# 2006 MUNICIPAL SCREENING BOARD DATA



**JUNE 2006** 



Memo

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

Date: May 10, 2006

To: Municipal Engineers

City Clerks

From: R. Marshall Johnston

Manager, Municipal State Aid Needs Unit

Subject: 2006 Municipal Screening Board Data booklet

Enclosed is a copy of the June 2006 "Municipal Screening Board Data" booklet.

Office Tel.: 651 296-3011

651 282-2727

The data included in this report will be used by the Municipal Board at its May 30 and 31, 2006 meeting to establish unit prices for the 2006 Needs Study that is used to compute the 2007 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) 296-6677.

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

This report is also available for either printing or viewing on the State Aid web site. Go to <a href="https://www.dot.state.mn.us/stateaid">www.dot.state.mn.us/stateaid</a> and follow the links to the report.

### 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 stateaid highway and street network.

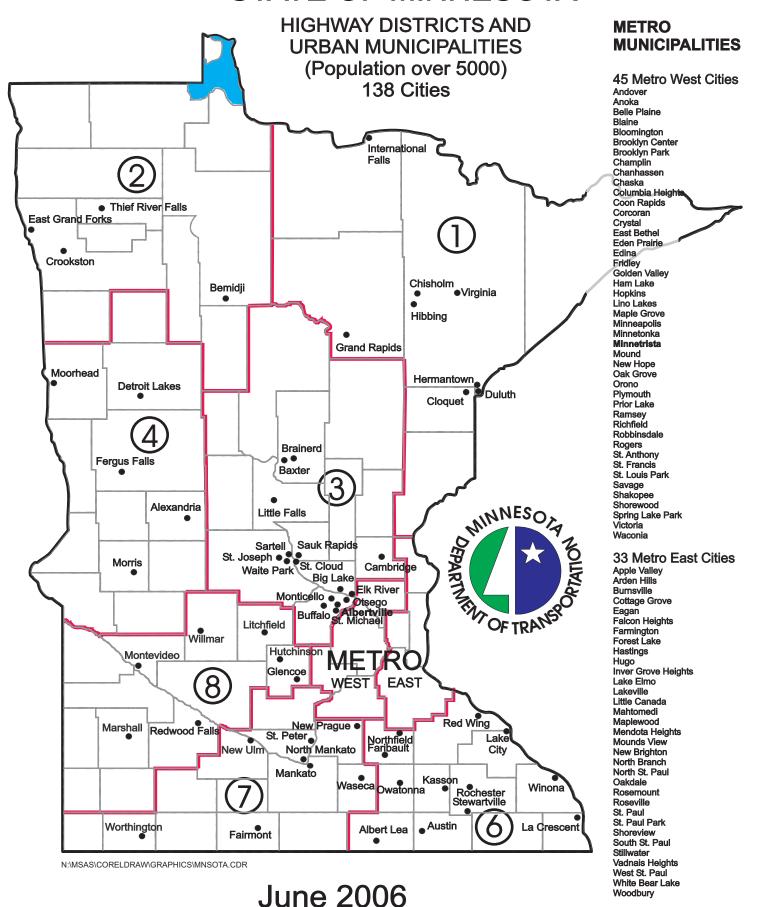
*State-aid funds* are the funds collected by the state according to the constitution and law, distributed from the Highway Users Tax Distribution Fund, apportioned among the counties and cities, and used by the counties and cities for aid in the construction, improvement and maintenance of county state-aid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

### 2006 MUNICIPAL SCREENING BOARD DATA

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### STATE OF MINNESOTA



### **2006 MUNICIPAL SCREENING BOARD**

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OFFICERS				
Chair	Stephen Gaetz	St. Cloud	(320) 255-7241	
Vice Chair	Chuck Ahl	Maplewood	(651) 770-4552	
Secretary	Mel Odens	Willmar	(320) 235-4202	

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	2004-2006	Jeff Kuhn	Morris	(320) 762-8149	
Metro-West	2004-2006	Craig Gray	Anoka	(763) 576-2781	
6	2004-2006	Jeff Johnson	Owatonna	(507) 444-4350	
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	
<u>Cities</u>	Permanent	Jim Benning	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	2007	Robert Zimmerman	Moorhead	(218) 299-5390		
Metro-West	2007	Jon Haukaas	Fridley	(763) 572-3550		
6	2007	Heidi Hamilton	Northfield	(507) 645-3009		
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		

### **2006 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
Shelly Pederson, Chair Bloomington (952) 563-4870 Expires after 2006  Tim Loose St. Peter (507) 625-4171 Expires after 2007  Dave Kildahl Crookston (218) 281-6522 Expires after 2008	Thomas Drake, Chair Faribault (507) 334-2222 Expires after 2006  Lee Gustafson Minnetonka (952) 939-8200 Expires after 2007  Mike Metso Past Chair (218) 727-3282 Expires after 2008

### 2005 MUNICIPAL SCREENING BOARD Fall Meeting Minutes Ruttger's Bay Lake Lodge October 18 & 19, 2005

I. Opening by Municipal Screening Board Chair Mike Metso

The 2005 Fall Municipal Screening Board Meeting was called to order at 1:05 p.m. on Tuesday, October 18, 2005

A. Chair Metso introduced the Head Table and Subcommittee Chairs:

Himself - Mike Metso, Duluth - Chair, Municipal Screening Board Stephen Gaetz, St. Cloud - Vice Chair, Municipal Screening Board Julie Skallman, Mn\DOT - State Aid Engineer Marshall Johnston, Mn\DOT - Manager, Municipal State Aid Needs Unit Tom Drake, Fairbault - Past Chair, Municipal Screening Board Lee Gustafson, Minnetonka - Past Chair, Municipal Screening Board Chuck Ahl, Maplewood - Secretary, Municipal Screening Board

Chair Metso noted the absence of Melvin Odens, Willmar - Chair, Needs Study Subcommittee, who was unable to attend.

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

District 1 Tom Pagel, Grand Rapids

District 2 Dave Kildahl, Crookston, Int'l Falls, Thief River Falls

District 3 Terry Maurer, Elk River

District 4 Jeff Kuhn, Morris Metro West Craig Gray, Anoka

District 6
District 7
District 8
District 8
Dave Berryman, Montevideo
Debra Bloom, Roseville

Duluth Mike Metso

Minneapolis Rhonda Rae, serving for Klara Fabry

St. Paul Paul Kurtz

C. Secretary Ahl recognized the following Screening Board Alternates, who are scheduled to be joining the Board in 2006:

District 2 Brian Freeburg, Bemidji (absent)

District 8 Glenn Olson, Marshall

D. Secretary Ahl recognized Minnesota Department of Transportation personnel in attendance:

Rick Kjonaas Deputy State Aid Engineer

Patti Simmons State Aid Programs Engineer (absent Tuesday)

Diane Gould Manager, County State Aid Needs Unit
Dan Simon Assistant Mgr., MSAS Needs Unit

Walter Leu District 1 State Aid Engineer (joined at 2:00 pm)
Lou Tasa District 2 State Aid Engineer (absent Wednesday)

Kelvin Howieson
Bob Kotaska
Steve Kirsch
Doug Haeder
District 3 State Aid Engineer
District 4 State Aid Engineer
District 6 State Aid Engineer
District 7 State Aid Engineer

Tom Behm District 8 State Aid Engineer (absent Tuesday)
Mark Gieseke Metro State Aid Engineer (absent Tuesday)

Mike Kowski Assistant Metro State Aid Engineer

E. Secretary Ahl recognized others in attendance:

Larry Veek, Minneapolis Jim Vanderhoof, St. Paul

Dave Sonnenberg, SEH (absent Tuesday)

Mr. Brett Weiss WSB, former District #3 representative to Board

- F. Vice President Gaetz noted that this is the Second Year for President Metso as our Chair and expressed appreciation from Association and remainder of the Board for his leadership.
- G. Chair Metso noted that David Jessup, Woodbury is the out-going chair of the Unencumbered Construction Funds Subcommittee and could not attend this session. Tom Drake, who will be taking over as Subcommittee Chair is in attendance as acting Chair. Mel Odens, Willmar, is the outgoing chair of the NSS and will be replaced by Shelly Pederson, Bloomington as chair.
- II. Review of the 2005 Municipal State Aid Street Needs Report

Chair Metso suggested that the portions of the report where issues were raised at Pre-Screening Board District meetings 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 Tuesday evening.

Chair Metso announced that the Wednesday morning meeting is scheduled to adjourn by 10:00 A.M. for a joint meeting with the County Engineers Executive Committee at 10:15 a.m.

A. The Spring 2005 Screening Board minutes were presented for approval (pages 16-30). There was agreement that the minutes did not need to be read aloud.

Motion by Bloom, second by Salsbury to approve minutes as presented. Motion carried without opposition.

- \* Marshall Johnston began his review of the Booklet:
- B. Screening Board Issues (page 9): Johnston began his report by noting the two new cities added to the MSAS system in 2005. Those cities are Minnetrista and Albertville. Johnston also noted that the following revisions to the Screening Board Membership (page 12):
  - Terry Maurer, Elk River, was formerly the alternate, but has been promoted to the Board due to the change in engineering status in Monticello, where a new City Engineer has been hired. Bret Weiss is no longer serving as the acting City Engineer and cannot serve on the Board.
  - Dave Berryman (District 8) and Dave Kildahl (District 2) are serving at their final Screening Board meeting, as their terms expire.
  - Greg Boppre (East Grand Forks) has been appointed as alternate for District 2.
  - Steve Bot (St. Michael) has been appointed as alternate for District 3.
  - Kent Exner (Hutchinson) has been appointed as alternate for District 8.

Johnston reviewed the minutes from the Spring meeting regarding action noted within the minutes on Fridley, the soil factor and that there was no action or change in the Excess Balance Program.

C. Review of UCFS Recommendations (Page 31-34):
The Unencumbered Construction Funds Subcommittee was referred two issues from the Spring Board regarding Bonding/Advancing and Off-system spending. Tom Drake, acting Chair, and Lee Gustafson were in attendance

to report on their recommendation on the bonding issue, which was the only issue that was reviewed by the Committee to-date:

a. Proposed wording for Bond Account Adjustment Resolution:

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

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

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

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

### Effective January 1, 1996

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

Johnston noted his recommendation on this change, which goes back to the method used for Bond Account Adjustments prior to 1996. The reason for the recommendation was that the current method does not allow for an adjustment to the needs for funds not spent on the system.

Johnston noted that on Page 34, Eagan and Glencoe should have negative adjustments due to not having reported the expenditure for bond proceeds used on the system. This was a clerical error that the Board directed Johnston to correct.

Berryman requested clarification as to whether after these adjustments there would always be this negative adjustment. Salsbury suggested that it is likely that as projects change, portions of bond proceeds may be spent off system that should not receive a positive needs adjustment.

### D. Theoretical Population Apportionment (page 35-43)

Johnston explained the use of either the 2000 census or 2004 estimate for this computation, whichever is higher for the calculation. There are 137 cities (with the two new cities of Albertville and Minnetrista) which meet this criteria plus Chisholm, which has a current population of 4,804. Special legislation (page 35) allows for cities with a population of between 4,900 and 5,000 in the 2000 census who previously had populations in excess of 5,000 to remain within the system. Chisholm's population is noted as 5,000. There was discussion on the length of time for the Chisholm extension. There was no agreement, although Julie reported that with the 2010 census, it is likely that MnDOT would address the situation in their proposed legislation. The Board took no action or position on this issue.

The city of Shakopee has a one-time adjustment due to under reporting in past years. The new calculation results in a person providing \$16.24 per person in 2004; while this is reduced to \$15.997 in 2005.

### E. Effect of the 2005 Needs Study Update (page 44-47)

Page 45 shows unadjusted needs based upon unit costs established at the Spring Meeting. Traffic and structure update phases were also noted. Baxter and Marshall were noted as the biggest loss due to large construction programs. Biggest gains are Shoreview, Rochester, Inver Grove Heights and Monticello due to reinstate of needs and new mileage.

### F. Mileage, Needs, and Apportionment (Pages 48-54):

Johnston noted the increase in needs and mileage and the lack of increase in funds to the MSAS account. The overall impact is the lowest apportionment per \$1000 since 1958. Current estimate is \$16.8117 per \$1000 in needs. This is a decrease of \$1.24 since 2004. A clerical error was noted on page 50 for Fairmont, their mileage should show no increase at 19.70 miles.

Johnston reviewed the cost per mile of needs. Oakdale has the lowest cost per mile at \$463,964 while Crookston had the highest cost of needs per mile at \$1,699,081. The high amount for Crookston was partially due to the number of bridges. The average was \$993,504.

### G. Comparison of Needs (page 55)

Johnston noted the impact of the changes on the chart on page 55. Our system now requires over 30 years to bring the system up to state aid standards. It was not long ago that this was 20 years.

### H. Tentative 2006 Construction Needs Apportionment (Page 56-62)

Johnston noted that Maple Grove and Woodbury had the largest positive adjustments to construction needs mainly due to right of way. Robbinsdale and Eden Prairie had large negative adjustments due to the impact of the Excess Fund Balance Adjustment. Both Robbinsdale and Eden Prairie have third year adjustment factors applied.

### I. Adjustment to the Needs (page 63-85)

Johnston reviewed the various adjustments. The fund balance adjustment shown on Page 65-67. The balance shown on 08-31-05 is an estimate only. The actual balance on 12-31-05 will be used, so many cities have project reports and will reduce their balance.

The excess balance adjustment had 13 cities redistribute funds to 76 cities. Three cities (Eden Prairie, Robbinsdale and Worthington) are in the third year of excess balance adjustments. Johnston reported that while the current spreadsheet shows 14 cities with possible adjustments, that in the past at least half of these will likely expend funds to reduce their balance so that no adjustment occurs. The current estimate of funds to be redistributed is \$49,288,963 in needs.

The Unamortized Bond Account Balance adjustment is the issue determined on page 34 in the booklet. The chart on Page 74 is the recommended method (pre-1996) to be used for this adjustment. If the revision is adopted by the Board, all bond adjustments will use this new (pre-1996) method.

Five new bridges added to the system this year noted on page 76. Right of way acquisition (purchased in 2004) was noted on page 77.

Johnston reported on the Individual Adjustments:

- Andover will receive a one time negative needs adjustment of \$377,400 for a non-existing bridge claim.
- Chanhassen will receive a positive needs adjustment of \$2,241,645 due to a removal of needs for a segment where no Commissioner's Order existed.
- Chanhassen will receive a one time negative needs adjustment of \$2,820,816 due to the City inappropriately receiving needs for a bridge structure.
- Fridley will receive a one time positive needs adjustment of \$1,602,781 due to reinstatement by the Board based upon their soils factor study.

- Inver Grove Heights will receive a one time negative needs adjustment of \$7,680,750 due to the failure to remove a segment from their needs.
- North Mankato will receive a one time negative needs adjustment of \$978,583 due to failure to remove a segment from the needs report.
- Richfield will receive a one time positive needs adjustment of \$1,472,480 due to an inadvertent exclusion of their right of way needs in 2004 and 2005.
- Robbinsdale will receive a needs adjustment of \$1,602,825 due to the combination route which is not allowed on the system per resolution of the Screening Board in 1998.

Johnston reported on Trunk Highway Turnback Maintenance Allowance. This is needed because the miles eligible for turnback maintenance do not receive needs so there is no maintenance dollars available.

J. Construction Needs Recommendation to the Commissioner (page 86-88)

Johnston reported on page 86 that Bret Weiss is shown for District 3, this will be changed to Terry Maurer. The needs shown on page 87 and 88 are the basis for the final calculation, with minor revisions.

K. Theoretical 2006 Total Apportionment, Comparisons and Apportionment Rankings (page 89-98)

Johnston reviewed the comparisons. He noted that 69 cities showed an increase in the estimated apportionment, while 69 cities showed a decrease in estimated apportionment.

### L. Other topics:

- a. Certification of MSAS System as Complete (pages 101-102): Johnston reported that four cities (Fridley, Columbia Heights, Falcon Heights, and South St. Paul) have certified their systems as complete and to standards. This allows them to use a portion (population apportionment) on local streets.
- b. Advances (page103): Johnston reported that four cities received advances in 2004 due to previous commitments.
- c. Administrative Account (page 104): Johnston reported that \$1,711,766, which is 1 ½% of this year's total MSAS funds available is used for expenses. Unused allocations are returned to the state aid fund.
- d. Research Account (page 105): Johnston reported that \$559,118 is proposed to be set aside.

- e. County Highway Turnback Policy (pages 106-107):
  Johnston stated that this is a very complicated policy. If cities have questions they should contact their DSAE.
- f. Screening Board Resolutions (pages 108-118):
  Johnston stated that this section is for information purposes. Changes have been shown in bold. Specific reference was made to changes on Page 109 which note the revisions to the soil factor policy; Page 110 on the deadline for needs submittals; and Page 113 the new unit costs.

### III. State Aid Report:

A. Julie Skallman reported on an issue with the City of St. Paul requesting a variance to allow up to 45% for their maintenance allocation. Julie reported that Counties can ask for an administrative variance for this; while cities are not allowed to request this and must seek a variance. St. Paul has requested a 3-year period to allow them to receive the 45% maintenance allocation.

The Variance Board did not want to approve this due to the failure to spend funds on the system, which would increase the construction needs. The Variance Board approved the request but decided to send this to the Screening Board, contingent upon the Screening Board's approval. The Board will need to consider this in June 2006 to adjust St. Paul's needs.

Salsbury requested input from the State Aid staff on the impact to the needs. He felt the Board should consider an adjustment but does see that St. Paul has a need. Bloom suggested that this is not just a St. Paul issue but that we should look at this as a permanent solution. Drake suggested referring this to the Needs Study Subcommittee. Maurer agreed with Bloom and suggested that we develop guidelines for other cities to follow. Gray stated that he felt that this was a slippery slope for us to follow as this will result in less money going to the construction of the system.

Kurtz reported that St. Paul understands the issues but that their Finance Board had directed that they explore this. Metso summarized that this issue needs to come back to the Board with a recommendation from the NSS. Kurtz reported that St. Paul knew that they needed a variance for their request, but they did not want to go the legislative route; however, the administration was ready to go that method. They are asking for a 3-year commitment only, and that hopefully the issue will go away at that time.

### B. Mission Study Follow up items:

Skallman reported on the Phase II of the Mission Study. Most of the revisions are on some Construction Design Standards. Most changes are to the rural standards and are being referred to the Counties.

### C. Other State Aid topics:

Ahl requested information on why the Total Apportionment to MSAS peaked in 2002, when it seems that more miles are being driven and more fuel purchased within the state. Skallman provided information that in 2003 was the first year of the license tab fee reduction enacted by the legislature. Gas tax is only a portion of the fund. We also see interest income and our fund balance is now down. There is very little growth in the fund. MnDOT finance also does a mid-year estimate and if revenues are down may make an adjustment. That may have also occurred in 2003. Ahl commented that the City Engineers Association is aware of the fact that there is no growth in the fund and that we all need to understand the need for increased financing to transportation and that we are losing ground to this battle. Ahl encouraged members to share this information locally that the impact of failure to raise the gas tax is resulting in less funds locally.

Rick Kjonaas reported on advances and federal funding allocations. In 2005 there was a moratorium on advances, although there were 3 small advances (\$3 - \$4 million) for federal match. At this point, it is estimated that 83% of the fund will be expended in 2005, so the fund balance should grow, allowing advances in 2006. For federal funds, cities should plan for only 90% of their allocation. Kjonaas also reminded cities that if they received HPP funds that the project must be within MnDOT's STP. Also, where MnDOT formerly pooled funds and made HPP funds available, the new procedure will provide 20% each year so cities will need to Advance construct projects. He also reminded everybody that 2006 is already the second year of the federal bill.

### D. Other topics:

Metso opened discussion on possible legislative action to modify the Bond repayment provisions. Currently it is required for a 15-year period, why can't it be to a shorter term. Pagel noted that it is difficult to bond for HPP advances for a short term advance of a project. Drake commented that not all needs for advances are for federal projects. Walter Leu noted that change is needed as the law says that cities must use MSA Construction Allotment for HPP\$, why can't we use HPP\$ to pay MSAS Bonds.

Metso reported that the executive boards of the City Engineers and County Engineers will be meeting tomorrow. Some of the legislative issues will be discussed as part of that meeting.

IV. Chair Metso recessed the meeting until 8:30 a.m. Wednesday at which time formal actions will be taken on items before the Board.

### WEDNESDAY MORNING SESSION

The Municipal Screening Board reconvened at 8:35 a.m. on October 19, 2005.

Attendance Note: All members were in attendance.

Chair Metso reminded everyone that a joint meeting with the County Engineers Executive Committee is scheduled for 10:15 a.m.

- I. Formal Actions by the 2005 Fall Municipal Screening Board:
  - A. Needs and Apportionment Data (pages 44-48)

There was no discussion. Chair Metso called for a motion. Motion by Kildahl, second by Pagel and carried without opposition to accept the Needs and Apportionment Data, with minor revisions by State Aid staff. A letter to the Commissioner signifying approval of the apportionment was routed and signed by each member of the Board.

B. Research Account (Page 105)Motion by Salsbury and seconded by Bloom:

Be it resolved that an amount of \$559,118 (not to exceed ½ of 1% of the 2005 MSAS Apportionment Sum of \$111,823,549) shall be set aside from the 2006 Apportionment Fund and credited to the Research Account.

Motion approved without opposition.

C. Bond Account Adjustment (page 34)

Gray moved and Salsbury seconded to approve the UCFS Recommendation to return the Bond Account Adjustment to the pre-1996 method and to accept the wording to revise the resolution as shown within the booklet (page 32-33) [minutes note: revised resolution shown previously within these minutes].

### D. St. Paul Maintenance Allocation

Discussion on this item continued. Salsbury indicated that we should take action to refer this item to committee now because we will need to take action on this in June. Metso commented that he doesn't believe it will open a major issue. Skallman commented that the Board needs to think about what pieces of information of information that is needed for a decision and basis for approval. For example, Counties require notice that the local levy has been increased. Gray commented about his concern, noting that St. Paul has reported over \$237 million in needs, yet is proposing not to expend all available funds toward construction in the next three years, which is not what our program is about.

Skallman noted that the Board does not have the authority to undo a variance. The question for the Board is how to proceed in June: should there be an adjustment to St. Paul's needs?

Salsbury indicated that he is looking for information on the fund as a whole. He can appreciate St. Paul's action, but is concerned with the number of other requests that may follow. He thinks we should reduce the needs to offset the loss of funds from construction to maintenance. Kildahl noted that many cities report different maintenance values and we may need across the board negative adjustments for maintenance above a certain value. Kurtz questioned how the St. Paul action is any different from an off-system expenditure that also spends down a balance but does not reduce system needs. Salsbury stated that while he agreed with Kurtz's point, he believes that this is a question of equity. Salsbury would like us to look at a method to analyze the impacts of the increased maintenance allocation.

Gustafson commented on off-system expenditures are not used to lower a levy, the money is used to improve the system, not the general fund. Metso commented that we have off-system rules and certified system. Metso would support and encourages an open discretion and review by NSS on how a city should be allowed to spend maintenance and construction funds on their State Aid system. Metso stated that there are many new methods that exist that have been defined as "maintenance" of the system. Salsbury reiterated that he believes we will have many of these requests to follow. Drake sees a need for an adjustment of needs. Will the next request be at 100%. He says it is appropriate to refer to NSS. Gaetz does not agree that we will see numerous requests for these type of variances. He believes we should refer this NSS for action in the Spring. We don't want this to go the legislative route. Bloom stated that we need criteria for a variance, for example, a hardship and maybe cap at population apportionment similar to the certified system. Needs should be used for construction. We need to give NSS guidance.

Bloom moved and seconded by Salsbury to refer the impact of the Maintenance Fund Variance Request of the City of St. Paul to the Needs Study Subcommittee for a Spring Report. Further, the MSAS staff will report on the current County options with an analysis of the funding impact on the needs of these type of requests.

Sonnenberg questioned as to whether the analysis should be done with a 45% maintenance request or all maintenance requests. Kurtz indicated that this Board does not decide where money goes. If a city requests a 60% maintenance request then the variance board says no. Bloom pointed out that her motion should be clarified that the analysis is about a process and the impacts and limits. Salsbury commented that the issue is not the variance, it is to look at the maintenance issue and impacts on needs of this action. Skallman pointed out that we are in a rule-making session, and, if the

Board, in the Spring, determines that changes to the 35% maintenance allocation are needed that this could be implemented.

Kurtz requested that the motion include an analysis by NSS of both the maintenance allocation above 35% as well as the off-system expenditure impacts. Bloom stated that the off-system issue was not part of her motion and that she does not accept that issue. Gustafson commented that UCFS is looking at the off-system issue and expenditures.

A vote was called and the Bloom motion carried unanimously.

### E. Bond Adjustment

Chair Metso commented on the need for some revisions to the bonding adjustment. The CEAM Executive Board to consider possible action with the League of Minnesota Cities. Salsbury asked why a bond is set at 50% of allotment. Should it be a 10-year or 5-year? Metso indicated that they may have been looking for some consistency. The Board requested that the State Aid staff investigate this issue for historical information and report to the Board at the Spring Meeting.

### F. Other issues:

Gaetz reported that the City of St. Cloud is considering using local resources (a local sales tax for transportation) to improve their MSAS system. He noted that this reduces their needs and really shoots themselves in the foot. Counties have after the fact needs for local funds used. He asked that this be a possible Spring Board discussion. Metso agreed that this would be an appropriate discussion item.

Kjonaas commented that we have a 50% increase in funding with advances available shows that we have a huge need. The issue is that money is being diluted and that other options need to be considered. Drake agreed and noted that the UCFS is reviewing this issue similar to the off-system issue.

Metso moved and Salsbury seconded to Refer to UCFS the local dollars expenditure on the MSA system and a possible needs adjustment. This issue shall be included with the off-system study.

Motion carried without opposition.

### II. Report from CEAM Legislative Committee – Dave Sonnenberg

Sonnenberg provided a report on various on-going legislative issues. It appears that SAFETEA-LU authorization may be adjusted for Hurricane Katrina relief. There also may be a possible moratorium on gas-tax collections due the current

high fuel prices. Our current CEAM and LMC direction is probably to attempt to protect our current level of funding.

The Street Utility was stripped from the past session's bill. CEAM has determined to put this issue on hold. LMC suggests keeping in front of legislature, just look at method of collecting. A Constitutional Amendment will be on the ballot for November 6, 2006 to dedicate 100% of MVET to transportation. At least 40% must go to Transit and not more than 60% for roadway improvements. Some concern with this language. This could be 100% dedicated to transit. The topic of equitable distribution could cause a Metro versus Out-state debate.

The LMC supports local funding and taxing options. They support cost participation policies that protect cities impacted by Major Transportation projects. They support a prohibition on funding for non-transportation costs from the Trunk Highway Fund. They support cities under 5,000 having access to CSAH and the 5% set-aside funds for collector streets. Finally, MnOPS rules go into affect on January 1, 2006 and will have significant impact on cities due to the addition of service laterals.

Kjonaas commented on the truck weight issue. They are looking to legalize larger trucks to help the Minnesota economy. Groups are moving closer, but the outcome is unlikely to result in a plan that can be adopted. A North Star Workshop is being held to review the Pros and Cons of the proposal. After the final report on November 10<sup>th</sup>, MnDOT will review the findings and decide what to add to the MnDOT Legislative Agenda. They will also review with Counties. More discussion is needed by the CEAM group.

### III. Thanks

Chair Metso thanked:

- Melvin Odens, Chair of the Needs Study Subcommittee and David Jessup, Chair of Unencumbered Construction Funds Subcommittee (both in absentia) for their service as chairs
- Tom Drake and Lee Gustafson, Past Chairs of the Municipal Screening Board and for representing the Unencumbered Construction Funds Subcommittee
- Screening Board members
- District State Aid Engineers and State-Aid staff
- Dave Sonnenberg, the Legislative Committee Chair
- Marshall Johnston, Julie Skallman and Rick Kjonaas
- Dave Berryman, Dave Kildahl and Bret Weiss who are attending their last Screening Board meetings.
- Others in attendance for their participation and interest.

Drake noted that this was Chair Metso's last Screening Board Meeting as Chair after 2 years of service. The Board expressed it's thanks to Mike Metso.

### IV. Announcements:

Metso announced that the Spring Screening Board meeting will be Tuesday and Wednesday, May 30th and 31<sup>st</sup> at Arrowwood Lodge in Alexandria.

### V. Adjournment:

A motion was made by Kildahl to adjourn, second by Berryman and adopted without opposition.

