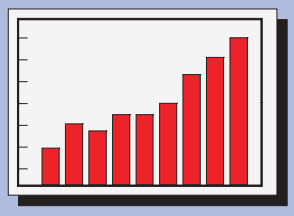
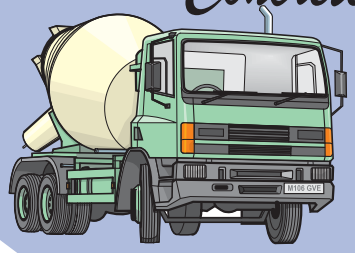
2007 MUNICIPAL SCREENING BOARD DATA

Unit Cost Index



Concrete vs Bituminous



June 2007

Minnesota Department of Transportation

Memo

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

Office Tel.: 651 366-3815
Fax: 651 366-3801

Date: **May 8, 2007**

To: **Municipal Engineers**
City Clerks

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

Subject: 2007 Municipal Screening Board Data booklet

Enclosed is a copy of the June 2007 "Municipal Screening Board Data" booklet.

The data included in this report will be used by the Municipal Board at its May 30 and May 31, 2007 meeting to establish unit prices for the 2007 Needs Study that is used to compute the 2008 apportionment. The Board will also review other recommendations of the Needs Study Subcommittee and the Unencumbered Construction Funds Subcommittee as outlined in their minutes.

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) 366-3815.

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

The State Aid Program Mission Study

Mission Statement:

The purpose of the state-aid program is to provide resources, from the Highway Users Tax Distribution Fund, to assist local governments with the construction and maintenance of community-interest highways and streets on the state-aid system.

Program Goals:

The goals of the state-aid program are to provide users of secondary highways and streets with:

- Safe highways and streets;
- Adequate mobility and structural capacity on highways and streets; and
- An integrated transportation network.

Key Program Concepts:

Highways and streets of community interest are those highways and streets that function as an integrated network and provide more than only local access. Secondary highways and streets are those routes of community interest that are not on the Trunk Highway system.

A community interest highway or street may be selected for the state-aid system if it:

A. Is projected to carry a relatively heavier traffic volume or is functionally classified as collector or arterial

B. Connects towns, communities, shipping points, and markets within a county or in adjacent counties; provides access to rural churches, schools, community meeting halls, industrial areas, state institutions, and recreational areas; serves as a principal rural mail route and school bus route; or connects the points of major traffic interest, parks, parkways, or recreational areas within an urban municipality.

C. Provides an integrated and coordinated highway and street system affording, within practical limits, a state-aid highway network consistent with projected traffic demands.

The function of a road may change over time requiring periodic revisions to the state-aid highway and street network.

State-aid funds are the funds collected by the state according to the constitution and law, distributed from the Highway Users Tax Distribution Fund, apportioned among the counties and cities, and used by the counties and cities for aid in the construction, improvement and maintenance of county state-aid highways and municipal state-aid streets.

The *Needs* component of the distribution formula estimates the relative cost to build county highways or build and maintain city streets designated as state-aid routes.

2007 MUNICIPAL SCREENING BOARD DATA

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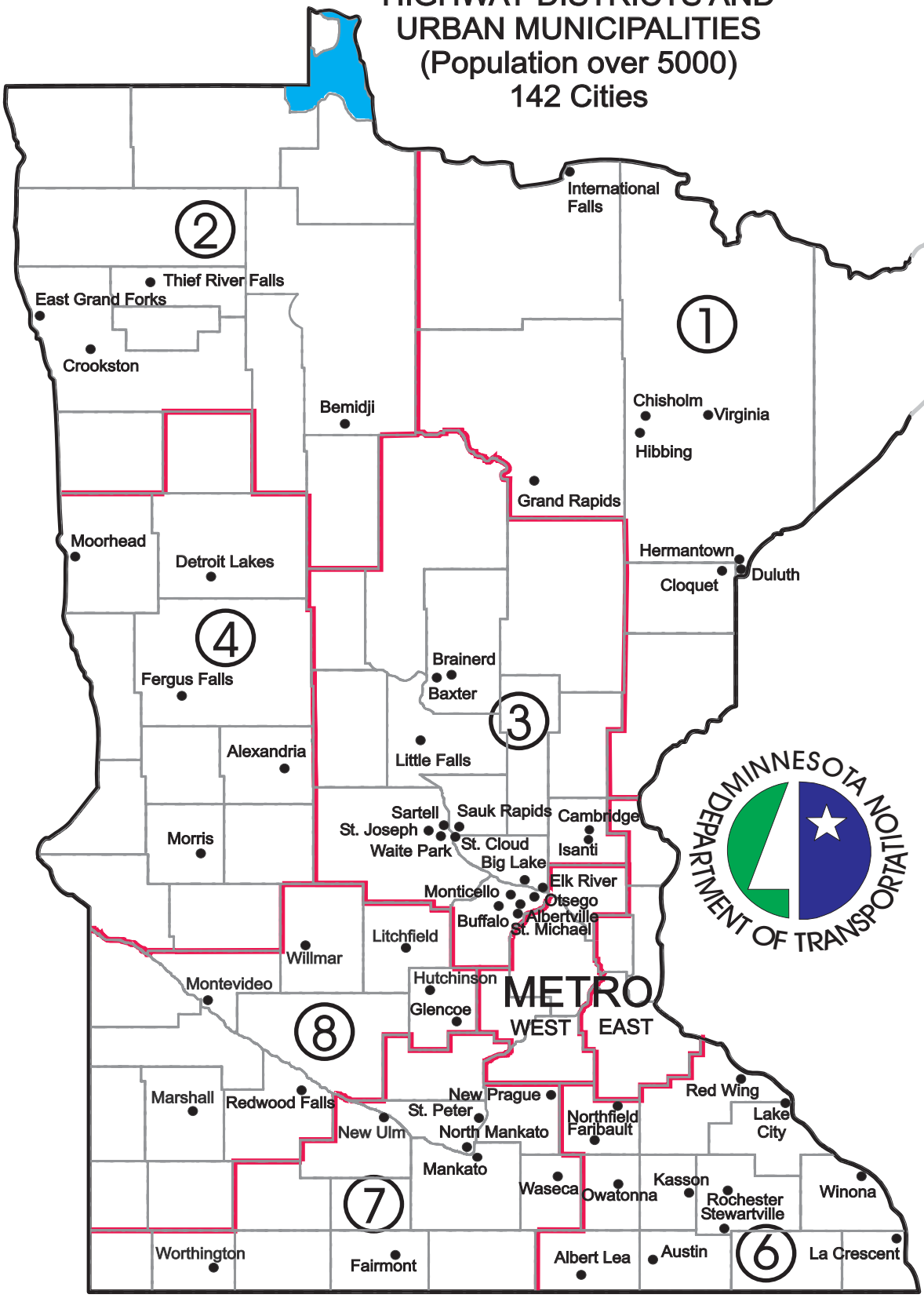
STATE OF MINNESOTA

HIGHWAY DISTRICTS AND URBAN MUNICIPALITIES (Population over 5000) 142 Cities



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METRO MUNICIPALITIES

48 Metro West Cities

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

MINNESOTA DEPARTMENT OF TRANSPORTATION

June 2007

2007 MUNICIPAL SCREENING BOARD

screening board stuff\2007\Screening Board June 2007.xls 07-May-07

OFFICERS			
Chair	Chuck Ahl	Maplewood	(651) 770-4552
Vice Chair	Mel Odens	Willmar	(320) 235-4202
Secretary	Shelly Pederson	Bloomington	(952) 563-4870

MEMBERS				
District	Years Served	Representative	City	Phone
1	2005-2007	Tom Pagel	Grand Rapids	(218) 326-7625
2	2006-2008	Brian Freeburg	Bemidji	(218) 759-3576
3	2006-2008	Terry Maurer	Elk River	(651) 644-4389
4	2007-2009	Bob Zimmerman	Moorhead	(218) 299-5390
Metro-West	2007-2009	Jon Haukaas	Fridley	(763) 572-3550
6	2007-2009	Katy Gehler	Northfield	(507) 645-3006
7	2005-2007	Fred Salsbury	Waseca	(507) 835-9700
8	2006-2008	Glenn Olson	Marshall	(507) 537-6774
Metro-East	2005-2007	Deb Bloom	Roseville	(651) 490-2200
Cities	Permanent	Cindy Voigt	Duluth	(218) 730-5200
of the	Permanent	Rhonda Rae	Minneapolis	(612) 673-2443
First Class	Permanent	Paul Kurtz	Saint Paul	(651) 266-6203

ALTERNATES				
District	Year Beginning		City	Phone
1	2008	Jim Prusak	Cloquet	(218) 879-6758
2	2009	Greg Boppre	East Grand Forks	(218) 773-1185
3	2009	Steve Bot	St. Michael	(763) 497-2041
4	2010	Gary Nansen	Detroit Lakes	(218) 299-5390
Metro-West	2010	Jean Keely	Blaine	(763) 784-6700
6	2010	Don Borcherding	Stewartville	(507) 288-6464
7	2008	Ken Saffert	Mankato	(507) 387-8631
8	2009	Kent Exner	Hutchinson	(320) 234-4212
Metro-East	2008	Russ Matthys	Eagan	(651) 675-5637

07-May-07

2007 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
Tim Loose, Chair St. Peter (507) 625-4171 Expires after 2007	Lee Gustafson, Chair Minnetonka (952) 939-8200 Expires after 2007
Dave Kildahl Crookston (218) 281-6522 Expires after 2008	Mike Metso Past Chair (218) 727-3282 Expires after 2008
Craig Gray Anoka (763) 576-2700 Expires after 2009	Steve Gaetz St. Cloud (320) 255-7240 Expires after 2009

2006 Municipal SCREENING BOARD
Fall Meeting Minutes
October 24 & 25, 2006

I. Opening by Municipal Screening Board Chair Stephen Gaetz

The 2006 Fall Municipal Screening Board Meeting was called to order at 1:00 p.m. on Tuesday, October 24, 2006 by Chair Gaetz.

A. Chair Gaetz introduced the Head Table and Subcommittee Chairs

Himself – Steve Gaetz, St. Cloud - Chair, Municipal Screening Board
Chuck Ahl, Maplewood - Vice Chair, Municipal Screening Board
Patti Simmons, MnDOT - State Aid Programs Engineer
Marshall Johnston, MnDOT - Manager, Municipal State Aid Needs Unit
Tom Drake – Faribault, Past Chair, Municipal Screening Board and Chair, Unencumbered Construction Funds Committee
Shelly Pederson, Bloomington - Chair, Needs Study Subcommittee
Lee Gustafson, Minnetonka - Past Chair, Municipal Screening Board
Mel Odens, Willmar - Secretary, Municipal Screening Board

B. Secretary Odens conducted the roll call with the following members present:

District 1	Tom Pagel, Grand Rapids
District 2	Rich Clauson, Crookston (alternate)
District 3	Terry Maurer, Elk River
District 4	Jeff Kuhn, Morris
Metro West	Craig Gray, Anoka
District 6	Jeff Johnson, Owatonna
District 7	Fred Salsbury, Waseca
District 8	Glen Olson, Marshall
Metro East	Deb Bloom-Heiser, Roseville
Duluth	Cindy Voigt
Minneapolis	Rhonda Rae
St. Paul	Paul Kurtz

C. Chair Gaetz recognized the following Screening Board Alternates:

District 6	Heidi Hamilton, Northfield
Metro West	Jon Haukaas, Fridley

D. Chair Gaetz recognized Minnesota Department of Transportation personnel:

Kim DeLaRosa	Manager, County State Aid Needs Unit
Dan Simon	Assistant Mgr., MSAS Needs Unit
John Minor	Assistant District 1 State Aid Engineer

Lou Tasa	District 2 State Aid Engineer
Kelvin Howieson	District 3 State Aid Engineer
Merle Earley	District 4 State Aid Engineer
Steve Kirsch	District 6 State Aid Engineer (absent)
Doug Haeder	District 7 State Aid Engineer
Tom Behm	District 8 State Aid Engineer
Mark Gieseke	Metro State Aid Engineer (absent)
Mike Kowski	Assistant Metro State Aid Engineer

E. Chair Gaetz recognized others in attendance:

Larry Veek, Minneapolis
Jim Vanderhoof, St. Paul
Patrick Mlaker, Duluth
Dave Sonnenberg, SEH, Chair, CEAM Legislative Committee

II. Review of the 2006 Municipal State Aid Street Needs Report Booklet

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

A. Spring Screening Board minutes Pages 16-26

Chair Gaetz revised the agenda to move item B, joint subcommittee minutes of the Needs and Unencumbered Construction Funds, to after item L on the agenda. Also a presentation by North Mankato was added under Section III.

The minutes of the May, 2006 Screening Board were presented for approval. Motion by Salsbury, second by Bloom to approve minutes as presented. Motion carried.

Marshall went through the booklet and noted that he wouldn't go through each item in detail as this was done at the District meetings where there was good attendance. We have added four new cities: Circle Pines, Dayton, Isanti, and Jordan.

The Chair now proceeded with Item C as Item B was moved to after Item L.

C. Theoretical Population Apportionment. Pages 34-42.

The population share for 2007 apportionment is $15.62 per person in SA, which is down by $0.33 from last year (2006). This is due to city population increases and new cities. There is a population increase of 72,767.

D. Effect of the 2006 Needs Study Update. Pages 43-45

Marshall overviewed the effects of the 2006 MSAS needs study update, of which, doesn't include the four new cities yet.

E. Mileage, Needs and Apportionment. Pages 46-48

Marshall pointed out that the 2007 apportionment estimate is $14.97 per $1,000 in needs. There were 65.02 miles added plus the mileage of the four new cities.

F. Itemized Tabulation of Needs. Pages 49-53

Marshall reviewed the itemized tabulation of needs. The large insert/spread sheet provides an item by item comparison of construction Needs for each municipality except for "after the fact needs." The cost per mile shown in the report does not include bridges because large bridges in some cities distort the average. It was pointed out that, based on current needs and funding, the reconstruction cycle is 33.7 years on the MSA system.

G. Tentative 2007 Construction Needs Apportionment. Pages 54-60

It was noted that the construction needs apportionment estimate is based on the $14.97 per $1,000 in needs.

H. Adjustments to the Needs. Pages 61-77

Marshall went through the unencumbered construction fund balance adjustment table. The estimate will be finalized as of the December 1st balance. Chair Gaetz asked if there will be dollars available for advancement this year. State Aid noted that the November projection looks like there may be some to advance. Projects submitted for advancement will be ranked by MnDOT to determine who gets advancement dollars.

I. Recommendation to the Commissioner. Pages 78-80

Marshall noted that the Screening Board needs to submit our findings, by this letter, to the Commissioner based on Minnesota Statutes, Chapter 162.13, Subdivision 1.

J. Trunk Highway Turnback Allowance. Page 81

Information only and no discussion.

K. Theoretical 2007 Total Apportionment, Comparisons and Apportionment Rankings. Pages 82-91

Information only and no discussion.

L. Other Topics

a. Certification of MSAS system as Complete. Pages 95-97

There are four cities certified as complete needs: Fridley, Columbia Heights, Falcon Heights, and South St. Paul. This is reviewed every 2 years.

b. Administrative Account. Page 98
No discussion.

c. Research Account Pages 99-100
This is an action item for Wednesday, and discussion was deferred until then.

d. County Highway Turnback policy Pages 101-102
No discussion.

e. Screening Board Resolutions. Pages 103-112
No discussion.

Chair Gaetz now directed the board's discussion back to item "B".

B. Combined Subcommittee Meeting Minutes of the Needs and Unencumbered Construction Funds. Pages 27-32.

The main purpose of the was to review the number of unit price items, the way we are doing the needs to see if there is a way to make them simpler and various other topics. Also, take a look around the region to see if there is a better approach to distribute the construction funds. This evaluation had been referred to both the Needs Subcommittee and the UCFS Subcommittee, of which, both minutes were available. Chair Gaetz asked Marshall to review the minutes and overview what their discussion and recommendations were.

It was noted that Tom Drake, Chair of the UCFS, is available for questions and explanation of their recommendations.

a. Rules Revision Recommendation
The Standards Committee requested that a group of city engineers review a proposed rules revision pertaining to designating Municipal State Aid roads outside the city limits.
The rules revision doesn't require Screening Board approval and the committee voted against proposed rules revision for the following reasons:

i. The existing policy interpretation as administered by the SA Division is adequate.
ii. The proposed language only applies to a few exceptional situations.
iii. At this time these segments out of the city limits are not collection needs and are therefore self restricting.
iv. An Orderly Annexation Agreement doesn't guarantee annexation.

This item doesn't require Screening Board action.

b. Simplifying and Streamlining Unit Price Study

i. Removing Rural Needs

This pertains to about 5% of the overall needs. Even though this is a small percent overall, it could have a large impact on certain communities. The committee voted to not remove Rural Needs.

ii. Urban and Rural Grading Factors

Currently, SA computes a grading cost within their needs formula. The committee looked at applying a grading factor on top of this grading cost. They came up with both an urban grading multiplier as well as a rural grading multiplier. The multiplier would reflect those construction items that are less than 2% of the 25-year Construction Needs. The multipliers discussed were 1.6 for urban, and 1.4 for rural. This would eliminate four to five items within the needs that SA wouldn't have to compute every year. Handouts were then provided to show the effect these multipliers would have on all the cities. Different multipliers were also calculated as the initial multipliers actually reduced the needs by about $20 million, which wasn't the intent of the multipliers. Another grading factor of 1.7 for urban grading was also evaluated which didn't reduce the Needs as dramatic. Tom Drake explained implications of the grading factors versus Needs, for the benefit of the board, emphasizing they didn't want to see an overall reduction in Needs. There was then lengthy discussion on the pros and cons of applying the grading factors.

iii. "After the Fact" Retaining Wall Needs

Because retaining walls are generally used on a limited basis, provide an alternative to additional right of way acquisition, and right of way needs are calculated on an "after the fact" basis the committee recommended to revise the method of computing retaining wall needs to an "after the fact" basis.

iv. Maintenance Needs

The committee recommended no change.

c. Simplifying and Streamlining Needs Study

i. Current Needs Study process

Marshall commented that his staff polled other states, and concluded that there didn't appear to be a simple good uniform process. Tom Drake spoke in favor of the current system as it probably is the best. Others spoke in favor of the current system and Chair Gaetz agreed the current seemed to be OK and to leave it alone.

ii. Future Spring Screening Board meetings

Options were discussed to continue to meet as a stand-alone meeting or conduct with the summer CEAM meeting, or in August with other meetings. It was the consensus to allow the CEAM Executive Board discuss this issue taking in account all the other meetings scheduled with other organizations.

iii. Frequency of the Unit Price Study

Currently we do a unit price study every other year, and there was general support to do it every three years. SA would use the ENR construction cost index for the two "off" years. Currently on the odd years, we use the ENR construction cost index already.

III. Other Items

A. Presentation by North Mankato regarding negative Needs adjustment made in 2006.

This is a result of a negative needs adjustment for a segment incorrectly generating needs for seven years. There was a one time negative adjustment, of which, North Mankato has issue with. Brian Malm, of Bolton and Menk, was available to present the information to the Screening Board with action to be taken on Wednesday morning. Mr. Malm presented and explained their case. They had clear intent to follow procedure, had the process taken through the City Council, mileage was available and thought they sent in all the information. They were unaware no commissioner order was issued and were surprised when they heard about this adjustment. After lengthy discussion, members were concerned reversing this action could have a ripple effect to other communities requesting changes. Members also cited examples when this type of loss of needs has happened before, and wasn't caught until the next time needs were submitted. North Mankato was instructed to have available an appropriately worded resolution for action on Wednesday.

B. Presentation by Margaret Donahoe, Transportation Alliance

Margaret spoke regarding the MVST Amendment. If passed, this would be phased in over five years starting in FY2008. She had available spreadsheets on impacts, as well as campaign signs for members use. Opposition seems to be forming, and there also seems to be a sense that most of the money will be going to the metro area. She urged members to inform their city councils and constituents so they would understand the amendment and the help it will have on transportation across the state.

IV. Motion to Adjourn

Upon request from Chair Gaetz, a motion was made by Gray, seconded by Bloom, and carried without opposition to adjourn at 3:40 p.m. and resume the meeting at 8:30 a.m. Wednesday, at which time formal action will be taken on items before the Board.

WEDNESDAY MORNING SESSION

The Municipal Screening Board reconvened at 8:30 a.m. on October 25, 2006.

Chair Gaetz welcomed Julie Skallman, and Rick Kjonaas to the meeting. He also requested to add item I. A. h. North Mankato negative needs discussion.

I. Formal Actions by the 2006 Municipal Screening Board:

A. Recommendations from combined Subcommittees (page 33)

Chair Gaetz indicated that draft language is available for the action items for today's meeting.

a. Removing all Rural Needs from the Needs study
No action is needed on this as the committee didn't recommend any changes.

b. Urban and Rural multipliers
There was a motion made by Gray, seconded by Olson to move the draft Grading Multiplier resolution with an urban multiplier of 1.7, with the rural multiplier remaining at 1.4. The resolution read as follows:

That Needs for tree removal, concrete pavement removal, curb and gutter removal, and sidewalk removal be removed from urban segments and replaced with an urban grading multiplier of 1.7. This multiplier will apply to the Grading Needs of all proposed urban segments. That Needs for tree removal, concrete pavement removal, special drainage, gravel surface, and

gravel shoulders be removed from rural segments and replaced with a Rural Grading Multiplier of 1.4. This multiplier will be applied to the Grading Needs of all proposed rural segments.

Jeff Johnson, District 6 spoke against both multipliers as they are less accurate and not really true for all cities. Deb Bloom indicated they generally did support the idea as it won't affect the accuracy of the system. Others spoke both in favor and against. Generally everyone agreed simpler would be OK, but equity was a great concern. There was also a concern that the total needs remain, or at least not go down.

