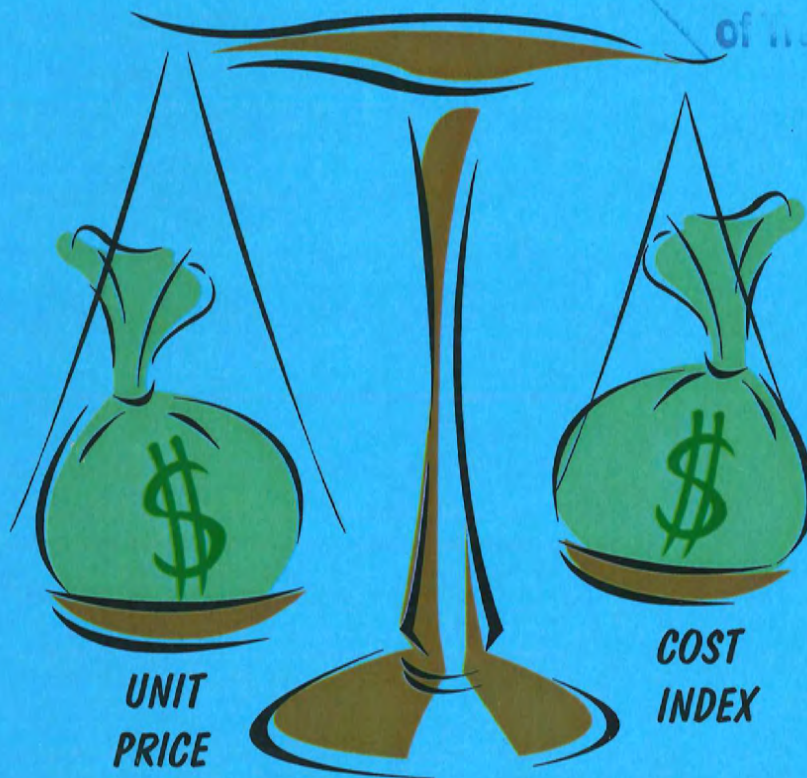




2003 MUNICIPAL SCREENING BOARD DATA

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JUNE, 2003

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| | Falcon Heights | | Thief River Falls | | Waite Park | | Buffalo |
| | Little Canada | | | | | | Litchfield |
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|---------------|------------------|---------------|-------------------|
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| Apple Valley | East Grand Forks | Montevideo | Saint Peter |
| Arden Hills | Elk River | Monticello | Sartell |
| Baxter | Falcon Heights | Morris | Sauk Rapids |
| Big Lake | Forest Lake | Mound | Spring Lake Park |
| Buffalo | Glencoe | Mounds View | Stewartville |
| Cambridge | Ham Lake | New Hope | Thief River Falls |
| Chisholm | Hermantown | North Mankato | Vadnais Heights |
| Corcoran | Hugo | Oak Grove | Virginia |
| Cottage Grove | La Crescent | Otsego | Waite Park |
| Crookston | Lake City | Saint Anthony | Waconia |
| Dayton | Lake Elmo | Saint Francis | |
| Detroit Lakes | Litchfield | Saint Michael | |
| | Little Canada | | |
| | Little Falls | | |
- 192 -- Julie Skallman - State Aid - MS 500**
- 193 -- Rick Kjonaas - State Aid - MS 500**
- 194 -- Mark Gieseke - State Aid - MS 500**
- * 195 -- Joan Peters - Finance - MS 215**
- 196 -- Norman Cordes - State Aid - MS 500**
- 197 -- Diane Gould - State Aid - MS 500**
- 198 -- Marshall Johnston - State Aid - MS 500**
- 199 -- Mark Channer - State Aid - MS 500**
- 200 -- Ken Anderson - Progressive Consulting - 6120 Earle Brown Dr. - Brooklyn Center, MN. 55430**
- * 201 -- Christine Scotillo, Ex. Sec. - Mn.Mun.Bd. - 658 Cedar St. #300 - St. Paul, MN. 55155-1603**
- * 202 -- Gary Carlson - League of Minnesota Cities - 145 University Ave.**
- 203 -- Paul Ogren - Director of Engineering Services in Mpls.**
- 204 -- Larry Veek - Mpls.**
- 205 -- Heidi Hamilton - Mpls.**
- 206 -- Jim Vanderhoof - 1000 City Hall Annex - City of Saint Paul**
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The 2003 MUNICIPAL SCREENING BOARD DATA booklet is also available for viewing and/or download on the State Aid web page. Log onto www.dot.state.mn.us/stateaid and follow the links.

**2003
MUNICIPAL
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JUNE, 2003

**2003
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DATA**



JUNE, 2003



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: April 28, 2003

To: Municipal Engineers
City Clerks

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

Subject: 2003 Municipal Screening Board Data booklet

Enclosed is a copy of the June 2003 Municipal Screening Board Data booklet.

The data included in this report will be used by the Municipal Board at its June 3 and 4, 2003 meeting to establish unit prices for the 2002 Needs Study that is used to compute the 2004 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 page 22.

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, a copy is also sent to the municipal clerk.

A limited number of copies of this report are available on request.

2003 MUNICIPAL SCREENING BOARD

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STATE OF MINNESOTA

HIGHWAY DISTRICTS AND URBAN MUNICIPALITIES (Population over 5000)

131 Cities

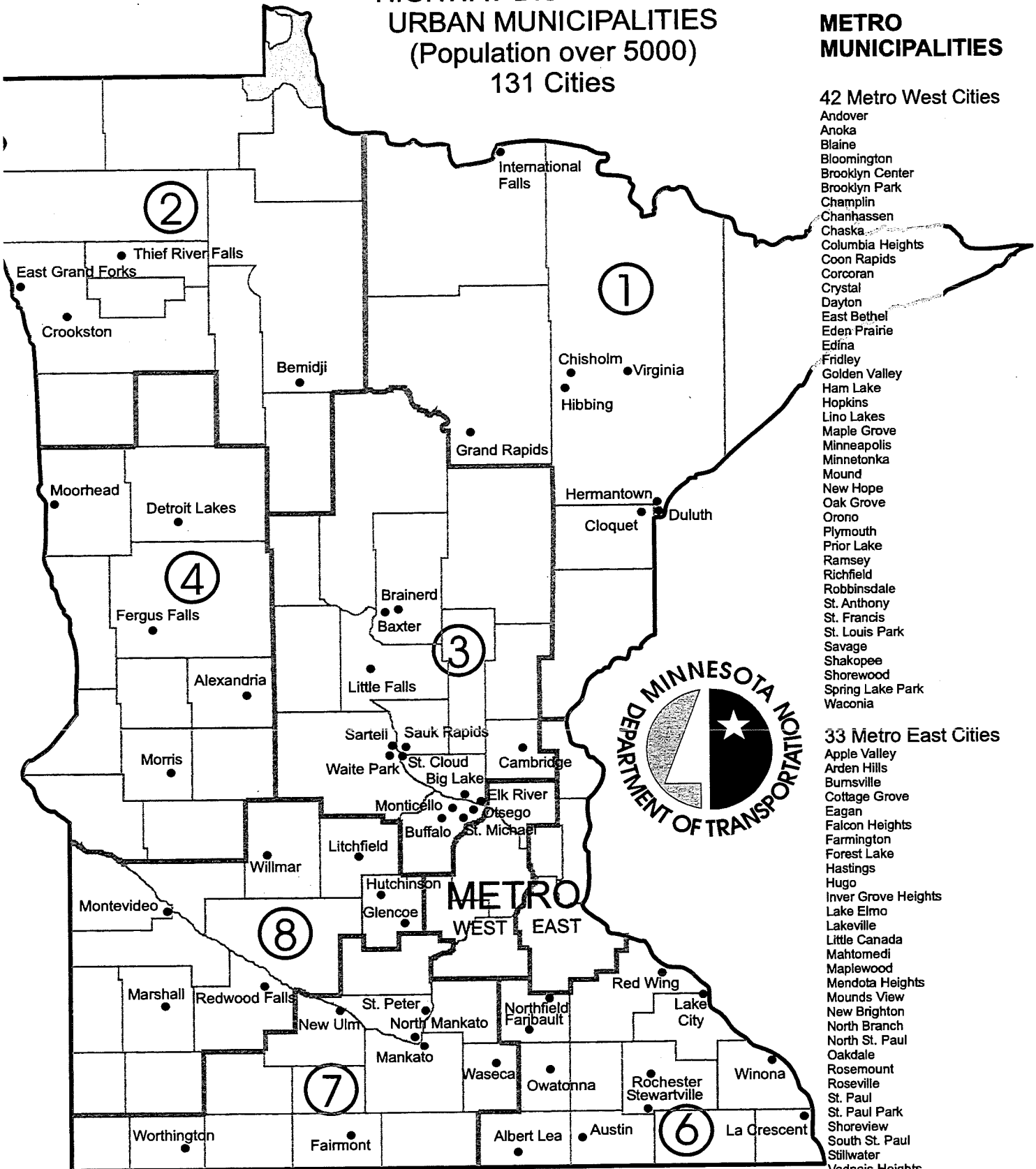
METRO MUNICIPALITIES

42 Metro West Cities

Andover
Anoka
Blaine
Bloomington
Brooklyn Center
Brooklyn Park
Champlin
Chanhassen
Chaska
Columbia Heights
Coon Rapids
Corcoran
Crystal
Dayton
East Bethel
Eden Prairie
Edina
Fridley
Golden Valley
Ham Lake
Hopkins
Lino Lakes
Maple Grove
Minneapolis
Minnetonka
Mound
New Hope
Oak Grove
Orono
Plymouth
Prior Lake
Ramsey
Richfield
Robbinsdale
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, 2003

2003 MUNICIPAL SCREENING BOARD

screening board stuffScreening Board June 2003.xls

15-Apr-03

OFFICERS			
Chair	Lee Gustafson	Minnetonka	(952) 939-8200
Vice Chair	Mike Metso	Duluth	(218) 723-3278
Secretary	Maria Hagen	St. Louis Park	(952) 924-2687

MEMBERS				
District	Served	Representative		
1	2	John Suihkonen	Hibbing	(218) 262-3486
2	1	Dave Kildahl	Crookston, T R Falls	(218) 281-6522
3	1	Bret Weiss	Monticello	(763) 541-4800
4	3	Dan Edwards	Fergus Falls	(218) 739-2251
Metro-West	3	Shelly Pederson	Bloomington	(952) 948-3866
6	3	Tim Murray	Faribault	(507) 334-2222
7	2	Tim Loose	St. Peter	(507) 625-4171
8	1	Dave Berryman	Montevideo	(320) 269-7695
Metro-East	2	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	Jeff Kuhn	Morris	(320) 762-8149
Metro-West	Craig Gray	Anoka	(763) 576-2781
6	Randy Peterson	Northfield	(507) 645-8832
7	Fred Salisbury	Waseca	(507) 835-9700
8	Glen Olson	Marshall	(507) 537-6774
Metro-East	Deb Bloom	Roseville	(651) 490-2200

2003 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>Tim Schoonhoven, Chair Alexandria (320) 762-8149 Expires in 2003</p> <p>Steve Koehler New Ulm (507) 359-8245 Expires in 2004</p> <p>Melvin Odens Willmar (320) 235-4202 Expires in 2005</p>	<p>Ken Ashfeld, Chair Maple Grove (612) 494-6000 Expires in 2003</p> <p>David Jessup Woodbury (651) 714-3593 Expires in 2004</p> <p>Tom Drake Red Wing (651) 385-3623 Expires in 2005</p>

2002 MUNICIPAL SCREENING BOARD
Fall Meeting Minutes
October 29 & 30, 2002

I. Opening by Municipal Screening Board Chair Tom Drake

The 2002 Fall Municipal Screening Board Meeting was called to order at 1:05 p.m. on October 29, 2002.

A. Chair Drake introduced:

Himself – Tom Drake, Red Wing - Chair, Municipal Screening Board
Lee Gustafson, Minnetonka—Vice Chair, Municipal Screening Board
Julie Skallman, Mn/DOT- Director, State Aid for Local Transportation Group
Marshall Johnston, Mn/DOT- Manager, Municipal State Aid Needs Unit
John Rodeberg, Hutchinson - Chair, Unencumbered Construction Funds
Subcommittee and Past Chair, Municipal Screening Board
David Salo, Hermantown – Chair, Needs Study Subcommittee
Ken Ashfeld, Maple Grove - Past Chair, Municipal Screening Board
David Jessup, Woodbury – Past Chair, Municipal Screening Board
David Sonnenberg – Past Chair/Member, Municipal Screening Board
Mike Metso, Duluth - Secretary, Municipal Screening Board

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

District 1	John Suihkonen	Hibbing
District 2	Gary Sanders	East Grand Forks
District 3	Brett Weiss	Monticello
District 4	Dan Edwards	Fergus Falls
Metro-West	Shelly Pederson	Bloomington
District 6	Tim Murray	Faribault
District 7	Tim Loose	St. Peter
District 8	Mel Odens	Willmar
Metro-East	Deb Bloom (Alternate)	Roseville
Duluth	Mike Metso	
Minneapolis	Paul Ogren	
Saint Paul	Paul Kurtz	

The Chair recognized the following Screening Board Alternates:

District 8	Dave Berryman	Montevideo
------------	---------------	------------

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

Rick Kjonaas	Assistant State Aid Engineer
Diane Gould	Manager, County State Aid Needs
Walter Leu	District 1 State Aid Engineer
Lou Tasa	District 2 State Aid Engineer
Kelvin Howieson	District 3 State Aid Engineer
Bob Kotaska	District 4 Assistant State Aid Engineer
Steve Kirsch	District 6 State Aid Engineer
Doug Haeder	District 7 State Aid Engineer
Bob Brown	Metro State Aid Engineer
Mark Channer	Asst. Manager, MSAS Needs Unit
Dan Erickson	Metro State Aid Division
Patti Loken	Metro State Aid Division

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

Jim Vanderhoof	Saint Paul
Dave Kreager	Duluth
Beth Stiffler	Minneapolis
Larry Veek	Minneapolis
Don Elwood	Minneapolis

II. 2002 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 2002 Screening Board Minutes were presented for approval (Pages 6-16).

Motion by Dan Edwards / seconded by Shelly Pederson that the minutes be approved.
Motion carried without opposition.

Marshall Johnston began his review of the 2002 Municipal State Aid Needs Report with a review of MSAS cities. He noted that there are currently 132 cities eligible for Municipal State Aid apportionment, but that this number could be adjusted up or down slightly upon final decisions relative to challenges of 2000 Census population levels by the cities of St. Joseph and Dayton. Marshall went on to note that two new cities were added in 2002 – St. Francis and LaCrescent – as their 2001 population estimates as established by the State Demographer exceed 5,000.

B. 2002 Screening Board and Subcommittee Members (Pages 2-5).

Marshall Johnston noted two revisions to the current Municipal Screening Board membership, as Paul Ogren has replaced David Sonnenberg as representative for the

City of Minneapolis and Tom Pagel (Grand Rapids City Engineer) has been named as the Alternate for District 1. He also noted that the terms of David Salo (Needs Study Subcommittee Chair) and John Rodeberg (Unencumbered Construction Funds Subcommittee Chair) will be expiring at the end of the year. The vacancy on the Needs Study Subcommittee will be filled by one of the Screening Board members whose term expires this year, and the vacancy on the Unencumbered Construction Funds Subcommittee will be filled by Tom Drake.

C. Review of Unencumbered Construction Funds Subcommittee Matters (Pages 17-30).

Marshall Johnston reviewed matters addressed by the Unencumbered Construction Funds Subcommittee (UCFS) at their September 6, 2002 meeting, noting the John Rodeberg, UCFS Chair, was available for any explanation of their recommendations.

- Private Road on MSA System – Arden Hills:
Marshall Johnston noted that Arden Hills has had a private road on their MSA system for six years, and despite repeated contacts with the City this situation had not been remedied. The recommendation of the UCFS was to support SALT's request to implement a more severe adjustment if Arden Hills does not take action following one final contact with the City regarding this matter.
- Incorrect Bridge Needs:
Marshall Johnston noted that with the implementation of SALT's new database system, four cities (Alexandria, Chaska, Minneapolis and St. Paul) were discovered to have non-qualifying TH or pedestrian bridges earning needs on their MSA systems. These four cities have generated a total of \$37,939,551 in non-qualifying bridge Needs over the last five years. The recommendation of the UCFS was to implement a one-time negative needs adjustment, in the total amount of \$37,939,551, to the cities' needs in conjunction with the January 2003 allocation. (Refer to Page 21 of the 2002 Municipal State Aid Needs Report for the individual amounts of the adjustment.) Paul Ogren questioned whether this recommended action was in line with past practice and/or proper procedure. Marshall Johnston further explained the proposed action, and John Rodeberg pointed out that the action wasn't a penalty, but simply an appropriate adjustment to earned needs. Chair Drake noted that past practice has been a one-time needs adjustment. David Sonnenberg questioned whether an option could be to reduce the cities' current balance rather than adjust their needs. Julie Skallman pointed out that a reduction could be made from the maintenance account, but not from the construction account. Chair Drake noted that either would be a one-time adjustment. Julie Skallman suggested that best option may be action as recommended, as any other action may require statutory review, and further suggested that Minneapolis consider the direction they would prefer to take.
- High Unencumbered Construction Fund Balances:
Marshall Johnston provided a brief historical overview of this issue, including a review of letters sent out by the UCFS to (a) those twelve cities with a construction fund balance of over three times their annual allotment requesting an explanation of the city's 5-year plan to reduce their balance, and (b) all cities noting the need for assistance in reducing the MSAS Construction Fund balance.

He went on to note that responses were received from 8 of 12 cities, and a compiled summary was included in the Needs Report (Page 27). The recommendation of the UCFS was to adopt a resolution that would allow for an incremental negative adjustment for each successive year a city's December 31st construction fund balance exceeds three times their January construction allotment or \$1,000,000 – whichever is greater (Page 30). John Rodeberg noted that many of the same cities had provided similar 5-year plans five years ago – which indicated a lack of attention and/or action by some cities. He also noted that all cities are facing tight budget times, and that there is a need to recognize those cities that have apparent funding needs vs. those cities that do not have apparent funding needs. He suggested that there was a need to have incentives to spend fund balances in order to avoid possible legislative inquiries due to a high overall fund balance. He noted that the UCFS was also looking for ways to redistribute funds to those cities in need, and recognized that the proposed resolution may require some language adjustment. Mel Odens noted three of the twelve cities were “first timers” and that the penalty proposed in the resolution appeared to be excessively punitive, and in response John Rodeberg acknowledged that there may be a need for a one-year “grace period”. The possibility and/or need for an appeal process was discussed, but it was noted that this may be difficult to administer, and a grace period may be a better option. Brett Weiss asked if there was a positive way to address this issue rather than the negative way proposed, but John Rodeberg suggested that this too could be difficult to administer. Chair Drake recognized the possibility of thinking “outside the box” in order to identify a creative solution – including different methods in which to advance funds, and noted that penalties may not be the best solution. David Sonnenberg suggested consideration be given toward redistributing forfeited funds to those cities with zero balances as an incentive to spending down funds. Secretary Metso noted concerns regarding the fair distribution of funds if multi-level criteria are used. Brett Weiss again suggested that there was need to look at both penalties and incentives, and John Rodeberg acknowledged the need for both positive and negative actions. Shelly Pederson questioned whether the implementation of a 5-year plan should be recognized in the process, but it was noted that it would be difficult to monitor on an ongoing progress. Vice-Chair Gustafson noted that there were three issues involved in the discussions – (1) penalties for excessive balances, (2) distribution of unused funds and (3) overall Construction Fund balance levels, and suggested that the immediate need was to deal with the first issue. He went on to note his support of the UCFS recommendation with some grace period. Mel Odens questioned the possibility of considering the opportunity to recover lost needs in subsequent years. David Salo suggested a positive adjustment for cities that advance funds – similar to that for cities that receive a bond account adjustment. Chair Drake noted that a City could both have a construction balance and receive an advance, so some additional consideration needed to be given this suggestion.

D. Review of Minutes and Recommendations of Needs Study Subcommittee (Pages 31-37).

Marshall Johnston reviewed the minutes and recommendations of the Needs Study Subcommittee (NSS), noting that David Salo, NSS Chair, was available for any explanation of their recommendations.

- Definition of Widening Needs:
Marshall Johnston noted that the definition of Widening Needs had not been interpreted consistently by District State Aid Engineers. The NSS discussed this issue, and was recommending that there be no change to the definition of Widening Needs at this time.
- Design Chart Revisions:
Marshall Johnston noted the NSS reviewed the effects of recent Design Chart revisions, and that the overall effect of these revisions is estimated to be a \$146 million increase in Needs.
- Traffic Signal Needs:
Marshall Johnston noted that the NSS had completed additional review of the issue of Traffic Signal Needs, as this item had been referred back to the NSS for more study following the Spring Screening Board meeting. As part of this review, it was determined that the needs generated by traffic signals were approximately two times the dollars spent on traffic signals over the last two years – suggesting that no increase was required. Consequently, the NSS was recommending that there be no change in determining Traffic Signal needs, and that there be no further study at this time.

E. Theoretical Population Apportionment (Pages 38-48).

Marshall Johnston reviewed the information provided on Page 38, noting that St. Joseph's disputed 2000 Census population of 4,681 had been upheld on appeal, and consequently St. Joseph would not be eligible for a MSAS allocation. As a result of this, St. Joseph's pending 2002 allocation of \$147,745 (which was computed and set aside until the dispute was resolved) will be redistributed. He went to note that Dayton's disputed 2000 Census population was still pending, and requested that the Screening Board support the Administration's request to hold this allocation until final resolution of this dispute is achieved. He again noted that two new cities – LaCrescent and St. Francis – were eligible for MSAS allocations based on their 2001 population estimates, and that the final amount of the allocation would be based on the greater of their 2000 Census population or their 2001 estimated population. Finally, he noted that the population apportionment for 2003 is estimated at \$17.45 per person.

