996	65	169,911	4,023,193	23.68	23.60	23.54
1998	60	158,320	3,895,038	24.60	24.50	23.64
1999					25.00	
2000	51	137,663	3,792,496	27.55	26.50	24.78
2001					30.00	
2002	50	242,437	7,175,392	29.60	30.00	27.25
2003						28.57

BITUMINOUS SURFACE #2361

NEEDS YEAR	NO. OF CITIES	QUANTITY	TOTAL COST	YEARLY AVERAGE CONTRACT PRICE	PRICE USED IN NEEDS	5 YEAR AVERAGE CONTRACT PRICE
1989	17	25,201	\$770,369	\$30.57	\$34.00	\$31.81
1990	14	31,527	888,370	28.18	33.00	31.18
1991	13	13,901	364,419	26.22	30.00	29.79
1992	3	6,186	198,585	32.10	32.00	29.41
1993	13	33,901	991,209	29.14	32.00	29.24
1994	11	24,412	700,939	28.71	30.00	28.87
1995	8	28,444	847,581	29.80	30.00	29.19
1996	7	12,140	373,248	30.75	30.10	30.10
1998	5	4,770	145,148	30.43	30.50	29.77
1999					31.50	
2000	4	5,753	200,706	34.89	31.50	31.47
2001					30.00	
2002	3	5,028	207,923	41.35	None	35.56
2003						38.12

ALL BITUMINOUS COMBINED

NEEDS YEAR	NO. OF CITIES*	QUANTITY	TOTAL COST	YEARLY AVERAGE CONTRACT PRICE	PRICE USED IN NEEDS	5 YEAR AVERAGE CONTRACT PRICE
1989	70	631,506 ¹	12,802,798 ²	\$20.27 ³	\$23.00 ⁴	
1990	68	599,083 ¹	11,821,216 ²	19.73 ³	22.33 ⁴	
1991	70	613,163 ¹	12,925,191 ²	21.08 ³	22.33 ⁴	20.37 ⁵
1992	69	519,900 ¹	11,685,503 ²	22.48 ³	23.67 ⁴	20.83 ⁵
1993	66	598,566 ¹	13,434,379 ²	22.44 ³	23.67 ⁴	21.16 ⁵
1994	70	692,066 ¹	15,208,681 ²	21.98 ³	22.67 ⁴	21.53 ⁵
1995	61	601,173 ¹	13,535,386 ²	22.51 ³	22.33 ⁴	22.08 ⁵
1996	68	540,860 ¹	12,419,802 ²	22.96 ³	22.57 ⁴	22.45 ⁵
1998	67	505,372 ¹	12,132,901 ²	24.01 ³	23.50 ⁴	22.71 ⁵
1999					24.00 ⁴	22.78 ⁵
2000	51	434,005 ¹	11,739,821 ²	27.05 ³	26.17 ⁴	23.94 ⁵
2001					30.00 ⁴	24.52 ⁵
2002	50	371,198 ¹	10,989,206 ²	29.60 ³	30.00 ⁴	26.60 ⁵
2003					31.00	28.23 ⁵
2004						

* Used highest number of cities from the **BITUMINOUS - PAST YEARS COMBINED** pages

¹ Combined the quantities from the four previous tables together.

² Combined the total costs from the four previous tables together.

³ Total Costs divided by quantity.

⁴ Average of the Price Used in Needs from the four previous tables.

⁵ Used past 5 year's costs divided by the past 5 year's quantity.

MSAS UNIT PRICE STUDY CURB AND GUTTER CONSTRUCTION - LIN. FT.

CITY NAME	No. Of Projects	TOTAL QTY.	TOTAL COST	AVERAGE UNIT PRICE
District 1				
Duluth	6	45,556	\$417,323	\$9.16
Grand Rapids	2	6,215	45,549	7.33
Hermantown	1	372	6,696	18.00
Hibbing	1	5,258	42,064	8.00
Virginia	1	26,878	236,927	8.81
District 1 Total	11	84,279	\$748,559	\$8.88

District 2				
East Grand Forks	1	3,758	\$43,367	\$11.54
Thief River Falls	2	1,260	12,600	10.00
District 2 Total	3	5,018	\$55,967	\$11.15

District 3				
Brainerd	2	14,012	\$112,748	\$8.05
Elk River	1	1,345	14,795	11.00
Little Falls	3	5,540	44,633	8.06
Monticello	2	3,285	39,420	12.00
Otsego	2	15,200	106,400	7.00
Sartell	1	10,635	74,445	7.00
St. Cloud	1	15,724	105,178	6.69
St. Michael	1	9,159	65,584	7.16
Waite Park	1	9	119	13.20
District 3 Total	14	74,909	\$563,322	\$7.52

District 4				
Alexandria	6	4,807	\$63,168	\$13.14
Moorhead	3	28,740	304,935	10.61
District 4 Total	9	33,547	\$368,103	\$10.97

Metro West				
Andover	2	696	\$7,342	\$10.55
Anoka	2	4,290	30,674	7.15
Bloomington	2	13,242	111,890	8.45
Brooklyn Park	2	17,992	131,217	7.29
Champlin	4	6,262	55,957	8.94
Chaska	2	7,960	73,180	9.19
Coon Rapids	3	4,864	54,067	11.12
East Bethel	1	3,465	24,775	7.15
Ham Lake	1	2,560	18,944	7.40
Hopkins	1	6,177	61,770	10.00
Lino Lakes	1	10,540	75,888	7.20
Minneapolis	2	13,542	173,879	12.84
Minnnetonka	1	857	11,227	13.10
Savage	1	11,100	83,250	7.50
Shorewood	1	430	6,880	16.00
St. Francis	1	2,638	17,656	6.69
Metro West Total	27	106,615	\$938,594	\$8.80

MSAS UNIT PRICE STUDY CURB AND GUTTER CONSTRUCTION - LIN. FT.

CITY NAME	No. Of Projects	TOTAL QTY.	TOTAL COST	AVERAGE UNIT PRICE
District 6				
Albert Lea	1	4,952	\$49,090	\$9.91
Austin	1	200	4,212	21.06
Northfield	2	8,789	65,158	7.41
Owatonna	2	181	1,810	10.00
Red Wing	2	1,455	18,105	12.44
Rochester	3	12,987	122,023	9.40
Winona	2	4,067	34,325	8.44
District 6 Total	13	32,631	\$294,724	\$9.03

District 7				
Fairmont	1	4,560	\$38,760	\$8.50
Worthington	1	2,372	22,534	9.50
District 7 Total	2	6,932	\$61,294	\$8.84

District 8				
Hutchinson	4	20,285	\$141,014	\$6.95
Marshall	2	220	3,960	18.00
Montevideo	1	1,850	13,690	7.40
Redwood Falls	1	3,002	29,270	9.75
Willmar	3	2,085	19,753	9.47
District 8 Total	11	27,442	\$207,687	\$7.57

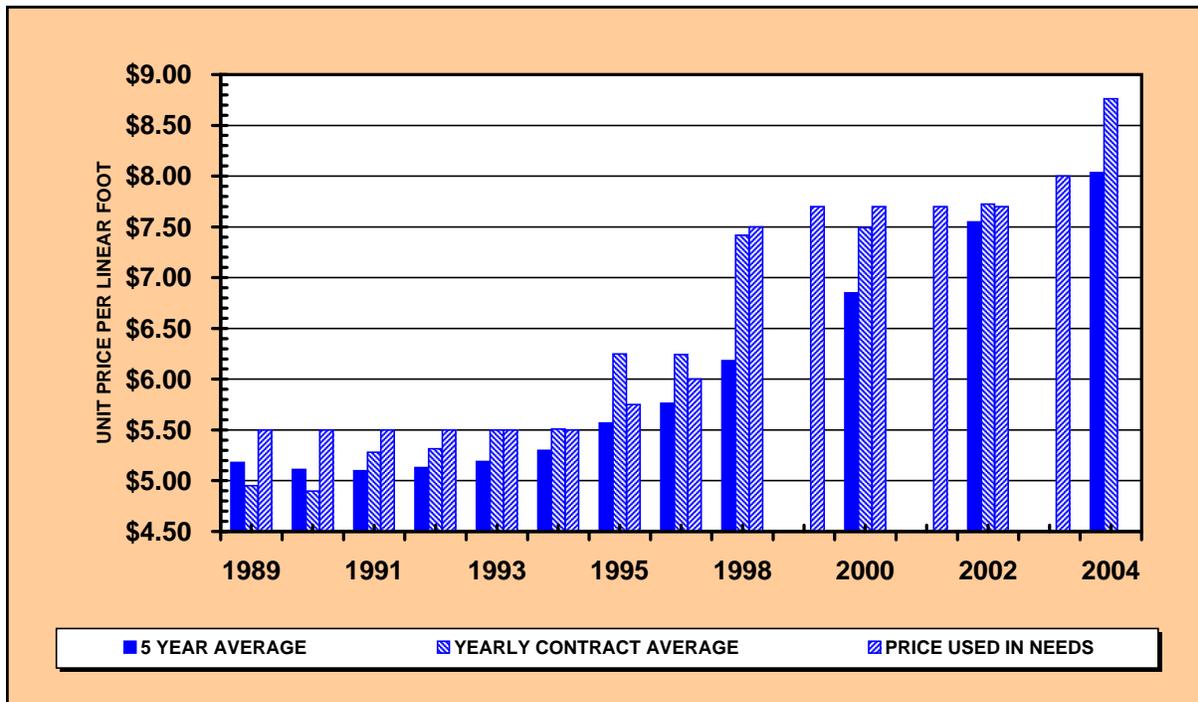
Metro East				
Apple Valley	7	11,220	\$115,540	\$10.30
Arden Hills	1	8,411	63,072	7.50
Burnsville	3	7,420	77,489	10.44
Eagan	2	3,512	38,042	10.83
Maplewood	1	6,755	57,353	8.49
New Brighton	1	1,200	10,800	9.00
Oakdale	2	16,750	142,063	8.48
Rosemount	2	14,085	118,219	8.39
Roseville	2	590	6,195	10.50
South St. Paul	3	101	1,515	15.00
St. Paul	6	27,715	241,675	8.72
Metro East Total	30	97,759	\$871,961	\$8.92

District Totals				
District 1 Total	11	84,279	\$748,559	\$8.88
District 2 Total	3	5,018	55,967	11.15
District 3 Total	14	74,909	563,322	7.52
District 4 Total	9	33,547	368,103	10.97
Metro West Total	27	106,615	938,594	8.80
District 6 Total	13	32,631	294,724	9.03
District 7 Total	2	6,932	61,294	8.84
District 8 Total	11	27,442	207,687	7.57
Metro East Total	30	97,759	871,961	8.92

STATE TOTAL	120	469,131	\$4,110,211	\$8.76
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CURB AND GUTTER CONSTRUCTION



NEEDS YEAR	NO. OF CITIES	QUANTITY	TOTAL COST	YEARLY AVERAGE CONTRACT PRICE	PRICE USED IN NEEDS	5 YEAR AVERAGE CONTRACT PRICE
1989	73	606,413	\$3,002,995	\$4.95	\$5.50	\$5.18
1990	57	603,356	2,954,409	4.90	5.50	5.11
1991	67	559,342	2,952,849	5.28	5.50	5.10
1992	68	523,717	2,783,163	5.31	5.50	5.13
1993	69	515,687	2,836,644	5.50	5.50	5.19
1994	70	460,898	2,538,790	5.51	5.50	5.30
1995	64	528,679	3,303,027	6.25	5.75	5.57
1996	72	453,022	2,828,565	6.24	6.00	5.76
1998	64	347,973	2,581,523	7.42	7.50	6.18
1999					7.70	
2000	55	418,211	3,133,900	7.49	7.70	6.85
2001					7.70	
2002	50	363,497	2,807,345	7.72	7.70	7.55
2003					8.00	
2004	59	469,131	4,110,211	8.76		8.04

SUBCOMMITTEE'S RECOMMENDED PRICE FOR THE 2004 NEEDS STUDY IS \$8.25 PER LIN. FT.

Note: There was no Unit Price Study in years 1997,1999, 2001 and 2003. Therefore, we used the total o the past five year's costs divided by the total of the past five year's quantities for the 5-Year Average.

MSAS UNIT PRICE STUDY SIDEWALK CONSTRUCTION - SQUARE YARD

CITY NAME	No. Of Projects	TOTAL QTY.	TOTAL COST	AVERAGE UNIT PRICE
District 1				
Duluth	4	12,111	\$283,641	\$23.42
Grand Rapids	2	1,683	39,570	23.51
Hibbing	1	1,353	31,668	23.40
Virginia	1	13,893	287,496	20.69
District 1 Total	8	29,040	\$642,375	\$22.12

District 2				
Thief River Falls	1	28	\$750	\$27.00
District 2 Total	1	28	\$750	\$27.00

District 3				
Brainerd	2	10,721	\$207,374	\$19.34
Elk River	1	114	3,090	27.00
Little Falls	3	3,771	79,269	21.02
St. Cloud	2	7,788	147,808	18.98
Waite Park	1	2,267	43,393	19.14
District 3 Total	9	24,661	\$480,935	\$19.50

District 4				
Alexandria	4	91	\$3,575	\$39.14
Moorhead	3	1,752	65,531	37.41
District 4 Total	7	1,843	\$69,106	\$37.50

Metro West				
Andover	1	150	\$3,551	\$23.67
Anoka	2	919	19,853	21.60
Bloomington	1	6,702	214,425	31.99
Brooklyn Park	2	6,959	128,676	18.49
Champlin	2	2,174	39,624	18.23
Chaska	2	647	17,460	27.00
Coon Rapids	3	1,065	29,330	27.54
Hopkins	2	1,818	48,455	26.66
Minneapolis	2	8,417	239,356	28.44
Savage	1	3,080	67,255	21.84
Shorewood	1	169	6,232	36.90
St. Francis	1	628	13,493	21.49
Metro West Total	20	32,727	\$827,709	\$25.29

District 6				
Albert Lea	1	12	\$523	\$42.75
Austin	1	350	10,910	31.17
Northfield	2	733	16,488	22.50
Owatonna	2	1,453	30,148	20.74
Red Wing	2	59	2,064	35.05
Rochester	3	4,343	116,607	26.85
District 6 Total	11	6,951	\$176,738	\$25.43

MSAS UNIT PRICE STUDY SIDEWALK CONSTRUCTION - SQUARE YARD

CITY NAME	No. Of Projects	TOTAL QTY.	TOTAL COST	AVERAGE UNIT PRICE
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District 7				
Fairmont	1	2,131	\$62,332	\$29.25
Wothington	1	38	2,197	58.50
District 7 Total	2	2,169	\$64,529	\$29.76

District 8				
Hutchinson	4	4,807	\$100,631	\$20.94
Marshall	2	170	8,404	49.50
Montevideo	1	27	784	28.80
Redwood Falls	1	9	560	63.00
Willmar	2	747	17,136	22.95
District 8 Total	10	5,759	\$127,515	\$22.14

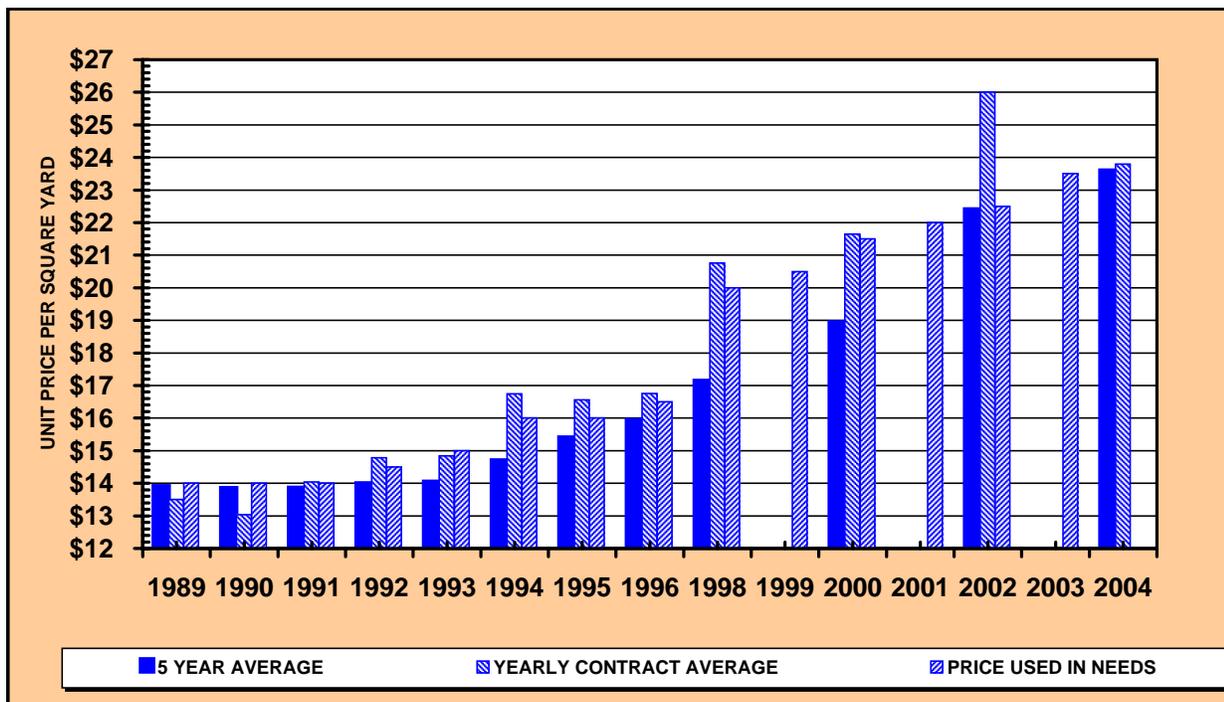
Metro East				
AppleValley	7	188	\$8,150	\$43.40
Burnsville	2	1,309	33,628	25.69
Eagan	2	2,114	52,322	24.75
Maplewood	1	989	26,715	27.00
New Brighton	1	640	17,561	27.44
Oakdale	2	156	4,150	26.68
Rosemount	2	4,361	111,799	25.64
Roseville	2	3	105	31.50
South St. Paul	1	19	936	49.26
St. Paul	7	10,504	292,531	27.85
Metro East Total	27	20,283	\$547,897	\$27.01

District Totals				
District 1 Total	8	29,040	\$642,375	\$22.12
District 2 Total	1	28	750	27.00
District 3 Total	9	24,661	480,935	19.50
District 4 Total	7	1,843	69,106	37.50
Metro West Total	20	32,727	827,709	25.29
District 6 Total	11	6,951	176,738	25.43
District 7 Total	2	2,169	64,529	29.76
District 8 Total	10	5,759	127,515	22.14
Metro East Total	27	20,283	547,897	27.01

STATE TOTAL	95	123,460	\$2,937,553	\$23.79
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SIDEWALK CONSTRUCTION #2521



NEEDS YEAR	NO. OF CITIES	QUANTITY	TOTAL COST	YEARLY AVERAGE CONTRACT PRICE	PRICE USED IN NEEDS	5 YEAR AVERAGE CONTRACT PRICE
1989	62	159,205	\$2,150,360	\$13.51	\$14.00	\$13.90
1990	54	125,748	1,639,735	13.04	14.00	13.85
1991	60	179,115	2,514,996	14.04	14.00	13.86
1992	62	141,946	2,097,863	14.78	14.50	13.99
1993	55	119,082	1,767,834	14.85	15.00	14.04
1994	56	89,662	1,501,608	16.75	16.00	14.69
1995	49	134,724	2,230,974	16.56	16.00	15.39
1996	60	94,140	1,577,035	16.75	16.50	15.94
1998	54	71,578	1,486,101	20.76	20.00	17.13
1999					20.50	
2000	45	88,562	1,917,075	21.65	21.50	18.93
2001					22.00	
2002	38	61,390	1,596,409	26.00	22.50	22.40
2003					23.50	
2004	47	123,460	2,937,553	23.79		23.59

SUBCOMMITTEE'S RECOMMENDED PRICE FOR THE 2004 NEEDS STUDY IS \$24.00 PER SQ. YD.

Note: There was no Unit Price Study in years 1997, 1999, 2001 and 2003. Therefore, we used the total of the past five year's costs divided by the total of the past five year's quantities for the 5-Year Average.