After roll call vote the motion failed with a yes vote of 4, and no vote of 7.

The above discussion included the issue of the equity of having needs for concrete pavement removal and not for bituminous removal. There was then a motion by Rae, seconded by Pagel to refer this removal issue back to the joint Needs/UCFS Subcommittee. After roll call vote the motion passed with a yes vote of 7 and no vote of 4. There was also a suggestion to include a representative of a City of the 1st class.

There was then a motion by Salsbury, seconded by Bloom to give guidance to the subcommittee to look at items more commonly used or items unique or not necessarily basic to the system. Motion failed.

c. "After the Fact" retaining wall Needs

This item was brought forward from Tuesday's meeting with a draft resolution available that read as follows:

That Retaining Wall Needs shall not be included in the needs study until such time that the retaining wall has been constructed and the actual cost established. At that time a 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. Documentation of the construction of the retaining wall, including eligible costs, must be submitted to your District State Aid Engineer by July 1st to be included in that years Needs Study.

The effective date for these needs would be for projects let after January 1, 2007. It was also noted that retaining walls already in the system would be removed. There was a motion by Pagel, seconded by Kuhn to approve the motion as presented. Motion carried.

d. Annual Maintenance Needs
No action required.

e. Current Needs process
No action required.

f. Spring Screening Board meeting

It was noted that the Spring, 2007 meeting is set already and action would start with the Spring, 2008 meeting. It was the consensus of the delegates to continue with a standalone meeting and leave alone for now.

g. Frequency of the Unit Price Study

This item was brought forward from Tuesday's meeting with a draft resolution that read as follows:

That the Unit Price Study go to a three-year (or triennial) cycle with the Unit Prices for the two "off years" to be set using the Construction Cost Index (ENR). The Screening Board may request a Unit Price Study on individual items in the "off years" if it is deemed necessary.

After brief discussion, there was a motion by Bloom, seconded by Maurer to approve the motion as presented. Motion carried.

h. North Mankato Negative Needs Adjustment

There was a motion by Salsbury to remove the negative needs, except the 1998 adjustment, for Sherman Street Route 106. The motion died for a lack of a second.

B. Needs and Apportionment Data. Pages 43-80

Marshall presented the letter to the Commissioner for adjusted construction needs. There was a motion by Salsbury, seconded by Olson to approve. Motion carried.

C. Research Account
The following resolution was discussed as follows:

Be it resolved that an amount of $557,436 (not to exceed ½ of 1% of the 2006 MSAS Apportionment Sum of $111,487,130) shall be set aside from the 2007 Apportionment Fund and credited to the Research Account.

There was a motion by Gray, seconded by Maurer to approve the resolution as presented. Motion carried.

II. **Presentation by CEAM Legislative Committee – Dave Sonnenberg**
Dave overviewed the 2007 Legislative proposals they intend to present this session.

III. **State Aid Report – Julie Skallman/Rick Kjonaas**
Rick started the SA update by talking about advancement update, partnership agreements, and rules making meeting.

SA staff thinks there may be money available to advance this year. Appears it may be up to $10 million. There will be a November mailing to request to see if there is advancement wanted. They will then evaluate the requests internally.

Partnership agreements need to be renewed. Examples are using state labs. They are good for five years and it is time they be renewed.

The Rules making process is starting again and the next meeting is scheduled for November 29.

Julie announced that they are hosting the Mississippi Valley AASHTO conference in Minneapolis July 9, 10, 11, 2007. They are starting planning meetings and Secretary Mel Odens is representing CEAM and is to keep the membership informed.

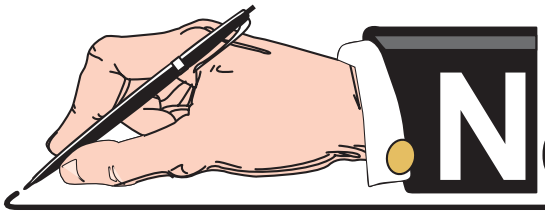
IV. **Other items**
There were no other items brought forward.

V. **Thanks**
Chair Gaetz thanked the following individuals:
Shelly Pederson – Chair of the Needs Study Subcommittee
Tom Drake – Chair of the UCFS and Past Chair of the Municipal Screening Board
Lee Gustafson – Past Chair of the Municipal Screening Board
Mike Metso – Past Chair of the Municipal Screening Board
Last meeting of Screening Board members: Jeff Kuhn, Craig Gray, and Jeff Johnson
Julie Skallman – State Aid Engineer
Rick Kjonaas – Assistant State Aid Engineer
Marshall Johnston – Manager, MSAS Needs Unit
All the District Aid Engineers and all other MnDOT staff in attendance.

VI. **Adjourn**
Upon request from Chair Gaetz, a motion was made by Gray, seconded by Maurer, and carried without opposition to adjourn at 10:05 a.m..

Respectfully submitted,

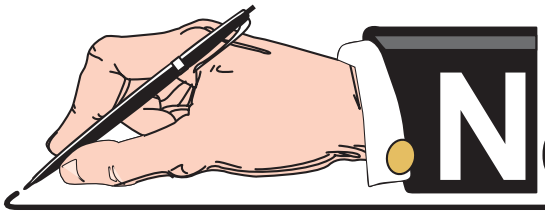
Melvin Odens
MSA Screening Board Secretary
Public Works Director – Willmar



NOTES and COMMENTS

UNIT PRICES

AND GRAPHS



NOTES and COMMENTS

UNIT PRICE STUDY

The unit price study was done annually until 1997. In 1996, the Municipal Screening Board made a motion to conduct the Unit Price study every two years, with the ability to adjust significant unit price changes on a yearly basis. There were no changes in the unit prices in 1997. In 1999 and 2001, a construction cost index was applied to the 1998 and 2000 contract prices. In 2003, the Screening Board directed the Needs Study Subcommittee to use the percent of increase in the annual National Engineering News Record Construction Cost Index to recommend Unit Costs to the Screening Board.

Needs Study Subcommittee minutes April 10, 2003

> **After discussing at length the impacts, Chairman Schoonhoven suggested the Engineering News-Record (ENR) Construction Cost Index (CCI) 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.**

Screening Board minutes from June 3 & 4, 2003

> **Discussion took place regarding the use of the Minneapolis cost index versus the regional one. Motion by Kildahl / seconded by Ahl to accept the Needs Study Subcommittee's recommendations as presented, using a CCI of 3.22%. Motion carried without opposition.**

Method of Computing Construction Cost Index Prices in the Future

> **Motion by Ahl / seconded by Weiss to use the Engineering News Record CCI, National Average, for the Needs Unit Price adjustments in odd years. Motion carried without opposition.**

These prices will be applied against the quantity tables located in the State Aid Manual Figs. C & D 5-892.820 to compute the 2007 construction (money) needs apportionment.

State Aid bridges are used to 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 2006 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 2006 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. All deficient segments receive street lighting needs. The unit prices used in the 2006 needs study are found in the Screening Board resolutions included in this booklet.

ENR Construction Cost Index

for 2006
Used in the 2007 Needs Study
for the January 2008 allocation

In 2005, the annual average CCI increased 7446% from the base year of 1913.
In 2006, the annual average CCI increased 7751% from the base year of 1913.
The annual CCI increased 4.10% in 2006. This is computed by:

(7751 – 7446) / 7446 *100 = 4.10%

ENR Construction Cost Index

for 2004
Used in the 2005 Needs Study
for the January 2006 allocation

In 2003, the annual average CCI increased 6694% from the base year of 1913.
In 2004, the annual average CCI increased 7115% from the base year of 1913.
The annual CCI increased 6.29% in 2004. This is computed by:

(7115 – 6694) / 6694 *100 = 6.29%

ENR Construction Cost Index Percent of Increase

Year	Year end Percent of Increase from Base Year	Annual Percent of Increase	Five Year Average Percent of Increase	Ten Year Average Percent of Increase
1990	4732			
1991	4835	2.18		
1992	4985	3.10		
1993	5210	4.51		
1994	5408	3.80		
1995	5471	1.16	2.95	
1996	5620	2.72	3.06	
1997	5826	3.67	3.17	
1998	5920	1.61	2.59	
1999	6059	2.35	2.30	
2000	6221	2.67	2.60	2.78
2001	6343	1.96	2.45	2.76
2002	6538	3.07	2.33	2.75
2003	6694	2.39	2.49	2.54
2004	7115	6.29	3.28	2.79
2005	7446	4.65	3.67	3.14
2006	7751	4.10	4.10	3.28
2007				

The ENR CCI percent of increase from the previous year is used to calculate the Unit Prices in the bolded years.

2007 UNIT PRICE RECOMMENDATIONS

Needs Item		2006 Need Prices	Subcommittee Recommended Prices for 2007	Screening Board Approved Prices For 2007
Grading (Excavation)	Cu. Yd.	$4.75	**$4.95** *	
Aggregate Shoulders #2221	Ton	14.25	**14.25** *	
Curb and Gutter Removal	Lin.Ft.	2.75	**2.90** *	
Sidewalk Removal	Sq. Yd.	5.50	**5.50** *	
Concrete Pavement Removal	Sq. Yd.	5.40	**5.40** *	
Tree Removal	Unit	300.00	**310.00** *	
Class 5 Base #2211	Ton	8.40	**8.75** *	
All Bituminous	Ton	38.00	**42.00** *	
Gravel Surface #2118	Ton	7.10	**7.10**	
Curb and Gutter Construction	Lin.Ft.	9.75	**10.15** *	
Sidewalk Construction	Sq. Yd.	26.00	**28.00** *	
Storm Sewer Adjustment	Mile	86,100	**88,100**	
Storm Sewer	Mile	268,035	**271,200**	
Special Drainage - Rural	Mile	40,000	**36,000**	
Street Lighting	Mile	100,000	**100,000** *	
Traffic Signals	Per Sig	130,000	**130,000** *	
Signal Needs Based On Projected Traffic				
Projected Traffic Percentage X Unit Price = Needs Per Mile				
0 - 4,999 .25 $130,000 = $32,500			**$32,500** *	
5,000 - 9,999 .50 130,000 = 65,000			**65,000** *	
10,000 & Over 1.00 130,000 = 130,000			**130,000** *	
Right of Way (Needs Only)	Acre	98,850	**98,850** *	
Engineering	Percent	22	**22**	
Railroad Grade Crossing				
Signs	Unit	1,000	**1,000**	
Pavement Marking	Unit	750	**750**	
Signals (Single Track-Low Speed)	Unit	150,000	**175,000**	
Signals & Gate (Multiple Track - High & Low Speed)	Unit	200,000	**200,000**	
Concrete Xing Material(Per Track)	Lin.Ft.	1,000	**1,000**	
Bridges				
0 to 149 Ft.	Sq. Ft.	95.00	**105.00**	
150 to 499 Ft.	Sq. Ft.	95.00	**105.00**	
500 Ft. and over	Sq. Ft.	95.00	**105.00**	
Railroad Bridges over Highways				
Number of Tracks - 1	Lin.Ft.	10,200	**102,000** *	
Additional Track (each)	Lin.Ft.	8,500	**8,500** *	

*** 4.10% 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 2006 was $28,863,893 or 0.79% 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 $10,300 in maintenance needs per mile.

EXISTING FACILITIES ONLY

	2006 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
4.10% CCI			$1,796	$2,967		
Traffic Lane Per Mile	$1,725	$2,850	**$1,800**	**$2,970**		
4.10% CCI			1,796	1,796		
Parking Lane Per Mile	1,725	1,725	**1,800**	**1,800**		
4.10% CCI			599	1,171		
Median Strip Per Mile	575	1,125	**600**	**1,180**		
4.10% CCI			599	599		
Storm Sewer Per MIle	575	575	**600**	**600**		
4.10% CCI			599	599		
Per Traffic Signal	575	575	**600**	**600**		
Normal M.S.A.S. Streets			5,955	5,955		
Minimum Allowance Per Mile	5,720	5,720	**5,960**	**5,960**		

"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

This item was 0.79% of the total needs last year

A HISTORY OF THE ANNUAL MAINTENANCE NEEDS COSTS

(COMPUTED ON EXISTING MILEAGE ONLY)

7-May-07

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	1,500	2,500	1,500	1,500	500	980	500	500	500	500	5,000	5,000
2004	1,550	2,575	1,550	1,550	515	1,000	515	515	515	515	5,150	5,150
2005	1,650	2,735	1,650	1,650	550	1,065	550	550	550	550	5,475	5,475
2006	1,725	2,850	1,725	1,725	575	1,125	575	575	575	575	5,720	5,720
2007												

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.

25 YEAR CONSTRUCTION NEEDS
FOR EACH INDIVIDUAL CONSTRUCTION ITEM

07-May-07

ITEM	2005 APPORTIONMENT NEEDS COST	2006 APPORTIONMENT NEEDS COST	DIFFERENCE	2006 % OF THE TOTAL
Grading	$220,554,292	$254,418,202	$33,863,910	6.95%
Special Drainage	4,529,296	4,360,172	(169,124)	0.12%
Storm Sewer Adjustment	71,559,739	75,419,295	3,859,556	2.06%
Storm Sewer Construction	255,568,746	267,418,612	11,849,866	7.30%
Curb & Gutter Removal	34,992,307	36,181,169	1,188,862	0.99%
Sidewalk Removal	23,140,994	23,987,970	846,976	0.65%
Pavement Removal	58,090,966	58,439,424	348,458	1.60%
Tree removal	17,619,250	23,109,900	5,490,650	0.63%
SUBTOTAL GRADING	**$686,055,590**	**$743,334,744**	**$57,279,154**	**20.29%**
Gravel Base #2211	$391,729,602	$418,879,209	$27,149,607	11.43%
Bituminous Base #2350	318,684,660	360,659,216	41,974,556	9.85%
SUBTOTAL BASE	**$710,414,262**	**$779,538,425**	**$69,124,163**	**21.28%**
Gravel Surface #2118	$60,039	$89,674	$29,635	0.00%
Bituminous Surface #2350	297,917,585	333,429,974	35,512,389	9.10%
Surface Widening	2,152,360	2,544,214	391,854	0.07%
SUBTOTAL SURFACE	**$300,129,984**	**$336,063,862**	**$35,933,878**	**9.17%**
Gravel Shoulders #2221	$2,799,574	$2,664,011	($135,563)	0.07%
SUBTOTAL SHOULDERS	**$2,799,574**	**$2,664,011**	**($135,563)**	**0.07%**
Curb and Gutter	$176,732,177	$206,095,093	$29,362,916	5.63%
Sidewalk	234,834,075	254,813,052	19,978,977	6.96%
Traffic Signals	198,727,750	205,261,875	6,534,125	5.60%
Street Lighting	169,256,175	215,307,000	46,050,825	5.88%
Retaining Walls	20,186,165	21,281,972	1,095,807	0.58%
SUBTOTAL MISCELLANEOUS	**$799,736,342**	**$902,758,992**	**$103,022,650**	**24.64%**
TOTAL ROADWAY	**$2,499,135,752**	**$2,764,360,034**	**$265,224,282**	**75.46%**
Bridge	$148,313,334	$155,499,919	$7,186,585	4.24%
Railroad Crossings	57,460,375	59,081,725	1,621,350	1.61%
Maintenance	27,017,647	28,863,893	1,846,246	0.79%
Engineering	540,981,871	655,367,238	114,385,367	17.89%
SUBTOTAL OTHERS	**$773,773,227**	**$898,812,775**	**$125,039,548**	**24.54%**
TOTAL	**$3,272,908,979**	**$3,663,172,809**	**$390,263,830**	**100.00%**

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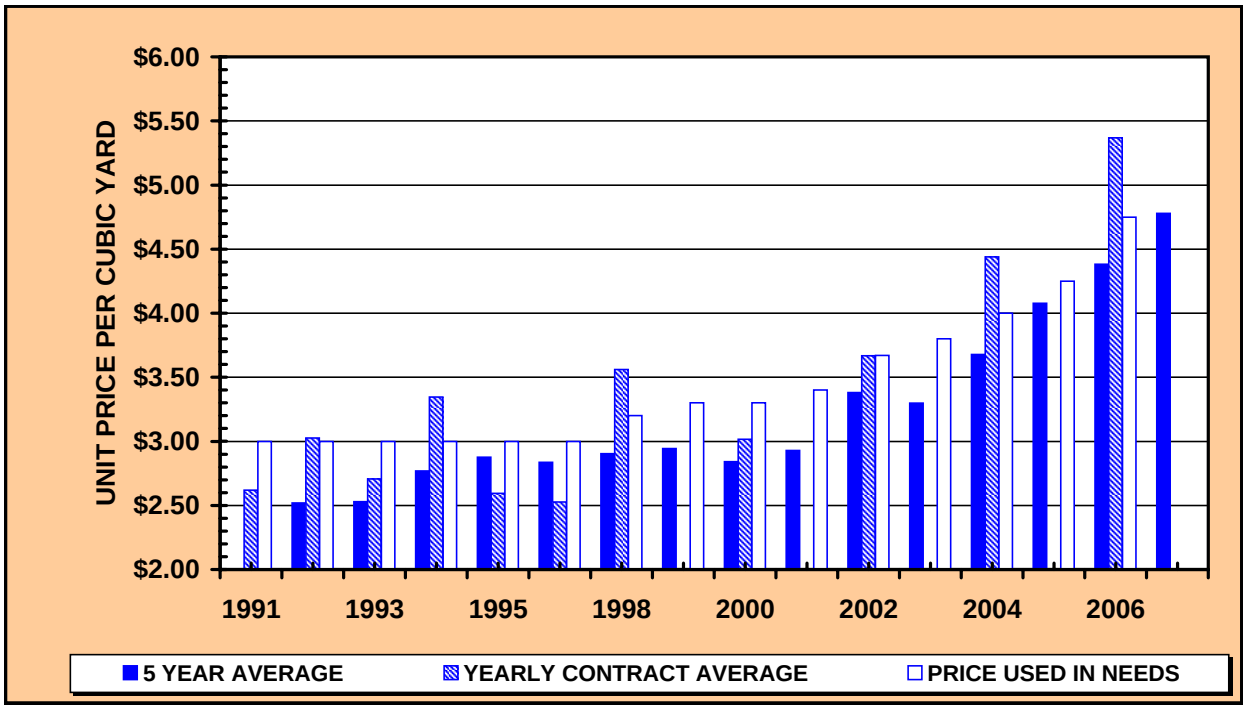
GRADING



NEEDS YEAR	NO. OF CITIES	QUANTITY	TOTAL COST	YEARLY AVERAGE CONTRACT PRICE	PRICE USED IN NEEDS	5 YEAR AVERAGE CONTRACT PRICE
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	2.88
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	2.90
1999					3.30	2.94
2000	56	1,157,353	3,490,120	3.02	3.30	2.84
2001					3.40	2.93
2002	50	893,338	3,275,650	3.67	3.67	3.38
2003					3.80	3.30
2004	56	1,018,912	4,523,089	4.44	4.00	3.68
2005					4.25	4.08
2006	48	587,442	3,152,838	5.37	4.75	4.38
2007						4.78

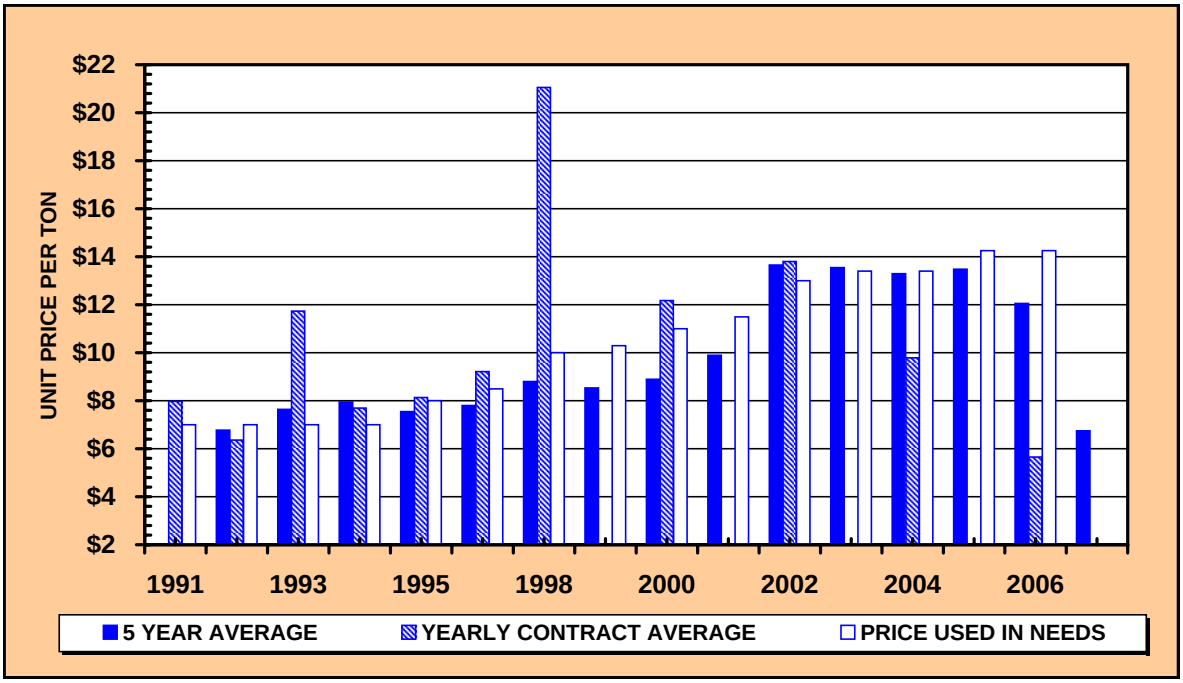
SUBCOMMITTEE'S RECOMMENDED PRICE FOR THE 2007 NEEDS STUDY IS **$4.95 PER CU. YD.**

The 5 year average includes the costs from 2003 thru 2007

Applying the ENR Construction Cost Index of 4.10% will result in an increase of $0.19 for a 2007 Unit Price of $4.94