F. Effects of 2002 Needs Study Update (Pages 49-51).

Marshall Johnston reviewed the effects of the 2002 Needs Study update, noting that the update involved the following five phases:

- Accomplishments and System Revisions.

- 2002 Traffic Count Updates.
- 2002 Roadway Unit Cost Revisions.
- 2002 Structure & Railroad Cost Revisions.
- 2002 Design Table Revisions.

G. Mileage, Needs and Apportionment (Pages 52-54).

Marshall Johnston reviewed this section of the Needs Report, noting that the needs apportionment for 2003 is estimated at \$21.89 per \$1,000 of needs.

H. 2002 Itemized Tabulation of Needs (Pages 55-56 & Pocket).

Marshall Johnston provided a brief overview of the Tabulation of Needs, noting that Crookston had the highest needs cost per mile (\$1,590,639), and Oak Grove had the lowest needs cost per mile (\$370,490). He also noted that the new cities' needs allocation would be based on the lowest cost per mile (Oak Grove) if no MSA system is submitted.

I. Comparison of Needs (Page 57).

Marshall Johnston reviewed the comparison of needs between 2001 and 2002, noting that Base need increased by 31% (due to previously discussed design chart revisions) and Bridge needs decreased by 11% (due to previously discussed bridge needs corrections for four cities).

J. Tentative 2003 Construction Needs Apportionment (Pages 58-61).

Marshall Johnston reviewed this section of the Needs Report, highlighting the information on Page 58.

K. Adjustments to the 2003 Construction Needs (Pages 65-77).

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

- Unencumbered Construction Fund Balance Adjustment – noting that 22 cities have a balance of greater than three times their 2002 construction allotment as of 9-01-2002.
- Bond Account Adjustment.
- Non-Existing Bridge Adjustment. – noting that this may include an adjustment for Maple Grove if they submit the correct documentation on time.
- ROW Adjustment – noting that this is an after-the-fact adjustment, and represents the largest needs adjustment at \$76.9 million.
- Individual Adjustments – including:
 - Arden Hills (private road).
 - Robbinsdale (combination route).
- TH Turnback Maintenance (24.3 miles eligible).

L. Construction Needs Recommendations to the Commissioner (Pages 78-80).

Marshall Johnston reviewed this section of the Needs Report, noting that Page 78 contained a copy of the recommendation letter to be signed and sent to the Commissioner of Transportation, and highlighting that the total 2002 adjusted construction needs were \$2.65 billion.

M. Theoretical 2003 Total Apportionment (Pages 81-83).

Marshall Johnston reviewed this section of the Needs Report, noting that the tentative total apportionment is \$116.4 million.

N. Comparison of 2002 and 2003 Estimated Apportionment (Pages 84-86).

Marshall Johnston reviewed this section of the Needs Report.

O. Tentative 2003 Apportionment Rankings (Pages 87-90).

Marshall Johnston reviewed this section of the Needs Report, noting 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 (Oak Grove, Corcoran and East Bethel).

P. Certified MSAS Systems (Pages 93-94).

Marshall Johnston reviewed this section of the Needs Report, noting that four cities had certified their MSAS systems as complete.

Q. General Fund Advances (Pages 95-97).

Marshall Johnston reviewed the overall status of general fund advances, noting that the balance available for advances was \$62.8 million as of 10-02-2002. Julie Skallman noted that a request to advance general State Aid funds for a federally funded project had been received from a county in District 7 and was going to be reviewed with the District State Aid Engineers and Mn/DOT's TPIC, and that she was interested in receiving feedback from the Municipal Screening Board. Chair Drake and David Salo both expressed concerns regarding advanced funding for a project beyond the 3-year State Transportation Improvement Plan (STIP). Further discussion indicated that consideration should be given to limiting advances for projects on the 3-year STIP, and also that perhaps there should be a capped statewide level for advances (i.e., \$10 million). Brett Weiss supported the requirement for STIP projects only, and John Rodeberg suggested an initial limit of 10%-20% of the available general fund balance. Shelly Pederson suggested a cap should be considered for first year applications, and David Sonnenberg recommended that consideration be given to using the entire available balance. David Jessup noted SALT faced a different level

of opportunity three years ago, and suggested a subcommittee be established for further review. John Suihkonen suggested incorporating the past history of advances for tracking purposes and policy input. Ken Ashfeld questioned why general fund advances do not generate a positive needs adjustment as bonds do, and recommended that it be considered. Dave Kreager noted that the one-year payback option for larger cities limited the benefits associated with an advance, and questioned whether consideration should be given to a longer payback period. Lee Gustafson questioned the opportunity to increase limits as included in the Guidelines.

R. Past History of the Administrative Account (Page 98).

Marshall Johnston briefly reviewed the Administrative Account history, noting that 1½% of the total funds available is set aside for administrative purposes.

S. Research Account Motion (Page 99).

Marshall 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.

T. County Highway Turnback Policy (Pages 100-101).

Marshall Johnston briefly reviewed this section of the Needs Report.

U. Screening Board Resolutions (Pages 102-113).

Marshall Johnston noted that a number of miscellaneous revisions clarifying and updating current Screening Board resolutions had been proposed at the Spring Screening Board meeting, but no action had been taken. Consequently, he requested that the Screening Board consider acting on these revisions by resolution or motion.

III. Chair Drake called for any other subjects the representatives or audience would like presented.

David Jessup provided an update on the Transportation Primer currently under development by the City Engineers Association of Minnesota and the Minnesota Public Works Association. He noted that an initial draft had been developed and reviewed, that additional funding (\$10,000) to complete the development and publication of the Primer had been requested from CEAM and MPWA, and that it expected that a discussion draft would be available by the MPWA Fall meeting. Chair Drake confirmed that the CEAM Executive Committee had committed an additional \$5,000 for Primer completion.

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

Motion by Brett Weiss / seconded by John Suihkonen 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 Tom Drake at 8:30 a.m. on October 30, 2002.

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

I. Formal Actions by the 2002 Municipal Screening Board

1. Needs and Apportionment Data (Pages 38-90).

Motion by Brett Weiss / seconded by Dan Edwards to approve the Needs and Apportionment Data as presented. Motion carried without opposition.

The original of the letter to the Commissioner on page 78 was subsequently signed by all Screening Board members.

2. Research Account (Page 99).

Motion by Deb Bloom / seconded by John Suihkonen to approve the following resolution:

That an amount of \$582,170 (not to exceed ½ of 1% of the 2002 MSAS apportionment sum of \$116,434,082) shall be set aside from the 2003 Apportionment fund and be credited to the Research Account.

Motion carried without opposition.

3. Private Road on MSA System (Pages 18-19).

Motion by Dan Edwards / seconded by Shelly Pederson to support SALT's request to implement a more severe adjustment if Arden Hills does not remove the private road and resulting stub roadway segment from its MSA system. Motion carried without opposition.

4. Bridge Adjustment (Pages 18, 20-21).

David Sonnenberg and Paul Ogren both expressed their support for UCFS recommendations regarding these adjustments. Mel Odens asked for additional clarification of the issue, and Mark Channer provided same.

Motion by John Suihkonen / seconded by Mel Odens to approve the UCFS recommendation for a one-time negative adjustment, in a total amount of

\$37,938,551, to the 2003 needs allocation for each of the four cities which earned incorrect bridge needs on ineligible TH or pedestrian bridges. Motion carried without opposition.

5. Excess Balance Adjustment (Pages 18, 20-21).

Discussion continued relative to proposed action regarding this issue, with David Sonnenberg questioning when the new rules would be implemented – noting that it would be a hardship to implement them this year, and suggesting they should take effect at the end of 2003. Brett Weiss stated that the Board should consider providing positive incentives – including increasing advance levels to \$1,000,000, a longer payback term and a positive needs adjustment. Chair Drake suggested incentive issues should be referred to the UCFS. Mel Odens recommended a one-year warning and a negative needs adjustment of one times the construction fund balance as a first step.

Motion by Dan Edwards / seconded by John Suihkonen to approve the following resolution:

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 reduced 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.

Motion carried without opposition.

There was additional discussion regarding advancing State Aid general funds for Federally funded projects. Brett Weiss supported action on this and the other three positive needs adjustments previously discussed (see #5 above). Shelly Pederson suggested allowing for Federal project advances at this time and reviewing at the Spring Screening Board meeting.

Motion by John Suihkonen / seconded by Shelly Pederson to support allowing SALT to advance funds out of the general fund account balance for approved federal STIP projects. Motion passed without opposition.

Discussion continued regarding current advance limits and payback periods.

Motion by Brett Weiss / seconded by Mel Odens to increase the advance limit for small cities to \$1,000,000, and to increase the payback period for all cities to a maximum of 3 years. Motion carried without opposition.

Discussion continued regarding positive incentives for advancing construction funds, and Tim Murray recommended consideration of a positive needs adjustment if a city's unencumbered construction fund balance goes below zero.

Motion by Brett Weiss / seconded by Tim Murray that an appropriate needs adjustment (positive or negative) be applied based on the year-end construction fund balance. Motion passed without opposition.

The Unencumbered Construction Funds Subcommittee was directed to review possible incentive options and projections relative to future unencumbered construction fund balance penalties, allotment re-distributions and other related concerns, and to report back to the Screening Board on appropriate Needs adjustments. These adjustments could include incentives for a zero balance, low balance, and/or advancing funds.

6. Definition of Widening Needs (Pages 31-32).

Motion by Shelly Pederson / seconded by Deb Bloom to support the recommendation of the Needs Study Subcommittee that there be no change to the wording or definition of Widening Needs at this time. Motion carried without opposition.

7. Traffic Signal Needs (Pages 31, 33-37).

Motion by Deb Bloom / seconded by John Suihkonen to support the recommendation of the Needs Study Subcommittee that there be no change in determining Traffic Signal Needs and that no further study is necessary at this time. Motion carried without opposition.

8. Revised Resolutions (Pages 102-113).

Motion by Dan Edwards / seconded by John Suihkonen to approve the proposed clarifications and updates to existing Screening Board resolutions. Motion carried without opposition.

9. Resolution of Support for Population Adjustments

Motion by Tim Murray / seconded by Gary Sanders to support SALT's recommendation that the 2002 and future MSA allotments for Dayton remain pending until the current dispute regarding 2000 Census population is resolved. Motion carried without opposition.

10. Resolution Recognizing David Sonnenberg

Motion by Paul Ogren / seconded by Dan Edwards to recognize David Sonnenberg for his years of professional service to the Municipal Screening Board – both as a voting member and in various leadership positions. Motion carried without opposition.

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

Julie Skallman had nothing to report at this time.

III. Chair Drake thanked David Salo, Chair of the Needs Study Subcommittee, and John Rodeberg, Chair of the Unencumbered Construction Funds Subcommittee.

IV. Chair Drake thanked the past Chairs for their time and appearance at the meeting – John Rodeberg, Ken Ashfeld and David Jessup.

V. Chair Drake noted that the date and location of the 2003 Spring Screening Board meeting has not yet been determined. It was also noted that the 2003 Fall Screening Board meeting was scheduled for the third week in October.

VI. Chair Drake requested a motion for adjournment.

Motion by Shelly Pederson / seconded by Mel Odens to adjourn. Motion carried without opposition.

Respectfully submitted,



Michael J. Metso, P.E.
MSA Screening Board Secretary
City Engineer – Duluth

Needs Study Subcommittee Minutes

April 10, 2003

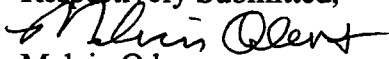
The Needs Study Subcommittee (NSS) held a meeting on April 8, 2003 at the City Office Building in Willmar. Members present were Chairman Tim Schoonhoven – Alexandria; Steve Koehler – New Ulm; Melvin Odens – Willmar; Marshall Johnston – State Aid; and Julie Skallman – State Aid Engineer. The purpose of the meeting was to discuss the Cost Index method of adjusting Unit Prices, make Unit Price recommendations to the Screening Board, and review submittal dates for Needs reporting.

The Cost Index method of setting unit prices is done in the odd years and the Unit Price Study is done in the even years. In the past, nine items were used to determine a composite index which would be applied to make unit price adjustments. The Composite Cost Index calculation for this year averaged 124.24%. This adjustment, when compared historically, is too large of an increase. Marshall brought three options to the table for consideration: annual percent increase, flat percent increase, or no increase. After discussing at length the impacts, Chairman Schoonhoven suggested the Engineering News Record (ENR) Construction Cost Index (CCI) option be reviewed against these options as well. The CCI was 3.22% for the last year. The CCI is a recognized method of making price adjustments, and is consistent with past Cost Index price adjustments. There was a motion by Koehler seconded by Odens to use the CCI method of unit price adjustment for this year. This years Unit Price recommendations are based on the 3.22% ENR Construction Cost Index and rounded unless there was a recommendation from Mn/DOT on the cost.

Marshall brought up timing issues with the submittal dates on needs reporting and system revisions. Currently the normal needs updates are due by March 30th of each year, and the system revisions are not due until May 1st of each year. The confusion exists because if a city is going to have a system revision, they don't have to have it submitted until May 1st, however DSAE has their needs reporting information, and now has to send them back to the city for revision. The committee, with a suggested process offered by Marshall, looked at ways of streamlining this process. The suggested revisions and new dates used by the MSAS Needs Unit would be as follows: January 15th – Certification of Mileage due; March 1st – Request for system revision due; March 30th – Needs Update due unless City has system revision; May 1st – System revision resolution, and Needs Update due. There was a motion by Schoonhoven, seconded by Koehler to revise the submittal dates as stated. This will require a Resolution revision. Marshall will present the suggested wording at the District meetings.

In other business, before the next CCI study is conducted, the committee directed State Aid staff to review the ENR Construction Cost Index method of making price adjustments to see if there is a regional ENR CCI as well as national CCI. It was agreed that this is more of an industry standard, and is pretty consistent annually. There being no other information brought before the committee, the meeting adjourned at 12:30 p.m.

Respectively Submitted,



Melvin Odens

Willmar

2003 UNIT PRICE RECOMMENDATIONS USING ENR CONSTRUCTION COST INDEX				
Needs Item		2002 Need Prices	Subcommittee Suggested Prices for 2003	Screening Board Recommended Prices For 2003
Grading (Excavation)	Cu. Yd.	\$3.67	\$3.80 *	
Aggregate Shoulders #2221	Ton	13.00	13.40 *	
Curb and Gutter Removal	Lin.Ft.	2.52	2.60 *	
Sidewalk Removal	Sq. Yd.	5.35	5.50 *	
Concrete Pavement Removal	Sq. Yd.	5.25	5.40 *	
Tree Removal	Unit	220.00	225.00 *	
Class 5 Base #2211	Ton	7.05	7.30 *	
Bituminous Base #2350	Ton	30.00	31.00 *	
Gravel Surface #2118	Ton	5.23	5.35	
Bituminous Surface #2350	Ton	30.00	31.00 *	
Curb and Gutter Construction	Lin.Ft.	7.70	8.00 *	
Sidewalk Construction	Sq. Yd.	22.50	23.50 *	
Storm Sewer Adjustment	Mile	81,600	82,700	
Storm Sewer	Mile	254,200	257,375	
Special Drainage - Rural	Mile	37,400	37,400	
Street Lighting	Mile	78,000	80,000 *	
Traffic Signals	Per Sig	120,000	124,000 *	
Signal Needs Based On Projected Traffic				
Projected Traffic	Percentage	X Unit Price = Needs Per Mile		
0 - 4,999	.25	\$120,000 = \$30,000	\$31,000 *	
5,000 - 9,999	.50	120,000 = 60,000	62,000 *	
10,000 & Over	1.00	120,000 = 120,000	124,000 *	
Right of Way (Needs Only)	Acre	90,000	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	120,000	
Signals & Gate (Multiple				
Track - High & Low Speed)	Unit	160,000	160,000	
Concrete Xing Material(Per Track Lin.Ft.		1,000	1,000	
Bridges				
0 to 149 Ft.	Sq. Ft.	68.00	70.00 *	
150 to 499 Ft.	Sq. Ft.	68.00	70.00 *	
500 Ft. and over	Sq. Ft.	68.00	70.00 *	
Railroad Bridges				
over Highways				
Number of Tracks - 1	Lin.Ft.	9,000	9,300 *	
Additional Track (each)	Lin.Ft.	7,500	7,750 *	

* 3.22% Construction Cost Index
from the Engineering News Record

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 2002 was \$22,138,974 or 0.83% 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 \$8660 in maintenance needs per mile.

3.22% Construction Cost Index from the Engineering New Record applied to all maintenance needs costs

EXISTING FACILITIES ONLY

	2002 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	\$1,450	\$2,400	\$1,500	\$2,500		
Parking Lane Per Mile	1,450	1,450	1,500	1,500		
Median Strip Per Mile	480	950	500	980		
Storm Sewer Per Mile	480	480	500	500		
Per Traffic Signal	480	480	500	500		
Normal M.S.A.S. Streets Minimum Allowance Per Mile	4,800	4,800	5,000	5,000		

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

(Existing surface width minus (the # of traffic lanes x 12)) / 8 = # 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)

15-Apr-03

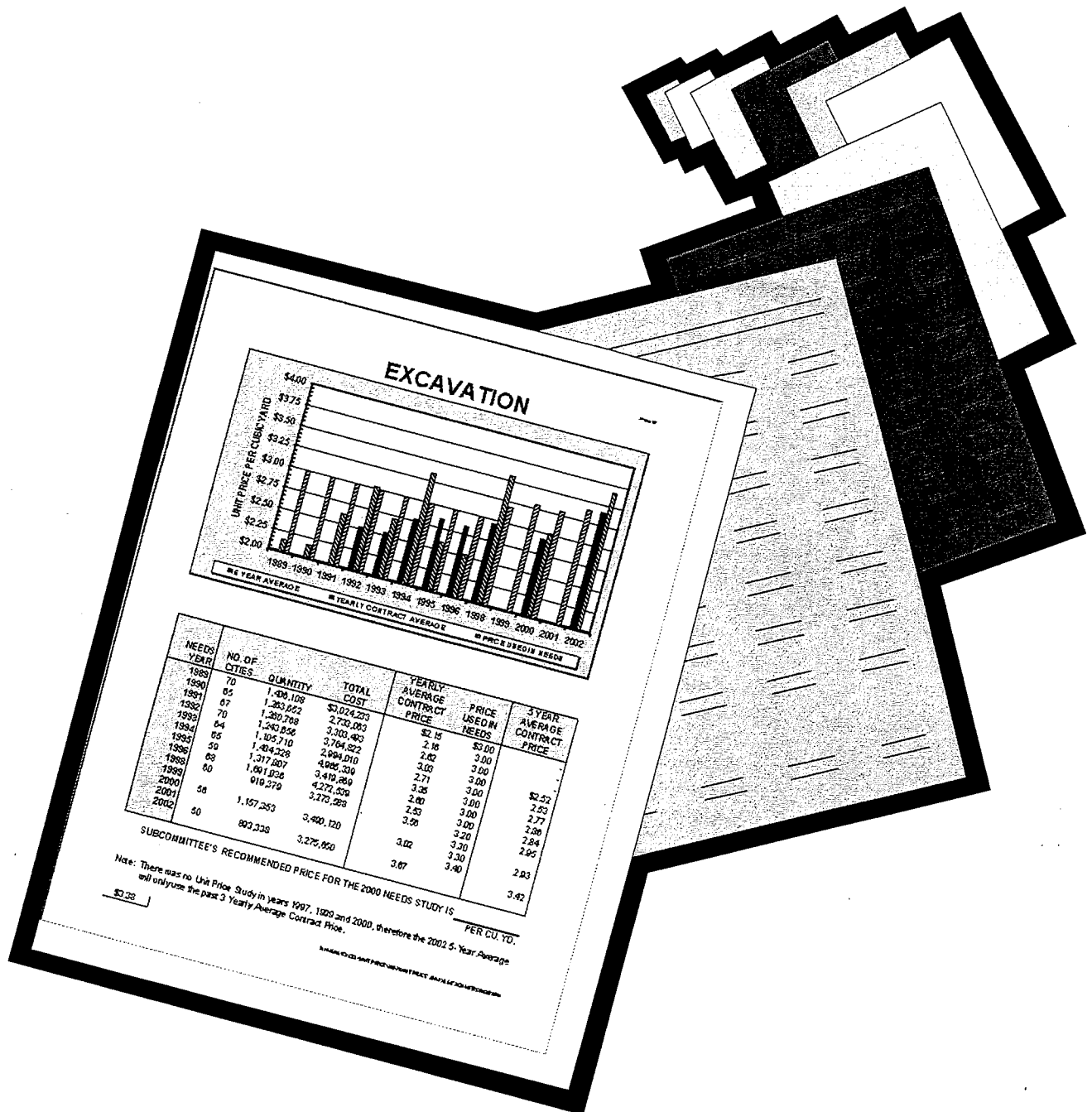
Year	Traffic Lane Per Mile		Parking Lane Per Mile		Median Strip Per Mile		Storm Sewer Per Mile		Per Traffic Signal		Minimum Maintenance Allowance Per Mile	
	Under 1000 ADT	Over 1000 ADT	Under 1000 ADT	Over 1000 ADT	Under 1000 ADT	Over 1000 ADT	Under 1000 ADT	Over 1000 ADT	Under 1000 ADT	Over 1000 ADT	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												

THESE MAINTENANCE COSTS ARE USED IN COMPUTING NEEDS .

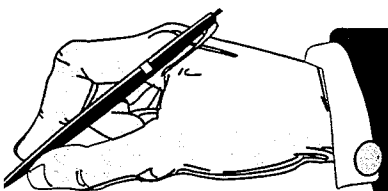
ALL MAINTENANCE COSTS FOR COMMON BOUNDARY DESIGNATIONS AND APPROVED ONE WAY STREETS ARE COMPUTED USING THE LENGTH REPORTED IN THE NEEDS STUDY.

n:\msas\excel\2003\JUNE 2003 book\Maintenance Cost History.xls

UNIT PRICES



AND GRAPHS



NOTES and COMMENTS

COST INDEX HISTORY AND INSTRUCTIONS

Needs Study Subcommittee minutes April 19, 1996:

The committee also discussed methods of how the unit price update could be determined in the future to save a great deal of time and effort for the State Aid Office. As per the unit price review charts in this year's booklet the average change per unit per year on most contract items is small. It appears that unit prices for the needs study could be determined for most items every other year without going to all the work of tabulating each item from each city separately. It was suggested that when Ken Straus holds his annual visit with cities in each MnDOT District Office prior to the Screening Board Meeting that this subject be discussed.