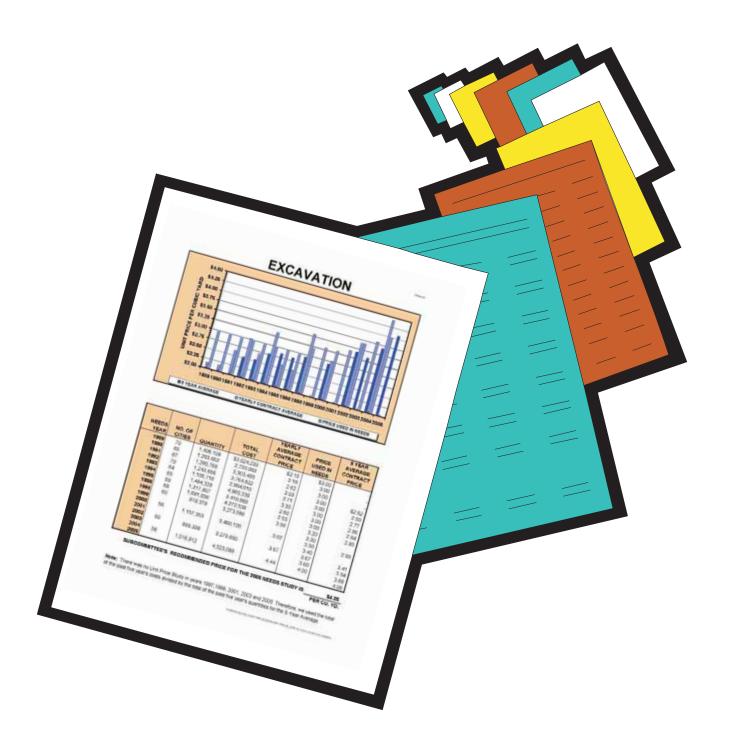
Respectfully submitted,

R. Charles Ahl

MSA Screening Board Secretary, City Engineer - Maplewood



# UNIT PRICES



# AND GRAPHS



### **UNIT PRICE STUDY**

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

The quantities and unit prices used in this unit price study are compiled from the on system MSAS projects that were let and a 'State Aid Payment Request' form that was received by the State Aid Division in 2005. There were a minimum of 139 on system projects and 69 off system projects let in 2005 for which we received a Payment Request. Of the 139 on system projects, 115 of them were included in the Unit Price Study. The state average of the on system prices and quantities are used by the Needs Study Subcommittee and the Municipal Screening Board to determine the prices to be used in the 2006 needs study. These prices will be applied against the quantity tables located in the State Aid Manual Figs. C & D 5-892.820 to compute the 2007 construction (money) needs apportionment.

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

MN/DOT's hydraulic office furnished a recommendation of costs for storm sewer construction and adjustment based on 2005 construction costs. Special drainage costs are computed for rural roadways by the MN/DOT Estimating Unit and Hydraulics Office 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 2005 construction projects.

Due to lack of data, a study is not done for traffic signals, maintenance, and engineering. Every segment, except those eligible for THTB funding, receives needs for traffic signals, engineering, and maintenance. The unit prices used in the 2005 needs study, are found in the Screening Board resolutions included in this booklet.

### **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 2005 was \$27,017,647 or 0.83% of the total Needs. For example, An urban road segment with 2 traffic lanes, 2 parking lanes, over 1,000 traffic, storm sewer and one traffic signal would receive \$9870 in maintenance needs per mile.

### **EXISTING FACILITIES ONLY**

		IEEDS CES	SUBCOM SUGGE PRIC	STED	BC RECOM	EENING OARD IMENDED ICES
	Under 1000 ADT	Over 1000 ADT	Under 1000 ADT	Over 1000 ADT	Under 1000 ADT	Over 1000 ADT
Traffic Lane Per Mile	\$1,650	\$2,735	\$1,725	\$2,850		
Parking Lane Per Mile	1,650	1,650	1,725	1,725		
Median Strip Per Mile	550	1,065	575	1,115		
Storm Sewer Per Mile	550	550	575	575		
Per Traffic Signal	550	550	575	575		
Normal M.S.A.S. Streets Minimum Allowance Per Mile	5,475	5,475	5,720	5,720		

<sup>&</sup>quot;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' 32' - 39' 40' & over	0 1 2
4 Lanes	less than 56' 56' - 63' 64' & over	0 1 2

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# A HISTORY OF THE ANNUAL MAINTENANCE NEEDS COSTS

(COMPUTED ON EXISTING MILEAGE ONLY)

												,
	Traffic Lane	Lane	Parkin	Parking Lane	Median Strip	Strip	Storm Sewer	Sewer	ď	Per	Minimum Maintenance	num nance
Year	Per Mile	Mile	Per Mile	Mile	Per Mile	Mile	Per Mile	Mile	Traffic	Traffic Signal	Allowance Per Mile	ance Mile
	Under	Over	Under	Over	Under	Over	Under	Over	Under	Over	Under	Over
	1000 ADT	1000 ADT	1000 ADT	1000 ADT	1000 ADT	1000 ADT	1000 ADT	1000 ADT	1000 ADT	1000 ADT	1000 ADT	1000 ADT
1986	\$300	\$500	\$100	\$100	\$100	\$200	\$100	\$100	\$100	\$100	\$1,000	\$1,000
1987	300	200	100	100	100	200	100	100	100	100	1,000	1,000
1988	009	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	420	006	450	450	420	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	200	086	200	200	200	200	5,000	5,000
2004	1,550	2,575	1,550	1,550	515	1,000	515	515	515	515	5,150	5,150
2002	1,650	2,735	1,650	1,650	220	1,065	220	220	220	220	5,475	5,475
2006	1,725	2,850	1,725	1,725	575	1,115	575	275	575	275	5,720	5,720

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.

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

09-May-06

	2004	2005		2005
	APPORTIONMENT	APPORTIONMENT		% OF THE
ITEM	NEEDS COST	NEEDS COST	DIFFERENCE	TOTAL
Grading	\$196,216,556	\$220,554,292	\$24,337,736	6.74%
Special Drainage	4,820,844	4,529,296	(291,548)	0.14%
Storm Sewer Adjustment	67,138,597	71,559,739	4,421,142	2.19%
Storm Sewer Construction	239,615,954	255,568,746	15,952,792	7.81%
Curb & Gutter Removal	30,815,553	34,992,307	4,176,754	1.07%
Sidewalk Removal	21,778,802	23,140,994	1,362,192	0.71%
Pavement Removal	56,340,146	58,090,966	1,750,820	1.77%
Tree removal	13,687,575	17,619,250	3,931,675	0.54%
SUBTOTAL GRADING	\$630,414,027	\$686,055,590	\$55,641,563	20.96%
Gravel Base #2211	\$351,456,104	\$391,729,602	\$40,273,498	11.97%
Bituminous Base #2350	288,864,774	318,684,660	29,819,886	9.74%
SUBTOTAL BASE	\$640,320,878	\$710,414,262	\$70,093,384	21.71%
Gravel Surface #2118	\$76,902	\$60,039	(\$16,863)	0.00%
Bituminous Surface #2350	271,666,318	297,917,585	26,251,267	9.10%
Surface Widening	1,738,440	2,152,360	413,920	0.07%
SUBTOTAL SURFACE	\$273,481,660	\$300,129,984	\$26,648,324	9.17%
Gravel Shoulders #2221	\$2,719,200	\$2,799,574	\$80,374	0.09%
SUBTOTAL SHOULDERS	\$2,719,200	\$2,799,574	\$80,374	0.09%
Curb and Gutter	\$157,961,717	\$176,732,177	\$18,770,460	5.40%
Sidewalk	208,140,192	234,834,075	26,693,883	7.18%
Traffic Signals	184,102,800	198,727,750	14,624,950	6.07%
Street Lighting	159,520,000	169,256,175	9,736,175	5.17%
Retaining Walls	18,346,517	20,186,165	1,839,648	0.62%
SUBTOTAL MISCELLANEOUS	\$728,071,226	\$799,736,342	\$71,665,116	24.44%
TOTAL ROADWAY	\$2,275,006,991	\$2,499,135,752	\$224,128,761	76.36%
Bridge	\$135,612,784	\$148,313,334	\$12,700,550	4.53%
Railroad Crossings	57,172,250	57,460,375	288,125	1.76%
Maintenance	24,663,323	27,017,647	2,354,324	0.83%
Engineering	493,558,440	540,981,871	47,423,431	16.53%
SUBTOTAL OTHERS	\$711,006,797	\$773,773,227	\$62,766,430	23.64%
TOTAL	\$2,986,013,788	\$3,272,908,979	\$286,895,191	100.00%

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## MSAS UNIT PRICE STUDY EXCAVATION - CUBIC YARD

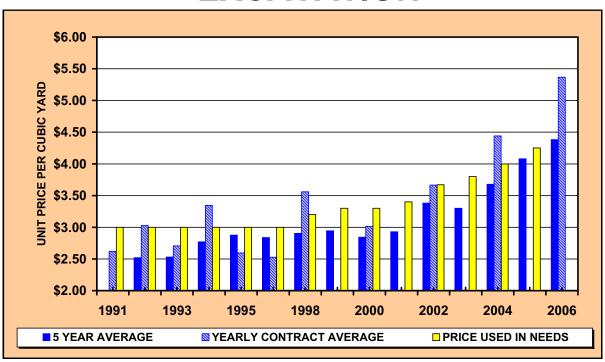
<u>_</u>	CAVAII	JM - CUBIC 1	AKU	
CITY	No. Of	TOTAL	TOTAL	AVERAGE
NAME	Projects	QTY.	COST	UNIT PRICE
	<u> </u>	District 1		
Cloquet	2	16,331	\$79,591	\$4.87
Duluth	2	45,822	311,188	6.79
Grand Rapids	2	56,250	230,626	4.10
District 1 Total	6	118,403	\$621,405	\$5.25
2.00.000		,	<b>,</b> ,	7 3 3 3 3
		District 2		
Crookston	3	8,351	\$33,404	\$4.00
Thief River Falls	1	2,961	12,436	4.20
District 2 Total	4	11,312	\$45,840	\$4.05
		District 3		
Otsego	1	27,000	\$64,260	\$2.38
St. Cloud	1	1,968	20,762	10.55
District 3 Total	2	28,968	\$85,022	\$2.94
		<b>D</b>		
E	•	District 4	ΦE 4 570	ΦΕ 00
Fergus Falls	3	10,245	\$54,576	\$5.33
Moorhead	1	8,666	35,341	4.08
Morris  District 4 Total	1	9,514	40,910	4.30
District 4 Total	5	28,425	\$130,827	\$4.60
		Metro West		
Andover	2	18,322	\$23,625	\$1.29
Anoka	1	7,700	52,360	6.80
Bloomington	1	461	6,915	15.00
Brooklyn Center	2	7,100	77,745	10.95
Brooklyn Park	1	16,753	83,765	5.00
Champlin	1	973	11,530	11.85
Chanhassen	1	2,240	29,600	13.21
Coon Rapids	2	6,930	39,515	5.70
Crystal	3	8,529	74,969	8.79
Ham Lake	3	4,343	36,315	8.36
Minneapolis	3	9,686	142,552	14.72
Minnetonka	2	9,516	66,612	7.00
Robbinsdale	1	1,781	15,655	8.79
St Louis Park	1	2,204	14,676	6.66
Metro West Total	24	96,538	\$675,834	\$7.00
	4	District 6	<b>#</b> 00 <b>777</b>	<b>#</b> 0.01
Albert Lea	1	3,445	\$22,777	\$6.61
Austin	4	4,595	30,348	6.60
Faribault	2	870	5,092	5.85
Owatonna	2	1,191	3,692	3.10
Rochester	3	23,443	122,537	5.23
Winona  District 6 Total	1 13	51,293	307,245	5.99
District 6 Total	13	84,837	\$491,691	\$5.80

# MSAS UNIT PRICE STUDY EXCAVATION - CUBIC YARD

		000.0	.,	
CITY	No. Of	TOTAL	TOTAL	AVERAGE
NAME	Projects	QTY.	COST	UNIT PRICE
		District 7		
Fairmont	1	700	\$5,950	\$8.50
Worthington	1	13,194	59,373	4.50
District 7 Total	2	13,894	\$65,323	\$4.70
		Diatriat 0		
Hutchinson	2	District 8	¢1// 510	ድ2 <u>20</u>
		45,162	\$144,518	\$3.20
Marshall  District 8 Total	1 3	1,966 <b>47,128</b>	10,813	5.50
District 6 Total	ა	41,120	\$155,331	\$3.30
	N	letro East		
Apple Valley	1	4,200	\$42,000	\$10.00
Burnsville	1	2,964	11,207	3.78
Falcon Heights	1	2,089	25,068	12.00
Hastings	1	4,644	64,715	13.94
Inver Grove Heights	1	4,074	12,426	3.05
Little Canada	1	13,176	92,232	7.00
Oakdale	1	1,775	13,579	7.65
Roseville	2	74	1,803	24.36
Shoreview	1	4,000	16,998	4.25
South St Paul	1	500	5,750	11.50
St. Paul	6	58,540	276,880	4.73
Stillwater	1	11,000	64,900	5.90
White Bear Lake	6	16,446	128,272	7.80
Woodbury	2	34,455	125,736	3.65
Metro East Total	26	157,937	\$881,565	\$5.58
		trict Totals		
District 1 Total	6	118,403	\$621,405	\$5.25
District 2 Total	4	11,312	45,840	4.05
District 3 Total	2	28,968	85,022	2.94
District 4 Total	5	28,425	130,827	4.60
Metro West Total	24	96,538	675,834	7.00
District 6 Total	13	84,837	491,691	5.80
District 7 Total	2	13,894	65,323	4.70
District 8 Total	3	47,128	155,331	3.30
Metro East Total	26	157,937	881,565	5.58
STATE TOTAL	0 <i>E</i>	E07 442	¢2 152 020	¢E 27
STATE TOTAL	85	587,442	\$3,152,838	\$5.37

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### **EXCAVATION**



				YEARLY AVERAGE	PRICE	5 YEAR AVERAGE
NEEDS	NO. OF		TOTAL	CONTRACT	USED IN	CONTRACT
YEAR	CITIES	QUANTITY	COST	PRICE	NEEDS	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		4.38

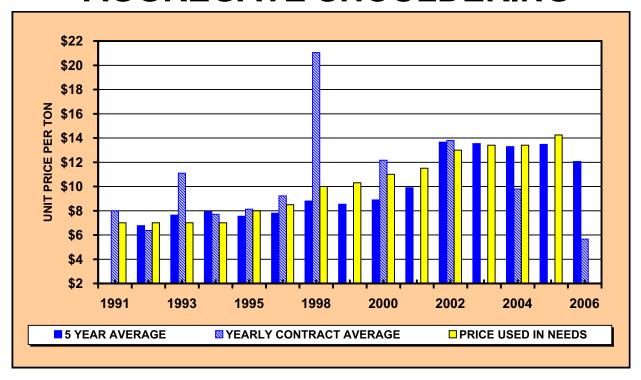
SUBCOMMITTEE'S RECOMMENDED PRICE FOR THE 2006 NEEDS STUDY IS \$4.75 PER CU. YD.

Note: The Unit Price Study is done every two years. Therefore, we used the total of the past five years costs divided by the total of the past five years quantites for the five year average.

# MSAS UNIT PRICE STUDY AGGREGATE SHOULDERS - TON

CITY	No. Of	TOTAL	TOTAL	AVERAGE			
NAME	Projects	QTY.	COST	UNIT PRICE			
	Dist	rict 4					
FERGUS FALLS	2	813	\$4,600	\$5.66			
District 4 Total	2	813	\$4,600	\$5.66			
STATE TOTAL	2	813	\$4,600	\$5.66			

## **AGGREGATE SHOULDERING**



				YEARLY		5 YEAR
				AVERAGE	PRICE	AVERAGE
NEEDS	NO. OF		TOTAL	CONTRACT	USED IN	CONTRACT
YEAR	CITIES	QUANTITY	COST	PRICE	NEEDS	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	11.09	7.00	7.64
1994	4	999	7,691	7.70	7.00	7.94
1995	8	4923	40,009	8.13	8.00	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		12.06

SUBCOMMITTEE'S RECOMMENDED PRICE FOR THE 2006 NEEDS STUDY IS

Note: The Unit Price Study is done every two years. Therefore, we used the total of the past five years costs divided by the total of the past five years quantites for the five year average.

# MSAS UNIT PRICE STUDY CURB & GUTTER REMOVAL - LINEAR FEET

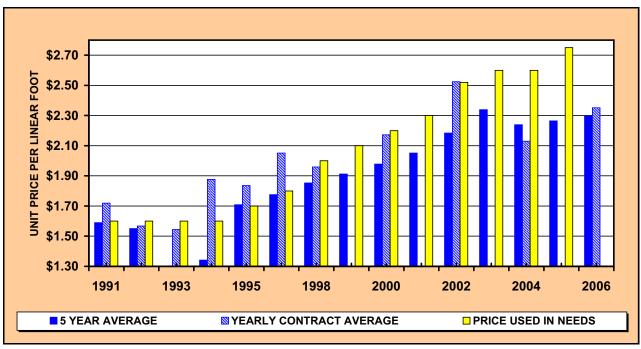
CURD & G	UIIEK	REMOVAL - L		<u> </u>
CITY	No. Of	TOTAL	TOTAL	AVERAGE
NAME	Projects	QTY.	COST	UNIT PRICE
	•	District 1		
Cloquet	2	1,717	\$2,789	\$1.62
Duluth	2	26,860	81,115	3.02
Grand Rapids	2	9,628	14,442	1.50
District 1 Total	6	38,205	\$98,347	\$2.57
		District 2		
Crookston	3	3,749	\$10,310	\$2.75
District 2 Total	3	3,749	\$10,310	\$2.75
		District 3		
Buffalo	1	500	\$1,750	\$3.50
Otsego	1	250	500	2.00
St. Cloud	1	510	1,658	3.25
District 3 Total	3	1,260	\$3,908	\$3.10
		District 4		•
Fergus Falls	2	2,349	\$7,047	\$3.00
Moorhead	3	4,580	14,418	3.15
Morris	1	2,521	4,034	1.60
District 4 Total	6	9,450	\$25,499	\$2.70
		Madua Wast		
Annalassan	4	Metro West	ФОО	<b>#4.70</b>
Andover	1	37	\$63	\$1.70
Anoka	1	10,500 1,838	21,000 5,414	2.00 2.95
Bloomington Brooklyn Center	2	7,190	27,682	3.85
Brooklyn Park	1	7,190	60	3.00
Coon Rapids	2	20 278	1,161	4.18
Crystal	3	8,274	8,274	1.00
Fridley	1	400	1,340	
_				
IHAM LAKA	2		•	3.35
Ham Lake Minneapolis	2	344	1,284	3.73
Minneapolis	3	344 8,245	1,284 23,346	3.73 2.83
Minneapolis Minnetonka	3 1	344 8,245 110	1,284 23,346 330	3.73 2.83 3.00
Minneapolis Minnetonka Robbinsdale	3 1 1	344 8,245 110 685	1,284 23,346 330 685	3.73 2.83 3.00 1.00
Minneapolis Minnetonka Robbinsdale Spring Lake Park	3 1 1 3	344 8,245 110 685 2,566	1,284 23,346 330 685 9,109	3.73 2.83 3.00 1.00 3.55
Minneapolis Minnetonka Robbinsdale	3 1 1	344 8,245 110 685 2,566 2,327	1,284 23,346 330 685 9,109 6,981	3.73 2.83 3.00 1.00 3.55 3.00
Minneapolis Minnetonka Robbinsdale Spring Lake Park St Louis Park	3 1 1 3 2	344 8,245 110 685 2,566	1,284 23,346 330 685 9,109	3.73 2.83 3.00 1.00 3.55
Minneapolis Minnetonka Robbinsdale Spring Lake Park St Louis Park	3 1 1 3 2	344 8,245 110 685 2,566 2,327	1,284 23,346 330 685 9,109 6,981	3.73 2.83 3.00 1.00 3.55 3.00
Minneapolis Minnetonka Robbinsdale Spring Lake Park St Louis Park	3 1 1 3 2	344 8,245 110 685 2,566 2,327 <b>42,814</b>	1,284 23,346 330 685 9,109 6,981	3.73 2.83 3.00 1.00 3.55 3.00
Minneapolis Minnetonka Robbinsdale Spring Lake Park St Louis Park Metro West Total	3 1 1 3 2 <b>24</b>	344 8,245 110 685 2,566 2,327 42,814	1,284 23,346 330 685 9,109 6,981 \$106,729	3.73 2.83 3.00 1.00 3.55 3.00 \$2.49
Minneapolis Minnetonka Robbinsdale Spring Lake Park St Louis Park Metro West Total  Albert Lea	3 1 1 3 2 <b>24</b>	344 8,245 110 685 2,566 2,327 <b>42,814</b> District 6	1,284 23,346 330 685 9,109 6,981 \$106,729	3.73 2.83 3.00 1.00 3.55 3.00 \$2.49
Minneapolis Minnetonka Robbinsdale Spring Lake Park St Louis Park Metro West Total  Albert Lea Austin	3 1 1 3 2 <b>24</b> 1 5 1 2	344 8,245 110 685 2,566 2,327 <b>42,814</b> District 6 886 4,473	1,284 23,346 330 685 9,109 6,981 \$106,729	3.73 2.83 3.00 1.00 3.55 3.00 \$2.49 \$1.80 2.19
Minneapolis Minnetonka Robbinsdale Spring Lake Park St Louis Park Metro West Total  Albert Lea Austin Faribault	3 1 1 3 2 <b>24</b> 1 5 1	344 8,245 110 685 2,566 2,327 <b>42,814</b> District 6 886 4,473 720	1,284 23,346 330 685 9,109 6,981 \$106,729  \$1,595 9,785 1,872	3.73 2.83 3.00 1.00 3.55 3.00 <b>\$2.49</b> \$1.80 2.19 2.60
Minneapolis Minnetonka Robbinsdale Spring Lake Park St Louis Park Metro West Total  Albert Lea Austin Faribault Owatonna	3 1 1 3 2 <b>24</b> 1 5 1 2	344 8,245 110 685 2,566 2,327 <b>42,814</b> <b>District 6</b> 886 4,473 720 159	1,284 23,346 330 685 9,109 6,981 <b>\$106,729</b> \$1,595 9,785 1,872 636	3.73 2.83 3.00 1.00 3.55 3.00 <b>\$2.49</b> \$1.80 2.19 2.60 4.00

# MSAS UNIT PRICE STUDY CURB & GUTTER REMOVAL - LINEAR FEET

CITY	No. Of	TOTAL	TOTAL	AVERAGE			
NAME	Projects	QTY.	COST	UNIT PRICE			
District 7							
Fairmont	2	940	\$3,120	\$3.32			
Worthington	1	3,740	9,724	2.60			
District 7 Total	3	4,680	\$12,844	\$2.74			
	_						
		District 8					
Hutchinson	2	470	\$940	\$2.00			
Marshall	1	2,263	6,789	3.00			
District 8 Total	3	2,733	\$7,729	\$2.83			
	NA.	etro East					
Apple Valley	1 1	3,900	\$8,775	\$2.25			
Apple Valley Burnsville	4	5,809	φο,775 25,665	φ2.25 4.42			
Falcon Heights	4	1,251	2,502	2.00			
Hastings	1 1	479	2,502 1,437	3.00			
Inver Grove Heights	1	2,165	2,403	1.11			
Little Canada	1	1,050	3,150	3.00			
Oakdale	1	150	5, 150 525	3.50			
Roseville	3	1,052	7,206	6.85			
Shoreview	1	1,400	2,660	1.90			
South St.Paul	2	1,155	3,158	2.73			
St. Paul	6	16,111	15,922	0.99			
Vadnais Heights	1	3,355	7,549	2.25			
White Bear Lake	6	14,814	18,518	1.25			
Woodbury	2	7,821	14,562	1.86			
Metro East Total	31	60,512	\$114,032	\$1.88			
	Dis	trict Totals					
District 1 Total	6	38,205	\$98,347	\$2.57			
District 2 Total	3	3,749	10,310	2.75			
District 3 Total	3	1,260	3,908	3.10			
District 4 Total	6	9,450	25,499	2.70			
Metro West Total	24	42,814	106,729	2.49			
District 6 Total	13	16,225	43,034	2.65			
District 7 Total	3	4,680	12,844	2.74			
District 8 Total	3	2,733	7,729	2.83			
Metro East Total	31	60,512	114,032	1.88			
STATE TOTAL	02	170 620	¢422 424	¢2.25			
STATE TOTAL	92	179,628	\$422,431	\$2.35			

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## **CURB & GUTTER REMOVAL #2104**



				YEARLY		5 YEAR
				AVERAGE	PRICE	AVERAGE
NEEDS	NO. OF		TOTAL	CONTRACT	USED IN	CONTRACT
YEAR	CITIES	QUANTITY	COST	PRICE	NEEDS	PRICE
1991	59	207,105	\$355,996	\$1.72	\$1.60	\$1.59
1992	58	152,992	239,845	1.57	1.60	1.55
1993	56	118,793	183,378	1.54	1.60	0.97
1994	59	309,891	581,256	1.88	1.60	1.34
1995	51	209,177	384,029	1.84	1.70	1.71
1996	62	142,362	291,935	2.05	1.80	1.77
1998	63	150,083	294,046	1.96	2.00	1.85
1999					2.10	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		2.30

SUBCOMMITTEE'S RECOMMENDED PRICE FOR THE 2006 NEEDS STUDY IS

\$2.75

PER LIN. FT.

Note: The Unit Price Study is done every two years. Therefore, we used the total of the past five years costs divided by the total of the past five years quantites for the five year average.

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## MSAS UNIT PRICE STUDY SIDEWALK REMOVAL - SQUARE YARD

CITY	No. Of	TOTAL	TOTAL	AVERAGE
NAME	Projects	QTY.	COST	UNIT PRICE
10 001		District 1		0111111102
Cloquet	2	1,735	\$6,244	\$3.60
Duluth	2	10,702	35,789	3.34
Grand Rapids	1	278	1,251	4.50
District 1 Total	5	12,715	\$43,285	\$3.40
		<b>,</b>	<b>,</b> ,	******
	C	District 2		
Crookston	2	900	\$4,050	\$4.50
District 2 Total	2	900	\$4,050	\$4.50
	D	District 3		
	0	0	\$0	\$0.00
District 3 Total	0	0	\$0	\$0.00
		District 4		
Fergus Falls	2	825	\$7,592	\$9.20
Moorhead	2	573	3,124	5.45
Morris	1	263	1,343	5.12
District 4 Total	5	1,661	\$12,059	\$7.26
		4 387 4		
		etro West	<b>40.555</b>	00.45
Anoka	1	811	\$2,555	\$3.15
Brooklyn Center	2	982	6,138	6.25
Coon Rapids	2	152	1,424	9.39
Crystal	1	893	1,502	1.68
Minneapolis Minnetonka	3	5,359	39,205	7.32
Robbinsdale	1 1	108 96	970 30	9.00 0.31
	3	547	958	1.75
Spring Lake Park St. Louis Park	2	252	4,583	18.16
Metro West Total	16	9,199	\$57,363	\$ <b>6.24</b>
motro rroot rotar	10	0,100	Ψ01,000	Ψ0:2-1
		District 6		
Albert Lea	1	606	\$2,998	\$4.95
Austin	5	1,526	15,185	9.95
Owatonna	2	17	155	8.89
Rochester	2	1,364	10,522	7.72
Winona	1	632	3,160	5.00
District 6 Total	11	4,145	\$32,020	\$7.72

## MSAS UNIT PRICE STUDY SIDEWALK REMOVAL - SQUARE YARD

CITY	No. Of	TOTAL	TOTAL	AVERAGE			
NAME	Projects	QTY.	COST	UNIT PRICE			
District 7							
Fairmont	1	127	\$1,016	\$8.00			
District 7 Total	1	127	\$1,016	\$8.00			

		District 8		
Marshall	1	925	\$5,829	\$6.30
District 8 Total	1	925	\$5,829	\$6.30

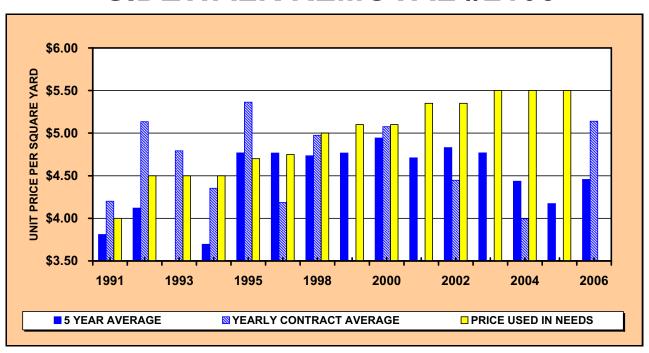
Metro East							
Apple Valley	1	756	\$3,400	\$4.50			
Burnsville	4	2,026	9,369	4.62			
Falcon Heights	1	384	2,040	5.31			
Hastings	1	215	1,397	6.50			
Roseville	3	358	1,646	4.59			
South St. Paul	2	108	772	7.13			
St. Paul	6	3,945	15,003	3.80			
Stillwater	1	78	700	9.00			
White Bear Lake	6	7,119	39,569	5.56			
Metro East Total	25	14,990	\$73,895	\$4.93			

District Totals							
District 1 Total	5	12,715	\$43,285	\$3.40			
District 2 Total	2	900	4,050	4.50			
District 3 Total	0	0	0	0.00			
District 4 Total	5	1,661	12,059	7.26			
Metro West Total	16	9,199	57,363	6.24			
District 6 Total	11	4,145	32,020	7.72			
District 7 Total	1	127	1,016	8.00			
District 8 Total	1	925	5,829	6.30			
Metro East Total	25	14,990	73,895	4.93			

STATE TOTAL	66	44,661	\$229,517	\$5.14
01/112 101/12	•	77,001	Ψ <b>22</b> 0,017	Ψ0.1-

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## **SIDEWALK REMOVAL #2105**



				YEARLY		5 YEAR
				AVERAGE	PRICE	AVERAGE
NEEDS	NO. OF		TOTAL	CONTRACT	USED IN	CONTRACT
YEAR	CITIES	QUANTITY	COST	PRICE	NEEDS	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	2.83
1994	39	54,206	235,995	4.35	4.50	3.70
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		4.46

SUBCOMMITTEE'S RECOMMENDED PRICE FOR THE 2006 NEEDS STUDY IS \$5.50

PER SQ.YD.

Note: The Unit Price Study is done every two years. Therefore, we used the total of the past five years costs divided by the total of the past five years quantites for the five year average.