This item was 6.95% of the total needs last year

AGGREGATE SHOULDERING



NEEDS YEAR	NO. OF CITIES	QUANTITY	TOTAL COST	YEARLY AVERAGE CONTRACT PRICE	PRICE USED IN NEEDS	5 YEAR AVERAGE CONTRACT PRICE
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	11.73	7.00	7.64
1994	4	999	7,691	7.70	7.00	7.94
1995	8	4923	40,009	8.13	8.00	7.54
1996	6	3067	28,277	9.22	8.50	7.80
1998	2	60	1,263	21.05	10.00	8.80
1999					10.30	8.54
2000	4	621	7,557	12.17	11.00	8.89
2001					11.50	9.90
2002	7	3365	46,422	13.80	13.00	13.65
2003					13.40	13.54
2004	2	290	2,840	9.79	13.40	13.29
2005					14.25	13.48
2006	1	813	4,600	5.66	14.25	12.06
2007						6.75

SUBCOMMITTEE'S RECOMMENDED PRICE FOR THE 2007 NEEDS STUDY IS $14.25 PER TON

The 5 year average includes the costs from 2003 thru 2007

Applying the ENR Construction Cost Index of 4.10% will result in an increase of $0.58 for a 2007 Unit Price of $14.83

This item was 0.07% of the total needs last year

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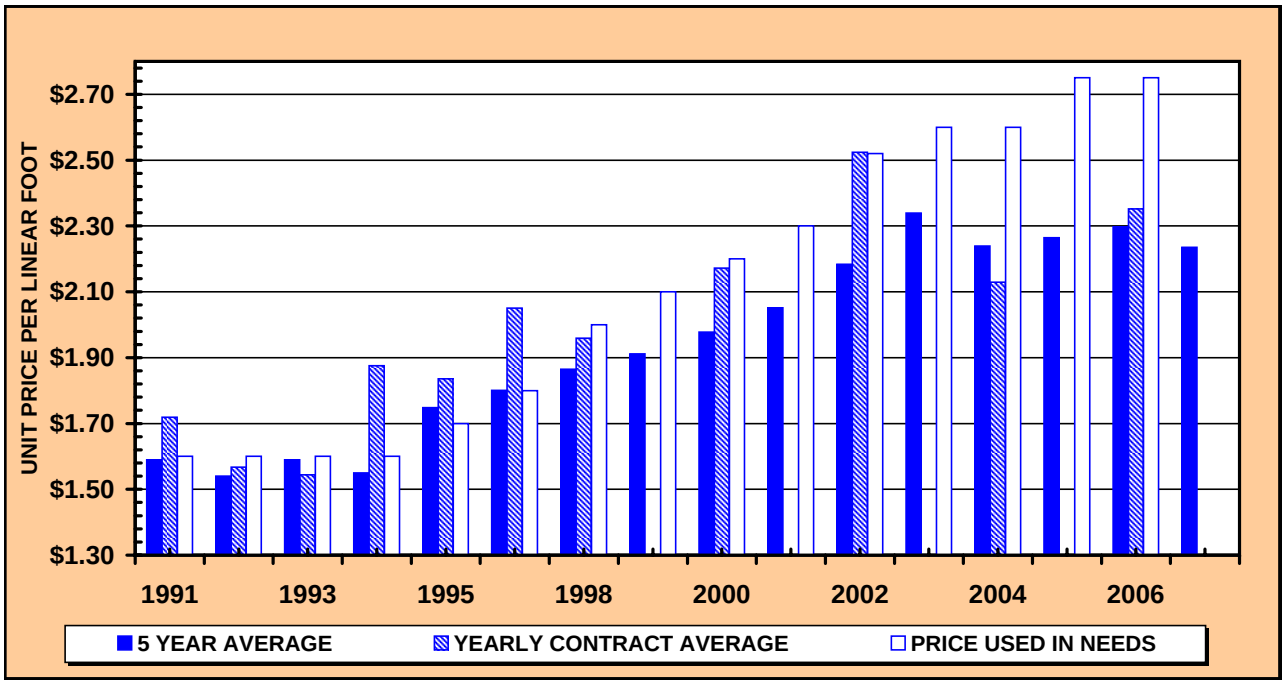
CURB & GUTTER REMOVAL #2104



NEEDS YEAR	NO. OF CITIES	QUANTITY	TOTAL COST	YEARLY AVERAGE CONTRACT PRICE	PRICE USED IN NEEDS	5 YEAR AVERAGE CONTRACT PRICE
1991	59	207,105	$355,996	$1.72	$1.60	$1.59
1992	58	152,992	239,845	1.57	1.60	1.54
1993	56	118,793	183,378	1.54	1.60	1.59
1994	59	309,891	581,256	1.88	1.60	1.55
1995	51	209,177	384,029	1.84	1.70	1.75
1996	62	142,362	291,935	2.05	1.80	1.80
1998	63	150,083	294,046	1.96	2.00	1.86
1999					2.10	1.91
2000	53	114,421	248,505	2.17	2.20	1.98
2001					2.30	2.05
2002	42	103,074	260,173	2.52	2.52	2.18
2003					2.60	2.34
2004	54	198,097	421,810	2.13	2.60	2.24
2005					2.75	2.26
2006	48	179,628	422,431	2.35	2.75	2.30
2007						2.24

SUBCOMMITTEE'S RECOMMENDED PRICE FOR THE 2007 NEEDS STUDY IS $2.90 PER LIN. FT.

The 5 year average includes the costs from 2003 thru 2007

Applying the ENR Construction Cost Index of 4.10% will result in an increase of $0.11 for a 2007 Unit Price of $2.86

This item was 0.99% of the total needs last year

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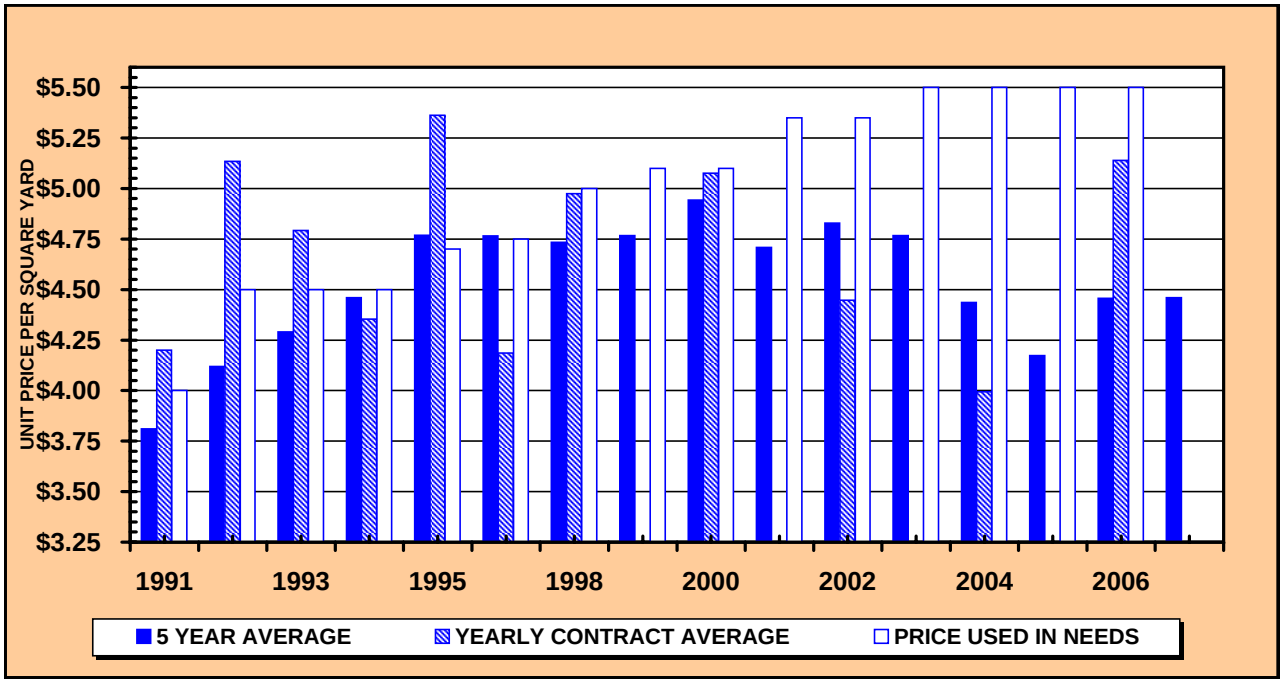
SIDEWALK REMOVAL #2105



NEEDS YEAR	NO. OF CITIES	QUANTITY	TOTAL COST	YEARLY AVERAGE CONTRACT PRICE	PRICE USED IN NEEDS	5 YEAR AVERAGE CONTRACT PRICE
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	4.77
2000	37	44,143	224,067	5.08	5.10	4.94
2001					5.35	4.71
2002	28	42,436	188,701	4.45	5.35	4.83
2003					5.50	4.77
2004	35	65,062	259,880	3.99	5.50	4.44
2005					5.50	4.17
2006	32	44,661	229,517	5.14	5.50	4.46
2007						4.46

SUBCOMMITTEE'S RECOMMENDED PRICE FOR THE 2007 NEEDS STUDY IS $5.50 PER SQ.YD.

The 5 year average includes the costs from 2003 thru 2007

Applying the ENR Construction Cost Index of 4.10% will result in an increase of $0.23 for a 2007 Unit Price of $5.73

This item was 0.65% of the total needs last year

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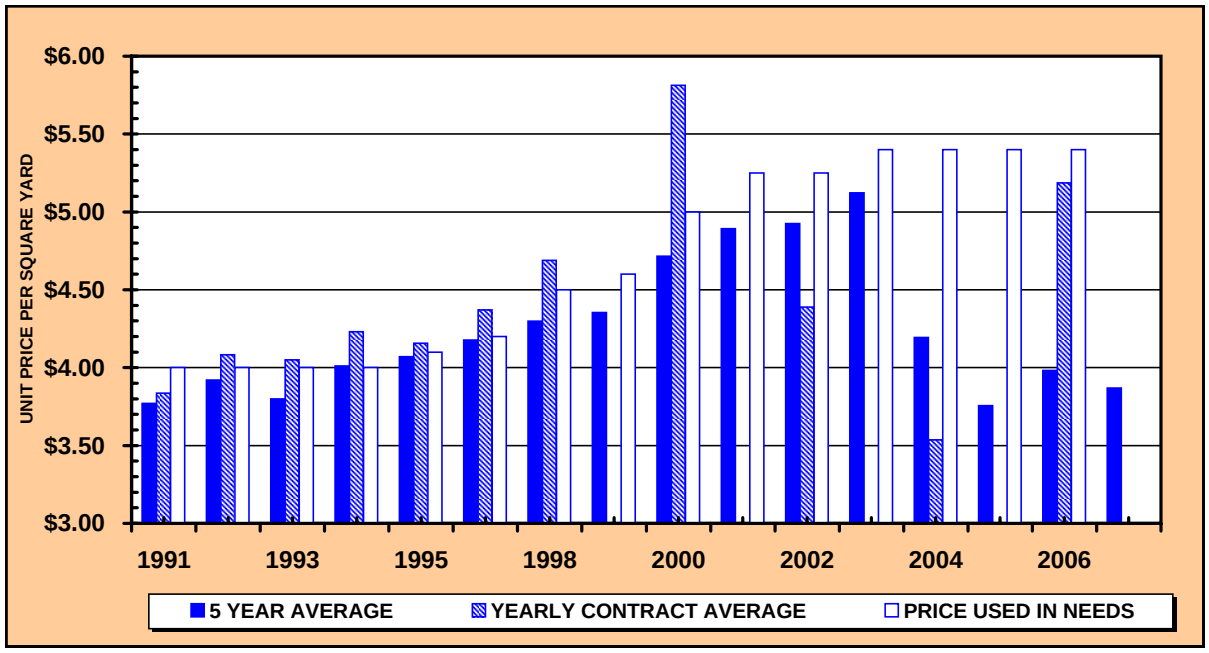
CONCRETE PAVEMENT REMOVAL #2106



NEEDS YEAR	NO. OF CITIES	QUANTITY	TOTAL COST	YEARLY AVERAGE CONTRACT PRICE	PRICE USED IN NEEDS	5 YEAR AVERAGE CONTRACT PRICE
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	4.35
2000	15	68,760	399,759	5.81	5.00	4.72
2001					5.25	4.89
2002	17	64,918	284,994	4.39	5.25	4.93
2003					5.40	5.12
2004	23	188,676	667,342	3.54	5.40	4.19
2005					5.40	3.76
2006	20	47,703	247,439	5.19	5.40	3.98
2007						3.87

SUBCOMMITTEE'S RECOMMENDED PRICE FOR THE 2007 NEEDS STUDY IS $5.40 PER SQ. YD.

The 5 year average includes the costs from 2003 thru 2007

Applying the ENR Construction Cost Index of 4.10% will result in an increase of $0.22 for a 2007 Unit Price of $5.62

This item was 1.60% of the total needs last year

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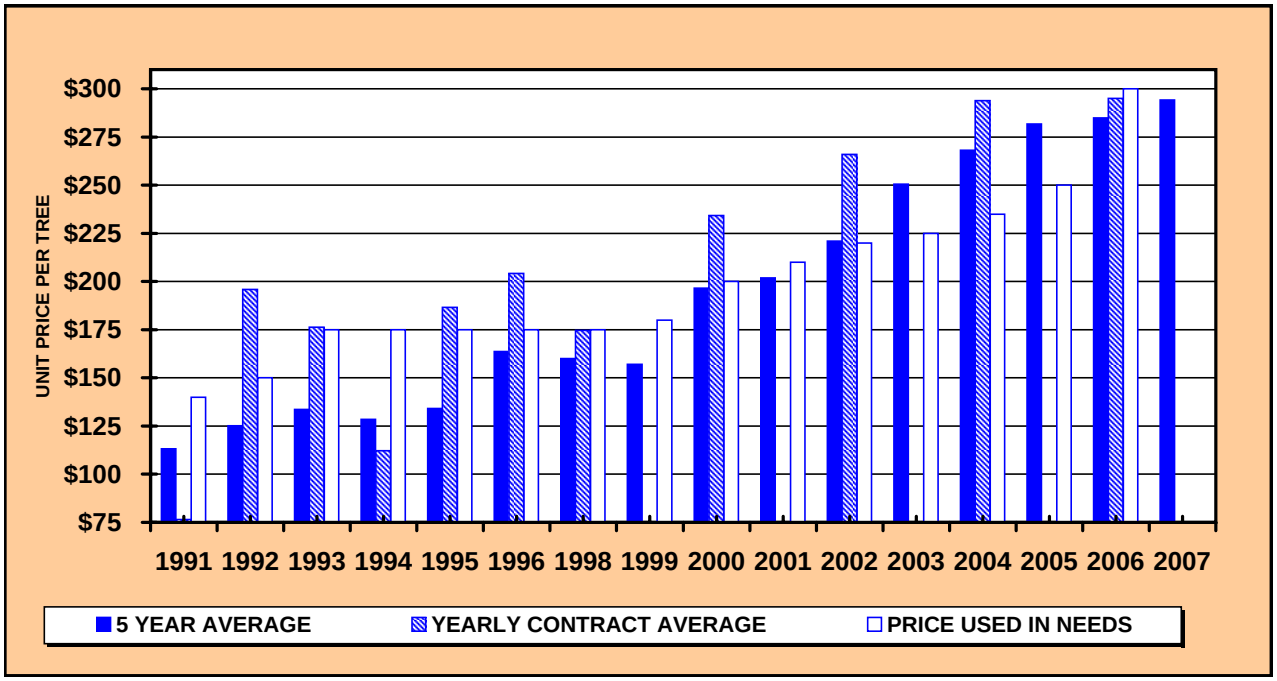
TREE REMOVAL #2101



NEEDS YEAR	NO. OF CITIES	QUANTITY	TOTAL COST	YEARLY AVERAGE CONTRACT PRICE	PRICE USED IN NEEDS	5 YEAR AVERAGE CONTRACT PRICE
1991	35	1,869	$142,888	$76.45	$140.00	$113.19
1992	39	867	169,797	195.84	150.00	125.11
1993	34	853	150,442	176.37	175.00	133.66
1994	35	1,876	210,444	112.18	175.00	128.49
1995	41	1,136	211,912	186.54	175.00	134.14
1996	33	783	159,884	204.19	175.00	163.64
1998	28	779	136,044	174.64	175.00	160.07
1999					180.00	157.04
2000	24	593	138,966	234.34	200.00	196.54
2001					210.00	201.81
2002	21	625	166,204	265.93	220.00	220.94
2003					225.00	250.55
2004	31	830	243,734	293.83	235.00	268.08
2005					250.00	281.84
2006	22	453	133,684	295.11	300.00	284.99
2007						294.28

SUBCOMMITTEE'S RECOMMENDED PRICE FOR THE 2007 NEEDS STUDY IS $310.00 PER TREE

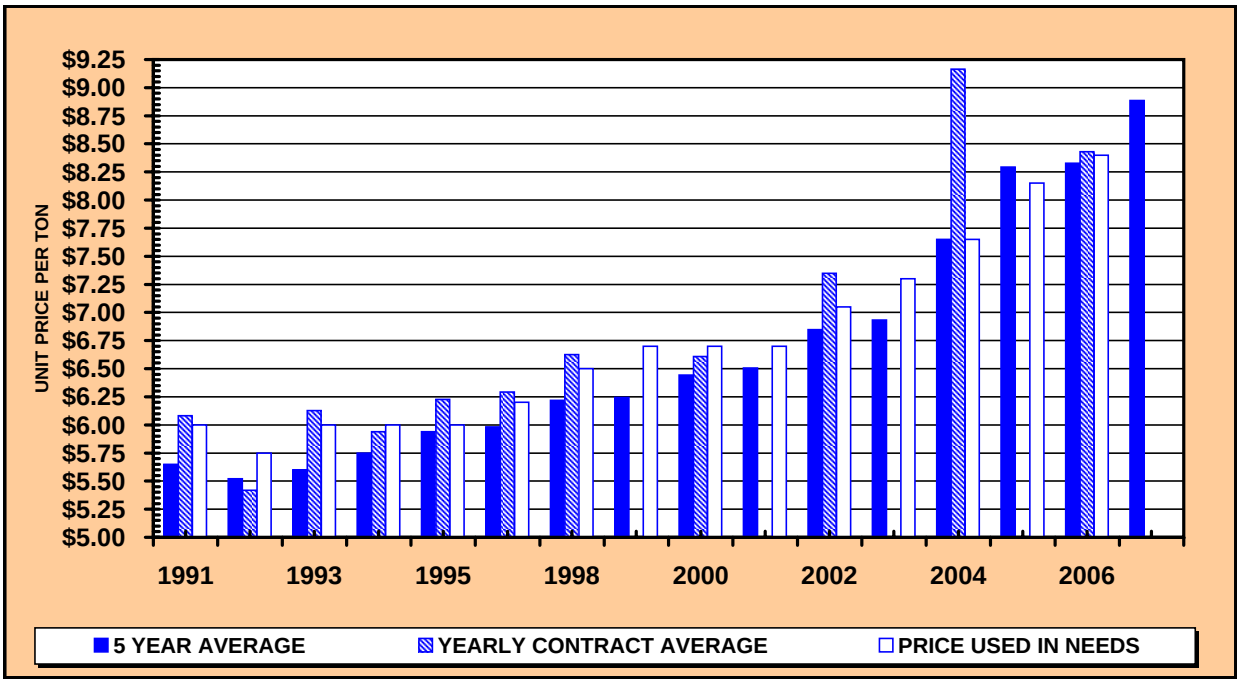
The 5 year average includes the costs from 2003 thru 2007

Applying the ENR Construction Cost Index of 4.10% will result in an increase of $12 for a 2007 Unit Price of $312

This item was 0.63% of the total needs last year

07-May-07

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
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	5.94
1996	68	593,314	3,733,431	6.29	6.20	5.98
1998	67	470,633	3,118,365	6.63	6.50	6.22
1999					6.70	6.24
2000	58	680,735	4,498,220	6.61	6.70	6.44
2001					6.70	6.51
2002	52	527,592	3,877,688	7.35	7.05	6.85
2003					7.30	6.93
2004	58	573,153	5,252,804	9.16	7.65	7.65
2005					8.15	8.29
2006	46	355,866	3,000,906	8.43	8.40	8.33
2007						8.88

SUBCOMMITTEE'S RECOMMENDED PRICE FOR THE 2007 NEEDS STUDY IS $8.75 PER TON

The 5 year average includes the costs from 2003 thru 2007

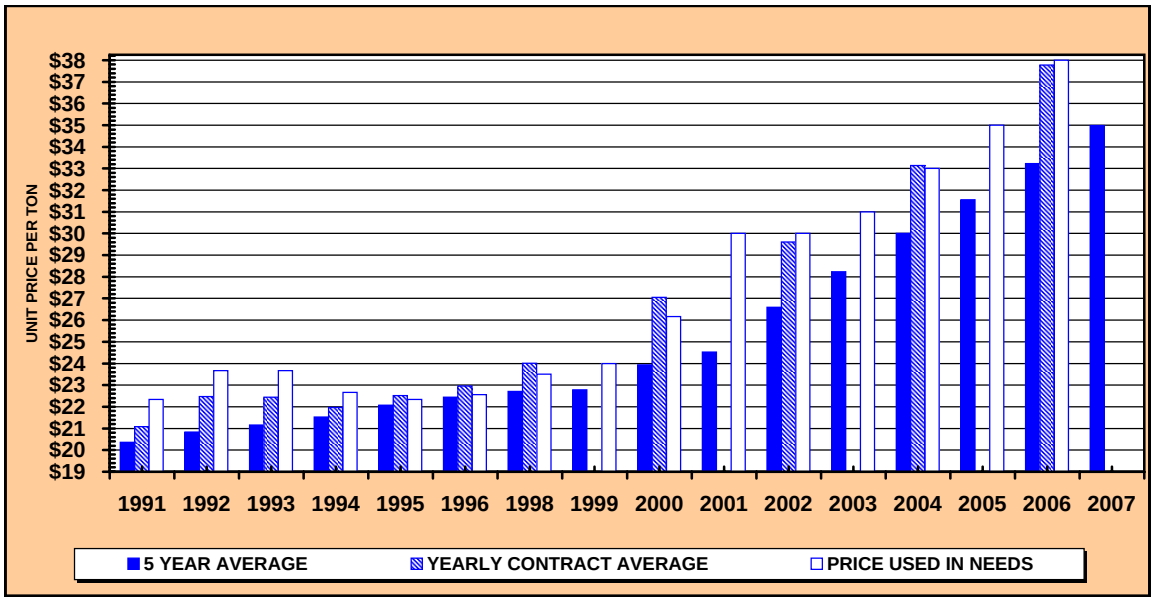
Applying the ENR Construction Cost Index of 4.10% will result in an increase of $0.34 for a 2007 Unit Price of $8.74