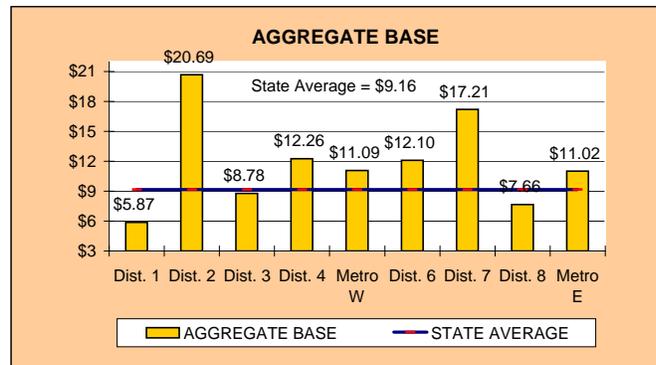
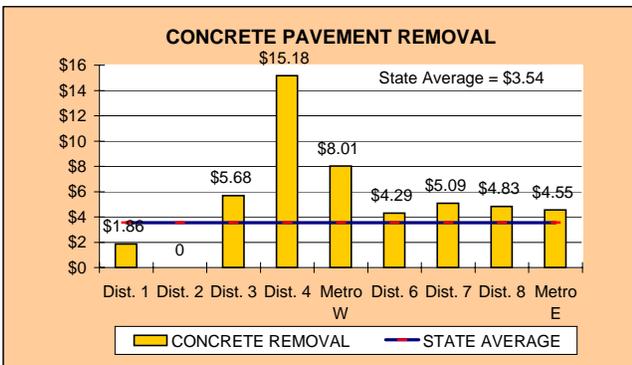
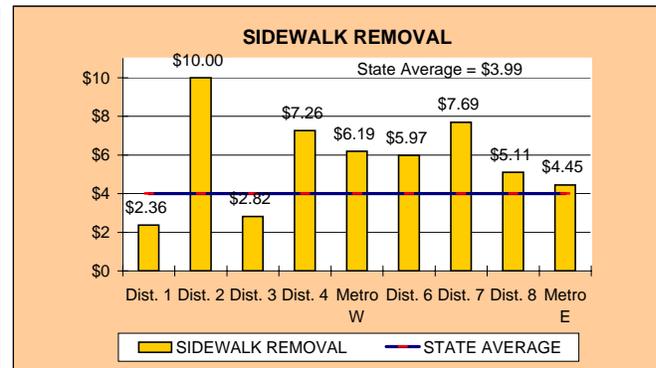
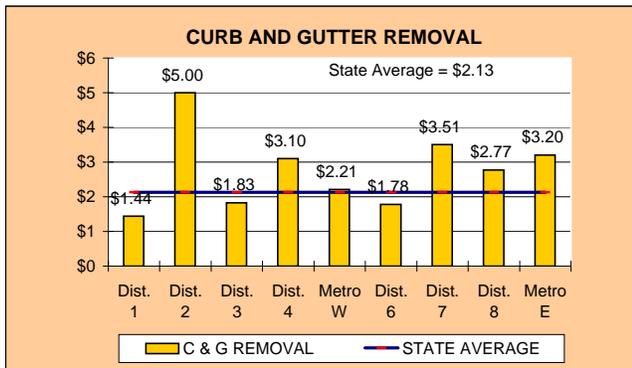
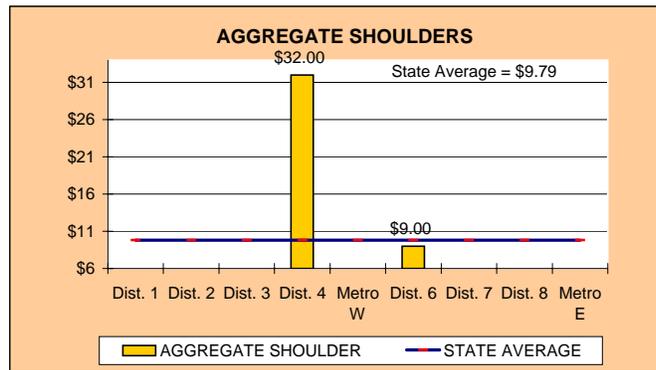
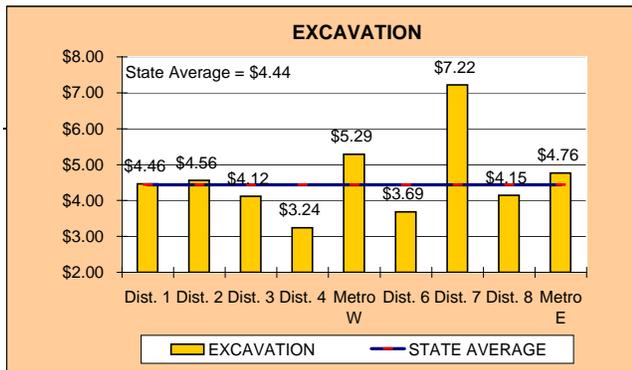
2003 UNIT PRICES BY DISTRICT

For the 2004 Unit Price Study

	Dist. 1	Dist. 2	Dist. 3	Dist. 4	Metro West	Dist. 6	Dist. 7	Dist. 8	Metro East	State Average
Excavation	\$4.46	\$4.56	\$4.12	\$3.24	\$5.29	\$3.69	\$7.22	\$4.15	\$4.76	\$4.44
Aggregate Shoulders	--	--	--	\$32.00	--	\$9.00	--	--	--	\$9.79
C & G Removal	<i>\$1.44</i>	\$5.00	\$1.83	\$3.10	\$2.21	\$1.78	\$3.51	\$2.77	\$3.20	\$2.13
Sidewalk Removal	\$2.36	\$10.00	\$2.82	\$7.26	\$6.19	\$5.97	\$7.69	\$5.11	\$4.45	\$3.99
Conc. Pave. Removal	\$1.86	--	\$5.68	\$15.18	\$8.01	\$4.29	\$5.09	\$4.83	\$4.55	\$3.54
Tree Removal (Clear)	\$247.33	--	\$198.30	\$412.50	\$121.30	\$327.25	\$500.00	\$195.31	\$195.27	\$187.06
Tree Removal (Grub)	\$94.96	--	\$132.01	\$171.43	\$75.80	\$147.45	\$350.00	\$187.50	\$113.95	\$105.13
Agg. Base - 2211	\$5.87	\$20.69	\$8.78	\$12.26	\$11.09	\$12.10	\$17.21	\$7.66	\$11.02	\$9.16
Bituminous - All	\$30.87	\$29.48	\$32.90	\$32.84	\$34.25	\$37.68	\$43.66	\$29.70	\$32.84	\$33.14
C & G Const.	\$8.88	\$11.15	\$7.52	\$10.97	\$8.80	\$9.03	\$8.84	\$7.57	\$8.92	\$8.76
Sidewalk Const.	\$22.12	\$27.00	\$19.50	\$37.50	\$25.29	\$25.43	\$29.76	\$22.14	\$27.01	\$23.79

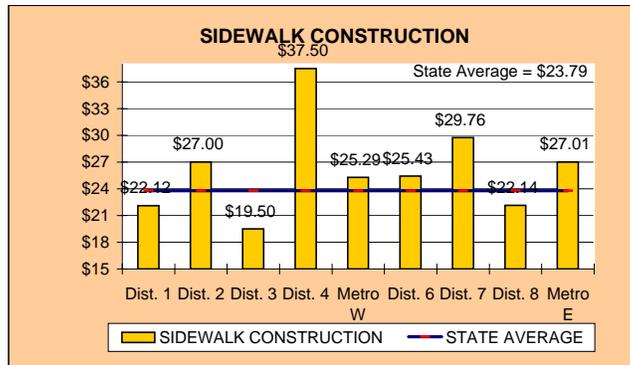
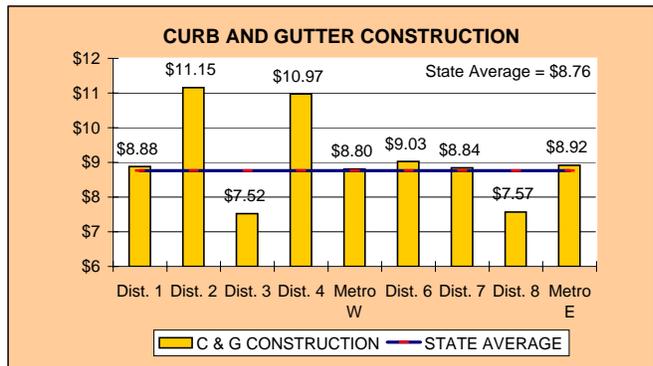
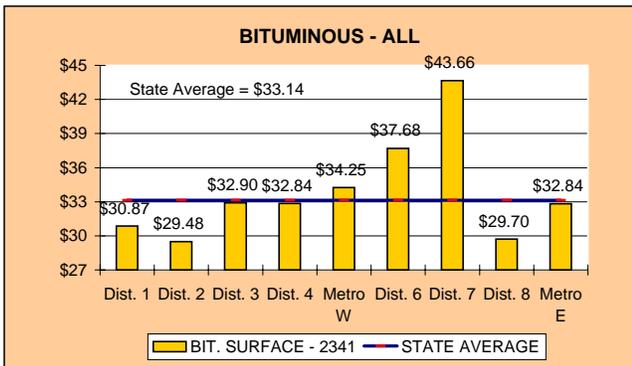
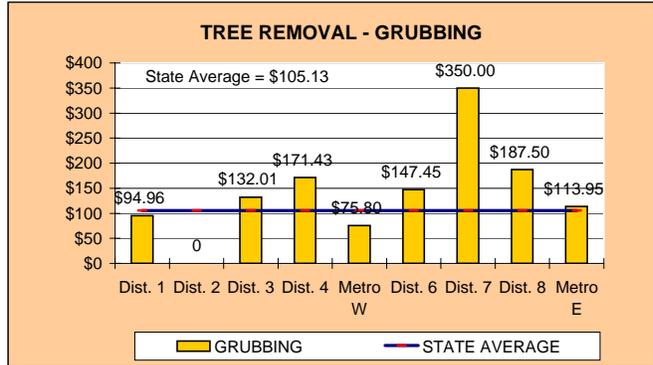
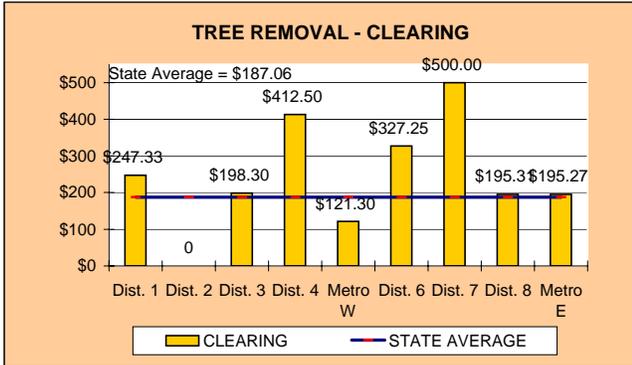
BOLD = Highest District Cost in That Category

ITALIC = Lowest District Cost in That Category



2003 UNIT PRICES BY DISTRICT

Graphs (Continued)



STORM SEWER, LIGHTING AND SIGNAL NEEDS COSTS

NEEDS YEAR	STORM SEWER ADJUSTMENT (Per Mile)	STORM SEWER CONSTRUCTION (Per Mile)	LIGHTING (Per Mile)	SIGNALS (Per Mile)
1987	62,000	196,000 *	2,000	12,000
1988	62,000	196,000 *	16,000	15,000
1989	62,000	196,000 *	16,000	15,000-45,000
1990	62,000	196,000	16,000	15,000-45,000
1991	62,000	196,000	16,000	18,750-75,000
1992	62,000	199,500	20,000	20,000-80,000
1993	64,000	206,000	20,000	20,000-80,000
1994	67,100	216,500	20,000	20,000-80,001
1995	69,100	223,000	20,000	20,000-80,002
1996	71,200	229,700	20,000	20,000-80,003
1998	76,000	245,000	20,000	24,990-99,990
1999	79,000	246,000	35,000	24,990-99,991
2000	80,200	248,500	50,000	24,990-99,992
2001	80,400	248,000	78,000 **	30,000-120,000
2002	81,600	254,200	78,000	30,000-120,001
2003	82,700	257,375	80,000	31,000-124,000
2004				

* Years that "After the Fact Needs" were in effect. 1986 to 1989 price was used only for needs purposes.

** Lighting needs were revised to deficient segment only.

MNDOT'S HYDRAULIC OFFICE RECOMMENDED PRICES FOR 2004:

	Storm Sewer Adjustment	Storm Sewer Construction
2004	\$83,775	\$262,780

SUBCOMMITTEE'S RECOMMENDED PRICES FOR 2004:

	Storm Sewer Adjustment	Storm Sewer Construction	Lighting	Signals
2004	\$83,775	\$262,780	\$80,000	\$124,000

RAILROAD CROSSINGS NEEDS COSTS

NEEDS YEAR	SIGNS (Per Unit)	PAVEMENT MARKING	SIGNALS (Low Speed) (Per Unit)	SIGNALS & GATES (High Speed) (Per Unit)	CONCRETE CROSSING MATERIAL (Per foot)
1987	300		65,000	95,000	
1988	300		65,000	95,000	\$700
1989	300		70,000	99,000	700
1990	400		75,000	110,000	750
1991	500		80,000	110,000	850
1992	600	\$750	80,000	110,000	900
1993	600	750	80,000	110,000	900
1994	800	750	80,000	110,000	750
1995	800	750	80,000	110,000	750
1996	800	750	80,000	110,000	750
1998	1,000	750	80,000	130,000	750
1999	1,000	750	85,000	135,000	850
2000	1,000	750	110,000	150,000	900
2001	1,000	750	120,000	160,000	900
2002	1,000	750	120,000	160,000	1,000
2003	1,000	750	120,000	160,000	1,000
2004					

MNDOT'S RAILROAD OFFICE RECOMMENDED PRICES FOR 2004:

	Signs	Pavement Marking	Signals	Sig. & Gates	Concrete X-ing Surf.
2004	\$1,000	\$750	\$150,000	\$150-225,000	\$1,000

SUBCOMMITTEE'S RECOMMENDED PRICES FOR 2004:

2004	\$1,000	\$750	\$150,000	\$187,500	\$1,000
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Memo

Bridge Office
3485 Hadley Avenue North
Oakdale, MN 55128-3307

Date: March 22, 2004

To: Marshall Johnston
Manager, Municipal State Aid Street Needs Section

From: Mike Leuer *ML*
State Aid Hydraulic Specialist

Phone: (651) 747-2167

Subject: State Aid Storm Sewer
Construction Costs for 2003

We have completed our analysis of storm sewer construction costs incurred for 2003 and the following assumptions can be utilized for planning purposes per roadway mile:

- Approximately \$262,780 for new construction, and
- Approximately \$83,775 for adjustment of existing systems

The preceding amounts are based on the average cost per mile of State Aid storm sewer using unit prices from approximately 142 plans for 2003.

CC: Andrea Hendrickson



Memo

Office of Freight & Commercial Vehicle Operations
Railroad Administration Section
Mail Stop 420
1110 Centre Pointe Curve
Mendota Heights, MN 55120-4798

Office Tel: 651/406-4798
Fax: 651/406-4811

March 18, 2004

To: Marshall Johnson
Needs Unit – State Aid

From: Susan H. Aylesworth
Director, Rail Administration Section

Subject: Projected Railroad Grade Crossing
Improvements – Cost for 2004

We have projected 2004 costs for railroad/highway improvements at grade crossings. For planning purposes, we recommend using the following figures:

Signals (single track, low speed, average price)*	\$150,000.00
Signals & Gates (multiple track, high/low speed, average price)*	\$150,000 - \$225,000.00
Signs (advance warning signs and crossbucks)	\$1,000 per crossing
Pavement Markings (tape)	\$5,500 per crossing
Pavement Markings (paint)	\$ 750 per crossing
Crossing Surface (concrete, complete reconstruction)	\$1,000 per track ft.

*Signal costs include sensors to predict the motion of train or predictors which can also gauge the speed of the approaching train and adjust the timing of the activation of signals.

Our recommendation is that roadway projects be designed to carry any improvements through the crossing area – thereby avoiding the crossing acting as a transition zone between two different roadway sections or widths. We also recommend a review of all passive warning devices including advance warning signs and pavement markings – to ensure compliance with the MUTCD and OFCVO procedures.

Special Drainage Costs for Rural Segments
2004

On April 19, 1996, the Needs Study Subcommittee requested background information on how this unit price is determined. The following minutes are taken from the Needs Study Subcommittee meeting of March 19, 1990:

Rural section drainage needs: some cities have a certain amount of rural section streets or roads which are unlikely to ever require curb and gutter section and storm sewers, that is, urban section needs. It would seem that they should draw some needs however for ditching, driveway culverts, centerline culverts, rip-rap, etc. There are two ways to handle this inequity, come up with an average cost per mile, or have cities submit special drainage needs. After considerable discussion it was decided to recommend cost of \$25,000 per mile - based on an average of 25 driveways per mile and four centerline pipes per mile. If cities feel this does not represent their needs or if they have out of the ordinary drainage needs they have the option of submitting special drainage needs. These would be subject to approval by the District State Aid Engineer.

At the April 19, 1994 meeting of the Needs Study Subcommittee, the unit price for special drainage was changed to \$26,000 per mile. There is no indication in the minutes as to why this change was made.

After consulting with the MN/DOT estimating unit and research in the State Aid manual and the Drainage manual, the following determinations have been made:

For Entrance Culverts:

- 1) The recommended residential driveway width onto a state aid roadway is 16 feet. (State Aid Manual Fig. D(2) 5-892.210).
- 2) The minimum pipe diameter of Side Culverts shall be 18 inches. The minimum cover shall be one foot, however, it is desirable to have 1.25 feet or more of cover on side roads. (Drainage Manual 5-294.302).
- 3) The MN/DOT estimating unit recommends using a 18-inch Galvanized Steel Pipe and two aprons as the standard for an entrance culvert to a rural segment on the Municipal State Aid Street system.
- 4) For construction needs purposes the MN/DOT estimating unit recommends using \$24.00 per foot as a cost for 18" GSP and \$150.00 per apron.
- 5) Using a 3:1 inslope for the driveway with a 4' deep ditch (the culvert would have 2.5 feet of cover), the length of the pipe would be 31 feet plus two aprons.
- 6) Therefore, the estimated construction needs cost per entrance would be \$1,044.00.

Using the 1990 Needs Study Subcommittee recommended number of 25 entrances per mile, the cost of Side Culverts per mile would be \$26,100.

For 42 Culverts:

- 1) The minimum pipe diameter of 42 culverts shall be 24 inches. The minimum cover shall be 1.25 feet to the top of rigid pavement and 1.75 feet to the top of flexible pavement. (Drainage Manual 5-294.302).
- 2) The MN/DOT estimating unit recommends using a 30-inch Reinforced Concrete Pipe and two aprons as the standard for a centerline culvert on a rural segment of the Municipal State Aid Street system.
- 3) For construction needs purposes the MN/DOT estimating unit recommends using \$55.00 per foot as a cost for 30" RCP and \$650 per apron.
- 4) Using a 40' roadbed width, a 4:1 inslope and a 4' ditch depth (the culvert would have 1.5 feet of cover), the length of the culvert would be 52' plus two aprons.
- 5) Therefore, the estimated construction needs cost per 6 culvert would be \$4,160.

Using the 1990 Needs Study Subcommittee recommended number of four 6 culverts per mile, the cost of centerline culverts per mile would be \$16,640.

By adding the cost of the 25 Side Culverts and the 4 42 culverts, the estimated construction needs cost per mile for Special Drainage would be **\$42,470** per mile.

**SUBCOMMITTEE'S RECOMMENDED PRICE FOR THE 2004 NEEDS STUDY IS
\$40,000 PER MILE.**

The 2003 Cost per Mile was \$37,400

The 2002 Cost per Mile was \$37,400

2004 COUNTY SCREENING BOARD DATA

JUNE, 2004

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

Construction Item	2003 CSAH Needs Study Average	1999-2003 CSAH 5-Year Const. Average	2003 CSAH Const. Average	2004 MSAS Needs Study Unit Price Recommended by MSAS Subcommittee
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Rural & Urban Design

Grav. Base CI 5 & 6/Ton	\$5.76	\$5.58	\$5.81	
Outstate(Grav. Base CI 5 & 6/Ton)	\$5.47	\$5.34	\$5.57	
Metro (Grav. Base CI 5 & 6/Ton)	\$7.79	\$7.31	\$8.84	

Rural Design

Combine Bit. Base & Surface (2331, 2341, 2350, & 2361)/Ton	\$22.74	\$21.59	\$22.91	
Outstate(2331,2341,2350,& 2361)/Ton)	\$22.48	\$21.41	\$22.78	
Gravel Surf. 2118/Ton	5.35	5.27	5.67	5.50
Gravel Shldr. 2221/Ton	6.44	6.12	6.41	

Urban Design

Combine Bit. Base & Surface (2331, 2341, 2350, & 2361)/Ton	\$29.92	\$28.68	\$32.73	
Outstate(2331,2341,2350,& 2361/Ton)	\$27.18	\$28.05	\$32.16	
Metro (Rural & Urban) (2331, 2341, 2350, & 2361)	\$31.81	\$28.91	\$33.47	

RURAL SEGMENTS WITH PROJECTED TRAFFIC LT 150

CITY NAME	SEGMENT	PROPOSED DESIGN CODE	PROJECTED TRAFFIC	SEGMENT LENGTH
Hibbing	131-186-010	2 RURAL/EXISTING RURAL	90	0.20
Hibbing	131-186-030	2 RURAL/EXISTING RURAL	136	0.73
Hibbing	131-203-010	2 RURAL/EXISTING RURAL	75	0.76
Hibbing	131-203-020	2 RURAL/EXISTING RURAL	75	0.19
Hibbing	131-203-030	2 RURAL/EXISTING RURAL	75	0.46
Hibbing	131-209-010	2 RURAL/EXISTING RURAL	70	0.93
Hibbing	131-214-010	2 RURAL/EXISTING RURAL	90	0.71
Andover	198-104-010	2 RURAL/EXISTING RURAL	30	1.01
North Branch	225-114-010	2 RURAL/EXISTING RURAL	72	0.50
St. Michael	227-102-030	2 RURAL/EXISTING RURAL	143	0.25
St. Michael	227-102-040	2 RURAL/EXISTING RURAL	143	0.38
TOTAL				6.12

BRIDGES LET IN CALENDAR YEAR 2003

BRIDGE LENGTH 0-149 FEET

NEW BRIDGE NUMBER	PROJECT NUMBER	LENGTH	DECK AREA	BRIDGE COST	COST PER SQ. FT.
1522	SAP 1-599-022	132.88	3,990	393,996	99
4522	SAP 4-611-010	98.10	4,214	452,584	107
8543	SAP 8-599-039	100.58	3,535	250,025	71
8545	SAP 8-599-040	124.50	3,901	263,686	68
10537	SAP 10-640-003	116.08	7,081	582,409	82
11523	SAP 11-599-012	55.50	1,960	180,251	92
11518	SAP 11-613-003	90.50	3,510	300,706	86
12547	SAP 12-599-049	95.30	3,325	238,260	72
12548	SAP 12-599-068	92.50	3,268	232,630	71
14540	SAP 14-602-020	142.50	6,175	435,828	71
17525	SAP 17-599-027	77.50	2,418	179,266	74
19542	SAP 19-647-015	104.50	4,929	323,982	66
19541	SAP 19-666-009	87.67	4,135	305,973	74
22598	SAP 22-613-019	125.67	5,418	321,585	59
23565	SAP 23-599-154	94.67	3,325	316,664	95
23567	SAP 23-638-004	129.46	4,515	466,669	103
25593	SAP 25-598-009	82.58	2,918	205,765	71
27A76	SAP 27-597-005	37.00	1,159	201,102	174
28532	SAP 28-599-058	73.67	2,294	203,000	88
28524	SAP 28-605-010	37.01	4,446	256,280	58
31548	SAP 31-598-016	89.69	3,510	237,439	68
31541	SP 31-629-013	53.67	2,106	217,830	103
31547	SP 31-672-002	101.50	3,570	272,150	76
32545	SP 32-599-078	68.00	2,040	166,324	82
33534	SAP 33-599-009	86.25	3,010	200,071	66
36529	SAP 36-629-011	112.50	4,368	353,576	81
37548	SAP 37-598-015	119.50	4,222	253,222	60
38J04	SAP 38-602-020	24.00	2,016	253,592	126
39521	SAP 39-598-023	71.25	2,232	226,065	101
40522	SAP 40-599-016	83.25	2,905	227,375	78
40521	SAP 40-602-017	51.58	2,028	176,189	87
42559	SAP 42-599-125	83.50	2,604	185,140	71
42560	SAP 42-599-128	86.54	2,712	186,828	69
43544	SAP 43-599-025	129.76	4,030	281,673	70
43547	SAP 43-603-026	122.60	5,781	491,634	85
45552	SAP 45-599-108	77.50	2,730	240,824	88
45565	SP 45-599-134	117.58	3,658	312,110	85
46550	SP 46-599-053	106.58	3,766	299,989	80
48527	SAP 48-599-041	122.67	4,305	261,761	61
55574	SAP 55-599-062	120.06	3,720	292,961	79
55573	SAP 55-606-004	109.92	4,730	433,354	92
91932	SP 56-696-002	61.67	3,608	374,898	104
58544	SAP 58-598-018	77.70	3,042	324,116	107
58543	SAP 58-598-021	45.70	1,794	224,036	125
58546	SAP 58-599-029	56.25	1,736	179,361	103
58546	SAP 58-599-029	56.25	1,736	179,361	103
59535	SAP 59-599-041	99.50	3,500	229,985	66
60545	SAP 60-599-166	80.50	2,844	289,884	102
60550	SAP 60-599-188	115.83	4,093	348,631	85
60549	SAP 60-599-190	84.17	2,974	287,703	97
62570	SP 62-597-002	45.94	2,301	280,770	122
64573	SAP 64-599-066	77.25	2,730	181,708	67
64572	SAP 64-599-079	132.94	4,655	327,735	70
64570	SAP 64-599-082	120.87	4,235	258,071	61
64571	SAP 64-599-083	117.50	4,130	248,496	60
66540	SAP 66-599-033	49.00	1,666	171,010	103
67548	SP 67-599-062	77.50	2,428	183,183	75
67547	SP 67-599-066	140.50	4,900	316,766	65
68535	SP 68-599-076	83.50	2,940	257,390	88
69653	SP 69-609-034	27.26	1,404	406,570	290
69642	SP 69-703-011	24.00	1,568	166,686	106