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# MSAS UNIT PRICE STUDY CONCRETE PAVEMENT REMOVAL - SQUARE YARD

			<u> </u>						
CITY	No. Of	TOTAL	TOTAL	AVERAGE					
NAME	Projects	QTY.	COST	<b>UNIT PRICE</b>					
	District 1								
Cloquet	1	13,281	\$59,765	\$4.50					
Duluth	2	2,750	11,356	4.13					
Grand Rapids	1	58	580	10.00					
District 1 Total	4	16,089	\$71,701	\$4.46					
		District 2							
Crookston	2	228	\$1,027	\$4.50					
District 2 Total	2	228	\$1,027	\$4.50					
St. Cloud	1	11	\$51	\$4.64					
District 3 Total	1	11	\$51	\$4.64					
		District 4							
		0	\$0	\$0.00					
District 4 Total	0	0	\$0	\$0.00					
	M	etro West	_						
Anoka	1	1,356	\$6,710	\$4.95					
Bloomington	1	952	3,808	4.00					
Chanhassen	1	205	1,025	5.00					
Metro West Total	3	2,513	\$11,543	\$4.59					
		2: ( : ( 2							
A II	<u>.</u>	District 6	<b>***</b>	<b>A.</b> 40					
Albert Lea	1	4,723	\$20,781	\$4.40					
Austin	4	3,913	28,441	7.27					
Faribault	1	360	1,800	5.00					
Rochester	2	11,809	66,425	5.62					
District 6 Total	8	20,805	\$117,447	\$5.65					
		Diatolat 7							
F = i		District 7	Ф4 <b>7</b> 00	<b>#0.00</b>					
Fairmont	1	595	\$4,760	\$8.00					
Worthington	1	1,476	5,906	4.00					
District 7 Total	2	2,071	\$10,666	\$5.15					
		District 9							
Maraball		District 8	¢21 020	<b>ቀ</b> ፍ ሰብ					
Marshall	1	5,173 5 <b>173</b>	\$31,038 \$31,038	\$6.00 <b>\$6.00</b>					
District 8 Total	1	5,173	\$31,038	Φ0.UU					

# MSAS UNIT PRICE STUDY CONCRETE PAVEMENT REMOVAL - SQUARE YARD

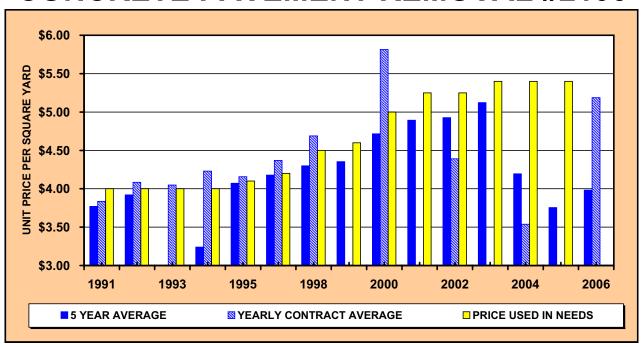
CITY	No. Of	TOTAL	TOTAL	AVERAGE
NAME	Projects	QTY.	COST	UNIT PRICE
	M	letro East		
Inver Grove Heights	1	105	\$529	\$5.04
Oakdale	1	100	350	3.50
South St Paul	1	85	510	6.00
Stillwater	1	75	338	4.51
Woodbury	1	448	2,240	5.00
Metro East Total	5	813	\$3,967	\$4.88

	Di	strict Totals		
District 1 Total	4	16,089	\$71,701	\$4.46
District 2 Total	2	228	1,027	4.50
District 3 Total	1	11	51	4.64
District 4 Total	0	0	0	0.00
Metro West Total	3	2,513	11,543	4.59
District 6 Total	8	20,805	117,447	5.65
District 7 Total	2	2,071	10,666	5.15
District 8 Total	1	5,173	31,038	6.00
Metro East Total	5	813	3,967	4.88

STATE TOTAL 26	47,703	\$247,439	\$5.19
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### **CONCRETE PAVEMENT REMOVAL #2106**



				YEARLY		5 YEAR
				AVERAGE	PRICE	AVERAGE
NEEDS	NO. OF		TOTAL	CONTRACT	USED IN	CONTRACT
YEAR	CITIES	QUANTITY	COST	PRICE	NEEDS	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	2.39
1994	26	185,066	782,965	4.23	4.00	3.24
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		3.98

SUBCOMMITTEE'S RECOMMENDED PRICE FOR THE 2006 NEEDS STUDY IS

PER SQ. YD.

Note: The Unit Price Study is done every two years. Therefore, we used the total of the past five years costs divided by the total of the past five years quantites for the five year average.

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## MSAS UNIT PRICE STUDY TREE REMOVAL - CLEARING

	NUMBER OF	TOTAL	TOTAL	AVERAGE
CITY NAME	PROJECTS	QUANTITY	COST	UNIT PRICE
CITTINAIVIE		strict 1	COST	UNIT PRICE
Ola most			<b>#</b> 400	<b>#</b> 400 00
Cloquet	1	4	\$400	\$100.00
Duluth	2	36	12,220	339.46
Grand Rapids	1	6	600	100.00
District 1 Total	4	46	\$13,220	\$287.40
		strict 2		
Crookston	1	1	\$50	\$50.00
District 2 Total	1	1	\$50	\$50.00
		strict 3		
St. Cloud	1	11	\$1,870	\$170.00
District 3 Total	1	11	\$1,870	\$170.00
	Dis	strict 4		
Fergus Falls	2	7	\$5,700	\$814.29
Morris	1	23	3,450	150.00
District 4 Total	3	30	\$9,150	\$305.00
	Met	ro West		
Anoka	1	40	\$12,000	\$300.00
Champlin	1	4	1,440	360.00
Crystal	3	10	2,000	200.00
Ham Lake	2	37	1,198	32.38
Minnetonka	2	43	5,375	125.00
Robbinsdale	_ 1	4	800	200.00
Metro West Total	10	138	\$22,813	\$165.31
			<del>+,</del>	<b>¥</b> 100101
	Dis	strict 6		
Albert Lea	1	1	\$200	\$200.00
Rochester	3	48	5,900	122.92
Winona	1	76	11,400	150.00
District 6 Total	5	125	\$17,500	\$140.00
Diotilot o Total			<b>VIII,000</b>	<b>V. 10100</b>
	Dis	strict 7		
	0	0	\$0	\$0.00
District 7 Total	0	0	0	0.00
Diotilot i Total				0.00
	Dis	strict 8		
Hutchinson	1	4	\$800	\$200.00
District 8 Total	1	4	\$800	\$200.00
2.0th of o Total		-	Ψ000	Ψ=00.00
	Met	tro East		
Burnsville	1	2	\$300	\$150.00
Little Canada	1	29	5,800	200.00
Oakdale	1	6	1,050	175.00
Shoreview	1	20	2,000	100.00
St. Paul	2	9	4,500	500.00
Stillwater	1	30	3,000	100.00
White Bear Lake	3	30		
Metro East Total	10	99	1,800 <b>\$18,450</b>	600.00 \$186.36
Metro East Total	10	99	φ 10,45U	\$186.36
STATE TOTAL	25	454	¢02.052	¢404.70
STATE TOTAL	35	454	\$83,853	\$184.70

## MSAS UNIT PRICE STUDY TREE REMOVAL - GRUBBING

	EE KEIVIOV			
	NUMBER OF	TOTAL	TOTAL	AVERAGE
CITY NAME	PROJECTS	QUANTITY	COST	<b>UNIT PRICE</b>
	Dis	strict 1		
Cloquet	1	4	\$1,000	\$250.00
Duluth	2	38	4,432	116.62
	1	6	600	100.00
Grand Rapids				
District 1 Total	4	48	\$6,032	\$125.66
	Dis	strict 2		
Crookston	1	1	\$50	\$50.00
District 2 Total	1	1	\$50	\$50.00
	Dis	strict 3		
St. Cloud	1	11	\$1,430	\$130.00
District 3 Total	1	11	\$1,430	\$130.00
District 3 Total	<u>I</u>	11	ψ1,43U	\$ 13U.UU
	<u> </u>			
		strict 4	<b>A</b>	<b>* * * * *</b>
Fergus Falls	2	7	\$1,500	\$214.29
Morris	1	24	2,400	100.00
District 4 Total	3	31	\$3,900	\$125.81
	Met	ro West		
Anoka	1	40	\$2,600	\$65.00
Champlin	1	4	800	200.00
Crystal	3	10	1,250	125.00
1 -				
Ham Lake	2	30	552	18.40
Minnetonka	2	40	5,000	125.00
Robbinsdale	1	4	500	125.00
Metro West Total	10	128	\$10,702	\$83.61
	Dis	strict 6		
Albert Lea	1	4	\$720	\$180.00
Rochester	3	50	4,550	91.00
Winona	1	76	11,400	150.00
District 6 Total	5	130	\$16,670	\$128.23
			<b>,,,,,</b>	**=====
	Die	strict 7		
	0	0	\$0	\$0.00
District 7 Total	0	0	\$0 <b>\$0</b>	
District / Total	U	U	ψU	\$0.00
		strict 8		
Hutchinson	1	4	\$800	\$200.00
District 8 Total	1	4	\$800	\$200.00
	Met	ro East		
Burnsville	1	2	\$300	\$150.00
Little Canada	1	29	2,900	100.00
Oakdale	1	6	1,050	175.00
Shoreview	1	20	1,600	80.00
St. Paul	2	9	1,772	196.89
		_		
Stillwater	1	30	2,250	75.00
White Bear Lake	3	3	375	125.00
Metro East Total	10	99	\$10,247	\$103.51
STATE TOTAL	35	452	\$49,831	\$110.24

## MSAS UNIT PRICE STUDY TREE REMOVAL - CLEARING

	NUMBER OF	TOTAL	TOTAL	AVERAGE
CITY NAME	PROJECTS	QUANTITY	COST	<b>UNIT PRICE</b>
	Distri	ict Totals		
District 1 Total	4	46	\$13,220	\$287.40
District 2 Total	1	1	50	50.00
District 3 Total	1	11	1,870	170.00
District 4 Total	3	30	9,150	305.00
Metro West Total	10	138	22,813	165.31
District 6 Total	5	125	17,500	140.00
District 7 Total	0	0	0	0.00
District 8 Total	1	4	800	200.00
Metro East Total	10	99	18,450	186.36
TOTAL CLEARING	35	454	\$83,853	\$184.70

## MSAS UNIT PRICE STUDY TREE REMOVAL - GRUBBING

	NUMBER OF	TOTAL	TOTAL	AVERAGE
CITY NAME	PROJECTS	QUANTITY	COST	UNIT PRICE
	Distri	ict Totals		
District 1 Total	4	48	\$6,032	\$125.66
District 2 Total	1	1	50	50.00
District 3 Total	1	11	1430	130.00
District 4 Total	3	31	3,900	125.81
Metro West Total	10	128	10,702	83.61
District 6 Total	5	130	16,670	128.23
District 7 Total	0	0	0	0.00
District 8 Total	1	4	800	200.00
Metro East Total	10	99	10,247	103.51
TOTAL GRUBBING	35	452	\$49,831	\$110.24

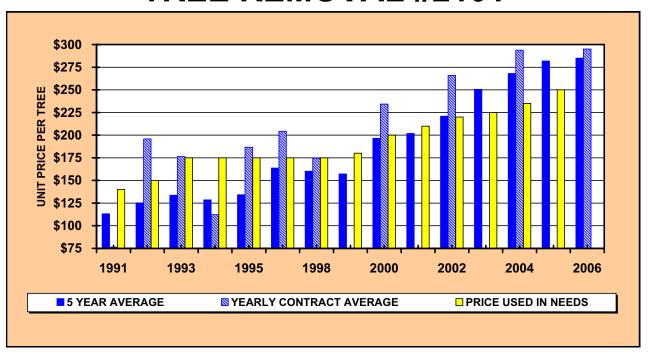
## CLEARING AND GRUBBING ARE COMBINED TO COMPUTE TREE REMOVAL

CITY	No. Of	TOTAL	TOTAL	AVERAGE
NAME	Projects	QTY.	COST	UNIT PRICE
TOTAL CLEARING	35	454	\$83,853	\$184.70
TOTAL GRUBBING	35	452	\$49,831	\$110.24
TOTAL	70	906	\$133,684	\$147.55

906/2=453 TREES
AVERAGE COST PER TREE = \$133,684/453 = \$295.11

 $N:\\ MSAS\setminus EXCEL\setminus UNIT\ PRICE\setminus 2006\setminus UNIT\ PRICE\ BREAK\ OUT-2006\ FINAL.x is\ CLEARING\ \&\ GRUBBING\ COMBINATION$ 

### **TREE REMOVAL #2101**



				YEARLY		5 YEAR
				AVERAGE	PRICE	AVERAGE
NEEDS	NO. OF		TOTAL	CONTRACT	USED IN	CONTRACT
YEAR	CITIES	QUANTITY	COST	PRICE	NEEDS	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		284.99

SUBCOMMITTEE'S RECOMMENDED PRICE FOR THE 2006 NEEDS STUDY IS

\$300.00

PER TREE

Note: The Unit Price Study is done every two years. Therefore, we used the total of the past five years costs divided by the total of the past five years quantites for the five year average.

N:\MSAS\EXCEL\UNIT PRICE\2006\UNIT PRICE BREAK OUT- FINAL 2006.XLS CLEARING & GRUBBING GRAPH

### MSAS UNIT PRICE STUDY AGGREGATE BASE 2211 - TONS

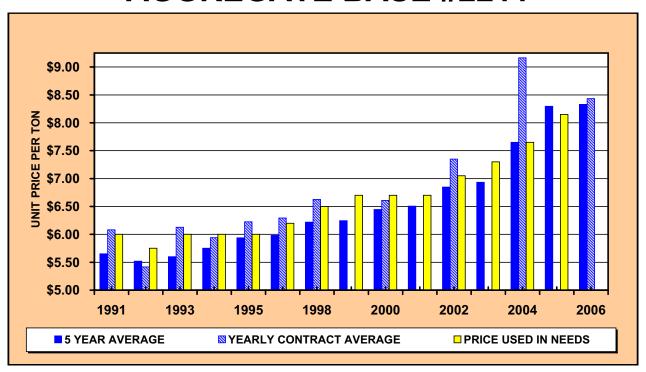
CITY	No. Of	TOTAL	TOTAL	AVERAGE
NAME	Projects	QTY.	COST	UNIT PRICE
		District 1		
Cloquet	2	9,955	\$76,840	\$7.72
Duluth	2	27,736	235,425	8.49
Grand Rapids	2	26,773	155,610	5.81
District 1 Total	6	64,463	\$467,875	\$7.26
		,		·
		District 2		
Crookston	3	11,132	\$67,736	\$6.08
Thief River Falls	1	3,610	15,662	4.34
District 2 Total	4	14,742	\$83,398	\$5.66
		,	. ,	
		District 3		
Otsego	1	10,125	\$121,196	\$11.97
St. Cloud	1	3,204	28,730	8.97
District 3 Total	2	13,329	\$149,926	\$11.25
		,	•	
		District 4		
Fergus Falls	2	6,896	\$51,721	\$7.50
Moorhead	2	7,059	74,975	10.62
Morris	1	6,626	40,319	6.08
District 4 Total	5	20,581	\$167,015	\$8.11
		Matua Maat		
		Metro West		
Andover	2	16,086	\$155,794	\$9.69
Andover Anoka	2 1		\$155,794 77,000	\$9.69 11.00
		16,086	•	•
Anoka		16,086 7,000	77,000	11.00
Anoka Bloomington		16,086 7,000 307	77,000 4,486	11.00 14.61
Anoka Bloomington Champlin		16,086 7,000 307 805	77,000 4,486 9,660	11.00 14.61 12.00
Anoka Bloomington Champlin Coon Rapids	1 1 1 1	16,086 7,000 307 805 4,763	77,000 4,486 9,660 65,790	11.00 14.61 12.00 13.81
Anoka Bloomington Champlin Coon Rapids Crystal	1 1 1 1 3	16,086 7,000 307 805 4,763 8,917	77,000 4,486 9,660 65,790 77,132	11.00 14.61 12.00 13.81 8.65 12.50 13.63
Anoka Bloomington Champlin Coon Rapids Crystal Fridley	1 1 1 1 3 1 3 3	16,086 7,000 307 805 4,763 8,917 50	77,000 4,486 9,660 65,790 77,132 625	11.00 14.61 12.00 13.81 8.65 12.50
Anoka Bloomington Champlin Coon Rapids Crystal Fridley Ham Lake	1 1 1 1 3 1 3	16,086 7,000 307 805 4,763 8,917 50 3,414	77,000 4,486 9,660 65,790 77,132 625 46,527	11.00 14.61 12.00 13.81 8.65 12.50 13.63
Anoka Bloomington Champlin Coon Rapids Crystal Fridley Ham Lake Minneapolis	1 1 1 3 1 3 3 2 1	16,086 7,000 307 805 4,763 8,917 50 3,414 5,361	77,000 4,486 9,660 65,790 77,132 625 46,527 86,919	11.00 14.61 12.00 13.81 8.65 12.50 13.63 16.21
Anoka Bloomington Champlin Coon Rapids Crystal Fridley Ham Lake Minneapolis Minnetonka	1 1 1 3 1 3 3 2	16,086 7,000 307 805 4,763 8,917 50 3,414 5,361 3,119	77,000 4,486 9,660 65,790 77,132 625 46,527 86,919 44,550	11.00 14.61 12.00 13.81 8.65 12.50 13.63 16.21 14.29
Anoka Bloomington Champlin Coon Rapids Crystal Fridley Ham Lake Minneapolis Minnetonka Robinsdale Spring Lake Park St. Louis Park	1 1 1 3 1 3 3 2 1	16,086 7,000 307 805 4,763 8,917 50 3,414 5,361 3,119 1,573	77,000 4,486 9,660 65,790 77,132 625 46,527 86,919 44,550 13,606	11.00 14.61 12.00 13.81 8.65 12.50 13.63 16.21 14.29 8.65
Anoka Bloomington Champlin Coon Rapids Crystal Fridley Ham Lake Minneapolis Minnetonka Robinsdale Spring Lake Park	1 1 1 3 1 3 3 2 1 2	16,086 7,000 307 805 4,763 8,917 50 3,414 5,361 3,119 1,573 4,134	77,000 4,486 9,660 65,790 77,132 625 46,527 86,919 44,550 13,606 37,826	11.00 14.61 12.00 13.81 8.65 12.50 13.63 16.21 14.29 8.65 9.15
Anoka Bloomington Champlin Coon Rapids Crystal Fridley Ham Lake Minneapolis Minnetonka Robinsdale Spring Lake Park St. Louis Park	1 1 1 3 1 3 3 2 1 2 2 2	16,086 7,000 307 805 4,763 8,917 50 3,414 5,361 3,119 1,573 4,134 4,120 <b>59,649</b>	77,000 4,486 9,660 65,790 77,132 625 46,527 86,919 44,550 13,606 37,826 56,733	11.00 14.61 12.00 13.81 8.65 12.50 13.63 16.21 14.29 8.65 9.15
Anoka Bloomington Champlin Coon Rapids Crystal Fridley Ham Lake Minneapolis Minnetonka Robinsdale Spring Lake Park St. Louis Park	1 1 1 3 1 3 3 2 1 2 2 2	16,086 7,000 307 805 4,763 8,917 50 3,414 5,361 3,119 1,573 4,134 4,120	77,000 4,486 9,660 65,790 77,132 625 46,527 86,919 44,550 13,606 37,826 56,733	11.00 14.61 12.00 13.81 8.65 12.50 13.63 16.21 14.29 8.65 9.15 13.77
Anoka Bloomington Champlin Coon Rapids Crystal Fridley Ham Lake Minneapolis Minnetonka Robinsdale Spring Lake Park St. Louis Park	1 1 1 1 3 1 3 3 2 1 2 2 2 2 23	16,086 7,000 307 805 4,763 8,917 50 3,414 5,361 3,119 1,573 4,134 4,120 <b>59,649</b>	77,000 4,486 9,660 65,790 77,132 625 46,527 86,919 44,550 13,606 37,826 56,733 \$676,648	11.00 14.61 12.00 13.81 8.65 12.50 13.63 16.21 14.29 8.65 9.15 13.77 \$11.34
Anoka Bloomington Champlin Coon Rapids Crystal Fridley Ham Lake Minneapolis Minnetonka Robinsdale Spring Lake Park St. Louis Park Metro West Total	1 1 1 3 1 3 3 2 1 2 2 2 2 23	16,086 7,000 307 805 4,763 8,917 50 3,414 5,361 3,119 1,573 4,134 4,120 <b>59,649</b>	77,000 4,486 9,660 65,790 77,132 625 46,527 86,919 44,550 13,606 37,826 56,733 \$676,648	11.00 14.61 12.00 13.81 8.65 12.50 13.63 16.21 14.29 8.65 9.15 13.77 \$11.34
Anoka Bloomington Champlin Coon Rapids Crystal Fridley Ham Lake Minneapolis Minnetonka Robinsdale Spring Lake Park St. Louis Park Metro West Total	1 1 1 1 3 1 3 2 1 2 2 2 2 2 2 23	16,086 7,000 307 805 4,763 8,917 50 3,414 5,361 3,119 1,573 4,134 4,120 59,649  District 6 2,948 4,473 3,117	77,000 4,486 9,660 65,790 77,132 625 46,527 86,919 44,550 13,606 37,826 56,733 \$676,648 \$32,760 47,140 23,065	11.00 14.61 12.00 13.81 8.65 12.50 13.63 16.21 14.29 8.65 9.15 13.77 \$11.34 \$11.11 10.54 7.40
Anoka Bloomington Champlin Coon Rapids Crystal Fridley Ham Lake Minneapolis Minnetonka Robinsdale Spring Lake Park St. Louis Park Metro West Total  Albert Lea Austin	1 1 1 3 1 3 3 2 1 2 2 2 2 23	16,086 7,000 307 805 4,763 8,917 50 3,414 5,361 3,119 1,573 4,134 4,120 <b>59,649</b> District 6 2,948 4,473	77,000 4,486 9,660 65,790 77,132 625 46,527 86,919 44,550 13,606 37,826 56,733 \$676,648 \$32,760 47,140	11.00 14.61 12.00 13.81 8.65 12.50 13.63 16.21 14.29 8.65 9.15 13.77 \$11.34 \$11.11 10.54 7.40 10.85
Anoka Bloomington Champlin Coon Rapids Crystal Fridley Ham Lake Minneapolis Minnetonka Robinsdale Spring Lake Park St. Louis Park Metro West Total  Albert Lea Austin Faribault	1 1 1 1 3 1 3 2 1 2 2 2 2 2 2 23	16,086 7,000 307 805 4,763 8,917 50 3,414 5,361 3,119 1,573 4,134 4,120 59,649  District 6 2,948 4,473 3,117	77,000 4,486 9,660 65,790 77,132 625 46,527 86,919 44,550 13,606 37,826 56,733 \$676,648 \$32,760 47,140 23,065	11.00 14.61 12.00 13.81 8.65 12.50 13.63 16.21 14.29 8.65 9.15 13.77 \$11.34 \$11.11 10.54 7.40 10.85 11.55
Anoka Bloomington Champlin Coon Rapids Crystal Fridley Ham Lake Minneapolis Minnetonka Robinsdale Spring Lake Park St. Louis Park Metro West Total  Albert Lea Austin Faribault Owatonna	1 1 1 3 1 3 3 2 1 2 2 2 2 23	16,086 7,000 307 805 4,763 8,917 50 3,414 5,361 3,119 1,573 4,134 4,120 <b>59,649</b> <b>District 6</b> 2,948 4,473 3,117 1,200	77,000 4,486 9,660 65,790 77,132 625 46,527 86,919 44,550 13,606 37,826 56,733 \$676,648 \$32,760 47,140 23,065 13,019	11.00 14.61 12.00 13.81 8.65 12.50 13.63 16.21 14.29 8.65 9.15 13.77 \$11.34 \$11.11 10.54 7.40 10.85

### MSAS UNIT PRICE STUDY AGGREGATE BASE 2211 - TONS

CITY	No. Of	TOTAL	TOTAL	AVERAGE
NAME	Projects	QTY.	COST	UNIT PRICE
	•			
		District 7		
Fairmont	1	365	\$4,562	\$12.50
Worthington	1	13,566	129,204	9.52
District 7 Total	2	13,931	\$133,766	\$9.60
		•	•	
		District 8		
Hutchinson	2	17,643	\$158,228	\$8.97
Marshall	1	6,139	55,279	9.00
District 8 Total	3	23,782	\$213,507	\$8.98
		Metro East		
Apple Valley	1	3,000	\$36,000	\$12.00
Burnsville	4	2,640	31,824	12.05
Falcon Heights	1	2,746	29,924	10.90
Hastings	1	25,781	92,137	3.57
Inver Grove Heights	1	3,432	12,421	3.62
Little Canada	1	14,500	126,930	8.75
Oakdale	1	200	1,700	8.50
Roseville	2	50	1,659	33.18
South St. Paul	1	700	6,895	9.85
St. Paul	6	34,084	191,026	5.60
Stillwater	1	4,700	34,780	7.40
Vadnais Heights	1	1,030	12,360	12.00
Woodbury	2	14,842	124,867	8.41
Metro East Total	23	107,706	\$702,523	\$6.52
		D: ( : ( T ( )		
District 4 Total		District Totals	<b>0407.07</b>	<u></u>
District 1 Total	6	64,463	\$467,875	\$7.26
District 2 Total	4	14,742	83,398	5.66
District 3 Total	2	13,329	149,926	11.25
District 4 Total	5	20,581	167,015	8.11
Metro West Total	23	59,649	676,648	11.34
District 6 Total	14	37,683	406,248	10.78
District 7 Total	2	13,931	133,766	9.60
District 8 Total	3	23,782	213,507	8.98
Metro East Total	23	107,706	702,523	6.52
STATE TOTAL	82	355,866	\$3,000,906	\$8.43

N:\MSAS\EXCEL\UNIT PRICE\2006\UNIT PRICE BREAK OUT - 2006 FINAL.xls AGG. BASE - 2211

## **AGGREGATE BASE #2211**



Includes Class 2, 3, 4, 5 and 6

				YEARLY		5 YEAR
				AVERAGE	PRICE	AVERAGE
NEEDS	NO. OF		TOTAL	CONTRACT	USED IN	CONTRACT
YEAR	CITIES	QUANTITY	COST	PRICE	NEEDS	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		8.33

SUBCOMMITTEE'S RECOMMENDED PRICE FOR THE 2006 NEEDS STUDY IS \_\_\_\_\_

\$8.40 PER TON

Note: The Unit Price Study is done every two years. Therefore, we used the total of the past five years costs divided by the total of the past five years quantites for the five year average.

## MSAS UNIT PRICE STUDY BITUMINOUS

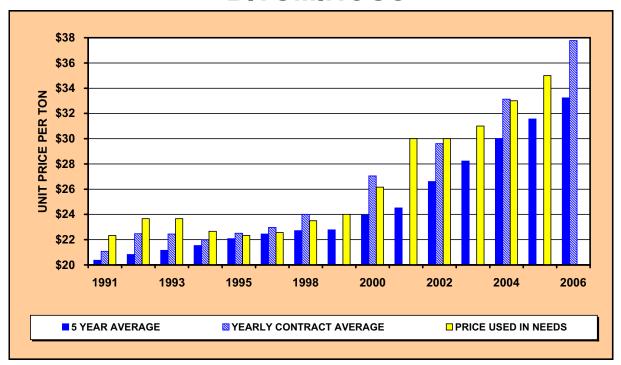
	BITOWINGOS						
CITY	No. Of	TOTAL	TOTAL	AVERAGE			
NAME	Projects	QTY.	COST	<b>UNIT PRICE</b>			
		District 1					
Cloquet	2	4,292	\$169,620	\$39.52			
Duluth	3	29,293	957,065	32.67			
Grand Rapids	2	11,983	499,163	41.66			
District 1 Total	7	45,568	\$1,625,848	\$35.68			
		,	. , ,				
		District 2					
Crookston	3	1,607	\$52,567	\$32.71			
Thief River Falls	1	450	14,058	31.24			
District 2 Total	4	2,057	\$66,625	\$32.39			
		•	. ,				
		District 3					
Buffalo	1	2,750	\$93,130	\$33.87			
Otsego	1	6,835	225,141	32.94			
St. Cloud	3	4,074	151,362	37.15			
District 3 Total	5	13,659	\$469,633	\$34.38			
		•					
		District 4					
Fergus Falls	4	5,853	\$206,659	\$35.31			
Moorhead	1	9,050	279,882	30.93			
Morris	1	2,060	71,529	34.72			
District 4 Total	6	16,963	\$558,070	\$32.90			
	ľ	Metro West					
Andover	3	6,361	\$233,415	\$36.69			
Anoka	1	4,250	154,350	36.32			
Bloomington	1	4,788	152,877	31.93			
Brooklyn Center	2	15,558	631,643	40.60			
Brooklyn Park	1	10,467	425,710	40.67			
Champlin	1	578	27,970	48.39			
Chanhassen	1	3,850	162,311	42.16			
Coon Rapids	2	4,460	183,887	41.23			
Crystal	3	4,589	133,836	29.16			
Fridley	1	1,840	70,252	38.18			
Ham Lake	3	4,293	167,041	38.91			
Minneapolis	3	14,577	786,186	53.93			
Minnetonka	2	2,585	106,222	41.09			
Robbinsdale	1	1,128	32,698	28.99			
Spring Lake Park	3	10,113	422,665	41.79			
St. Louis Park	4	8,339	288,894	34.64			
Metro West Total	32	97,776	\$3,979,957	\$40.70			
		District 6					
Albert Lea	1	446	\$22,466	\$50.37			
Austin	1	1,440	54,653	37.95			
Faribault	2	1,880	67,954	36.15			
Rochester	3	3,695	154,763	41.88			
Winona	1	3,245	154,497	47.61			
District 6 Total	8	10,706	\$454,333	\$42.44			

## MSAS UNIT PRICE STUDY BITUMINOUS

Bitowiitooo							
CITY	No. Of	TOTAL	TOTAL	AVERAGE			
NAME	Projects	QTY.	COST	<b>UNIT PRICE</b>			
	-						
District 7							
Fairmont	1	1,662	\$63,865	\$38.43			
Worthington	1	5,672	282,554	49.82			
District 7 Total	2	7,334	\$346,419	\$47.23			
		•	•				
	]	District 8					
Hutchinson	2	6,240	\$195,019	\$31.25			
Marshall	1	1,737	73,586	42.36			
District 8 Total	3	7,977	\$268,605	\$33.67			
	M	letro East					
Apple Valley	1	2,225	\$104,555	\$46.99			
Burnsville	4	8,134	260,228	31.99			
Falcon Heights	2	656	22,098	33.69			
Hastings	1	4,563	177,280	38.85			
Inver Grove Heights	1	1,045	35,720	34.18			
Little Canada	1	5,900	224,862	38.11			
Oakdale	1	2,200	70,565	32.08			
Roseville	3	5,125	243,890	47.59			
Shoreview	3	5,400	191,850	35.53			
South St. Paul	2	1,270	42,148	33.19			
St. Paul	6	37,134	1,251,999	33.72			
Stillwater	1	2,090	76,725	36.71			
Vadnais Heights	1	4,873	211,752	43.45			
White Bear Lake	6	9,649	346,226	35.88			
Woodbury	2	12,770	495,188	38.78			
Metro East Total	35	103,033	\$3,755,085	\$36.45			
		trict Totals	<b>A. A. C. C. C. C. C. C. C. C</b>	A :			
District 1 Total	7	45,568	\$1,625,848	\$35.68			
District 2 Total	4	2,057	66,625	32.39			
District 3 Total	5	13,659	469,633	34.38			
District 4 Total	6	16,963	558,070	32.90			
Metro West Total	32	97,776	3,979,957	40.70			
District 6 Total	8	10,706	454,333	42.44			
District 7 Total	2	7,334	346,419	47.23			
District 8 Total	3	7,977	268,605	33.67			
Metro East Total	35	103,033	3,755,085	36.45			
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STATE TOTAL	102	305,073	\$11,524,574	\$37.78			

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### **BITUMINOUS**



Includes all roadway bituminous types (2331, 2341, 2350, 2360, etc.)