This item was 11.43% of the total needs last year

N:\MSAS\EXCEL\2007\JUNE 2007 BOOK\UNIT PRICES 2007.XLS AGG. BASE - 2211 GRAPH

07-May-07

ALL BITUMINOUS BASE & SURFACE



NEEDS YEAR	NO. OF CITIES	QUANTITY	TOTAL COST	YEARLY AVERAGE CONTRACT PRICE	PRICE USED IN NEEDS	5 YEAR AVERAGE CONTRACT PRICE
1991	70	613,163	$12,925,191	$21.08	$22.33	$20.37
1992	69	519,900	11,685,503	22.48	23.67	20.83
1993	66	598,566	13,434,379	22.44	23.67	21.16
1994	70	692,066	15,208,681	21.98	22.67	21.53
1995	61	601,173	13,535,386	22.51	22.33	22.08
1996	68	540,860	12,419,802	22.96	22.57	22.45
1998	67	505,372	12,132,901	24.01	23.50	22.71
1999					24.00	22.78
2000	51	434,005	11,739,821	27.05	26.17	23.94
2001					30.00	24.52
2002	50	371,198	10,989,206	29.60	30.00	26.60
2003					31.00	28.23
2004	60	459,606	15,229,960	33.14	33.00	30.01
2005					35.00	31.56
2006	51	305,073	11,524,574	37.78	38.00	33.23
2007						34.99

SUBCOMMITTEE'S RECOMMENDED PRICE FOR THE 2007 NEEDS STUDY IS $42.00 PER TON

The 5 year average includes the costs from 2003 thru 2007

Applying the ENR Construction Cost Index of 4.10% will result in an increase of $1.56 for a 2007 Unit Price of $39.56

This item was 18.95% of the total needs last year

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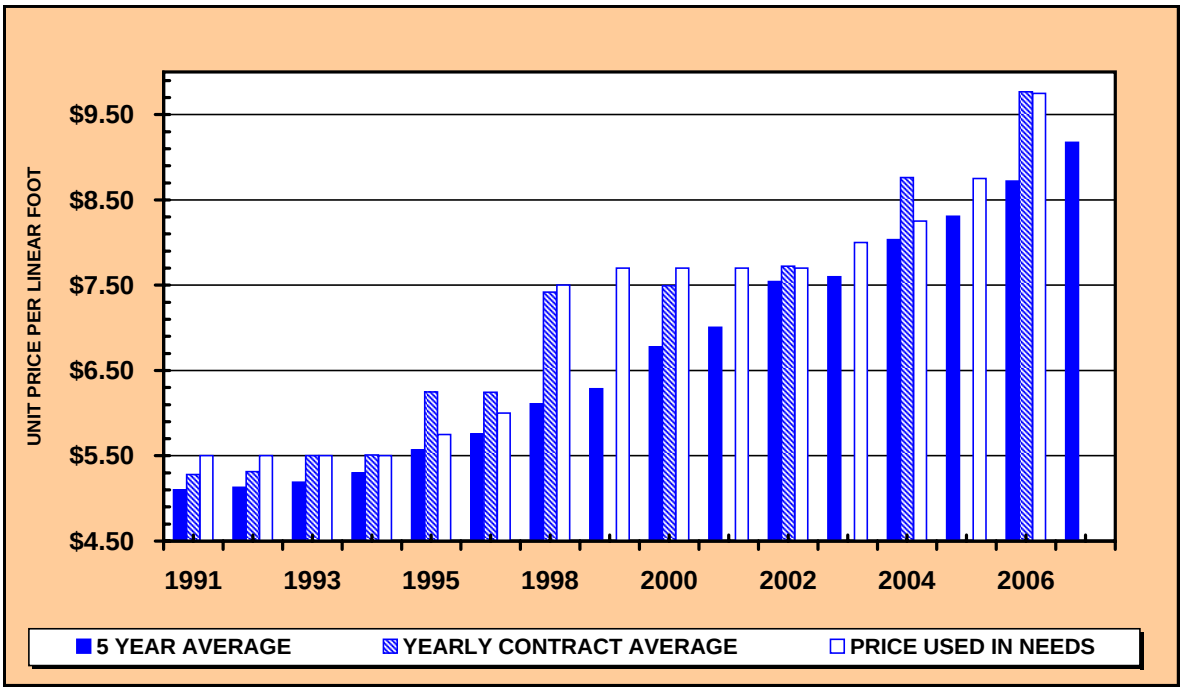
07-May-07

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
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	6.11
1999					7.70	6.28
2000	55	418,211	3,133,900	7.49	7.70	6.78
2001					7.70	7.01
2002	50	363,497	2,807,345	7.72	7.70	7.54
2003					8.00	7.60
2004	59	469,131	4,110,211	8.76	8.25	8.04
2005					8.75	8.31
2006	52	327,171	3,195,201	9.77	9.75	8.72
2007						9.17

SUBCOMMITTEE'S RECOMMENDED PRICE FOR THE 2007 NEEDS STUDY IS $10.15 PER LIN. FT.

The 5 year average includes the costs from 2003 thru 2007

Applying the ENR Construction Cost Index of 4.10% will result in an increase of $0.40 for a 2007 Unit Price of $10.15

This item was 5.63% of the total needs last year

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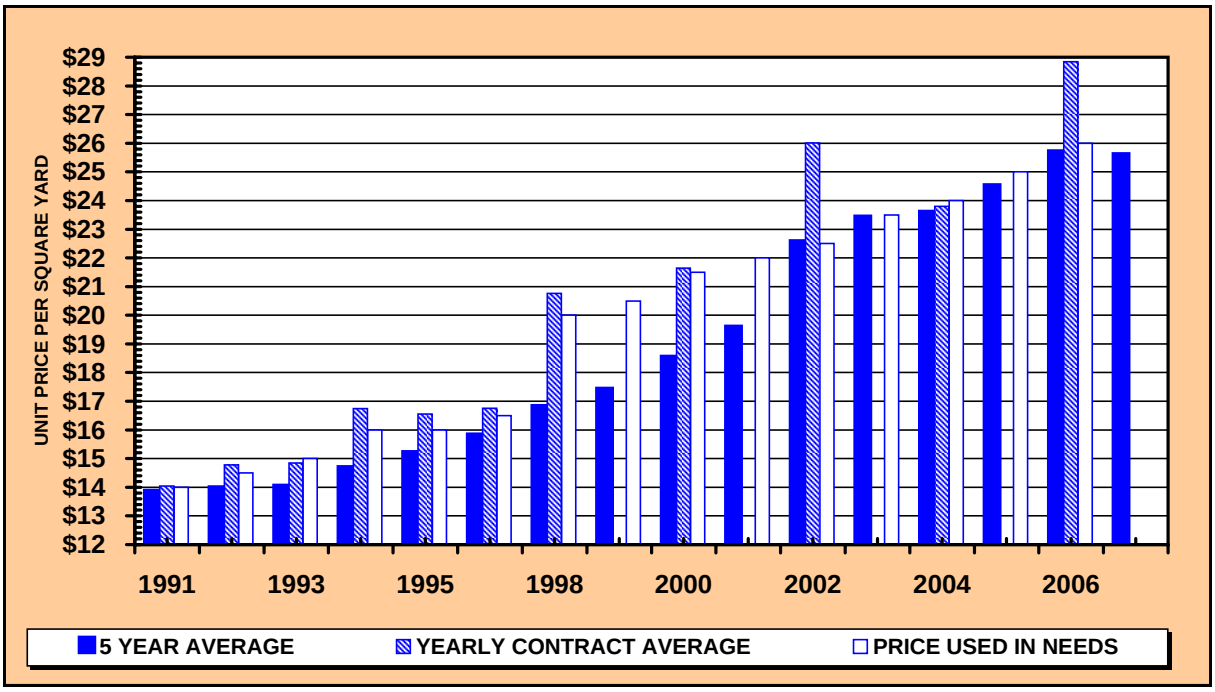
07-May-07

SIDEWALK CONSTRUCTION #2521



NEEDS YEAR	NO. OF CITIES	QUANTITY	TOTAL COST	YEARLY AVERAGE CONTRACT PRICE	PRICE USED IN NEEDS	5 YEAR AVERAGE CONTRACT PRICE
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	15.22
1996	60	94,140	1,577,035	16.75	16.50	15.83
1998	54	71,578	1,486,101	20.76	20.00	16.82
1999					20.50	17.42
2000	45	88,562	1,917,075	21.65	21.50	18.54
2001					22.00	19.59
2002	38	61,390	1,596,409	26.00	22.50	22.57
2003					23.50	23.43
2004	47	123,460	2,937,553	23.79	24.00	23.59
2005					25.00	24.53
2006	43	69,500	2,004,367	28.84	26.00	25.71
2007						25.61

SUBCOMMITTEE'S RECOMMENDED PRICE FOR THE 2007 NEEDS STUDY IS $28.00 PER SQ. YD.

The 5 year average includes the costs from 2003 thru 2007
Applying the ENR Construction Cost Index of 4.10% will result in an increase of $1.07 for a 2007 Unit Price of $27.07

This item was 6.96% of the total needs last year

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STORM SEWER, LIGHTING AND SIGNAL NEEDS COSTS

NEEDS YEAR	STORM SEWER ADJUSTMENT (Per Mile)	STORM SEWER CONSTRUCTION (Per Mile)	LIGHTING (Per Mile)	SIGNALS (Per Mile)
1987	$62,000	$196,000 *	$2,000	$12,000
1988	62,000	196,000 *	16,000	15,000
1989	62,000	196,000 *	16,000	15,000-45,000
1990	62,000	196,000	16,000	15,000-45,000
1991	62,000	196,000	16,000	18,750-75,000
1992	62,000	199,500	20,000	20,000-80,000
1993	64,000	206,000	20,000	20,000-80,000
1994	67,100	216,500	20,000	20,000-80,001
1995	69,100	223,000	20,000	20,000-80,002
1996	71,200	229,700	20,000	20,000-80,003
1998	76,000	245,000	20,000	24,990-99,990
1999	79,000	246,000	35,000	24,990-99,991
2000	80,200	248,500	50,000	24,990-99,992
2001	80,400	248,000	78,000 **	30,000-120,000
2002	81,600	254,200	78,000	30,000-120,001
2003	82,700	257,375	80,000	31,000-124,000
2004	83,775	262,780	80,000	31,000-124,000
2005	85,100	265,780	82,500	32,500-130,000
2006	86,100	268,035	100,000	32,500-130,000
2007				

* 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 2007:

	Storm Sewer Adjustment	Storm Sewer Construction
2007	**$88,102**	**$271,117**

SUBCOMMITTEE'S RECOMMENDED PRICES FOR 2007:

	Storm Sewer Adjustment	Storm Sewer Construction	Lighting	Signals
2007	**$88,100**	**$271,200**	**$100,000**	**$130,000**

RAILROAD CROSSINGS NEEDS COSTS

NEEDS YEAR	SIGNS (Per Unit)	PAVEMENT MARKING	SIGNALS (Low Speed) (Per Unit)	SIGNALS & GATES (High Speed) (Per Unit)	CONCRETE CROSSING MATERIAL (Per foot)
1987	$300		$65,000	$95,000	
1988	300		65,000	95,000	$700
1989	300		70,000	99,000	700
1990	400		75,000	110,000	750
1991	500		80,000	110,000	850
1992	600	$750	80,000	110,000	900
1993	600	750	80,000	110,000	900
1994	800	750	80,000	110,000	750
1995	800	750	80,000	110,000	750
1996	800	750	80,000	110,000	750
1998	1,000	750	80,000	130,000	750
1999	1,000	750	85,000	135,000	850
2000	1,000	750	110,000	150,000	900
2001	1,000	750	120,000	160,000	900
2002	1,000	750	120,000	160,000	1,000
2003	1,000	750	120,000	160,000	1,000
2004	1,000	750	150,000	187,500	1,000
2005	1,000	750	150,000	187,000	1,000
2006	1,000	750	150,000	200,000	1,000
2007					

MN\DOT'S RAILROAD OFFICE RECOMMENDED PRICES FOR 2007:

	Signs	Pavement Marking	Signals	Sig. & Gates	Concrete X-ing Surf.
2007	**$1,000**	**$750**	**$175,000**	**$175,000-$250,000**	**$1,000**

SUBCOMMITTEE'S RECOMMENDED PRICES FOR 2007:

2007	**$1,000**	**$750**	**$175,000**	**$200,000**	**$1,000**

Minnesota Department of Transportation

Memo

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

Date: April 23, 2007

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

From: Mike Leuer
State Aid Hydraulic Specialist

Phone: (651) 747-2167

Subject: State Aid Storm Sewer
Construction Costs for 2006

We have completed our analysis of storm sewer construction costs incurred for 2006 and the following assumptions can be utilized for planning purposes per roadway mile:

- Approximately $271,117 for new construction, and
- Approximately $88,102 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 95 plans for 2006.

CC: Andrea Hendrickson (file)

Minnesota Department of Transportation

Memo

Office of Freight and Commercial Vehicle Operations
Railroad Administration Section
Mail Stop 470
395 John Ireland Blvd.
St. Paul, Minnesota 55155-1899

Office Tel: 651/366-3659
Fax: 651/366-3720

May 7, 2007

To: Marshall Johnson
Needs Unit – State Aid

From: Susan H. Aylesworth
Director, Rail Administration Section

Subject: Projected Railroad Grade Crossing Improvements – Cost for 2006

We have projected 2006 costs for railroad/highway improvements at grade crossings. For planning purposes, we recommend using the following figures:

Signals (single track, low speed, average price)*	$175,000.00
Signals & Gates (multiple track, high/low speed, average price)*	$175,000 - $250,000.00
Signs (advance warning signs and crossbucks)	$1,000 per crossing
Pavement Markings (tape)	$5,500 per crossing
Pavement Markings (paint)	$ 750 per crossing
Crossing Surface (concrete, complete reconstruction)	$1,000 per track ft.

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

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

Special Drainage Costs for Rural Segments
2007

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 the MN/DOT hydraulics unit, 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 15 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 5.2.4).
3) The MN/DOT hydraulics unit recommends using a 15 -inch Corrugated Steel Pipe and two GS 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 $22.00 per foot as a cost for 15” CSP and $150.00 per apron.
5) Using a 3:1 inslope for the driveway with a 4' deep ditch (the culvert would have 2.5 feet of cover), the length of the pipe would be 31 feet plus two aprons.
6) Therefore, the estimated construction needs cost per entrance would be $982.00.

Using the 1990 Needs Study Subcommittee recommended number of 25 entrances per mile, the cost of Side Culverts per mile would be $24,550.

For Centerline Culverts:

1) The minimum pipe diameter of centerline culverts shall be 18 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 5.2.4).
2) The MN/DOT hydraulics unit recommends using an 18 -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 $34.00 per foot as a cost for 18" RCP and $540 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 centerline culvert would be $2,848.

Using the 1990 Needs Study Subcommittee recommended number of four centerline culverts per mile, the cost of centerline culverts per mile would be $11,392.

By adding the cost of the 25 Side Culverts and the 4 centerline culverts, the estimated construction needs cost per mile for Special Drainage would be **$35,942** per mile.

SUBCOMMITTEE'S RECOMMENDED PRICE FOR THE 2007 NEEDS STUDY IS
$36,000 PER MILE.

The 2006 Cost per Mile was $40,000
The 2005 Cost per Mile was $40,000
The 2004 Cost per Mile was $40,000
The 2003 Cost per Mile was $37,400
The 2002 Cost per Mile was $37,400

This item was 0.12 % of the total needs last year.

CSAH Roadway Unit Price Report

JUNE, 2007

Construction Item	2006 CSAH Needs Study Average	2002-2006 CSAH 5-Year Const. Average	2006 CSAH Const. Average	2007 MSAS Needs Study Unit Price Recommended by NSS
Rural & Urban Design				
Gravel Base Cl 5 & 6/Ton	$7.03	$6.45	$7.89	
Outstate(Gravel Base Cl 5 & 6/Ton)	6.69	6.14	7.34	
Metro (Gravel Base Cl 5 & 6/Ton)	10.02	8.45	9.76	
Rural Design				
Outstate (Bituminous/Ton)	27.62	25.89	36.90	
Gravel Surf. 2118/Ton	7.09	6.34	7.21	7.10
Gravel Shldr. 2221/Ton	8.36	7.16	9.05	
Urban Design				
Outstate (Bituminous/Ton)	37.39	32.64	36.27	
Rural & Urban Design				
Metro (Bituminous/Ton)	37.41	38.93	49.68	

Gravel Surface cost used in the Needs last year was $7.10
This item was 0.00% of the Needs last year

RURAL SEGMENTS WITH PROJECTED TRAFFIC LESS THAN 150

from 2006 Needs for the 2007 Needs Study

CITY NAME	SEGMENT	PROPOSED DESIGN CODE	PROJECTED TRAFFIC	SEGMENT LENGTH
DAYTON	229 - 102 - 20	2 - RURAL/EXISTING RURAL	143	0.54
HIBBING	131 - 209 - 010	2 - RURAL/EXISTING RURAL	70	0.93
HIBBING	131 - 214 - 010	2 - RURAL/EXISTING RURAL	80	0.71
NORTH BRANCH	225 - 114 - 010	2 - RURAL/EXISTING RURAL	108	0.50
SHAKOPEE	166 - 128 - 20	2 - RURAL/EXISTING RURAL	75	0.26
TOTAL				**2.94**

2007 MSAS SCREENING BOARD DATA

JUNE, 2007

2006 Bridge Construction Projects

After compiling the information received from the Mn/DOT Bridge Office and the State Aid Bridge Office at Oakdale, these are the average costs arrived at for 2006. In addition to the 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.

From minutes of June 6, 2001 Screening Board Meeting:
Motion by David Sonnenberg and seconded by Mike Metso to combine the three bridge unit costs into one. Motion carried without oppostion.