BRIDGES LET IN CALENDAR YEAR 2003

BRIDGE LENGTH 0-149 FEET

NEW BRIDGE NUMBER	PROJECT NUMBER	LENGTH	DECK AREA	BRIDGE COST	COST PER SQ. FT.
76538	SAP 76-631-022	74.60	2,925	208,797	71
78511	SP 78-598-022	74.00	2,318	147,779	64
78512	SAP 78-598-024	54.00	1,674	160,507	96
78513	SAP 78-613-006	47.00	1,473	145,416	99
81528	SP 81-598-009	126.83	4,988	391,310	78
83543	SP 83-599-057	86.00	2,580	192,270	75
84531	SAP 84-598-040	146.00	5,110	285,804	56
85547	SAP 85-598-005	90.50	3,560	298,676	84
85547	SAP 85-598-005	90.50	3,560	298,676	84
86520	SP 86-614-008	43.17	2,020	414,555	205
87579	SAP 87-599-040	80.50	2,800	262,000	94
27A77	SAP 98-080-027	113.17	3,131	923,404	295
10044	TH	73.75	2,630	241,013	92
19094	TH	126.17	8,874	587,301	66
19095	TH	63.00	3,234	284,055	88
23023	TH	87.00	4,466	321,318	72
55073	TH	119.83	8,751	609,029	70
55074	TH	118.50	6,794	486,400	72
55075	TH	118.50	6,735	516,863	77
60023	TH	98.42	4,658	348,782	75
69127	TH	149.92	6,801	663,067	97
State Aid Projects			240,982	20,646,322	\$86
Trunk Hwy Projects			52,943	4,057,828	\$77
TOTALS			293,925	24,704,150	\$84

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BRIDGES LET IN CALENDAR YEAR 2003

BRIDGE LENGTH 150-499 FEET

NEW BRIDGE NUMBER	PROJECT NUMBER	LENGTH	DECK AREA	BRIDGE COST	COST PER SQ. FT.
7577	SP 7-603-008	443.50	40069	\$3,075,219.00	77
18524	SAP 18-611-020	200.33	8600	\$498,538.00	58
19540	SAP 19-598-010	152.67	7191	\$467,242.00	65
23575	SAP 23-640-002	216.67	4515	\$288,893.00	64
37547	SP 37-631-008	169.58	6670	\$460,523.00	69
43545	SAP 43-599-027	186.25	7254	\$562,499.00	78
45547	SP 45-598-011	163.81	6396	\$413,772.00	65
53535	SP 53-635-014	181.00	8567	\$455,228.00	53
55569	SP 55-598-050	171.63	6064	\$431,792.00	71
69644	SP 69-598-028	168.58	5239	\$436,860.00	83
86528	SAP 86-599-024	165.25	6499	\$477,155.00	73
86528	SAP 86-599-024	165.25	6499	\$494,746.00	76
69578	SP 98-080-001	348.00	16472	\$1,038,167.00	63
62598	SP 164-288-003	767.00	64770	\$5,119,888.00	79
82027	SP 184-080-002	394.23	23390	\$2,926,013.00	125
19R01	TH	233.58	23,200	1,646,037	71
19R02	TH	198.35	10,570	848,208	80
19R03	TH	198.35	10,570	831,920	79
19R04	TH	240.25	25,546	1,484,658	58
27V33	TH	319.09	34,670	3,119,072	90
27V38	TH	205.85	37,380	3,652,312	98
18007	TH	179.93	10,366	730,027	70
18008	TH	179.93	8,030	553,701	69
27273	TH	492.33	23,585	1,929,564	82
27274	TH	223.69	14,018	1,078,368	77
27275	TH	245.17	15,446	1,082,295	70
27280	TH	206.77	19,843	1,392,453	70
36024	TH	420.25	16,530	1,587,005	96
54006	TH	326.17	14,134	1,433,148	101
55068	TH	235.65	27,255	1,817,556	67
63002	TH	321.08	13,914	1,300,227	93
69125	TH	223.23	10,127	716,059	71
69126	TH	223.10	12,597	872,022	69
69128	TH	150.20	7,375	723,319	98
73022	TH	213.26	19,763	1,461,542	74
73566	TH	277.69	27,912	1,807,749	65
State Aid Projects			218,195	\$17,146,535	\$79
Trunk Hwy Projects			382,831	\$30,067,242	\$79
TOTALS			601,026	\$47,213,777	\$79

BRIDGES LET IN CALENDAR YEAR 2003

BRIDGE LENGTH 500 FEET AND OVER

NEW BRIDGE NUMBER	PROJECT NUMBER	LENGTH	DECK AREA	BRIDGE COST	COST PER SQ. FT.
62545	SP 164-128-006	654.88	36025	\$3,997,953.00	111
27A74	TH	721.46	24,730	1,423,804	58
27R08	TH	667.71	21,694	1,188,456	55
State Aid Projects			36,025	3,997,953	111
Trunk Hwy Projects			46,424	\$2,612,260	\$56
TOTALS			82,449	\$6,610,213	\$80

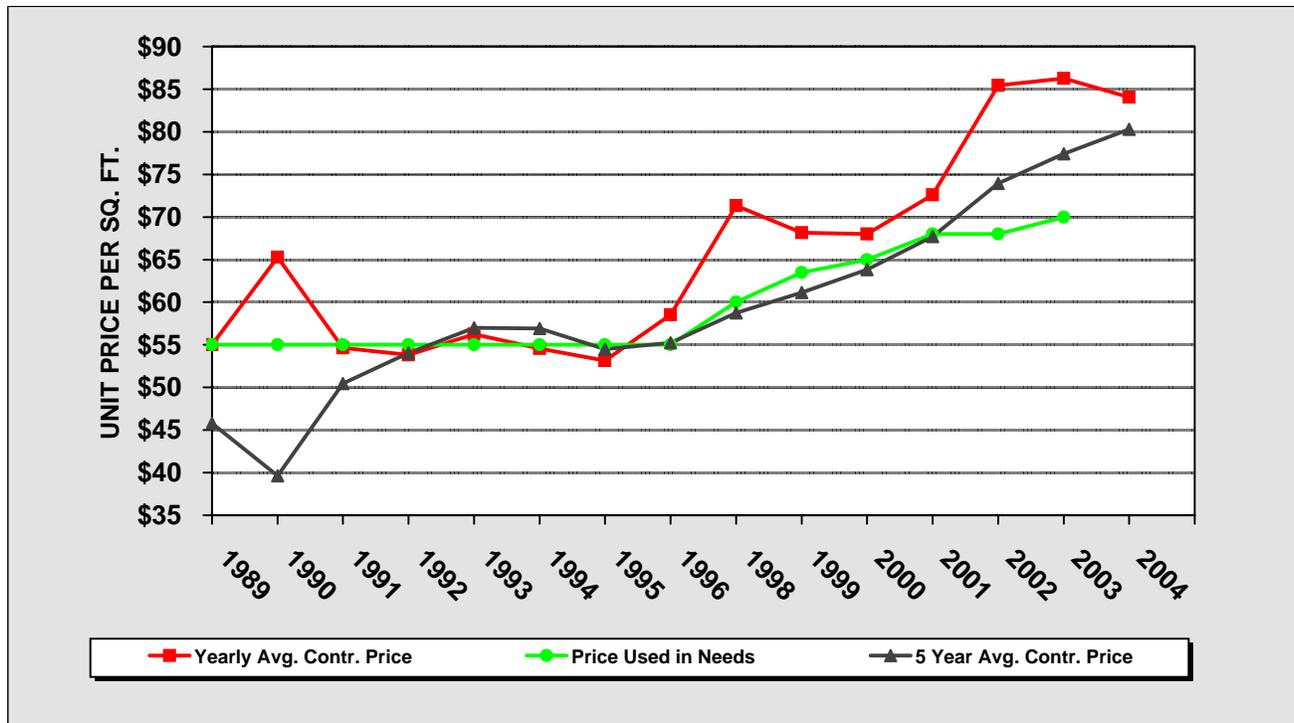
BRIDGES LET IN CALENDAR YEAR 2003

Railroad Bridges

NEW BRIDGE NUMBER	PROJECT NUMBER	Number of Tracks	Bridge Cost	Cost Per Lin. Ft.	Bridge Length
TOTALS			\$0	\$0	0

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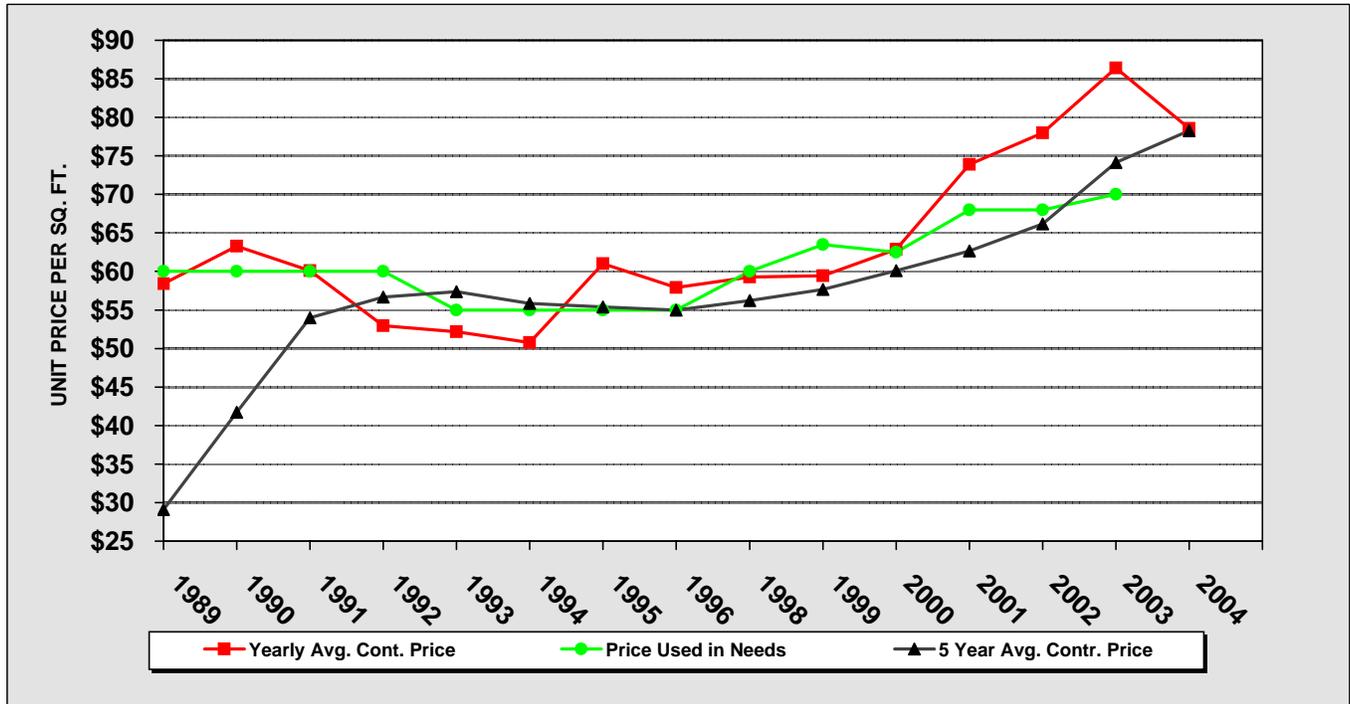
BRIDGE COST O-149 FEET



NEEDS YEAR	NUMBER OF PROJECTS	DECK AREA	TOTAL COST	YEARLY AVERAGE CONTRACT PRICE	PRICE USED IN NEEDS	5-YEAR AVERAGE CONTRACT PRICE
1989	11	35,733	\$1,966,077	\$55.02	\$55.00	\$45.78
1990	42	214,557	14,003,285	65.27	55.00	39.64
1991	37	136,770	7,472,265	54.63	55.00	50.46
1992	39	147,313	7,929,250	53.83	55.00	54.05
1993	38	190,400	10,709,785	56.25	55.00	57.00
1994	49	208,289	11,362,703	54.55	55.00	56.91
1995	32	124,726	6,627,018	53.13	55.00	54.48
1996	35	152,105	8,900,177	58.51	55.00	55.25
1998	52	191,385	13,651,209	71.33	60.00	58.76
1999	53	193,950	13,219,596	68.16	63.50	61.14
2000	54	210,895	14,341,592	68.00	65.00	63.83
2001	62	221,590	16,085,383	72.59	68.00	67.72
2002	62	274,232	23,435,194	85.46	68.00	73.93
2003	64	299,132	25,806,454	86.27	70.00	77.42
2004	85	293,925	24,704,150	84.05		80.30

SUBCOMMITTEE'S RECOMMENDED PRICE FOR THE 2004 NEEDS STUDY IS \$70.00 PER SQ. FT.

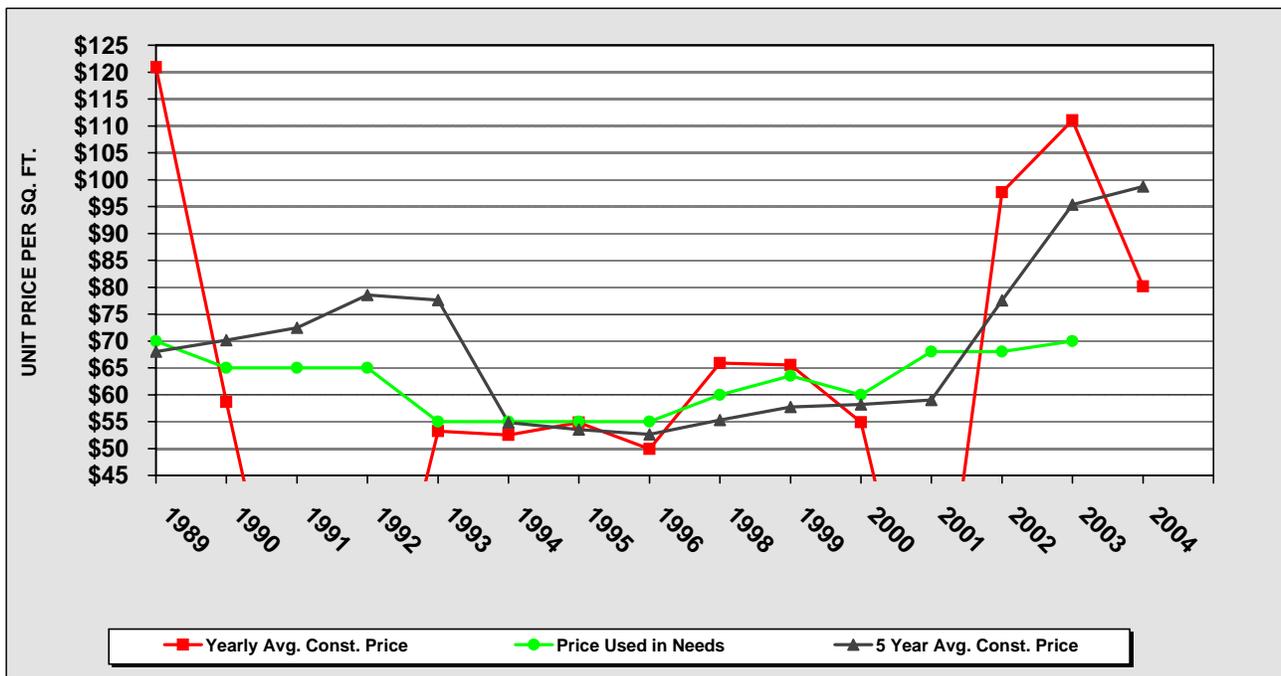
BRIDGE COST 150-499 FEET



NEEDS YEAR	NUMBER OF PROJECTS	DECK AREA	TOTAL COST	YEARLY AVERAGE CONTRACT PRICE	PRICE USED IN NEEDS	5-YEAR AVERAGE CONTRACT PRICE
1989	11	116,378	\$6,796,566	\$58.40	\$60.00	\$29.07
1990	25	418,376	26,483,631	63.30	60.00	41.73
1991	27	368,709	22,167,571	60.12	60.00	54.00
1992	24	331,976	17,582,542	52.96	60.00	56.66
1993	31	421,583	21,987,208	52.15	55.00	57.39
1994	29	307,611	15,619,506	50.78	55.00	55.86
1995	28	381,968	23,310,410	61.03	55.00	55.41
1996	27	385,230	22,302,967	57.90	55.00	54.96
1998	30	483,315	28,642,031	59.26	60.00	56.22
1999	29	455,964	27,104,753	59.44	63.50	57.68
2000	22	275,074	17,296,406	62.88	62.50	60.10
2001	21	272,162	20,110,670	73.89	68.00	62.67
2002	37	443,458	34,577,147	77.97	68.00	66.18
2003	40	667,548	57,671,538	86.39	70.00	74.15
2004	38	601,026	47,213,777	78.56		78.29

SUBCOMMITTEE'S RECOMMENDED PRICE FOR THE 2004 NEEDS STUDY IS \$74.00
PER SQ. FT.

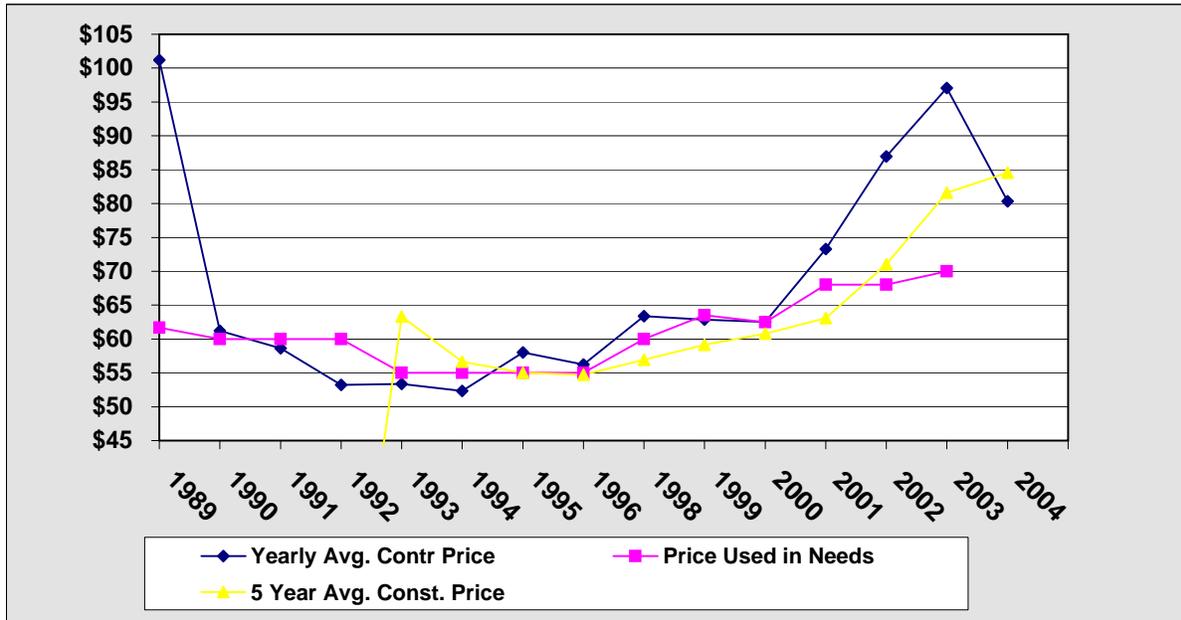
BRIDGE COST 500 & OVER



NEEDS YEAR	NUMBER OF PROJECTS	DECK AREA	TOTAL COST	YEARLY AVERAGE CONTRACT PRICE	PRICE USED IN NEEDS	5-YEAR AVERAGE CONTRACT PRICE
1989	8	335,830	\$40,615,626	\$120.94	\$70.00	\$68.02
1990	13	684,812	40,178,274	58.67	65.00	70.15
1991	0	0	0	0	65.00	72.44
1992	0	0	0	0	65.00	78.55
1993	6	245,572	13,068,106	53.21	55.00	77.61
1994	3	75,425	3,959,504	52.50	55.00	54.79
1995	2	174,991	9,595,341	54.83	55.00	53.51
1996	4	157,751	7,875,932	49.93	55.00	52.62
1998	3	182,129	12,002,782	65.90	60.00	55.27
1999	6	201,931	13,228,740	65.51	63.50	57.73
2000	2	162,652	8,922,542	54.86	60.00	58.21
2001	0	0	0	0.00	68.00	59.05
2002	6	409,395	39,986,160	97.67	68.00	77.54
2003	10	741,892	82,381,125	111.04	70.00	95.34
2004	3	82,449	6,610,213	80.17	70.00	98.75

SUBCOMMITTEE'S RECOMMENDED PRICE FOR THE 2004 NEEDS STUDY IS \$74.00
Per Sq. Ft.