Screening Board minutes from June 4 & 5, 1996

June 4:

Marshall Johnston and Chair Sonnenberg discussed the Unit Price calculations and recommendations. The consensus of the board was that unit prices could be adjusted every other year. Discussion occurred on Bridge and Bituminous Unit Prices regarding the potential volatility of the cost, and the need to have the ability to adjust prices if necessary. It was agreed that some system to adjust costs, if necessary, should be included in any change of policy.

June 5:

Motion to adjust Unit Prices every two years, with the ability to adjust significant unit price changes on a yearly basis.

Motion by Curt Kreklau, seconded by Dave Halter to approve. Motion passed unanimously.

Note:

In 1997, 1996 Unit Prices were used. I cannot find any SB or subcommittee action on this, but that year we did the Design Chart revisions and the Life Cycle Study instead of the Unit Price Study.

Needs Study Subcommittee minutes April 12, 1999

Part 1- Apply a MSA Construction Cost Index to the 1998 Prices.

In an effort to simplify the method of calculating the unit prices that are now calculated individually, the NSS is recommending the use of a Construction Cost Index, put together by the Needs Unit. This is referred to as the "Municipal State Aid Annual Construction Cost Index" as shown on page 22 of the Municipal Screening Board Data booklet. The annual construction cost study was used in this calculation in the proposed unit prices, found on page 16 and the Annual Maintenance needs cost found on page 17, with the exception of the items modified under Part 2 of this memorandum.

Part 2 – Setting of Unit Prices other than with the proposed "Municipal State Aid Annual Construction Cost Index"

The following items are recommended to be set by either sections within Mn/DOT or as modified by the NSS:

Storm Sewer and Storm Sewer Adjustment....
Special Drainage- Rural....
Bridges....
Right of Way....
Engineering Overhead....
Signal Lights....
Railroad Grade Crossings....

SB minutes June 3, 1999

- A. Unit Price Recommendation
Mark Burch moved to adopt the unit price recommendations contained in the June Municipal Screening Board data report.
Motion seconded by Mark Winson. Motion carried.

From June, 1999 booklet

MSAS CONSTRUCTION COST INDEX

The Screening Board made a motion that the unit prices for 1999 be determined by applying a construction cost index to the 1998 prices. The needs unit, after reviewing what items Mn/Dot used in calculating a cost index, decided that a MSA cost index would better determine the MSA costs.

MN/Dot Cost Index was not used because the scope of the projects are much different than MSA projects. Mn/Dot computes their cost index on 6 items. Some items are not used in computing the MSA needs.

An annual Municipal State Aid Construction Cost Index was computed to provide a fixed based index of price trends for construction costs on the MSAS system. It was done by relating the average bid costs for each year to the 1988 bid costs with a basis as 100. Nine indicator items used in the needs were used to compute a weighted average based on the relative dollar amounts from the base year of 1988 for years 1989 through 1998. The annual Cost Index for each item was computed by dividing the annual contract cost by the contract cost of the base year (1988) times one hundred.

The Total Weight is the base years total weight of all nine indicator items. For this basis, it is always one hundred.

The Relative Weight of each item is the 1988 dollar amount awarded for that item divided by the total 1988 dollar amount of the nine items.

A composite cost index was computed based on bid costs for nine items for the years 1988 through 1998 used in the needs unit price study. The composite index measures the change of all items combined for each year from 1988 relative to an index of 100. The annual Composite Index is computed by adding the annual cost index of each item times the quotient of the Relative Weight divided by the Total Weight.

And

The unit price study was done annually until 1997 when no study was done. This resulted without making a adjustments to the unit prices for the 1997 needs study. 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 and the past 10 unit price studies. The Screening Board will review and act upon the options provided and Needs Study Subcommittee's recommendations. In the fall, the Needs Unit will adjust the prices as approved by the Screening Board in determining the 1999 Needs. These prices will be applied against the quantity tables located in the State Aid Manual Figs. C & D 5-892.820 to compute the 2000 construction (money) needs apportionment.

MSAS CONSTRUCTION COST INDEX WEIGHTED AVERAGE FROM BASE YEAR CURRENT METHOD

At the Spring, 1996 Municipal Screening Board meeting, the following motion was passed unanimously:

Motion to adjust Unit Prices every two years, with the ability to adjust significant unit prices changes on a yearly basis.

The Mn/Dot Cost Index was not used because the scope of Mn/DOT projects is much different than MSA projects. Mn/Dot computes their cost index on 6 items. Some items are not used in computing the MSA needs. It was decided that a MSAS Cost Index would better estimate MSAS costs.

Nine items were chosen from the Unit Price study for the MSAS Cost Index. They were chosen because they make a good cross section of the items used in the Unit Price Study.

The year 1990 was used as the base year with a value of 100. Then, the average contract price for a year is divided by the average contract price for the base year (1990) and the result is multiplied by 100. This gives the annual Cost Index for each item.

The Relative Weight of each item is the percentage of the 1990 construction cost of each individual item divided by the total 1990 construction cost of all nine items.

The relative weight times the Cost Index of each individual item are added together to get the MSAS Composite Cost Index

The annual Composite Cost Index are then added together and divided by the number of years to get the average Composite Cost Index. The average for this year is **124.24**.

According to current Screening Board motions, this number should be used as a guideline for the Needs Study Subcommittee and the Screening Board in setting Unit Prices for this year.

MUNICIPAL STATE AID

ANNUAL CONSTRUCTION COST INDEX (CI)

WEIGHTED AVERAGE FROM BASE YEAR
CURRENT METHOD

Base Year of 1990 Unit Price Study = 100

The 1990 Unit Price Study is based on 1989 bid prices

Cost Index - relating the average bid costs for each year to the 1990 UP Study with a basis as 10

Includes Municipal State Aid expenditures for on system projects from past unit price studies

Based on quantities and prices for projects awarded each year

YEAR	CI Grading (Excavation)	CI C & G Removal	CI Sidewalk Removal	CI Conc. Pvmt. Removal	CI Gravel Base
1990	100.00	100.00	100.00	100.00	100.00
1991	121.30	122.86	109.38	99.74	117.83
1992	140.28	112.14	133.59	105.97	105.04
1993	125.46	110.00	124.74	105.19	118.80
1994	155.09	134.29	113.28	109.87	115.12
1995	120.37	131.43	139.58	108.05	120.74
1996	117.13	146.43	109.11	110.91	121.90
1998	164.81	140.00	129.43	121.82	128.49
2000	139.81	155.00	132.29	150.91	128.10
2002	169.91	180.00	115.89	114.03	142.44
AVERAGE	135.42	133.21	120.73	112.65	119.84
1990 Cost	\$2,733,063	\$301,389	\$192,021	\$339,571	\$3,696,421
Relative wt. (%)	13.61	1.50	0.96	1.69	18.41

YEAR	CI #2331 Bit	CI #2341 Bit	CI C&G Const.	CI Sdwk. Const.	CI Composite Index
1990	100.00	100.00	100.00	100.00	100.00
1991	112.99	105.36	107.76	107.67	112.67
1992	122.52	113.30	108.37	113.34	117.31
1993	111.63	112.69	112.24	113.88	115.24
1994	114.12	107.10	112.45	128.45	120.08
1995	112.71	109.45	127.55	126.99	118.60
1996	120.14	111.28	127.35	128.45	120.73
1998	129.44	115.60	151.43	159.20	137.91
2000	146.68	129.46	152.86	166.03	142.55
2002	163.07	138.67	157.55	190.11	157.28
AVERAGE	123.33	114.29	125.76	133.41	124.24
1990 Cost	\$5,517,034	\$2,707,906	\$2,954,409	\$1,639,735	\$20,081,549
Relative wt. (%)	27.47	13.48	14.71	8.17	100.00

Relative weight is the % of the total \$ amount for the 9 items used to compute the Cost Index.

n:/msas/excel/2003/June 2003 book/Cost Index 2003 Current Method.xls

2003 UNIT PRICE RECOMMENDATIONS				
USING WEIGHTED AVG. FROM BASE YEAR- CURRENT METHOD				
COST INDEX OF 1.2424				
Needs Item		2002 Need Prices	Prices using Weighted Average from Base Year	Sub- committee Suggested Prices For 2003
Grading (Excavation)	Cu. Yd.	\$3.67 *	\$4.56	
Aggregate Shoulders #2221	Ton	13.00 *	16.15	
Curb and Gutter Removal	Lin.Ft.	2.52 *	3.13	
Sidewalk Removal	Sq. Yd.	5.35 *	6.65	
Concrete Pavement Removal	Sq. Yd.	5.25 *	6.52	
Tree Removal	Unit	220.00 *	273.33	
Class 5 Base #2211	Ton	7.05 *	8.76	
Bituminous Base #2350	Ton	30.00 *	37.27	
Bituminous Surface #2118	Ton	5.23 **		
Bituminous Surface #2350	Ton	30.00 *	37.27	
Curb and Gutter Construction	Lin.Ft.	7.70 *	9.57	
Sidewalk Construction	Sq. Yd.	22.50 *	27.95	
Storm Sewer Adjustment	Mile	81,600 **		
Storm Sewer	Mile	254,200 **		
Special Drainage - Rural	Mile	37,400 **		
Street Lighting	Mile	78,000 **		
Traffic Signals	Per Sig	120,000 **		
Signal Needs Based On Projected Traffic				
Projected Traffic	Percentage	X Unit Price =	Needs Per Mile	
0 - 4,999	.25	\$120,000 =	\$30,000	
5,000 - 9,999	.50	120,000 =	60,000	
10,000 & Over	1.00	120,000 =	120,000	
Right of Way (Needs Only)	Acre	90,000 **		
Engineering	Percent	20 **		
Railroad Grade Crossing				
Signs	Unit	1,000 **		
Pavement Marking	Unit	750 **		
Signals (Single Track-Low Speed)	Unit	120,000 **		
Signals & Gate (Multiple Track - High & Low Speed)	Unit	160,000		
Concrete Xing Material(Per Tract)	Lin.Ft.	1,000 **		
Bridges				
0 to 149 Ft.	Sq. Ft.	68.00 **		
150 to 499 Ft.	Sq. Ft.	68.00 **		
500 Ft. and over	Sq. Ft.	68.00 **		
Railroad Bridges over Highways				
Number of Tracks - 1	Lin.Ft.	9,000 **		
Additional Track (each)	Lin.Ft.	7,500 **		

* Based upon the Cost Index

** Based upon other information

MSAS CONSTRUCTION COST INDEX
YEARLY PERCENT OF INCREASE
POSSIBLE ALTERNATIVE

At the Spring, 1996 Municipal Screening Board meeting, the following motion was passed unanimously:

Motion to adjust Unit Prices every two years, with the ability to adjust significant unit prices changes on a yearly basis.

The Mn/Dot Cost Index was not used because the scope of Mn/DOT projects is much different than MSA projects. Mn/Dot computes their cost index on 6 items. Some items are not used in computing the MSA needs. It was decided that a MSAS Cost Index would better estimate MSAS costs.

Nine items were chosen from the Unit Price study for the MSAS Cost Index. They were chosen because they make a good cross section of the items used in the Unit Price Study.

The year 1990 is the first year, because we went back 10 unit price studies.

The Annual Percent of Increase is calculated by dividing the current years Average Contract Price by the previous years Average Contract Price, dividing by 100, then subtracting 100.

The Relative Weight of each item is the percentage of the total construction costs (for all 10 unit cost studies) per item divided by the total construction cost of all 9 items. This gives the percentage that the cost of each item is of the cost of all the items.

The Weighted Annual Percent of Increase is calculated by subtracting 100 from the Annual Percent of Increase, multiplying it by the Relative Weight of the item and dividing by 100.

The Average Annual Percent of Increase and the Average Weighted Annual Percent of Increase are obtained by adding each individual items annual row and dividing by 9. The Total of the Average Annual Percent of Increase and the Weighted Annual Percent of Increase is obtained by adding the columns (in the bottom right) and dividing by 9. The Average Annual Percent of Increase this year is **103.89** The Average Weighted Annual Percent of Increase is **111.73**.

For this example **103.89** is used.

**MUNICIPAL STATE AID
ANNUAL CONSTRUCTION COST INDEX (CI)
YEARLY PERCENT OF INCREASE EXAMPLE**

YEAR	Average Contract Price Grading (Excavation)	Annual Percent of Increase	Weighted Annual Percent of Increase	Average Contract Price C & G Removal	Annual Percent of Increase	Weighted Annual Percent of Increase	Average Contract Price Sidewalk Removal	Annual Percent of Increase	Weighted Annual Percent of Increase	Average Contract Price Conc. Pvmt. Removal	Annual Percent of Increase	Weighted Annual Percent of Increase	Average Contract Price Gravel Base	Annual Percent of Increase	Weighted Annual Percent of Increase
1990	\$2.16			\$1.40			\$3.84			\$3.85			\$5.16		
1991	2.62	21.30	20.39	1.72	22.86	1.83	4.20	9.38	1.26	3.84	(0.26)	2.17	6.08	17.83	20.43
1992	3.03	15.65	19.44	1.57	(8.72)	1.36	5.13	22.14	1.41	4.08	6.25	2.31	5.42	(10.86)	15.45
1993	2.71	(10.56)	15.03	1.54	(1.91)	1.46	4.79	(6.63)	1.07	4.05	(0.74)	2.16	6.13	13.10	19.61
1994	3.35	23.62	20.78	1.88	22.08	1.82	4.35	(9.19)	1.04	4.23	4.44	2.27	5.94	(3.10)	16.80
1995	2.60	(22.39)	13.05	1.84	(2.13)	1.46	5.36	23.22	1.42	4.16	(1.65)	2.14	6.23	4.88	18.18
1996	2.53	(2.69)	16.36	2.05	11.41	1.66	4.19	(21.83)	0.90	4.37	5.05	2.29	6.29	0.96	17.50
1997							No Unit Price Study conducted- No Average Contract Price Available								
1998	3.56	20.36	23.65	1.96	(2.20)	1.42	4.97	9.31	1.36	4.69	3.66	2.34	6.63	2.70	18.27
1999							No Unit Price Study conducted- No Average Contract Price Available								
2000	3.02	(7.58)	14.26	2.17	5.36	1.65	5.08	1.11	1.18	5.81	11.94	2.70	6.61	(0.15)	17.28
2001							No Unit Price Study conducted- No Average Contract Price Available								
2002	3.67	10.76	20.43	2.52	8.06	1.73	4.45	(6.20)	1.01	4.39	(12.22)	1.65	7.35	5.60	19.28
AVERAGE		5.38	18.15		6.09	1.60		2.37	1.18		1.83	2.23		3.44	18.09
Total Cost			\$35,492,493.16			\$3,140,552.00			\$2,429,178.46			\$4,598,493.87			\$36,607,324.77
Relative wt. (%)			16.81			1.49			1.15			2.18			17.34

YEAR	Average Contract Price #2331 Blt	Annual Percent of Increase	Weighted Annual Percent of Increase	Average Contract Price #2341 Blt	Annual Percent of Increase	Weighted Annual Percent of Increase	Average Contract Price C&G Const.	Annual Percent of Increase	Weighted Annual Percent of Increase	Average Contract Price Sdwk. Const.	Annual Percent of Increase	Weighted Annual Percent of Increase	Average Contract Price Sdwk. Const.	Annual Percent of Increase	Weighted Annual Percent of Increase
1990	\$17.63			\$21.28			\$4.90			\$13.04					
1991	19.92	12.99	25.69	22.42	5.36	16.88	5.28	7.76	14.66	14.04	7.67	9.35		11.65	12.52
1992	21.60	8.43	24.65	24.11	7.54	17.23	5.31	0.57	13.68	14.78	5.27	9.14		5.14	11.63
1993	19.68	(8.89)	20.71	23.82	(1.20)	15.83	5.50	3.58	14.09	14.85	0.47	8.72		(1.42)	10.97
1994	20.12	2.24	23.24	22.79	(4.32)	15.33	5.51	0.18	13.63	16.75	12.79	9.79		5.42	11.63
1995	19.87	(1.24)	22.45	23.29	2.19	16.37	6.25	13.43	15.43	16.56	(1.13)	8.58		1.69	11.01
1996	21.18	6.59	24.23	23.68	1.67	16.29	6.24	(0.16)	13.58	16.75	1.15	8.78		0.24	11.29
1997							No Unit Price Study conducted- No Average Contract Price Available								
1998	22.82	3.87	24.50	24.60	1.94	16.65	7.42	9.46	16.17	20.76	11.97	10.76		6.79	12.79
1999							No Unit Price Study conducted- No Average Contract Price Available								
2000	25.86	6.66	25.76	27.55	6.00	17.94	7.49	0.47	13.73	21.65	2.14	9.05		2.88	11.51
2001							No Unit Price Study conducted- No Average Contract Price Available								
2002	28.75	5.59	25.28	29.51	3.56	17.16	7.72	1.54	14.02	24.79	7.25	9.94		2.66	12.28
AVERAGE		4.03	24.06		2.53	16.63		4.09	14.33		5.29	9.35		3.89	11.73
Total Cost			\$48,008,786.59			\$33,834,701.35			\$28,720,215.01			\$18,329,629.84			\$211,161,375.05
Relative wt. (%)			22.74			16.02			13.60			8.68			100.00

Relative weight is the % of the total \$ amount for the 9 items used to compute the Cost Index.

2003 UNIT PRICE RECOMMENDATIONS USING YEARLY PERCENT OF INCREASE				
AVERAGE YEARLY PERCENT OF INCREASE = 1.0389				
Needs Item		2002 Need Prices	Prices using Yearly Percent of Increase Method	Sub- committee Suggested Prices For 2003
Grading (Excavation)	Cu. Yd.	\$3.67 *	\$3.81	
Aggregate Shoulders #2221	Ton	13.00 *	13.51	
Curb and Gutter Removal	Lin.Ft.	2.52 *	2.62	
Sidewalk Removal	Sq. Yd.	5.35 *	5.56	
Concrete Pavement Removal	Sq. Yd.	5.25 *	5.45	
Tree Removal	Unit	220.00 **	228.56	
Class 5 Base #2211	Ton	7.05 *	7.32	
Bituminous Base #2350	Ton	30.00 *	31.17	
Bituminous Surface #2118	Ton	5.23 **		
Bituminous Surface #2350	Ton	30.00 *	31.17	
Curb and Gutter Construction	Lin.Ft.	7.70 *	8.00	
Sidewalk Construction	Sq. Yd.	22.50 *	23.38	
Storm Sewer Adjustment	Mile	81,600 **		
Storm Sewer	Mile	254,200 **		
Special Drainage - Rural	Mile	37,400 **		
Street Lighting	Mile	78,000 **		
Traffic Signals	Per Sig	120,000 **		
Signal Needs Based On Projected Traffic				
Projected Traffic	Percentage	X Unit Price = Needs Per Mile		
0 - 4,999	.25	\$120,000 = \$30,000		
5,000 - 9,999	.50	120,000 = 60,000		
10,000 & Over	1.00	120,000 = 120,000		
Right of Way (Needs Only)	Acre	90,000 **		
Engineering	Percent	20 **		
Railroad Grade Crossing				
Signs	Unit	1,000 **		
Pavement Marking	Unit	750 **		
Signals (Single Track-Low Speed)	Unit	120,000 **		
Signals & Gate (Multiple Track - High & Low Speed)	Unit	160,000 **		
Concrete Xing Material(Per Tract Lin.Ft.		1,000 **		
Bridges				
0 to 149 Ft.	Sq. Ft.	68.00 **		
150 to 499 Ft.	Sq. Ft.	68.00 **		
500 Ft. and over	Sq. Ft.	68.00 **		
Railroad Bridges over Highways				
Number of Tracks - 1	Lin.Ft.	9,000 **		
Additional Track (each)	Lin.Ft.	7,500 **		

* Based upon the Cost Index

** Based upon other information

2003 UNIT PRICE RECOMMENDATIONS USING FLAT RATE OF INCREASE (2%)				
Needs Item		2002 Need Prices	Prices using 2% Rate of Increase	Sub- committee Suggested Prices For 2003
Grading (Excavation)	Cu. Yd.	\$3.67	\$3.74	
Aggregate Shoulders #2221	Ton	13.00	13.26	
Curb and Gutter Removal	Lin.Ft.	2.52	2.57	
Sidewalk Removal	Sq. Yd.	5.35	5.46	
Concrete Pavement Removal	Sq. Yd.	5.25	5.36	
Tree Removal	Unit	220.00	224.40	
Class 5 Base #2211	Ton	7.05	7.19	
Bituminous Base #2350	Ton	30.00	30.60	
Bituminous Surface #2118	Ton	5.23		
Bituminous Surface #2350	Ton	30.00	30.60	
Curb and Gutter Construction	Lin.Ft.	7.70	7.85	
Sidewalk Construction	Sq. Yd.	22.50	22.95	
Storm Sewer Adjustment	Mile	81,600 ***		
Storm Sewer	Mile	254,200 ***		
Special Drainage - Rural	Mile	37,400 ***		
Street Lighting	Mile	78,000 ***		
Traffic Signals	Per Sig	120,000 ***		
Signal Needs Based On Projected Traffic				
Projected Traffic	Percentage	X Unit Price = Needs Per Mile		
0 - 4,999	.25	\$120,000 = \$30,000		
5,000 - 9,999	.50	120,000 = 60,000		
10,000 & Over	1.00	120,000 = 120,000		
Right of Way (Needs Only)	Acre	90,000 ***		
Engineering	Percent	20 ***		
Railroad Grade Crossing				
Signs	Unit	1,000 ***		
Pavement Marking	Unit	750 ***		
Signals (Single Track-Low Speed)	Unit	120,000 ***		
Signals & Gate (Multiple Track - High & Low Speed)	Unit	160,000 ***		
Concrete Xing Material(Per Tract)	Lin.Ft.	1,000 ***		
Bridges				
0 to 149 Ft.	Sq. Ft.	68.00 ***		
150 to 499 Ft.	Sq. Ft.	68.00 ***		
500 Ft. and over	Sq. Ft.	68.00 ***		
Railroad Bridges over Highways				
Number of Tracks - 1	Lin.Ft.	9,000 ***		
Additional Track (each)	Lin.Ft.	7,500 ***		