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Bridges Let In Calendar Year 2006

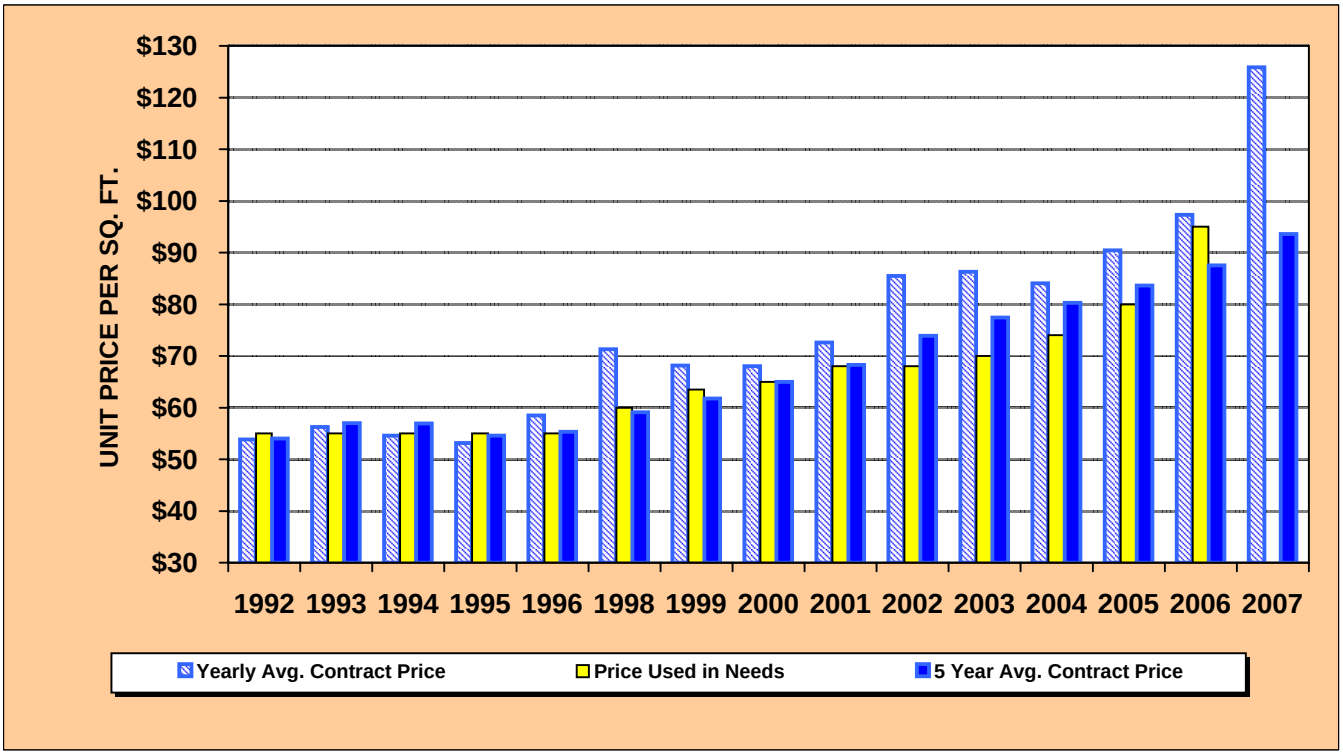
JUNE, 2007

BRIDGE LENGTH 0-149 FEET

NEW BRIDGE NUMBER	PROJECT NUMBER		LENGTH	DECK AREA	BRIDGE COST	COST PER SQ. FT.
1525	SAP	01-599-029	68.00	2,584	$328,222	$127
2563	SAP	02-649-001	71.42	6,493	778,174	120
4525	SAP	04-619-006	55.00	2,187	807,443	369
4524	SAP	04-619-006	102.00	3,863	421,291	109
8549	SAP	08-608-036	118.00	5,114	380,263	74
9528	SAP	09-598-006	80.00	2,912	263,178	90
9527	SAP	09-608-013	140.25	6,020	599,480	100
12550	SAP	12-599-061	113.00	3,555	297,710	84
12549	SAP	12-599-072	111.70	3,946	492,479	125
20556	SAP	20-634-009	86.67	4,377	497,788	114
22601	SAP	22-599-088	55.42	1,958	189,926	97
22604	SAP	22-599-095	73.50	2,300	220,782	96
25602	SP	25-662-002	132.16	10,133	1,262,492	125
27B19	SAP	27-633-001	88.00	6,175	1,178,502	191
27B34	SAP	27-635-025	39.67	3,438	547,249	159
29525	SP	29-599-005	138.50	4,894	392,615	80
36530	SAP	36-608-014	133.92	4,732	664,101	140
44512	SP	44-598-007	128.04	4,012	386,934	96
56536	SP	56-683-009	96.67	4,671	507,256	109
59517	SAP	59-599-051	110.00	3,541	280,750	79
59527	SAP	59-599-063	105.17	3,296	279,278	85
60557	SP	60-602-017	88.50	3,481	440,285	126
60556	SP	60-602-017	111.92	4,402	466,686	106
64576	SAP	64-599-086	75.42	2,363	210,911	89
64577	SAP	64-599-087	82.42	2,582	217,046	84
67554	SP	67-599-133	102.46	3,210	268,548	84
67556	SAP	67-599-145	77.50	2,428	214,874	89
68537	SAP	68-602-032	80.75	3,557	489,925	138
68538	SAP	68-602-033	88.00	3,813	407,173	107
69670	SP	69-616-043	68.92	2,504	262,357	105
70540	SAP	70-598-003	35.00	637	271,268	426
72541	SAP	72-599-050	126.50	3,963	308,561	78
73568	SP	73-617-032	132.58	6,673	573,544	86
74543	SAP	74-635-007	78.67	3,061	256,904	84
85554	SAP	85-599-053	117.40	3,678	346,015	94
85557	SAP	85-599-055	83.50	2,950	309,595	105
86529	SAP	86-602-011	133.00	6,295	451,331	72
69671	SAP	118-080-031	40.25	564	534,851	948
69672	SAP	118-176-002	32.25	779	518,859	666
27B30	SAP	128-411-005	56.00	1,217	714,586	587
70541	SP	211-010-005	134.76	1,954	873,666	447
TOTAL				**150,312**	**$18,912,898**	**$126**

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
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	54.61
1996	35	152,105	8,900,177	58.51	55.00	55.33
1998	52	191,385	13,651,209	71.33	60.00	59.12
1999	53	193,950	13,219,596	68.16	63.50	61.76
2000	54	210,895	14,341,592	68.00	65.00	64.99
2001	62	221,590	16,085,383	72.59	68.00	68.25
2002	62	274,232	23,435,194	85.46	68.00	73.93
2003	64	299,132	25,806,454	86.27	70.00	77.42
2004	85	293,925	24,704,150	84.05	74.00	80.30
2005	35	145,663	13,168,890	90.41	80.00	83.59
2006	42	156,176	15,198,545	97.32	95.00	87.51
2007	41	150,312	18,912,898	125.82		93.56

BRIDGES LET IN CALENDAR YEAR 2006

JUNE 2007

BRIDGE LENGTH 150 FEET & OVER

NEW BRIDGE NUMBER		PROJECT NUMBER	LENGTH	DECK AREA	BRIDGE COST	COST PER SQ. FT.
1526	SAP	01-622-007	243.25	9,506	$935,627	$98
27B32	SP	27-673-008	158.60	11,472	1,060,455	92
35534	SP	35-598-008	195.98	6,141	535,108	87
48526	SAP	48-609-006	171.40	8,113	1,119,625	138
66544	SP	66-599-013	219.50	8,666	938,731	108
66548	SAP	66-629-010	156.42	7,404	650,494	88
7001	SP	126-020-005	151.00	9,490	$759,149	80
27B45	SAP	193-020-008	319.67	24,401	1,886,096	77
TOTAL				**85,193**	**$7,885,285**	**$93**

BRIDGES LET IN CALENDAR YEAR 2006

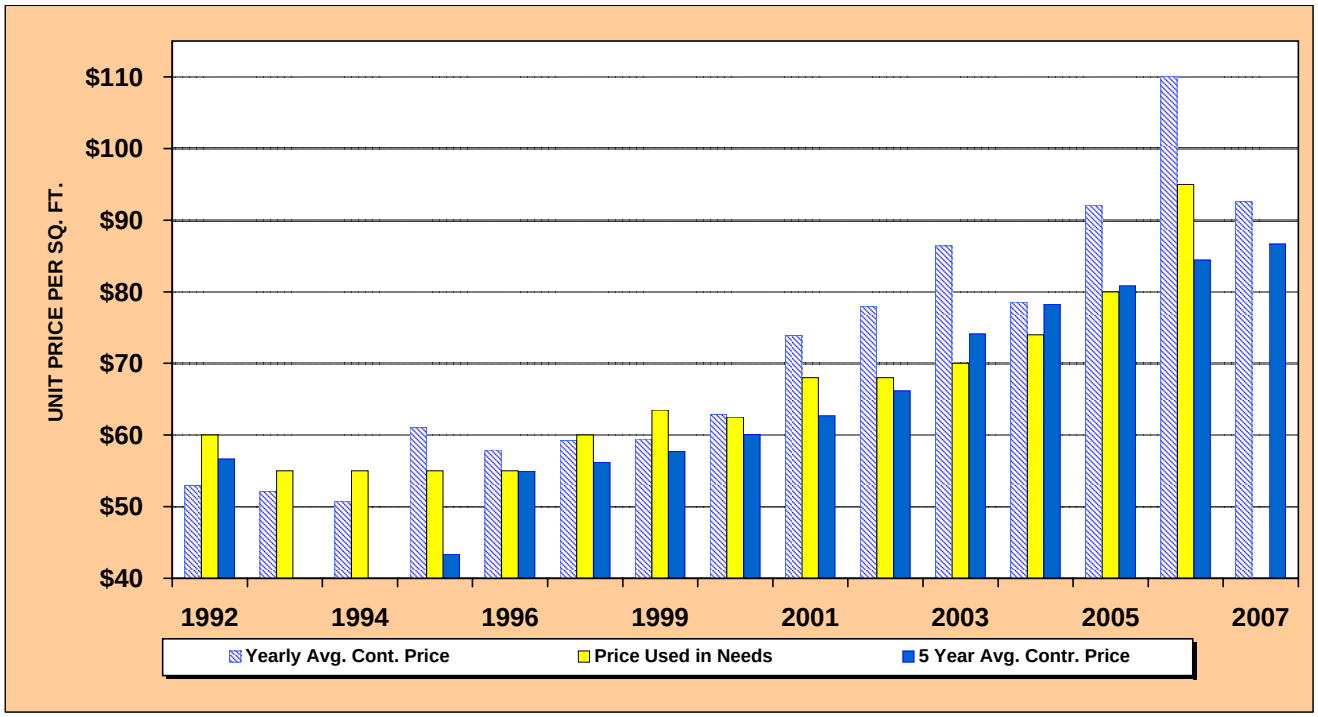
JUNE 2007

RAILROAD BRIDGES

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

BRIDGE COST

150 FEET AND OVER



NEEDS YEAR	NUMBER OF PROJECTS	DECK AREA	TOTAL COST	YEARLY AVERAGE CONTRACT PRICE	PRICE USED IN NEEDS	5-YEAR AVERAGE CONTRACT PRICE
1992	24	331,976	17,582,542	$52.96	$60.00	$56.66
1993	31	421,583	21,987,208	52.15	55.00	21.02
1994	29	307,611	15,619,506	50.78	55.00	31.18
1995	28	381,968	23,310,410	61.03	55.00	43.38
1996	27	385,230	22,302,967	57.90	55.00	54.96
1998	30	483,315	28,642,031	59.26	60.00	56.22
1999	29	455,964	27,104,753	59.44	63.50	57.68
2000	22	275,074	17,296,406	62.88	62.50	60.10
2001	21	272,162	20,110,670	73.89	68.00	62.67
2002	37	443,458	34,577,147	77.97	68.00	66.18
2003	40	667,548	57,671,538	86.39	70.00	74.15
2004	38	601,026	47,213,777	78.56	74.00	78.29
2005	8	68,194	6,278,305	92.07	80.00	80.81
2006	9	179,285	19,734,941	110.08	95.00	84.45
2007	8	85,193	7,885,285	92.56		86.67

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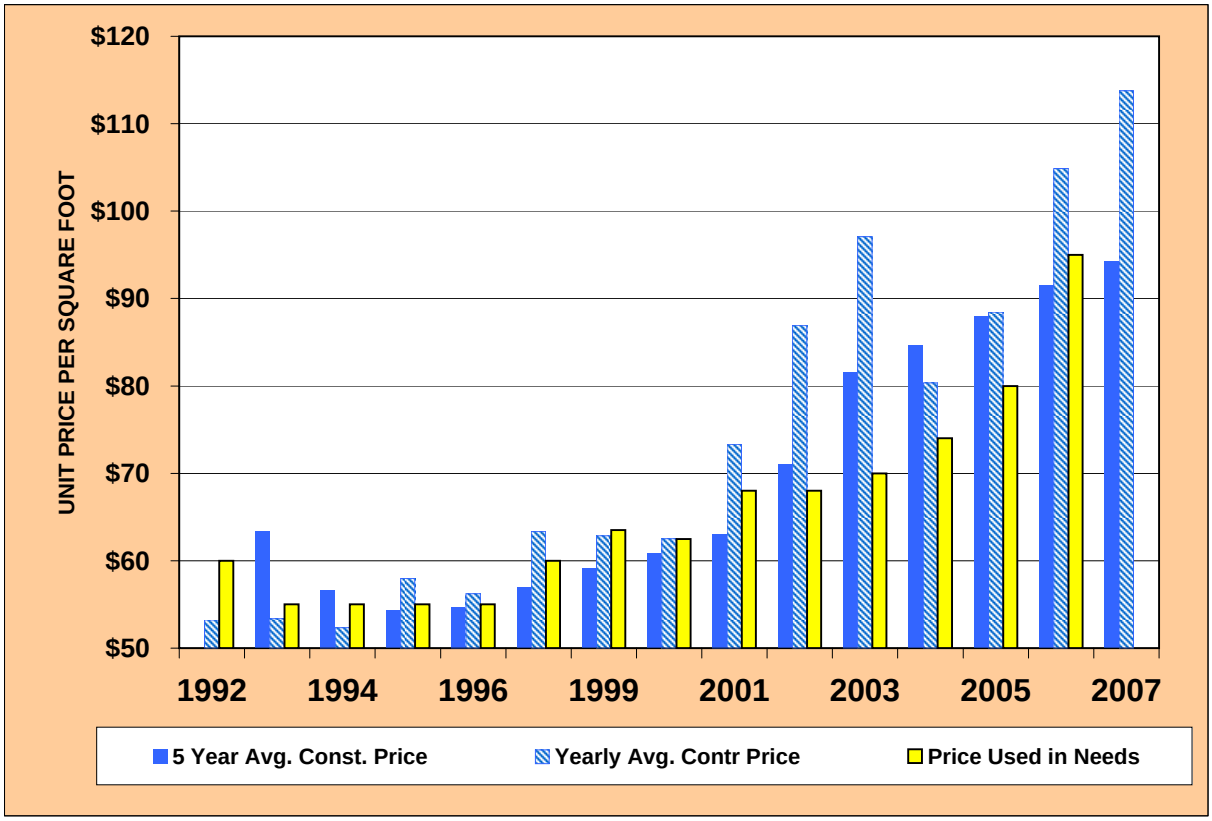
ALL BRIDGES COMBINED



NEEDS YEAR	NO. OF PROJECTS	DECK AREA	TOTAL COST	YEARLY AVERAGE CONTRACT PRICE	PRICE USED IN NEEDS	5 YEAR AVERAGE CONTRACT PRICE
1992	63	479,289	$25,511,792	$53.23	$60.00	
1993	75	857,555	45,765,099	53.37	55.00	$63.31
1994	81	591,325	30,941,713	52.33	55.00	56.65
1995	62	681,685	39,532,769	57.99	55.00	54.31
1996	66	695,086	39,079,076	56.22	55.00	54.72
1998	85	856,829	54,296,022	63.37	60.00	56.92
1999	88	851,845	53,553,089	62.87	63.50	59.13
2000	78	648,621	40,560,540	62.53	62.50	60.80
2001	83	493,752	36,196,053	73.31	68.00	63.08
2002	105	1,127,085	97,998,501	86.95	68.00	71.04
2003	114	1,708,572	165,859,117	97.07	70.00	81.61
2004	126	977,400	78,528,140	80.34	74.00	84.58
2005	44	252,713	22,351,485	88.45	80.00	87.93
2006	53	533,871	55,999,602	104.89	95.00	91.47
2007	49	235,505	26,798,183	113.79		94.26

SUBCOMMITTEE'S RECOMMENDED PRICE FOR THE 2007 NEEDS STUDY IS $105.00 PER SQ. FT.

This item was 4.24% of the total Needs last year

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RAILROAD BRIDGES OVER HIGHWAYS

07-May-07

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	0			9,000	7,500
2003	0	0			9,300	7,750
2004	0	0			9,600	8,000
2005	0	0			10,200	8,500
2006	0	0			10,200	8,500
2007	0	0				

SUBCOMMITTEE'S RECOMMENDED PRICE FOR THE 2005 NEEDS STUDY IS PER LINEAL FOOT FOR THE FIRST TRACK **$10,200**

SUBCOMMITTEE'S RECOMMENDED PRICE FOR THE 2005 NEEDS STUDY IS PER LIN. FT. FOR ADDITIONAL TRACKS **$8,500**

There are 67 Existing Underpasses on the MSAS system

There are 49 proposed Underpasses on the MSAS system

Applying the 4.10% CCI to these costs would be $10,618 and $8,849

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All Structures on the MSAS System

No. of Existing Structures	No. of Proposed Structures	Structure Type
398	127	1 - Bridge
23	11	3 - Structural Plate Arch
28	0	4 - Other
58	23	5 - Box Culvert Single
22	9	6 - Box Culvert Double
6	0	7 - Box Culvert Triple
1	0	8 - Box Culvert Quad
29	395	Adequate, or not eligible
565	**565**	**TOTAL**

There are a total of 253 adequate structures on the MSAS system.
There are a total of 312 deficient structures on the MSAS system
There are 142 structures on the MSAS system that don't qualify for Needs

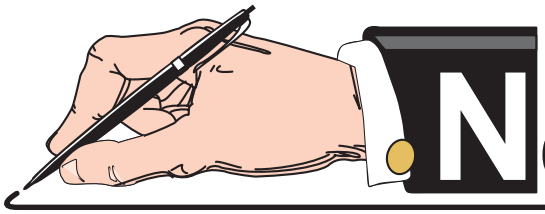
Structures on the MSAS System That Qualify for Needs

No. of Existing Structures	No. of Proposed Structures	Structure Type
299	127	1 - Bridge
22	11	3 - Structural Plate Arch
20	0	4 - Other
54	23	5 - Box Culvert Single
21	9	6 - Box Culvert Double
6	0	7 - Box Culvert Triple
1	0	8 - Box Culvert Quad
0	253	Blank - None Indicated (Not Eligible for Needs)
423	**423**	**TOTAL**

There are a total of 253 adequate structures on the MSAS system that qualify for Needs
There are a total of 170 deficient structures on the MSAS system that qualify for Needs

Subcommittee

Issues



NOTES and COMMENTS

Minutes
of the
Municipal State Aid Screening Board
Needs Study Subcommittee
May 1, 2007

The Needs Study Subcommittee met at 8:00 a.m. on May 1, 2007 at the MnDOT District 3 Headquarters in St. Cloud. Members present were Craig Gray – Anoka. Members absent were Tim Loose, Chair – St. Peter and Dave Kildahl – Crookston. Also present were Rick Kjonaas, Marshall Johnston and Dan Simon of Mn/DOT State Aid, Chuck Ahl, Chair Municipal Screening Board and Rhonda Rae - Minneapolis.

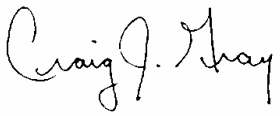
1. Marshall reviewed the Annual Maintenance Needs Cost. For 2007 the ENR Construction Cost Index (CCI) was used to help the committee set the needs cost per mile. The CCI was 4.10% in 2006. The Committee decided that the CCI should be added to the maintenance needs costs. Therefore, the NSS recommends the following Maintenance Needs Costs:

	< 1000ADT	>1000 ADT
Traffic Lane per Mile:	$1,800	$2,970
Parking Lane per Mile	$1,800	$1,800
Median Strip per Mile	$ 600	$1,180
Storm Sewer per Mile	$ 600	$ 600
Per Traffic Signal	$ 600	$ 600
Minimum per Mile	$5,960	$5,960

2. Unit Price Study:
   a. Excavation: NSS noted that a significant increase in the needs occurred in 2006, due to higher bid prices. The NSS recommends that the CCI of 4.1% be added to the 2006 unit price and recommends $4.95 per cubic yard.
   b. Aggregate Shouldering: NSS recommends $14.25 per ton again for 2007, no increase. The reported $5.66 represents only two projects last year. The NSS discussed whether or not to simply use the CSAH unit price for 2007. The NSS believes that the higher MSAS unit price is more accurate for MSA projects with smaller quantities than a rural CSAH project. However, the NSS noted that this item was only 0.07% of the total needs last year and this could be one item that be looked at as part of needs simplification/combination effort.
   c. Curb and Gutter Removal: Increase unit price by CCI. Recommend $2.90 per LF.
   d. Sidewalk Removal: No increase. $5.50 per SY
   e. Concrete Pavement Removal: No increase. $5.40 per SY. There was discussion about the concrete vs. bituminous removal issue. This is addressed further in the combined NSS and UCFS meeting minutes. However, the NSS feels that it is a large inequity to have needs for concrete pavement removal and not for bituminous pavement removal. The NSS recommended that the Screening Board should combine all types of pavement removal into one category.

f. Tree removal: NSS recommends increase to $310 per tree.
g. Aggregate Base 2211: Recommend $8.75 per ton based on CCI increase of 4.1%.
h. Bituminous: Recommend $42.00 per ton, which is an 11% increase over the 2006 unit price of $38.00 based on anticipation of higher prices this year due to oil increases.
i. Curb and Gutter Construction: Recommend $10.15 per LF.
j. Sidewalk Construction: Recommend $28.00 per SY.
k. Storm Sewer: Follow Hydraulics Unit recommendation and recommend $88,100 per mile for adjustments and $271,200 per mile for new construction. Lighting: Recommend $100,000 per mile. The NSS recognized that street lighting costs can be significantly higher than $100,000 per mile however it is recommended that the needs remain at $100,000 to avoid this single item from becoming an even larger part of our total needs. Signals: No change from 2006.
l. Railroad Crossing Needs: Recommend we use the recommendation from the MnDOT RR Office and use $175,000 for low speed signals and gates and $200,000 for high-speed signals and gates.
m. Special Drainage Costs for Rural Segments: Mn/DOT Hydraulics has recommended $35,942 per mile. The NSS recommends $36,000 per mile for the 2007 needs study.
n. Gravel Surface: The NSS recommends $7.10/ton. However the NSS noted that this item was 0.00% of the needs last year and after discussion with those present at the NSS meeting the NSS is recommending that the Screening Board consider removal of this item from future needs studies or that it be combined with other items as part of a grading factor.
o. Bridges: The NSS recommends $105.00 per square foot for all bridges.
p. Railroad Bridges over Highways: No basis for changing the unit price, so NSS recommends staying with the same prices as in 2006.

4. Adjournment: Craig Gray adjourned the meeting at 9:50 a.m.



Craig Gray, Secretary
Needs Study Subcommittee

Municipal State Aid Screening Board
Joint Needs Study / Unencumbered Construction Funds Subcommittee
Meeting Minutes
May 1, 2007

A joint meeting of the Needs Study Subcommittee (NSS) and the Unencumbered Construction Funds Subcommittee (UCFS) was held on Tuesday, May 1, 2007 at the Mn/DOT 3B District Headquarters Building in St. Cloud.

Attendance: Members in attendance included Lee Gustafson (Minnetonka) Chair of UCFS; Mike Metso (Krech Ojard & Associates) of the UCFS; Stephen Gaetz (St. Cloud) of the UCFS, and Craig Gray (Anoka) of the NSS. Also in attendance were Chuck Ahl (Maplewood) Chair of the MSB, Rhonda Rae (Minneapolis) representing Cities of the First Class; and Marshall Johnston, Rick Kjonaas, and Dan Simon of Mn/DOT State Aid.

Purpose: The primary purpose of the meeting was to review the equity/inequity of including concrete pavement removal but not bituminous pavement removal in the Needs Study. This item was referred to the NSS and UCFS by action of the 2006 Fall Screening Board.