				YEARLY AVERAGE	PRICE	5 YEAR AVERAGE
NEEDS	NO. OF		TOTAL	CONTRACT	USED IN	CONTRACT
YEAR	CITIES	QUANTITY	COST	PRICE	NEEDS	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		33.23

#### SUBCOMMITTEE'S RECOMMENDED PRICE FOR THE 2006 NEEDS STUDY IS

\$38.00 PER TON

Note: The Unit Price Study is done every two years. Therefore, we used the total of the past five years costs divided by the total of the past five years quantites for the five year average.

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

	<del></del>	it concinted		
CITY	No. Of	TOTAL	TOTAL	AVERAGE
NAME	Projects	QTY.	COST	UNIT PRICE
		District 1		
Cloquet	2	8,932	\$77,791	\$8.71
Duluth	3	27,408	337,372	12.31
Grand Rapids	2	17,209	126,457	7.35
District 1 Total	7	53,549	\$541,620	\$10.11
District 1 Total	•	00,040	Ψ0-11,020	Ψ10.11
		District 2		
Crookston	3	4,520	\$39,640	\$8.77
Thief River Falls	1	792	7,286	9.20
District 2 Total	4	5,312	\$46,926	\$8.83
District 2 Total	4	5,512	<b>\$40,920</b>	<b>\$0.03</b>
		District 3		
Buffalo	1	500	\$8,500	\$17.00
Otsego	1	8,710	71,019	8.15
_	-			
St. Cloud	1	2,201	20,799	9.45
District 3 Total	3	11,411	\$100,318	\$8.79
		District 4		
Fergus Falls	2	2,435	\$24,837	\$10.20
Moorhead	3	4,510	79,802	17.69
Morris	3 1	3,803	33,276	8.75
District 4 Total	6	10,748		\$12.83
District 4 Total	0	10,746	\$137,915	\$12.63
		Metro West		
Andover	2	11,874	\$96,235	\$8.10
Anoka	1	10,500	77,175	7.35
Bloomington	1	1,837	23,271	12.67
Brooklyn Center	2	6,865	72,083	10.50
Brooklyn Park	1	9,246	73,968	8.00
_	-		13,470	9.40
Champlin	1	1,433	•	
Chanhassen	1	12,788	105,501	8.25
Coon Rapids	2	3,955	41,897	10.59
Crystal	3	10,294	76,381	7.42
Fridley	1	400	5,800	14.50
Ham Lake	3	2,639	25,174	9.54
Minneapolis	3	8,338	134,723	16.16
Minnetonka	2	3,367	30,967	9.20
Robbinsdale	1	2,198	16,309	7.42
Spring Lake Park	3	2,931	27,845	9.50
St. Louis Park	1	1,982	19,820	10.00
Metro West Total	28	90,647	\$840,618	\$9.27
		B. ( ) ( )		
Alls sut I se	4	District 6	<b>#44.000</b>	040.04
Albert Lea	1	1,195	\$14,623	\$12.24
Austin	3	3,155	47,601	15.09
Faribault	2	2,454	27,614	11.25
Owatonna	2	159	2,186	13.75
Rochester	3	3,984	51,223	12.86
Winona	1	20,284	246,010	12.13
District 6 Total	12	31,231	\$389,257	\$12.46

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

CITY	No. Of	TOTAL	TOTAL	AVERAGE		
NAME	Projects	QTY.	COST	UNIT PRICE		
District 7						
Fairmont	2	890	\$14,860	\$16.70		
Worthington	1	4,457	50,721	11.38		
District 7 Total	3	5,347	\$65,581	\$12.27		

District 8					
Hutchinson	2	9,875	\$85,187	\$8.63	
Marshall	1	2,203	21,259	9.65	
District 8 Total	3	12,078	\$106,446	\$8.81	

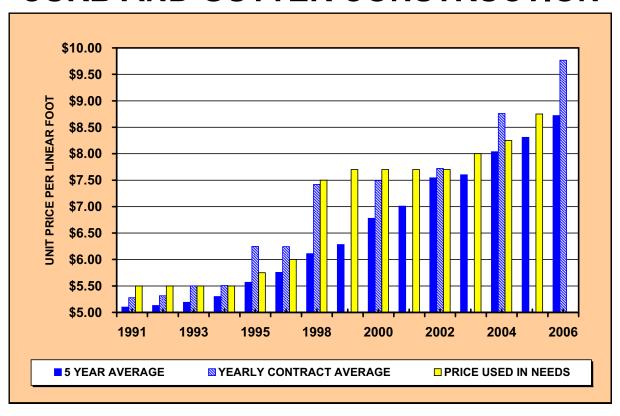
Metro East							
Apple Valley	1	3,400	\$31,110	\$9.15			
Burnsville	4	7,038	100,782	14.32			
Falcon Heights	1	1,343	12,087	9.00			
Hastings	1	459	9,576	20.86			
Inver Grove Heights	1	2,081	19,770	9.50			
Little Canada	1	8,100	63,990	7.90			
Oakdale	1	1,600	14,400	9.00			
Roseville	3	957	16,491	17.23			
Shoreview	1	5,200	42,380	8.15			
South St. Paul	2	1,155	10,808	9.36			
St. Paul	6	42,264	363,279	8.60			
Stillwater	1	4,500	34,875	7.75			
Vadnais Heights	1	950	9,215	9.70			
White Bear Lake	6	12,588	107,501	8.54			
Woodbury	2	15,213	130,257	8.56			
Metro East Total	32	106,848	\$966,521	\$9.05			

	District Totals		
7	53,549	\$541,620	\$10.11
4	5,312	46,926	8.83
3	11,411	100,318	8.79
6	10,748	137,915	12.83
28	90,647	840,618	9.27
12	31,231	389,257	12.46
3	5,347	65,581	12.27
3	12,078	106,446	8.81
32	106,848	966,521	9.05
	3 6 28 12 3 3	4 5,312 3 11,411 6 10,748 28 90,647 12 31,231 3 5,347 3 12,078	4 5,312 46,926 3 11,411 100,318 6 10,748 137,915 28 90,647 840,618 12 31,231 389,257 3 5,347 65,581 3 12,078 106,446

 STATE TOTAL
 98
 327,171
 \$3,195,201
 \$9.77

 N:\MSAS\EXCEL\UNIT PRICE\2006\UNIT PRICE BREAK OUT-FINAL 2006.XLS C & G CONST.

## **CURB AND GUTTER CONSTRUCTION**



				YEARLY		5 YEAR
				AVERAGE	PRICE	AVERAGE
NEEDS	NO. OF		TOTAL	CONTRACT	USED IN	CONTRACT
YEAR	CITIES	QUANTITY	COST	PRICE	NEEDS	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		8.72

SUBCOMMITTEE'S RECOMMENDED PRICE FOR THE 2006 NEEDS STUDY IS \$9.75 PER LIN. FT.

Note: The Unit Price Study is done every two years. Therefore, we used the total of the past five years costs divided by the total of the past five years quantites for the five year average.

# MSAS UNIT PRICE STUDY SIDEWALK CONSTRUCTION - SQUARE YARD

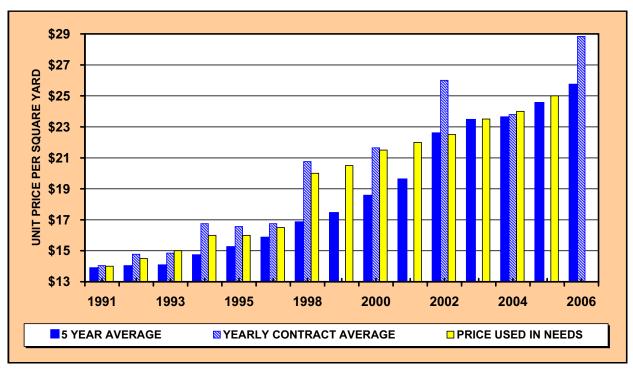
CITY	No. Of	TOTAL	TOTAL	AVERAGE
NAME	Projects	QTY.	COST	UNIT PRICE
		District 1		
Cloquet	2	4,082	\$90,375	\$22.14
Duluth	2	11,243	322,325	28.67
Grand Rapids	1	2,796	60,396	21.60
District 1 Total	5	18,121	\$473,096	\$26.11
	<u> </u>	-,	, ,,,,,,,	
		District 2		
Crookston	3	1,751	\$44,121	\$25.20
District 2 Total	3	1,751	\$44,121	\$25.20
		District 3		
St. Cloud	2	731	\$19,138	\$26.18
District 3 Total	2	731	\$19,138	\$26.18
		District 4		
Fergus Falls	2	443	\$14,549	\$32.85
Moorhead	2	2,632	105,310	40.01
Morris	1	15	472	31.47
District 4 Total	5	3,090	\$120,331	\$38.94
		Metro West		
Andover	1	1,500	\$36,450	\$24.30
Anoka	1	822	19,240	23.41
Bloomington	1	667	19,216	28.80
Brooklyn Center	2	981	35,320	36.00
Brooklyn Park	1	1,480	34,632	23.40
Coon Rapids	2	2,268	51,170	22.56
Crystal	1	863	18,260	21.15
Fridley	1	53	2,520	47.25
Ham Lake	1	47	1,579	33.76
Minneapolis	3	5,748	193,435	33.65
Minnetonka	2	597	12,629	21.15
Robinsdale	1	11	223	21.13
Spring Lake Park	3	720	20,884	28.99
St. Louis Park	2	133	5,280	39.60
Metro West Total	22	15,891	\$450,837	\$28.37
		•	·	
		District 6		
Albert Lea	1	762	\$28,126	\$36.90
Austin	5	1,409	43,751	31.04
Faribault	2	903	26,496	29.35
Owatonna	2	2,936	76,606	26.09
Rochester	2	206	12,691	61.71
Winona	1	725	24,461	33.75
District 6 Total	13	6,941	\$212,131	\$30.56

# MSAS UNIT PRICE STUDY SIDEWALK CONSTRUCTION - SQUARE YARD

OIDLIVA	LIC CONCI	110011011	OQUAIL	IAILD							
CITY	No. Of	TOTAL	TOTAL	AVERAGE							
NAME	Projects	QTY.	COST	UNIT PRICE							
		District 7									
Fairmont	1	160	\$4,000	\$25.00							
District 7 Total	1	160	\$4,000	\$25.00							
	District 8										
Hutchinson	2	71	\$5,417	\$76.18							
Marshall	1	824	26,867	32.60							
District 8 Total	3	895	\$32,284	\$36.06							
		Metro East									
AppleValley	1	756	\$19,380	\$25.65							
Burnsville	4	1,621	54,604	33.69							
Falcon Heights	1	252	8,569	34.02							
Hastings	1	205	7,949	38.86							
Little Canada	1	2,400	60,696	25.29							
Oakdale	1	344	10,850	31.50							
Roseville	3	402	17,035	42.40							
South St. Paul	2	23	877	37.59							
St. Paul	6	7,183	237,284	33.03							
Stillwater	1	78	3,500	45.00							
White Bear Lake	6	6,003	163,229	27.19							
Woodbury	2	2,654	64,456	24.29							
Metro East Total	29	21,920	\$648,429	\$29.58							
	D	intuint Tatala									
District 1 Total		istrict Totals 18,121	¢472.006	\$26.11							
	5	•	\$473,096	φ26.11 25.20							
District 2 Total	3	1,751	44,121								
District 3 Total District 4 Total	2 5	731	19,138	26.18 38.04							
		3,090 15,801	120,331	38.94							
Metro West Total District 6 Total	22 13	15,891 6 041	450,837	28.37 30.56							
District 7 Total	1	6,941 160	212,131 4,000	25.00							
District 8 Total	3	895	32,284	36.06							
Metro East Total	29	21,920	648,429	29.58							
INIONO LUST I OTAI	20	21,020	0-10,420	25.50							
STATE TOTAL	83	69,500	\$2,004,367	\$28.84							
		-	•								

N:\MSAS\EXCEL\UNIT PRICE\2006UNIT PRICE BREAK OUT FINAL 2006.XLS SIDEWALK CONST.

### **SIDEWALK CONSTRUCTION #2521**



				YEARLY		5 YEAR
				AVERAGE	PRICE	AVERAGE
NEEDS	NO. OF		TOTAL	CONTRACT	USED IN	CONTRACT
YEAR	CITIES	QUANTITY	COST	PRICE	NEEDS	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		25.71

SUBCOMMITTEE'S RECOMMENDED PRICE FOR THE 2006 NEEDS STUDY IS \$26.00 PER SQ. YD.

Note: The Unit Price Study is done every two years. Therefore, we used the total of the past five years costs divided by the total of the past five years quantites for the five year average.

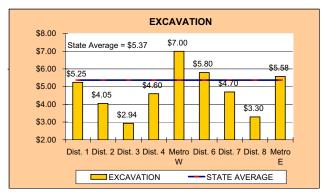
#### **2005 UNIT PRICES BY DISTRICT**

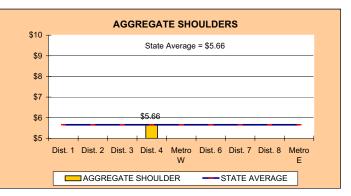
For the 2006 Unit Price Study

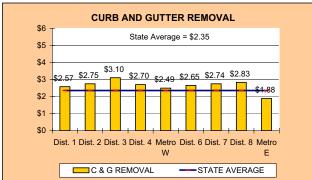
	Dist.	Dist.	Dist.	Dist.	Metro	Dist.	Dist.	Dist.	Metro	State
	1	2	3	4	West	6	7	8	East	Average
Excavation	\$5.25	\$4.05	\$2.94	\$4.60	\$7.00	\$5.80	\$4.70	\$3.30	\$5.58	\$5.37
Aggregate Shoulders				\$5.66						\$5.66
C & G Removal	\$2.57	\$2.75	\$3.10	\$2.70	\$2.49	\$2.65	\$2.74	\$2.83	\$1.88	\$2.35
Sidewalk Removal	\$3.40	\$4.50		\$7.26	\$6.24	\$7.72	\$8.00	\$6.30	\$4.93	\$5.14
Conc. Pave. Removal	\$4.46	\$4.50	\$4.64		\$4.59	\$5.65	\$5.15	\$6.00	\$4.88	\$5.19
Tree Removal (Clear)	\$287.40	\$50.00	\$170.00	\$305.00	\$165.31	\$140.00		\$200.00	\$186.36	\$184.70
Tree Removal (Grub)	\$125.66	\$50.00	\$130.00	\$125.81	\$83.61	\$128.23		\$200.00	\$103.51	\$110.24
Agg. Base - 2211	\$7.26	\$5.66	\$11.25	\$8.11	\$11.34	\$10.78	\$9.60	\$8.98	\$6.52	\$8.43
Bituminous - All	\$35.68	\$32.39	\$34.38	\$32.90	\$40.70	\$42.44	\$47.23	\$33.67	\$36.45	\$37.78
C & G Const.	\$10.11	\$8.83	\$8.79	\$12.83	\$9.27	\$12.46	\$12.27	\$8.81	\$9.05	\$9.77
Sidewalk Const.	\$26.11	\$25.20	\$26.18	\$38.94	\$28.37	\$30.56	\$25.00	\$36.06	\$29.58	\$28.84

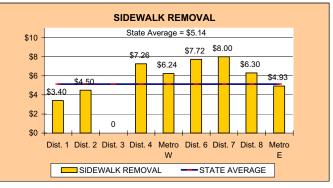
BOLD = Highest District Cost in That Category

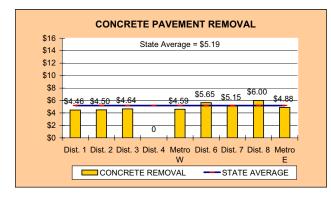
ITALIC = Lowest District Cost in That Category

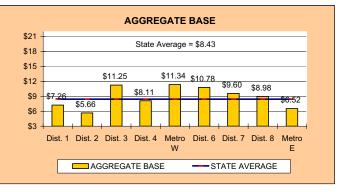






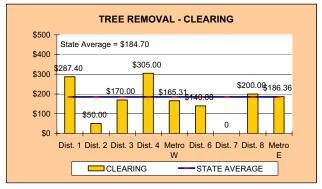


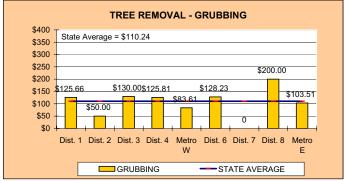


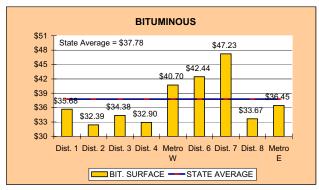


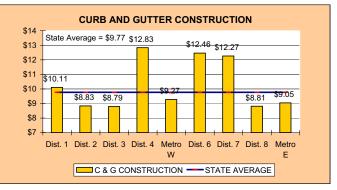
### **2005 UNIT PRICES BY DISTRICT**

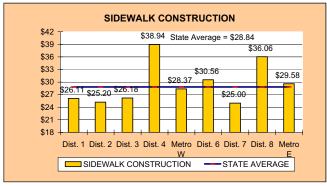
For the 2006 Unit Price Study











 $N:\\ MSAS\setminus EXCEL\setminus UNIT\ PRICE\setminus 2006\setminus UNIT\ PRICE\ BREAK\ OUT-2006\ FINAL.XLS\ UP\ BY\ DISTRICT\ (\&\ GRAPHS)$ 

09-May-06

#### 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				

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

#### MN\DOT'S HYDRAULIC OFFICE RECOMMENDED PRICES FOR 2006:

 Storm Sewer
 Storm Sewer

 Adjustment
 Construction

 2006
 \$86,121
 \$268,035

#### SUBCOMMITTEE'S RECOMMENDED PRICES FOR 2006:

 Storm Sewer
 Storm Sewer

 Adjustment
 Construction
 Lighting
 Signals

 2006
 \$86,100
 \$268,035
 \$100,000
 \$130,000

#### RAILROAD CROSSINGS NEEDS COSTS

			SIGNALS	SIGNALS & GATES	CONCRETE CROSSING
NEEDS YEAR	SIGNS (Per Unit)	PAVEMENT MARKING	(Low Speed) (Per Unit)	(High Speed) (Per Unit)	MATERIAL (Per feet)
1987	, ,	IVIARRING	<u> </u>		(Per foot)
	\$300		\$65,000	\$95,000	<b>¢</b> 700
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	187,500	1,000
2006					

#### MN\DOT'S RAILROAD OFFICE RECOMMENDED PRICES FOR 2006:

		Pavement			Concrete
	Signs	Marking	Signals	Sig. & Gates	X-ing Surf.
2006	\$1,000	\$750	\$150,000	\$175-\$225,000	\$1,000
SUBCOMMIT	TEE'S RECOMM	ENDED PRICES FO	OR 2006:		
2006	\$1,000	\$750	\$150,000	\$200,000	\$1,000

<sup>\*\*</sup> Lighting needs were revised to deficient segment only.

### Memo

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

Date:

March 24, 2006

To:

Marshall Johnston

Manager, Municipal State Aid Street Needs Section

From:

Mike Leuer M

State Aid Hydraulic Specialist

Phone:

(651) 747-2167

Subject:

State Aid Storm Sewer

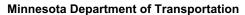
Construction Costs for 2005

We have completed our analysis of storm sewer construction costs incurred for 2005 and the following assumptions can be utilized for planning purposes per roadway mile:

- Approximately \$268,035 for new construction, and
- Approximately \$86,121 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 93 plans for 2005.

CC: Andrea Hendrickson (file)





#### Memo

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

May 9, 2006

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)\*

\$150,000.00

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

Signals & Gates (multiple track, high/low speed, average price)\* \$175,000 - \$225,000.00

Signs (advance warning signs and crossbucks)

\$1,000 per crossing

Pavement Markings (tape)

\$5,500 per crossing

Pavement Markings (paint)

\$ 750 per crossing

Crossing Surface (concrete, complete reconstruction)

\$1,000 per track ft.

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.

<sup>\*</sup>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.

#### Special Drainage Costs for Rural Segments 2006

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 \$20.00 per foot as a cost for 15" CSP and \$135.00 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 \$890.00.

Using the 1990 Needs Study Subcommittee recommended number of 25 entrances per mile, the cost of Side Culverts per mile would be \$22,250.

#### For **C** Culverts:

- 1) The minimum pipe diameter of £ 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 a 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 \$32.00 per foot as a cost for 18" RCP and \$525 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 £ culvert would be \$2,714.

Using the 1990 Needs Study Subcommittee recommended number of four ⊈ culverts per mile, the cost of centerline culverts per mile would be \$10,856.

By adding the cost of the 25 Side Culverts and the 4 £ culverts, the estimated construction needs cost per mile for Special Drainage would be \$33,106 per mile.

## SUBCOMMITTEE'S RECOMMENDED PRICE FOR THE 2006 NEEDS STUDY IS \$40,000 PER MILE.

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

# CSAH Roadway Unit Price Report JUNE, 2006

Construction Item	2005 CSAH Needs Study Average	2001-2005 CSAH 5-Year Const. Average	2005 CSAH Const. Average	2006 MSAS NSS Recommended Price
Rural & Urban Design				
italai a Giban Booigii				
Gravel Base CI 5 & 6/Ton	\$6.04	\$6.07	\$7.03	
Outstate(Gravel Base Cl 5 & 6/Ton)	5.96	5.86	6.69	
Metro (Gravel Base Cl 5 & 6/Ton)	6.43	7.65	10.02	
Rural Design				
Outstate(Bituminous)/Ton)	\$24.34	\$23.79	\$25.72	
Gravel Surf. 2118/Ton	5.97	5.92	7.09	7.10
Gravel Shidr. 2221/Ton	6.76	6.69	8.36	
Urban Design				
Outstate(Bituminous/Ton)	\$31.85	\$30.91	\$37.39	
Rural & Urban Design				
Metro (Bituminous/Ton)	\$38.44	\$33.58	\$37.41	

# 2006 MSAS SCREENING BOARD DATA JUNE, 2006

#### 2005 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 2005. 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 opposition.

N:\MSAS\EXCEL\2006\JUNE 2006 BOOK\BRIDGE PROJECTS 2005.XLS

#### **BRIDGES LET IN CALENDAR YEAR 2005**

BRIDGE LENGTH 0-149 FEET

NEW BRIDGE		DINE	OE EENON	H 0-149 FEET		COST PER
NUMBER	PROJ	ECT NUMBER	LENGTH	DECK AREA	BRIDGE COST	SQ. FT.
94112	SAP	034-604-017	40.00	1.360	\$168,613	\$124
4523	SAP	004-599-046	62.29	1,984	258,381	130
58548	SAP	058-654-004	66.00	2,580	208,304	81
84527	SP	084-602-006	66.00	2,332	268,411	115
32563	SAP	032-629-036	68.30	2,652	247,327	93
40523	SAP	040-603-023	69.25	2,691	265,600	99
78517	SAP	078-598-027	70.00	2,193	166,825	76
59533	SAP	059-609-003	73.25	3,760	316,609	84
66541	SAP	066-631-005	73.50	3,478	305,845	88
66542	SAP	066-631-003	73.50	3,478	255,786	74
27638	SAP	027-623-003	73.86	5,045	869,275	172
67551	SP	097-597-004	74.50	2,856	209,718	73
29527	SAP	029-599-006	74.67	2,240	249,475	111
67552	SAP	067-620-011	75.42	2,966	227,030	77
19556	SAP	019-599-029	77.50	2,730	257,740	94
43549	SAP	043-599-028	80.25	2,480	254,572	103
28531	SP	028-598-008	81.67	3,212	209,142	65
64574	SAP	064-607-037	85.58	4,051	256,985	63
27A94	SP	141-155-015	86.00	5,848	568,270	97
85550	SAP	085-599-048	90.77	3,185	306,193	96
22600	SAP	022-606-015	92.25	6,624	1,263,070	191
40520	SAP	040-615-013	92.40	3,588	306,861	86
24542	SAP	101-111-009	93.67	5,473	573,059	105
60554	SAP	060-599-218	93.75	2,937	327,854	112
7583	SAP	007-648-002	94.00	4,888	513,224	105
64575	SAP	064-641-002	94.58	3,720	270,196	73
45567	SP	045-634-007	95.50	3,840	300,761	78
55578	SAP	055-599-080	100.50	3,551	302,527	85
55577	SP	055-598-054	105.75	3,736	318,158	85
14543	SAP	014-599-021	107.54	3,370	298,904	89
31554	SAP	031-599-012	107.92	3,382	386,999	114
60555	SAP	060-599-217	111.92	3,506	365,516	104
28534	SP	028-604-025	112.54	4,427	357,080	81
76539	SAP	076-599-043	112.80	3,984	278,159	70
55580	SAP	055-599-084	113.00	3,955	306,520	78
44511	SP	044-610-014	116.00	5,027	322,092	64
28535 7580	SP SAP	028-624-003 007-633-011	119.90 120.92	4,718 5,240	416,235 759,772	88 145
69633	SAP	069-598-029	120.92	4,296	333,062	78
7582	SAP	007-599-039	132.50	4,296	310,980	67
85548	SAP	085-599-051	134.08	4,620	565,681	136
56535	SAP SP	056-599-053	134.08	6,019	451,734	75
		000-088-003	142.73			
State Aid Projects	5			156,176	\$15,198,545	\$97
TOTALS		42		156,176	\$15,198,545	\$97

### **BRIDGES LET IN CALENDAR YEAR 2005**

**BRIDGE LENGTH 150 TO 499 FEET** 

NEW BRIDGE		PROJECT	LENGTH	DEOK ADEA		COST PER
NUMBER		NUMBER	LENGTH	DECK AREA	BRIDGE COST	SQ. FT.
45569	SP	045-619-003	153.04	4,795	\$589,658	\$123
85555	SP	176-125-006	159.48	14,406	1,846,846	128
31552	SP	031-663-017	162.04	11,073	1,055,754	95
38530	SP	092-090-021	175.00	2,100	255,050	121
43546	SP	043-615-010	279.00	18,601	1,153,064	62
2570	SAP	114-127-003	292.00	22,407	2,189,459	98
8548	SP	008-610-024	351.38	15,235	1,381,574	91
27B23	SP	027-701-010	380.00	27,740	5,032,018	181
14539	SP	014-622-006	954.70	62,928	6,231,518	99
State Aid Project	S			179,285	\$19,734,941	\$110
Trunk Hwy Projec	cts					
TOTALS				179,285	\$19,734,941	\$110

### **BRIDGES LET IN CALENDAR YEAR 2005**

**BRIDGE LENGTH 500 FEET & OVER** 

NEW BRIDGE NUMBER		PROJECT NUMBER	LENGTH	DECK AREA	BRIDGE COST	COST PER SQ. FT.
27641	SP	027-716-003	1,070.00	75,970	\$4,374,806	\$58
5534	SP	191-115-002	1298.21	122,440	16,691,310	136
State Aid Projects	3			198,410	\$21,066,116	\$106
Trunk Hwy Projec	ts					
TOTALS				198,410	\$21,066,116	\$106

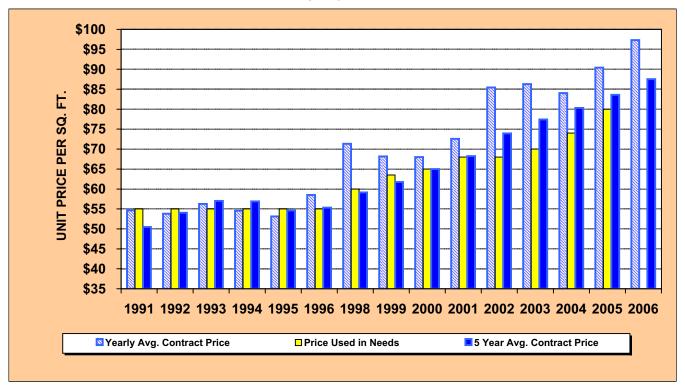
### **BRIDGES LET IN CALENDAR YEAR 2005**

Railroad Bridges

NEW BRIDGE NUMBER	PROJECT NUMBER	Number of Tracks	Bridge Cost	Cost Per Lin. Ft.	Bridge Length
TOTALS			\$0		60 0

### **BRIDGE COST**

**O-149 FEET** 



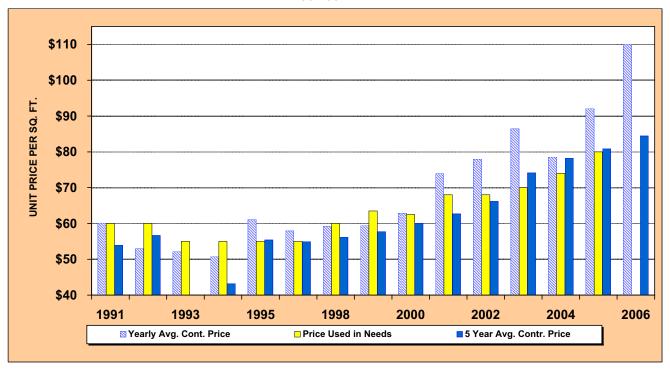
NEEDS YEAR	NUMBER OF PROJECTS	DECK AREA	TOTAL COST	YEARLY AVERAGE CONTRACT PRICE	PRICE USED IN NEEDS	5-YEAR AVERAGE CONTRACT PRICE
1991	37	136,770	\$7,472,265	\$54.63	\$55.00	\$50.46
1992	39	147,313	7,929,250	53.83	55.00	54.05
1993	38	190,400	10,709,785	56.25	55.00	57.00
1994	49	208,289	11,362,703	54.55	55.00	56.91
1995	32	124,726	6,627,018	53.13	55.00	54.61
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		87.51

SUBCOMMITTEE'S RECOMMENDED PRICE FOR THE 2006 NEEDS STUDY IS

PER SQ. FT.