*** Based upon other information

2003 UNIT PRICE RECOMMENDATIONS USING PREVIOUS YEARS COSTS				
Needs Item		2002 Need Prices	Prices using Same Costs as Previous Year	Sub- committee Suggested Prices For 2003
Grading (Excavation)	Cu. Yd.	\$3.67	\$3.67	
Aggregate Shoulders #2221	Ton	13.00	13.00	
Curb and Gutter Removal	Lin.Ft.	2.52	2.52	
Sidewalk Removal	Sq. Yd.	5.35	5.35	
Concrete Pavement Removal	Sq. Yd.	5.25	5.25	
Tree Removal	Unit	220.00	220.00	
Class 5 Base #2211	Ton	7.05	7.05	
Bituminous Base #2350	Ton	30.00	30.00	
Gravel Surface #2118	Ton	5.23	5.23	
Bituminous Surface #2350	Ton	30.00	30.00	
Curb and Gutter Construction	Lin.Ft.	7.70	7.70	
Sidewalk Construction	Sq. Yd.	22.50	22.50	
Storm Sewer Adjustment	Mile	81,600 ***		
Storm Sewer	Mile	254,200 ***		
Special Drainage - Rural	Mile	37,400 ***		
Street Lighting	Mile	78,000 ***		
Traffic Signals	Per Sig	120,000 ***		
Signal Needs Based On Projected Traffic				
Projected Traffic	Percentage	X Unit Price = Needs Per Mile		
0 - 4,999	.25	\$120,000	=	\$30,000
5,000 - 9,999	.50	120,000	=	60,000
10,000 & Over	1.00	120,000	=	120,000
Right of Way (Needs Only)	Acre	90,000 ***		
Engineering	Percent	20 ***		
Railroad Grade Crossing				
Signs	Unit	1,000 ***		
Pavement Marking	Unit	750 ***		
Signals (Single Track-Low Speed)	Unit	120,000 ***		
Signals & Gate (Multiple Track - High & Low Speed)	Unit	160,000 ***		
Concrete Xing Material(Per Tract)	Lin.Ft.	1,000 ***		
Bridges				
0 to 149 Ft.	Sq. Ft.	68.00 ***		
150 to 499 Ft.	Sq. Ft.	68.00 ***		
500 Ft. and over	Sq. Ft.	68.00 ***		
Railroad Bridges over Highways				
Number of Tracks - 1	Lin.Ft.	9,000 ***		
Additional Track (each)	Lin.Ft.	7,500 ***		

*** Based upon other information

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 received by the State Aid Division in 2002. There were 180 on system projects and 66 off system projects let in 2002. 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 2003 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 2004 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's hydraulic office furnished a recommendation of costs for storm sewer construction and adjustment based on 2002 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 2002 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 2002 needs study are found in the Screening Board resolutions included in this booklet.

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

15-Apr-03

ITEM	2001 APPORTIONMENT NEEDS COST	2002 APPORTIONMENT NEEDS COST	DIFFERENCE	2002 % OF THE TOTAL
Grading	\$157,951,428	\$172,796,705	\$14,845,277	6.45%
Special Drainage	5,415,248	5,860,378	445,130	0.22%
Storm Sewer Adjustment	58,275,528	61,585,152	3,309,624	2.30%
Storm Sewer Construction	217,052,080	227,244,632	10,192,552	8.48%
Curb & Gutter Removal	24,318,417	28,006,020	3,687,603	1.04%
Sidewalk Removal	19,384,143	20,214,891	830,748	0.75%
Pavement Removal	50,798,708	53,405,020	2,606,312	1.99%
Tree removal	9,029,160	10,232,640	1,203,480	0.38%
SUBTOTAL GRADING	\$542,224,712	\$579,345,438	\$37,120,726	21.62%

Gravel Base #2211	\$276,708,461	\$308,837,592	32,129,131	11.52%
Bituminous Base #2331	145,827,570	0	(145,827,570)	0.00%
Bituminous Base #2350	0	249,329,490	249,329,490	9.30%
SUBTOTAL BASE	\$422,536,031	\$558,167,082	\$135,631,051	20.83%

Gravel Surface #2118	\$0	\$137,757	\$137,757	0.01%
Bituminous Surface #2331	\$3,244,920	\$0	(\$3,244,920)	0.00%
Bituminous Surface #2341	188,244,330	0	(188,244,330)	0.00%
Bituminous Surface #2350	0	236,170,200	236,170,200	8.81%
Bituminous Surface #2361	22,943,910	0	(22,943,910)	0.00%
Surface Widening	1,268,880	1,137,510	(131,370)	0.04%
SUBTOTAL SURFACE	\$215,702,040	\$237,445,467	\$21,743,427	8.86%

Gravel Shoulders #2221	\$1,835,360	\$2,967,289	\$1,131,929	0.11%
SUBTOTAL SHOULDERS	\$1,835,360	\$2,967,289	\$1,131,929	0.11%

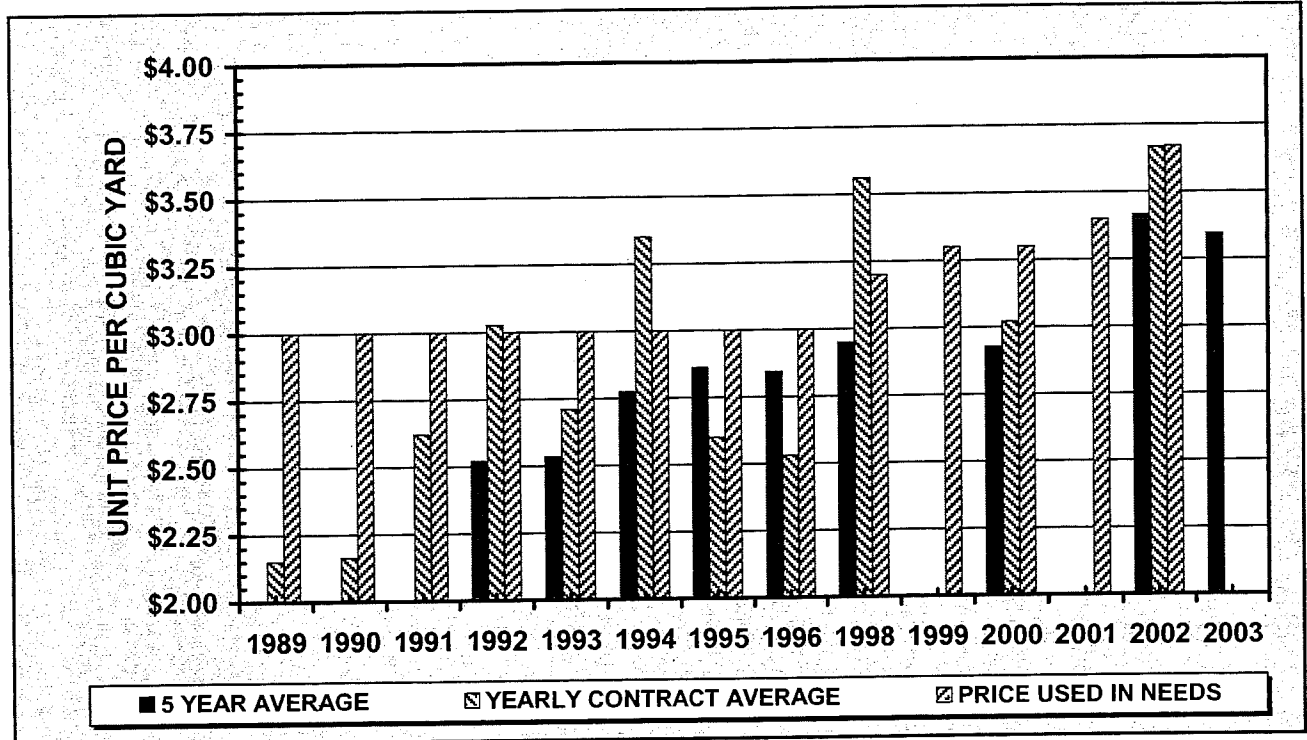
Curb and Gutter	\$136,194,186	\$141,136,028	\$4,941,842	5.27%
Sidewalk	186,325,876	196,422,674	10,096,798	7.33%
Traffic Signals	164,541,600	170,594,100	6,052,500	6.37%
Street Lighting	138,201,180	139,139,520	938,340	5.19%
Retaining Walls	16,139,977	18,582,030	2,442,053	0.69%
SUBTOTAL MISCELLANEOUS	\$641,402,819	\$665,874,352	\$24,471,533	24.84%

TOTAL ROADWAY	\$1,823,700,962	\$2,043,799,628	\$220,098,666	76.26%
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Bridge	\$135,987,544	\$122,244,066	(\$13,743,478)	4.56%
Railroad Crossings	47,333,100	48,993,500	1,660,400	1.83%
Maintenance	21,541,749	22,138,974	597,225	0.83%
Engineering	401,404,287	443,007,532	41,603,245	16.53%
SUBTOTAL OTHERS	\$606,266,680	\$636,384,072	\$30,117,392	23.74%

TOTAL	\$2,429,967,642	\$2,680,183,700	\$250,216,058	100.00%
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EXCAVATION

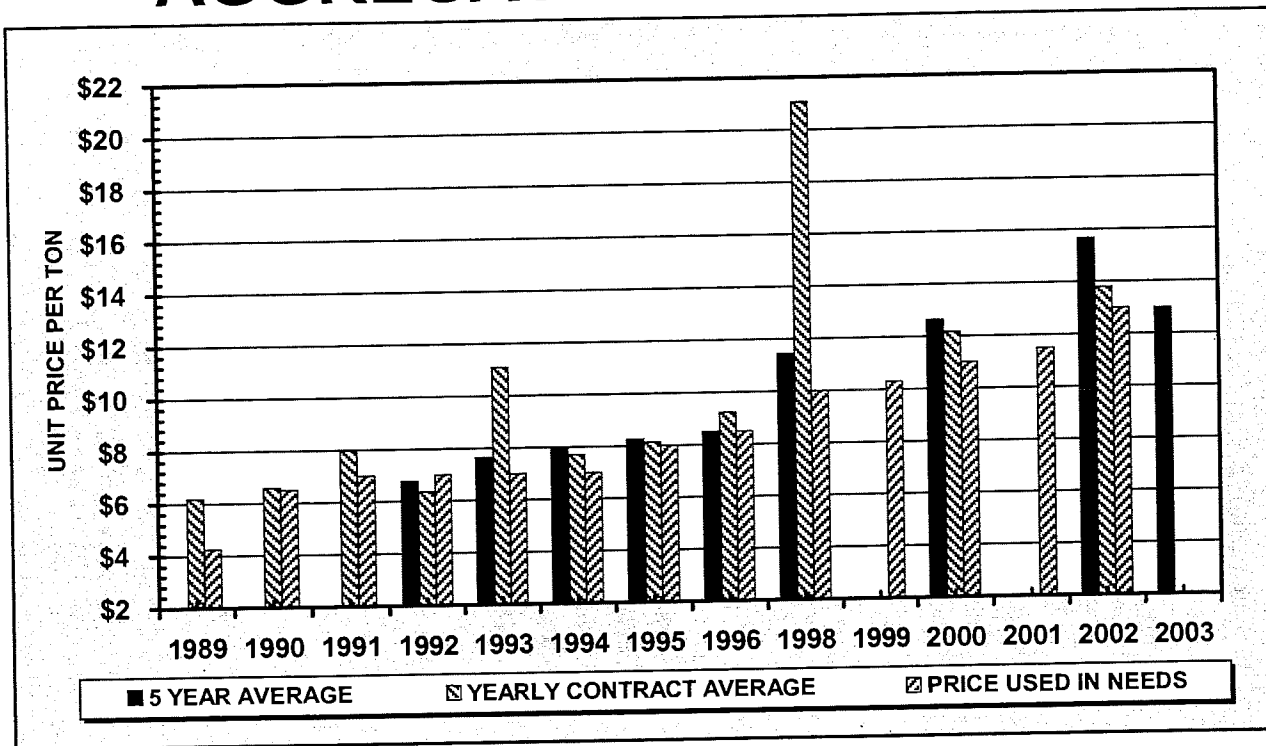


NEEDS YEAR	NO. OF CITIES	QUANTITY	TOTAL COST	YEARLY AVERAGE CONTRACT PRICE	PRICE USED IN NEEDS	5 YEAR AVERAGE CONTRACT PRICE
1989	70	1,406,108	\$3,024,233	\$2.15	\$3.00	-
1990	65	1,263,652	2,733,063	2.16	3.00	-
1991	67	1,260,768	3,303,493	2.62	3.00	-
1992	70	1,243,656	3,764,822	3.03	3.00	\$2.52
1993	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						3.34

SUBCOMMITTEE'S RECOMMENDED PRICE FOR THE 2003 NEEDS STUDY IS \$3.80
PER CU. YD.

Note: There was no Unit Price Study in years 1999 and 2001, therefore the 2003 5 Year Average Contract Price will only use the past 2 YEARLY AVERAGE CONTRACT PRICES

AGGREGATE SHOULDERING

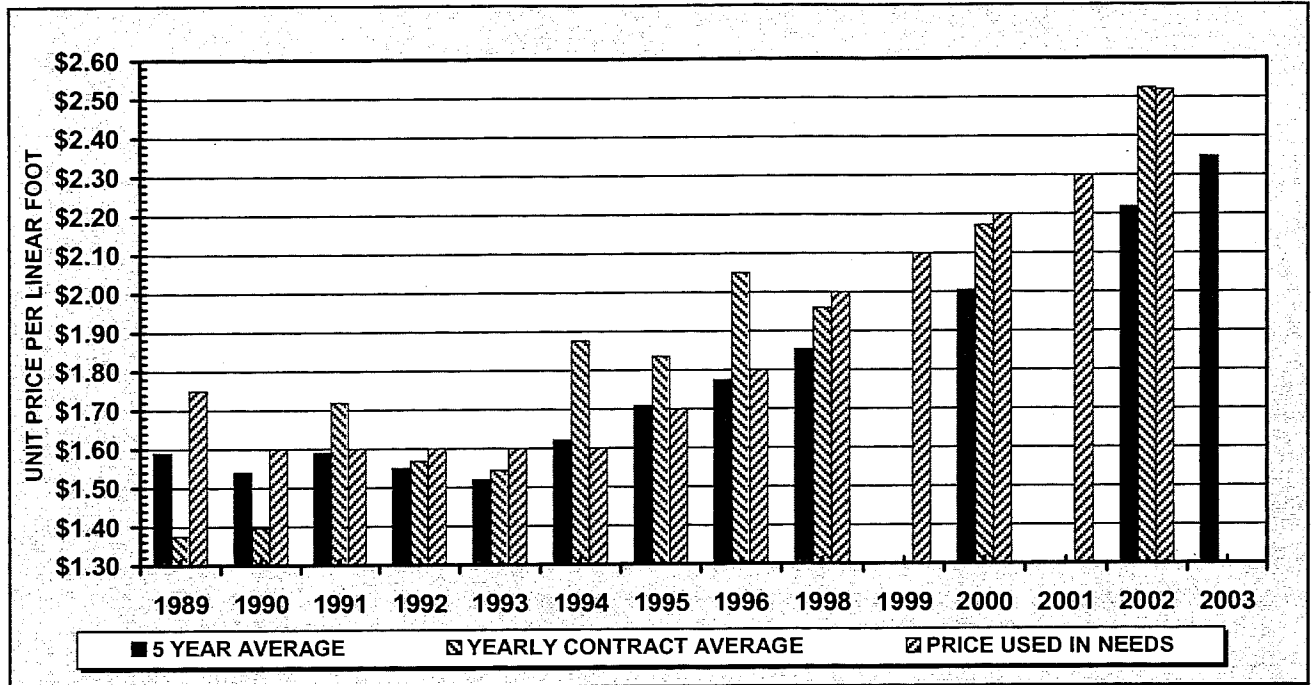


NEEDS YEAR	NO. OF CITIES	QUANTITY	TOTAL COST	YEARLY AVERAGE CONTRACT PRICE	PRICE USED IN NEEDS	5 YEAR AVERAGE CONTRACT PRICE
1989	7	3485	\$21,554	\$6.18	\$4.25	-
1990	6	3714	24,444	6.58	6.50	-
1991	3	2334	18,624	7.98	7.00	-
1992	7	6285	39,992	6.36	7.00	\$6.77
1993	7	803	9,423	11.09	7.00	7.64
1994	4	999	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						12.98

SUBCOMMITTEE'S RECOMMENDED PRICE FOR THE 2003 NEEDS STUDY IS \$13.40
PER TON

Note: There was no Unit Price Study in years 1999 and 2001, therefore the 2003 5 Year Average Contract Price will only use the past 2 YEARLY AVERAGE CONTRACT PRICES

CURB & GUTTER REMOVAL #2104

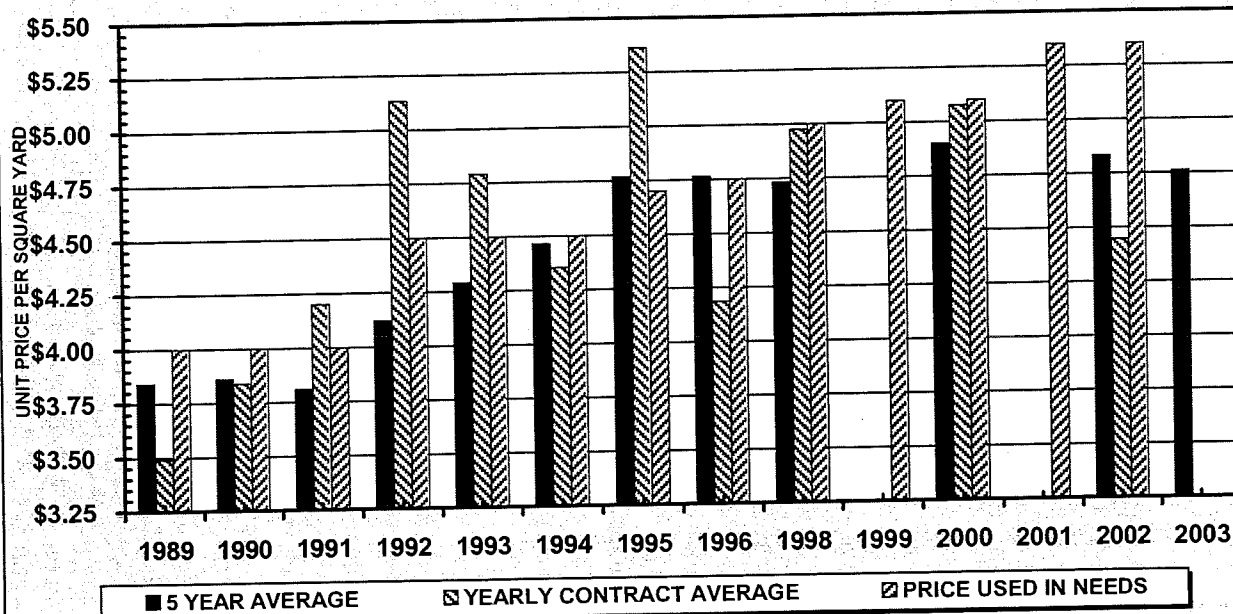


NEEDS YEAR	NO. OF CITIES	QUANTITY	TOTAL COST	YEARLY AVERAGE CONTRACT PRICE	PRICE USED IN NEEDS	5 YEAR AVERAGE CONTRACT PRICE
1989	64	211,446	\$290,721	\$1.37	\$1.75	\$1.59
1990	38	215,935	301,389	1.40	1.60	1.54
1991	59	207,105	355,996	1.72	1.60	1.59
1992	58	152,992	239,845	1.57	1.60	1.55
1993	56	118,793	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						2.35

SUBCOMMITTEE'S RECOMMENDED PRICE FOR THE 2003 NEEDS STUDY IS \$2.60
PER LIN. FT.