I. CALL TO ORDER

The meeting of the Joint Subcommittee was called to order at 10:00 a.m. by Lee Gustafson, Chair of the UCFS.

Marshall Johnston welcomed those in attendance and reviewed the proposed agenda which included the following items:

a. Review and make recommendations to the MSB on the equity/inequity of having Needs for concrete pavement removal and not for bituminous pavement removal.
b. Other equity/inequity issues pertaining to concrete vs. bituminous.
c. Dilution of Municipal State Aid funding (discussion item to be led by Rick Kjonaas)
d. Other related issues

II. PROCEDURAL MATTERS

Marshall noted that the meeting minutes would be included in the Spring MSA booklet, and that any forthcoming recommendations from the Joint Subcommittee would be discussed at the upcoming pre-screening board meetings and at the 2007 Spring MSB meeting.

Stephen Gaetz was appointed Secretary for the purpose of recording the meeting minutes.

III. PAVEMENT REMOVAL NEEDS

A. Background Information: Marshall provided the following background information for the first two agenda items:

Combined NSS/UCFS Meeting of 09/14/06 - The Combined Subcommittees met on September 14, 2006. One of the issues discussed was a proposal to simplify and streamline the Unit Cost Study process. At that time the Combined Subcommittee recommended that the following items, which each reflect less than 2 percent of the 25-Year Construction Needs, should be combined and consolidated as part of the "Grading" construction needs category:

Urban Segments:		Rural Segments:	
Tree Removal	0.5%	Tree Removal	0.5%
Pavement Removal	1.8%	Pavement Removal	1.8%
C & G Removal	1.1%	Special Drainage	0.1%
Sidewalk Removal	0.7%	Gravel Surf/Shldrs	0.1%
TOTAL	4.1%	TOTAL	2.5%

It was further recommended at the September 14, 2006 Combined Subcommittee meeting that the Needs for these consolidated items should be applied as a simple "multiplier factor" against the calculated "Grading" construction item needs category. As "Grading" construction items needs reflect approximately 6.7 % of total construction item needs, the following multipliers were recommended:

Urban Multiplier: 4.1 / 6.7 = 0.61 (or a multiplier of 1.6)
Rural Multiplier: 2.5 / 6.7 = 0.37 (or a multiplier of 1.4)

2006 Fall MSB Meeting – After a spirited discussion at the 2006 Fall MSB Meeting a motion was made to adopt the (foregoing) recommendations of the Combined NSS/UCFS to simply and streamline the Unit Cost Study process. While general support was expressed for simplification of the process, the motion failed on a split vote. Equity issues were cited by those who opposed the motion, especially the inequity that results from including concrete pavement removal in the Needs Study and not bituminous pavement removal. It was mentioned that any streamlining process needs to preserve/achieve equity. Concern was also expressed that the total Needs should not be reduced. The following motion came from this discussion:

… A motion was made by Rae, seconded by Pagel to refer the pavement removal issue to the Combined Needs/UCFS Subcommittee. The motion passed on a vote of 7 to 4. A suggestion was also made to include a representative of Cities of the First Class on the committee.

Related Issues – While preparing the information on the equity of concrete vs. bituminous pavement removal, staff came across some other equity issues between concrete and bituminous, including:

- Bituminous pavement construction is included while concrete pavement construction is not included.

- Concrete curb and gutter is included while bituminous curb is not included.

- Concrete sidewalk construction and removal are included, while bituminous pathway construction and removal are not included.

(As these issues were not referred to the Combined Subcommittee by the MSB, the Subcommittee had the discretion to review or not to review them)

B. Subcommittee Recommendations:

1. After considerable discussion, a motion was made by Gray, seconded by Metso and carried unanimously to recommend the following actions to the 2007 Spring MSB:

   a. Eliminate *Concrete Pavement Removal* Needs
   b. Add a new general *Pavement Removal* Needs category that includes both concrete and bituminous pavement removals (to include all type F, G, H, I, J, K, L and M pavement types)
   c. The Unit Price for the general Pavement Removal category is to be based on the cost of bituminous pavement removal, and to be initially set at $2.50/s.y.

Committee members provided the following rationale for the recommended actions:

- Equity would be achieved in the Pavement Removal category by including all pavement types.
- The recommended action would not add a field to the Needs spread sheet which is already deemed too large
- Although the unit cost to remove concrete pavement is higher than the unit cost to remove bituminous pavement, basing the needs for the new general Pavement Removal category on bituminous removal costs is deemed equitable since concrete pavements have a longer useful life expectancy and draw needs for a longer period of time before replacement as compared to bituminous pavements.

2. After further discussion a motion was made by Metso, seconded by Gray and carried unanimously to recommend the following additional action to the 2007 Spring MSB:

   If the MSB eliminates the concrete pavement removal category in favor of a general pavement removal category (as recommended above) then, for the following reasons, the Joint Subcommittee recommends that MSB revisit the Grading Factor issue (as outlined in the background notes):

- The inequity in concrete vs. bituminous pavement removal needs was the primary reason cited at the 2006 Fall MSB meeting for voting down the Grading Factor

proposal. Thus, it would be appropriate to revisit the Grading Factor issue once this inequity is resolved.

- Adoption of the Grading Factor proposal would simply and streamline the Needs process.
- Adoption of the Grading Factor proposal would resolve other existing inequities in the Needs reporting process relating to pavement construction, curb and gutter and sidewalk construction (see Related Issues notes under Background Information above).

It is recommended that the MSB discuss this issue at the 2007 Spring meeting and provide direction for (possible) formal reconsideration of the Grading Factor issue at the 2007 Fall meeting.

IV. DILUTION OF STATE AID FUNDING:

The Subcommittee engaged in a brainstorm discussion lead by Rick Kjonaas concerning the effects that the dilution of State Aid funding has had on Cities, and possible ways that State Aid might change its operations to better benefit Cities. Formal minutes were not kept for this portion of the meeting.

The meeting of the Joint NSS/UCFS Subcommittee was adjourned at 12:30 p.m.

Respectfully submitted,

Stephen Gaetz – Secretary
Combined Needs Study / Unencumbered Construction Funds Subcommittee

Errors discovered in the map and the computer printout should be indicated for correction by showing the correct data in red color.
Errors in road location should be indicated by showing the correct location in red and x-ing out the incorrect location. Errors in surface type should be identified by red pencil note.
Errors in incorporation boundaries should be identified by x-ing out the improper boundary and roughly sketching in the correct boundary.

VIII. DEFINITIONS OF GENERAL HIGHWAY CONSTRUCTION TYPES FOR ANNUAL STATUS MAPS

A. PRIMITIVE ROAD

An unimproved route (on which there is no public maintenance) useable by 4-wheel vehicles and publicly traveled by small numbers of vehicles.

B. UNIMPROVED ROAD

A road using the natural surface and maintained to permit bare passability for motor vehicles, but not conforming to the requirements for a graded and drained earth road. The road may have been bladed and minor improvements may have been made locally.

C. GRADED AND DRAINED EARTH ROAD

A road of natural earth aligned and graded to permit reasonably convenient use by motor vehicles and drained by longitudinal and transverse drainage systems (natural or artificial) sufficiently to prevent serious impairment of the road by normal surface water with or without dust palliative treatment or a continuous course of special borrow material to protect the new roadbed temporarily and to facilitate immediate traffic service.

D. SOIL-SURFACED ROAD

A road of natural soil, the surface of which has been improved to provide more adequate traffic service by the addition of: (1) a course of mixed soil having A-1 or A-2 characteristics, such as sand-clay, soft shale or topsoil, or (2) an admixture such as bituminous material, portland cement, calcium chloride, sodium chloride or fine granular material (sand or similar material).

E. GRAVEL OR STONE ROAD

A road, the surface of which consists of gravel, broken stone, slag, chert, caliche, iron ore, shale, chat, disintegrated rock or granite, or other similar fragmental material (coarser than sand) with or without sand-clay, bituminous, chemical or portland cement stabilizing admixture or light penetrations of oil or chemical to serve as a dust palliative.

Minnesota Specification 2118, Aggregate Surfacing, falls in this classification.

F. BITUMINOUS SURFACE-TREATED ROAD

An earth road, a soil-surfaced road, or a gravel or stone road to which has been added, by any process, a bituminous surface course with or without a seal coat, the total compacted thickness of which is less than one inch. Seal coats include those known as chip seals, drag seals, plant-mix seals and rock asphalt seals.
Minnesota Specification 2321, Road-Mixed Bituminous Surface, falls into this classification.

G. MIXED-BITUMINOUS ROAD

A road, the surface course of which is one inch or more in compacted thickness composed of gravel, stone, sand, or similar material, mixed with bituminous material under partial control as to grading and proportions.

Both Minnesota Specifications 2331, 2340 and 2341, Plant Mixed Bituminous Surface, fall into this classification.

H. BITUMINOUS PENETRATION ROAD

A road, the surface course of which is one inch or more in compacted thickness composed of gravel, stone, sand, or similar material bound with bituminous material introduced by downward or upward penetration.

I. BITUMINOUS CONCRETE, SHEET ASPHALT OR ROCK ASPHALT ROAD

A road on which has been constructed a surface course one inch or more in compacted thickness consisting of bituminous concrete or sheet asphalt, prepared in accordance with precise specifications controlling gradation, proportions and consistency of composition, or of rock asphalt. The surface course may consist of combinations of two or more layers such as bottom and top course, or a binder and a wearing course. Minnesota Specification 2351, Asphaltic Concrete Surface which is not mentioned in the above description is included in this classification.

J. PORTLAND CEMENT CONCRETE ROAD

A road consisting of portland cement concrete with or without a bituminous wearing surface less than one inch in compacted thickness.

K. BRICK ROAD

A road consisting of paving brick with or without a bituminous wearing surface less than one inch in compacted thickness.

L. BLOCK ROAD

A road consisting of stone block, wood block, asphalt block or other form of block, except paving brick, with or without bituminous wearing surface less than one inch in compacted thickness.

M. COMBINATION TYPE ROAD

A road, the wearing course of which consists of two or more individual types each being of such depth as to be classed logically as a part of the traffic bearing road surface rather than as surfaced shoulders.

N. DIVIDED HIGHWAYS

Adjacent roadways carrying traffic in opposite directions and separated by a dividing or non-traffic bearing strip shall be classed as a divided highway and coded as type "N" as per sample.

EXAMPLES OF INPUT FOR ANNUAL STATUS MAPS

The letter designation indicated for the surface type of a road section should be shown as the numerator of a fraction; the widths of the roadway and surface to be shown as the denominator, separated by a hyphen.

The first figure to be shown is for: Roadway Width - the width in feet between shoulders or curb lines.

The second figure to be shown is for: Surface Width - that portion of a road which is surfaced to carry traveling vehicles.

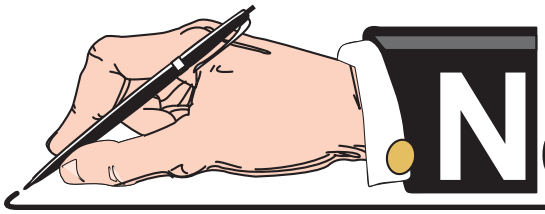
Undivided Roadways

3.5 $\frac{C}{24 \cdot 0}$ means 3.5 miles of $\frac{\textit{Graded \& Drained Earth}}{\textit{24' Roadway Width – No Surface Course}}$

1.2 $\frac{G}{32-24}$ means 1.2 miles of $\frac{\textit{Mixed Bituminous}}{\textit{32' Roadway Width – 24' Surface Width}}$

Divided Roadways

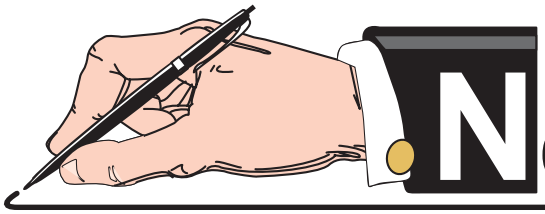
0.07 $\frac{N}{\frac{G-G}{36-24-26-20}}$ means 0.07 miles of $\frac{\textit{Mixed Bituminous}}{\textit{36' Roadway Width – 24' Surface Width}}$



NOTES and COMMENTS

OTHER

TOPICS



NOTES and COMMENTS

MUNICIPAL STATE AID CONSTRUCTION ACCOUNT
ADVANCE GUIDELINES

State Aid Advances

M.S. 162.14 provides for municipalities to make advances from future years allocations for the purpose of expediting construction. This process not only helps reduce the construction fund balance, but also allows municipalities to fund projects that may have been delayed due to funding shortages.

The formula used to determine if advances will be available is based on the current fund balance, expenditures trends, repayments and the $20,000,000 recommended threshold.

State Aid Advance Code Levels

Guidelines for advances are determined by the following codes.

SEVERE — Code RED - SEVERE- Fund Balances too low. NO ADVANCES - NO EXCEPTIONS

HIGH — Code ORANGE - HIGH - Fund Balance expected to drop below acceptable balance. Pain-O-Meter process in place. Advances approved by State Aid Engineer only. Resolution required. Reserve form not used.

GUARDED — Code BLUE- GUARDED - Fund balance low. Pain-O-Meter process in place. Advances approved on a case-by-case basis. Resolution required. Reserve option available only prior to bid advertisement by email or phone.

LOW — Code GREEN - LOW - Plush Fund Balance. Advances approved on first-come-first-serve basis while funds are available. Resolution required. Request to Reserve optional.

General Guidelines for State Aid Advances & Federal Aid Advance Construction

1. City Council Resolution
    - Must be received by State Aid Finance before funds can be advanced.
    - Required at all code levels.
    - Is not project specific.
    - Should be for the amount actually needed, not maximum allowable.
    - Resolution will be in effect when account balance reaches zero.
    - Must include a mutually acceptable repayment schedule (see limitations on pg 2).
        - Federal Aid Advances must include when project is programmed in the STIP and repayment will be made at time of conversion.
        - Federal Aid Advances must authorize repayments from a state aid account or local funds should the project fail to receive federal funds for any reason.
    - Does not reserve funds but gives State Aid Finance the authority to make project payments to the city that will result in a negative account balance.

- Good for year of submission only. If advance amount is not maximized, the resolution amount is reduced to actual advance amount and repayments are adjusted accordingly. If more funds are required, a new resolution must be submitted in the following year.
- Form can be obtained from SALT website.
    - #SALT 512(4/04) for State Aid projects.
    - #SALT 515(4/04) for Federal Aid projects.
- Mail completed form to Sandra Martinez in State Aid Finance.
    - E-mail will be sent to Municipal Engineer acknowledging receipt of resolution.

2. "Request to Reserve Advanced Funding" form
    - Not required.
    - Will allow the funds to be reserved for up to twelve weeks from date form is signed by Municipal Engineer.
    - Not used for Federal Aid Advance Construction projects.
    - Used in Code Green only.
    - Form #SALT 513(4/04), obtain from SALT website.
    - Mail completed form to Sandra Martinez in State Aid Finance.
        - Form will be signed and returned to Municipal Engineer

3. Pain-O-Meter
    - Resolution required.
        - Mail completed form to Sandra Martinez in State Aid Finance.
            - E-mail will be sent to Municipal Engineer acknowledging receipt of resolution.
    - Projects include, but are not limited, to projects where agreements with other agencies have mandated the municipality's participation or projects using Advance Federal Aid.
    - Requests are submitted to DSAE for prioritization within each district.
    - Requests should include negative impact if project had to be delayed or advance funding was not available; include significance of the project.
    - DSAE's submit prioritized lists to SALT for final prioritization.
    - Funds may be reserved (if available) prior to bid advertisement by phone call to Joan Peters. Do not use Request to Reserve Form.
    - Small over-runs and funding shortfalls may be funded, but require State Aid approval.

Advance Limitations

No statutory limitations. State Aid Rules limit advances as follows:

- Advance is limited to municipality's last construction allotment. SALT may approve advances that require more than 1 year's allotment or multiple year paybacks on a case-by-case basis. 5 times the annual construction allotment or $4,000,000 whichever is less is the maximum allowable
- Limitation may be exceeded by federal aid advance construction projects programmed by the ATP in the STIP where Sate Aid funds are used in lieu of federal funds. Repayment will be made at the time federal funds are converted.
- Any similar outstanding obligations and/or Bond Principle payments due reduce advance limit.
- The Municipal Screening Board shall recommend to the commissioner guidance for advance funding.

RELATIONSHIP OF CONSTRUCTION BALANCE TO CONSTRUCTION ALLOTMENT

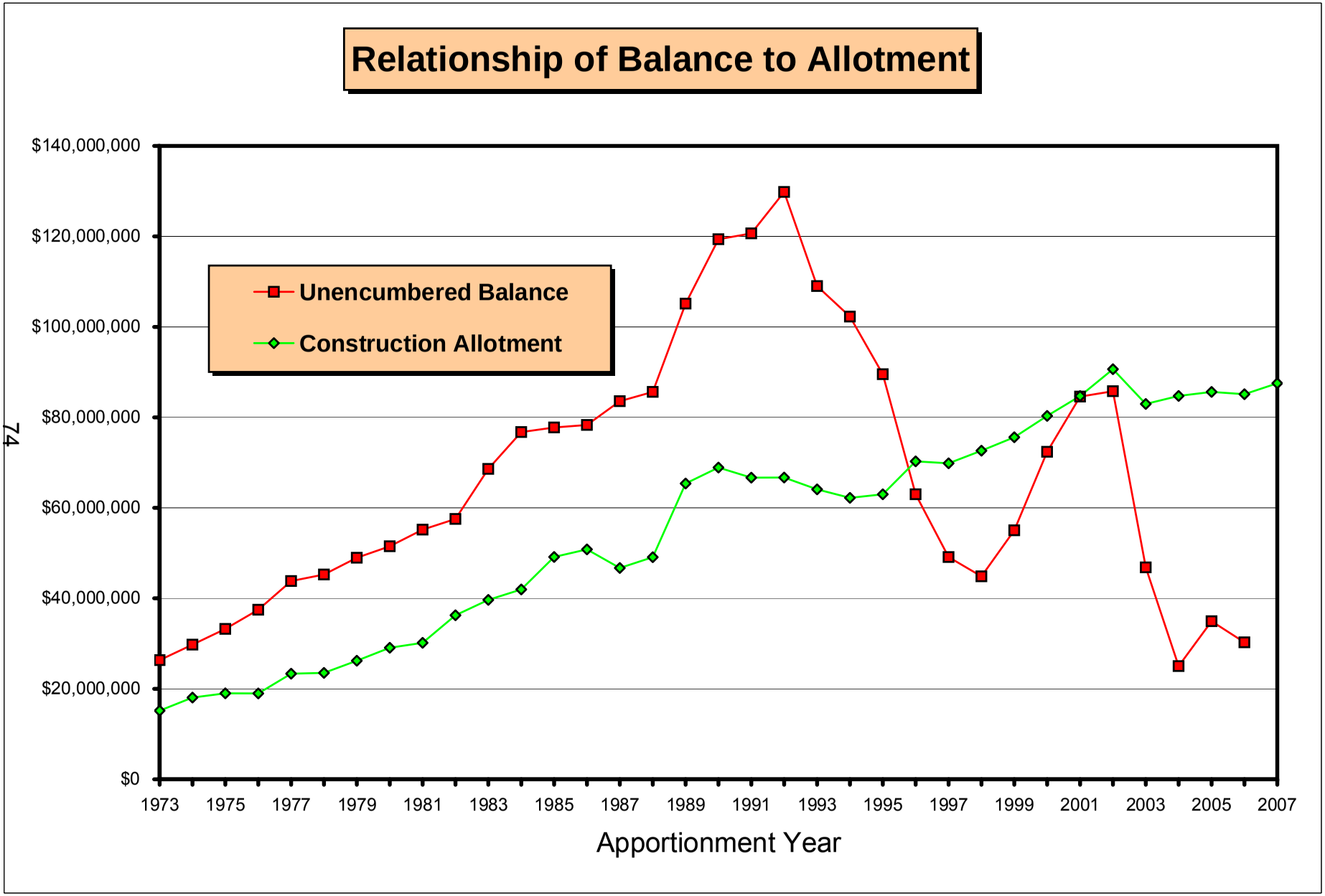
The amount spent on construction projects is computed by the difference between the previous year's and current years unencumbered construction balances plus the current years construction apportionment.