ALL BRIDGES COMBINED



NEEDS YEAR	NO. OF PROJECTS*	DECK AREA	TOTAL COST	YEARLY AVERAGE CONTRACT PRICE	PRICE USED IN NEEDS	5 YEAR AVERAGE CONTRACT PRICE
1989	30	487,941 ¹	\$49,378,269 ²	\$101.20 ³	\$61.67 ⁴	
1990	80	1,317,745 ¹	80,665,190 ²	61.21 ³	\$60.00 ⁴	
1991	64	505,479 ¹	29,639,836 ²	58.64 ³	\$60.00 ⁴	
1992	63	479,289 ¹	25,511,792 ²	53.23 ³	\$60.00 ⁴	
1993	75	857,555 ¹	45,765,099 ²	53.37 ³	\$55.00 ⁴	\$63.31 ⁵
1994	81	591,325 ¹	30,941,713 ²	52.33 ³	\$55.00 ⁴	56.65 ⁵
1995	62	681,685 ¹	39,532,769 ²	57.99 ³	\$55.00 ⁴	55.02 ⁵
1996	66	695,086 ¹	39,079,076 ²	56.22 ³	\$55.00 ⁴	54.72 ⁵
1998	85	856,829 ¹	54,296,022 ²	63.37 ³	\$60.00 ⁴	56.92 ⁵
1999	88	851,845 ¹	53,553,089 ²	62.87 ³	\$63.50 ⁴	59.13 ⁵
2000	78	648,621 ¹	40,560,540 ²	62.53 ³	\$62.50 ⁴	60.80 ⁵
2001	83	493,752 ¹	36,196,053 ²	73.31 ³	\$68.00 ⁴	63.08 ⁵
2002	105	1,127,085 ¹	97,998,501 ²	86.95 ³	\$68.00 ⁴	71.04 ⁵
2003	114	1,708,572 ¹	165,859,117 ²	97.07	\$70.00 ⁴	81.61 ⁵
2004	126	977,400 ¹	78,528,140	80.34		84.58 ⁵

* Combined the number of projects from the three different bridge graphs

¹ Combined the quantities from the three previous tables together.

² Combined the total costs from the three previous tables together.

³ Total Costs divided by quantity.

⁴ Average of the Price Used in Needs from the four previous tables.

⁵ Used past 5 year's costs divided by the past 5 year's quantity.

RAILROAD BRIDGES OVER HIGHWAYS

Needs Year	Number of Projects	Number of Tracks	Bridge Length	Bridge Cost per Lin. Ft. (Actual)	Cost per Lin. Ft. of 1st Track (Unit Price Study)	Cost per Lin. Ft. of Additional Tracks (Unit Price Study)
1986	0	0			\$2,250	\$1,750
1987	0	0			2,250	1,750
1988	1	3	103.71	\$13,988	2,250	1,750
1989	2	1	161.51	8,499	2,250	1,750
1990	1	1	317.19	5,423	2,250	1,750
1991	0	2	433.38	8,536	4,000	3,000
1992	1	0			4,000	3,000
1993	1	1	114.19	7,619	4,000	3,000
1994	1	1	181.83	7,307	5,000	4,000
1995	0	0			5,000	4,000
1996	1	1	80.83	12,966	5,000	4,000
1998	1	1	261.02	8,698	8,000	6,500
1999	1	1	150.3	8,139	8,200	6,700
2000	2	1	108.58	12,112		
2001	1	1	130.08	10,569	9,000	7,500
2002	0	1	163.00	14,182	9,000	7,500
2003	0				9,000	7,500
2004					9,300	7,750

SUBCOMMITTEE'S RECOMMENDED PRICE FOR THE 2004 NEEDS STUDY IS \$9,600

PER LINEAL FOOT FOR THE FIRST TRACK

SUBCOMMITTEE'S RECOMMENDED PRICE FOR THE 2004 NEEDS STUDY IS \$8,000

PER LIN. FT. FOR ADDITIONAL TRACKS

OTHER



TOPICS

FIVE YEAR HISTORY OF STORM SEWER NEEDS

YEAR	Needs Cost for Complete SS			Percent of Total Needs			Needs Cost/Mile for Complete SS Construction			Needs Cost for Partial SS			Percent of Total Needs			Needs Cost/Mile for Partial SS Construction			Comp & Part. % of Total Needs
	\$	Miles	%	\$	Miles	%	\$	Miles	%	\$	Miles	%	\$	Miles	%				
1999	\$204,034,860	10.49	10.49	\$246,000	835.03	2.46	\$53,341,590	694.72	2.46	\$79,000	694.72	2.46	\$53,341,590	694.72	2.46	\$79,000	694.72	2.46	12.95
2000	210,027,230	9.90	9.90	248,500	851.22	2.32	56,127,168	719.36	2.32	80,200	719.36	2.32	56,127,168	719.36	2.32	80,200	719.36	2.32	12.22
2001	217,052,080	8.64	8.64	248,000	879.26	2.31	58,275,528	742.44	2.31	80,400	742.44	2.31	58,275,528	742.44	2.31	80,400	742.44	2.31	10.95
2002	227,244,632	8.48	8.48	254,200	898.22	2.30	61,585,152	771.19	2.30	81,600	771.19	2.30	61,585,152	771.19	2.30	81,600	771.19	2.30	10.78
2003	229,035,824	8.11	8.11	257,375	891.70	2.24	63,307,677	780.64	2.24	82,700	780.64	2.24	63,307,677	780.64	2.24	82,700	780.64	2.24	10.35

Trunk Highway Turnbacks eligible for TB Funding are not included

STORM SEWER NEEDS

Appropriate life cycle of Storm Sewer

Report for the Needs Study Subcommittee

April 13, 2004

At the direction of the Municipal Screening Board, the Needs Study Subcommittee (NSS) discussed Storm Sewer Needs at its September 10, 2003 meeting. The following is an excerpt from the minutes of that meeting:

Marshall then explained the issue of Complete Storm Sewer Needs where there is existing storm sewer. Currently, Municipalities are only eligible for Complete Storm Sewer Needs if the segment doesn't have any storm sewer. In some cases, there have been situations where the storm sewer is old, large development has occurred, or parking lots installed, etc. where it seems logical to receive complete needs as the existing system will need to be completely replaced. The committee discussed at length and reviewed the process, State Aid involvement, how often this has been requested. It was the consensus of the committee that there seems to be adequate checks and balances in the process and recommended no change to process.

The following excerpt is taken from the first day (discussion day) of the October 2003 Municipal Screening Board meeting

Johnston stated that two items were discussed by the Subcommittee at their Sept. 2003 meeting, noting that Tim Schoonhoven, NSS Chair, was available for any explanation of their recommendations.

1. Storm Sewer Needs:

Johnston said that currently, if storm sewer is in place, a city can only generate needs for partial storm sewer. Complete storm sewer needs are allowed by the DSAE on a case-by-case basis due to age, condition, capacity, etc. The subcommittee recommended no change to the current procedure. Schoonhoven stated that many options are available but that the committee felt that the current system is workable with discretion given to the DSAE.

Ahl said that Metro had discussed this and would prefer a uniform standard across the state where a life cycle is established but still retains DSAE discretion. Suihkonen said that Dist. 1 felt there was no need for change; things are probably more uniform than people think. Metso said that he felt the standard shouldn't be based on life cycle alone. Behm stated that he questions capacity, age, & condition before making a decision.

The following excerpt is taken from the second day (motion day) of the October 2003 Municipal Screening Board meeting:

1. Storm Sewer Needs (Page 39).

Ahl opened the discussion by making a motion to refer this item back to the Needs Study Subcommittee for establishment of an appropriate life cycle that is consistent with other life cycles in place. This motion was seconded by Weiss.

Gustafson opened the floor for discussion. Kildahl commented that this may hinder the committee and would instead recommend sending it back to the committee without a specific task. Sonnenberg felt that the important issue was equity and consistency. Life cycle is not necessarily a means of determining effective life, but more for establishing that consistency. Metso questioned other life cycles in place. Johnston replied that only bridges are done in this way, on a 35-year cycle. Schoonhoven stated that we're really looking at a 40-year cycle – 20 years with no needs and 20 years with needs. Discretion between partial and full needs seems to be the question. Doing away with partial needs simplifies the process and eliminates the discretion. This might be more equitable but less representative of the system. Drake questioned whether the computer software would need to be modified. Johnston said that it would, but they could wait and make several changes at once using a consultant. Murray stated that the percentage of storm sewer needs is underrepresenting what's being spent currently. If you receive full needs at 20 years, is this more in line with actual spending? Johnston suggested that Kjonaas or Skallman sit in on the discussion if this is referred back to the Needs subcommittee. Skallman stated that several DSAEs could attend as well and give their perspective on the issue. Metso agrees with subcommittee's recommendation to leave system as is, but feels that if we are going to do something, it should be done on a consistent basis. He described the example of base, which is eligible for full needs after 20 years, but his city is not necessarily replacing it on that time frame. Reinstating full needs in line with the rest of the roadway provides consistency.

Gustafson called for a vote on the motion. Motion carried without opposition.

DISCUSSION POINTS

- 1) Generate Complete Needs after 20 years, same as other Roadway Needs items
 - a. Urban segments, whether Inplace SS or not?
 - b. No longer have Partial SS Needs?
 - c. Only allow Partial SS Needs on Widening Needs?
- 2) Generate Partial SS Needs after 20 years from last year graded and Complete Needs after XX years.
 - a. Urban segments, whether Inplace SS or not?
 - b. Would require a new Report in the Needs Update program (Data Collector).
 - c. City would reinstate Needs itself- like other Needs.
 - d. Criteria for DSAE approval?
- 3) Generate Complete Needs on a different life cycle than roadway needs- like structures are on a 35 year lifecycle, i.e. 30, 40 or 50 years.
 - a. New report in (Data Collector)
 - b. New field in Data Collector program
 - c. Reprogramming of Computation Program
 - d. New tables behind the scenes in the Data Collector program
 - e. DSAE approval for generating Needs differently than the normal
- 4) Leave Storm Sewer Needs as is
 - a. Propose state wide guidelines for DSAE approval of Complete SS where existing
- 5) Leave SS Needs as is
 - a. Require only one criteria for DSAE approval- The city must convince the DSAE that the next construction project on that roadway will include Storm Sewer Construction.
- 6) Leave SS Needs as is
 - a. Leave DSAE approval as is. Each segment looked at and approved on an individual basis.
- 7) “After the Fact” Storm Sewer Needs adjustment
 - a. Generate Needs on amount actually spent
 - b. Length of adjustment?

Discussion Point 1

2003 Storm Sewer Needs

*if complete SS Needs were reinstated after 20 years
Needs Value decreases from \$19.08 per \$1000 to \$18.24*

Allocation increases for 52 cities and decreases for 81 cities

Currently, 10.36% of Needs are based on SS. In proposed method, 14.06% would be based on SS

MUNICIPALITY	Current Complete Storm Sewer Needs	Current Partial Storm Sewer Needs	Total Storm Sewer Needs if all Partial were Complete	Increase in Needs	Actual 2004 Construction Needs Apportionment	Proposed 2004 Construction Needs Apportionment	Difference in 2004 Allocation if Complete SS Needs Reinstated after 20 Years
ALBERT LEA	\$221,343	\$789,785	\$2,679,274	\$1,668,146	\$335,643	\$351,263	\$15,620
ALEXANDRIA	990,894	348,994	2,077,017	737,129	227,635	231,039	3,404
ANDOVER	3,886,367	0	3,886,367	0	481,264	460,034	(21,230)
ANOKA	1,912,306	66,160	2,118,206	139,740	212,767	205,930	(6,837)
APPLE VALLEY	2,066,726	1,173,513	5,718,877	2,478,638	607,510	625,921	18,411
ARDEN HILLS	970,305	18,194	1,026,928	38,429	106,658	102,654	(4,004)
AUSTIN	1,842,812	559,052	3,582,667	1,180,803	584,353	580,113	(4,240)
BAXTER	1,438,728	100,894	1,752,726	213,104	150,312	147,568	(2,744)
BEMIDJI	342,312	264,640	1,165,912	558,960	195,098	196,687	1,589
BIG LAKE	975,454	31,426	1,073,257	66,377	104,094	100,713	(3,381)
BLAINE	4,179,776	222,463	4,872,115	469,876	516,202	502,002	(14,200)
BLOOMINGTON	8,302,937	2,106,369	14,858,278	4,448,972	1,808,591	1,809,957	1,366
BRAINERD	185,311	484,622	1,693,529	1,023,596	155,311	167,129	11,818
BROOKLYN CENTER	715,503	697,988	2,887,748	1,474,257	350,006	361,456	11,450
BROOKLYN PARK	2,470,804	543,339	4,161,758	1,147,615	529,474	527,050	(2,424)
BUFFALO	2,113,055	95,105	2,409,036	200,876	273,015	264,635	(8,380)
BURNSVILLE	1,562,269	1,164,416	5,186,109	2,459,424	723,142	736,101	12,959
CAMBRIDGE	947,144	73,603	1,176,208	155,461	158,020	154,476	(3,544)
CHAMPLIN	1,281,732	39,696	1,405,272	83,844	173,976	167,831	(6,145)
CHANHASSEN	1,474,760	176,978	2,025,543	373,805	189,764	188,402	(1,362)
CHASKA	1,328,056	133,147	1,742,430	281,227	221,118	216,494	(4,624)
CHISHOLM	620,277	156,303	1,106,716	330,136	113,071	114,105	1,034
CLOQUET	2,344,693	90,143	2,625,232	190,396	315,383	304,944	(10,439)
COLUMBIA HEIGHTS	967,732	371,323	2,123,346	784,291	245,921	249,378	3,457
COON RAPIDS	362,899	573,938	2,149,082	1,212,245	636,177	630,224	(5,953)
CORCORAN	275,391	0	275,391	0	130,931	125,155	(5,776)
COTTAGE GROVE	3,165,717	426,732	4,493,772	901,323	571,570	562,797	(8,773)
CROOKSTON	671,750	309,298	1,634,333	653,285	342,989	339,775	(3,214)
CRYSTAL	1,485,057	310,125	2,450,213	655,031	272,921	272,829	(92)
DETROIT LAKES	1,320,337	118,261	1,688,383	249,785	169,739	166,807	(2,932)
DULUTH	5,376,576	2,817,589	14,145,342	5,951,177	2,229,950	2,243,219	13,269

MUNICIPALITY	Current Complete Storm Sewer Needs	Current Partial Storm Sewer Needs	Total Storm Sewer Needs if all Partial were Complete	Increase in Needs	Actual 2004 Construction Needs Apportionment	Proposed 2004 Construction Needs Apportionment	Difference in 2004 Allocation if Complete SS Needs Reinstated after 20 Years
EAGAN	\$576,519	\$1,098,256	\$3,994,459	\$2,319,684	\$474,716	\$496,085	\$21,369
EAST BETHEL	3,170,864	0	3,170,864	0	415,350	397,028	(18,322)
EAST GRAND FORKS	1,006,339	76,911	1,245,698	162,448	256,827	248,461	(8,366)
EDEN PRAIRIE	3,574,941	1,359,588	7,806,186	2,871,657	738,319	758,128	19,809
EDINA	2,040,987	858,426	4,712,540	1,813,127	609,040	615,244	6,204
ELK RIVER	3,600,679	75,257	3,834,890	158,954	451,166	434,164	(17,002)
FAIRMONT	3,384,488	67,814	3,595,536	143,234	467,120	449,127	(17,993)
FALCON HEIGHTS	141,557	46,312	285,687	97,818	35,907	36,107	200
FARIBAULT	1,657,498	358,918	2,774,506	758,090	480,781	473,400	(7,381)
FARMINGTON	2,416,754	7,443	2,439,918	15,721	284,997	272,712	(12,285)
FERGUS FALLS	1,292,025	444,099	2,674,129	938,005	409,753	410,028	275
FOREST LAKE	5,096,030	53,755	5,263,324	113,539	410,173	394,150	(16,023)
FRIDLEY	617,700	771,591	3,019,009	1,629,718	236,944	256,217	19,273
GLENCOE	903,389	126,531	1,297,173	267,253	143,249	141,804	(1,445)
GOLDEN VALLEY	1,335,781	598,748	3,199,176	1,264,647	340,561	348,605	8,044
GRAND RAPIDS	1,358,940	200,961	1,984,361	424,460	217,003	215,173	(1,830)
HAM LAKE	3,196,605	49,620	3,351,030	104,805	397,789	382,153	(15,636)
HASTINGS	725,800	15,713	774,701	33,188	231,153	221,562	(9,591)
HERMANTOWN	2,385,867	0	2,385,867	0	211,921	202,573	(9,348)
HIBBING	3,073,067	459,812	4,504,072	971,193	769,763	753,521	(16,242)
HOPKINS	903,389	280,353	1,775,890	592,148	185,545	188,161	2,616
HUGO	630,570	0	630,570	0	187,270	179,009	(8,261)
HUTCHINSON	1,178,779	413,500	2,465,654	873,375	301,764	304,383	2,619
INTERNATIONAL FALLS	138,983	305,163	1,088,697	644,551	128,072	134,179	6,107
INVER GROVE HEIGHTS	2,401,309	379,593	3,582,660	801,758	405,991	402,706	(3,285)
LA CRESCENT	136,409	95,932	434,964	202,623	108,250	107,170	(1,080)
LAKE CITY	432,390	215,020	1,101,565	454,155	107,577	111,115	3,538
LAKE ELMO	694,913	37,215	810,732	78,604	91,669	89,059	(2,610)
LAKEVILLE	6,457,546	500,335	8,014,665	1,056,784	1,051,581	1,024,469	(27,112)
LINO LAKES	3,242,928	0	3,242,928	0	344,495	329,387	(15,108)
LITCHFIELD	1,456,745	47,139	1,603,449	99,565	146,348	141,708	(4,640)
LITTLE CANADA	1,096,418	324,184	2,105,328	684,726	207,931	211,248	3,317
LITTLE FALLS	2,097,610	224,117	2,795,096	473,369	298,413	293,883	(4,530)
MAHTOMEDI	774,699	52,101	936,845	110,045	95,898	93,675	(2,223)
MANKATO	1,636,905	708,739	3,842,609	1,496,965	548,347	551,462	3,115
MAPLE GROVE	4,913,291	325,011	5,924,775	686,473	1,160,306	1,121,644	(38,662)
MAPLEWOOD	3,814,302	693,853	5,973,678	1,465,523	642,779	641,155	(1,624)
MARSHALL	1,384,681	431,694	2,728,179	911,804	237,861	244,000	6,139
MENDOTA HEIGHTS	1,034,647	220,809	1,721,838	466,382	163,934	165,209	1,275

MUNICIPALITY	Current Complete Storm Sewer Needs	Current Partial Storm Sewer Needs	Total Storm Sewer Needs if all Partial were Complete	Increase in Needs	Actual 2004 Construction Needs Apportionment	Proposed 2004 Construction Needs Apportionment	Difference in 2004 Allocation if Complete SS Needs Reinstated after 20 Years
MINNEAPOLIS	9,010,723	10,267,205	40,963,829	21,685,901	5,716,746	5,860,107	143,361
MINNETONKA	\$3,950,711	\$683,929	\$6,079,202	\$1,444,562	\$809,288	\$799,936	(\$9,352)
MONTEVIDEO	401,508	136,455	826,177	288,214	101,532	102,310	778
MONTICELLO	1,243,124	40,523	1,369,238	85,591	136,968	132,488	(4,480)
MOORHEAD	615,128	956,839	3,592,957	2,020,990	618,836	628,399	9,563
MORRIS	715,505	57,890	895,668	122,273	116,215	113,319	(2,896)
MOUND	687,193	376,285	1,858,249	794,771	148,028	155,995	7,967
MOUNDS VIEW	1,436,155	138,109	1,865,971	291,707	170,366	168,172	(2,194)
NEW BRIGHTON	718,078	173,670	1,258,566	366,818	190,788	189,063	(1,725)
NEW HOPE	15,443	727,760	2,280,343	1,537,140	252,844	269,727	16,883
NEW PRAGUE	165,310	14,059	229,064	29,695	31,878	30,472	(1,406)
NEW ULM	792,716	550,782	2,506,834	1,163,336	314,151	321,512	7,361
NORTH BRANCH	939,419	28,945	1,029,500	61,136	272,545	261,638	(10,907)
NORTH MANKATO	586,815	377,112	1,760,445	796,518	253,310	256,664	3,354
NORTH ST PAUL	658,882	352,302	1,755,300	744,116	150,630	157,558	6,928
NORTHFIELD	496,735	241,484	1,248,270	510,051	208,660	208,759	99
OAK GROVE	2,118,197	0	2,118,197	0	277,749	265,497	(12,252)
OAKDALE	823,601	81,046	1,075,829	171,182	190,111	184,847	(5,264)
ORONO	2,360,130	0	2,360,130	0	259,151	247,719	(11,432)
OTSEGO	2,632,947	0	2,632,947	0	286,681	274,035	(12,646)
OWATONNA	1,230,258	192,691	1,829,942	406,993	345,756	337,927	(7,829)
PLYMOUTH	4,985,358	963,455	7,983,777	2,034,964	975,572	969,654	(5,918)
PRIOR LAKE	2,306,083	80,219	2,555,737	169,435	294,401	284,505	(9,896)
RAMSEY	3,242,930	57,063	3,420,519	120,526	282,170	271,921	(10,249)
RED WING	2,715,310	329,146	3,739,663	695,207	452,051	444,791	(7,260)
REDWOOD FALLS	859,635	228,252	1,569,990	482,103	163,667	165,241	1,574
RICHFIELD	1,732,137	873,312	4,450,017	1,844,568	492,797	504,703	11,906
ROBBINSDALE	725,800	163,746	1,235,403	345,857	95,373	97,475	2,102
ROCHESTER	2,020,399	1,550,625	6,846,180	3,275,156	1,149,387	1,158,422	9,035
ROGERS	548,210	9,924	579,095	20,961	82,814	79,161	(3,653)
ROSEMOUNT	3,670,169	0	3,670,169	0	369,499	353,199	(16,300)
ROSEVILLE	1,433,583	759,186	3,796,286	1,603,517	405,763	417,111	11,348
ST ANTHONY	324,294	229,079	1,037,223	483,850	134,221	137,126	2,905
ST CLOUD	4,879,834	1,084,197	8,254,020	2,289,989	987,767	986,182	(1,585)
ST FRANCIS	1,554,547	43,004	1,688,382	90,831	193,597	186,714	(6,883)
ST JOSEPH	308,851	31,426	406,654	66,377	43,439	42,734	(705)
ST LOUIS PARK	684,619	1,357,107	4,908,143	2,866,417	580,786	607,448	26,662
ST MICHAEL	1,956,051	0	1,956,051	0	326,387	311,989	(14,398)
ST PAUL	1,876,269	9,736,271	32,177,028	20,564,488	4,625,906	4,796,932	171,026