Note: There was no Unit Price Study in years 1999 and 2001, therefore the 2003 5 Year Average Contract Price will only use the past 2 YEARLY AVERAGE CONTRACT PRICES

SIDEWALK REMOVAL #2105

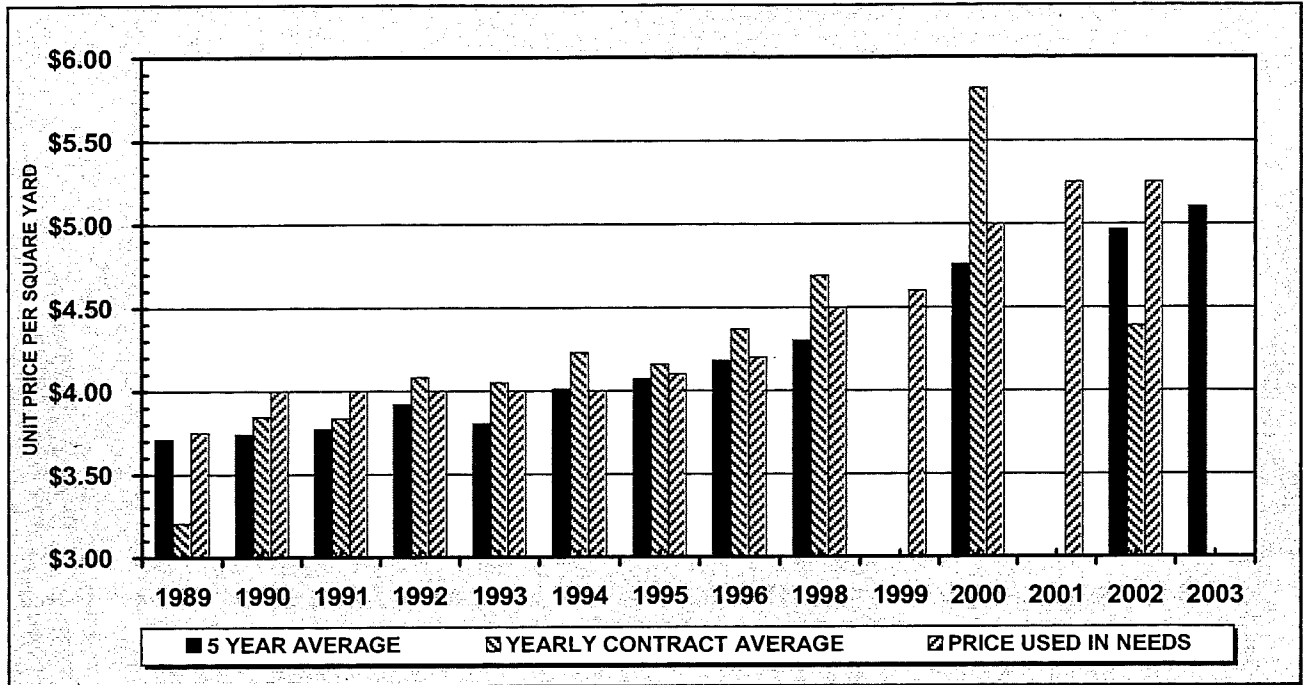


NEEDS YEAR	NO. OF CITIES	QUANTITY	TOTAL COST	YEARLY AVERAGE CONTRACT PRICE	PRICE USED IN NEEDS	5 YEAR AVERAGE CONTRACT PRICE
1989	46	77,633	\$270,831	\$3.49	\$4.00	\$3.84
1990	41	50,017	192,021	3.84	4.00	3.86
1991	43	71,868	301,912	4.20	4.00	3.81
1992	45	57,606	295,735	5.13	4.50	4.12
1993	40	43,017	206,147	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						4.76

SUBCOMMITTEE'S RECOMMENDED PRICE FOR THE 2003 NEEDS STUDY IS \$5.50
PER SQ.YD.

Note: There was no Unit Price Study in years 1999 and 2001, therefore the 2003 5 Year Average Contract Price will only use the past 2 YEARLY AVERAGE CONTRACT PRICES

CONCRETE PAVEMENT REMOVAL #2106

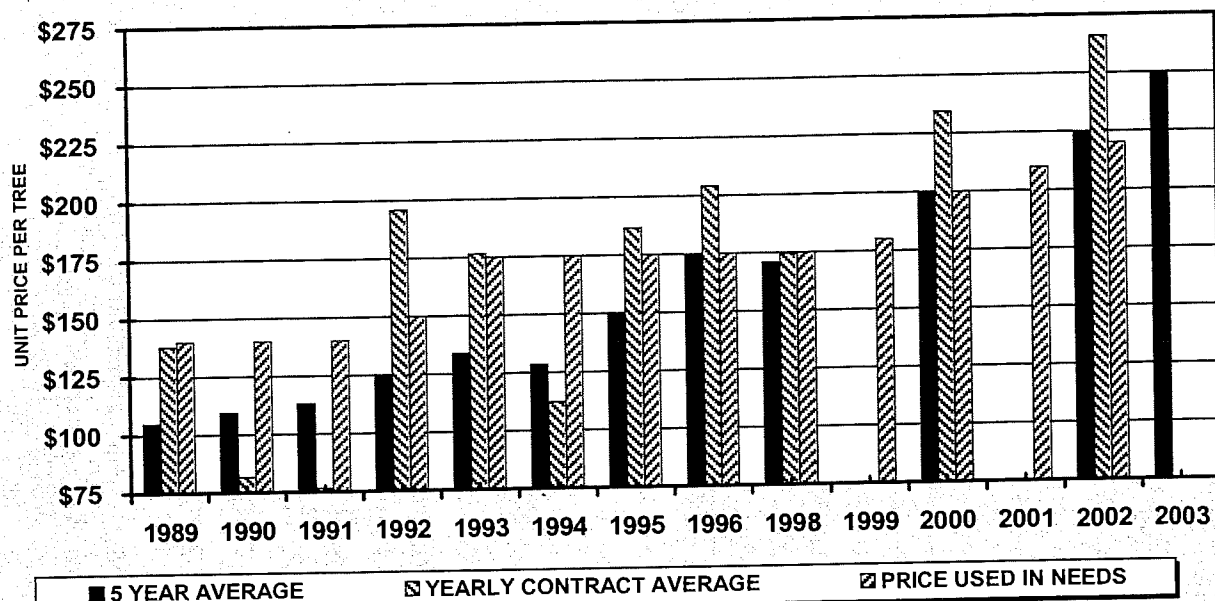


NEEDS YEAR	NO. OF CITIES	QUANTITY	TOTAL COST	YEARLY AVERAGE CONTRACT PRICE	PRICE USED IN NEEDS	5 YEAR AVERAGE CONTRACT PRICE
1989	44	276,630	\$886,757	\$3.21	\$3.75	\$3.71
1990	27	88,278	339,571	3.85	4.00	3.74
1991	27	108,995	418,053	3.84	4.00	3.77
1992	23	98,752	403,278	4.08	4.00	3.92
1993	26	190,259	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						5.10

SUBCOMMITTEE'S RECOMMENDED PRICE FOR THE 2003 NEEDS STUDY IS \$5.40
PER SQ. YD.

Note: There was no Unit Price Study in years 1999 and 2001, therefore the 2003 5 Year Average Contract Price will only use the past 2 YEARLY AVERAGE CONTRACT PRICES

TREE REMOVAL #2101

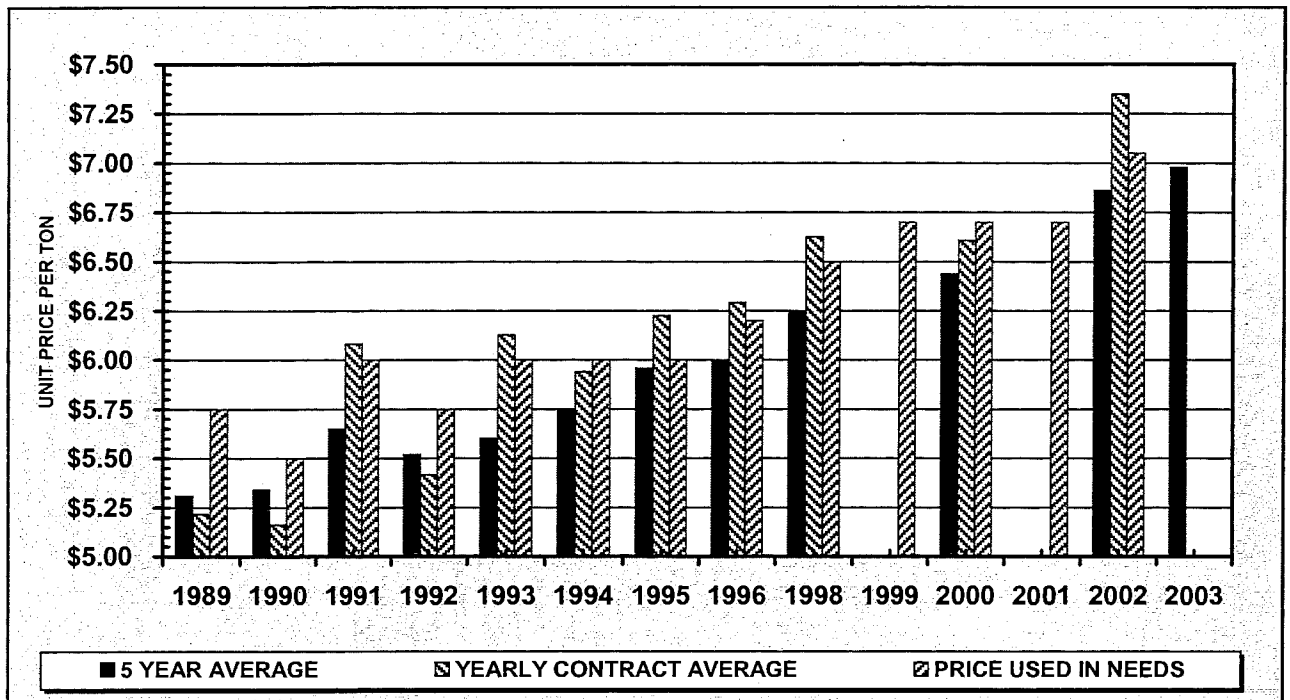


NEEDS YEAR	NO. OF CITIES	QUANTITY	TOTAL COST	YEARLY AVERAGE CONTRACT PRICE	PRICE USED IN NEEDS	5 YEAR AVERAGE CONTRACT PRICE
1989	40	884	\$122,030	\$138.04	\$140.00	\$104.88
1990	37	1,659	135,381	81.60	140.00	109.35
1991	35	1,869	142,888	76.45	140.00	113.19
1992	39	867	169,797	195.84	150.00	125.11
1993	34	853	150,442	176.47	175.00	133.68
1994	35	1,876	210,444	112.15	175.00	128.50
1995	41	1,136	211,912	186.54	175.00	149.49
1996	33	783	159,884	204.19	175.00	175.04
1998	28	779	136,044	174.64	175.00	170.80
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						250.14

SUBCOMMITTEE'S RECOMMENDED PRICE FOR THE 2003 NEEDS STUDY IS \$225.00
PER TREE

Note: There was no Unit Price Study in years 1999 and 2001, therefore the 2003 5 Year Average Contract Price will only use the past 2 YEARLY AVERAGE CONTRACT PRICES

CLASS 5 AGGREGATE BASE #2211



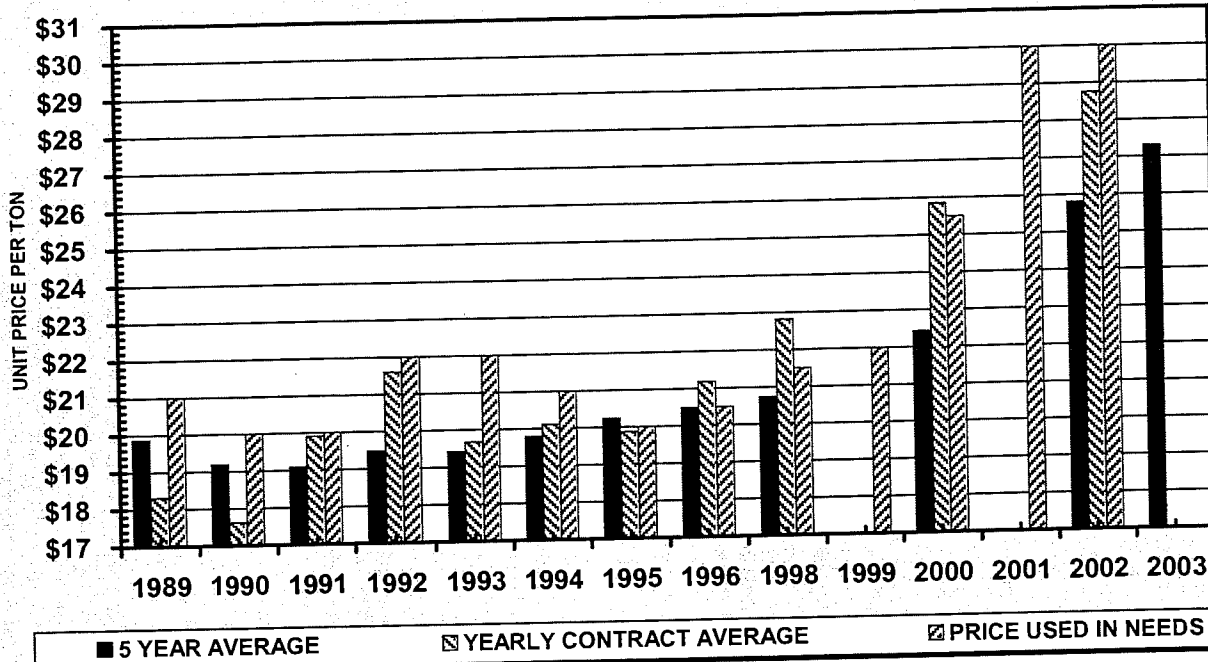
NEEDS YEAR	NO. OF CITIES	QUANTITY	TOTAL COST	YEARLY AVERAGE CONTRACT PRICE	PRICE USED IN NEEDS	5 YEAR AVERAGE CONTRACT PRICE
1989	70	648,988	\$3,385,938	\$5.22	\$5.75	\$5.31
1990	68	715,922	3,696,421	5.16	5.50	5.34
1991	70	553,874	3,368,664	6.08	6.00	5.65
1992	69	650,835	3,525,629	5.42	5.75	5.52
1993	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						6.98

SUBCOMMITTEE'S RECOMMENDED PRICE FOR THE 2003 NEEDS STUDY IS \$7.30
PER TON

Note: There was no Unit Price Study in years 1999 and 2001, therefore the 2003 5 Year Average Contract Price will only use the past 2 YEARLY AVERAGE CONTRACT PRICES

N:\MSAS\EXCEL\UNIT PRICE\2003\UNIT PRICE 2003.XLS AGG. BASE - 2211 GRAPH

BITUMINOUS BASE OR SURFACE #2331

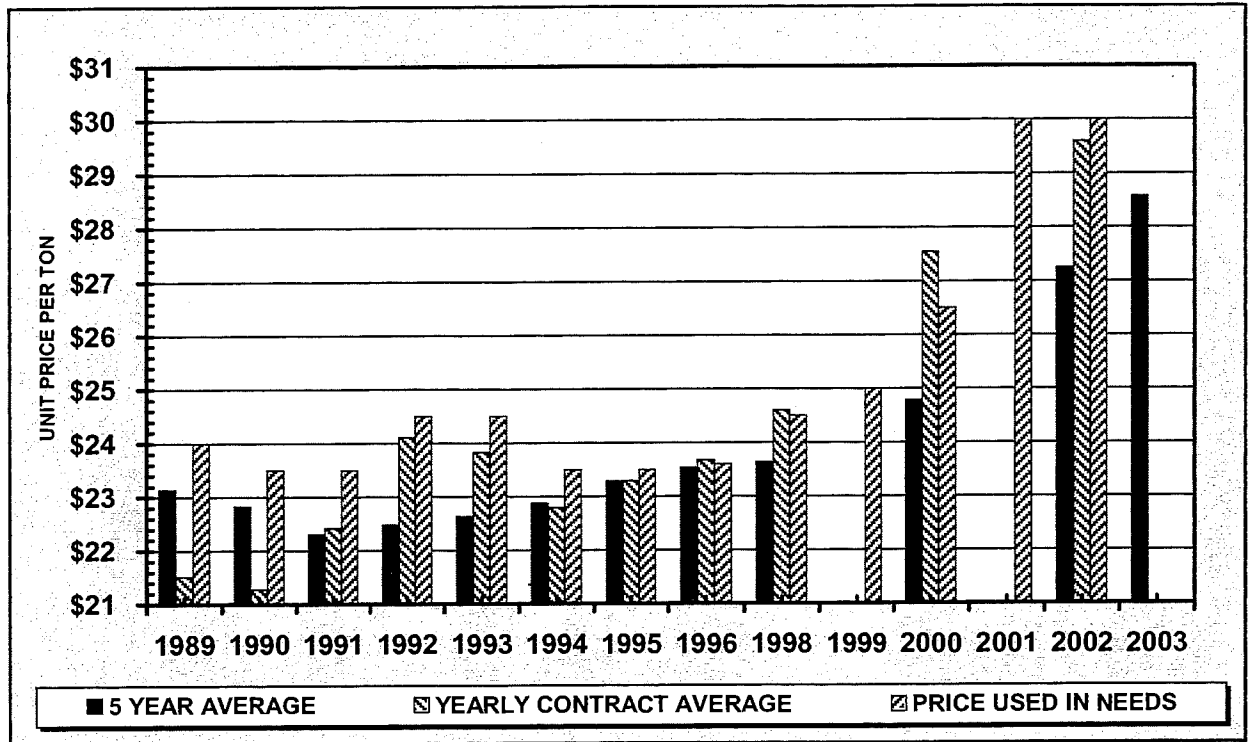


NEEDS YEAR	NO. OF CITIES	QUANTITY	TOTAL COST	YEARLY AVERAGE CONTRACT PRICE	PRICE USED IN NEEDS	5 YEAR AVERAGE CONTRACT PRICE
1989	70	316,333	\$5,793,245	\$18.31	\$21.00	\$19.87
1990	68	313,022	5,517,034	17.63	20.00	19.19
1991	70	349,058	6,952,316	19.92	20.00	19.09
1992	69	358,244	7,739,246	21.60	22.00	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

SUBCOMMITTEE'S RECOMMENDED PRICE FOR THE 2003 NEEDS STUDY IS _____ PER TON

Note: There was no Unit Price Study in years 1999 and 2001, therefore the 2003 5 Year Average Contract Price will only use the past 2 YEARLY AVERAGE CONTRACT PRICES

BITUMINOUS SURFACE #2341 & 2350

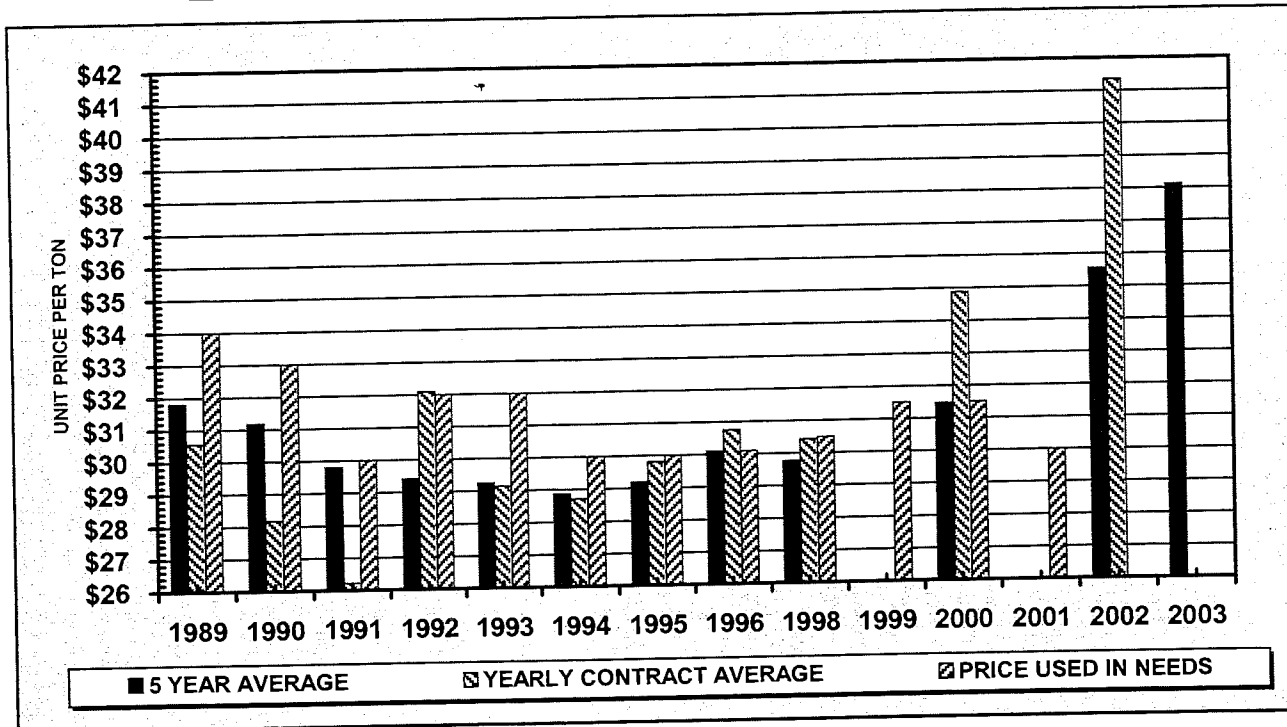


NEEDS	NO. OF CITIES	QUANTITY	TOTAL COST	YEARLY AVERAGE CONTRACT PRICE	PRICE USED IN NEEDS	5 YEAR AVERAGE CONTRACT PRICE
1989	58	144,986	\$3,119,592	\$21.52	\$24.00	\$23.14
1990	44	127,267	2,707,906	21.28	23.50	22.83
1991	48	125,102	2,804,228	22.42	23.50	22.31
1992	31	77,735	1,873,836	24.11	24.50	22.48
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

SUBCOMMITTEE'S RECOMMENDED PRICE FOR THE 2003 NEEDS STUDY IS \$31.00
PER TON

Note: There was no Unit Price Study in years 1999 and 2001, therefore the 2003 5 Year Average Contract Price will only use the past 2 YEARLY AVERAGE CONTRACT PRICES