### **BRIDGE COST**

150-499 FEET



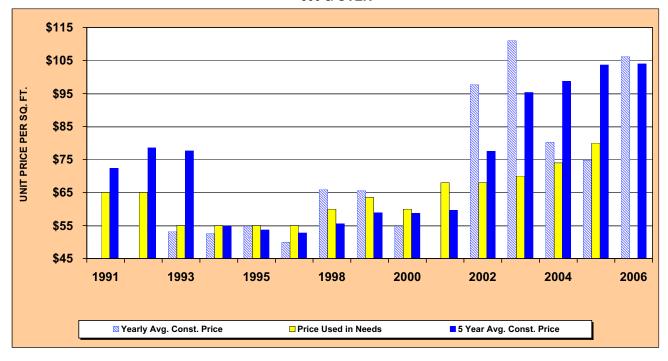
	NUMBER			YEARLY AVERAGE	PRICE	5-YEAR AVERAGE
NEEDS	OF	DECK	TOTAL	CONTRACT	USED IN	CONTRACT
YEAR	PROJECTS	AREA	COST	PRICE	NEEDS	PRICE
1991	27	368,709	\$22,167,571	\$60.12	\$60.00	\$54.00
1992	24	331,976	17,582,542	52.96	60.00	56.66
1993	31	421,583	21,987,208	52.15	55.00	33.05
1994	29	307,611	15,619,506	50.78	55.00	43.20
1995	28	381,968	23,310,410	61.03	55.00	55.41
1996	27	385,230	22,302,967	57.90	55.00	54.96
1998	30	483,315	28,642,031	59.26	60.00	56.22
1999	29	455,964	27,104,753	59.44	63.50	57.68
2000	22	275,074	17,296,406	62.88	62.50	60.10
2001	21	272,162	20,110,670	73.89	68.00	62.67
2002	37	443,458	34,577,147	77.97	68.00	66.18
2003	40	667,548	57,671,538	86.39	70.00	74.15
2004	38	601,026	47,213,777	78.56	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		84.45

### SUBCOMMITTEE'S RECOMMENDED PRICE FOR THE 2006 NEEDS STUDY IS

PER SQ. FT.

### **BRIDGE COST**

500 & OVER

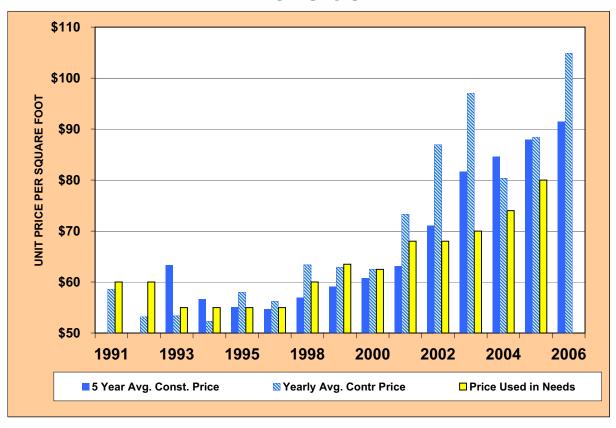


NEEDS YEAR	NUMBER OF PROJECTS	DECK AREA	TOTAL COST	YEARLY AVERAGE CONTRACT PRICE	PRICE USED IN NEEDS	5-YEAR AVERAGE CONTRACT PRICE
1991	0	0	\$0	\$0	\$65.00	\$72.44
1992	0	0	0	0	65.00	78.55
1993	6	245,572	13,068,106	53.21	55.00	77.61
1994	3	75,425	3,959,504	52.50	55.00	54.79
1995	2	174,991	9,595,341	54.83	55.00	53.68
1996	4	157,751	7,875,932	49.93	55.00	52.77
1998	3	182,129	12,002,782	65.90	60.00	55.63
1999	6	201,931	13,228,740	65.51	63.50	58.90
2000	2	162,652	8,922,542	54.86	60.00	58.70
2001	0	0	0	0.00	68.00	59.66
2002	6	409,395	39,986,160	97.67	68.00	77.54
2003	10	741,892	82,381,125	111.04	70.00	95.34
2004	3	82,449	6,610,213	80.17	74.00	98.75
2005	1	38,856	2,904,290	74.74	80.00	103.63
2006	2	198,410	21,066,116	106.17		103.98

SUBCOMMITTEE'S RECOMMENDED PRICE FOR THE 2006 NEEDS STUDY IS

PER SQ. FT.

### **ALL BRIDGES COMBINED**



				YEARLY AVERAGE	PRICE	5 YEAR AVERAGE
NEEDS	NO. OF		TOTAL	CONTRACT	USED IN	CONTRACT
YEAR	PROJECTS	DECK AREA	COST	PRICE	NEEDS	PRICE
1991	64	505,479	\$29,639,836	\$58.64	\$60.00	
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	55.02
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		91.47

SUBCOMMITTEE'S RECOMMENDED PRICE FOR THE 2006 NEEDS STUDY IS

\$95.00 PER SQ. FT.

# RAILROAD BRIDGES OVER HIGHWAYS

						09-May-06
					Cost per Lin. Ft. of	Cost per Lin. Ft. of
	Number Of	Number of		<b>Bridge Cost per</b>	1st Track (Unit	Additional Tracks
<b>Needs Year</b>	Projects	Tracks	<b>Bridge Length</b>	Lin. Ft. (Actual)	Price Study)	(Unit Price Study)
1986	0	0			\$2,250	\$1,750
1987	0	0			2,250	1,750
1988	_	က	103.71	\$13,988	2,250	1,750
1989	2	_	161.51	8,499	2,250	1,750
		_	317.19	5,423	2,250	1,750
1990	_	2	433.38	8,536	4,000	3,000
1991	0	0			4,000	3,000
1992	_	_	114.19	7,619	4,000	3,000
1993	_	_	181.83	7,307	2,000	4,000
1994	0	0			2,000	4,000
1995	0	0			2,000	4,000
1996	_	_	80.83	12,966	2,000	4,000
1998	_	_	261.02	8,698	8,000	6,500
1999	_	_	150.30	8,139	8,200	6,700
2000	2	<b>~</b>	108.58	12,112		
		<b>~</b>	130.08	10,569	000'6	7,500
2001	_	_	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			009'6	8,000
2005	0	0			10,200	8,500
2006	0	0				

SUBCOMMITTEE'S RECOMMENDED PRICE FOR THE 2006 NEEDS STUDY IS PER LINEAL FOOT FOR THE FIRST TRACK

\$10,200

\$8,500

SUBCOMMITTEE'S RECOMMENDED PRICE FOR THE 2006 NEEDS STUDY IS PER LIN. FT. FOR ADDITIONAL TRACKS

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### All Structures on the MSAS System

No. of Existing Structures	No. of Proposed Structures	
391	123	1 - Bridge
22	8	3 - Structural Plate Arch
29	0	4 - Other
55	23	5 - Box Culvert Single
21	9	6 - Box Culvert Double
6	0	7 - Box Culvert Triple
0	0	8 - Box Culvert Quad
29	390	Adequate, or not eligible
553	553	TOTAL

There are a total of 250 adequate structures on the MSAS system. There are a total of 303 deficient structures on the MSAS system There are 140 structures on the MSAS system that don't qualify for Needs

### **Structures on the MSAS System That Qualify for Needs**

	No. of Proposed	
Structures		Structure Type
293	123	1 - Bridge
21	8	3 - Structural Plate Arch
21	0	4 - Other
52	23	5 - Box Culvert Single
20	9	6 - Box Culvert Double
6	0	7 - Box Culvert Triple
0	0	8 - Box Culvert Quad
	250	Blank - None Indicated
l	250	(Not Eligible for Needs)
413	413	TOTAL

There are a total of 163 adequate structures on the MSAS system that qualify for Needs There are a total of 250 deficient structures on the MSAS system that qualify for Needs



## Subcommittee



## Issues



### Minutes of the

### Municipal State Aid Screening Board Needs Study Subcommittee

May 4, 2006

The Needs Study Subcommittee met at 10:30 a.m. on May 4, 2006 in the office of the Crookston City Engineer. Members present were Shelly Pederson, Chair – Bloomington, Tim Loose – St. Peter and Dave Kildahl – Crookston. Also present were Julie Skallman, State Aid Engineer, Marshall Johnston and Dan Simon of Mn/DOT State Aid.

1. Marshall reviewed the Annual Maintenance Needs Cost. Marshall also said there is no current study or information that would help the committee set the needs cost per mile. The NSS discussed whether to raise the cost per mile and, if so, how could we justify it. The committee feels the amount should be raised from the present \$5,475 per mile due to regular inflation and the higher costs for fuel. It was decided the amount should be raised in accordance with the Engineering News Record national average cost index of 4.55%. Therefore, the NSS recommends the following Maintenance Needs Costs:

	< 1000ADT	>1000 ADT
Traffic Lane per Mile:	\$1,725	\$2,850
Parking Lane per Mile	\$1,725	\$1,725
Median Strip per Mile	\$ 575	\$1,115
Storm Sewer per Mile	\$ 575	\$ 575
Per Traffic Signal	\$ 575	\$ 575
Minimum per Mile	\$5,720	\$5,720

### 2. Unit Price Study:

- a. Excavation: NSS anticipates substantially higher prices this year due to fuel increases and recommends \$4.75 per cubic yard. This is a compromise between the 5-year average and the \$5.37 calculated from the study.
- b. Aggregate Shouldering: NSS recommends \$14.25 per ton again for 2006, 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 2006: (\$8.36). 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 recommends that both CSAS and MSAS unit prices be studied in future years.
- c. Curb and Gutter Removal: No increase. Recommend \$2.75 per LF.
- d. Sidewalk Removal: No increase. \$5.50 per SY
- e. Concrete Pavement Removal: No increase. \$5.40 per SY
- f. Tree removal: NSS recommends increase to \$300 per tree, inline with the two past studies.
- g. Aggregate Base 2211: Recommend \$8.40 per ton based on 2006 study. Motion by Shelly Pederson, second by Tim Loose that Class 7 be included in the next unit price study in 2008. Motion carried.

- h. Bituminous: Recommend \$38.00 per ton, based on study and anticipation of much higher prices this year due to oil increases.
- Curb and Gutter Construction: Recommend \$9.75 per LF based on study price of \$9.77 per LF.
- j. Sidewalk Construction: Recommend \$26.00 per SY based on the 5-year average and the belief that the study price of \$28.84 is a temporary spike.
- k. Storm Sewer: Follow Hydraulics Unit recommendation and recommend \$86,100 per mile for adjustments and \$268,035 per mile for new construction. Lighting: Recommend \$100,000 per mile, based on bids received in Crookston in 2005. Signals: No change from 2005.
- I. Railroad Crossing Needs: Recommend we use the recommendation from the MnDOT RR Office and use \$200,000 for Signals and Gates.
- m. Special Drainage Costs for Rural Segments: Mn/DOT Hydraulics has recommended \$33,106 per mile based on minimum culvert sizes recommended in the Drainage Manual. The NSS discussed whether to use minimum sizes or the average sizes actually installed for establishing a needs cost. Motion by Dave Kildahl, second by Tim Loose to recommend that the municipal Screening Board take the following action: Request the Mn/DOT staff to study and determine the average culvert sizes used for centerline and side culverts and report the cost per mile based on average culvert sizes rather than minimum sizes required by the Drainage Manual. Motion carried.
- n. Railroad Bridges over Highways: No basis for changing the unit price, so NSS recommends staying with the same prices as in 2005.
- 3. Effects of Increase in Maintenance Allocation: The NSS reviewed the discussion and recommendation of the UCFS. The NSS discussed, in general, the use of maintenance vs. construction funds and the effect it has on the overall construction needs. The NSS agreed that maintenance is essential to keeping the transportation system functioning, but does nothing to reduce the 25-year construction needs. Maintenance only postpones the need for reconstruction or major rehab projects. It is too late now to recommend a negative needs adjustment for all maintenance allocations, or for any maintenance allocation up to the presently allowed 35 per cent of the total. However, the NSS believes that not less than 65% of the total annual allocation should be used on construction projects that reduce the 25-year construction needs. Therefore, the NSS approved the following motion by Dave Kildahl, seconded by Tim Loose:

A city that requests and receives more than 35% of its total annual allocation for maintenance shall receive an "after-the-fact" negative needs adjustment in an amount equal to the portion of its maintenance allocation greater than 35% for a period of 25 years. Each subsequent annual "excess maintenance allocation" shall receive its respective adjustment which shall run concurrently with and be in addition to any unexpired previous similar adjustments, until the expiration of its 25-year period.

- 4. Maintenance Allocation Requests: Marshall reviewed the many options for requesting maintenance allocations, summarizing that it is very difficult keeping up with all the different requests. After much discussion, the NSS concluded that this issue is outside the mission of the NSS and has nothing to do with how the needs are actually determined. The NSS reviewed the UCFS recommendation that the staff strictly follow the language of the Rule regarding urban maintenance allocation, and believe that more discussion with the entire Municipal Screening Board is necessary.
- 5. Dave Kildahl discussed the current screening board resolution that grants a positive needs adjustment every year for a city with a negative unencumbered construction fund balance. These cities are already rewarded by receiving their prorated share of the "excess balance" negative needs adjustment from the cities that have an UCFB over 3 times their annual construction allocation. The only purpose of this additional positive adjustment was to give an incentive to cities that wanted to advance fund their projects and draw down the municipal account when it was getting "too high". Those days are over. The NSS makes no recommendation on this issue, but recommends it be discussed at the full Municipal Screening Board Meeting.
- **6.** Adjournment: Motion by Tim loose, second by Dave Kildahl to adjourn at 2:20 p.m. Motion carried.

David B. Kildahl, Secretary Needs Study Subcommittee

### **2006 UNIT PRICE RECOMMENDATIONS**

n:msas/excel/2006/June 2006 Book/unit price recommendations.xls				09-May-06
				Screening
				Board
		2005	Subcommittee	Recommended
		Need	Suggested Prices	Prices
Needs Item		Prices	for 2006	For 2006
Grading (Excavation)	Cu. Yd.	\$4.25	\$4.75	1 0. 2000
Aggregate Shoulders #2221	Ton	14.25	14.25	
Aggregate offounders #2221	1011	14.25		
Curb and Gutter Removal	Lin.Ft.	2.75	2.75	
Sidewalk Removal	Sq. Yd.	5.50	5.50	
Concrete Pavement Removal	Sq. Yd.	5.40	5.40	
Tree Removal	Unit	250.00	300.00	
Tree Nemovai	OTIIL .	230.00		
Class 5 Base #2211	Ton	8.15	8.40	
Bituminous Base #2350	Ton	35.00	38.00	
Bitaninous Base #2000	1011	00.00		
Gravel Surface #2118	Ton	5.70	7.10	
Bituminous Surface #2350	Ton	35.00	38.00	
Braning de danace 7/2000	-			
Curb and Gutter Construction	Lin.Ft.	8.75	9.75	
Sidewalk Construction	Sq. Yd.	25.00	26.00	
Storm Sewer Adjustment	Mile	85,100	86,100	
Storm Sewer	Mile	265,780	268,035	
Special Drainage - Rural	Mile	40,000	40,000	
Street Lighting	Mile	82,500	100,000	
Traffic Signals	Per Sig	130,000	130,000	
Signal Needs Based On Projecte	· .	100,000		
		e = Needs Per Mile		
0 - 4,999 .25	\$130,0		\$32,500	
5,000 - 9,999 .50	130,0		65,000	
10,000 & Over 1.00	130,0		130,000	
Right of Way (Needs Only)	Acre	98,850	98,850	
Engineering	Percent	20	22	
	T CTOOTIL			
Railroad Grade Crossing				
Signs	Unit	1,000	1,000	
Pavement Marking	Unit	750	750	
Signals (Single Track-Low Speed)	_	150,000	150,000	
Signals & Gate (Multiple	-	100,000		
Track - High & Low Speed)	Unit	187,500	200,000	
Concrete Xing Material(Per Track)	_	1,000	1,000	
Control of Alling Material (1 of Track)		1,000		
Bridges				
0 to 149 Ft.	Sq. Ft.	80.00	95.00	
150 to 499 Ft.	Sq. Ft.	80.00	95.00	
500 Ft. and over	Sq. Ft.	80.00	95.00	
Railroad Bridges				
over Highways				
Number of Tracks - 1	Lin.Ft.	10,200	10,200	
Additional Track (each)	Lin.Ft.	8,500	8,500	
L				

### CLASS 7 AGGREGATE BASE

Report for the NSS
For a recommendation to the Municipal Screening Board
June 2006

Currently, aggregate classes of 2, 3, 4, 5, and 6 are included in the Unit Price study. These are all virgin aggregates and do not include any recycled materials.

Class 7 aggregate can meet the specs for any of the other classes, it just used approved recycled materials.

Over the last few years, we have been noticing more projects that use Class 7 aggregate base and/or surface.

Because of the small number of projects using aggregate surfacing on the MSAS system, we use the CSAH computed costs for aggregate surfacing. CSAH includes Class 7 in their computation of the aggregate surfacing.

Should we include Class 7 in our computations to compute the average Unit Price of Aggregate Base?

See the attached Excel spreadsheets for the effects of including Class 7.

### MSAS UNIT PRICE STUDY AGGREGATE BASE - Class 7 - TONS

	GILGATI	E DASE - Class		
CITY	No. Of	TOTAL	TOTAL	AVERAGE
NAME	Projects	QTY.	COST	UNIT PRICE
	······	District 1		
		Diouriot i		
District 1 Total	0	0	\$0	
District 1 Total	U	U	φυ	
		District 2		
		DISTRICT Z		
D: 1: 10 T 1 I	•	•	00	
District 2 Total	0	0	\$0	
		District 3		
District 3 Total	0	0	\$0	
		District 4		
District 4 Total	0	0	\$0	
		Metro West		
Brooklyn Center	2	16,349	\$71,795	\$4.39
Metro West Total	2	16,349	\$71,795	\$4.39
		•	•	
		District 6		
District 6 Total	0	0	\$0	
21011101 0 1 01111			+•	
		District 7		
		2.00.100.1		
District 7 Total	0	0	\$0	
District 7 Total			ΨŪ	
		District 8		
		District		
District 8 Total	0	0	\$0	
District 6 Total	U	U	φυ	
		Matua Faat		
01 D	4	Metro East	007.040	<b>#0.70</b>
St. Paul	1	9,934	\$37,318	\$3.76
Shoreview	1	5,005	42,042	8.40
White Bear Lake	6	14,140	138,574	9.80
Metro East Total	8	29,079	\$217,934	\$7.49
		District Totals		
District 1 Total	0	0	\$0	\$0.00
District 2 Total	0	0	0	0.00
District 3 Total	0	0	0	0.00
District 4 Total	0	0	0	0.00
Metro West Total	2	16,349	71,795	4.39
District 6 Total	0	0	0	0.00
District 7 Total	0	0	0	0.00
District 8 Total	0	0	0	0.00
Metro East Total	8	29,079	217,934	7.49
STATE TOTAL	10	45,428	\$289,729	\$6.38
		·	S\EXCEL\UNIT PRICE\2006\Class 7	•

N:\MSAS\EXCEL\UNIT PRICE\2006\Class 7 Unit Prices on Projects let in 2005

**2006 Unit Price Study** Class 7 Option by District

Unit	Price	\$4.39	4.39	\$4.39		3.76	8.40	9.80	9.80	9.80	9.80	9.80	9.80	\$7.49		\$6.38
Class 7 - Base	AMOUNT	\$46,646	25,149	71,795		37,318	42,042	17,705	17,705	38,641	18,012	21,462	25,049	217,934		\$289,729.34
Class	QTY.	10,622	5,727	16,349		9,934	5,005	1,807	1,807	3,943	1,838	2,190	2,556	29,079		45,428
CO.	NO.	27	27			62	62	82, 62	82, 62	82, 62	82, 62	82, 62	82, 62			
SEG.	LENGTH	0.508	0.448	0.956		1.405	0.400	0.113	0.113	0.204	0.144	0.123	0.211	2.713		6.382
	DIST NO.	2	2			6	6	6	6	6	6	6	6			
PROJECT	NUMBER	109-109-029	109-128-001			164-288-005	167-254-002	174-106-007	174-106-008	174-115-004	174-116-004	174-119-002	174-121-001			
	SAP/SP	SAP	SAP			SP	SAP	SAP	SAP	SAP	SAP	SAP	SAP			
	CITY NAME	BROOKLYN CENTER	BROOKLYN CENTER	METRO WEST TOTALS		ST PAUL	SHOREVIEW	WHITE BEAR LAKE	METRO EAST TOTALS		STATE TOTAL					
	CITY NO.	109	109			164	167	174	174	174	174	174	174			

If Class 7 was included in the Unit Price Study, then the average Unit Price for Aggregate Base would be lowered from \$8.43 to \$8.20 per ton.

N:\MSAS\EXCEL\UNIT PRICE\2006\Class 7 Unit Prices let on Projects let in 2005

# 2006 Unit Price Study CLASS 7

						CO.	Class 7 - Base	. Base	Unit
CITY NO.	CITY NAME	SAP/SP	PROJECT NUMBER	DIST NO.	SEG. LENGTH	NO.	QTY.	AMOUNT	Price
109	BROOKLYN CENTER	SAP	109-109-029	2	0.508	27	10,622	\$46,646	\$4.39
109	BROOKLYN CENTER	SAP	109-128-001	2	0.448	27	5,727	25,149	4.39
164	ST PAUL	SP	164-288-005	6	1.405	62	9,934	37,318	3.76
167	SHOREVIEW	SAP	167-254-002	6	0.400	62	5005	42,042	8.40
174	WHITE BEAR LAKE	SAP	174-106-007	6	0.113	82, 62	1,807	17,705	9.80
174	WHITE BEAR LAKE	SAP	174-106-008	6	0.113	82, 62	1,807	17,705	9.80
174	WHITE BEAR LAKE	SAP	174-115-004	6	0.204	82, 62	3,943	38,641	9.80
174	WHITE BEAR LAKE	SAP	174-116-004	6	0.144	82, 62	1,838	18,012	9.80
174	WHITE BEAR LAKE	SAP	174-119-002	6	0.123	82, 62	2,190	21,462	9.80
174	WHITE BEAR LAKE	SAP	174-121-001	6	0.211	82, 62	2,556	25,049	9.80
TOTAL					3.669		45,428	\$289,729.34	\$6.38

Per Mn/DOT Spec. No. 3138.2: Salvaged/recycled aggregate materials may be used or blended with a combination of virgin and salvaged/recycled aggregates or 100% salvaged/recycled aggregate materials as permitted in accordance with the following requirements. These composite mixtures/blends shall be designated as Class 7.

### **GRAVEL SHOULDERS**

Report for the NSS
For a recommendation to the Municipal Screening Board
June 2006

Gravel Shoulders make up 0.09% of the total needs this year.

The MSAS Unit Price study included 2 projects in one city that used Gravel Shoulders. The average Unit Price is \$5.66 which is based on 813 tons costing \$4,600.

The CSAH Unit Price study included 188 projects that used Gravel Shoulders. The average Unit Price is \$8.36 which is based on 801,530 tons costing \$6,699,094.

Should we use the CSAH Unit Price, or continue to conduct a Unit Price study on the MSAS projects?

### <u>Special Drainage Costs for Rural Segments</u> 2006

The Mn/DOT Hydraulics Unit, along with Mn/DOT Estimating Unit, was asked to review the Special Drainage Unit Costs this year.

Below are the recommended revisions from the Hydraulics Unit.

The most current average bid prices, provided by Mn/DOT Estimating Unit, were then applied to these materials.

Based upon these smaller sized pipes, the estimated construction needs cost per mile for Special Drainage has dropped from \$42,470 last year to \$33,106.

### CHANGES RECOMMENDED TO THE SPECIAL DRAINAGE DOCUMENT

Provided by the Mn/DOT Hydraulics Unit

- ➤ Page 1, item 2: minimum side culvert to be 15" diameter. Minimum cover to be 1.25 feet for rigid pavement and 1.75 feet for flexible pavement. Refer to drainage manual 5.2.4.
- ➤ Page 1, item 3, replace 18" with 15" for minimum side culvert, and change Galvanized Steel to Corrugated Steel, and refer to GS aprons.
- ➤ Page 1, item 4, replace 18" GSP with 15" CSP.
- ➤ Page 2, item 1, replace 24" with 18". Refer to drainage manual 5.2.4
- ➤ Page 2, item 2, change 30" to 18".
- ➤ We list HDPE pipe as an alternate for storm sewer on all State Aid projects unless the County or City does not want it.

### **EXAMPLE OF 'EXCESS MAINTENANCE ACCOUNT ADJUSTMENT'**

Proposed by the NSS

If St. Paul had requested to increase their Maintenance from 35% to 45% in December 2005, it would have increased their January 2006 Maintenance allocation by 10% or \$881,707.

It would have decreased their Construction Allocation by a like amount.

Because the city would have decreased its Construction Account, it would not have as many dollars to spend on construction projects, so would not reduce its Needs as quickly.

The negative Needs adjustment proposed by the NSS for this would be:

The NSS is recommending an 'after the fact' negative Needs adjustment in an amount equal to the portion of its maintenance allocation greater than 35% for a period 25 years.

From the January 2007 until the January 2031 allocation, St. Paul would receive an annual negative Needs Adjustment of \$881,707.

St. Paul's Needs in 2006 were \$237,712,046.

Based on 2006 dollars, in 2007 approximately \$14,610 in actual dollars (\$881,707 \* \$16.57/1000) would have been taken from St. Paul and redistributed between the other cities.

Over a period of 25 years, it would have cost St. Paul \$22,042,675 in Needs to increase its maintenance allocation 10%.

Based on this 2006 Needs value, it would have cost St. Paul a total of \$365,250 in actual dollars (or 41% of the amount its Maintenance Account was increased) over the 25 years to increase its Maintenance Account by \$881,707 for one year.

# Municipal State Aid Screening Board Unencumbered Construction Funds Subcommittee Meeting Minutes April 24, 2006

The Unencumbered Construction Funds Subcommittee (UCFS) held a meeting at 10:00 a.m. on April 24, 2006 at the central office of Mn/DOT in St. Paul. Members present were Chairman Tom Drake-Faribault, Lee Gustafson-Minnetonka and Mike Metso-Krech Ojard & Associates. Also attending for all or parts of the meeting were Marshall Johnston, Julie Skallman, Rick Kjonaas, Dan Simon and Julie Puffer of Mn/DOT State Aid. The primary purpose of the meeting was to review items referred to the UCFS from the 2005 Fall Screening Board, and to discuss other items brought forward by the State Aid office.

### I. Effects of an Increase in the Maintenance Allocation

Marshall Johnston began the discussion of this agenda item by presenting the background for it – noting that various issues and concerns associated with it were raised following the MSA Variance Committee's approval of a 2005 request from the City of St. Paul to deposit 45% of its total MSAS allocation into its Maintenance Account for a period of 3 years. At the Fall 2005 Municipal Screening Board meeting, the Board moved to refer various issues involving the Maintenance Fund variance request /approval to the Needs Study Subcommittee for a report at the Spring 2006 Screening Board meeting. After further consideration of this action, State Aid staff determined that this matter should also be reviewed by the Unencumbered Construction Funds Subcommittee given its nature and potential impacts.

Marshall went on to note that there were currently several methods and/or options for computing a city's Maintenance Allocation, including:

- \$1500 per improved mile.
- \$1500 per improved mile plus bond interest (not to exceed 35%).
- 25% of Total Apportionment
- 25% of Total Apportionment plus bond interest (not to exceed 35%).
- Requested lump sum or specified percentage (not to exceed 25%).
- Requested lump sum or specified percentage greater than 25% and less that 35% (Maintenance expenditure report required).
- 35% of Total Apportionment (Maintenance expenditure report required).

Marshall also noted that cities could request to pay bond interest with local funds rather than with Maintenance Allocation funds.