MUNICIPALITY	Current Complete Storm Sewer Needs	Current Partial Storm Sewer Needs	Total Storm Sewer Needs if all Partial were Complete	Increase in Needs	Actual 2004 Construction Needs Apportionment	Proposed 2004 Construction Needs Apportionment	Difference in 2004 Allocation if Complete SS Needs Reinstated after 20 Years
ST PAUL PARK	728,374	113,299	1,080,978	239,305	89,904	90,303	399
ST PETER	2,293,213	152,168	2,766,733	321,402	263,870	258,092	(5,778)
SARTELL	\$2,270,049	\$38,869	\$2,391,015	\$82,097	\$292,202	\$280,810	(\$11,392)
SAUK RAPIDS	1,052,664	179,459	1,611,168	379,045	231,429	228,133	(3,296)
SAVAGE	2,383,296	14,886	2,429,624	31,442	363,421	347,963	(15,458)
SHAKOPEE	1,366,664	268,775	2,203,133	567,694	315,919	312,362	(3,557)
SHOREVIEW	1,042,369	170,362	1,572,562	359,831	185,393	183,778	(1,615)
SHOREWOOD	1,930,316	15,713	1,979,217	33,188	142,633	136,947	(5,686)
SOUTH ST PAUL	301,131	334,108	1,340,926	705,687	231,905	234,547	2,642
SPRING LAKE PARK	0	102,548	319,145	216,597	50,218	51,953	1,735
STEWARTVILLE	458,129	71,122	679,472	150,221	77,419	76,744	(675)
STILLWATER	730,948	309,298	1,693,531	653,285	203,291	206,239	2,948
THIEF RIVER FALLS	2,004,960	119,915	2,378,154	253,279	344,747	334,159	(10,588)
VADNAIS HEIGHTS	594,537	92,624	882,797	195,636	110,511	109,204	(1,307)
VIRGINIA	676,899	292,758	1,588,007	618,350	271,735	271,820	85
WACONIA	23,164	317,568	1,011,484	670,752	75,880	84,767	8,887
WAITE PARK	507,030	38,042	625,423	80,351	92,029	89,435	(2,594)
WASECA	612,557	26,464	694,917	55,896	109,475	105,665	(3,810)
WEST ST PAUL	823,602	189,383	1,412,991	400,006	160,633	160,843	210
WHITE BEAR LAKE	1,093,847	395,306	2,324,100	834,947	268,730	272,105	3,375
WILLMAR	2,187,688	224,117	2,885,174	473,369	358,598	351,414	(7,184)
WINONA	898,239	339,897	1,956,050	717,914	310,769	310,153	(616)
WOODBURY	5,731,747	210,885	6,388,053	445,421	1,089,037	1,049,121	(39,916)
WORTHINGTON	100,377	249,754	877,650	527,519	168,545	170,731	2,186
	\$229,035,824	\$63,349,027	\$426,187,648	\$133,802,797	\$55,445,291	\$55,445,291	\$0

DISCUSSION POINT 2

2003 Storm Sewer Needs

if all Storm Sewer Needs between 20 and 39 years generated Partial Needs and all SS Needs Greater Than 39 years generated Complete SS Needs Needs Value decreases from \$19.08 per \$1000 to \$19.02

Allocation increases for 53 cities and decreases for 80 cities

Currently, 10.36% of Needs are based on SS. In proposed method, 10.63% would be based on SS

MUNICIPALITY	Current Complete Storm Sewer Needs	Current Partial Storm Sewer Needs	Proposed Complete Storm Sewer Needs	Proposed Partial Storm Sewer	Change in Storm Sewer Needs	Actual 2004 Construction Needs Apportionment	Proposed 2004 Construction Needs Apportionment	Difference in 2004 Construction Needs Apportionment using Proposed Method of Computing SS Needs
ALBERT LEA	\$221,343	\$789,785	\$1,335,776	\$482,141	\$806,789	\$335,643	\$349,989	\$14,346
ALEXANDRIA	990,894	348,994	1,080,975	305,990	47,077	227,635	227,851	216
ANDOVER	3,886,367	0	3,047,320	156,303	(682,744)	481,264	466,838	(14,426)
ANOKA	1,912,306	66,160	1,608,594	269,602	(100,270)	212,767	210,224	(2,543)
APPLE VALLEY	2,066,726	1,173,513	2,192,835	1,073,446	26,042	607,510	606,191	(1,319)
ARDEN HILLS	970,305	18,194	903,386	39,696	(45,417)	106,658	105,475	(1,183)
AUSTIN	1,842,812	559,052	2,174,819	512,740	285,695	584,353	588,043	3,690
BAXTER	1,438,728	100,894	993,468	138,936	(407,219)	150,312	142,116	(8,196)
BEMIDJI	342,312	264,640	375,768	243,138	11,954	195,098	194,743	(355)
BIG LAKE	975,454	31,426	313,433	313,433	(693,447)	104,094	90,591	(13,503)
BLAINE	4,179,776	222,463	3,098,795	569,803	(733,641)	516,202	500,704	(15,498)
BLOOMINGTON	8,302,937	2,106,369	3,098,795	4,034,106	(3,276,405)	1,808,591	1,740,859	(67,732)
BRAINERD	185,311	484,622	736,093	384,555	450,715	155,311	163,421	8,110
BROOKLYN CENTER	715,503	697,988	872,501	647,541	106,551	350,006	350,988	982
BROOKLYN PARK	2,470,804	543,339	2,290,638	578,073	(145,433)	529,474	525,126	(4,348)
BUFFALO	2,113,055	95,105	1,351,219	307,644	(549,297)	273,015	261,749	(11,266)
BURNSVILLE	1,562,269	1,164,416	1,446,448	1,185,918	(94,320)	723,142	719,188	(3,954)
CAMBRIDGE	947,144	73,603	1,196,794	155,476	331,523	158,020	163,895	5,875
CHAMPLIN	1,281,732	39,696	784,994	103,375	(433,059)	173,976	165,218	(8,758)
CHANHASSEN	1,474,760	176,978	1,423,284	71,949	(156,505)	189,764	186,233	(3,531)
CHASKA	1,328,056	133,147	1,024,353	230,733	(206,118)	221,118	216,537	(4,581)
CHISHOLM	620,277	156,303	957,435	145,552	326,407	113,071	118,943	5,872
CLOQUET	2,344,693	90,143	1,315,186	420,943	(698,707)	315,383	301,149	(14,234)
COLUMBIA HEIGHTS	967,732	371,323	1,073,254	427,559	161,758	245,921	248,264	2,343
COON RAPIDS	362,899	573,938	301,129	611,980	(23,728)	636,177	633,825	(2,352)
CORCORAN	275,391	0	275,391	0	0	130,931	130,540	(391)
COTTAGE GROVE	3,165,717	426,732	2,908,338	524,318	(159,794)	571,570	566,823	(4,747)
CROOKSTON	671,750	309,298	676,896	286,142	(18,010)	342,989	341,622	(1,367)
CRYSTAL	1,485,057	310,125	2,215,959	74,430	495,247	272,921	281,528	8,607
DETROIT LAKES	1,320,337	118,261	388,636	417,635	(632,327)	169,739	157,205	(12,537)
DULUTH	5,376,576	2,817,589	15,684,433	1,668,886	9,159,154	2,229,950	2,397,745	167,795
EAGAN	576,519	1,098,256	576,520	1,098,256	1	474,716	473,298	(1,418)
EAST BETHEL	3,170,864	0	2,105,328	323,357	(742,180)	415,350	399,990	(15,360)
EAST GRAND FORKS	1,006,339	76,911	862,206	187,729	(33,315)	256,827	255,426	(1,401)
EDEN PRAIRIE	3,574,941	1,359,588	3,150,270	1,097,429	(686,830)	738,319	723,048	(15,271)

MUNICIPALITY	Current		Current		Proposed		Change in		Actual 2004		Proposed 2004		Difference in 2004		
	Complete Storm Sewer Needs	Partial Storm Sewer Needs	Complete Storm Sewer Needs	Partial Storm Sewer Needs	Complete Storm Sewer Needs	Partial Storm Sewer Needs	Storm Sewer Needs	Storm Sewer Needs	Construction Needs	Apportnment	Construction Needs	Apportnment	Construction Needs	Apportnment	SS Needs
EDINA	\$2,040,987	\$858,426	\$2,419,325	\$676,486	\$196,398	\$609,040	\$610,957								\$1,917
ELK RIVER	3,600,679	75,257	3,399,924	50,447	(225,565)	451,166	445,528								(5,638)
FAIRMONT	3,384,488	67,814	3,649,578	490,411	687,687	467,120	478,808								11,688
FALCON HEIGHTS	141,557	46,312	15,443	86,835	(85,592)	35,907	34,171								(1,736)
FARBALUT	1,657,498	358,918	586,815	745,127	(684,474)	480,781	466,324								(14,457)
FARMINGTON	2,416,754	7,443	2,398,735	33,907	8,445	284,997	284,306								(691)
FERGUS FALLS	1,292,025	444,099	2,393,588	396,133	1,053,597	409,753	428,657								18,904
FOREST LAKE	5,096,030	53,755	4,303,310	261,332	(585,143)	410,173	397,816								(12,357)
FRIDLEY	617,700	771,591	156,999	917,143	(315,149)	236,944	230,241								(6,703)
GLENCOE	903,389	126,531	869,928	136,455	(23,538)	143,249	142,373								(876)
GOLDEN VALLEY	1,335,781	598,748	949,714	734,376	(250,439)	340,561	334,780								(5,781)
GRAND RAPIDS	1,358,940	200,961	638,290	467,255	(454,356)	217,003	207,711								(9,292)
HAM LAKE	3,196,605	49,620	1,912,296	418,462	(915,467)	397,789	379,185								(18,604)
HASTINGS	725,800	15,713	388,636	142,244	(210,633)	231,153	226,456								(4,697)
HERMANTOWN	2,385,867	0	996,041	173,670	(1,216,156)	211,921	188,152								(23,669)
HIBBING	3,073,067	459,812	3,510,595	672,351	650,067	769,763	779,831								10,068
HOPKINS	903,389	280,353	481,291	415,981	(286,470)	185,545	179,541								(6,004)
HUGO	630,570	0	630,569	(1)		187,270	186,710								(560)
HUTCHINSON	1,178,779	413,500	1,196,794	405,230	9,745	301,764	301,048								(716)
INTERNATIONAL FALLS	138,983	305,163	1,101,565	49,620	707,039	128,072	141,141								13,069
INVER GROVE HEIGHTS	2,401,309	379,593	602,258	957,666	(1,220,979)	405,991	381,551								(24,440)
LA CRESCENT	136,409	95,932	231,638	52,928	52,225	108,250	108,920								670
LAKE CITY	432,390	215,020	537,914	181,113	71,617	107,577	108,618								1,041
LAKE ELMO	694,913	37,215	458,128	113,299	(160,702)	91,669	88,338								(3,331)
LAKEVILLE	6,457,546	500,335	5,389,433	702,950	(865,499)	1,051,581	1,031,976								(19,605)
LINO LAKES	3,242,928	0	3,242,925	(3)		344,495	343,472								(1,023)
LITCHFIELD	1,456,745	47,139	1,209,663	155,476	(138,746)	146,348	143,271								(3,077)
LITTLE CANADA	1,096,418	324,184	1,685,806	160,438	425,642	207,931	215,407								7,476
LITTLE FALLS	2,097,610	224,117	1,819,641	425,905	(76,181)	298,413	296,073								(2,340)
MAHTOMEDI	774,699	52,101	756,683	(70,118)		95,898	94,278								(1,620)
MANKATO	1,636,905	708,739	1,680,659	734,376	69,391	548,347	548,029								(318)
MAPLE GROVE	4,913,291	325,011	4,787,175	300,201	(150,926)	1,160,306	1,153,970								(6,336)
MAPLEWOOD	3,814,302	693,853	3,026,730	946,915	(534,510)	642,779	630,691								(12,088)
MARSHALL	1,384,681	431,694	1,304,891	485,449	(26,035)	237,861	236,656								(1,205)
MENDOTA HEIGHTS	1,034,647	220,809	463,275	389,517	(402,664)	163,934	155,784								(8,150)
MINNEAPOLIS	9,010,723	10,267,205	16,299,559	7,651,404	4,673,035	5,716,746	5,788,574								71,828
MINNETONKA	3,950,711	683,929	3,783,413	669,870	(181,358)	809,288	803,421								(5,867)
MONTEVIDEO	401,508	136,455	195,605	214,193	(128,165)	101,532	98,790								(2,742)
MONTECELLO	1,243,124	40,523	483,865	292,758	(507,024)	136,968	126,914								(10,054)
MOORHEAD	615,128	956,839	1,953,476	640,925	1,022,434	618,836	636,439								17,603
MORRIS	715,505	57,890	478,718	148,033	(146,645)	116,215	113,078								(3,137)
MOUND	687,193	376,285	205,900	537,550	(320,028)	148,028	141,498								(6,530)
MOUNDS VIEW	1,436,155	138,109	445,259	439,137	(689,868)	170,366	156,733								(13,633)
NEW BRIGHTON	718,078	173,670	491,586	200,134	(200,028)	190,788	186,413								(4,375)
NEW HOPE	\$15,443	\$727,760	\$1,155,614	\$349,821	\$762,232	\$252,844	\$266,590								\$13,746

MUNICIPALITY	Current		Current		Proposed		Change in		Actual 2004		Proposed 2004		Difference in 2004	
	Complete Storm Sewer Needs	Partial Storm Sewer Needs	Complete Storm Sewer Needs	Partial Storm Sewer Needs	Complete Storm Sewer Needs	Partial Storm Sewer Needs	Storm Sewer Needs	Storm Sewer Needs	Construction Needs	Apportnment	Construction Needs	Apportnment	Construction Needs	Apportnment
NEW PRAGUE	185,310	14,059	185,310	14,059	0	0	0	0	31,878	31,878	31,783	31,783	(95)	(95)
NEW ULM	792,716	550,782	1,271,433	395,306	323,241	314,151	314,151	319,362	314,151	319,362	319,362	319,362	5,211	5,211
NORTH BRANCH	939,419	28,945	738,666	75,257	(154,441)	272,545	268,793	(3,752)	272,545	268,793	268,793	268,793	(3,752)	(3,752)
NORTH MANKATO	586,815	377,112	187,884	505,297	(270,746)	253,310	247,403	(5,907)	253,310	247,403	247,403	247,403	(5,907)	(5,907)
NORTH ST PAUL	658,882	352,302	846,764	310,125	145,705	150,630	152,952	2,322	150,630	152,952	152,952	152,952	2,322	2,322
NORTHFIELD	496,735	241,484	527,619	254,716	44,116	208,660	208,877	217	208,660	208,877	208,877	208,877	217	217
OAK GROVE	2,118,197	0	1,142,745	313,433	(662,019)	277,749	264,325	(13,424)	277,749	264,325	264,325	264,325	(13,424)	(13,424)
OAKDALE	823,601	81,046	296,893	296,893	(607,754)	190,111	177,981	(12,130)	190,111	177,981	177,981	177,981	(12,130)	(12,130)
ORONO	2,360,130	0	1,873,690	156,303	(330,137)	259,151	252,096	(7,055)	259,151	252,096	252,096	252,096	(7,055)	(7,055)
OTSEGO	2,632,947	0	2,488,816	286,681	(144,131)	283,083	283,083	(3,598)	286,681	283,083	283,083	283,083	(3,598)	(3,598)
OWATONNA	1,230,258	192,691	1,222,531	320,876	120,458	345,756	347,015	1,259	345,756	347,015	347,015	347,015	1,259	1,259
PLYMOUTH	4,985,358	963,455	3,677,889	1,362,069	(908,855)	975,572	955,368	(20,204)	975,572	955,368	955,368	955,368	(20,204)	(20,204)
PRIOR LAKE	2,306,083	80,219	2,241,736	100,894	(43,672)	294,401	292,691	(1,710)	294,401	292,691	292,691	292,691	(1,710)	(1,710)
RAMSEY	3,242,930	57,063	2,280,343	366,361	(653,290)	282,170	268,899	(13,271)	282,170	268,899	268,899	268,899	(13,271)	(13,271)
RED WING	2,715,310	329,146	2,344,686	454,023	(245,747)	446,026	446,026	(6,025)	452,051	446,026	446,026	446,026	(6,025)	(6,025)
REDWOOD FALLS	859,635	228,252	1,155,614	141,417	209,144	163,667	167,157	3,490	163,667	167,157	167,157	167,157	3,490	3,490
RICHFIELD	1,732,137	873,312	419,521	1,273,580	(912,348)	492,797	473,969	(18,828)	492,797	473,969	473,969	473,969	(18,828)	(18,828)
ROBBINSDALE	725,800	163,746	738,666	200,961	50,081	95,373	96,041	668	95,373	96,041	96,041	96,041	668	668
ROCHESTER	2,020,399	1,550,625	3,111,664	1,111,488	652,128	1,149,387	1,149,387	8,974	1,149,387	1,149,387	1,149,387	1,149,387	8,974	8,974
ROGERS	548,210	9,924	496,734	82,814	(61,400)	81,398	81,398	(1,416)	82,814	81,398	81,398	81,398	(1,416)	(1,416)
ROSEMOUNT	3,670,169	0	3,538,906	42,177	(89,086)	369,499	366,700	(2,799)	369,499	366,700	366,700	366,700	(2,799)	(2,799)
ROSEVILLE	1,433,583	759,186	1,636,905	709,566	153,702	405,763	407,475	1,712	405,763	407,475	407,475	407,475	1,712	1,712
ST ANTHONY	324,294	229,079	638,290	162,919	247,836	134,221	138,535	4,314	134,221	138,535	138,535	138,535	4,314	4,314
ST CLOUD	4,879,834	1,084,197	5,543,858	803,017	382,844	987,767	992,115	4,348	987,767	992,115	992,115	992,115	4,348	4,348
ST FRANCIS	1,554,547	43,004	1,595,725	20,675	18,849	193,597	193,378	(219)	193,597	193,378	193,378	193,378	(219)	(219)
ST JOSEPH	308,851	31,426	332,014	23,983	15,720	43,439	43,609	170	43,439	43,609	43,609	43,609	170	170
ST LOUIS PARK	684,619	1,357,107	1,006,336	1,253,732	218,342	580,786	583,205	2,419	580,786	583,205	583,205	583,205	2,419	2,419
ST MICHAEL	1,956,051	0	1,956,050	(1)	(1)	326,387	325,412	(975)	326,387	325,412	325,412	325,412	(975)	(975)
ST PAUL	1,876,269	9,736,271	19,717,499	4,098,612	12,203,571	4,625,906	4,844,253	218,347	4,625,906	4,844,253	4,844,253	4,844,253	218,347	218,347
ST PAUL PARK	728,374	113,299	748,961	106,683	13,971	89,904	89,902	(2)	89,904	89,902	89,902	89,902	(2)	(2)
ST PETER	2,293,213	152,168	1,739,855	454,850	(250,676)	263,870	268,313	(5,557)	263,870	268,313	268,313	268,313	(5,557)	(5,557)
SARTELL	2,270,049	38,869	2,254,605	10,751	(43,562)	292,202	290,501	(1,701)	292,202	290,501	290,501	290,501	(1,701)	(1,701)
SAUK RAPIDS	1,052,664	179,459	1,268,859	129,839	166,575	231,429	233,906	2,477	231,429	233,906	233,906	233,906	2,477	2,477
SAVAGE	2,383,296	14,886	1,145,319	377,939	(874,924)	363,421	345,691	(17,730)	363,421	345,691	345,691	345,691	(17,730)	(17,730)
SHAKOPEE	1,366,664	268,775	715,503	450,715	(469,222)	315,919	306,050	(9,869)	315,919	306,050	306,050	306,050	(9,869)	(9,869)
SHOREVIEW	1,042,369	170,362	929,124	206,750	(76,857)	185,393	183,377	(2,016)	185,393	183,377	183,377	183,377	(2,016)	(2,016)
SHOREWOOD	1,930,316	15,713	1,979,214	33,185	33,185	142,633	142,838	205	142,633	142,838	142,838	142,838	205	205
SOUTH ST PAUL	301,131	334,108	316,571	329,146	10,478	231,905	231,412	(493)	231,905	231,412	231,412	231,412	(493)	(493)
SPRING LAKE PARK	0	102,548	102,548	102,548	0	50,218	50,068	(150)	50,218	50,068	50,068	50,068	(150)	(150)
STEWARTVILLE	458,129	71,122	126,114	177,805	(225,332)	77,419	72,901	(4,518)	77,419	72,901	72,901	72,901	(4,518)	(4,518)
STILLWATER	730,948	309,298	512,176	334,935	(193,135)	203,291	199,010	(4,281)	203,291	199,010	199,010	199,010	(4,281)	(4,281)
THIEF RIVER FALLS	2,004,960	119,915	1,384,678	468,082	(272,116)	344,747	338,541	(6,206)	344,747	338,541	338,541	338,541	(6,206)	(6,206)
VADNAIS HEIGHTS	594,537	92,624	543,061	109,164	(34,936)	110,511	109,516	(995)	110,511	109,516	109,516	109,516	(995)	(995)
VIRGINIA	\$676,899	\$292,758	\$1,459,316	\$275,391	\$765,050	\$271,735	\$285,531	\$13,796	\$271,735	\$285,531	\$285,531	\$285,531	\$13,796	\$13,796
WACONIA	23,164	317,568	1,011,484	0	670,752	75,880	88,414	12,534	75,880	88,414	88,414	88,414	12,534	12,534

MUNICIPALITY	Current		Current		Proposed		Change in		Actual 2004		Proposed 2004		Difference in 2004	
	Complete Storm Sewer Needs	Partial Storm Sewer Needs	Complete Storm Sewer Needs	Partial Storm Sewer	Complete Storm Sewer Needs	Partial Storm Sewer	Storm Sewer Needs	Storm Sewer Needs	Construction Needs Apportionment	Construction Needs Apportionment	Construction Needs Apportionment	Construction Needs Apportionment	Proposed Method of Computing SS Needs	Proposed Method of Computing SS Needs
WAITE PARK	507,030	38,042	476,144	41,350	(27,578)	92,029	91,230	(799)						
WASECA	612,557	26,464	123,540	208,404	(307,077)	109,475	103,306	(6,169)						
WEST ST PAUL	823,602	189,383	102,950	377,112	(532,923)	160,633	150,015	(10,618)						
WHITE BEAR LAKE	1,093,847	395,306	1,976,640	172,843	660,330	268,730	280,490	11,760						
WILLMAR	2,187,688	224,117	1,503,070	685,583	(223,152)	358,598	353,282	(5,316)						
WINONA	898,239	339,897	1,065,533	323,357	150,754	310,769	312,708	1,939						
WOODBURY	5,731,747	210,885	3,708,774	827,827	(1,406,031)	1,089,037	1,059,035	(30,002)						
WORTHINGTON	100,377	249,754	684,618	104,202	438,689	168,545	176,386	7,841						
	\$229,035,824	\$63,349,027	\$236,911,114	\$64,155,352	\$8,681,615	\$55,445,291	\$55,445,291	(\$0)						

STORM SEWER NEEDS

Change Implementation Options
Rick Kostohryz, SALT ITS
March 30, 2004

The following are SALT ITS perspectives on the Storm Sewer Needs options being discussed by the Municipal Screening Board this spring.