JUNE 2007 BOOK/RELATIONSHIP OF CONSTRUCTION BALANCE TO ALLOTMENT.XLS 07-May-07

App. Year		No. of Cities	Needs Mileage	January Construction Allotment	31-Dec Unencumbered Construction Balance	Amount Spent on Construction Projects	Ratio of Construction Balance to Construction Allotment	Ratio of Amount spent to Amount Received
1973		94	1,580.45	$15,164,273	$26,333,918	$12,855,250	1.7366	0.8477
1974		95	1608.06	18,052,386	29,760,552	14,625,752	1.6486	0.8102
1975		99	1629.30	19,014,171	33,239,840	15,534,883	1.7482	0.8170
1976		101	1718.92	18,971,282	37,478,614	14,732,508	1.9755	0.7766
1977		101	1748.55	23,350,429	43,817,240	17,011,803	1.8765	0.7285
1978		104	1807.94	23,517,393	45,254,560	22,080,073	1.9243	0.9389
1979		106	1853.71	26,196,935	48,960,135	22,491,360	1.8689	0.8585
1980		106	1889.03	29,082,865	51,499,922	26,543,078	1.7708	0.9127
1981		106	1933.64	30,160,696	55,191,785	26,468,833	1.8299	0.8776
1982		105	1976.17	36,255,443	57,550,334	33,896,894	1.5874	0.9349
1983		106	2022.37	39,660,963	68,596,586	28,614,711	1.7296	0.7215
1984		106	2047.23	41,962,145	76,739,685	33,819,046	1.8288	0.8059
1985		107	2110.52	49,151,218	77,761,378	48,129,525	1.5821	0.9792
1986		107	2139.42	50,809,002	78,311,767	50,258,613	1.5413	0.9892
1987	*	107	2148.07	46,716,190	83,574,312	41,453,645	1.7890	0.8874
1988		108	2171.89	49,093,724	85,635,991	47,032,045	1.7443	0.9580
1989		109	2205.05	65,374,509	105,147,959	45,862,541	1.6084	0.7015
1990		112	2265.64	68,906,409	119,384,013	54,670,355	1.7326	0.7934
1991		113	2330.30	66,677,426	120,663,647	65,397,792	1.8097	0.9808
1992		116	2376.79	66,694,378	129,836,670	57,521,355	1.9467	0.8625
1993		116	2410.53	64,077,980	109,010,201	84,904,449	1.7012	1.3250
1994		117	2471.04	62,220,930	102,263,355	68,967,776	1.6436	1.1084
1995		118	2526.39	62,994,481	89,545,533	75,712,303	1.4215	1.2019
1996		119	2614.71	70,289,831	62,993,508	96,841,856	0.8962	1.3778
1997	**	122	2740.46	69,856,915	49,110,546	83,739,877	0.7030	1.1987
1998		125	2815.99	72,626,164	44,845,521	76,891,189	0.6175	1.0587
1999		126	2859.05	75,595,243	55,028,453	65,412,311	0.7279	0.8653
2000		127	2910.87	80,334,284	72,385,813	62,976,924	0.9011	0.7839
2001		129	2972.16	84,711,549	84,583,631	72,513,731	0.9985	0.8560
2002		130	3020.39	90,646,885	85,771,900	89,458,616	0.9462	0.9869
2003		131	3080.67	82,974,496	46,835,689	121,910,707	0.5645	1.4693
2004		133	3116.44	84,740,941	25,009,033	106,567,597	0.2951	1.2576
2005		136	3190.82	85,619,350	34,947,345	75,681,038	0.4082	0.8839
2006		138	3291.64	85,116,889	30,263,685	89,800,549	0.3556	1.0550
2007		142	3382.28	87,542,451				

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

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


Relationship of Balance to Allotment
$140,000,000
$120,000,000
$100,000,000
$80,000,000
$60,000,000
$40,000,000
$20,000,000
$0
Unencumbered Balance
Construction Allotment
1973
1975
1977
1979
1981
1983
1985
1987
1989
1991
1993
1995
1997
1999
2001
2003
2005
2007
Apportionment Year

2007 APPORTIONMENT RANKINGS

5/7/2007

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

MSAS\Excel\2007\June 2007 Book\2007 Apportionment Rankings.xls

POPULATION APPORTIONMENT

Rank	Municipality	2006 Total Needs Mileage	2007 Population Apportionment Per Need Mile
1	MINNEAPOLIS	207.97	$29,885
2	HOPKINS	9.85	28,095
3	ST PAUL	164.75	27,963
4	FALCON HEIGHTS	3.29	27,671
5	NEW HOPE	12.70	26,346
6	VADNAIS HEIGHTS	8.45	25,119
7	CIRCLE PINES	3.26	24,940
8	COON RAPIDS	41.83	24,327
9	ROBBINSDALE	9.37	24,162
10	NEW BRIGHTON	14.92	23,859
11	COLUMBIA HEIGHTS	12.50	23,750
12	WASECA	6.71	23,266
13	WEST ST PAUL	13.54	22,974
14	ANOKA	12.64	22,924
15	ST LOUIS PARK	31.13	22,853
16	OAKDALE	19.30	22,834
17	ST ANTHONY	5.95	22,566
18	EAGAN	47.71	22,414
19	CHASKA	16.22	22,212
20	NORTHFIELD	13.74	22,122
21	ARDEN HILLS	7.12	22,035
22	RICHFIELD	25.11	21,986
23	BURNSVILLE	44.73	21,955
24	BROOKLYN CENTER	21.40	21,852
25	EDEN PRAIRIE	45.46	21,494
26	SHOREVIEW	19.52	21,322
27	APPLE VALLEY	36.93	21,264
28	CRYSTAL	17.88	20,350
29	BROOKLYN PARK	56.67	20,097
30	STEWARTVILLE	4.57	20,071
31	PLYMOUTH	56.85	19,867
32	ROCHESTER	78.64	19,813
33	WHITE BEAR LAKE	20.35	19,636
34	WINONA	22.29	19,632
35	CHAMPLIN	19.81	19,478
36	FARMINGTON	14.88	19,427
37	MOUND	8.17	19,303
38	FRIDLEY	22.87	19,240
39	SOUTH ST PAUL	16.82	19,220
40	WACONIA	7.82	18,962
41	EDINA	40.27	18,888
42	BLAINE	46.32	18,695

MONEY NEEDS APPORTIONMENT

Rank	Municipality	2006 Total Needs Mileage	2007 Money Needs Apportionment Per Need Mile
1	CROOKSTON	11.65	$27,190
2	BLOOMINGTON	75.25	25,148
3	ST PAUL	164.75	25,141
4	MINNEAPOLIS	207.97	24,707
5	MOUND	8.17	23,268
6	MAPLE GROVE	52.24	22,676
7	LA CRESCENT	5.64	21,723
8	FAIRMONT	19.70	21,578
9	INVER GROVE HEIGHTS	31.26	21,423
10	NEW ULM	16.11	21,150
11	JORDAN	5.89	20,841
12	THIEF RIVER FALLS	15.23	20,672
13	FERGUS FALLS	24.67	20,559
14	RED WING	24.54	20,126
15	FARMINGTON	14.88	20,048
16	FARIBAULT	23.60	19,965
17	AUSTIN	28.62	19,947
18	LITTLE FALLS	16.83	19,859
19	ST FRANCIS	11.55	19,808
20	RICHFIELD	25.11	19,802
21	DULUTH	114.38	19,545
22	ALBERTVILLE	7.26	19,521
23	STEWARTVILLE	4.57	19,174
24	COLUMBIA HEIGHTS	12.50	19,075
25	SAUK RAPIDS	11.87	19,068
26	ST PETER	15.26	18,874
27	BURNSVILLE	44.73	18,867
28	NEW HOPE	12.70	18,757
29	KASSON	5.06	18,639
30	ALBERT LEA	23.40	18,614
31	OWATONNA	25.24	18,434
32	MINNETRISTA	11.41	18,284
33	GRAND RAPIDS	15.86	18,269
34	COTTAGE GROVE	33.41	18,243
35	MAPLEWOOD	33.60	18,210
36	ST LOUIS PARK	31.13	18,131
37	ST ANTHONY	5.95	18,018
38	ALEXANDRIA	18.14	17,992
39	MOORHEAD	38.04	17,801
40	WOODBURY	52.88	17,771
41	NORTH ST PAUL	11.40	17,579
42	HERMANTOWN	14.08	17,478

TOTAL APPORTIONMENT

Rank	Municipality	2007 Total Needs Mileage	2006 Total Apportionment Per Need Mile
1	MINNEAPOLIS	207.97	$54,591
2	ST PAUL	164.75	53,104
3	HOPKINS	9.85	45,330
4	NEW HOPE	12.70	45,103
5	BLOOMINGTON	75.25	43,292
6	COLUMBIA HEIGHTS	12.50	42,825
7	MOUND	8.17	42,571
8	RICHFIELD	25.11	41,788
9	CIRCLE PINES	3.26	41,499
10	ST LOUIS PARK	31.13	40,984
11	BURNSVILLE	44.73	40,822
12	MAPLE GROVE	52.24	40,603
13	ST ANTHONY	5.95	40,585
14	FALCON HEIGHTS	3.29	40,353
15	WASECA	6.71	40,120
16	ROBBINSDALE	9.37	39,856
17	FARMINGTON	14.88	39,475
18	COON RAPIDS	41.83	39,406
19	STEWARTVILLE	4.57	39,245
20	SHOREVIEW	19.52	38,496
21	CROOKSTON	11.65	38,462
22	INVER GROVE HEIGHTS	31.26	38,445
23	ANOKA	12.64	38,364
24	VADNAIS HEIGHTS	8.45	38,315
25	EDEN PRAIRIE	45.46	37,450
26	APPLE VALLEY	36.93	36,757
27	ROCHESTER	78.64	36,481
28	WINONA	22.29	36,456
29	LA CRESCENT	5.64	36,354
30	ARDEN HILLS	7.12	36,048
31	SAUK RAPIDS	11.87	35,964
32	PLYMOUTH	56.85	35,923
33	NEW BRIGHTON	14.92	35,828
34	CRYSTAL	17.88	35,753
35	MAPLEWOOD	33.60	35,519
36	KASSON	5.06	35,468
37	FARIBAULT	23.60	35,320
38	BROOKLYN CENTER	21.40	34,991
39	FRIDLEY	22.87	34,879
40	NEW ULM	16.11	34,797
41	WACONIA	7.82	34,589
42	JORDAN	5.89	34,580

POPULATION APPORTIONMENT			
Rank	Municipality	2006 Total Needs Mileage	2007 Population Apportionment Per Need Mile
93	ALBERT LEA	23.40	$12,582
94	WILLMAR	23.91	12,543
95	LITCHFIELD	8.77	12,528
96	ALBERTVILLE	7.26	12,398
97	SARTELL	17.14	12,377
98	LAKE CITY	6.91	12,328
99	BEMIDJI	16.99	12,321
100	ANDOVER	39.31	12,266
101	HUTCHINSON	18.11	12,230
102	BELLE PLAINE	7.95	12,173
103	DULUTH	114.38	12,098
104	FOREST LAKE	23.05	12,091
105	GLENCOE	7.88	11,583
106	CROOKSTON	11.65	11,272
107	ST PETER	15.26	11,221
108	ST MICHAEL	20.63	10,995
109	RED WING	24.54	10,686
110	REDWOOD FALLS	8.20	10,672
111	ELK RIVER	32.80	10,531
112	ROSEMOUNT	29.96	10,390
113	MONTEVIDEO	8.55	10,263
114	MORRIS	8.11	10,225
115	HERMANTOWN	14.08	10,181
116	CHISHOLM	7.99	10,031
117	RAMSEY	34.86	10,001
118	ST FRANCIS	11.55	9,942
119	ORONO	12.43	9,870
120	ALEXANDRIA	18.14	9,760
121	VIRGINIA	15.93	9,215
122	FERGUS FALLS	24.67	9,034
123	THIEF RIVER FALLS	15.23	8,921
124	GRAND RAPIDS	15.86	8,907
125	LAKE ELMO	14.39	8,874
126	FAIRMONT	19.70	8,861
127	CAMBRIDGE	13.08	8,649
128	CLOQUET	21.67	8,582
129	DAYTON	9.72	8,343
130	DETROIT LAKES	15.44	8,313
131	EAST GRAND FORKS	15.51	8,078
132	OTSEGO	21.11	8,037
133	HAM LAKE	30.49	7,958
134	LITTLE FALLS	16.83	7,948
135	HUGO	19.15	7,902
136	MINNETRISTA	11.41	7,786
137	NORTH BRANCH	22.53	7,261
138	BAXTER	16.04	7,215
139	EAST BETHEL	28.37	6,734
140	CORCORAN	14.80	6,373
141	HIBBING	51.35	5,329
142	OAK GROVE	24.14	5,310
	AVERAGE		**$15,472**

MONEY NEEDS APPORTIONMENT			
Rank	Municipality	2006 Total Needs Mileage	2007 Money Needs Apportionment Per Need Mile
93	HIBBING	51.35	$14,399
94	ROSEVILLE	29.12	14,367
95	OTSEGO	21.11	14,090
96	ARDEN HILLS	7.12	14,013
97	LAKE CITY	6.91	13,955
98	MONTICELLO	10.37	13,824
99	MOUNDS VIEW	12.43	13,803
100	MENDOTA HEIGHTS	14.67	13,747
101	BRAINERD	16.78	13,518
102	SHAKOPEE	35.00	13,357
103	SOUTH ST PAUL	16.82	13,335
104	VADNAIS HEIGHTS	8.45	13,196
105	BROOKLYN CENTER	21.40	13,139
106	SHOREWOOD	8.61	12,959
107	HAM LAKE	30.49	12,878
108	EAST BETHEL	28.37	12,857
109	DETROIT LAKES	15.44	12,788
110	FALCON HEIGHTS	3.29	12,682
111	GOLDEN VALLEY	23.57	12,419
112	HUGO	19.15	12,251
113	CHASKA	16.22	12,238
114	EAGAN	47.71	12,143
115	MONTEVIDEO	8.55	12,102
116	BAXTER	16.04	12,082
117	ST JOSEPH	4.81	11,993
118	NEW BRIGHTON	14.92	11,970
119	CHANHASSEN	21.22	11,876
120	NORTHFIELD	13.74	11,580
121	WEST ST PAUL	13.54	11,476
122	BEMIDJI	16.99	11,378
123	WHITE BEAR LAKE	20.35	11,246
124	WAITE PARK	6.12	11,074
125	BIG LAKE	10.16	10,929
126	DAYTON	9.72	10,831
127	BLAINE	46.32	10,768
128	LAKE ELMO	14.39	10,705
129	MORRIS	8.11	10,506
130	NEW PRAGUE	6.45	10,422
131	SAVAGE	26.04	10,403
132	CHAMPLIN	19.81	10,373
133	HASTINGS	21.43	10,098
134	CAMBRIDGE	13.08	9,812
135	NORTH BRANCH	22.53	9,713
136	ISANTI	6.42	9,593
137	BROOKLYN PARK	56.67	9,583
138	MAHTOMEDI	8.62	9,182
139	CORCORAN	14.80	9,131
140	OAKDALE	19.30	8,947
141	SPRING LAKE PARK	5.82	7,628
142	ROGERS	7.66	6,649
	AVERAGE		**$15,628**

TOTAL APPORTIONMENT			
Rank	Municipality	2007 Total Needs Mileage	2006 Total Apportionment Per Need Mile
93	BELLE PLAINE	7.95	$28,607
94	LITTLE FALLS	16.83	27,807
95	ALEXANDRIA	18.14	27,752
96	HERMANTOWN	14.08	27,659
97	WILLMAR	23.91	27,638
98	GLENCOE	7.88	27,485
99	ANDOVER	39.31	27,476
100	GRAND RAPIDS	15.86	27,175
101	REDWOOD FALLS	8.20	27,136
102	HUTCHINSON	18.11	27,103
103	SHOREWOOD	8.61	27,017
104	SHAKOPEE	35.00	26,794
105	BRAINERD	16.78	26,752
106	MENDOTA HEIGHTS	14.67	26,403
107	GOLDEN VALLEY	23.57	26,368
108	NEW PRAGUE	6.45	26,305
109	LAKE CITY	6.91	26,283
110	SPRING LAKE PARK	5.82	26,280
111	ROSEMOUNT	29.96	26,215
112	HASTINGS	21.43	26,172
113	VIRGINIA	15.93	26,144
114	CHISHOLM	7.99	26,079
115	MINNETRISTA	11.41	26,070
116	ST MICHAEL	20.63	25,952
117	SAVAGE	26.04	25,585
118	ELK RIVER	32.80	25,246
119	ORONO	12.43	25,190
120	RAMSEY	34.86	24,654
121	BIG LAKE	10.16	24,610
122	EAST GRAND FORKS	15.51	24,261
123	CLOQUET	21.67	24,252
124	MAHTOMEDI	8.62	23,950
125	BEMIDJI	16.99	23,699
126	ISANTI	6.42	22,529
127	MONTEVIDEO	8.55	22,365
128	OTSEGO	21.11	22,127
129	DETROIT LAKES	15.44	21,101
130	HAM LAKE	30.49	20,835
131	MORRIS	8.11	20,731
132	ROGERS	7.66	20,704
133	OAK GROVE	24.14	20,652
134	HUGO	19.15	20,154
135	HIBBING	51.35	19,728
136	EAST BETHEL	28.37	19,590
137	LAKE ELMO	14.39	19,579
138	BAXTER	16.04	19,297
139	DAYTON	9.72	19,174
140	CAMBRIDGE	13.08	18,461
141	NORTH BRANCH	22.53	16,974
142	CORCORAN	14.80	15,504
	AVERAGE		**$31,099**

POPULATION APPORTIONMENT			
Rank	Municipality	2006 Total Needs Mileage	2007 Population Apportionment Per Need Mile
43	ST JOSEPH	4.81	$18,683
44	SPRING LAKE PARK	5.82	18,652
45	ROSEVILLE	29.12	18,652
46	BLOOMINGTON	75.25	18,144
47	MAPLE GROVE	52.24	17,927
48	WAITE PARK	6.12	17,746
49	PRIOR LAKE	19.62	17,481
50	MAPLEWOOD	33.60	17,308
51	STILLWATER	16.23	17,217
52	INVER GROVE HEIGHTS	31.26	17,023
53	CHANHASSEN	21.22	17,011
54	SAUK RAPIDS	11.87	16,896
55	MANKATO	33.30	16,864
56	KASSON	5.06	16,829
57	NORTH ST PAUL	11.40	16,774
58	MONTICELLO	10.37	16,482
59	MOUNDS VIEW	12.43	16,428
60	WOODBURY	52.88	16,397
61	ST CLOUD	63.22	16,287
62	MINNETONKA	50.86	16,281
63	HASTINGS	21.43	16,074
64	WORTHINGTON	11.39	15,961
65	COTTAGE GROVE	33.41	15,919
66	NEW PRAGUE	6.45	15,884
67	ST PAUL PARK	5.37	15,660
68	OWATONNA	25.24	15,405
69	FARIBAULT	23.60	15,354
70	SAVAGE	26.04	15,182
71	MAHTOMEDI	8.62	14,768
72	LA CRESCENT	5.64	14,632
73	VICTORIA	6.44	14,529
74	MOORHEAD	38.04	14,497
75	LITTLE CANADA	11.16	14,358
76	NORTH MANKATO	14.33	14,069
77	SHOREWOOD	8.61	14,059
78	ROGERS	7.66	14,055
79	GOLDEN VALLEY	23.57	13,949
80	LAKEVILLE	60.02	13,814
81	LINO LAKES	22.90	13,789
82	JORDAN	5.89	13,739
83	BIG LAKE	10.16	13,681
84	NEW ULM	16.11	13,646
85	SHAKOPEE	35.00	13,437
86	INTERNATIONAL FALLS	8.06	13,339
87	AUSTIN	28.62	13,309
88	MARSHALL	15.64	13,255
89	BRAINERD	16.78	13,234
90	ISANTI	6.42	12,937
91	MENDOTA HEIGHTS	14.67	12,656
92	BUFFALO	16.79	12,651

MONEY NEEDS APPORTIONMENT			
Rank	Municipality	2006 Total Needs Mileage	2007 Money Needs Apportionment Per Need Mile
43	ST PAUL PARK	5.37	$17,476
44	HOPKINS	9.85	17,236
45	SHOREVIEW	19.52	17,174
46	VIRGINIA	15.93	16,930
47	WASECA	6.71	16,854
48	WINONA	22.29	16,824
49	FOREST LAKE	23.05	16,821
50	ROCHESTER	78.64	16,668
51	LITCHFIELD	8.77	16,664
52	NORTH MANKATO	14.33	16,560
53	CIRCLE PINES	3.26	16,559
54	REDWOOD FALLS	8.20	16,465
55	BELLE PLAINE	7.95	16,434
56	SARTELL	17.14	16,405
57	BUFFALO	16.79	16,401
58	LAKEVILLE	60.02	16,313
59	INTERNATIONAL FALLS	8.06	16,284
60	EAST GRAND FORKS	15.51	16,183
61	WORTHINGTON	11.39	16,166
62	PLYMOUTH	56.85	16,057
63	CHISHOLM	7.99	16,048
64	LITTLE CANADA	11.16	16,040
65	EDEN PRAIRIE	45.46	15,956
66	MINNETONKA	50.86	15,952
67	GLENCOE	7.88	15,901
68	ROSEMOUNT	29.96	15,825
69	MARSHALL	15.64	15,793
70	ROBBINSDALE	9.37	15,694
71	CLOQUET	21.67	15,670
72	FRIDLEY	22.87	15,639
73	WACONIA	7.82	15,627
74	EDINA	40.27	15,602
75	MANKATO	33.30	15,552
76	APPLE VALLEY	36.93	15,493
77	ANOKA	12.64	15,440
78	CRYSTAL	17.88	15,403
79	OAK GROVE	24.14	15,341
80	ORONO	12.43	15,320
81	ANDOVER	39.31	15,210
82	LINO LAKES	22.90	15,150
83	WILLMAR	23.91	15,095
84	COON RAPIDS	41.83	15,079
85	ST MICHAEL	20.63	14,957
86	HUTCHINSON	18.11	14,872
87	ST CLOUD	63.22	14,824
88	VICTORIA	6.44	14,719
89	ELK RIVER	32.80	14,715
90	RAMSEY	34.86	14,653
91	STILLWATER	16.23	14,560
92	PRIOR LAKE	19.62	14,546