BITUMINOUS SURFACE #2361

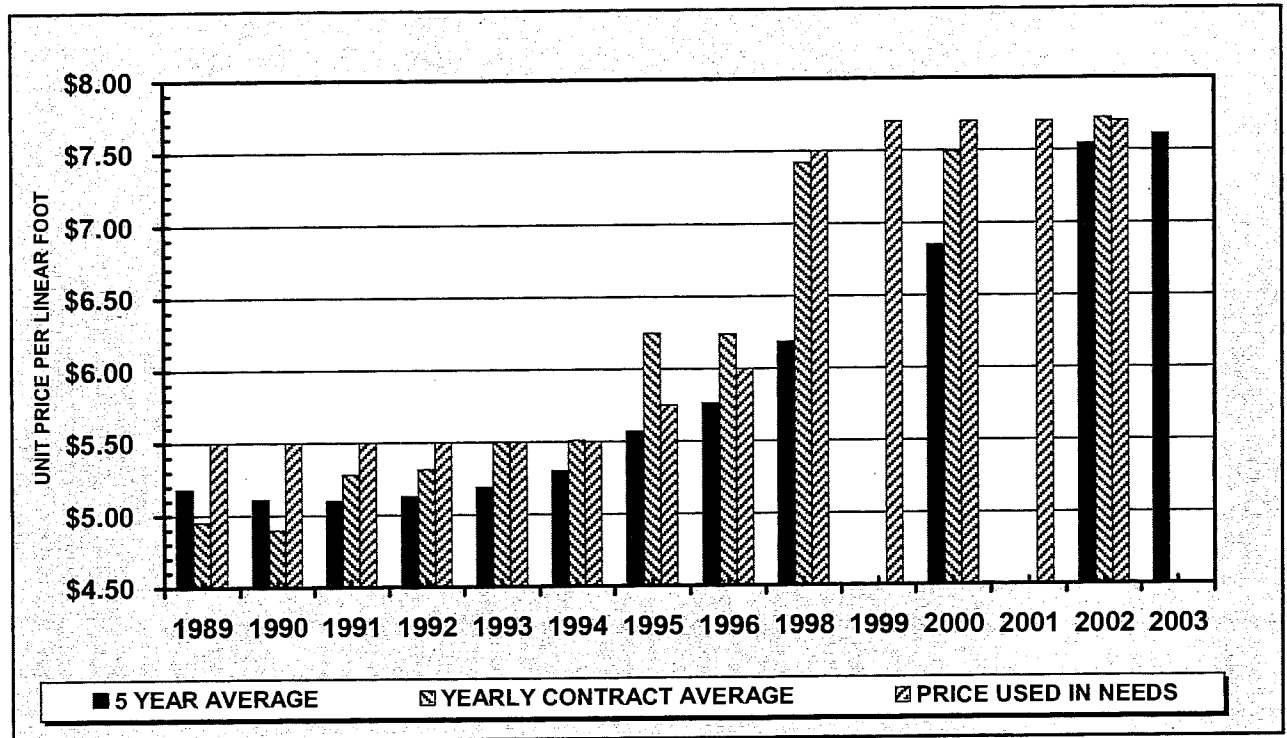


NEEDS YEAR	NO. OF CITIES	QUANTITY	TOTAL COST	YEARLY AVERAGE CONTRACT PRICE	PRICE USED IN NEEDS	5 YEAR AVERAGE CONTRACT PRICE
1989	17	25,201	\$770,369	\$30.57	\$34.00	\$31.81
1990	14	31,527	888,370	28.18	33.00	31.18
1991	13	13,901	364,419	26.22	30.00	29.79
1992	3	6,186	198,585	32.10	32.00	29.41
1993	13	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

SUBCOMMITTEE'S RECOMMENDED PRICE FOR THE 2003 NEEDS STUDY IS _____ PER TON

Note: There was no Unit Price Study in years 1999 and 2001, therefore the 2003 5 Year Average Contract Price will only use the past 2 YEARLY AVERAGE CONTRACT PRICES

CURB AND GUTTER CONSTRUCTION

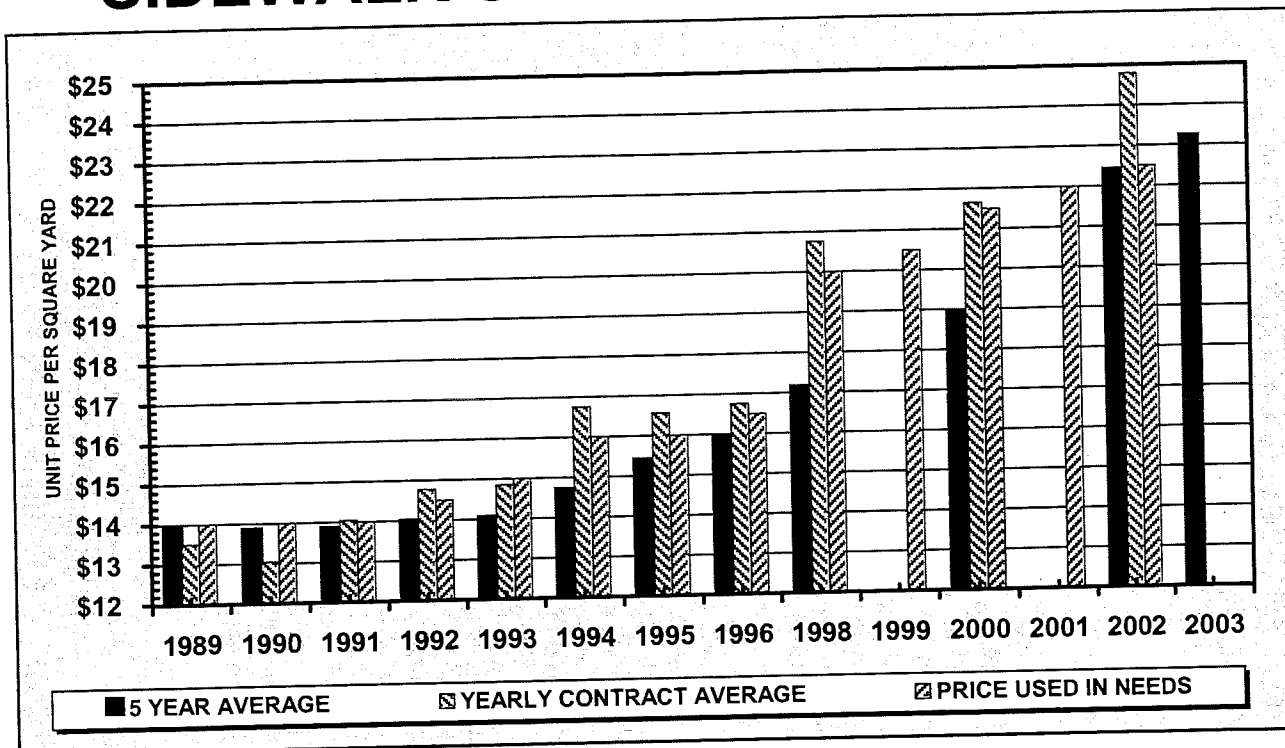


NEEDS YEAR	NO. OF CITIES	QUANTITY	TOTAL COST	YEARLY AVERAGE CONTRACT PRICE	PRICE USED IN NEEDS	5 YEAR AVERAGE CONTRACT PRICE
1989	73	606,413	\$3,002,995	\$4.95	\$5.50	\$5.18
1990	57	603,356	2,954,409	4.90	5.50	5.11
1991	67	559,342	2,952,849	5.28	5.50	5.10
1992	68	523,717	2,783,163	5.31	5.50	5.13
1993	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						7.61

SUBCOMMITTEE'S RECOMMENDED PRICE FOR THE 2003 NEEDS STUDY IS \$8.00
PER LIN. FT.

Note: There was no Unit Price Study in years 1999 and 2001, therefore the 2003 5 Year Average Contract Price will only use the past 2 YEARLY AVERAGE CONTRACT PRICES

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	15.40
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	64,390	1,596,409	24.79	22.50	22.40
2003						23.22

SUBCOMMITTEE'S RECOMMENDED PRICE FOR THE 2003 NEEDS STUDY IS \$23.50
PER SQ. YD.

Note: There was no Unit Price Study in years 1999 and 2001, therefore the 2003 5 Year Average Contract Price will only use the past 2 YEARLY AVERAGE CONTRACT PRICES

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)
1986	\$62,000	\$196,000 *	\$2,000	\$10,000
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	20,000-80,000
1995	69,100	223,000	20,000	20,000-80,000
1996	71,200	229,700	20,000	20,000-80,000
1998	76,000	245,000	20,000	24,990-99,990
1999	79,000	246,000	35,000	24,990-99,990
2000	80,200	248,500	50,000	24,990-99,990
2001	80,400	248,000	78,000 **	30,000-120,000
2002	81,600	254,200	78,000	30,000-120,000
2003				

* 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.

MN/DOT'S HYDRAULIC OFFICE RECOMMENDED PRICES FOR 2003:

	Storm Sewer Adjustment	Storm Sewer Construction
2003	\$82,700	\$257,375

SUBCOMMITTEE'S RECOMMENDED PRICES FOR 2003:

	Storm Sewer. Adjustment	Storm Sewer Construction	Lighting	Signals
2003	\$82,700	\$257,375	\$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)
1986	\$300		\$65,000	\$95,000	
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					

MN/DOT'S RAILROAD OFFICE RECOMMENDED PRICES FOR 2003:

	Signs	Pavement Marking	Signals	Sig. & Gates	Concrete X-ing Surf.
2003	\$1,000	\$750	\$120,000	\$135-185,000	\$1,000

SUBCOMMITTEE'S RECOMMENDED PRICES FOR 2003:

	Signs	Pavement Marking	Signals	Sig. & Gates	Concrete X-ing Surf.
2003	\$1,000	\$750	\$120,000	\$160,000	\$1,000



Minnesota Department of Transportation

Memo

Office of Bridges and Structures
3485 Hadley Avenue North
Oakdale, MN 55128-3307

Date: March 21, 2003

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

From: Mike Leuer *ML*
State Aid Hydraulic Technician

Phone: (651) 747-2167

Subject: State Aid Storm Sewer
Construction Costs for 2002

We have completed our analysis of storm sewer construction costs incurred for 2002 and the following assumptions can be utilized for planning purposes per roadway mile:

- Approximately \$257,375 for new construction, and
- Approximately \$82,700 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 131 plans for 2002.

CC: J. L. Boynton

STATE OF MINNESOTA
OFFICE MEMORANDUM



Minnesota Department of Transportation
Office of Freight, Railroads and Waterways
Mailstop 470
395 John Ireland Blvd.
St. Paul, MN 55155-1899

March 25, 2003

TO: Marshall Johnson
Needs Unit – State Aid

FROM: Susan H. Aylesworth
Director, Rail Administration Section

PHONE: 6-2472

SUBJECT: Projected Railroad Grade Crossing
Improvements – Cost for 2003

We have projected 2003 costs for railroad/highway improvements at grade crossings. For planning purposes, we recommend using the following figures:

Signals (single track, low speed, average price)*	\$120,000.00
Signals & gates (multiple track, high/low speed, average price)*	\$135,000 – 185,000.00
Signs (advance warning signs & 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 and 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 OFRW procedures.

Cc: Tim Spencer
Rashmi Brewer
Gene Dahlke
Paul Delarosa
Josh Collins

Special Drainage Costs for Rural Segments
2003

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 \$20.00 per foot as a cost for 18" GSP and \$120.00 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 \$860.00.

Using the 1990 Needs Study Subcommittee recommended number of 25 entrances per mile, the cost of Side Culverts per mile would be \$21,500.

For 4' Culverts:

- 1) The minimum pipe diameter of 4' 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 \$52.00 per foot as a cost for 30" RCP) and \$625 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 4' culvert would be \$3,954.

Using the 1990 Needs Study Subcommittee recommended number of four 4' culverts per mile, the cost of centerline culverts per mile would be \$15,816.

By adding the cost of the 25 Side Culverts and the 4 4' culverts, the 2002 estimated construction needs cost per mile for Special Drainage would be **\$37,316** per mile.

**SUBCOMMITTEE'S RECOMMENDED PRICE FOR THE 2003 NEEDS STUDY IS
\$37,400 PER MILE.**

2003 COUNTY SCREENING BOARD DATA

JUNE, 2003

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

<u>Construction Item</u>	<u>2002 CSAH Needs Study Average</u>	<u>1998-2002 CSAH 5-Year Construction Average</u>	<u>2002 CSAH Construction Average</u>	<u>2003 CSAH Needs Study Unit Price Recommended by CSAH Subcommittee</u>
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Rural & Urban Design

Grav. Base CI 5 & 6/Ton	\$5.74	\$5.41	\$5.76	*
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Rural Design

Combine Bit. Base & Surf. (2331, 2341, & 2350)/Ton		\$19.54	\$22.74	$\$22.74 - \$5.76 = \text{G.B.} +16.98$
Gravel Surf. 2118/Ton	5.23	5.12	5.35	$\$5.35 - \$5.76 = \text{G.B.} -0.41$
Gravel Shldr. 2221/Ton	5.92	5.97	6.44	$\$6.44 - \$5.76 = \text{G.B.} +0.68$

Urban Design

Combine Bit. Base & Surf. (2331, 2341, & 2350)/Ton		\$27.38	\$29.92	$\$29.92 - \$5.76 = \text{G.B.} +24.16$
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* The Recommended Gravel Base Unit Price for each individual county is shown on the state map foldout (Fig. A)

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

BRIDGES LET IN CALENDAR YEAR 2002

BRIDGE LENGTH 0-149 FEET

NEW BRIDGE NUMBER	PROJECT NUMBER	LENGTH	DECK AREA	BRIDGE COST	COST PER SQ. FT.
7546	SAP 07-653-005	59.31	2,537	\$195,547	\$77
7575	SAP 07-620-016	62.25	2,697	244,217	91
8541	SAP 08-602-013	103.67	4,492	278,337	62
8542	SAP 08-602-014	121.65	5,246	299,986	57
9525	SP 09-602-013	93.38	3,999	320,021	80
10538	SAP 10-597-003	103.42	4,017	779,642	194
11522	SAP 11-598-004	74.90	2,625	211,885	81
11520	SAP 11-606-008	59.25	2,301	193,322	84
11421	SAP 11-607-009	84.67	3,655	234,223	64
14536	SAP 14-598-031	90.67	3,185	238,113	75
20555	SP 20-599-085	113.48	4,407	319,568	73
20554	SAP 20-599-086	68.25	2,108	178,614	85
22597	SP 22-598-005	65.90	2,328	195,343	84
22594	SP 22-599-069	80.89	2,835	188,176	66
24537	SAP 24-615-003	82.25	2,870	240,086	84
24539	SAP 24-617-015	66.58	2,613	234,615	90
24538	SAP 24-625-022	97.25	3,783	313,275	83
25599	SAP 25-599-077	100.75	3,131	256,663	82
28529	SAP 28-599-055	97.25	3,395	239,808	71
29523	SP 29-639-010	80.67	2,835	268,573	95
30512	SAP 30-613-009	41.21	1,593	142,645	90
37548	SAP 37-598-015	119.50	4,222	253,222	60
42558	SAP 42-599-131	93.50	2,914	213,425	73
42557	SAP 42-602-031	96.50	4,128	324,734	79
43543	SAP 43-598-009	98.83	4,653	343,668	74
43542	SAP 43-599-022	141.54	4,970	300,088	60
43541	SAP 43-599-023	109.58	3,850	267,750	70
45562	SAP 45-599-128	74.54	2,325	221,552	95
50583	SP 50-090-002	122.40	1,464	234,216	160
51529	SP 51-599-072	93.50	2,914	189,430	65
54547	SAP 54-608-005	68.30	2,139	266,795	125
56531	SAP 56-610-010	99.00	4,613	326,734	71
58542	SAP 58-599-030	73.00	2,482	264,131	106
58545	SAP 58-607-018	40.75	1,763	240,951	137
61511	SAP 61-603-025	74.30	3,108	213,213	69
67550	SP 67-599-063	73.50	2,294	184,359	80
67544	SP 67-604-016	112.50	5,325	330,456	62
68532	SAP 68-599-074	71.60	2,232	236,061	106
69638	SP 69-623-029	36.00	1,512	169,228	112
71524	SAP 71-599-001	122.67	3,843	304,205	79
71523	SAP 71-599-004	107.00	3,317	256,688	77
72537	SAP 72-599-043	103.50	3,224	212,787	66
83526	SAP 83-599-058	87.67	3,080	215,199	70
85545	SP 85-597-003	105.50	3,710	249,577	67
85546	SP 85-599-012	129.50	4,030	319,828	79
85544	SP 85-599-020	132.61	4,662	414,813	89
87576	SAP 87-599-097	91.75	3,220	202,140	63
56532	SP 126-104-004	130.00	10,660	973,587	91
42552	SP 139-129-001	134.31	6,298	476,614	76
27R07	TH	59.39	3,423	346,178	101
11010	TH	74.67	3,833	242,682	63
69122	TH	78.33	7,828	723,504	92
82029	TH	103.51	12,475	1,476,041	118
68006	TH	118.50	5,135	393,377	77
69022	TH	118.67	5,439	344,139	63
85025	TH	122.25	5,297	399,272	75
69124	TH	129.83	3,895	714,203	183
82863	TH	131.58	8,697	636,158	73
82864	TH	131.58	8,525	651,556	76
82857	TH	135.89	13,638	862,587	63
82858	TH	135.89	13,820	929,037	67
82035	TH	141.17	5,038	469,810	93
53007	TH	142.00	6,437	492,813	77
82030	TH	144.27	26,049	3,346,987	128
State Aid Projects			169,604	\$13,778,110	\$81
Trunk Hwy Projects			129,529	\$12,028,344	\$93
TOTALS			299,133	\$25,806,454	\$86

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BRIDGES LET IN CALENDAR YEAR 2002

BRIDGE LENGTH 150-499 FEET

NEW BRIDGE NUMBER	PROJECT NUMBER	LENGTH	DECK AREA	BRIDGE COST	COST PER SQ. FT.
2566	SP	02-652-003	233.60	23,067	\$2,137,859
5533	SAP	05-598-018	441.40	17,199	1,389,198
11519	SP	11-090-002	242.26	2,904	182,456
14538	SAP	14-598-032	217.50	7,848	494,710
14537	SP	14-618-008	390.33	18,476	1,234,259
22591	SP	22-616-014	178.00	10,680	739,606
31545	SAP	31-598-013	156.70	5,495	399,989
55565	SP	55-598-048	172.83	6,798	530,565
60546	SAP	60-599-173	217.50	7,848	644,624
64569	SP	64-606-025	172.20	6,708	464,497
87575	SP	87-643-002	163.23	6,683	537,816
27A63	SP	98-080-002	347.40	19,524	1,322,416
27A70	SP	141-080-025	274.70	15,400	2,305,646
27A95	SAP	155-165-007	209.77	15,540	1,640,124
62900	TH		150.46	17,007	1,361,815
34029	TH		160.17	17,351	1,640,118
4022	TH		197.91	9,386	1,550,860
4024	TH		199.61	6,943	1,345,106
74829	TH		200.08	14,539	1,348,427
28014	TH		205.00	10,489	710,351
34027	TH		213.29	9,669	817,734
40007	TH		221.33	16,674	1,124,216
71015	TH		225.08	18,982	1,306,597
69123	TH		228.90	10,377	1,364,364
30002	TH		229.29	11,603	859,287
34028	TH		230.13	14,114	920,611
5016	TH		232.75	18,193	1,131,962
71013	TH		233.38	20,615	1,234,186
27V35	TH		241.58	25,477	2,105,059
82865	TH		265.19	27,157	2,741,181
82036	TH		272.31	9,472	1,013,342
18006	TH		277.62	31,517	2,043,231
82031	TH		291.96	34,789	3,627,316
28012	TH		320.98	29,316	2,501,747
23022	TH		348.25	20,315	1,599,441
28015	TH		399.00	20,416	1,209,407
28016	TH		426.88	21,842	1,259,292
62901	TH		440.79	46,349	5,143,596
69038	TH		466.34	17,245	2,432,727
62915	TH		498.04	23,541	1,255,800
State Aid Projects			164,170	\$14,023,765	\$85
Trunk Hwy Projects			503,378	\$43,647,773	\$87
TOTALS			667,548	\$57,671,538	\$86

BRIDGES LET IN CALENDAR YEAR 2002

BRIDGE LENGTH 500 FEET AND OVER

NEW BRIDGE NUMBER	PROJECT NUMBER	LENGTH	DECK AREA	BRIDGE COST	COST PER SQ. FT.
27A69	SAP	27-630-009	607.90	53,980	\$3,436,322
27A71	SP	116-090-001	814.27	12,215	1,313,837
82037	TH		566.93	18,600	1,898,597
82859	TH		655.35	54,691	3,174,266
82860	TH		668.18	44,100	3,398,819
69121	TH		847.83	43,522	3,734,572
2015	TH		962.41	100,417	3,770,281
82855	TH		1891.83	169,478	25,650,720
82856	TH		1891.83	194,213	30,062,371
82034	TH	VAR	50.676	5,941,340	117
State Aid Projects			66,195	\$4,750,159	\$72
Trunk Hwy Projects			675,697	\$77,630,966	\$115
TOTALS			741,892	\$82,381,125	\$111