Option 1

Generate complete storm sewer Needs after 20 years, in the same manner as other roadway Needs items. The city would adjust the partial or complete storm sewer mileage fields on the data collector tool as needed if the last year graded is over 20 years.

No database or program changes necessary for this option.

The MSAS Needs User Manual would need to include specific instructions on how and when to adjust the storm sewer mileage fields.

Option 2

Generate complete or partial storm sewer Needs based on a pre-determined number of years past the last year graded. The city would adjust the partial or complete storm sewer mileage fields on the data collector tool as needed if the last year graded is beyond the pre-determined number of years.

No database changes necessary.

A new Data Collector report would need to be developed and implemented, similar to Report 3- 20 yr Reinstatement. The report would list segments in which the last year graded is beyond the pre-determined number of years. The city would adjust their complete or partial storm sewer mileage based on the results of the report.

MSAS Needs User Manual would need to include specific instructions on the use of the new report and how and when to adjust the storm sewer mileage fields.

Option 3

Generate Complete storm sewer Needs on a different life cycle than roadway needs. The city would adjust the partial or complete storm sewer mileage fields on the data collector tool as needed if a new field called 'Last Year Storm Sewer Constructed' is beyond a pre-determined number of years.

A new field on the database would be necessary - Year Storm Sewer Constructed

The Grading tab form on the Data Collector would need to be modified to include the new field.

A new Data Collector report would need to be developed and implemented, similar to Report 3- 20 yr Reinstatement. The report would list segments in which the new field 'Last Year Storm Sewer Constructed' is beyond the pre-determined number of years. The city would adjust their complete or partial storm sewer mileage based on the results of the report.

MSAS Needs User Manual would need to include specific instructions on the use of the new field, the new report, and how and when to adjust the storm sewer mileage fields.

Provided current staffing and resource levels remain consistent, it's possible to implement any of the 3 options prior to the start of the 2005 Needs cycle (1/1/2005) with little or no assistance from outside consultants.

The above options 1, 2 and 3, are in order of complexity, with option 1 being the easiest to implement, and option 3 being the most complex. Actual time commitments to implement each option have not been determined.

**CRITERIA USED BY DSAE'S TO APPROVE COMPLETE STORM SEWER
NEEDS WHERE THERE IS EXISTING STORM SEWER**

The DSAE's were asked the following 5 questions about approving SS Needs. In no particular order, their answers are in bold below each question.

- 1) What criteria (or guidelines) do you use to approve Complete SS Needs where there is existing SS. And what do you think is the most important?
 - a. **Hydraulic inadequacy, poor condition, too shallow to serve**
 - b. **It has to have used its half life (about 35 – 40 years old) or future development will require upgrading the SS.**
 - c. **...requires significant grade change, and/or significant drainage changes**
 - d. **40 years old or older or greatly increased impervious area, lots of new development, etc.**
 - e. **Usually anything that is 40 – 50 years old or more is allowed, and sometimes younger if they argue strongly that it is worn out.**
 - f. **If they need added capacity or it is really old. Usually need both to be approved.**
- 2) What info do you require the city to provide you?
 - a. **Hand written note on Report 7 form**
 - b. **Explanation on Report 7 form or to me when I call them**
 - c. **Any current plans under review or other evidence that future development is being planned.**
 - d. **...I always ask for their justification of why it needs to be replaced. The most usual response is something to the effect that it's "old and worn out and when we rebuild the road we'll need to replace the storm sewer". I typically ask the age of the existing storm sewer and they usually have a construction date for it. Sometimes it's unclear exactly when it was built, but that's usually on systems that appear to be VERY old.**
 - e. **Note on the Report 7 form, usually followed up by a phone call. If it seems borderline, ask for drainage info. Usually can resolve with a phone call.**
- 3) About what percent of the requests you receive do you approve or not approve?
 - a. **About 100% approved**
 - b. **About 50% approved and 50% not (because they just reinstated with the grading needs at 20 years)**
 - c. **I have had 3 or 4 requests in the time I've been DSAE and approved them all as best I can recall.**
 - d. **I'm not real sure what percentage we disallow now, but it is significantly less than 2 or 3 years ago. I'd estimate that better than 85 or 90% is approved now.**
 - e. **Have had 5 to 8 requests. As best as I can recall, have approved them all.**

- 4) What do you think about having statewide guidelines for the approval of Complete SS where there is Existing SS?
- a. **It's okay, but the guideline ought to be, "If complete grading needs, then complete SS need." I realize that complete SS is not always required, but neither is complete grading.**
 - b. **We feel a guideline at least on the life of the storm sewer should be set, but still have DSAE be able to approve the special cases.**
 - c. **This could be a good thing.**
 - d. **It would be very helpful to me to have well defined guidelines to apply to Storm Sewer needs, for instance an age criteria. ...Report 7 could still be used for unusual circumstances which warranted replacement earlier.**
 - e. **I'm ok with that.**
- 5) Any other info on this subject you would like presented to the subcommittee?
- a. **Needs are theoretical**
 - b. **Maybe consider an after the fact need for several years rather than trying to second guess if it is to be upgraded from development. The development could take anywhere from 2 – 10 years to occur and by then it may be over 30 years old. It may be better to do after the fact if objective criteria is difficult to develop.**
 - c. **I still think AFTER THE FACT is the purist way.**
 - d. **My big fear is that we are being more strict than the rest of the state and therefore I am creating a disadvantage for the cities and counties in my district.**
 - e. **There may be inconsistencies, and maybe there should be consistent guidelines, but I think that the DSAE's are approving ones that need to be approved.**

2004 Municipal Screening Board Data

JUNE, 2004

Advancement of MSAS Construction Funds from the General MSAS Construction Account

Actual Expenditures as of 5/02/04	
Maximim \$'s Allowable to Advance:	\$27,000,000
Less \$'s Actual Advances:	\$9,829,012
Less Outstanding Reserve \$ Amount:	\$6,726,397
Remaining Available to Advance:	\$10,444,591

2004 SUMMARY TO DATE

County	\$'s Approved for Advancing	\$'s Actually Advanced
Alexandria	\$406,000	\$31,089
Brooklyn Park	841,728	841,728
Eagan	4,000,000	1,867,100
Elk River	299,542	0
Glencoe	62,032	62,032
Hibbing	190,851	0
Lake City	400,000	0
Lakeville	4,000,000	131,057
Maple Grove	535,666	0
Morris	586,289	250,010
Oakdale	1,623,274	618,521
Otsego	435,140	435,140
Red Wing	2,155,530	825,827
Redwood Falls	213,039	213,039
Rochester	4,000,000	0
Sartell	1,415,274	1,250,389
Savage	850,000	0
Shakopee	2,122,233	361,466
Shoreview	1,857,177	1,857,177
St. Anthony	22,766	22,766
St. Francis	107,433	0
St. Michael	596,632	256,721
White Bear Lake	450,000	246,004
Woodbury	558,946	558,946
TOTAL	\$27,729,552	\$9,829,012

If the cities were to advance the total amount on the City Council resolutions submitted, they would have a balance available to advance of (\$729,552). Historical data shows that cities have requested approximately 1 1/2 times more than they have actually advanced.

MSAS FUND ADVANCES

Revised June 1999 November 2000 November 2002 June 2003, October 2003 June 2004

Guidelines

General Fund Advance for State Aid Projects

Any city may advance up to a cumulative maximum of five times its annual construction allotment or \$4,000,000 whichever is less. This amount may be exceeded by advances for Federal Aid projects. **Per State Statute 162.14 subp. 6 advances “shall not exceed the city’s total estimated apportionment for the three years following the year the advance is made.” At times, a city using our guidelines may exceed the State Statute guidelines. If this happens, the city will be limited to the statutory limits. This issue will be addressed in the 2005 legislative session.**

The maximum Municipal State Aid construction dollars that can be advanced from the General Fund account in any one year shall be the difference between the Municipal State Aid construction fund balance at the end of the preceding calendar year, current year projected disbursements, and \$20 million. SALT may revise the amount of the required reserve as the year progresses.

A City Council Resolution is required to advance funds for an MSAS project. A sample resolution can be found in the State Aid manual (**SALT 512(4/04)**) **on the SALT website**. The City Council Resolution can be passed at any time, but must be submitted with or prior to, any payment requests. It need not be project specific, but must include the maximum amount of advance the City Council is authorizing for financing approved Municipal State Aid Street projects. A mutually acceptable repayment schedule not to exceed five years shall be included in the resolution. The resolution should be mailed directly to State Aid Finance. The resolution does not reserve the funds. The funds are paid on a first come first served basis established by payment requests. As payment requests are processed by State Aid Finance, the amount on the ‘State Aid Payment Request’ form (up to the resolution/allowable amount) will be deducted from the city’s account.

To “reserve” the funds, the City Engineer may submit a “Request to Reserve Advanced Funding” form (**SALT 513(4/04)**) **on the SALT website**) up to **12** weeks prior to anticipating or incurring an obligation where advanced funding is required. This form “reserves” the funds in the city’s account. Once the request has been approved by State Aid and the funds added to the city’s account, a copy of the approved request will be returned to the City Engineer. The “Request to Reserve Advanced Funding” form should be mailed to Sandra Martinez in State Aid Finance. This form is not required, but will allow the funds to be set aside up to **twelve** weeks in advance of the payment request.

General Fund Advance for Federal Aid Projects

Cities may advance for Federal Projects that are programmed by the ATP in the STIP and are eligible for State Aid financing. Repayment to the General Fund will be made at the time federal funds are converted. The city will agree to authorize repayments from their state aid account or from local funds under a mutually acceptable repayment schedule should said project fail to receive Federal funds for any reason

A City Council Resolution and an Advance Construction Agreement are required to advance funds for a Federal Aid project. A sample resolution can be found in the State Aid manual (**SALT 515(4/04) on the SALT website**). The actual Agreement that must be processed will be written by Lynnette Roshell. Contact her directly at (651) 282-6479 to get the agreement started. This resolution must be project specific and must include the maximum amount of advance the City Council is authorizing. The resolution and signed Agreement should be mailed directly to Lynnette.

Additional Guidelines

General Fund Advance repayments may be relaxed to accommodate the payment on the principal of State Aid bonds.

In any one year, if the maximum advance amount available is reached, a city has to submit a new city council resolution when more funds become available the following year.

Advances will always be processed on a 'first come first served' basis.

All revisions to these guidelines are ultimately an administrative decision by the State Aid Engineer with any input and discussion by the Screening Board being taken into consideration.

MUNICIPAL
STATE AID STREET FUNDS ADVANCE RESOLUTION

WHEREAS, the Municipality of _____ is planning to implement Municipal State Aid Street Project(s) in 20____ which will require State Aid funds in excess of those available in its State Aid Construction Account, and

WHEREAS, said municipality is prepared to proceed with the construction of said project(s) through the use of an advance from the Municipal State Aid Street Fund to supplement the available funds in their State Aid Construction Account, and

WHEREAS, the advance is based on the following determination of estimated expenditures:

Account Balance as of date _____		\$ _____
Less estimated disbursements:		
Project # _____	\$ _____	
Project # _____	\$ _____	
Project # _____	\$ _____	
Project # _____	\$ _____	
Bond Principle (if any)	\$ _____	
Project Finals (overruns-if any)	\$ _____	
Other _____	\$ _____	
Total Estimated Disbursements		\$ _____
Advance Amount (amount in excess of acct balance)		\$ _____

WHEREAS, repayment of the funds so advanced will be made in accordance with the provisions of Minnesota Statutes 162.14, Subd. 6 and Minnesota Rules, Chapter 8820.1500, Subp. 10b, and

WHEREAS, the Municipality acknowledges advance funds are released on a first-come-first-serve basis and this resolution does not guarantee the availability of funds.

NOW, THEREFORE, Be It Resolved: That the Commissioner of Transportation be and is hereby requested to approve this advance for financing approved Municipal State Aid Street Project(s) of the Municipality of _____ in an amount up to \$ _____. I hereby authorize repayments from subsequent accruals to the Municipal State Aid Street Construction Account of said Municipality in accordance with the schedule herein indicated: (initial one)

- ___ Repayment from entire future year allocations until fully repaid.
- ___ Repayment in _____ equal annual installments
- ___ Repayment from future year allocations in amounts listed below until fully repaid (maximum 5 year repayment).

\$ _____ CY _____	\$ _____ CY _____	\$ _____ CY _____
\$ _____ CY _____	\$ _____ CY _____	

I HEREBY CERTIFY that the above is a true and correct copy of a resolution presented to and adopted by the Municipality of _____, County of _____, State of Minnesota, at a duly authorized Municipal Council Meeting held in the Municipality of _____, Minnesota on the _____ day of _____, 20____, as disclosed by the records of said Municipality on file and of record in the office.

Municipality of _____

Municipal Clerk

MUNICIPAL
REQUEST TO RESERVE ADVANCE FUNDING

The Municipality of _____ requests that the amount of
\$ _____ be reserved from the Municipal State Aid Street Construction Fund for the
State Aid Project(s) listed below.

Project # _____

Project # _____

Project # _____

Project # _____

MUNICIPAL APPROVAL

The Municipality agrees that a "State Aid Payment Request" form will be submitted within 12 weeks of the signing of this document. A Municipal Council Resolution authorizing this advance funding is attached or has been previously submitted.

Municipal Engineer

Date

STATE AID APPROVAL

Construction funds in the amount of \$ _____ has been approved and reserved from the Municipal State Aid Street Construction Fund for a period of 12 weeks from the date the Municipal Engineer signed this form.

State Aid Finance

Date

Original retained in SAF Finance file, one copy to Municipal Engineer

RELATIONSHIP OF CONSTRUCTION BALANCE TO CONSTRUCTION ALLOTMENT

The amount spent on construction projects is computed by the difference between the previous year's and current years unencumbered construction balances plus the current years construction apportionment.

JUNE 2004 BOOK/RELATIONSHIP OF CONSTRUCTION BALANCE TO ALLOTMENT.XLS

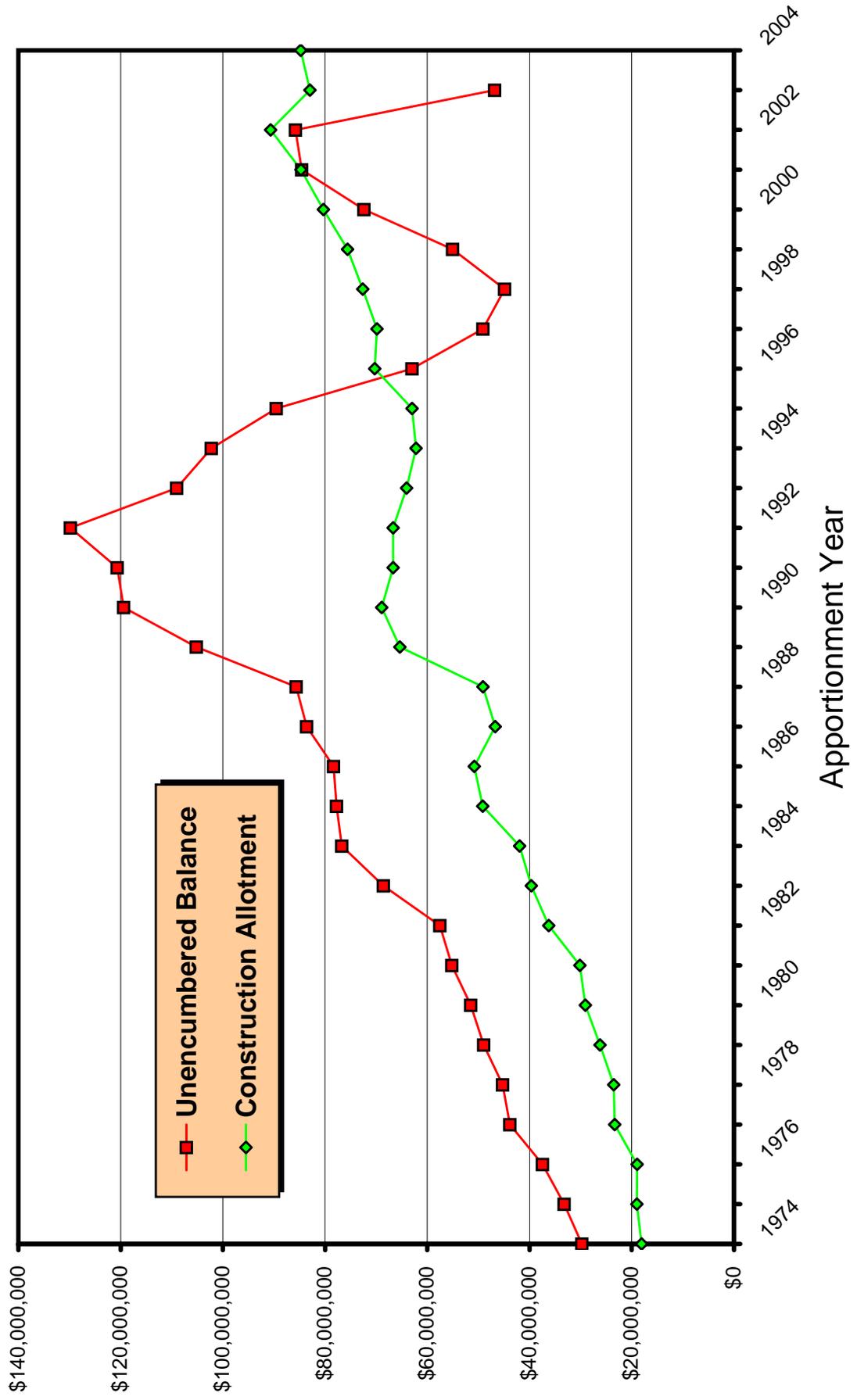
04-May-04

App. Year	No. of Municipalities	Needs Mileage	January Construction Allotment	31-Dec Unencumbered Construction Balance	Amount Spent on Construction Projects	Ratio of Construction Balance to Construction Allotment	Ratio of Amount spent to Amount Received	
1973		94	1,580.45	\$15,164,273	\$26,333,918	\$12,855,250	1.7366	0.8477
1974		95	1608.06	18,052,386	29,760,552	14,625,752	1.6486	0.8102
1975		99	1629.30	19,014,171	33,239,840	15,534,883	1.7482	0.8170
1976		101	1718.92	18,971,282	37,478,614	14,732,508	1.9755	0.7766
1977		101	1748.55	23,350,429	43,817,240	17,011,803	1.8765	0.7285
1978		104	1807.94	23,517,393	45,254,560	22,080,073	1.9243	0.9389
1979		106	1853.71	26,196,935	48,960,135	22,491,360	1.8689	0.8585
1980		106	1889.03	29,082,865	51,499,922	26,543,078	1.7708	0.9127
1981		106	1933.64	30,160,696	55,191,785	26,468,833	1.8299	0.8776
1982		105	1976.17	36,255,443	57,550,334	33,896,894	1.5874	0.9349
1983		106	2022.37	39,660,963	68,596,586	28,614,711	1.7296	0.7215
1984		106	2047.23	41,962,145	76,739,685	33,819,046	1.8288	0.8059
1985		107	2110.52	49,151,218	77,761,378	48,129,525	1.5821	0.9792
1986		107	2139.42	50,809,002	78,311,767	50,258,613	1.5413	0.9892
1987	*	107	2148.07	46,716,190	83,574,312	41,453,645	1.7890	0.8874
1988		108	2171.89	49,093,724	85,635,991	47,032,045	1.7443	0.9580
1989		109	2205.05	65,374,509	105,147,959	45,862,541	1.6084	0.7015
1990		112	2265.64	68,906,409	119,384,013	54,670,355	1.7326	0.7934
1991		113	2330.30	66,677,426	120,663,647	65,397,792	1.8097	0.9808
1992		116	2376.79	66,694,378	129,836,670	57,521,355	1.9467	0.8625
1993		116	2410.53	64,077,980	109,010,201	84,904,449	1.7012	1.3250
1994		117	2471.04	62,220,930	102,263,355	68,967,776	1.6436	1.1084
1995		118	2526.39	62,994,481	89,545,533	75,712,303	1.4215	1.2019
1996		119	2614.71	70,289,831	62,993,508	96,841,856	0.8962	1.3778
1997	**	122	2740.46	69,856,915	49,110,546	83,739,877	0.7030	1.1987
1998		125	2815.99	72,626,164	44,845,521	76,891,189	0.6175	1.0587
1999		126	2859.05	75,595,243	55,028,453	65,412,311	0.7279	0.8653
2000		127	2910.87	80,334,284	72,385,813	62,976,924	0.9011	0.7839
2001		129	2972.16	84,711,549	84,583,631	72,513,731	0.9985	0.8560
2002		130	3020.39	90,646,885	85,771,900	89,458,616	0.9462	0.9869
2003		131	3080.67	82,974,496	46,835,689	121,910,707	0.5645	1.4693
2004		133	3116.44	84,740,941				

* The date for the unencumbered balance deduction was changed from June 30 to September 1. Effective September 1, 1986.

** The date for the unencumbered balance deduction was changed from September 1 to December 31. Effective December 31, 1996.

Relationship of Balance to Allotment



2004 APPORTIONMENT RANKINGS

Rankings are from highest apportionment per Needs mile to lowest. Bridges in some cities increases the costs.