TOTAL APPORTIONMENT			
Rank	Municipality	2007 Total Needs Mileage	2006 Total Apportionment Per Need Mile
43	EAGAN	47.71	$34,557
44	EDINA	40.27	34,490
45	CHASKA	16.22	34,451
46	WEST ST PAUL	13.54	34,450
47	NORTH ST PAUL	11.40	34,353
48	WOODBURY	52.88	34,169
49	COTTAGE GROVE	33.41	34,162
50	OWATONNA	25.24	33,838
51	NORTHFIELD	13.74	33,702
52	AUSTIN	28.62	33,256
53	ST PAUL PARK	5.37	33,136
54	ROSEVILLE	29.12	33,019
55	SOUTH ST PAUL	16.82	32,555
56	MANKATO	33.30	32,416
57	MOORHEAD	38.04	32,298
58	MINNETONKA	50.86	32,233
59	WORTHINGTON	11.39	32,128
60	PRIOR LAKE	19.62	32,027
61	ALBERTVILLE	7.26	31,919
62	OAKDALE	19.30	31,781
63	STILLWATER	16.23	31,776
64	DULUTH	114.38	31,643
65	ALBERT LEA	23.40	31,195
66	ST CLOUD	63.22	31,111
67	WHITE BEAR LAKE	20.35	30,882
68	RED WING	24.54	30,812
69	ST JOSEPH	4.81	30,676
70	NORTH MANKATO	14.33	30,629
71	FAIRMONT	19.70	30,438
72	LITTLE CANADA	11.16	30,398
73	MONTICELLO	10.37	30,306
74	MOUNDS VIEW	12.43	30,230
75	LAKEVILLE	60.02	30,127
76	ST PETER	15.26	30,095
77	CHAMPLIN	19.81	29,851
78	ST FRANCIS	11.55	29,749
79	BROOKLYN PARK	56.67	29,680
80	INTERNATIONAL FALLS	8.06	29,624
81	THIEF RIVER FALLS	15.23	29,593
82	FERGUS FALLS	24.67	29,593
83	BLAINE	46.32	29,463
84	VICTORIA	6.44	29,249
85	LITCHFIELD	8.77	29,192
86	BUFFALO	16.79	29,052
87	MARSHALL	15.64	29,048
88	LINO LAKES	22.90	28,938
89	FOREST LAKE	23.05	28,912
90	CHANHASSEN	21.22	28,887
91	WAITE PARK	6.12	28,820
92	SARTELL	17.14	28,782

4/30/2007

2007 Local Road Research Board Program

INCLUDES 2007 APPROVED ONGOING PROGRAMS

INV	TITLE	PROJECT TOTAL	LRRB $	LRRB Paid to Date	Committed Previous Years	2007	2008	2009	2010	2011	2012
645	2005-2006 Implementation of Research Findings	**400,000**	**404,083**	$315,393		75,565	13,125				
645	2007-2008 Implementation of Research Findings	**400,000**	**400,000**			35,000	150,000	215,000			
668*	2006 Technology Transfer Center, U of M - Base	**185,000**	**185,000**	25,650		129,016	30,334				
	Technology Transfer Center, U of M - Cont. Projects:										
883	Circuit Training & Assist.Program (CTAP), Instructor-$74,500	**74,500**	**74,500**	74,500							
	Circuit Training & Assist.Program (CTAP) T^2 Center-$84,000	**84,000**	**84,000**	84,000							
	Minnesota Maintenance Research Expos	**26,000**	**26,000**	26,000							
	Transportation Student Development	**5,500**	**5,500**	5,500							
668*	2007 Technology Transfer Center, U of M - Base	**185,000**	**185,000**					185,000			
	Technology Transfer Center, U of M - Cont. Projects:										
882	Circuit Training & Assist.Program (CTAP), Instructor-$74,500	**74,500**	**74,500**				74,500				
	Circuit Training & Assist.Program (CTAP) T^2 Center-$84,000	**84,000**	**84,000**				84,000				
	Minnesota Maintenance Research Expos	**26,000**	**26,000**				26,000				
	Transportation Student Development	**5,500**	**5,500**			5,000	500				
676	2007 MN Road Research: Facility Sprt-$500,000, Staff -$60,000	**560,000**	**560,000**				560,000				
745	2007 Library Services for Local Governments	**60,000**	**60,000**				60,000				
768	Geosynthetics in Roadway Design thru FY11	**30,000**	**30,000**	6,000		9,000	2,500	2,500	2500	2500	5000
773*	Shredded Tires Used for Road Bases	**150,000**	**100,000**	73,856		26,144					
792*	Pavement Research Institute funded thru CY2007	**730,000**	**300,000**	240,000		60,000					
801*	Adaptation of Mechanistic 2003 Guide for Design of MN-Low Volume PCC	**89,900**	**25,000**	25,000							
808	Pavement Rehabilitation Selection (co PI U of M & Lab)	**102,000**	**102,000**	15,300	**16,320**	10,000	37,030	23,350			
809	Research Tracking for Local Roads funded thru CY08	**60,000**	**60,000**	17,825		25,730	16,445				
810*	Coal Ash Utilization in Gravel Roads	**212,995**	**149,280**	128,183		21,097					
812	Resilient Modulus & Strength of Base Course with Recycled Asphalt Pavements	**94,000**	**94,000**	75,200		18,800					
813	Human-Centered Interventions Twrd Zero Deaths in Rural MN	**188,804**	**188,804**	66,080		122,724					
815*	Calibration of the 2002 AASHTO Pavement Design Guide for Minnesota Portland Cement Concrete Pavements and Hot Mix Asphalt Pavements	**292,385**	**126,600**	8,809	**19,968**	87,823	10,000				
817*	Determination of Optimum Time for the Application of Surface Treatments to Asphalt Concrete Pavements	**226,000**	**113,000**	26,600	**72,400**	14,000					
822	Crack Sealing & Filling Performance	**72,802**	**72,802**			5,800	33,354	33,648			
823	The Road to a Thoughtful Street Tree Master Plan (increase apprvd.vl $1,000)	**31,450**	**31,450**	3,958		21,924	5,568				
824	Dev of Improved Proof Rolling Methods for Roadway Embankment Construction	**110,000**	**110,000**	45,100		49,500	15,400				
825	Perf Monitoring of Olmsted CR 177/104 & Aggregate Base Material thru FY11 @ $8K/year	**40,000**	**40,000**			8,000	8,000	8,000	8,000	8,000	
826	Appropriate Use of RAP	**30,789**	**30,789**	5770		15,019	5,000	5,000			
827	Winter Pavement Tenting (expired - 3/07 reinstated)	**25,126**	**25,126**				12,563	12,563			
828	Local Road Material Properties and Calibration of MnPAVE	**56,000**	**56,000**			48,000	8,000				
830	Evaluating Roadway Subsurface Drainage Practices	**186,735**	**186,735**	1,204	**126,099**	50,082	9,350				
831*	Stripping in MN Class 7 (Rap) & Full Depth Reclamation Base Material	**101,656**	**50,793**	1,167		45,798	3,453	375			
832*	Volume Warrants for Right Turn Lanes	**61,000**	**16,620**	13,100	**1,900**	1,620					
833*	Design Tool for Controlling Runoff & Sediment from Highway Construction	**89,000**	**44,500**	10,000		34,500					
834	Assessment of Storm Water Management Practices on the Water Quality of Runoff	**138,000**	**138,000**	103,500		34,500					
835	Best Use of Cone Penetration Testing	**55,000**	**55,000**		**22,000**	27,500	5,500				
836	Design Procedures for Bituminous Stabilized Road Surfaces for low Volume Roads	**60,080**	**60,080**	44,919		15,161					
838*	Petroleum Glass Spun Glass Paving Fabric	**30,000**	**20,000**		**10,000**	10,000					
839	Warrants for Roundabouts	**39,444**	**39,444**			22,699	16,745				
840	Performance of PG 52-34 Oil	**76,200**	**76,200**			20,000	10,000	32,000	14,200		
841	Long-Term Maintenace Effect on Hot Mix Asphalts	**43,257**	**43,257**			8,257	25,000	10,000			
842	Best Practices for Dust Control on Agg Surfc Road	**75,000**	**75,000**	19,873		19,294	15,833	20,000			
843*	Predicting Bumps in Overlays - thru 09- CO PROJECT WITH LAB	**64,540**	**64,540**			11,870	26,593	26,077			
844	Update Vehicle Classification for CR Pavement Dsgn	**54,094**	**54,094**			39,550	14,544				
845	Analysis of Highway Design and Geometric Effects on Crashes - Part I (CH2MHill)	**70,373**	**70,373**	PENDING CONTRACT		10,000	35,000	25,373			
846	Hydraulic, Mechanical, and Leaching Characteristics of Recylcled Materials	**135,000**	**135,000**			56,654	68,346	10,000			
847	Use of Fly Ash for Reconstruction of Bitum Roads	**170,056**	**170,056**			70,692	44,364	55,000			
848	Warning Efficacy of Active Passive Warnings for Unsignalized Intersection & Mid-Block Pedestrian Sidewalks	**118,908**	**118,908**			56,481	50,536	11,891			
849	Environmental Effects of De-Icing Salt on Water Quality	**93,355**	**93,355**	18,671		32,673	42,011				
850	Mechanistic Modeling of DCP Test	**105,000**	**105,000**			63,000	36,750	5,250			
851	Allowable Axle Loads on Pavements	**110,000**	**110,000**			36,438	24,062	49,500			
852	Subsurface Drainage Manual for Pavements in MN	**71,638**	**71,638**	14,202		48,793	8,643				

INV	TITLE	PROJECT TOTAL	LRRB $	LRRB Paid to Date	Committed Previous Years	2007	2008	2009	2010	2011	2012
853	Development of Flexural Vibration Equipment PhsII	**52,980**	**52,980**			37,083	15,897				
854*	Pavement Peformance/Failure under Overweight Farm Loads - Pooled Fund Prjct	**475,000**	**105,000**	PENDING CONTRACT		35,000	70,000				
855*	A Property-Based Spec for Coarse Aggregate in Pavement Apps	**92,624**	**46,313**				33,601	12,712			
856*	Investigation of In-Place Asphalt Film Thickness and Performance of MN Hot Mix Asphalt Mixtures	**78,000**	**38,905**				35,010	3,895			
857*	Report & Analysis of Effects of Seasonal and Climatic Changes on Ride Quality as Observed in MnROAD Low & High Volume Roads	**79,494**	**39,744**			26,495	13,249				
858*	Crack & Concrete Deck Sealant Performance	**75,000**	**37,500**			18,750	18,750				
860	Compaction Specifications for Unbound Materials	**105,000**	**105,000**			16,000	29,500	59,500			
861	Best Mgmt Practices for Pavement Preservation of Hot mix Asphalt	**71,049**	**71,049**			25,000	25,000	21,049			
862*	Real Time Arterial Performance - U of M contribute	**140,000**	**70,000**			22,167	20,000	27,833			
863*	Optimal Timing of Preventive Maintenance for Addressing Environmental Aging in HMA Pavements-Pooled Fund Prjct	**335,000**	**75,000**	PENDING CONTRACT		15,000	15,000	15,000	15,000	15,000	
864*	Recycled Asphalt Pavements-Pooled Fund Prjct	**350,000**	**75,000**	PENDING CONTRACT		15,000	15,000	15,000	15,000	15,000	
865*	Low Temp Cracking - Pooled Fund Prjct	**400,000**	**50,000**	PENDING CONTRACT		10,000	10,000	10,000	10,000	10,000	
867*	Composite Pavements - Pooled Fund Prjct	**450,000**	**50,000**	PENDING CONTRACT		10,000	10,000	10,000	10,000	10,000	
868*	HMA Surface Characteristics-Pooled Fund Project	**300,000**	**75,000**	PENDING CONTRACT		15,000	15,000	15,000	15,000	15,000	
870	Stream Geomorphology & Fish Passage Rqrmnt on Const Costs of Culvert Structure	**50,663**	**50,663**	PENDING CONTRACT			27,807	22,856			
871*	Statistical Methods for Material Testing	**95,260**	**47,630**	PENDING CONTRACT			20,925	22,890	3,815		
872*	Mn/ROAD Data Mining, Evaluation and Qualification Phase 1	**55,000**	**27,500**	PENDING CONTRACT			15,000	12,500			
873	Use of Foamed Asphalt Base Reclamation on Local Roads	**20,000**	**20,000**	PENDING CONTRACT			20,000				
874*	Assessment of the Underground Stormwater Management Devices	**111,000**	**55,500**	PENDING CONTRACT			25,000	25,000	5,500		
875*	Estimating Size Distribution of Suspended Sediments in MN Stormwater	**155,000**	**55,000**	PENDING CONTRACT			20,000	18,000	17,000		
876	Best Preventive Maintenance Treatments for Recreational Trails	**53,569**	**53,569**	PENDING CONTRACT			16,785	30,784	6,000		
877	Development and Field Test of Advance Dynamic LED Warning Signals	**99,940**	**99,940**	PENDING CONTRACT			64,961	34,979			
878	Porous Asphal Pavement Performance in Cold Regions	**82,400**	**82,400**	PENDING CONTRACT			28,300	33,425	20,675		
879	Pervious Concrete Pavement in Mn/ROAD Low Volume Road	**50,000**	**50,000**	PENDING CONTRACT			25,000	25,000			
880	Snow Plow Optimization - St Louis Co	**45,000**	**45,000**	PENDING CONTRACT			15,000	15,000	15,000		
881*	LRRB Annual Program/Technical Synthesis Reports	**17,912**	**10,000**			10,000					
882	Technical Synthesis Report - Financing	**22,104**	**22,104**	22,104		22,104					
998	2006 Operational Research Program	**70,000**	**70,000**	5,000		5,761	6,739	52,500			
998	2007 Operational Research Program	**70,000**	**70,000**				20,000	20,000	30000		
998	Website Enhancements	**16,300**	**16,300**				16,300				
999	2007 Program Administration (includes web, outreach & publishing)	**266,000**	**266,000**				133,000	133,000			
	TOTALS	10,944,882	7,560,624	1,522,463	$268,687	1,787,064	2,369,873	1,366,450	187,690	75,500	5,000

Footnotes from Page 1 & 2:

*Projects co-funded from other sources

Pending Contract

SUMMARY:		City	County
Funds Allotted for 2007 (Receive FY07 - July 06)	$ 2,339,382	$ 557,436	$ 1,781,946

January 3, 2003

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 2007 and updated in the needs in 2008

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

Metro District
Four year traffic counting schedule - to be counted in 2009 and updated in the needs in 2010

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

Outstate
Two year traffic counting schedule - to be counted in 2007 and updated in the needs in 2008

Northfield
St. Cloud
Sartell

Outstate
Two year traffic counting schedule - to be counted in 2008 and updated in the needs in 2009

Rochester

Outstate
Two year traffic counting schedule - to be counted in 2007 and updated in the needs in 2008

Brainerd

Outstate
Four year traffic counting schedule - to be counted in 2007 and updated in the needs in 2008

Bemidji
Big Lake
Cambridge
Chisholm
Duluth
Elk River
Fergus Falls
Glencoe
Hermantown
Hibbing
Hutchinson
Isanti
La Crescent
Lake City
Litchfield
North Mankato
Owatonna
Red Wing
Redwood Falls
Saint Joseph
Saint Peter
Sauk Rapids
Thief River Falls
Virginia
Waite Park
Waseca
Winona

Outstate
Four year traffic counting schedule - to be counted in 2008 and updated in the needs in 2009

Austin	International Falls	Otsego
Buffalo	Montevideo	Saint Michael
Detroit Lakes	Monticello	

Outstate
Four year traffic counting schedule - to be counted in 2009 and updated in the needs in 2010

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

Outstate
Four year traffic counting schedule - to be counted in 2010 and be updated in the needs in 2011

Alexandria	Stewartville	Worthington
Cloquet	Willmar	

Duluth counts 1/4 of the city each year.

CURRENT RESOLUTIONS
OF THE
MUNICIPAL SCREENING BOARD

June 2007

Bolded wording (except headings) are revisions since the last publication of the Resolutions

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 **$557,436** (not to exceed 1/2 of 1% of the **2006** MSAS Apportionment sum of **$111,487,130**) shall be set aside from the 2006 Apportionment fund and be credited to the research account.

Soil Type - Oct. 1961 (Revised June, 2005)

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 using the following steps:

a) The DSAE shall have the authority to review and approve requests for Soils Factor revisions on independent segments (if less than 10% of the MSAS system). Appropriate written documentation is required with the request and the DSAE should consult with the Mn/DOT Materials Office prior to approval.
b) If greater than 10% of the municipality's MSAS system mileage is proposed for Soil Factor revisions, the following shall occur:
    Step 1. The DSAE (in consultation with the Mn/DOT Materials Office) and Needs Study Subcommittee will review the request with appropriate written documentation and make a recommendation to the Screening Board.
    Step 2. The Screening Board shall review and make the final determination of the request for Soils Factor revisions.

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 Mn/DOT Soils Classification Map for Needs purposes. Any requests for changes must follow the above process.

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 (Revised June, 2005)

That any new city having determined its eligible mileage, but has not submitted its Needs to the DSAE by December 1, will have its money Needs determined at the cost per mile of the lowest other city.

Unit Price Study- Oct. 2006

That the Unit Price Study go to a 3 year (or triennial) cycle with the Unit Prices for the two 'off years' to be set using the Engineering News Record construction cost index. The Screening Board may request a Unit Price Study on individual items in the 'off years' if it is deemed necessary.

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

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

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

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

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

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

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

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

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

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

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

Population Apportionment - October 1994, 1996

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

DESIGN

Design Limitation on Non-Existing Streets - Oct. 1965

That non-existing streets shall not have their Needs computed on the basis of urban design unless justified to the satisfaction of the State Aid Engineer.

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

That if a Municipal State Aid Street is constructed with State Aid funds to a width less than the design width in the quantity tables for Needs purposes, the total Needs shall be taken off such constructed street other than Additional Surfacing Needs.
Additional surfacing and other future Needs shall be limited to the constructed width as reported in the Needs Study, unless exception is justified to the satisfaction of the State Aid Engineer.

Greater Than Minimum Width (Revised June 1993)

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

Miscellaneous Limitations - Oct. 1961

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

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

That the maximum mileage for Municipal State Aid Street designation shall be 20 percent of the municipality's basic mileage - which is comprised of the total improved mileage of local streets, county roads and county road turnbacks.

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

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

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

That the maximum mileage for Municipal State Aid Street designation shall be based on the Annual Certification of Mileage current as of December 31st of the preceding year. Submittal of a supplementary certification during the year shall not be permitted. Frontage roads not designated Trunk Highway, Trunk Highway Turnback or County State Aid Highways shall be considered in the computation of the basic street mileage. The total mileage of local streets, county roads and county road turnbacks on corporate limits shall be included in the municipality's basic street mileage. Any State Aid Street that is on the boundary of two adjoining urban municipalities shall be considered as one-half mileage for each municipality.

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

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

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

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

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

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

NEEDS COSTS

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

Roadway Item Unit Prices (Reviewed Annually)			
Right of Way (Needs Only)			$98,850 per Acre
Grading (Excavation)			$4.75 per Cu. Yd.

Base:			
	Class 5 Gravel	Spec. #2211	$8.40 per Ton
	Bituminous	Spec. #2350	$38.00 per Ton
Surface:			
	Gravel	Spec. #2118	$7.10 per Ton
	Bituminous	Spec. #2350	$38.00 per Ton
Shoulders:			
	Gravel	Spec. #2221	$14.25 per Ton
Miscellaneous:			
	Storm Sewer Construction		$268,035 per Mile
	Storm Sewer Adjustment		$86,100 per Mile
	Special Drainage (rural segments only)		$40,000 per Mile
	Street Lighting		$100,000 per Mile
	Curb & Gutter Construction		$9.75 per Lineal Foot
	Sidewalk Construction		$26.00 per Sq. Yd.
	Project Development		22%
Removal Items:			
	Curb & Gutter		$2.75 per Lineal Foot
	Sidewalk		$5.50 per Sq. Yd.
	Concrete Pavement		$5.40 per Sq. Yd.
	Tree Removal		$300.00 per Unit

Traffic Signal Needs Based On Projected Traffic (every segment)

Projected Traffic	Percentage X	Unit Price =	Needs Per Mile
0 - 4,999	25%	$130,000	$32,500 per Mile
5,000 - 9,999	50%	$130,000	$65,000 per Mile
10,000 and Over	100%	$130,000	$130,000 per Mile

Bridge Width & Costs - (Reviewed Annually)

All Bridge Unit Costs shall be $95.00 per Sq. Ft.

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

Railroad Over Highway	
One Track	$10,200 per Linear Foot
Each Additional Track	$8,500 per Linear Foot

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)	$150,000 per Unit
Signals and Gates (Multiple Track – high speed)	$200,000 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	$1,725 per Mile	$2,850 per Mile
Parking Lanes:	$1,725 per Mile	$1,725 per Mile

Segment length times number of parking lanes times cost per mile		
Median Strip: Segment length times cost per mile	$575 per Mile	$1,125 per Mile
Storm Sewer: Segment length times cost per mile	$575 per Mile	$575 per Mile
Traffic Signals: Number of traffic signals times cost per signal	$575 per Unit	$575 per Unit
Minimum allowance per mile is determined by segment length times cost per mile.	$5,720 per Mile	$5,720 per Mile

NEEDS ADJUSTMENTS

Bond Adjustment - Oct. 1961 (Revised 1976, 1979, 1995**,** 2003, Oct. 2005)

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 shall be based upon the remaining amount of principal to be paid minus any amount not applied toward Municipal State Aid, County State Aid or Trunk Highway projects.

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

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

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

Excess Unencumbered Construction Fund Balance Adjustment – Oct. 2002

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

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

and takes effect for the 2004 apportionment.

Low Balance Incentive – Oct. 2003

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

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

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

'After the Fact' Non Existing Bridge Adjustment-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 local cost (which is the total cost less county or trunk highway participation) for a period of 15 years. The total cost shall include project development and construction engineering costs based upon the current Project Development percentage used in the Needs Study.

Excess Maintenance Account – June 2006

That any city which requests an annual Maintenance Allocation of more than 35% of their Total Allocation, is granted a variance by the Variance Committee, and subsequently receives the increased Maintenance Allocation shall receive a negative Needs adjustment equal to the amount of money over and above the 35% amount transferred from the city's Construction Account to its Maintenance Account. The Needs adjustment will be calculated for an accumulative period of twenty years, and applied as a single one-year (one time) deduction each year the city receives the maintenance allocation.

'After the Fact' Retaining Wall Adjustment Oct. 2006

That retaining wall Needs shall not be included in the Needs study until such time that the retaining wall has been constructed and the actual cost established. At that time a 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. Documentation of the construction of the retaining wall, including eligible costs, must be submitted to your District State Aid Engineer by July 1 to be included in that years Needs study.

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.

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.