Marshall presented the following discussion items as developed by State Aid staff:

- Review CSAH Maintenance Account processes.
- Is 35% a reasonable amount for the maximum Maintenance Allocation?
- Is \$1500 per mile a reasonable amount for the minimum Maintenance Allocation?
- Should there be a Needs adjustment for maintenance allocations over a certain percentage?
- Should the number of different methods of computing the Maintenance Allocation be simplified or reduced?

Marshall also noted that 2006 was a State Aid "rule-making" year, and therefore it would be an appropriate time to consider rule revisions in this area if necessary or desired.

Marshall then went on to briefly review the CSAH Maintenance Account processes – noting that current State Aid rules set the counties' maintenance allotment at 40%, and also presented general examples of possible impacts/outcomes if a select number of cities increased their maintenance allotments to 45% and some type of a negative "Excess Maintenance Account Needs Adjustment" was established. He went on to present possible revisions to the current methods and/or options for computing a city's Maintenance Allocation.

UCFS members then discussed the issues and concerns involving a negative Needs adjustment relative to Maintenance Account allocations – noting various "pros & cons" to establishing (another) new Needs adjustment including possible tracking issues for State Aid. The UCFS also discussed issues and concerns with attempting to reduce the methods/options for computing Maintenance Allocations given the large number of variations currently used by cities. Finally, the Subcommittee again discussed the events leading up to this point in time, and the future potential of similar requests coming from other cities.

Upon completion of these discussions, Lee Gustafson moved / Tom Drake seconded a motion recommending that the Municipal Screening Board pass the following resolution:

Any city that 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 ten (10) years, and will be applied as a single one-year (one-time) deduction.

The motion carried without opposition.

The UCFS then continued with discussions regarding possible reductions in the number of current methods and/or options of computing Maintenance Allocations – including a review of the current language found in State Aid Operations Rules 8820.1400 Subp. 3 which in part states:

### Urban maintenance apportionment account.

Twenty-five percent of the total allocation, if requested by the urban municipality before December 16 preceding the annual allocation, or \$1,500 per mile of improved municipal state-aid streets, is the minimum allotment for the general maintenance of the approved state-aid system. The commissioner may modify any allotments to the urban maintenance to finance the amount needed to pay the interest due on municipal state aid bonds and to accommodate the screening board resolutions pertaining to trunk highway turnback maintenance allowances.

Those municipalities desiring to receive an amount greater than the established minimum, not to exceed 35% of the total allocation, shall file a request with the commissioner before December 16 preceding the annual allocation...

In reviewing this language, State Aid staff and UCFS members both noted that current practices involving methods/options for computing Maintenance Allocations appear to both conflict with and exceed this Rule – as the Rule states the base minimum allotment is \$1,500 per mile, but could be "increased" to 25% of the total allocation if requested by the municipality. It does not appear to provide for other amounts (either lump sum or specified percentage) less than 25% of the total allocation – although State Aid staff acknowledged that this practice has been in place for an undeterminable period of time. Further discussions occurred regarding the benefits and impacts of enforcing this Rule as written, and the opportunities for simplification and improved efficiencies within State Aid should this occur.

Upon completion of these discussions, Lee Gustafson moved / Mike Metso seconded the following motion:

The Unencumbered Construction Funds Subcommittee recommends that State Aid Operations Rules 8820.1400 Subp. 3 be enforced as currently stated effective with the 2007 annual allocation.

The motion carried without opposition.

The UCFS members also requested that this recommendation be highlighted and discussed at all upcoming Spring District Screening Board meetings in preparation for anticipated further discussions at the full Screening Board meeting.

### II. Credit for Local Effort

Marshall Johnston began the discussion of this agenda item by presenting the background for it – noting that at the Fall 2005 Screening Board meeting Steve Gaetz reported that the City of St. Cloud was considering using local resources (a local sales tax for transportation) to improve their MSA system, which would then result in a reduction in their Needs and therefore have a negative impact on the city's MSA allotment. The Screening Board subsequently moved to refer this issue involving expenditures of local funds on the MSA system and related possible Needs adjustments to the Unencumbered Construction Funds Subcommittee for a report at a future Screening Board meeting.

Marshall then went on to briefly review the current CSAH Screening Board resolution on "Needs Credit for Local Effort", along with various applicable aspects of the CSAH 'Credit for Local Effort Users Guide' – both of which relate to a positive 20-year Needs adjustment available to counties "...for local effort for construction items which reduce State Aid needs...". This then led to discussions involving concerns in the ability to track this type of Needs adjustment on the municipal system – as it was noted that the MSA system can be some what more "dynamic" than the CSAH system with regard to MSA route designations, and as a result it may be difficult to address changes in Needs associated with the future designation/revocation of MSA routes – and especially if the designation is revoked on a route that previously had received a positive Needs adjustment because of the use of local funds.

It was also noted that the use of local funds on the MSA system had some relationship to the use of MSA funds for "off-system" expenditures, and therefore the two topics may need to be discussed from some type of combined perspective.

The UCFS subsequently identified the need and potential benefit of attempting to quantify the extent of use and related impacts of the expenditure of local funds on the MSA system as well as the use of MSA funds "off-system" before any full discussions could occur with regard to either. State Aid staff noted that project-related documentation relative to the expenditure of MSA funds "off-system" would very likely be available through their office, but project-related documentation relative to the expenditure of local funds on the MSA system would not likely be available through their office as cities may or may not currently be reporting this on a consistent basis – even though it is a "requirement" of the State Aid program.

As a result, the UCFS recommended that this matter be discussed further at the both the upcoming District Pre-Screening Board meetings and the full Spring Screening Board meeting. Pending the outcome of these discussions, the UCFS further suggested that subsequent to the Screening Board's discussion a letter from Chair Steve Gaetz be sent to all MSA cities (a) outlining the background, issues and concerns relating to the Screening Board's current review of both local fund expenditures on the MSA system and MSA fund expenditures "off-system"; and (b) requesting information (actual available or best estimates) on the level of local expenditures (for MSA-eligible expenses) on MSA route construction or reconstruction projects incurred annually over the past 3-5 years. (It was believed that a request from the Screening Board Chair – rather than State Aid staff – may be better received and understood by cities.) Once information can be compiled regarding both of these issues – the UCFS would then meet to review the information and make further recommendations as appropriate and/or necessary.

III. Off-System Expenditures

(See "Credit for Local Effort" above.)

IV. Other Topics

(None)

The meeting was adjourned at 1:15 p.m.

Respectfully submitted,

Mike Metso - Secretary

Unencumbered Construction Funds Subcommittee

### EXAMPLE OF 'EXCESS MAINTENANCE ACCOUNT ADJUSTMENT' Proposed by the UCFS

If St. Paul had requested to increase their Maintenance from 35% to 45% in December 2005, it would have increased their January 2006 Maintenance allocation by 10% or \$881,707.

It would have decreased their Construction Allocation by a like amount.

Because the city would have decreased its Construction Account, it would not have as many dollars to spend on construction projects, so would not reduce its Needs as quickly.

The negative Needs adjustment for this would be:

The UCFS is recommending a one time Needs adjustment of 10 times the amount the city reduces its Construction Allocation.

In the January 2007 allocation, St. Paul would receive a one time negative Needs Adjustment of \$8,817,072 (\$881,707 \* 10). This means its Total 2006 Allocation of \$8,817,072 would be subtracted from its Needs in January 2007.

St. Paul's Needs in 2006 were \$237,712,046.

Based on 2006 dollars, in 2007 approximately \$146,099 in actual dollars (\$8,817,072 \* \$16.57/1000) would have been taken from St. Paul and redistributed between the other cities.

It would have cost St. Paul \$146,099 to increase its Maintenance Account by \$881,707.

### **EFFECTS OF INCREASE IN MAINTENANCE ALLOCATION**

Report for the Needs Study Subcommittee For a recommendation to the Municipal Screening Board Spring, 2006

### **Background Information**

In 2005, the Variance Committee approved a variance for St. Paul to deposit 45% of its total MSAS allocation into its Maintenance Account. The city could deposit this percentage in its Maintenance Account for 3 years.

This issue precipitated the following discussion at the Fall 2005 Municipal Screening Board meeting.

The Fall, 2005 Municipal Screening Board Meeting minutes state, in part:

...Skallman noted that the Board does not have the authority to undo a variance. The question for the Board is how to proceed in June: Should there be an adjustment...

Bloom moved and seconded by Salsbury to refer the impact of the Maintenance Fund Variance Request of the city of St. Paul to the Needs Study Subcommittee for a Spring report. Further, the MSAS staff will report on the current County options with an analysis of the funding impact on the needs of these type of requests...

...Bloom pointed out that her motion should be clarified that the analysis is about a process and the impacts and limits. Salsbury commented that the issue is not the variance, it is to look at the maintenance issue and impacts on needs of this action. Skallman pointed out that we are in a rule-making session, and, if the Board, in the Spring, determines that changes to the 35% maintenance allocation are needed that this could be implemented...

... A vote was called and the Bloom motion carried unanimously.

State Statute 162.14 Subd. 3 states:

**Maintenance**. The proportion of each such city's annual apportionment to be used for maintenance on its respective municipal state-aid street system shall be a joint determination of the commissioner and the governing body of each city. In the event that agreement cannot be reached, the determination of the commissioner shall be final.

State Aid Operations Rules 8820.1400 Subp. 3 state:

### Urban maintenance apportionment account.

Twenty-five percent of the total allocation, if requested by the urban municipality before December 16 preceding the annual allocation, or \$1,500 per mile of improved municipal state-aid streets, is the minimum allotment for the general maintenance of the approved state-aid system. The commissioner may modify any allotments to the urban maintenance account to finance the amount needed to pay the interest due on municipal state aid bonds and to accommodate the screening board resolutions pertaining to trunk highway turnback maintenance allowances.

Those municipalities desiring to receive an amount greater than the established minimum, not to exceed 35% of the total allocation, shall file a request with the commissioner before December 16 preceding the annual allocation...

Currently, there are several options for computing Maintenance Allocation

\$1500 per improved mile

\$1500 per improved mile plus bond interest (not to exceed 35%)

25% of Total Apportionment

25% of Total Apportionment plus bond interest (not to exceed 35%)

Lump sum or certain percent requested (not to exceed 25%)

Lump sum or certain requested of more than 25% and less than 35% (Maintenance expenditure report required)

35% of Total Apportionment (Maintenance expenditure report required)

Requested that Bond Interest be paid with local funds

### **Discussion Items:**

Review CSAH Maintenance Account processes.

Is 35% a reasonable amount for the maximum maintenance allocation?

Is \$1500 per improved mile a reasonable amount for the minimum maintenance allocation?

Should there be a Needs adjustment for maintenance allocations over a certain percentage?

Should the 8 different methods of computing the maintenance allotment be simplified?

### EFFECTS OF INCREASE IN MAINTENANCE ALLOCATION

Report for the Needs Study Subcommittee For a recommendation to the Municipal Screening Board Spring, 2006

### County Maintenance Requirements

State Aid Operations Rules 8820.1400 state in part:

- ...the commissioner shall apportion and set aside the following amounts:
- ...40 percent of the regular county state-aid allotment for the general maintenance of county state-aid highways;
- ...40 percent of the county-municipal account allotment for maintaining the county stateaid highways within municipalities of less than 5,000 population.

### Revisions of county maintenance apportionments.

The commissioner may, upon recommendation of the screening board or upon receipt of a resolution from a county board and for good cause shown, increase or decrease the proportion to be used for maintenance...

# REVISIONS TO COUNTY MAINTENANCE ALLOTMENT

N:MSAS/EXCEL/SUBCOMMITTEE ISSUES/NSS/2006/COUNTY MAINT FORMULA CHANGES.XLS

		Orig	Current	Formula	
	Alloc	Maint	Maint	Change	
County	Year	Alloc	Alloc	(from 40%) Re	Reason
Cook	2005	\$837,960.00	\$837,960.00 \$1,047,450.50	50.00% SF	50.00% Shortfall in Maint allocation
Cook	2004	\$817,913.00	\$920,152.00	45.00% Sr	45.00% Shortfall in Maint allocation
Benton	2003	\$822,194.00	\$1,008,960.50	50.00% Ju	50.00% Justification kept in District file
None	2002				

# ALL COUNTIES ARE REQUIRED TO SUBMIT A MAINTENANCE EXPENDITURE REPORT

### EFFECTS OF INCREASE IN MAINTENANCE ALLOCATION

Report for the Needs Study Subcommittee For a recommendation to the Municipal Screening Board Spring, 2006

### Excess Maintenance Account Needs Adjustment

### Examples of 'Excess Maintenance Account Needs Adjustment'

If 21 cities had increased their Maintenance Allotment to 45%, the attached spreadsheets show the effects on the 2006 apportionment using two examples.

### Example 1

The difference between the maximum maintenance (35%) and 45%.

Each of the 21 cities Needs adjustment is the amount their construction allotment is reduced because of the increase in maintenance allotment from 35 to 45%.

These 21 cities Needs are reduced by \$4,019,815. Because they have less Needs (and the Needs are valued less), they receive a decrease in their allotment.

This decreases the Needs, so it increases the value of the Needs, so each of the other cities receive a slight increase in their allotment.

The 21 cities receive a total of \$66,608 less actual dollars, so the other 117 cities have \$66,608 to proportionately distribute between them.

### Example 2

The difference between the city's most recent maintenance request and 45%.

Each of the 21 cities Needs adjustment is the amount their construction allotment is reduced because of the increase in maintenance allotment from the most recent request to 45%.

These 21 cities Needs are reduced by \$6,338,663. Because they have less Needs (and the Needs are valued less), they receive a decrease in their allotment.

This decreases the Needs, so it increases the value of the Needs, so each of the other cities receive a slight increase in their allotment.

The 21 cities receive a total of \$105,665 less actual dollars, so the other 117 cities have \$105,665 to proportionately distribute between them.

# 2006 CONSTRUCTION AND MAINTENANCE ALLOTMENTS

A negative Needs adjustment for an Excess Maintenance Allotment

IF THESE 21 CITIES HAD REQUESTED THEIR MAINTENANCE ALLOTMENT TO BE A PERCENTAGE OVER 35%, THIS SHOWS WHAT THEIR ADJUSTMENT IN 2006 WOULD HAVE BEEN. THIS ADJUSTMENT TO THEIR NEEDS EQUALS THE DIFFERENCE IN CONSTRUCTION ALLOCATION WHEN MAINTENANCE IS REVISED.

**ADJUSTMENT IS** ADJUSTMENT: NEEDS IF BETWEEN CURRENT IS BETWEEN 35 ADJUSTMENT TO NEEDS IF **ADJUSTMENT** 1,139,311 (60,483)**AND 45%** CONSTRUCTION CONSTRUCTION \$564,262 1,721,443 332,655 557,232 111,262 593,182 248,245 91,421 90,150 MAINTENANCE 219,955 1,958,455 251,639 6,266,209 693,398 1,544,028 1,049,029 4,849,390 241,308 202,022 290,271 \$22,108,971 ALLOTMENT IF 45% 2,034,432 272,308 293,381 2,314,538 393,138 658,547 131,492 701,033 297,391 7,405,520 1,239,762 343,048 5,731,097 106,541 242,299 108,043 \$666,855 259,947 1,824,761 819,471 285,182 \$26,128,786 IF 35% MAINTENANCE ALLOTMENT 338,516 193,835 808,884 434,800 7,405,520 1,084,223 759,862 124,665 122,932 395,824 5,731,097 CONSTRUCTION 2,034,432 395,311 279,575 2,526,592 \$718,152 299,938 2,492,579 453,621 1,430,494 416,782 \$28,447,634 ALLOTMENT 455,917 5,126,899 567,326 MAINTENANCE ALLOTMENT 191,185 203,110 91,033 485,330 74,799 73,759 300,325 237,495 \$461,669 1,408,453 1,669,548 205,886 167,745 1,263,296 \$18,192,119 179,963 863,265 3,967,682 197,434 MAINTENANCE ALLOTMENT 149,292 157,974 1,313,465 184,718 3,085,975 354,602 70,803 377,479 58,177 57,368 \$359,076 3,987,588 130,468 \$14,172,304 1,095,464 239,842 160,134 441,253 982,563 672,532 153,560 139,971 TOTAL TOTAL MAINTENANCE ALLOTMENT 26,289 112,839 179,359 253,287 3,987,588 41,555 40,977 8,460 269,628 22,725 93,192 131,942 21,960 \$307,779 280,732 481,800 3,085,975 \$11,853,456 99,980 1,095,464 ,135,424 253,287 253,287 8,460 269,628 22,725 3,987,588 176,501 23,625 112,839 1,068,248 41,555 16,582 131,942 GENERAL MAINTENANCE 280,732 3,085,975 \$11.579,588 99,980 1,095,464 476,832 \$213,481 21,960 ALLOTMENT MAINTENANCE PERCENTAGE 30% 25 35 25 30 25 25 35 \$1500/Mile \$1500/Mile \$1500/Mile ACTUAL \$1500/Mile 421,600 457,525 202,295 163,909 438,742 399,918 3,628,003 632,980 ,078,512 ,912,294 3,129,896 1,013,149 11,393,108 1,260,724 166,220 2,807,324 \$1,025,931 372,767 TOTAL APPORTION-8,817,072 \$40,301,090 MENT North Branch Bloomington MUNICIPALITY Fergus Falls Minneapolis New Prague La Crescent Crookston Rochester Moorhead St Michae St. Cloud Brainerd Mankato Marshall Andover Paul St. Peter Hibbing Bemidji Morris TOTAL Duluth

### **COMPARISON OF THE 2006 APPORTIONMENT**

with two possible Excess Maintenance Account Adjustments

If 21 cities had received a variance to increase their Maintenance Allocation to 45% in 2005, this is how it would have affected the total apportionment in 2006

N:\MSAS\Excel\Subcommittee Issues/NSS/2006/CO	MPARISON OF THE 2006 APPORTIONMENT to N	faintenance Account Adjustments			
		Adjustment equ	ials difference	Adjustment equ	
		between 35% and		between current	
				amount and 45°	
	2000 = 4.1	2006 Total	Increase	2006 Total	Increase
Municipality	2006 Total Apportionment	Apportionment 21 cities 45%	(Decrease) Amount	Apportionment 21 cities 45%	(Decrease) Amount
Albert Lea	\$715,165	\$715,672	\$507	\$715,964	\$799
Albertville	228,405	228,576	171	228,675	270
Alexandria	491,646	492,036	390	492,262	616
Andover	1,025,931	1,024,900	(1,031)	1,024,434	(1,497)
Anoka	496,159	496,407	248	496,551	392
Apple Valley	1,328,193	1,328,851	658	1,329,232	1,039
Arden Hills	266,773	266,908	135	266,986	213
Austin	948,994	949,678	684	950,073	1,079
Baxter	226,070	226,209	139	226,289	219
Belle Plaine	197,197	197,332	135	197,410	213
Bemidji	399,918	399,486	(432)	398,955	(963)
Big Lake	227,224	227,338	114	227,404	180
Blaine	1,270,801	1,271,349	548	1,271,667	866
Bloomington	3,129,896	3,126,823	(3,073)	3,128,044	(1,852)
Brainerd	421,600	421,144	(456)	419,239	(2,361)
Brooklyn Center	769,342	769,707	365	769,918	576
Brooklyn Park	1,565,546	1,566,104	558	1,566,426	880
Buffalo	497,107	497,459	352	497,663	556
Burnsville	1,797,392	1,798,372	980	1,798,939	1,547
Cambridge	234,098	234,239	141	234,320	222
Champlin	534,094	534,282	188	534,390	296
Chanhassen	501,701	501,882	181	501,986	285
Chaska	547,772	548,015	243	548,156	384
Chisholm	204,343	204,492	149	204,578	235
Cloquet	542,180	542,610	430	542,858	678
Columbia Heights	560,884	561,201	317	561,384	500
Coon Rapids	1,605,623	1,606,358	735	1,606,783	1,160
Corcoran	223,474	223,629	155	223,719	245
Cottage Grove	1,036,357	1,036,992	635	1,037,359	1,002
Crookston	451,355	450,991	(364)	450,463	(892)
Crystal	663,937	664,297	360	664,505	568
Detroit Lakes	319,801	320,033	232	320,167	366
Duluth	3,628,003	3,624,714	(3,289)	3,623,268	(4,735)
Eagan	1,554,502	1,555,109	607	1,555,459	957
East Bethel	548,205	548,644	439	548,898	693
East Grand Forks	368,003	368,296	293	368,465	462
Eden Prairie	1,690,679	1,691,551	872	1,692,054	1,375
Edina	1,366,932	1,367,652	720	1,368,068	1,136
Elk River	765,305	765,836	531	766,143	838
Fairmont	601,165	601,678	513	601,974	809
Falcon Heights	129,885	129,934	49	129,963	78
Faribault	828,607	829,176	569	829,504	897
Farmington	544,926	545,258	332	545,449	523
Fergus Falls	632,980	632,438	(542)	631,700	(1,280)
Forest Lake	635,377	635,818	441	636,072	695
Fridley	833,736	834,211	475	834,485	749
Glencoe	207,617	207,757	140	207,839	222

		Adjustment equ between 35% and		Adjustment equipment between current amount and 45%	maintenance
		2006 Total	Increase	2006 Total	Increase
Municipality	2006 Total Apportionment	Apportionment 21 cities 45%	(Decrease) Amount	Apportionment 21 cities 45%	(Decrease) Amount
Golden Valley	\$639,475	\$639,846	\$371	\$640,061	\$586
Grand Rapids	413,757	414,091	334	414,284	527
Ham Lake	658,970	\$659,483	513	659,779	809
Hastings	548,859	549,124	265	549,278	419
Hermantown	389,544	389,846	302	390,021	477
Hibbing	1,013,149	1,012,356	(793)	1,011,186	(1,963)
Hopkins	445,790	445,986	196	446,100	310
Hugo	361,074	361,339	265	361,493	419
Hutchinson	500,183	500,522	339	500,718	535
International Falls	243,270	243,433	163	243,528	258
Inver Grove Heights	1,046,232	1,046,871	639	1,047,241	1,009
Kasson	180,980	181,097	117	181,164	184
La Crescent	202,295	202,104	(191)	201,152	(1,143)
Lake City	183,695	183,815	120	183,884	189
Lake Elmo	237,792	237,928	136	238,007	215
Lakeville	1,797,878	1,799,095	1,217	1,799,798	1,920
Lino Lakes	583,247	583,586	339	583,782	535
Litchfield	257,691	257,870	179	257,974	283
Little Canada	· · · · · · · · · · · · · · · · · · ·		236		372
	354,107	354,343		354,479	
Little Falls	426,837	427,190	353	427,394	557
Mahtomedi	211,366	211,465	99	211,522	156
Mankato	1,078,512	1,077,354	(1,158)	1,075,927	(2,585)
Maple Grove	2,078,292	2,079,698	1,406	2,080,511	2,219
Maplewood	1,224,626	1,225,408	782	1,225,860	1,234
Marshall	457,525	457,069	(456)	454,962	(2,563)
Mendota Heights	378,881	379,111	230	379,244	363
Minneapolis	11,393,108	11,380,550	(12,558)	11,384,204	(8,904)
Minnetonka	1,626,165	1,627,130	965	1,627,688	1,523
Minnetrista	298,203	298,460	257	298,609	406
Montevideo	190,514	190,638	124	190,710	196
Monticello	309,796	309,972	176	310,074	278
Moorhead	1,260,724	1,259,503	(1,221)	1,255,610	(5,114)
Morris	166,220	166,045	(175)	165,827	(393)
Mound	351,681	351,917	236	352,053	372
Mounds View	375,834	376,039	205	376,157	323
New Brighton	536,840	537,057	217	537,182	342
New Hope	581,237	581,535	298	581,707	470
New Prague	163,909	163,718	(191)	163,493	(416)
New Ulm	441,471	441,734	263	441,886	415
North Branch	372,767	372,405	(362)	371,934	(833)
North Mankato	410,910	411,163	253	411,310	400
North St. Paul	396,289	396,530	241	396,669	380
Northfield	475,863	476,078	215	476,203	340
Oak Grove	473,276	473,701	425	473,947	671
Oakdale	625,161	625,382	221	625,509	348
Orono	309,386	309,609	223	309,738	352
Otsego	456,199	456,556	357	456,763	564
Owatonna	829,668	830,206	538	830,518	850
Plymouth	2,080,112	2,081,255	1,143	2,081,915	1,803
Prior Lake	661,792	662,180	388	662,404	612
Ramsey	749,910	750,426	516	750,724	814
Red Wing	736,977	730,420	572	737,880	903
Redwood Falls		229,492	171		270
Richfield	229,321		654	229,591	
	1,095,316	1,095,970		1,096,347	1,031
Robbinsdale	261,873	261,916	43	261,942	69

		Adjustment equ	45% for 21 cities	Adjustment equipers between current amount and 45%	maintenance for 21 cities
		2006 Total	Increase	2006 Total	Increase
Municipality	2006 Total	Apportionment 21 cities 45%	(Decrease) Amount	Apportionment 21 cities 45%	(Decrease)
Municipality	Apportionment				Amount
Rochester	\$2,807,324	\$2,804,219	(\$3,105)	\$2,793,460	(\$13,864)
Rogers	155,566	155,642	76	155,686	120
Rosemount	679,764	680,240	476	680,515	751
Roseville	935,786	936,256	470	936,528	742
St. Anthony	233,276	233,401	125	233,473	197
St. Cloud	1,912,294	1,910,197	(2,097)	1,907,645	(4,649)
St. Francis	321,169	321,430	261	321,580	411
St. Joseph	147,013	147,086	73	147,128	115
St. Louis Park	1,256,792	1,257,448	656	1,257,827	1,035
St. Michael	527,766	527,269	(497)	526,611	(1,155)
St. Paul	8,817,072	8,807,520	(9,552)	8,810,444	(6,628)
St. Paul Park	178,634	178,752	118	178,819	185
St. Peter	438,742	438,341	(401)	436,345	(2,397)
Sartell	469,977	470,299	322	470,485	508
Sauk Rapids	443,382	443,680	298	443,852	470
Savage	673,310	673,659	349	673,860	550
Shakopee	871,229	871,713	484	871,992	763
Shoreview	758,339	758,744	405	758,978	639
Shorewood	233,803	233,938	135	234,015	212
South St. Paul	555,482	555,761	279	555,923	441
Spring Lake Park	158,306	158,366	60	158,401	95
Stewartville	160,273	160,356	83	160,404	131
Stillwater	479,129	479,374	245	479,516	387
Thief River Falls	450,552	450,931	379	451,150	598
Vadnais Heights	326,114	326,252	138	326,331	217
Victoria	191,067	191,191	124	191,263	196
Virginia	399,726	400,030	304	400,206	480
Waconia	232,546	232,659	113	232,725	179
Waite Park	180,325	180,412	87	180,462	137
Waseca	278,193	278,342	149	278,427	234
West St. Paul	423,008	423,142	134	423,220	212
White Bear Lake	658,043	658,356	313	658,536	493
Willmar	656,476	656,906	430	657,155	679
Winona	788,364	788,788	424	789,034	670
Woodbury	1,837,592	1,838,837	1,245	1,839,558	1,966
Worthington	311,247	311,403	156	311,493	246
TOTAL	\$111,487,130	\$111,487,130	0	\$111,487,130	0

### EFFECTS OF INCREASE IN MAINTENANCE ALLOCATION

Report for the Needs Study Subcommittee For a recommendation to the Municipal Screening Board Spring, 2006

### Revision to amount deposited in Maintenance Account May require a Rules revision

Currently, there are several options for computing Maintenance Allocation

\$1500 per improved mile including bond interest, if any

\$1500 per improved mile plus bond interest (not to exceed 35%)

25% of Total Apportionment including bond interest, if any

25% of Total Apportionment plus bond interest (not to exceed 35%)

Lump sum or certain percent requested includes bond interest, if any (not to exceed 25%)

Lump sum or certain requested of more than 25% and less than 35% includes bond interest, if any (Maintenance expenditure report required)

35% of Total Apportionment includes bond interest (Maintenance expenditure report required)

Requested that Bond Interest be paid with local funds

State Statute 162.14 Subd. 3 states:

**Maintenance**. The proportion of each such city's annual apportionment to be used for maintenance on its respective municipal state-aid street system shall be a joint determination of the commissioner and the governing body of each city. In the event that agreement cannot be reached, the determination of the commissioner shall be final.

State Aid Operations Rules 8820.1400 Subp. 3 state:

### Urban maintenance apportionment account.

Twenty-five percent of the total allocation, if requested by the urban municipality before December 16 preceding the annual allocation, or \$1,500 per mile of improved municipal state-aid streets, is the minimum allotment for the general maintenance of the approved state-aid system. The commissioner may modify any allotments to the urban maintenance account to finance the amount needed to pay the interest due on municipal state aid bonds and to accommodate the screening board resolutions pertaining to trunk highway turnback maintenance allowances.

Those municipalities desiring to receive an amount greater than the established minimum, not to exceed 35% of the total allocation, shall file a request with the commissioner before December 16 preceding the annual allocation...

Should the several different methods of computing the maintenance allocation be simplified?