MS&S East/January 2004 Book/2004 Apportionment Rankings.xls

POPULATION APPORTIONMENT				MONEY NEEDS APPORTIONMENT				TOTAL APPORTIONMENT			
2003		2004		2003		2004		2003		2004	
Rank	Municipality	Total Needs Mileage	Population Apportionment Per Need Mile	Rank	Municipality	Total Needs Mileage	Money Needs Apportionment Per Need Mile	Rank	Municipality	Total Needs Mileage	Apportionment Per Need Mile
1	Falcon Heights	2.54	\$5,981	1	Crookston	11.71	\$29,290	1	Minneapolis	203.00	\$59,049
2	Minneapolis	203.00	30,887	2	Minneapolis	203.00	28,161	2	St. Paul	165.13	56,548
3	Hopkins	9.32	30,857	3	St. Paul	165.13	28,014	3	Hopkins	9.32	50,765
4	St. Paul	165.13	28,534	4	Bloomington	75.02	24,108	4	Falcon Heights	2.54	50,117
5	New Hope	12.70	26,966	5	Fairmont	19.49	23,967	5	St. Anthony	5.63	47,410
6	Vadnais Heights	8.32	26,083	6	St. Anthony	5.63	23,840	6	New Hope	12.70	46,875
7	Waseca	6.42	24,805	7	Woodbury	46.03	23,659	7	Columbia Heights	12.53	44,067
8	Oakdale	18.39	24,492	8	Maple Grove	49.10	23,631	8	Bloomington	75.02	42,753
9	Columbia Heights	12.53	24,441	9	Thief River Falls	15.06	22,892	9	Stewartville	3.99	42,210
10	New Brighton	14.92	24,436	10	Austin	27.70	21,096	10	Richfield	25.08	42,144
11	Coon Rapids	41.82	24,351	11	Fairbault	22.80	21,087	11	St. Louis Park	31.19	42,117
12	Robbinsdale	9.51	24,323	12	Moorhead	29.74	20,808	12	Waseca	6.42	41,857
13	West St. Paul	13.54	23,769	13	Redwood Falls	7.87	20,796	13	Maple Grove	49.10	41,645
14	St. Joseph	3.47	23,713	14	Orono	12.58	20,600	14	Woodbury	46.03	41,155
15	Northfield	12.36	23,648	15	Farmington	13.85	20,577	15	Crookston	11.71	40,748
16	St. Anthony	5.63	23,570	16	Glencoe	6.98	20,523	16	Northfield	12.36	40,530
17	St. Louis Park	31.19	23,496	17	New Ulm	15.33	20,493	17	Anoka	12.64	40,313
18	Anoka	12.64	23,480	18	Sartell	14.28	20,462	18	Owatonna	18.19	39,791
19	Brooklyn Park	48.08	23,368	19	Maplewood	31.71	20,271	19	Rochester	66.55	39,737
20	Shoreview	18.57	23,353	20	Lakeville	51.95	20,242	20	Coon Rapids	41.82	39,563
21	Eagan	46.15	22,962	21	New Hope	12.70	19,909	21	Vadnais Heights	8.32	39,366
22	Stewartville	3.99	22,807	22	Hopkins	9.32	19,908	22	Apple Valley	35.54	39,104
23	Burnsville	44.05	22,643	23	Duluth	112.18	19,878	23	Burnsville	44.05	39,060
24	Waconia	5.53	22,509	24	Little Canada	10.49	19,822	24	Maplewood	31.71	38,819
25	Richfield	25.08	22,495	25	Richfield	25.08	19,649	25	Moorhead	29.74	38,746
26	Rochester	66.55	22,466	26	Columbia Heights	12.53	19,627	26	Brooklyn Center	21.56	38,403
27	Brooklyn Center	21.56	22,169	27	Sauk Rapids	11.87	19,497	27	Plymouth	54.72	38,129
28	Apple Valley	35.54	22,010	28	Stewartville	3.99	19,403	28	Inver Grove Heights	23.86	38,095
29	Champlin	17.01	21,780	29	Buffalo	14.17	19,267	29	Mound	8.05	37,636
30	Arden Hills	7.42	21,323	30	La Crescent	5.66	19,125	30	Farmington	13.85	37,435
31	Inver Grove Heights	23.86	21,079	31	Owatonna	18.19	19,008	31	New Brighton	14.92	37,223
32	Crystal	17.88	20,922	32	Red Wing	23.82	18,978	32	Eden Prairie	45.40	36,826
33	Owatonna	18.19	20,783	33	North Mankato	13.38	18,932	33	Fairbault	22.80	36,515
34	Eden Prairie	45.40	20,563	34	Grand Rapids	11.47	18,919	34	St. Joseph	3.47	36,232
35	Chaska	15.13	20,525	35	Little Falls	15.98	18,674	35	Waconia	5.53	36,231
36	Winona	21.77	20,365	36	St. Francis	10.37	18,669	36	Crystal	17.88	36,186
37	Plymouth	54.72	20,301	37	St. Louis Park	31.19	18,621	37	Arden Hills	7.42	35,697
38	White Bear Lake	20.35	19,840	38	St. Peter	14.24	18,530	38	West St. Paul	13.54	35,633
39	South St. Paul	16.82	19,780	39	Mound	8.05	18,389	39	Sauk Rapids	11.87	35,259
40	Roseville	28.70	19,460	40	Forest Lake	22.35	18,352	40	St. Paul Park	4.92	35,234

POPULATION APPORTIONMENT			
Rank	Municipality	2003 Total Needs Mileage	2004 Population Apportionment Per Need Mile
41	Blaine	40.52	\$19,431
42	Edina	40.27	19,347
43	Mound	8.05	19,247
44	Spring Lake Park	5.82	19,207
45	Big Lake	6.37	18,700
46	Bloomington	75.02	18,645
47	Maplewood	31.71	18,548
48	Fridley	24.81	18,128
49	Maple Grove	49.10	18,014
50	Moorhead	29.74	17,938
51	Waite Park	6.12	17,904
52	Woodbury	46.03	17,496
53	Stillwater	15.45	17,268
54	North St. Paul	11.40	17,181
55	St. Paul Park	4.92	16,961
56	Monticello	9.04	16,935
57	Minnetonka	49.89	16,887
58	Farmington	13.85	16,857
59	Mounds View	12.51	16,758
60	St. Cloud	60.26	16,668
61	Mankato	33.27	16,425
62	Hastings	19.27	16,321
63	Worthington	11.39	16,230
64	Cottage Grove	31.44	16,141
65	Albert Lea	18.74	16,051
66	Prior Lake	17.58	15,993
67	Shakopee	24.53	15,960
68	Sauk Rapids	11.87	15,762
69	Chanhassen	22.27	15,698
70	Faribault	22.80	15,428
71	Little Canada	10.49	15,340
72	Savage	24.92	15,261
73	Mahtomedi	8.62	15,257
74	Shorewood	8.24	15,086
75	North Mankato	13.38	14,944
76	New Prague	5.52	14,892
77	Lakeville	51.95	14,592
78	La Crescent	5.66	14,547
79	New Ulm	15.33	14,524
80	Golden Valley	23.57	14,340
81	Lino Lakes	20.55	14,300
82	Austin	27.70	13,996
83	Brainerd	16.12	13,884
84	International Falls	8.06	13,629
85	Marshall	15.48	13,520
86	Mendota Heights	14.39	13,203
87	Buffalo	14.17	13,202
88	Hutchinson	16.65	13,188

MONEY NEEDS APPORTIONMENT			
Rank	Municipality	2003 Total Needs Mileage	2004 Money Needs Apportionment Per Need Mile
41	St. Paul Park	4.92	\$18,273
42	Cottage Grove	31.44	18,180
43	Hutchinson	16.65	18,124
44	Albert Lea	18.74	17,911
45	Plymouth	54.72	17,828
46	Osego	16.37	17,513
47	Shorewood	8.24	17,310
48	St. Michael	18.88	17,287
49	Rochester	66.55	17,271
50	Apple Valley	35.54	17,094
51	Virginia	15.93	17,058
52	Litchfield	8.58	17,057
53	Waseca	6.42	17,052
54	Inver Grove Heights	23.86	17,016
55	East Grand Forks	15.19	16,908
56	Northfield	12.36	16,882
57	Fergus Falls	24.32	16,848
58	Anoka	12.64	16,833
59	Lino Lakes	20.55	16,764
60	Prior Lake	17.58	16,746
61	Lake City	6.50	16,550
62	Mankato	33.27	16,482
63	Burnsville	44.05	16,416
64	St. Cloud	60.26	16,392
65	Big Lake	6.37	16,341
66	Eden Prairie	45.40	16,263
67	Brooklyn Center	21.56	16,234
68	Minnetonka	49.89	16,221
69	International Falls	8.06	15,890
70	Cloquet	20.14	15,660
71	East Bethel	26.91	15,435
72	Marshall	15.48	15,366
73	Crystal	17.88	15,264
74	Coon Rapids	41.82	15,212
75	Monticello	9.04	15,151
76	Edina	40.27	15,124
77	Hermantown	14.08	15,051
78	Waite Park	6.12	15,037
79	Ham Lake	26.51	15,005
80	Hibbing	51.31	15,002
81	Willmar	23.91	14,998
82	Elk River	30.42	14,831
83	Worthington	11.39	14,798
84	Chaska	15.13	14,615
85	Savage	24.92	14,584
86	Golden Valley	23.57	14,449
87	Arden Hills	7.42	14,374
88	Morris	8.11	14,330

TOTAL APPORTIONMENT			
Rank	Municipality	2003 Total Needs Mileage	2004 Total Apportionment Per Need Mile
41	Little Canada	10.49	\$35,162
42	Chaska	15.13	35,140
43	Austin	27.70	35,091
44	Big Lake	6.37	35,041
45	New Ulm	15.33	35,016
46	Lakeville	51.95	34,835
47	Oakdale	18.39	34,830
48	Winona	21.77	34,640
49	Edina	40.27	34,471
50	Brooklyn Park	48.08	34,381
51	Robbinsdale	9.51	34,352
52	Cottage Grove	31.44	34,321
53	Albert Lea	18.74	33,962
54	North Mankato	13.38	33,876
55	La Crescent	5.66	33,672
56	Roseville	28.70	33,598
57	South St. Paul	16.82	33,567
58	Glencoe	6.98	33,543
59	Shoreview	18.57	33,337
60	Eagan	46.15	33,248
61	Fairmont	19.49	33,118
62	Minnetonka	49.89	33,109
63	St. Cloud	60.26	33,060
64	White Bear Lake	20.35	33,045
65	Sartell	14.28	33,036
66	Waite Park	6.12	32,941
67	Mankato	33.27	32,906
68	Prior Lake	17.58	32,739
69	Duluth	112.18	32,481
70	Buffalo	14.17	32,469
71	Shorewood	8.24	32,396
72	Blaine	40.52	32,170
73	Redwood Falls	7.87	32,157
74	Monticello	9.04	32,086
75	Thief River Falls	15.06	32,078
76	Champlin	17.01	32,008
77	Hutchinson	16.65	31,312
78	Lino Lakes	20.55	31,064
79	Worthington	11.39	31,028
80	Grand Rapids	11.47	30,714
81	Orono	12.58	30,528
82	Stillwater	15.45	30,426
83	North St. Paul	11.40	30,395
84	Mounds View	12.51	30,376
85	Red Wing	23.82	30,164
86	St. Peter	14.24	30,008
87	Savage	24.92	29,845
88	Litchfield	8.58	29,738

POPULATION APPORTIONMENT				MONEY NEEDS APPORTIONMENT				TOTAL APPORTIONMENT			
Rank	Municipality	2003 Total Needs Mileage	2004 Population Apportment Per Need Mile	Rank	Municipality	2003 Total Needs Mileage	2004 Money Needs Apportment Per Need Mile	Rank	Municipality	2003 Total Needs Mileage	2004 Total Apportment Per Need Mile
89	Glencoe	6.98	\$13,021	89	Alexandria	15.90	\$14,317	89	Lake City	6.50	\$29,535
90	Lake City	6.50	12,984	90	Winoona	21.77	14,275	90	International Falls	8.06	29,519
91	Bemidji	16.25	12,786	91	Cambridge	11.07	14,275	91	Forest Lake	22.35	29,413
92	Andover	36.72	12,785	92	Rosemount	25.93	14,250	92	Marshall	15.48	28,885
93	Litchfield	8.58	12,681	93	Oak Grove	19.50	14,244	93	Shakopee	24.53	28,839
94	Willmar	23.91	12,681	94	Chisholm	7.99	14,152	94	Golden Valley	23.57	28,789
95	Duluth	112.18	12,603	95	Roseville	28.70	14,138	95	Hastings	19.27	28,316
96	Sartell	14.28	12,574	96	Falcon Heights	2.54	14,137	96	Spring Lake Park	5.82	27,835
97	Grand Rapids	11.47	11,795	97	South St. Paul	16.82	13,787	97	Willmar	23.91	27,679
98	St. Peter	14.24	11,478	98	Waconia	5.53	13,722	98	Fridley	24.81	27,678
99	Crookston	11.71	11,458	99	Mounds View	12.51	13,618	99	St. Francis	10.37	27,640
100	Redwood Falls	7.87	11,361	100	Vadnais Heights	8.32	13,283	100	Little Falls	15.98	27,090
101	Red Wing	23.82	11,186	101	North St. Paul	11.40	13,213	101	St. Michael	18.88	27,001
102	Forest Lake	22.35	11,060	102	White Bear Lake	20.35	13,205	102	Virginia	15.93	26,473
103	Montevideo	8.25	10,887	103	Stillwater	15.45	13,158	103	Mahtomedi	8.62	26,382
104	Rogers	7.71	10,643	104	Andover	36.72	13,106	104	Fergus Falls	24.32	26,077
105	Lake Elmo	11.42	10,594	105	Shakopee	24.53	12,879	105	Andover	36.72	25,891
106	Ramsey	29.32	10,519	106	New Brighton	14.92	12,787	106	Osego	16.37	25,727
107	Morris	8.11	10,516	107	Blaine	40.52	12,739	107	East Grand Forks	15.19	25,069
108	Chisholm	7.99	10,249	108	Detroit Lakes	13.33	12,734	108	Cloquet	20.14	24,912
109	Rosemount	25.93	10,176	109	St. Joseph	3.47	12,518	109	Morris	8.11	24,845
110	Alexandria	15.90	9,927	110	Montevideo	8.25	12,307	110	Bemidji	16.25	24,792
111	Orono	12.58	9,927	111	North Branch	22.53	12,097	111	Mendota Heights	14.39	24,595
112	Elk River	30.42	9,735	112	Bemidji	16.25	12,006	112	Elk River	30.42	24,567
113	St. Michael	18.88	9,713	113	Hastings	19.27	11,995	113	Hermantown	14.08	24,564
114	Hermantown	14.08	9,513	114	West St. Paul	13.54	11,864	114	Alexandria	15.90	24,490
115	Virginia	15.93	9,415	115	Baxter	12.77	11,771	115	Rosemount	25.93	24,426
116	Detroit Lakes	13.33	9,294	116	Mendota Heights	14.39	11,392	116	Chisholm	7.99	24,401
117	Cloquet	20.14	9,253	117	Hugo	16.79	11,154	117	Chanhausen	22.27	24,219
118	Fergus Falls	24.32	9,228	118	Mahtomedi	8.62	11,125	118	Brainerd	16.12	23,519
119	Thief River Falls	15.06	9,186	119	Brooklyn Park	48.08	11,012	119	Ham Lake	26.51	23,380
120	Fairmont	19.49	9,151	120	Rogers	7.71	10,741	120	Montevideo	8.25	23,194
121	St. Francis	10.37	8,971	121	Oakdale	18.39	10,338	121	Cambridge	11.07	22,924
122	Cambridge	11.07	8,649	122	Eagan	46.15	10,286	122	East Bethel	26.91	22,250
123	Little Falls	15.98	8,416	123	Champlin	17.01	10,228	123	Detroit Lakes	13.33	22,027
124	Ham Lake	26.51	8,375	124	Robbinsdale	9.51	10,029	124	Rogers	7.71	21,384
125	Osego	16.37	8,214	125	Shoreview	18.57	9,983	125	New Prague	5.52	20,667
126	East Grand Forks	15.19	8,161	126	Brainerd	16.12	9,635	126	Hibbing	51.31	20,451
127	Baxter	12.77	7,857	127	Ramsey	29.32	9,624	127	Oak Grove	19.50	20,199
128	Hugo	16.79	7,706	128	Fridley	24.81	9,550	128	Ramsey	29.32	20,142
129	East Bethel	26.91	6,815	129	Corcoran	14.80	8,847	129	Baxter	12.77	19,628
130	North Branch	22.53	6,527	130	Spring Lake Park	5.82	8,629	130	Hugo	16.79	18,860
131	Corcoran	14.80	6,415	131	Chanhausen	22.27	8,521	131	North Branch	22.53	18,624
132	Oak Grove	19.50	5,955	132	Lake Elmo	11.42	8,027	132	Lake Elmo	11.42	18,621
133	Hibbing	51.31	5,449	133	New Prague	5.52	5,775	133	Corcoran	14.80	15,262
		AVERAGE	\$16,265			AVERAGE	\$16,137			AVERAGE	\$32,402

POPULATION APPORTIONMENT				MONEY NEEDS APPORTIONMENT				TOTAL APPORTIONMENT			
Rank	Municipality	2003 Total Needs Mileage	2004 Population Apportment Per Need Mile	Rank	Municipality	2003 Total Needs Mileage	2004 Money Needs Apportment Per Need Mile	Rank	Municipality	2003 Total Needs Mileage	2004 Total Apportment Per Need Mile
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91	Bemidji	16.25	12,786	91	Cambridge	11.07	14,275	91	Forest Lake	22.35	29,413
92	Andover	36.72	12,785	92	Rosemount	25.93	14,250	92	Marshall	15.48	28,885
93	Litchfield	8.58	12,681	93	Oak Grove	19.50	14,244	93	Shakopee	24.53	28,839
94	Willmar	23.91	12,681	94	Chisholm	7.99	14,152	94	Golden Valley	23.57	28,789
95	Duluth	112.18	12,603	95	Roseville	28.70	14,138	95	Hastings	19.27	28,316
96	Sartell	14.28	12,574	96	Falcon Heights	2.54	14,137	96	Spring Lake Park	5.82	27,835
97	Grand Rapids	11.47	11,795	97	South St. Paul	16.82	13,787	97	Willmar	23.91	27,679
98	St. Peter	14.24	11,478	98	Waconia	5.53	13,722	98	Fridley	24.81	27,678
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103	Montevideo	8.25	10,887	103	Stillwater	15.45	13,158	103	Mahtomedi	8.62	26,382
104	Rogers	7.71	10,643	104	Andover	36.72	13,106	104	Fergus Falls	24.32	26,077
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107	Morris	8.11	10,516	107	Blaine	40.52	12,739	107	East Grand Forks	15.19	25,069
108	Chisholm	7.99	10,249	108	Detroit Lakes	13.33	12,734	108	Cloquet	20.14	24,912
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114	Hermantown	14.08	9,513	114	West St. Paul	13.54	11,864	114	Alexandria	15.90	24,490
115	Virginia	15.93	9,415	115	Baxter	12.77	11,771	115	Rosemount	25.93	24,426
116	Detroit Lakes	13.33	9,294	116	Mendota Heights	14.39	11,392	116	Chisholm	7.99	24,401
117	Cloquet	20.14	9,253	117	Hugo	16.79	11,154	117	Chanhausen	22.27	24,219
118	Fergus Falls	24.32	9,228	118	Mahtomedi	8.62	11,125	118	Brainerd	16.12	23,519
119	Thief River Falls	15.06	9,186	119	Brooklyn Park	48.08	11,012	119	Ham Lake	26.51	23,380
120	Fairmont	19.49	9,151	120	Rogers	7.71	10,741	120	Montevideo	8.25	23,194
121	St. Francis	10.37	8,971	121	Oakdale	18.39	10,338	121	Cambridge	11.07	22,924
122	Cambridge	11.07	8,649	122	Eagan	46.15	10,286	122	East Bethel	26.91	22,250
123	Little Falls	15.98	8,416	123	Champlin	17.01	10,228	123	Detroit Lakes	13.33	22,027
124	Ham Lake	26.51	8,375	124	Robbinsdale	9.51	10,029	124	Rogers	7.71	21,384
125	Osego	16.37	8,214	125	Shoreview	18.57	9,983	125	New Prague	5.52	20,667
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127	Baxter	12.77	7,857	127	Ramsey	29.32	9,624	127	Oak Grove	19.50	20,199
128	Hugo	16.79	7,706	128	Fridley	24.81	9,550	128	Ramsey	29.32	20,142
129	East Bethel	26.91	6,815	129	Corcoran	14.80	8,847	129	Baxter	12.77	19,628
130	North Branch	22.53	6,527	130	Spring Lake Park	5.82	8,629	130	Hugo	16.79	18,860
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132	Oak Grove	19.50	5,955	132	Lake Elmo	11.42	8,027	132	Lake Elmo	11.42	18,621
133	Hibbing	51.31	5,449	133	New Prague	5.52	5,775	133	Corcoran	14.80	15,262
		AVERAGE	\$16,265			AVERAGE	\$16,137			AVERAGE	\$32,402

CY 2004 Local Road Research Board Program

INV	TITLE	PROJECT TOTAL	2003	2004	2005
645	Implementation of Research	Ongoing	\$ 150,000	\$150,000	\$150,000
668	Technology Transfer Center, U of M - Base	Ongoing	150,000	150,000	150,000
	Technology Transfer Center, U of M - Cont. Projects:				
	Circuit Training and Assist. Program (CTAP), Instructor-\$50,000, T ² Center-\$77,500	Ongoing	127,500	127,500	127,500
	Minnesota Maintenance Research Expos	Ongoing	20,000	20,000	20,000
	Transportation Student Development	Ongoing	4,000	4,000	4,000
676	Materials & Road Research -- Mn/ROAd Facility Support- \$500,000, Staff Support-\$60,000	Ongoing	560,000	560,000	560,000
745	Library Services for Local Governments	Ongoing	60,000	60,000	60,000
768	Geosynthetics in Roadway Design	30,000	3,000	3,000	3,000
792	Pavement Research Institute Director	300,000	60,000	60,000	60,000
793	Design & Construction of Low Volume Roads Training	56,000	37,000	19,000	0
797	Urbanization of MN's Countryside: 2000-2005 - Future Geographics & Trans. Impacts	40,000	10,000	20,000	10,000
799	Impact of Alternative Storm Water Management Approaches on Highway Infrastructure	121,896	63,375	58,521	0
800	Cost Effectiveness Analysis of Storm Water Runoff Best Management Practices	98,000	49,000	49,000	0
801	Adaptation of Mechanistic-Empirical 2003 Guide for Design of MN Low-Volume PCC	25,000	12,500	12,500	0
802	Perf. Of Pvmt. Crack Sealants Beneath Bituminous Overlays	60,000	48,000	12,000	0
803	Determination of Optimum Time for Application of Surface Treatments to Asphalt Concrete Pavements	28,400	28,400	0	0
804	Investigation of the Low-Temperature Fracture Properties of Three MnRoad Asphalt Mixtures	59,800	29,900	29,900	0
805	Safety Impacts of Street Lighting at Isolated Rural Intersections - Phase II	51,180	17,060	17,060	17,060
806	Snow and Ice Maintenance Operation Field Guide	24,000	24,000	0	0
807	Evaluating Completed Research Projects for Implementation	25,000	0	25,000	0
808	Pavement Rehabilitation Selection	101,000	0	50,500	50,500
809	Research Tracking LRRB	60,000	0	12,000	12,000
810	Coal Ash Utilization in Gravel Roads	149,280	0	73,445	75,835
811	Match for Snow Plow Routing Study	30,000	0	30,000	0
812	Resilient Modulus & Strength of Base Course with Recycled Asphalt Pavements	94,000	0	47,000	47,000
813	Human-Centered Interventions Toward Zero Deaths in Rural Minnesota: Psychological Factors, Driver Risk Tasking, and Acceptable Interventions	188,961	0	188,961	0
814	Implications of State Aid Cuts for Local Road Funding	45,000	0	45,000	0
815	Calibration of the 2002 AASHTO Pavement Design Guide for Minnesota Portland Cement Concrete Pavements and Hot Mix Asphalt Pavements	126,600	0	63,300	63,300
816	Low Temperature Cracking of Flexible Pavements Due to Thermal Fatigue and Combined Effects of Loading and Temperature	155,000	0	95,000	60,000
817	Determination of Optimum Time for the Application of Surface Treatments to Asphalt Concrete Pavements	226,000	0	113,000	
818	Synthesis of Benefit/Cost Spring Load Restrictions	20,000	0	20,000	
819	Cell 26 Reconstruction at Mn/ROAD	30,000	0	30,000	
998	Operational Research Program	140,000	0	70,000	70,000
999	Program Administration	Ongoing	150,000	225,000	225,000
	TOTALS			\$2,440,687	\$1,765,195

Italicized = Anticipated

Bold = Funding Previously Approved

C.Y. 2004 SUMMARY:

Funds Allotted for 2004	\$ 2,223,195	City	\$544,962
Unprogrammed Funds Carried over from 2003	63,595	County	1,678,233
Funds from Cancelled Projects*	165,000	Total	\$2,223,195
Inv. 999 Carry Forward from C.Y. 03**	75,000		
Total Funds Available for 2004	\$2,526,790		
Total 2004 Commitments, Carryover & Continuation Projects	\$2,277,687		
CY 2004 Funds Available for Programming	\$249,103		

*Board action taken 9/17/03 to cancel Inv. 678, 718, 719 and 740

**C.Y. 03 funds budgeted for Inv. 999 but not used

COUNTY HIGHWAY TURNBACK POLICY

Definitions:

County Highway – Either a County State Aid Highway or a County Road

County Highway Turnback- A CSAH or a County Road which has been released by the county and designated as an MSAS roadway. A designation request must be approved and a Commissioner's Order written. A County Highway Turnback may be either County Road (CR) Turnback or a County State Aid (CSAH) Turnback. (See Minnesota Statute 162.09 Subdivision 1). A County Highway Turnback designation has to stay with the County Highway turned back and is not transferable to any other roadways.