BRIDGES LET IN CALENDAR YEAR 2002

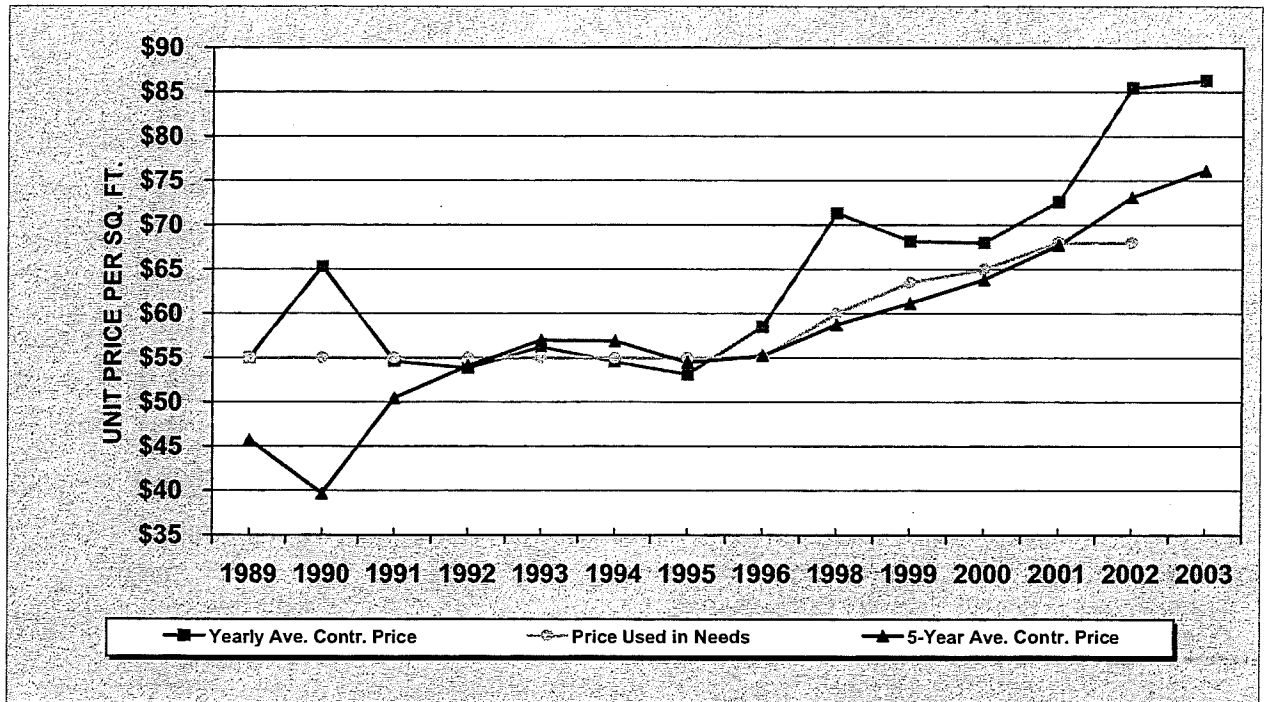
Railroad Bridges

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



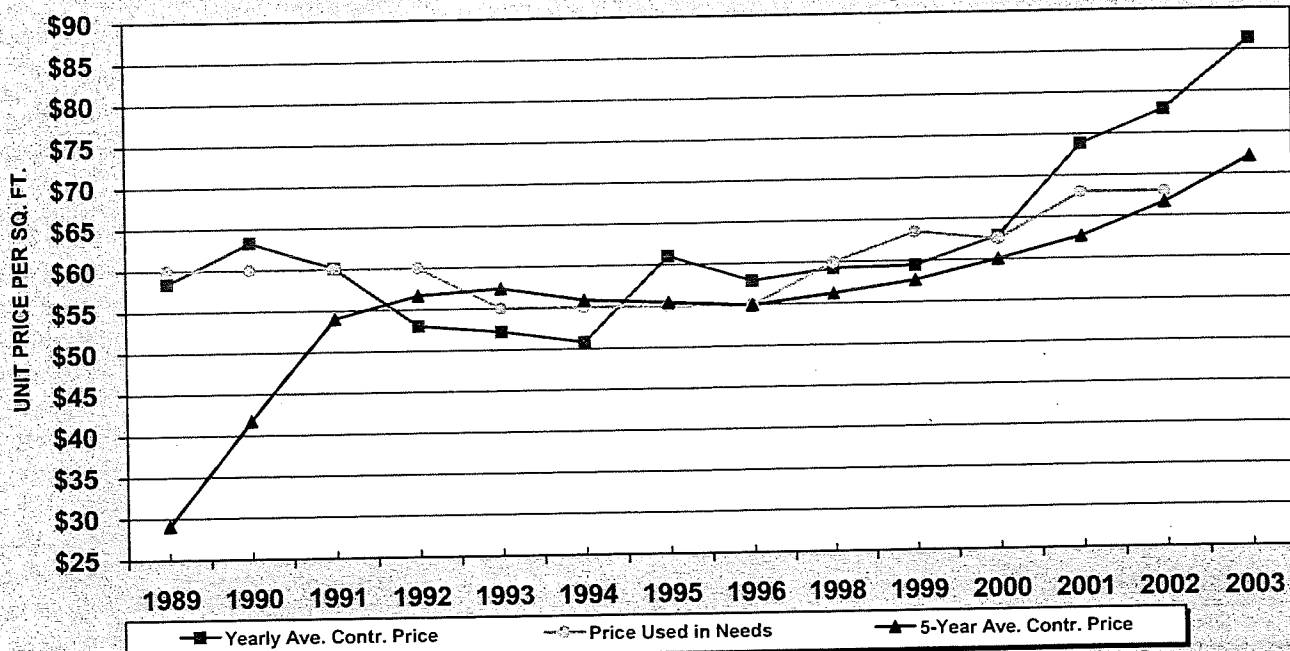
NEEDS YEAR	NUMBER OF PROJECTS	DECK AREA	TOTAL COST	YEARLY AVERAGE CONTRACT PRICE	PRICE USED IN NEEDS	5-YEAR AVERAGE CONTRACT PRICE
1989	11	35,733	\$1,966,077	\$55.02	\$55.00	\$45.78
1990	42	214,557	14,003,285	65.27	55.00	39.64
1991	37	136,770	7,472,265	54.63	55.00	50.46
1992	39	147,313	7,929,250	53.83	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	73.11
2003	64	299,132	25,806,454	86.27		76.10

SUBCOMMITTEE'S RECOMMENDED PRICE FOR THE 2003 NEEDS STUDY IS \$70.00
PER SQ. FT.

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BRIDGE COST

150-499 FEET

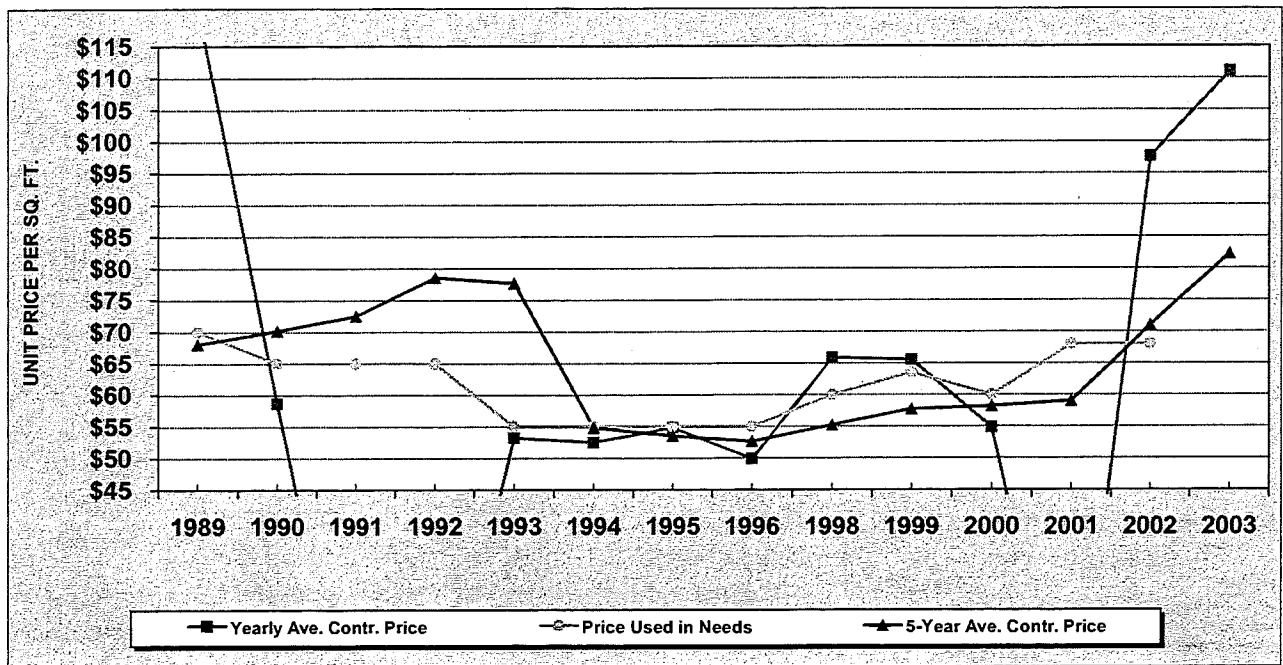


NEEDS YEAR	NUMBER OF PROJECTS	DECK AREA	TOTAL COST	YEARLY AVERAGE CONTRACT PRICE	PRICE USED IN NEEDS	5-YEAR AVERAGE CONTRACT PRICE
1989	11	116,378	\$6,796,566	\$58.40	\$60.00	\$29.07
1990	25	418,376	26,483,631	63.30	60.00	41.73
1991	27	368,709	22,167,571	60.12	60.00	54.00
1992	24	331,976	17,582,542	52.96	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	66.69
2003	40	667,548	57,671,538	86.39		72.12

SUBCOMMITTEE'S RECOMMENDED PRICE FOR THE 2003 NEEDS STUDY IS \$70.00
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	70.99
2003	10	741,892	82,381,125	111.04		82.27

SUBCOMMITTEE'S RECOMMENDED PRICE FOR THE 2003 NEEDS STUDY IS \$70.00
Per Sq. Ft.

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
		1	317.19	5,423	2,250	1,750
1990	1	2	433.38	8,536	4,000	3,000
1991	0	0			4,000	3,000
1992	1	1	114.19	7,619	4,000	3,000
1993	1	1	181.83	7,307	5,000	4,000
1994	0	0			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		
		1	130.08	10,569	9,000	7,500
2001	1	1	163.00	14,182	9,000	7,500
2002	0					
2003	0					

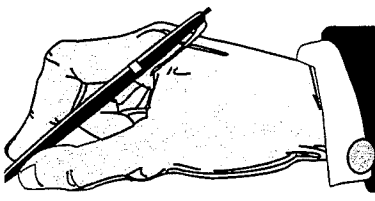
SUBCOMMITTEE'S RECOMMENDED PRICE FOR THE 2003 NEEDS STUDY IS \$9,300
PER LINEAL FOOT FOR THE FIRST TRACK

SUBCOMMITTEE'S RECOMMENDED PRICE FOR THE 2003 NEEDS STUDY IS \$7,750
PER LIN. FT. FOR ADDITIONAL TRACKS

OTHER



TOPICS



NOTES and COMMENTS

Lined area for notes and comments.

CITY GENERAL FUND ADVANCES

As of March 31, 2003

Fund 250	
2002 MSAS year end construction balance available	\$ 75,230,972.90
2003 Construction Allotment	82,974,496.00
Total available	158,205,468.90
Less: Estimated CY 2003 expenditures (updated quarterly)	93,000,000.00
Balance	65,205,468.90
Less: amount required in account	(20,000,000.00)
Maximum amount for advance in CY 2002	45,205,468.90
Outstanding reserve amount	(828,668.40)
Amount advanced to date (listed below)	(\$4,437,900.88)
Balance available to advance	<u>\$ 39,938,899.62</u>

CITY NAME	RESOLUTION AMOUNT	YEAR	REQUEST TO RESERVE ADVANCE FUNDING	ADVANCE AMOUNT	REPAID AMOUNT	BALANCE OF ADVANCE AVAILABLE	COMMENTS
Alexandria	\$650,000	2003			0.00	\$0.00	
Bemidji	650,000.00	2002	\$650,000	\$370,813	\$297,872	\$72,941	
Brooklyn Park	1,263,417.00	2003		1,263,417.00	0.00	1,263,417.00	
Columbia Heights	422,713.00	2002	422,713.00	370,051.24	317,389.48	52,661.76	
Columbia Heights	9,000.00	2003	9,000.00	9,000.00	0.00	9,000.00	
Coon Rapids	700,000.00	2003	700,000.00	371,331.60	0.00	371,331.60	
Elk River	750,000.00	2003			0.00	0.00	
New Brighton	750,000.00	2003			0.00	0.00	
Otsego	750,000.00	2003			0.00	0.00	
Lakeville	1,446,110.00	2003	1,446,110.00	1,446,110.00	0.00	1,446,110.00	
Oakdale	1,000,000.00	2003			0.00	0.00	
Red Wing	750,000.00	2002		476,098.37	202,196.74	273,901.63	
Sartell	750,000.00	2001	625,599.00	312,281.00	187,309.00	124,972.00	
Sartell	726,871.00	2003			0.00	0.00	
St. Anthony	500,000.00	2000	500,000.00	193,586.37	110,632.64	82,953.73	
White Bear Lake	500,000.00	2003	500,000.00		0.00	0.00	
Woodbury	1,700,000.00	2002		1,405,335.78	664,723.31	740,612.47	
TOTAL	\$12,668,111.00		\$4,853,422.00	\$6,218,024.12	\$1,780,123.24	\$4,437,900.88	

JANUARY 2003 BOOK GENERAL FUND ADVANCES (01_10_03) XLS

MSAS GENERAL FUND ADVANCES

Revised June 1999 November 2000 November 2002

Guidelines

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 all cities up to 3 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 allocation:

Cities with a construction allotment of **\$1,000,000** or less can now advance up to three times its previous years construction allotment or **\$1,000,000**, 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 years 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)**

Cities may advance for Federal Projects that are programmed by the ATP in the STIP. 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. (Fig. J 5-892.563 in the State Aid manual)

Clarification of Guidelines

The maximum Municipal State Aid construction dollars that can be advanced 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 decrease 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 (Fig. I 5-892.563).** 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 in that. 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 submitted by the city, the amount required to process the payment (up to the resolution/allowable amount) will be added to the city's account. The payment request is verified by the form 'Report of State Aid Contract'.

To "reserve" the funds, the City Engineer may submit a "Request to Reserve Advanced Funding" form (Fig. G 5-892.563) up to 8 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 eight weeks in advance of the payment request.

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 (Fig. J 5-892.563). 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.

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

If the General Fund runs out of funds to advance, a city has to submit a new city council resolution if more funds don't come available until the following year.

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

All cities will have the option of up to 3 years to payback the State Aid advance.

Advances will be allowed for Federal Projects that are programmed by the ATP in the STIP.

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. Does not include State Aid Advances.

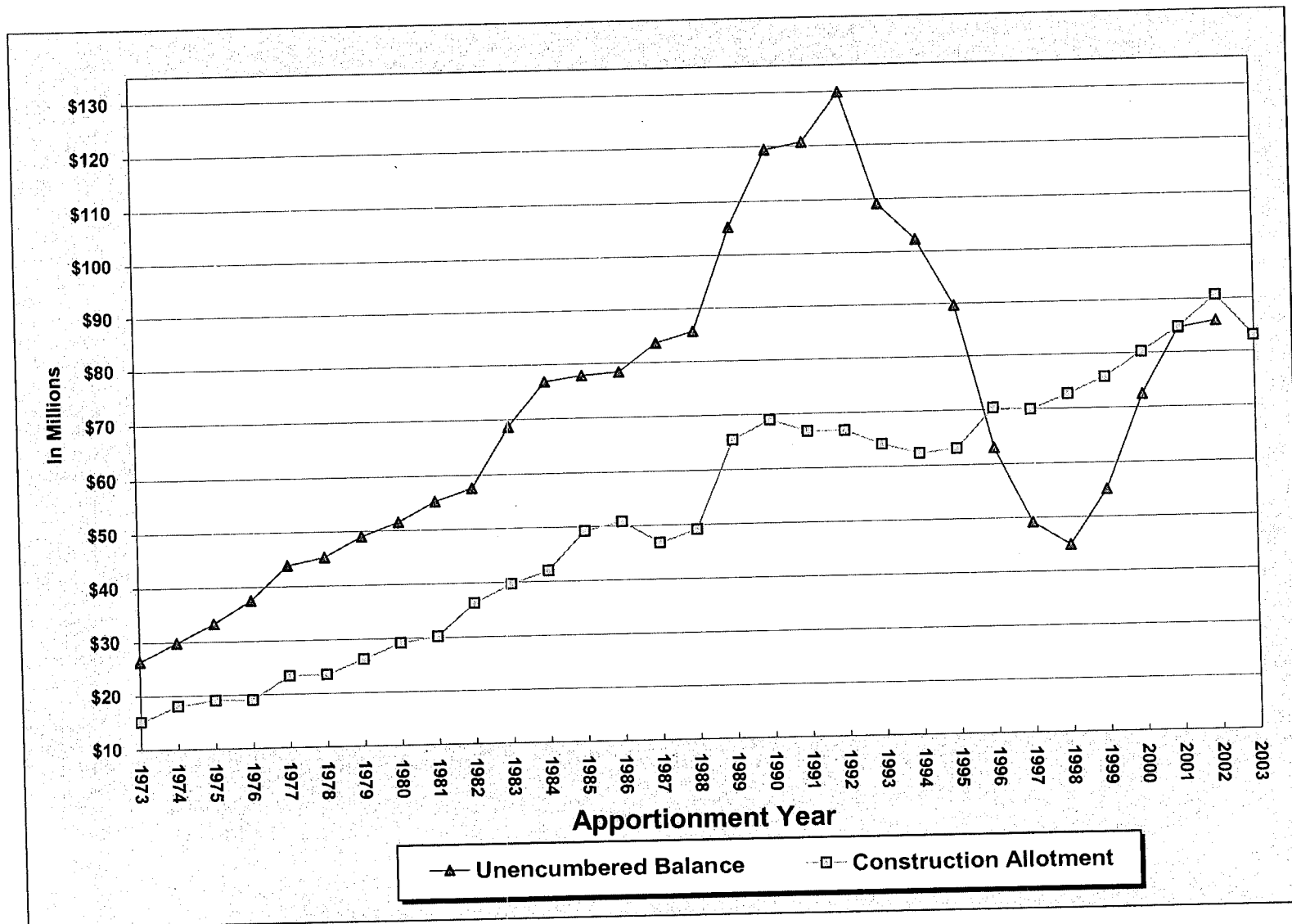
App. Year		No. of Municipalities	Needs Mileage	Unencumbered Construction Balance	Construction Allotment	Amount Spent on Construction Projects	Ratio of Construction Balance to Construction Allotment	Ratio of Amount spent to Amount Received
1973		94	1,580.45	\$26,333,918	\$15,164,273	\$12,855,250	1.7366	0.8477
1974		95	1,608.06	29,760,552	18,052,386	14,625,752	1.6486	0.8102
1975		99	1,629.30	33,239,840	19,014,171	15,534,883	1.7482	0.8170
1976		101	1,718.92	37,478,614	18,971,282	14,732,508	1.9755	0.7766
1977		101	1,748.55	43,817,240	23,350,429	17,011,803	1.8765	0.7285
1978		104	1,807.94	45,254,560	23,517,393	22,080,073	1.9243	0.9389
1979		106	1,853.71	48,960,135	26,196,935	22,491,360	1.8689	0.8585
1980		106	1,889.03	51,499,922	29,082,865	26,543,078	1.7708	0.9127
1981		106	1,933.64	55,191,785	30,160,696	26,468,833	1.8299	0.8776
1982		105	1,976.17	57,550,334	36,255,443	33,896,894	1.5874	0.9349
1983		106	2,022.37	68,596,586	39,660,963	28,614,711	1.7296	0.7215
1984		106	2,047.23	76,739,685	41,962,145	33,819,046	1.8288	0.8059
1985		107	2,110.52	77,761,378	49,151,218	48,129,525	1.5821	0.9792
1986		107	2,139.42	78,311,767	50,809,002	50,258,613	1.5413	0.9892
1987	*	107	2,148.07	83,574,312	46,716,190	41,453,645	1.7890	0.8874
1988		108	2,171.89	85,635,991	49,093,724	47,032,045	1.7443	0.9580
1989		109	2,205.05	105,147,959	65,374,509	45,862,541	1.6084	0.7015
1990		112	2,265.64	119,384,013	68,906,409	54,670,355	1.7326	0.7934
1991		113	2,330.30	120,663,647	66,677,426	65,397,792	1.8097	0.9808
1992		116	2,376.79	129,836,670	66,694,378	57,521,355	1.9467	0.8625
1993		116	2,410.53	109,010,201	64,077,980	84,904,449	1.7012	1.3250
1994		117	2,471.04	102,263,355	62,220,930	68,967,776	1.6436	1.1084
1995		118	2,526.39	89,545,533	62,994,481	75,712,303	1.4215	1.2019
1996		119	2,614.71	62,993,508	70,289,831	96,841,856	0.8962	1.3778
1997	**	122	2,740.46	49,110,546	69,856,915	83,739,877	0.7030	1.1987
1998		125	2,815.99	44,845,521	72,626,164	76,891,189	0.6175	1.0587
1999		126	2,859.05	55,028,453	75,595,243	65,412,311	0.7279	0.8653
2000		127	2,910.87	72,385,813	80,189,255	62,831,895	0.9027	0.7835
2001		129	2,972.16	84,583,631	84,711,549	72,513,731	0.9985	0.8560
2002		130	3,020.39	85,853,138	90,646,885	89,377,378	0.9471	0.9860
2003		131	3,080.67		82,974,496			

* 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.

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RELATIONSHIP OF CONSTRUCTION BALANCE TO CONSTRUCTION ALLOTMENT



EXCESS BALANCE ADJUSTMENT

to take affect in January 2004 allocation

At the 2002 Fall Screening Board Meeting, the Screening Board passed a motion to implement an excess balance adjustment for cities whose construction balance is more than 3 times their annual construction allotment. This negative needs adjustment will take effect for the 2004 allotment.

The following resolution was approved without opposition:

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 reduced 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.

If the adjustment had been in effect this year, the following cities would have received a negative adjustment to their Needs of 1 times their December 31, 2002 construction balance for a total adjustment of \$19,949,451.

Brainerd	\$1,614,378	Prior Lake	\$1,636,306
Champlin	\$1,611,170	Robbinsdale	\$1,179,332
Chanhassen	\$2,033,691	Shorewood	\$1,926,362
East Bethel	\$1,183,148	Willmar	\$1,875,346
Edina	\$3,586,041	Worthington	\$1,294,136
Lino Lakes	\$2,009,541		

This is an example. This adjustment will not take affect until the January 2004 allocation.