One option would be:

\$1,500 per improved mile plus bond interest, if any (not to exceed 35%)
25% of Total Apportionment, plus bond interest, if any (not to exceed 35%)
25% of Total Apportionment, including bond interest, if any (maintenance allocation without bond interest cannot be less than \$1,500 per improved mile)
35% of Total Apportionment, including bond interest, if any (Maintenance expenditure report required)
Requests that bond interest be paid with local funds

# COMPARISON OF THE 2006 CONSTRUCTION ALLOTMENTS with various possible Maintenance Account Percentages CSAH system allocates 40% of the total allocation to maintenance

T/ mean-excens upon minima e issuenvis s/2006/COMP-ART	BINS SIZCORICOMPARISON OF THE ZOOS APPORTICIONENT TO SPECIFIC MAINTENANCE PERCENTS XLS	2006 Construction		2006		2006		2006		2006	
	Actual Total	Allotment with \$1500	Increase	Construction	Increase	Construction	Increase	Construction	Increase	Construction	Increase
Municipality	Allotment	Maintenance	Amount	25% Maintenance	Amount	35% Maintenance	Amount	40% Maintenance	Amount	45%	Amount
Albert Lea	\$536,374	\$682,555	\$146,181	\$536,374	\$0	\$464,857	(\$71,517)	\$429,099	(\$107,275)	\$393,341	(\$143,033)
Albertville	220,035	220,035	0	171,304	(48,731)	148,463	(71,572)	137,043	(82,992)	125,623	(94,412)
Alexandria	368,734	465,726	96,992	368,734	0	319,570	(49,164)	294,988	(73,746)	270,405	(98,329)
Andover	718,152	984,426	266,274	772 119	51,296	322 503	(51,297)	615,559	(102,593)	564,262	(153,890)
Apple Valley	1 205 621	1 281 123	75 502	972,113	(284 978)	787 823	(417,798)	721 414	(484 207)	655,007	(550,617)
Arden Hills	200,020	256,948	56,868	200,080	0	173,402	(26,678)	160,064	(40,016)	146,725	(53,355)
Austin	856,064	906,064	20,000	711,745	(144,319)	616,846	(239,218)	569,396	(286,668)	521,947	(334,117)
Baxter	205,160	205,160	0	169,552	(35,608)	146,945	(58,215)	135,642	(69,518)	124,338	(80,822)
Belle Plaine	188,047	188,047	0	147,898	(40,149)	128,178	(59,869)	118,318	(69,729)	108,458	(79,589)
Bemidji	299,938	374,928	74,990	299,938	0	259,947	(39,991)	239,951	(59,987)	219,955	(79,983)
Big Lake	170,418	215,254	44,836	170,418	0	147,696	(22,722)	136,334	(34,084)	124,973	(45,445)
Blaine	953,101	1,222,006	268,905	953,101	0	826,021	(127,080)	762,481	(190,620)	698,941	(254,160)
Bloomington	2,034,432	3,018,341	983,909	2,347,422	312,990	2,034,432	0	1,877,938	(156,494)	1,721,443	(312,989)
Brainerd	395,311	397,975	2,664	314,202	٠,١٥	272,308	(123,003)	251,362	(143,949)	230,415	(164,896)
Brooklyn Center	673,442	137,242	63,800	5/1,106	(102,336)	494,172	(179,270)	455,705	(217,737)	417,238	(256,204)
Brooklyn Park	1,174,159	1,499,051	324,892	1,1/4,159	0	1,017,605	(156,554)	939,328	(234,831)	861,050	(313,109)
Buttalo	324,657	479,062	154,405	324,657	0	7 1 168 305	(49,710)	1 078 435	(74,566)	225,236	(99,421)
Cambridge	186 406	242,00,142	34 057	155 581	(30,825)	133 252	(53,154)	122 087	(509,009)	110 022	(75,470)
Champlin	400 570	508 444	107 874	400 570	(30,05)	347 161	(53,409)	320.456	(80,114)	293 752	(106.818)
Chanhassen	401.701	472.301	70,600	376.276	(25.425)	326.106	(75,595)	301.021	(100,680)	275,936	(125,765)
Chaska	410,829	524,207	113,378	410,829	0	356,052	(54,777)	328,663	(82,166)	301,275	(109,554)
Chisholm	153,257	192,358	39,101	153,257	0	132,823	(20,434)	122,606	(30,651)	112,389	(40,868)
Cloquet	352,417	509,855	157,438	406,635	54,218	352,417	0	325,308	(27,109)	298,199	(54,218)
Columbia Heights	420,663	541,969	121,306	420,663	0	364,575	(56,088)	336,530	(84,133)	308,486	(112,177)
Coon Rapids	1,438,038	1,543,808	105,770	1,098,447	(339,591)	937,885	(500,153)	857,604	(580,434)	777,323	(660,715)
Corcoran	145,258	201,274	56,016	167,605	22,347	145,258	0	134,084	(11,174)	122,911	(22,347)
Cottage Grove	996,802	996,802	0	777,268	(219,534)	673,632	(323,170)	621,814	(374,988)	966,996	(426,806)
Crookston	338,516	433,880	95,364	338,516	0	293,381	(45,135)	270,813	(67,703)	248,245	(90,271)
Crystal	431,559	637,267	205,708	497,953	66,394	431,559	٠,	398,362	(33,197)	365,165	(66,394)
Detroit Lakes	239,851	297,136	57,285	239,851	179 041	207,871	(31,980)	191,881	(47,970)	1/5,891	(63,960)
Facan	1 486 087	1 486 087	901,074	1 165 876	(320.241)	1.010.426	(475 661)	932 701	(553,386)	854 976	(534,124)
East Bethel	411.154	516.045	104.891	411.154	0	356,333	(54,821)	328,923	(82,231)	301,513	(109,641)
East Grand Forks	276,002	345,113	69,111	276,002	0	239,202	(36,800)	220,802	(55,200)	202,402	(73,600)
Eden Prairie	1,626,224	1,626,224	0	1,268,009	(358,215)	1,098,941	(527,283)	1,014,407	(611,817)	929,873	(696,351)
Edina	1,025,199	1,306,527	281,328	1,025,199	0	888,506	(136,693)	820,159	(205,040)	751,813	(273,386)
Elk River	728,930	728,930	0	573,979	(154,951)	497,448	(231,482)	459,183	(269,747)	420,918	(308,012)
Fairmont	572,080	572,080	0	450,874	(121,206)	390,757	(181,323)	360,699	(211,381)	330,641	(241,439)
Falcon Heights	84,425	124,950	40,525	97,414	12,989	84,425	0	77,931	(6,494)	/1,43/	(12,988)
Faribault	621,455	794,962	173,507	021,455	0	254,292	(82,860)	497,164	(124,291)	455,734	(100,001)
Fermington Ferming Falls	400,094	529,311	140,017	400,094	0	304,202	(54,492)	362,930	(01,730)	332,655	(100,965)
Forest Lake	476.533	604.822	128.289	476.533	0	412.995	(63,538)	381,226	(95,307)	349.457	(127.076)
Fridley	625,302	799,431	174,129	625,302	0	541,928	(83,374)	500,242	(125,060)	458,555	(166,747)
Glencoe	134,951	197,012	62,061	155,713	20,762	134,951	0	124,570	(10,381)	114,189	(20,762)
Golden Valley	479,606	604,930	125,324	479,606	0	415,659	(63,947)	383,685	(95,921)	351,711	(127,895)
Grand Rapids	269,944	395,217	125,273	269,944		228,568	(41,376)	207,880	(62,064)	187,192	(82,752)
Ham Lake	622,415	622,415	0	494,227	(128,188)	428,330	(194,085)	395,382	(227,033)	362,433	(259,982)
Hastings Hermantown	411,644 324,544	368,424	43,880	411,644 292,158	(32,386)	356,758 253,204	(54,886)	329,315	(82,329)	301,872	(109,772)

Aliotment with \$1500   Increase   Construction   Increase   Amount   25% Maintenance   Advisor   241,885   243,4342   241,422   241,422   241,422   241,422   241,422   241,422   241,422   241,422   241,422   241,422   241,422   241,422   241,422   241,432   2	1	ZODO COUSTINCTION		7000		2006		2002		2006	
Maintenance		otment with \$1500	Increase	Construction	Increase	Construction	Increase	Construction	Increase	Construction	Increase
\$759,862         \$893,499         \$179,67         \$759,882           20,43,42         431,686         817,42         270,802           20,43,42         431,686         817,42         270,802           20,40,47         1,41,886         81,74         270,802           8,47,87         1,41,80         81,71         182,422           193,836         133,834         103,81         161,71           193,836         133,834         133,839         115,774           193,836         133,839         133,839         133,839           193,836         133,839         133,839         133,839           193,836         131,81         28,839         137,771           193,837         141,800         145,807         145,807           194,807         1,714,808         244,807         17,14,807           195,807         1,14,480         32,144         11,14,807           195,807         1,14,480         32,14,807         11,48,807           1,14,804         1,14,480         32,14,807         11,48,807           1,15,804         1,14,480         32,14,800         11,48,807           1,15,804         1,14,480         1,14,880         1,14,880 <th></th> <th>er improved mile Maintenance</th> <th>(Decrease) Amount</th> <th></th> <th>(Decrease) Amount</th> <th>Allotment with 35% Maintenance</th> <th>(Decrease) Amount</th> <th>Allotment with 40% Maintenance</th> <th>(Decrease) Amount</th> <th>Allotment with 45%</th> <th>(Decrease) Amount</th>		er improved mile Maintenance	(Decrease) Amount		(Decrease) Amount	Allotment with 35% Maintenance	(Decrease) Amount	Allotment with 40% Maintenance	(Decrease) Amount	Allotment with 45%	(Decrease) Amount
230,434	\$759,862	\$939,499	\$179,637	\$759,862	\$0	\$658,547	(\$101,315)	\$607,889	(\$151,973)	\$557,232	(\$202,630)
250,085   333,984   68,179   366,957	334,342	431,885	97,543	334,342	0	289,763	(44,579)	267,474	(66,868)	245,184	(89,158)
186	270,805	333,984	63,179	270,805		234,698	(36,107)	216,644	(54,161)	198,591	(72,214)
1,13,000   1,13,000	456,078	231 180	18,200	356,937	(99,141)	306,919	(149,159)	281,910	(1/4,168)	733 798	(199,177)
173,960   173,960   16,775   16,775   17,775   17,777   17,4770   17,575   16,775   17,777   17,4770   17,575   17,777   17,4770   17,575   17,777   17,4770   17,575   17,777   17,4770   17,575   17,777   17,4770   17,575   17,777   17,777   17,777   17,777   17,777   17,777   17,777   17,575   17	784.674	1.003.587	218.913	784.674	-	680.051	(104.623)	627.739	(156.935)	575.428	(209,246)
193 855   193 855   194 855   195 855   195 855   195 855   195 855   195 855   195 855 850 850   195 855 850   195 855 850   195 855 850   195 855 850   195 855 850   195 855 850   195 855 850   195 855 850   195 855 850   195 855 850   195 855 850   195 855 850   195 855 850   195 855 850   195 855 850   195 855 850   195 855 850   195 855 850 850   195 855 850   195 855 850 850   195 855 850   195 855 850 850   195 855 850 850   195 855 850   195 855 850   195 855 850	173,960	173,960	0	135,735	12	117,637	(56,323)	108,588	(65,372)	99,539	(74,421)
140, 777   179, 779   174, 771   179, 771   179, 771   179, 772   179, 770   170, 770	193,835	193,835	0	151,721	(42,114)	131,492	(62,343)	121,377	(72,458)	111,262	(82,573)
146,524   146,524   146,524   146,524   146,524   146,524   146,524   146,524   146,524   146,524   146,524   146,524   146,524   146,432   146,432   146,432   146,432   146,432   146,432   146,432   146,524   146,544   146,	137,771	174,170	36,399	137,771	0	119,402		110,217	(27,554)	101,032	(36,739)
438,507         1,48,507         1,716,908         221,601         1,126,807           43,503         43,503         54,887         128,34         115,607         115,607           404,582         404,387         7,717         265,800         220,128           404,582         404,387         77,77         265,800         20,128           404,582         404,387         7,717         266,800         20,128           1,586,719         1,030,857         22,1373         10,68,84         1,586,719         10,68,84           1,586,719         2,021,077         2,021,077         2,021,077         26,884         1,586,719         1,58	186,267	219,087	32,820	145,524	(40,743)	121,745	(64,522)	109,855	(76,412)	996'26	(88,301)
435,923         564,857         128,934         435,923           167,489         244,587         128,934         435,928           265,580         338,237         77,177         265,580           198,601         198,601         0         158,271           198,601         198,601         0         158,6719           198,601         198,601         0         158,6719           1,586,79         2,021,937         40,884         100,087           1,586,400         1,080,288         7,403,00         1,144,61           1,586,400         1,144,61         3,600,288         3,600,288         3,644,161         1           1,1084,223         1,1084,233         1,207,789         1,23,686         945,541         1           1,1084,223         1,207,789         1,23,686         3,41,61         1,41,61         2,41,61         1           1,1084,223         1,207,789         1,23,686         3,41,61         1,41,61         3,41,61         1           1,1084,223         1,207,789         1,23,686         3,41,61         1,41,61         3,41,61           1,20,23         1,207,789         1,23,686         3,41,61         3,41,61         3,41,61           1	1,495,307	1,716,908	221,601	1,126,807	(368,500)	947,020	(548,287)	857,126	(638,181)	767,232	(728,075)
167,489         244,536         77,037         169,288           266,580         388,287         77,177         265,820           104,952         404,952         72,177         265,871           108,681         108,601         20,1037         20,128           108,884         1,030,887         20,133         808,884           1,558,719         2,021,037         462,318         1,558,719           1,658,719         2,021,037         462,318         1,558,719           1,658,719         2,021,037         2,03,007         719,387           1,658,720         1,085,230         7,409,50         284,161           1,658,400         1,556,400         0         1,219,624           1,684,612         1,685,700         0         1,219,624           1,1084,223         1,695,788         1,636,628         6,544,831         1           1,1084,223         1,696,788         1,636,638         1,624,831         1           1,1084,233         1,696,788         1,636,60         1,219,625         2,21,762           2,20,781         1,636,788         1,635,784         1,219,628         2,21,483         1,219,628           2,21,765         340,116         7,63,499	435,923	564,857	128,934	435,923	0	377,800	(58,123)	348,739	(87,184)	319,677	(116,246)
265,860         338,297         72,717         265,800           404,952         404,952         72,197         265,800           198,601         198,601         198,601         168,524           1,658,719         20,01,877         221,973         808,884           1,536,794         1,174,691         323,097         719,357           434,800         434,800         740,367         779,368           434,601         1,174,691         360,268         284,161           434,800         1,174,691         740,962         284,161           1,264,161         386,268         740,962         223,347           2,81,288         2,81,288         6,340         142,865           1,174,689         1,23,660         1,24,665         2,23,347           2,81,875         340,116         76,346         245,528           2,82,347         2,82,347         2,83,347         2,81,875           2,83,37         340,116         76,346         245,528           2,83,476         340,416         76,346         245,528           1,84,871         38,347         220,377         221,377           2,83,475         38,047         36,368         44,18,27 <th< td=""><td>167,499</td><td>244,536</td><td>77,037</td><td>193,268</td><td>25,769</td><td>167,499</td><td>0</td><td>154,615</td><td>(12,884)</td><td>141,730</td><td>(25,769)</td></th<>	167,499	244,536	77,037	193,268	25,769	167,499	0	154,615	(12,884)	141,730	(25,769)
404,952         404,952         404,952         0         320,128           1188,611         198,611         198,611         158,719         158,719         158,719           1,588,719         2021,037         221,973         16,88,719         16,88,719         16,88,719           861,199         434,800         434,800         719,357         719,357         719,357           434,800         434,800         434,800         320,097         719,357         719,357           434,800         1,174,681         3,600,268         85,44,851         17,354         12,96,41           1,556,400         1,556,400         1,556,400         1,200,262         223,347         223,347         223,347         223,347         223,347         223,347         223,347         223,462         223,462         223,462         223,462         223,462         223,462         223,462         223,462         223,462         223,347         221,875         223,462         223,462         223,462         223,462         223,462         223,462         223,462         223,462         223,462         223,462         223,462         223,462         223,462         223,462         223,462         223,462         223,462         223,462         223,462	265,580	338,297	72,717	265,580	0	230,170	(35,410)	212,464	(53,116)	194,759	(70,821)
18,601         18,601         21,933         168,524           18,601         19,8,601         21,021,037         221,933         168,524           16,568,719         2,021,037         221,933         168,624           1,568,719         2,021,037         243,314         168,624           44,4804         1,144,681         32,307         7,143,57           1,568,718         3,600,268         2,84,161         343,144           1,568,720         1,1568,788         3,600,268         2,84,831         1           1,156,422         1,1568,708         3,600,268         2,84,831         1           1,156,423         1,27,689         1,27,789         123,666         945,543           2,17,689         1,27,789         1,23,660         145,885           2,21,875         340,116         76,349         122,685           2,281,875         340,116         76,349         122,685           2,281,875         357,189         75,314         456,585           2,295,77         350,330         68,575         222,02           2,295,77         34,347         36,800         342,149           4,887         36,0161         127,190         426,885	404,952	404,952	0	320,128	(84,824)	277,444	(127,508)	256,102	(148,850)	234,760	(170,192)
1,586,844         1,000,857         221,973         808,884           1,586,194         1,174,991         221,318         1,586,194           434,800         1,174,991         320,097         719,357           434,800         1,174,991         320,097         719,357           434,800         1,174,991         320,097         719,357           224,161         386,264         74095         224,161         1           1,556,400         1,556,400         0         1219,624         1           21,23,47         221,268         3,600,268         8,544,831         1           1,566,400         1,556,400         0         1219,624         1           222,347         229,756         0         12,166,24         1           1,084,223         1,207,789         1,236,60         142,862         23,409         122,337           222,347         230,416         15,416         402,630         142,866         142,866         142,866         142,866         142,866         142,866         142,867         242,167         242,167         242,167         242,167         242,167         242,167         242,167         242,167         242,167         242,167         242,167         242	198,601	198,601	0	158,524		137,388	(61,213)	126,820	(71,781)	116,251	(82,350)
1588,719	808,884	1,030,857	221,973	808,884	0	701,033	(107,851)	647,107	(161,777)	593,182	(215,702)
## 1954   1,14,481   323,97   179,357   ## 1,14,481   323,97   179,357   ## 1,14,481   323,97   179,357   ## 1,144,801   328,026   284,161   ## 1,556,400   1,556,400   0   12,9624   ## 1,126,400   1,556,400   0   12,9624   ## 1,126,400   1,556,400   0   12,9624   ## 1,126,400   1,556,400   0   12,9624   ## 1,126,400   1,556,400   0   12,9624   ## 1,126,400   1,556,400   1,26,566   945,543   ## 1,126,301   1,207,789   1,25,566   945,543   ## 1,126,302   1,40,789   1,25,566   945,543   ## 1,126,302   1,40,576   1,40,437   1,22,932   ## 1,26,304   1,26,004   1,26,004   1,26,004   ## 1,26,304   1,26,004   1,26,004   1,26,004   ## 1,26,006   1,26,004   1,26,006   ## 1,26,304   1,26,304   1,26,304   1,26,006   ## 1,26,304   1,26,304   1,26,304   1,26,006   ## 1,26,006   1,26,006   1,26,006   1,26,006   ## 1,26,006   1,	1,558,719	2,021,037	462,318	1,558,719	0	1,350,890	(207,829)	1,246,975	(311,744)	1,143,061	(415,658)
148         148 <td>851,594</td> <td>1,174,691</td> <td>323,097</td> <td>719,357</td> <td>(132,237)</td> <td>596,895</td> <td>(254,699)</td> <td>535,664</td> <td>(315,930)</td> <td>474,432</td> <td>(377,162)</td>	851,594	1,174,691	323,097	719,357	(132,237)	596,895	(254,699)	535,664	(315,930)	474,432	(377,162)
1.586,400         1.386,286         3,680,268         8,544,81         1           1.596,400         1,556,400         1,556,400         1,219,624         1,219,624         1,219,624         1,210,624         1,219,624         1,210,624         1,219,624	434,800	434,800	0	343,144	(91,656)	297,391	(137,409)	274,515	(160,285)	251,639	(183,161)
1,556,400         1,1081,188         3,580,288         8,548,11         1,1219,624           281,268         177,689         177,689         177,689         17219,624           212,347         281,268         0         142,865           212,347         281,766         63,409         123,665           1,084,223         1,207,789         123,566         945,543           1,084,223         1,207,789         123,366         945,543           1,084,233         120,7789         123,356         945,543           1,084,233         1,124,66         144,265         29,600         124,665           1,084,23,76         33,411         76,335         283,761         281,875           281,875         320,741         36,875         281,875         287,77           425,928         518,045         115,497         415,927           420,576         420,576         40,012         279,575           420,576         420,476         127,190         46,8877           386,897         444,851         89,844         364,374           488,771         386,894         354,20,99           342,149         444,827         89,844           486,344         6	284,161	358,256	74,095	284,161	0	246,273	(37,888)	227,329	(56,832)	208,385	(75,776)
1,250,400	7,405,520	11,085,788	3,680,268	8,544,831	1,139,311	7,405,520	0	6,835,865	(569,655)	6,266,209	(1,139,311)
17,689         17,689         0         423,632           222,347         295,756         63,409         232,347           1,044,223         1,207,789         123,566         945,543           1,044,223         1,207,789         123,566         945,543           223,747         124,665         23,600         124,665         263,761           281,875         340,146         76,334         281,875         281,875         281,875           281,875         340,146         76,314         281,875         281,487         281,487         281,487         281,487         281,487         281,487         281,487         281,487         281,487         281,487         281,487         281,489         481,482         881,887         481,482         881,887	1,556,400	1,556,400	0	1,219,624	(336,776)	1,057,007	_^I.	9/5,699	(580,701)	894,391	(662,009)
17,003         17,1003         17,1003         17,1003         17,1003         17,1003         17,1003         17,1003         17,1003         17,1003         17,1003         17,1003         17,1003         123,1003         123,1003         123,1003         124,1005<	281,268	281,268		223,652	(57,616)	193,832		178,922	(102,346)	164,012	(117,256)
1084,223         1,291,344         2.91,100         1,24,665         2.52,347           124,665         124,665         29,600         124,665         263,761           124,665         154,265         29,600         124,665         263,761           281,875         387,189         75,314         281,875         263,761           435,928         562,277         126,349         435,932         122,332           420,576         40,576         40,576         435,932         122,332           420,576         40,576         331,033         435,932         122,332           420,576         40,677         34,797         122,332           297,217         381,647         435,937         257,027           297,217         381,647         83,847         297,217           356,897         465,048         89,451         356,897           46,817         381,647         468,871         366,897           356,897         441,829         99,680         342,149           488         370         232,039         342,149           488         370         232,039           340,444         487,441         441,293         1,560,084	177,009	205 756	0 83 400	772 222	(34,004)	123,034	(30,05)	185 878	(03,301)	170 388	(72,900)
124,665         154,165         154,165         154,165         154,165         154,165         154,165         154,165         154,165         154,165         154,165         154,165         154,165         154,165         154,165         156,174         261,167         263,761         263,761         263,761         261,167         402,630         154,165         263,761         263,161         261,875         263,761         263,761         402,630 <t< td=""><td>1 084 223</td><td>1 207 789</td><td>123 566</td><td>945 543</td><td>(138 680)</td><td>819 471</td><td>(30,300)</td><td>756 434</td><td>(327 789)</td><td>603,308</td><td>(390,825)</td></t<>	1 084 223	1 207 789	123 566	945 543	(138 680)	819 471	(30,300)	756 434	(327 789)	603,308	(390,825)
263,761         340,146         76,355         263,761           402,630         557,189         75,314         281,875         263,761           402,630         518,045         115,415         402,630           420,576         405,576         0.012         279,525           420,576         420,576         0.012         279,575           277,772         34,797         122,932           420,576         406,576         0.012         279,575           279,575         339,587         60,012         279,575           277,77         36,687         267,027         279,575           384,957         444,851         89,894         356,897           384,957         444,851         89,894         356,897           384,957         444,851         89,894         356,897           384,957         444,851         89,894         356,897           384,957         444,851         89,894         356,897           384,957         444,851         89,894         356,897           384,957         444,851         89,894         356,897           384,957         444,293         1,560,884           486,467         444,293	124.665	154.265	29.600	124,665	0	108.043	(16,622)	99,732	(24,933)	91.421	(33,244)
281,875         357,189         75,314         281,875           402,630         518,045         115,415         402,630           426,528         562,277         126,349         435,928           420,576         420,576         34,797         122,932           420,575         420,576         420,576         371,103           273,575         390,330         68,575         257,027           297,217         381,064         83,847         297,217           356,897         444,857         260,012         279,575           356,897         444,851         83,847         297,217           356,897         444,851         83,847         297,217           356,897         444,851         83,847         256,897           356,897         444,851         83,847         256,897           356,897         444,851         83,847         256,897           356,897         444,851         83,847         256,897           356,897         444,823         366,847         366,847           356,897         444,823         36,817         366,847           357,449         37,309         37,149         367,27           487,441	263.761	340.116	76.355	263.761	0	228,593	(35,168)	211.009	(52.752)	193.425	(70,336)
402,630         518,045         115,415         402,630           122,922         156,277         126,349         435,928           122,932         157,729         34,797         122,932           420,576         420,576         420,576         122,932           279,727         390,330         68,575         257,027           297,217         381,064         83,847         297,217           356,897         44,851         89,484         297,217           36,957         44,857         44,857         257,027           356,897         44,851         89,487         297,217           381,064         83,847         297,217         356,897           468,871         44,851         89,487         356,897           342,149         44,851         89,487         468,871           1,560,084         44,851         89,487         1,60,084           496,344         596,061         127,190         468,871           1,560,084         2,004,41         82         36,203         32,033           47,1383         701,883         707,502         228,467         552,733           479,035         170,584         178,997         2105,493 <td>281.875</td> <td>357,189</td> <td>75.314</td> <td>281,875</td> <td>0</td> <td>244.292</td> <td>(37,583)</td> <td>225,500</td> <td>(56,375)</td> <td>206.709</td> <td>(75,166)</td>	281.875	357,189	75.314	281,875	0	244.292	(37,583)	225,500	(56,375)	206.709	(75,166)
435,928         562,277         126,349         435,928           420,576         420,576         34,797         122,932           420,576         420,576         33,4797         122,932           279,575         339,587         60,012         279,575           297,217         381,064         83,847         297,217           356,897         456,048         99,151         356,897           468,871         381,064         83,847         297,217           354,957         444,851         89,884         356,897           468,871         596,061         127,190         468,871           237,039         290,711         382,149         356,867           342,149         441,829         99,680         342,149           791,883         791,883         791,883         791,883           791,883         791,883         791,883         791,883           791,883         791,883         791,883         791,883           791,883         791,883         791,883         700,834           82,441         71,991         71,991         70,502           82,4487         1,058,446         236,559         701,839           81,487 <td>402,630</td> <td>518,045</td> <td>115,415</td> <td>402,630</td> <td>0</td> <td>348,946</td> <td>(53,684)</td> <td>322,104</td> <td>(80,526)</td> <td>295,262</td> <td>(107,368)</td>	402,630	518,045	115,415	402,630	0	348,946	(53,684)	322,104	(80,526)	295,262	(107,368)
122,932         157,729         34,797         122,932           420,576         420,576         331,103         420,575         331,103           279,575         339,587         60,012         279,575         297,217           321,727         381,064         83,847         297,217         297,217           356,897         456,048         99,151         356,897         297,217           354,957         444,851         89,884         354,957         468,871           350,039         290,741         58,702         232,039           342,149         441,823         99,680         342,149           791,883         791,883         791,883         791,883         440,344           80,084         2,004,377         444,293         1,560,084           487,441         713,700         226,259         622,251           487,441         713,700         226,259         821,487           487,441         707,502         228,487         705,482           470,084         707,502         228,487         701,639           821,487         1,058,446         236,959         821,487           826,584         652,584         652,846         652,846	435,928	562,277	126,349	435,928	0	377,804	(58,124)	348,742	(87,186)	319,680	(116,248)
420,576         420,576         420,576         331,103           279,575         339,587         60,012         275,575           27,1755         380,330         68,575         257,027           297,217         381,048         83,847         297,217           356,897         456,048         83,847         297,217           356,897         444,851         89,894         356,867           468,871         596,061         127,190         468,871           468,871         596,061         127,190         468,871           468,871         596,061         127,190         468,871           48,871         444,851         89,894         356,957           342,149         441,829         99,680         342,149           791,883         791,883         0         622,251           487,441         713,700         226,259         562,432           479,035         704,502         228,467         552,733           479,035         707,502         228,467         552,733           47,487         1,058,446         236,959         821,487           821,487         1,058,446         236,959         171,891           116,674 <td>122,932</td> <td>157,729</td> <td>34,797</td> <td>122,932</td> <td>0</td> <td>106,541</td> <td>(16,391)</td> <td>98,345</td> <td>(24,587)</td> <td>90,150</td> <td>(32,782)</td>	122,932	157,729	34,797	122,932	0	106,541	(16,391)	98,345	(24,587)	90,150	(32,782)
279,575         339,587         60,012         279,575           321,755         339,587         60,012         277,577           297,217         381,064         83,847         297,217           356,897         456,048         99,151         356,897           356,877         444,851         89,894         354,957           468,871         596,061         127,190         468,871           468,871         596,061         127,190         468,871           468,871         444,851         89,894         354,957           468,871         444,851         89,894         354,149           468,871         444,883         791,883         90,880         342,149           791,883         791,883         90,880         342,149         496,344           496,344         642,862         146,518         496,344         496,344           479,035         701,502         228,467         552,733           479,035         707,502         228,467         552,733           47,487         1,058,446         236,959         821,487         2,105,493           48,784         1,058,446         2,26,592         701,839         116,674 <t< td=""><td>420,576</td><td>420,576</td><td>0</td><td>331,103</td><td>(89,473)</td><td>286,956</td><td>(133,620)</td><td>264,883</td><td>(155,693)</td><td>242,809</td><td>(177,767)</td></t<>	420,576	420,576	0	331,103	(89,473)	286,956	(133,620)	264,883	(155,693)	242,809	(177,767)
321,755         390,330         68,575         257,027           297,217         391,330         68,575         257,027           356,957         456,084         89,847         257,027           356,877         444,851         89,894         356,867           356,877         444,851         89,894         356,867           468,871         596,061         127,190         468,871           468,871         596,061         127,190         468,871           46,874         596,061         127,190         468,871           791,883         791,883         441,823         95,820         342,149           791,884         6,20,741         58,702         232,039         342,149           487,441         713,700         226,259         562,432           487,441         713,700         226,259         562,432           487,441         713,700         226,259         562,432           487,441         713,700         226,259         562,432           487,441         71,591         771,891           487,487         1,054,466         236,959         821,487           487,666         2,50,952         2,05,487         701,839	279,575	339,587	60,012	279,575	0	242,299	(37,276)	223,660	(55,915)	205,022	(74,553)
256,877         381,064         88,847         291,217           356,887         466,048         99,151         356,897           356,871         448,871         89,894         356,897           468,871         596,061         127,190         468,871           468,871         596,061         127,190         468,871           468,871         596,061         127,190         468,871           46,874         791,883         791,883         1,560,084           791,883         791,882         144,293         1,560,084           496,344         642,862         146,518         496,344           487,441         713,700         226,259         562,432           487,441         713,700         226,259         562,432           487,441         713,700         226,259         562,432           487,441         713,700         226,259         821,487           821,487         1,058,466         236,959         821,487           246,768         246,768         246,768         176,991           46,784         652,854         0         196,405           701,839         894,791         192,952         701,839           704,8	321,755	390,330	68,575	257,027	7	215,936	(105,819)	195,391	(126,364)	174,845	(146,910)
350,037         430,046         93,131         350,087           350,037         440,681         93,131         350,087           468,877         440,661         127,190         468,877           468,877         596,061         127,190         468,877           432,149         441,829         99,680         342,149           791,883         791,883         791,883         1,560,084           496,344         2,004,377         444,233         1,560,084           487,441         713,700         226,259         562,432           479,035         707,502         228,467         552,733           479,035         707,502         228,467         552,733           479,035         707,502         228,467         552,733           821,487         1,058,446         236,959         821,487           246,768         246,768         246,768         176,493           256,592         2,705,489         178,997         716,674           16,64         652,854         652,854         652,854         652,854           652,854         652,854         652,854         701,839           1430,494         1,831,579         701,085	717,782	381,064	83,847	712,782		257,588		231,113	(59,444)	217,959	(79,258)
468,137         474,161         591,034         591,034         591,034         591,034         591,034         591,034         591,034         591,034         591,034         591,034         591,034         591,034         591,034         622,251         791,883         791,883         791,883         791,483         791,493         791,493         791,493         791,493         791,493         791,493         791,493         791,493         791,493         791,493         791,432         791,732         791,839         701,230         701,839         701,230         701,839         701,839         701,722         7240,877         740,877         740,877         740,877         740,877         740,877         741,949         710,050         701,050         701,050         701,050         <	350,897	450,048	99,151	350,897		309,311	(47,586)	283,518	(7,1,379)	27,102	(95,172)
232,039         290,741         58,702         232,039           342,149         441,829         99,680         342,149           791,883         290,741         58,702         232,039           1,560,084         2,004,377         444,293         1,560,084           487,441         713,700         226,259         652,432           479,035         707,502         228,467         552,732           479,035         707,502         228,467         552,732           821,487         1,058,446         236,959         821,487           246,768         246,768         246,768         116,674           821,487         1,058,446         28,959         821,487           116,74         145,897         2,105,493           116,674         652,854         0         509,823           116,74         145,877         1430,494         174,957           1430,494         1,831,579         401,085         1,74,957           240,877         141,947         393,932         942,594           141,945         1,210,847         393,932         942,594	468 871	596,061	127 190	468 871		406 355	(47,320)	375,007	(93,774)	343 839	(125 032)
342,149         441,829         99,680         342,149           791,883         791,883         0         622,251           791,883         791,883         0         622,251           496,344         2,004,377         444,293         1,560,084           487,441         713,700         226,259         662,432           479,035         707,201         228,467         552,732           479,035         707,891         718,511         46,920         171,991           821,487         1,058,446         236,959         821,487           246,768         2,666         28,920         171,991           116,674         1,058,446         28,959         821,487           116,674         1,654,666         28,992         116,674           652,854         0         509,823           701,839         894,791         192,952         701,839           701,839         1430,494         1,831,579         401,085         1,430,494           1430,494         1,831,579         401,085         1,430,494           141,947         141,947         393,932         942,594	232 039	290,281	58 702	732,039		201,000	(30,538)	185 632	(46.407)	170 162	(61.877)
791,883         791,883         791,883         622,551           1,560,084         2,004,377         444,293         1,560,084           496,344         642,862         146,518         496,344           487,441         713,700         226,259         562,432           479,035         707,502         228,467         552,733           5         171,917         218,911         46,920         171,991           821,487         1,058,446         236,959         821,487           246,768         246,768         0         196,405           2526,592         2,705,489         178,897         2,105,493           116,674         145,646         28,992         105,493           652,844         652,844         5,992         701,839           701,839         894,791         192,952         701,839           701,839         894,791         192,952         701,839           701,839         894,791         192,952         701,839           701,839         1430,494         1,831,579         401,085         1,430,494           7430,494         1,831,579         707,22         240,877           740,877         141,947         393,932	342.149	441.829	99,680	342.149	0	296,529	(45,620)	273,719	(68.430)	250,909	(91,240)
1,560,084         2,004,377         444,293         1,560,084           496,344         642,862         146,518         496,344           487,441         713,700         226,259         562,432           479,035         707,502         228,467         552,733           171,931         218,911         46,920         171,991           821,487         1,058,446         236,959         821,487           246,768         246,768         246,768         0         196,405           2,526,532         2,705,489         178,897         2,105,493           116,674         145,666         28,992         116,674           652,844         652,844         652,844         659,823           701,839         894,791         192,952         701,839           1430,494         1,831,579         401,085         1,430,494           1430,494         1,831,579         401,085         1,430,494           240,877         331,393         942,594           816,915         1,210,847         942,594	791,883	791,883	0	622,251	63	539,284	(252,599)	497,801	(294,082)	456,317	(335,566)
496,344         642,862         146,518         496,344           487,441         713,700         226,259         562,432           487,441         713,700         226,259         562,432           479,035         707,502         228,467         552,733           5         171,991         218,911         46,920         171,991           7         246,768         246,768         246,768         821,487           2,526,592         2,705,489         178,897         2,105,493           16,674         145,666         28,992         116,674           652,884         652,844         192,952         701,839           174,957         224,831         49,874         174,957           1430,494         1,831,579         401,085         1,430,494           141,947         141,947         393,932         942,594	1,560,084	2,004,377	444,293	1,560,084	0	1,352,073	(208,011)	1,248,067	(312,017)	1,144,062	(416,022)
487,441         713,700         226,259         562,432           479,035         707,502         228,467         562,733           5         171,991         218,911         46,920         171,991           821,487         1,058,446         236,959         821,487           2,526,592         2,705,489         178,897         2,105,493           116,674         145,666         28,992         116,674           652,834         652,884         659,854         701,839           701,839         894,791         192,952         701,839           174,957         224,831         49,874         174,957           240,877         1,430,494         1,831,579         401,085         1,430,494           141,947         141,947         393,932         942,594	496,344	642,862	146,518	496,344	0	430,165	(66,179)	397,075	(99,269)	363,986	(132,358)
\$45,035         \$707,502         \$228,467         \$52,733           \$45,036         \$17,991         \$52,733           \$45,020         \$17,991         \$17,991           \$246,768         \$246,768         \$25,6,952         \$2,705,489         \$178,897         \$2,105,493           \$2,526,592         \$2,705,489         \$178,897         \$2,105,493         \$16,674         \$16,674           \$65,854         \$65,854         \$65,854         \$05,922         \$701,839         \$116,674         \$16,674           \$174,957         \$24,831         \$49,874         \$174,957         \$1430,494         \$1,831,579         \$401,085         \$1,430,494           \$1,430,494         \$1,831,579         \$701,839         \$701,839         \$140,837         \$10,405           \$141,947         \$141,947         \$393,932         \$94,877         \$10,260           \$1,41,945         \$141,947         \$393,932         \$94,877         \$10,260	487,441	713,700	226,259	562,432	74,991	487,441	0	449,946	(37,495)	412,450	(74,991)
1,1391	479,035	700,002	46 020	352,733	73,098	479,035	0	442,180	(30,849)	405,337	(73,098)
246,768         2,670,449         2,670,449         2,670,40         2,670,40         2,670,40         2,670,40         2,670,40         2,670,40         2,670,40         0         106,40         0         1,674         1,675         1,675         1,675         1,675         1,675         1,675         1,675         1,675         1,675         1,675         1,675         1,675         1,675         1,075         1,675 <t< td=""><td>824 487</td><td>1 058 446</td><td>236 950</td><td>821 787</td><td></td><td>711 055</td><td>(400 532)</td><td>657,190</td><td>(34,390)</td><td>RO2 424</td><td>(43,664)</td></t<>	824 487	1 058 446	236 950	821 787		711 055	(400 532)	657,190	(34,390)	RO2 424	(43,664)
246,768         246,768         0         196,405           2,526,592         2,705,489         178,897         2,105,493           116,674         145,666         28,992         116,674           652,854         0         509,823           701,839         894,791         192,952         701,839           174,957         224,831         49,874         174,957           1,430,494         1,831,579         401,085         1,430,494           1,430,494         141,949         70,722         240,877           141,947         141,947         393,932         942,594	821,487	1,058,446	236,959	821,487		711,955	(109,532)	061,190	(164,297)	602,424	(219,063)
2,526,592         2,705,489         178,897         2,105,493           116,674         145,666         28,992         116,674           652,884         652,884         65,884         659,823           701,839         894,791         192,952         701,839           174,957         224,831         49,874         174,967           1430,494         1,831,579         401,085         1,430,494           1430,494         141,993         70,722         240,877           141,943         141,947         393,932         942,594	246,768	246,768	0	196,405		170,217	(76,551)	157,124	(89,644)	144,030	(102,738)
10,074   143,050   26,392   110,074     652,834   652,854   192,952   701,839     701,839   894,791   192,952   701,839     174,957   224,831   49,874   174,957     1430,494   1,831,579   401,085   1,430,494     141,947   311,599   70,722   240,877     141,945   1,210,847   393,932   942,594	2,526,592	2,705,489	1/8,897	2,105,493	3	1,824,761		1,684,394		1,544,028	(982,564)
054,834         052,634         052,634         0 051,623           701,839         894,791         192,952         701,839           704,857         224,831         49,874         174,957           7240,844         1,831,579         401,085         1,430,494           240,877         311,599         70,722         240,877           141,943         141,943         0         110,260           816,915         1,210,847         393,932         942,594	116,6/4	145,666	28,992	116,6/4	0	101,118	(15,556)	93,340	(23,334)	85,561	(31,113)
174,957         224,831         49,874         174,957           1,430,494         1,831,579         401,085         1,430,494           240,877         311,599         70,722         240,877           141,943         141,943         0         110,260           816,915         1,210,847         393,932         942,594	701 839	897 794	102 052	209,623	(143,031)	608 261		561 172	(244,990)	513,610	(270,964)
1,430,494     1,831,579     401,085     1,430,494       240,877     311,599     70,722     240,877       141,943     141,943     0     110,260       816,915     1,210,847     393,932     942,594	174 057	224,131	AQ 87A	177 057		151 620		130 066	(34 001)	128 302	(101,131)
240,877     311,599     70,722     240,877       141,943     141,943     0     110,260       816,915     1,210,847     393,932     942,594	1 430 494	1831579	49,674	1 430 494		1 239 762	(190,326)	1 144 396	(386,098)	1 049 029	(381 465)
141,943     141,943     0     110,260       816,915     1,210,847     393,932     942,594	240.877	311.599	70.722	240.877		208.760	(32.117)	192,701	(48.176)	176.643	(64.234)
<b>816,915</b> 1,210,847 393,932 942,594	141,943	141,943	0	110,260	(31,683)		(46,385)	88,208	(53,735)	80,857	(61,086)
	816,915	1,210,847	393,932	942,594	125,679	ω	0	754,075	(62,840)	691,236	(125,679)
<b>504,906</b> 109,082 395,824	395,824	504,906	109,082	395,824	0	343,048	(52,776)	316,660	(79,164)	290,271	(105,553)