Basic Mileage- Total improved mileage of local streets, county roads and county road turnbacks. Frontage roads which are not designated trunk highway, trunk highway turnback or on the County State Aid Highway System shall be considered in the computation of the basic street mileage. A city is allowed to designate 20% of this mileage as MSAS. (See Screening Board Resolutions in the back of the most current booklet).

MILEAGE CONSIDERATIONS

County State Aid Highway Turnbacks

A CSAH Turnback **is not** included in a city's basic mileage, which means it **is not** included in the computation for a city's 20% allowable mileage. However, a city may draw Construction Needs and generate allocation on 100% of the length of the CSAH Turnback

County Road Turnbacks

A County Road Turnback **is** included in a city's basic mileage, so it **is** included in the computation for a city's 20% allowable mileage. A city may also draw Construction Needs and generate allocation on 100% of the length of the County Road Turnback.

Jurisdictional Exchanges

County Road for MSAS

Only the **extra** mileage a city receives in an exchange between a County Road and an MSAS route **will be** considered as a County Road Turnback.

If the mileage of a jurisdictional exchange is **even**, the County Road **will not be** considered as a County Road Turnback.

If a city receives **less** mileage in a jurisdictional exchange, the County Road **will not be** considered as a County Road Turnback.

CSAH for MSAS

Only the **extra** mileage a city receives in an exchange between a CSAH and an MSAS route **will be** considered as a CSAH Turnback.

If the mileage of a jurisdictional exchange is **even**, the CSAH **will not be** considered as a CSAH Turnback.

If a city receives **less** mileage in a jurisdictional exchange, the CSAH **will not be** considered as a CSAH Turnback

NOTE:

When a city receives **less** mileage in a CSAH exchange it will have less mileage to designate within its 20% mileage limitation and may have to revoke mileage the following year when it computes its allowable mileage.

Explanation: After this exchange is completed, a city will have more CSAH mileage and less MSAS mileage than before the exchange. The new CSAH mileage was included in the city's basic mileage when it was MSAS (before the exchange) but is not included when it is CSAH (after the exchange). So, after the jurisdictional exchange the city will have less basic mileage and 20% of that mileage will be a smaller number.

If a city has more mileage designated than the new, lower 20% allowable mileage, the city will be over designated and be required to revoke some mileage. **If a revocation is necessary, it will not have to be done until the following year after a city computes its new allowable mileage.**

MSAS designation on a County Road

County Roads can be designated as MSAS. If a County Road which is designated as MSAS is turned back to the city, it will not be considered as County Road Turnback.

MISCELLANEOUS

A CSAH which was previously designated as Trunk Highway turnback on the CSAH system and is turned back to the city will lose all status as a TH turnback and only be considered as CSAH Turnback.

A city that had previously been over 5,000 population, lost its eligibility for an MSAS system and regained it shall revoke all streets designated as CSAH at the time of eligibility loss and consider them for MSAS designation. These roads will not be eligible for consideration as CSAH turnback designation.

In a city that becomes eligible for MSAS designation for the first time all CSAH routes which serve only a municipal function and have both termini within or at the municipal boundary, should be revoked as CSAH and considered for MSAS designation. These roads will not be eligible for consideration as CSAH turnbacks.

STATUS OF MUNICIPAL TRAFFIC COUNTING

The current Municipal State Aid Traffic Counting resolution reads:

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 or four years at the discretion of the city.
2. The cities in the outstate area may have their traffic counted and maps prepared by State forces every four years, or may elect to continue the present procedure of taking their own counts and have state forces prepare the maps.
3. Any city may count traffic with their own forces every two years at their discretion and expense, unless the municipality has made arrangements with the Mn/DOT district to do the count.

In 1998, cities were given the option of counting on a 2 or 4 year cycle. The following traffic counting schedules are in effect:

Metro District

Two year traffic counting schedule -counted in 2003 and updated in the needs in 2004

Andover	East Bethel	Mounds View
Apple Valley	Eden Prairie	Oakdale
Blaine	Farmington	Plymouth
Bloomington	Forest Lake	Prior Lake
Brooklyn Center	Ham Lake	Ramsey
Brooklyn Park	Hastings	Rosemount
Burnsville	Hugo	St. Anthony
Champlin	Inver Grove Heights	St. Paul Park
Chanhassen	Lake Elmo	Savage
Chaska	Lakeville	Shakopee
Coon Rapids	Lino Lakes	Shoreview
Corcoran	Little Canada	Vadnais Heights
Cottage Grove	Maple Grove	Woodbury
Dayton	Mendota Heights	
Eagan	Minneapolis	
	Minnetonka	

Metro District

Four year traffic counting schedule - to be counted in 2005 and updated in the needs in 2006

Anoka	Maplewood	Roseville
Arden Hills	Mound	Shorewood
Columbia Heights	New Brighton	South Saint Paul
Crystal	New Hope	Spring Lake Park
Edina	North Branch	Stillwater
Falcon Heights	North St. Paul	St. Louis Park
Fridley	Oak Grove	St. Paul
Golden Valley	Orono	West St. Paul
Hopkins	Richfield	White Bear Lake
Mahtomedi	Robbinsdale	

Outstate

Two year traffic counting schedule - to be counted in 2003 and updated in the needs in 2004

Northfield	Sartell
St. Cloud	

Outstate

Two year traffic counting schedule - to be counted in 2004 and updated in the needs in 2005

Rochester

Outstate

Two year traffic counting schedule - to be counted in 2005 and updated in the needs in 2006

Brainerd

Outstate

Four year traffic counting schedule - to be counted in 2003 and updated in the needs in 2004

Bemidji	La Crescent	Thief River Falls
Cambridge	Lake City	Virginia
Chisholm	Litchfield	Waite Park
Elk River	North Mankato	Waseca
Fergus Falls	Owatonna	Winona
Hermantown	Red Wing	
Hibbing	St. Peter	
Hutchinson	Sauk Rapids	

Outstate

Four year traffic counting schedule - to be counted in 2004 and updated in the needs in 2005

Austin	International Falls	Otsego
Buffalo	Montevideo	
Detroit Lakes	Monticello	

Outstate

Four year traffic counting schedule - to be counted in 2005 and updated in the needs in 2006

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

Outstate

Four year traffic counting schedule - to be counted in 2006 and be updated in the needs in 2007

Alexandria	Stewartville	Worthington
Cloquet	Willmar	

Duluth counts 1/4 of the city each year.

**CURRENT RESOLUTIONS
OF THE
MUNICIPAL SCREENING BOARD**

June 2004

Wording in bold (except headings) are the most recent Screening Board revisions

BE IT RESOLVED:

ADMINISTRATION

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

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

Screening Board Chair, Vice Chair and Secretary- June 1987 (Revised June, 2002)

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

Appointment to the Needs Study Subcommittee - June 1987 (Revised June 1993)

That the Screening Board Chair shall annually appoint one city engineer, who has served on the Screening Board, to serve a three year term on the Needs Study Subcommittee. The appointment shall be made at the annual winter meeting of the City's Engineers Association. The appointed subcommittee person shall serve as chair of the subcommittee in the third year of the appointment.

Appointment to Unencumbered Construction Funds Subcommittee - Revised June 1979

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

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 Chair 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.

Screening Board Meeting Dates and Locations - June 1996

That the Screening Board Chair, with the assistance of the State Aid Engineer, determine the dates and locations for that year's Screening Board meetings.

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.

That an amount of **\$544,962** (not to exceed 1/2 of 1% of the **2003** MSAS Apportionment sum of **\$108,992,464**) shall be set aside from the **2004** Apportionment fund and be credited to the research account.

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.

That when a new municipality becomes eligible to participate in the MSAS allocation, the soil type to be used for Needs purposes shall be based upon the City Engineer's recommendation with the concurrence of the District State Engineer.

Improper Needs Report - Oct. 1961

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

New Cities Needs - Oct. 1983

That any new city having determined its eligible mileage, but does not have an approved State Aid Street System, will have its money Needs determined at the cost per mile of the lowest other city.

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

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

Construction Accomplishments - Oct. 1988 (Revised June 1993, October 2001, October 2003)

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

That in the event sidewalk or curb and gutter is constructed for the total length of the segment, those items shall be removed from the Needs for a period of 20 years.

All segments considered deficient for Needs purposes and receiving complete Needs shall receive street lighting Needs at the current unit cost per mile.

That if the construction of a Municipal State Aid Street is accomplished ~~with local funds~~, only the Construction Needs necessary to bring the roadway **segment** up to State Aid Standards will be permitted in subsequent Needs ~~for 20~~ **after 10** years from the date of the letting or encumbrance of force account funds. For the purposes of the Needs Study, these shall be called Widening Needs. ~~At the end of the 20 year period,~~ **Widening Needs shall continue until** reinstatement for complete Construction Needs shall be initiated by the Municipality.

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

That any bridge construction project shall cause the Needs of the affected bridge to be removed for a period of 35 years from the project letting date or date of force account agreement. At the end of the 35 year period, Needs for complete reconstruction of the bridge will be reinstated in the Needs Study at the initiative of the Municipal Engineer.

That the adjustments above will apply regardless of the source of funding for the road or bridge project. Needs may be granted as an exception to this resolution upon request by the Municipal Engineer and justified to the satisfaction of the State Aid Engineer (e.g., a deficiency due to changing standards, projected traffic, or other verifiable causes).

That in the event that an M.S.A.S. route earning "After the Fact" Needs is removed from the M.S.A.S. system, then, the "After the Fact" Needs shall be removed from the Needs Study, except if transferred to another state system. No adjustment will be required on Needs earned prior to the revocation.

Population Apportionment - October 1994, 1996

That beginning with calendar year 1996, the MSAS population apportionment shall be determined using the latest available federal census or population estimates of the State Demographer and/or the Metropolitan Council. However, no population shall be decreased below that of the latest available federal census, and no city dropped from the MSAS eligible list based on population estimates.

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 State Aid Engineer.

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

That if a Municipal State Aid Street is constructed with State Aid funds to a width less than the design width in the quantity tables for Needs purposes, the total Needs shall be taken off such constructed street other than Additional Surfacing Needs.

Additional surfacing and other future Needs shall be limited to the constructed width as reported in the Needs Study, unless exception is justified to the satisfaction of the State Aid Engineer.

Greater Than Minimum Width (Revised June 1993)

That if a Municipal State Aid Street is constructed to a width wider than required, Resurfacing Needs will be allowed on the constructed width.

Miscellaneous Limitations - Oct. 1961

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

MILEAGE - Feb. 1959 (Revised Oct. 1994. 1998)

That 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 mileage of local streets, county roads and county road turnbacks.

Nov. 1965 – (Revised 1969, October 1993, October 1994, June 1996, October 1998)

However, the maximum mileage for State Aid designation may be exceeded to designate trunk highway turnbacks after July 1, 1965 and county highway turnbacks after May 11, 1994 subject to State Aid Operations Rules.

Nov. 1965 (Revised 1972, Oct. 1993, 1995, 1998)

That 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. Frontage roads not designated Trunk Highway, Trunk Highway Turnback or County State Aid Highways shall be considered in the computation of the basic street mileage. The total mileage of local streets, county roads and county road turnbacks on corporate limits shall be included in the municipality's basic street mileage. Any State Aid Street that is on the boundary of two adjoining urban municipalities shall be considered as one-half mileage for each municipality.

That all mileage on the MSAS system shall accrue Needs in accordance with current rules and resolutions.

Oct. 1961 (Revised May 1980, Oct. 1982, Oct. 1983, June 1993, June 2003)

That all requests for revisions to the Municipal State Aid System must be received by the District State Aid Engineer by March first to be included in that years Needs Study. If a system revision has been requested, a City Council resolution approving the system revisions and the Needs Study reporting data must be received by May first, to be included in the current year's Needs Study. If no system revisions are requested, the District State Aid Engineer must receive the Normal Needs Updates by March 31st to be included in that years' Needs Study.

One Way Street Mileage - June 1983 (Revised Oct. 1984, Oct. 1993, June 1994, Oct. 1997)

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.

That all approved one-way streets be treated as one-half of the mileage and allow one-half complete Needs. When Trunk Highway or County Highway Turnback is used as part of a one-way pair, mileage for certification shall only be included as Trunk Highway or County Turnback mileage and not as approved one-way mileage.

NEEDS COSTS

That the Needs Study Subcommittee shall annually review the Unit Prices used in the Needs Study. The Subcommittee shall make its recommendation the Municipal Screening Board at its annual spring meeting.

Roadway Item Unit Prices (Reviewed Annually)			
Right of Way (Needs Only)			\$93,000 per Acre
Grading (Excavation)			\$3.80 per Cu. Yd.
Base:			
	Class 5 Gravel	Spec. #2211	\$7.30 per Ton
	Bituminous	Spec. #2350	\$31.00 per Ton
Surface:			
	Gravel	Spec. #2118	\$5.35 per Ton
	Bituminous	Spec. #2350	\$31.00 per Ton
Shoulders:			
	Gravel	Spec. #2221	\$13.40 per Ton
Miscellaneous:			
	Storm Sewer Construction		\$257,375 per Mile

	Storm Sewer Adjustment		\$82,700 per Mile
	Special Drainage (rural segments only)		\$37,400 per Mile
	Street Lighting		\$80,000 per Mile
	Curb & Gutter Construction		\$8.00 per Lineal Foot
	Sidewalk Construction		\$23.50 per Sq. Yd.
	Project Development		20%
Removal Items:			
	Curb & Gutter		\$2.60 per Lineal Foot
	Sidewalk		\$5.50 per Sq. Yd.
	Concrete Pavement		\$5.40 per Sq. Yd.
	Tree Removal		\$225.00 per Unit

Traffic Signal Needs Based On Projected Traffic (every segment)

Projected Traffic	Percentage	X	Unit Price =	Needs Per Mile
0 - 4,999	25%		\$124,000	\$31,000 per Mile
5,000 - 9,999	50%		\$124,000	\$62,000 per Mile
10,000 and Over	100%		\$124,000	\$124,000 per Mile

Bridge Width & Costs - (Reviewed 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:

Bridge Unit Costs	
Bridges 0 to 149 Feet long	\$70.00 per Sq. Ft.
Bridges 150 to 499 Feet long	\$70.00 per Sq. Ft.
Bridges 500 Feet and Over	\$70.00 per Sq. Ft.

Railroad Over Highway

One Track	\$9,300 per Linear Foot
Each Additional Track	\$7,750 per Linear Foot

"Non-existing" bridge costs - Revised October 1997

That the Construction 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 Construction Needs adjustment shall be made by annually adding the total amount of the structure cost, project development cost and construction engineering that is eligible for State Aid reimbursement for a 15-year period excluding all Federal or State grants. Project Development costs, at the current percentage, shall be included with all Non Existing Bridge Needs.

RAILROAD CROSSINGS

Railroad Crossing Costs - (Reviewed 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)	\$120,000 per Unit
Signals and Gates (Multiple Track – high speed)	\$160,000 per Unit
Signs Only & (low speed)	\$1,000 per Unit
Concrete Crossing Material Railroad Crossings (Per Track)	\$1,000 per Linear Foot
Pavement Marking	\$750 per Unit

Maintenance Needs Costs - June 1992 (Revised 1993)

That for the study of Needs on the Municipal State Aid Street System, the following costs shall be used in determining the Maintenance Apportionment Needs cost for existing segments only.

Maintenance Needs Costs	Cost For Under 1000 Vehicles Per Day	Cost For Over 1000 Vehicles Per Day
Traffic Lanes Segment length times number of Traffic lanes times cost per mile	\$1,500 per Mile	\$2,500 per Mile
Parking Lanes: Segment length times number of parking lanes times cost per mile	\$1,500 per Mile	\$1,500 per Mile
Median Strip: Segment length times cost per mile	\$500 per Mile	\$980 per Mile
Storm Sewer: Segment length times cost per mile	\$500 per Mile	\$500 per Mile
Traffic Signals:	\$500 per Unit	\$500 per Unit

Number of traffic signals times cost per signal		
Minimum allowance per mile is determined by segment length times cost per mile.	\$5,000 per Mile	\$5,000 per Mile

NEEDS ADJUSTMENTS

Bond Adjustment - Oct. 1961 (Revised 1976, 1979, 1995, **2003**)

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

That this adjustment, which covers the amortization (payment) period, and which annually reflects the net unamortized bonded debt (remaining principal payments due) shall be accomplished by adding said net unamortized (principal) amount to the computed Construction needs of the municipality.

That for the purpose of this adjustment, the net unamortized bonded debt (remaining principal) shall be the total unamortized bonded indebtedness (deducted from the amount of projects applied against the bond) less the unexpended bond amount (less the amount of projects not encumbered) as of December 31st of the preceding year. The charges for selling the bond issue shall be deducted from the amount that projects are applied against.

"Bond account money spent off ~~State Aid System~~ **the Municipal State Aid, CSAH, or Trunk Highway 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."

Effective January 1, 1996

The Construction Needs shall be annually reduced by 10% of the total bond issue amount. The computation of Needs shall be started in the year that bond principal payments are made to the city.

Unencumbered Construction Fund Balance Adjustment - Oct. 1961 (Revised October 1991, 1996, October, 1999, **2003**)

That for the determination of Apportionment Needs, ~~the amount of the~~ **a city with a positive unencumbered construction fund balance as of December 31st of the current year shall be have that amount** deducted from ~~the its~~ 25-year total Needs. ~~of each individual municipality. A municipality with a negative unencumbered construction fund balance as of December 31st of the current year shall have that amount added to its 25 year total Needs.~~

That funding Requests received before December 1st by the District State Aid Engineer for payment shall be considered as being encumbered and the construction balances shall be so adjusted.

Excess Unencumbered Construction Fund Balance Adjustment – Oct. 2002

That the December 31 construction fund balance will be compared to the annual construction allotment from January of the same year.

If the December 31 construction fund balance exceeds 3 times the January construction allotment and \$1,000,000, the first year adjustment to the Needs will be 1 times the December

31 construction fund balance. In each consecutive year the December 31 construction fund balance exceeds 3 times the January construction allotment and \$1,000,000, the adjustment to the Needs will be increased to 2, 3, 4, etc. times the December 31 construction fund balance until such time the Construction Needs are adjusted to zero.

If the December 31 construction fund balance drops below 3 times the January construction allotment and subsequently increases to over 3 times, the multipliers shall start over with one. This adjustment will be in addition to the unencumbered construction fund balance adjustment and takes effect for the 2004 apportionment.

Low Balance Incentive – Oct. 2003

That the amount of the Excess Unencumbered Construction Fund Balance Adjustment shall be redistributed to the Construction Needs of all municipalities whose December 31st construction fund balance is less than 1 times their January construction allotment of the same year. This redistribution will be based on a city's prorated share of its Unadjusted Construction Needs to the total Unadjusted Construction Needs of all participating cities times the total Excess Balance Adjustment.

Right of Way - Oct. 1965 (Revised June 1986, 2000)

That Right of Way Needs shall be included in the Total Needs based on the unit price per acre until such time that the right of way is acquired and the actual cost established. At that time a Construction 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 Construction Needs adjustment. This Directive to exclude all Federal or State grants. The State Aid Engineer shall compile right-of-way projects that are funded with State Aid funds.

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 Engineer.

Trunk Highway Turnback - Oct. 1967 (Revised June 1989)

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 Construction 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.

That the initial turnback adjustment when for less than 12 full months shall provide partial maintenance cost reimbursement by adding said initial adjustment to the Construction Needs which will produce approximately 1/12 of \$7,200 per mile in apportionment funds for each month or part of a month that the municipality had maintenance responsibility during the initial year.

That to provide an advance payment for the coming year's additional maintenance obligation, a Needs adjustment per mile shall be added to the annual Construction Needs. This Needs adjustment per mile shall produce sufficient apportionment funds so that at least \$7,200 in

apportionment shall be earned for each mile of trunk highway turnback on Municipal State Aid Street System.

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

TRAFFIC - 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 section of the State Aid Manual (section 700). This manual shall be prepared and kept current under the direction of the Screening Board regarding methods of counting traffic and computing average daily traffic. The manner and scope of reporting is detailed in the above mentioned manual.

Traffic Counting - Sept. 1973 (Revised June 1987, 1997, 1999)

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 or four years at the discretion of the city.
2. The cities in the outstate area may have their traffic counted and maps prepared by State forces every four years, or may elect to continue the present procedure of taking their own counts and have state forces prepare the maps.
3. Any city may count traffic with their own forces every two years at their discretion and expense, unless the municipality has made arrangements with the Mn/DOT district to do the count.