2003 APPORTIONMENT RANKINGS

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

Municipality	2002 Total Needs Mileage	2003 Population Apportionment Per Need Mile
Falcon Heights	2.54	\$35,932
Minneapolis	203.35	30,775
Hopkins	9.32	30,273
St. Paul	165.16	28,448
New Hope	12.70	26,930
Vadnais Heights	8.32	25,853
Waseca	6.42	24,748
New Brighton	14.92	24,353
Columbia Heights	12.53	24,187
Coon Rapids	41.82	24,170
West St. Paul	13.31	24,115
Eagan	43.94	23,935
Oakdale	18.39	23,930
Northfield	12.06	23,746
St. Anthony	5.63	23,538
Anoka	12.64	23,406
St. Louis Park	31.19	23,376
Shoreview	18.57	23,230
Brooklyn Park	48.08	23,156
Robbinsdale	10.10	22,871
Richfield	25.08	22,745
Stewartville	3.99	22,546
Burnsville	44.05	22,440
Rochester	65.33	22,364
Brooklyn Center	21.56	22,137
Apple Valley	35.04	21,752
Champlin	17.01	21,618
Waconia	5.53	21,591
Eden Prairie	42.66	21,340
Arden Hills	7.41	21,323
Owatonna	17.56	21,224

Municipality	2002 Total Needs Mileage	2003 Money Needs Apportionment Per Need Mile
Crookston	11.64	\$32,341
St. Paul	165.16	27,344
Minneapolis	203.35	25,814
Thief River Falls	14.92	24,241
Fairmont	19.49	23,908
Bloomington	75.06	23,837
St. Francis	9.81	23,747
Woodbury	44.96	23,704
New Hope	12.70	22,935
Maple Grove	48.62	22,801
Mound	8.05	22,275
Faribault	22.45	22,112
Farmington	13.85	21,921
Austin	27.70	21,225
Big Lake	6.37	21,156
New Ulm	15.33	21,132
Maplewood	31.71	21,103
Moorhead	29.74	20,926
Little Canada	10.49	20,909
Stewartville	3.99	20,726
Glencoe	6.98	20,567
Richfield	25.08	20,457
Orono	12.58	20,408
Lakeville	50.60	20,363
La Crescent	5.66	20,304
Duluth	112.18	20,176
St. Anthony	5.63	20,114
Columbia Heights	12.53	20,026
North Mankato	13.38	19,748
Hopkins	9.32	19,602
Owatonna	17.56	19,557

Municipality	2002 Total Needs Mileage	2003 Total Apportionment Per Need Mile
Minneapolis	203.35	\$56,589
St. Paul	165.16	55,792
Hopkins	9.32	49,875
New Hope	12.70	49,865
Falcon Heights	2.54	48,427
Columbia Heights	12.53	44,213
Crookston	11.64	43,852
St. Anthony	5.63	43,651
Stewartville	3.99	43,271
Richfield	25.08	43,201
Waseca	6.42	42,823
Bloomington	75.06	42,421
St. Louis Park	31.19	42,010
Mound	8.05	41,484
Woodbury	44.96	41,221
Brooklyn Center	21.56	41,051
Owatonna	17.56	40,781
Northfield	12.06	40,542
Anoka	12.64	40,505
Maple Grove	48.62	40,412
Apple Valley	35.04	39,859
Rochester	65.33	39,758
Coon Rapids	41.82	39,484
Vadnais Heights	8.32	39,243
Maplewood	31.71	39,197
Burnsville	44.05	38,943
Big Lake	6.37	38,860
Moorhead	29.74	38,732
Eden Prairie	42.66	38,117
Crystal	17.88	38,074
Inver Grove Heights	23.86	38,067

Municipality	2002 Total Needs Mileage	2003 Population Apportionment Per Need Mile
Crystal	17.88	\$20,809
Inver Grove Heights	23.86	20,668
Winona	21.75	20,379
Plymouth	54.72	19,929
Chaska	15.13	19,869
White Bear Lake	20.35	19,777
South St. Paul	16.82	19,618
Roseville	28.70	19,347
Edina	40.27	19,278
Mound	8.05	19,209
Spring Lake Park	5.82	19,046
Blaine	40.30	18,669
Bloomington	75.06	18,584
Mounds View	11.26	18,520
Fridley	24.81	18,109
Maplewood	31.71	18,094
North St. Paul	10.95	17,818
Moorhead	29.74	17,806
Big Lake	6.37	17,704
Maple Grove	48.62	17,611
Woodbury	44.96	17,517
Mankato	30.57	17,496
Prior Lake	15.78	17,058
St. Cloud	58.15	16,954
Minnetonka	49.89	16,858
Waite Park	6.48	16,770
St. Paul Park	4.96	16,755
Stillwater	15.45	16,503
Worthington	11.39	16,208
Albert Lea	18.74	16,035
Cottage Grove	31.43	16,004
Hastings	19.27	15,705
Farmington	13.85	15,682
Chanhausen	22.27	15,497
Sauk Rapids	11.43	15,492
Faribault	22.45	15,421
Shakopee	23.61	15,374
Little Canada	10.49	15,300

Municipality	2002 Total Needs Mileage	2003 Money Needs Apportionment Per Need Mile
St. Paul Park	4.96	\$19,303
Buffalo	13.87	19,203
Brooklyn Center	21.56	18,914
Grand Rapids	11.40	18,846
St. Louis Park	31.19	18,634
Little Falls	15.98	18,517
Forest Lake	20.59	18,490
Red Wing	23.82	18,419
St. Peter	13.88	18,184
Hutchinson	16.65	18,167
Apple Valley	35.04	18,107
Waseca	6.42	18,075
Redwood Falls	7.87	18,073
Marshall	15.48	18,059
Mankato	30.57	17,696
Sartell	13.33	17,642
Albert Lea	18.74	17,541
Virginia	15.93	17,470
Worthington	11.39	17,448
Litchfield	8.58	17,408
Inver Grove Heights	23.86	17,399
Rochester	65.33	17,395
Crystal	17.88	17,265
Plymouth	54.72	17,198
Anoka	12.64	17,099
Northfield	12.06	16,796
Eden Prairie	42.66	16,777
International Falls	8.06	16,757
St. Cloud	58.15	16,698
Golden Valley	23.57	16,557
Burnsville	44.05	16,504
Minnetonka	49.89	16,436
Lino Lakes	20.55	16,262
Fergus Falls	24.32	16,220
Mounds View	11.26	16,157
Cottage Grove	31.43	16,154
Hermantown	14.15	16,027
East Grand Forks	15.19	15,698

Municipality	2002 Total Needs Mileage	2003 Total Apportionment Per Need Mile
Farmington	13.85	\$37,602
Faribault	22.45	37,534
New Brighton	14.92	37,415
Plymouth	54.72	37,127
Little Canada	10.49	36,209
St. Paul Park	4.96	36,058
West St. Paul	13.31	36,023
New Ulm	15.33	35,636
Brooklyn Park	48.08	35,477
Winona	21.75	35,391
Waconia	5.53	35,348
Oakdale	18.39	35,253
Mankato	30.57	35,192
Austin	27.70	35,028
Lakeville	50.60	34,829
La Crescent	5.66	34,790
Mounds View	11.26	34,677
Eagan	43.94	34,581
North Mankato	13.38	34,483
Robbinsdale	10.10	34,396
Chaska	15.13	34,231
Arden Hills	7.41	34,163
South St. Paul	16.82	34,076
Edina	40.27	33,936
Roseville	28.70	33,755
Worthington	11.39	33,656
St. Cloud	58.15	33,652
Albert Lea	18.74	33,576
Glencoe	6.98	33,497
Thief River Falls	14.92	33,462
Minnetonka	49.89	33,294
Fairmont	19.49	33,095
Duluth	112.18	32,761
St. Francis	9.81	32,634
White Bear Lake	20.35	32,524
Shoreview	18.57	32,291
Cottage Grove	31.43	32,157
Buffalo	13.87	31,995

Municipality	2002 Total Needs Mileage	2003 Population Apportionment Per Need Mile
Monticello	9.04	\$15,193
Mahtomedi	8.62	15,136
Shorewood	8.24	14,967
Savage	24.92	14,848
North Mankato	13.38	14,735
New Ulm	15.33	14,504
La Crescent	5.66	14,486
Lakeville	50.60	14,465
Golden Valley	23.57	14,150
Lino Lakes	20.55	13,833
Austin	27.70	13,803
Brainerd	16.19	13,780
International Falls	8.06	13,610
Marshall	15.48	13,535
Mendota Heights	14.16	13,249
Hutchinson	16.65	13,079
Glencoe	6.98	12,930
Lake City	6.50	12,843
Buffalo	13.87	12,792
Willmar	23.91	12,689
Sartell	13.33	12,682
Duluth	112.18	12,585
Litchfield	8.58	12,538
Andover	36.72	12,225
Bemidji	16.24	12,161
Forest Lake	20.59	11,692
Crookston	11.64	11,511
St. Peter	13.88	11,505
Redwood Falls	7.87	11,350
Grand Rapids	11.40	11,323
Red Wing	23.82	11,131
Montevideo	8.25	10,868
Morris	8.11	10,459
Ramsey	29.56	10,329
Chisholm	7.99	10,235
Rosemount	24.67	10,124
Lake Elmo	11.42	10,077
Orono	12.58	9,871

Municipality	2002 Total Needs Mileage	2003 Money Needs Apportionment Per Need Mile
Brainerd	16.19	\$15,594
Cloquet	20.14	15,438
Coon Rapids	41.82	15,314
Shakopee	23.61	15,019
Winona	21.75	15,011
Chisholm	7.99	15,000
Lake City	6.50	14,924
Monticello	9.04	14,750
Edina	40.27	14,657
Elk River	30.42	14,571
Ham Lake	26.51	14,554
Prior Lake	15.78	14,468
South St. Paul	16.82	14,459
Shorewood	8.24	14,455
Roseville	28.70	14,408
Cambridge	11.07	14,387
Chaska	15.13	14,361
Alexandria	15.73	14,097
Willmar	23.91	13,972
Otsego	15.93	13,915
Dayton	9.28	13,870
Andover	36.72	13,787
Waconia	5.53	13,756
North St. Paul	10.95	13,660
Savage	24.92	13,594
St. Michael	17.60	13,555
Vadnais Heights	8.32	13,390
Hibbing	51.31	13,333
Rosemount	24.67	13,290
New Brighton	14.92	13,061
Blaine	40.30	13,029
Bemidji	16.24	13,016
Arden Hills	7.41	12,841
Sauk Rapids	11.43	12,832
White Bear Lake	20.35	12,747
Detroit Lakes	12.41	12,680
Falcon Heights	2.54	12,495
Stillwater	15.45	12,459

Municipality	2002 Total Needs Mileage	2003 Total Apportionment Per Need Mile
Blaine	40.30	\$31,699
Marshall	15.48	31,594
Prior Lake	15.78	31,526
North St. Paul	10.95	31,479
Hutchinson	16.65	31,246
Golden Valley	23.57	30,708
Shakopee	23.61	30,393
International Falls	8.06	30,367
Sartell	13.33	30,325
Orono	12.58	30,279
Forest Lake	20.59	30,182
Grand Rapids	11.40	30,169
Lino Lakes	20.55	30,095
Litchfield	8.58	29,946
Monticello	9.04	29,943
Champlin	17.01	29,782
St. Peter	13.88	29,689
Red Wing	23.82	29,551
Redwood Falls	7.87	29,422
Shorewood	8.24	29,422
Brainerd	16.19	29,374
Waite Park	6.48	29,058
Stillwater	15.45	28,962
Savage	24.92	28,442
Spring Lake Park	5.82	28,382
Sauk Rapids	11.43	28,324
Hastings	19.27	28,129
Lake City	6.50	27,767
Fridley	24.81	27,403
Mahtomedi	8.62	27,009
Virginia	15.93	26,872
Willmar	23.91	26,661
Chanhassen	22.27	26,544
Little Falls	15.98	26,539
Andover	36.72	26,012
Fergus Falls	24.32	25,397
Hermantown	14.15	25,389
Chisholm	7.99	25,235

Municipality	2002 Total Needs Mileage	2003 Population Apportionment Per Need Mile
Detroit Lakes	12.41	\$9,862
Alexandria	15.73	9,615
St. Michael	17.60	9,539
Virginia	15.93	9,402
Hermantown	14.15	9,362
Elk River	30.42	9,345
Cloquet	20.14	9,234
Thief River Falls	14.92	9,222
Fairmont	19.49	9,187
Fergus Falls	24.32	9,177
St. Francis	9.81	8,887
Dayton	9.28	8,813
Cambridge	11.07	8,444
East Grand Forks	15.19	8,113
Ham Lake	26.51	8,089
Little Falls	15.98	8,022
Baxter	12.77	7,454
Otsego	15.93	7,156
Hugo	16.79	7,009
East Bethel	26.90	6,736
North Branch	21.93	6,395
Corcoran	14.80	6,261
Oak Grove	19.50	5,831
Hibbing	51.31	5,442
Average		\$16,057

Municipality	2002 Total Needs Mileage	2003 Money Needs Apportionment Per Need Mile
Hastings	19.27	\$12,423
Ramsey	29.56	12,352
Brooklyn Park	48.08	12,320
Waite Park	6.48	12,288
Baxter	12.77	12,124
West St. Paul	13.31	11,908
Mahtomedi	8.62	11,873
Hugo	16.79	11,783
North Branch	21.93	11,773
Montevideo	8.25	11,588
Robbinsdale	10.10	11,525
Morris	8.11	11,524
Oakdale	18.39	11,323
Chanhassen	22.27	11,047
Eagan	43.94	10,646
Mendota Heights	14.16	10,510
East Bethel	26.90	9,429
Corcoran	14.80	9,420
Spring Lake Park	5.82	9,337
Fridley	24.81	9,294
Shoreview	18.57	9,061
Lake Elmo	11.42	8,311
Champlin	17.01	8,164
Oak Grove	19.50	7,601
		\$16,316

Municipality	2002 Total Needs Mileage	2003 Total Apportionment Per Need Mile
Bemidji	16.24	\$25,177
Cloquet	20.14	24,672
Elk River	30.42	23,916
East Grand Forks	15.19	23,812
Mendota Heights	14.16	23,759
Alexandria	15.73	23,712
Rosemount	24.67	23,414
St. Michael	17.60	23,093
Cambridge	11.07	22,831
Dayton	9.28	22,683
Ramsey	29.56	22,681
Ham Lake	26.51	22,643
Detroit Lakes	12.41	22,542
Montevideo	8.25	22,456
Morris	8.11	21,983
Otsego	15.93	21,071
Baxter	12.77	19,578
Hugo	16.79	18,792
Hibbing	51.31	18,775
Lake Elmo	11.42	18,388
North Branch	21.93	18,168
East Bethel	26.90	16,166
Corcoran	14.80	15,680
Oak Grove	19.50	13,432
		\$32,373

CY 2003 Local Road Research Board Program

INV	TITLE	PROJECT TOTAL	2002	2003	2004
645	Implementation of Research	Ongoing	\$ 150,000	\$150,000	<i>\$150,000</i>
668	Technology Transfer Center, U of M - Base	Ongoing	150,000	150,000	<i>150,000</i>
	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	<i>127,500</i>
	Minnesota Maintenance Research Expos	Ongoing	20,000	20,000	<i>20,000</i>
	Transportation Student Development	Ongoing	4,000	4,000	<i>4,000</i>
676	Materials & Road Research -- Mn/ROAD Facility Support- \$500,000, Staff Support-\$60,000	Ongoing	560,000	560,000	<i>560,000</i>
745	Library Services for Local Governments	Ongoing	60,000	60,000	<i>60,000</i>
768	Geosynthetics in Roadway Design	30,000	3,000	3,000	<i>3,000</i>
770	Repair of Rubberized Crack Filler/Joint Filler	90,000	25,000	25,000	<i>0</i>
773	Environmental Effect of the Use of Shredded Tires As Use for Light-Weight Fills	100,000	20,000	20,000	<i>0</i>
777	Statewide Implications of Transportation Financing Reform: Impacts on Rural and Other Low-Traffic Roads	199,996	100,000	38,000	<i>0</i>
784	Guidelines for Using Rumble Strips	149,659	59,000	90,659	<i>0</i>
785	Cost/Benefit Study of Increased Winter and Spring Load Restrictions	200,000	100,000	100,000	<i>0</i>
786	ADT for 10 Ton Pavement and Guardrails	20,000	10,000	10,000	<i>0</i>
787	Risk Assessment Tool for Selection of Erosion Control Practices	50,000	25,000	25,000	<i>0</i>
789	Traffic Calming - Implementation Procedures and Tools-	40,000	20,000	20,000	<i>0</i>
791	Safety & Operational Characteristics of Two-Way Left Turn Lanes	25,732	0	25,732	<i>0</i>
792	Pavement Research Institute Director	300,000	0	60,000	<i>60,000</i>
793	Design & Construction of Low Volume Roads Training	56,000	0	37,000	<i>19,000</i>
794	Imprvmt. & Dev. Of Mn/DOT DCP Specs for Aggregate Base & Sub-base Containing Recycled Bit. & Concrete for Mn/PAVE	46,200		46,200	<i>0</i>
795	Environmental Considerations for Using Fly Ash in Unbound Paving Materials	56,000	0	56,000	<i>0</i>
796	Effectiveness of All Red Clearance Time on Intersection Accidents and Violation Trends	49,978	0	49,978	<i>0</i>
797	Urbanization of MN's Countryside: 2000-2005 - Future Geographics & Trans. Impacts	40,000	0	10,000	<i>20,000</i>
798	Prelim. Lab Investigation of a Commerical Enzyme Solution As a Soil Stabilizer	59,000	0	59,000	<i>0</i>
799	Impact of Alternative Storm Water Management Approaches on Highway Infrastructure	121,896	0	63,375	<i>58,521</i>
800	Cost Effectiveness Analysis of Storm Water Runoff Best Management Practices	98,000	0	49,000	<i>49,000</i>
801	Adaptation of Mechanistic-Empirical 2003 Guide for Design of MN Low-Volume PCC	25,000	0	12,500	<i>12,500</i>
802	Perf. Of Pvm. Crack Sealants Beneath Bituminous Overlays	60,000	0	48,000	<i>12,000</i>
803	Determ. of Optimum Time for Applic. Of Surface Treatments to Asphalt Concrete	28,400	0	28,400	<i>0</i>
804	Determ. of Low-Temp. Fracture Toughness & Fracture Energy of Plain & Polymer Modified Asphalt Mixtures	59,800	0	59,800	<i>0</i>
805	Safety Impacts of Street Lighting at Isolated Rural Intersections - Phase II	51,180	0	17,060	<i>34,120</i>
806	Snow & Ice Maint Operation Field Guide & Accompanying Training Course	24,000	0	24,000	<i>0</i>
998	Applied Research Program	Ongoing	0	70,000	<i>70,000</i>
999	Program Administration	Ongoing	245,000	225,000	<i>225,000</i>
	TOTALS		\$1,678,500	\$2,344,204	<i>\$1,634,641</i>

Italicized = Anticipated

Bold = Funding Approved or New Project in C.Y. 2003 Program

C.Y. 2003 SUMMARY:

Funds Allotted for 2003	\$2,363,346
Unprogrammed Funds Carried over from 2002	78,573
Total Funds available for 2003	\$2,441,919
Total 2003 Commitments, Carryover & Continuation Projects *	\$2,346,207
CY 2003 Funds Available for Programming	\$95,712

City	\$582,170
County	1,781,176
Total	\$2,363,346

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

Metro District

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

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

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 2003 and updated in the needs in 2004

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, 2003

Minor Language Revisions in October, 2002

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 \$487,286 (not to exceed 1/2 of 1% of the 2002 MSAS Apportionment sum of \$116,434,082) shall be set aside from the 2003 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)

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 up to State Aid Standards will be permitted in subsequent Needs for 20 years from the date of the letting or encumbrance of force account funds. For the purposes of the Needs Study, these shall be called Widening Needs. At the end of the 20 year period, 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, and June 1993)

That all requests for revisions to the Municipal State Aid System must be received by the District State Aid Engineer by March first. 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. Any requests for revisions to the Municipal State Aid Systems received by the District State Aid Engineer after March first will be included in the following year's Needs Study.

One Way Street Mileage - June 1983 (Revised Oct. 1984, 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)			\$90,000 per Acre
Grading (Excavation)			\$3.67 per Cu. Yd.
Base:			
	Class 5 Gravel	Spec. #2211	\$7.05 per Ton
	Bituminous	Spec. #2350	
Surface:			
	Gravel	Spec. #2118	\$5.23 per Ton
	Bituminous	Spec. #2350	\$30.00 per Ton
Shoulders:			
	Gravel	Spec. #2221	\$13.00 per Ton
Miscellaneous:			
	Storm Sewer Construction		\$254,200 per Mile
	Storm Sewer Adjustment		\$81,600 per Mile
	Special Drainage (rural segments only)		\$37,400 per Mile
	Street Lighting		\$78,000 per Mile
	Curb & Gutter Construction		\$7.70 per Lineal Foot

	Sidewalk Construction		\$22.50 per Sq. Yd.
	Project Development		20%
Removal Items:			
	Curb & Gutter		\$2.52 per Lineal Foot
	Sidewalk		\$5.35 per Sq. Yd.
	Concrete Pavement		\$5.25 per Sq. Yd.
	Tree Removal		\$220.00 per Unit

Traffic Signal Needs Based On Projected Traffic (every segment)

Projected Traffic	Percentage X	Unit Price =	Needs Per Mile
0 - 4,999	25%	\$120,000	\$30,000 per Mile
5,000 - 9,999	50%	\$120,000	\$60,000 per Mile
10,000 and Over	100%	\$120,000	\$120,000 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	\$68.00 per Sq. Ft.
Bridges 150 to 499 Feet long	\$68.00 per Sq. Ft.
Bridges 500 Feet and Over	\$68.00 per Sq. Ft.

Railroad Over Highway	
One Track	\$9,000 per Linear Foot
Each Additional Track	\$7,500 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	\$1,450 per Mile	\$2,400 per Mile
Parking Lanes: Segment length times number of parking lanes times cost per mile	\$1,450 per Mile	\$1,450 per Mile
Median Strip: Segment length times cost per mile	\$480 per Mile	\$950 per Mile
Storm Sewer: Segment length times cost per mile	\$480 per Mile	\$480 per Mile
Traffic Signals: Number of traffic signals times cost per signal	\$480 per Unit	\$480 per Unit
Minimum allowance per mile is determined by segment length times cost per mile.	\$4,800 per Mile	\$4,800 per Mile

NEEDS ADJUSTMENTS

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

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 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)

That for the determination of Apportionment Needs, the amount of the unencumbered construction fund balance as of December 31st of the current year shall be deducted from the 25-year total Needs of each individual municipality.

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.

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.