		2006 Construction		2006		2006		2006		2006	
	Actual Total	Allotment with \$1500	Increase	Construction	Increase	Construction	Increase	Construction	Increase	Construction	Increase
	Construction	per improved mile	(Decrease)	Allotment with	(Decrease)	Allotment with	(Decrease)	Allotment with	(Decrease)	Allotment with	(Decrease)
Municipality	Allotment	Maintenance	Amount	25% Maintenance	Amount	35% Maintenance	Amount	40% Maintenance	Amount	45%	Amount
St. Paul	\$5,731,097	\$8,574,942	\$2,843,845	\$6,612,804	\$881,707	\$5,731,097	0\$	\$5,290,243	(\$440,854)	\$4,849,390	(\$881,707)
St. Paul Park	133,975	171,254	37,279	133,975	0	116,112	(17,863)	107,180	(26,795)	98,249	(35,726)
St. Peter	416,782	416,782	0	329,056	(87,726)	285,182	(131,600)	263,245	(153,537)	241,308	(175,474)
Sartell	386,012	448,167	62,155	290,328	(95,684)	243,330	(142,682)	219,831	(166,181)	196,332	(189,680)
Sauk Rapids	425,577	425,577	0	332,536	(93,041)	288,198	(137,379)	266,029	(159,548)	243,860	(181,717)
Savage	564,371	639,455	75,084	429,898	(134,473)	362,567	(201,804)	328,902	(235,469)	295,236	(269,135)
Shakopee	648,454	832,874	184,420	648,454	0	561,993	(86,461)	518,763	(129,691)	475,533	(172,921)
Shoreview	731,144	731,144	0	568,754	(162,390)	492,920	(238,224)	455,003	(276,141)	417,086	(314,058)
Shorewood	175,352	221,413	46,061	175,352	0	151,972	(23,380)	140,282	(35,070)	128,592	(46,760)
South St. Paul	416,611	530,252	113,641	416,611	0	361,063	(55,548)	333,289	(83,322)	305,515	(111,096)
Spring Lake Park	118,729	149,576	30,847	118,729	0	102,899	(15,830)	94,984	(23,745)	84,068	(31,661)
Stewartville	120,205	154,288	34,083	120,205	0	104,177	(16,028)	96,164	(24,041)	88,150	(32,055)
Stillwater	359,347	456,524	97,177	359,347	0	311,434	(47,913)	287,477	(71,870)	263,521	(95,826)
Thief River Falls	337,914	428,652	90,738	337,914	0	592,859	(45,055)	270,331	(67,583)	247,804	(90,110)
Vadnais Heights	244,585	314,294	60,709	244,585	0	211,974	(32,611)	195,668	(48,917)	179,363	(65,222)
Victoria	143,300	183,387	40,087	143,300	0	124,194	(19,106)	114,640	(28,660)	105,087	(38,213)
Virginia	299,794	376,251	76,457	299,794	0	259,822	(39,972)	239,836	(59,958)	219,849	(79,945)
Waconia	221,566	221,566	0	174,409	(47,157)	151,155	(70,411)	139,528	(82,038)	127,900	(93,666)
Waite Park	172,240	172,240	0	135,244	(36,996)	117,211	(52,029)	108,195	(64,045)	99,179	(73,061)
Waseca	184,688	269,403	84,715	184,688	0	156,868	(27,820)	142,959	(41,729)	129,049	(55,639)
West St. Paul	317,256	402,698	85,442	317,256	0	274,955	(42,301)	253,805	(63,451)	232,654	(84,602)
White Bear Lake	493,532	628,268	134,736	493,532	0	427,728	(65,804)	394,826	(98,706)	361,924	(131,608)
Willmar	492,357	620,611	128,254	492,357	0	426,709	(65,648)	393,886	(98,471)	361,062	(131,295)
Winona	591,273	755,679	164,406	591,273	0	512,437	(78,836)	473,018	(118,255)	433,600	(157,673)
Woodbury	1,276,180	1,769,177	492,997	1,276,180	0	1,092,421	(183,759)	1,000,541	(275,639)	908,662	(367,518)
Worthington	251,247	294,162	42,915	233,435	(17,812)	202,311	(48,936)	186,748	(64,499)	171,186	(80,061)
TOTAL	\$85,076,802	\$106,950,755	\$21,873,953	\$82,449,823	(\$2,626,979)	\$71,313,363	(\$13,763,439)	\$65,745,129	(\$19,331,673)	\$60,176,893	(\$24,899,909)

# CREDIT FOR LOCAL EFFORT

Report for the UCFS For a recommendation to the Municipal Screening Board June 2006

The Fall, 2005 Screening Board Meeting minutes state, in part:

Gaetz reported that the City of St. Cloud is considering using local resources (a local sales tax for transportation) to improve their MSAS system...this reduces their needs...Counties have after the fact needs for local funds used. He asked that this be a possible Spring Board discussion...

Metso moved and Salsbury seconded to refer to UCFS the local dollars expenditure on the MSA system and a possible needs adjustment... Motion carried without opposition.

The following is taken from the County State Aid Highway 'Credit For Local Effort Users Guide'. Minor revisions have been made to reflect the differences between CSAH and MSAS business processes.

CSAH Screening Board resolution on Needs Credit for Local Effort states:

Needs Credit for Local Effort - Oct. 1989 (Latest Rev. October, 1997)
That annually a needs adjustment for local effort for construction items which reduce State Aid needs shall be made to the CSAH 25 year construction needs.

The adjustment (credit for local effort) shall be the local (not State Aid or Federal Aid) dollars spent on State Aid Construction Projects for items eligible for State Aid participation. This adjustment shall be annually added to the 25 year County State Aid Highway construction needs of the county involved for a period of twenty years beginning with the first apportionment year after the documentation has been submitted.

It shall be the County Engineer's responsibility to submit this data to their District State Aid Engineer. His submittal and approval must be received in the Office of State Aid by July 1 to be included in the following year's apportionment determination.

# **Reporting Credit-For-Local-Effort**

Local investments "for construction items which reduce State Aid needs" are eligible to be reported and to receive credit for local effort. Construction items are any state-aid eligible items that are required for the construction of a state-aid project. Reduction of needs refers to normal needs. After-the-fact-needs also recognize local effort, but credit for those investments are calculated separately under the respective after-the-fact needs adjustment.

# Eligible Expenses

In order to be eligible, expenses must occur on road segments that are deficient in the Needs. The following are examples of expenses that are eligible for credit for local effort.

- Any items represented in the normal Needs calculation. Credit is earned for ?? years.
  - o All grading items
  - o Clearing/grubbing
  - o Common excavation
  - o Removals
  - o Bituminous paving (no overlays)
  - o Curb and gutter
  - o Storm sewer
- Any items eligible to be considered for after-the-fact needs are included in the Needs study as after-the-fact-needs whether they are paid with state-aid funds or local funds.
  - o Right-of-way (15 years)
  - o Non existing bridges (15 years)

The following investments are NOT eligible for credit for local effort.

- Locally funded expenses on segments that are not deficient in the needs
- Maintenance costs
- Bond interest payments
- Wages
- Overhead
- Buildings
- Engineering costs
- Adjustment of utilities
- Overlays
- Miscellaneous construction driveway pavement, fencing, etc.
  - Turn lanes or auxiliary lanes
  - ❖ Traffic control, traffic staging, detours
  - Paved medians
  - Storm sewer ponds
  - ❖ Agricultural tile relocation/restoration
  - \* Rumble strips
  - Striping

# Local Funds

An investment is considered local effort when the funds are provided from a local revenue source. Examples of local revenue sources are:

- Property taxes
- Special assessments
- Utility revenues
- Private contributions
- Wheelage taxes

Highway Users Tax funds from state or federal sources and other state general funds or bonds are NOT local effort. Examples of revenue sources that are NOT local effort are:

- State-aid funds (county or municipal)
- Trunk Highway funds
- Federal-aid funds
- Local Road Improvement Program funds
- Local Bridge Replacement Program funds (Bridge bonds)
- Funds from other state agencies such as DNR or DEED

# Process

- 1. The County submits a state-aid plan to the District for approval. Even if no state-aid funds are used, an approved plan is required to claim credit. The District will process the plan as usual.
- 2. After receiving plan approval, the County submits a request for credit for local effort and supporting documentation to the District State Aid Engineer. Required documentation includes any or all of the following:
  - a. An abstract of bids
  - b. A funding breakdown detailing which items reduce the needs (required for most projects unless the splits are clearly evident on the bid abstract).
  - c. A copy of the segment summary from the Needs database.
  - d. Force account agreements and invoices.

NOTE: Filling in the Credit-for-Local-Effort line on the State Aid Payment Request form does not report credit for local effort for Needs purposes. A separate submittal package is required. There is no standard form.

- 3. Requests for credit for local effort must be approved by the District and submitted to the CSAH Needs Unit by July 1<sup>st</sup> to be included in the following years apportionment.
- 4. The CSAH Needs Unit will verify that the items requested are eligible for credit for local effort. If approved, CSAH Needs will enter the costs into the Needs Study.
- 5. After-the-fact needs are reported and calculated in the Needs study separately. However, all the after-the-fact items may be claimed whether they are paid with state-aid funds or local effort funds.

# N:\MSAS\exce\\Subcommittee Issues\UCFS\2006\Credit for Local Efford example.xls

# **EXAMPLES OF VARIOUS CREDIT FOR LOCAL EFFORT ADJUSTMENTS**

Report for the UCFS

For a recommendation to the Municipal Screening Board June 2006

# **Dollars generated from Positive Adjustment**

Amount	Amount of Positive									
Needs Ac	Needs Adjustment									
		Needs	Needs	Needs	Needs		Actual	Actual	Actual	Actual
		adjustment	adjustment	adjustment	adjustment	Actual dollar	Positive	Positive	Positive	Positive
	Local	for 15 years	ars	for 15 years	for 20 years	amount of Local	amount for	amount for	amount for	amount for 20
Local	Dollars	for Local	for Local	for Local	for Local	Dollars Spent	15 years for	20 years for	15 years for	years for
Dollars	spent	Dollars	Dollars	Dollars	Dollars	per year at	Local Dollars	Local Dollars	Local Dollars	Local Dollars
Spent	times 2	Spent	Spent	Spent X 2	Spent X 2	\$16.57/\$1000	Spent	Spent	Spent X 2	Spent X 2
\$50,000	\$100,000	\$750,000	\$1,000,000	\$1,500,000	\$2,000,000	\$829	\$12,428	\$16,570	\$24,855	\$33,140
100,000	200,000	1,500,000	2,000,000	3,000,000	4,000,000	1,657	24,855	33,140	49,710	66,280
200,000	400,000	3,000,000	4,000,000	6,000,000	8,000,000	3,314	49,710	66,280	99,420	132,560
300,000	000'009	4,500,000	000'000'9	000'000'6	12,000,000	4,971	74,565	99,420	149,130	198,840
400,000	800,000	6,000,000	8,000,000	12,000,000	16,000,000	6,628	99,420	132,560	198,840	265,120
200,000	1,000,000	7,500,000	10,000,000	15,000,000	20,000,000	8,285	124,275	165,700	248,550	331,400
1,000,000	1,000,000   2,000,000	15,000,000	20,000,000	30,000,000	40,000,000	16,570	248,550	331,400	497,100	662,800
1,500,000	,500,000 3,000,000	22,500,000	30,000,000	45,000,000	60,000,000	24,855	372,825	497,100	745,650	994,200
2,000,000	2,000,000   4,000,000	30,000,000	40,000,000	60,000,000	80,000,000	33,140	497,100	662,800	994,200	1,325,600

The 'Amount of Positive Needs Adjustment' is the amount of Needs that would be added to the cities Needs.

The last 4 columns are based on a Needs value of \$16.57 per thousand dollars of Needs.

# OTHER



# **TOPICS**



# 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.

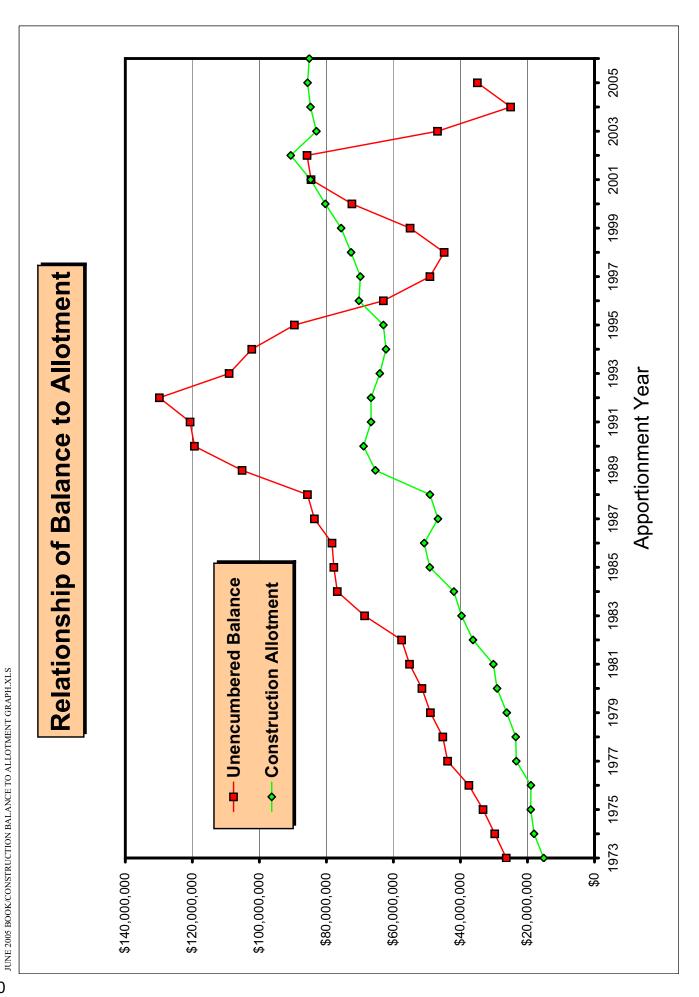
JUNE 2006 BOOK/RELATIONSHIP OF CONSTRUCTION BALANCE TO ALLOTMENT.XLS

09-May-06

JUNE 2006 BOOK	KELATI	JASHIF OF CONST	RUCTION BALANCE TO	ALLOTMENT.ALS		Amount	Ratio of	Ratio of
					31-Dec	Spent	Construction	Amount
				January	Unencumbered	on	Balance to	spent to
App.		No. of	Needs	Construction	Construction	Construction	Construction	Amount
Year		Cities	Mileage	Allotment	Balance	Projects	Allotment	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				

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

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



# **2006 APPORTIONMENT RANKINGS**

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

	POPULATIONAL	POPULATION APPORTIONMENT	TN		MONEY NEEDS /	MONEY NEEDS APPORTIONMENT			TOTAL AP	TOTAL APPORTIONMENT	
Ran	Rank Municipality	2005 Total Needs Mileage	2006 Population Apportionment Per Need Mile	Rank	Rank Municipality	2005 Total 2006 Money Needs Needs Apportionment Per Mileage Need Mile	2006 Money Needs Apportionment Per Need Mile	Rank	Rank Municipality	2005 Total Needs Mileage	2006 Total Apportionment Per Need Mile
,	=	0	0000	,	-		1	,	:	1 1 1	1
- (	Hopkins	9.34	\$30,178	(	Crookston	C9.TT	\$27,529	- (	Minneapolis	707.97	\$54,782
2	Minneapolis	207.97	29,339	2	St. Paul	164.81	52,689	2	St. Paul	164.81	53,498
က	St. Paul	164.81	27,810	က	Minneapolis	207.97	25,443	က	Hopkins	9.34	47,729
4	Falcon Heights	3.29	27,008	4	Mound	8.17	24,034	4	New Hope	12.70	45,767
2	New Hope	12.70	26,210	2	Bloomington	75.18	23,508	2	Columbia Heights	12.61	44,479
9	Vadnais Heights	8.45	25,043	9	Maple Grove	51.26	22,888	9	Richfield	25.09	43,655
7	New Brighton	14.92	23,870	7	Richfield	25.09	21,730	7	Mound	8.17	43,045
∞	Coon Rapids	41.85	23,718	∞	Fairmont	19.70	21,701	∞	Bloomington	75.18	41,632
6	Columbia Heights	12.61	23,522	6	La Crescent	5.64	21,385	6	Waseca	6.71	41,459
9	Waseca	6.71	23,032	10	Columbia Heights	12.61	20,957	10	St. Anthony	5.63	41,434
7	St. Anthony	5.63	22,949	7	Sauk Rapids	11.87	20,932	7	Maple Grove	51.26	40,544
12	West St. Paul	13.54	22,944	12	Thief River Falls	15.23	20,745	12	St. Louis Park	31.09	40,424
13	Anoka	12.64	22,899	13	Woodbury	51.07	20,353	13	Stewartville	3.99	40,169
4	St. Louis Park	31.09	22,831	4	Faribault	23.60	20,083	4	Burnsville	44.76	40,156
15	Stewartville	3.99	22,793	15	Farmington	13.85	19,972	15	Falcon Heights	3.29	39,479
16	Oakdale	19.40	22,734	16	Austin	28.62	19,925	16	Farmington	13.85	39,345
17	Robbinsdale	10.11	22,277	17	St. Paul Park	4.92	19,874	17	Anoka	12.64	39,253
18	Eagan	47.12	22,257	18	Red Wing	24.06	19,844	18	Shoreview	19.52	38,849
19	Richfield	25.09	21,925	19	St. Francis	11.02	19,738	19	Crookston	11.65	38,743
20	Burnsville	44.76	21,884	20	Albertville	7.26	19,670	20	Vadnais Heights	8.45	38,593
21	Apple Valley	35.67	21,851	21	Duluth	114.50	19,663	21	Rochester	72.91	38,504
22	Brooklyn Park	50.39	21,834	22	Grand Rapids	14.18	19,644	22	Coon Rapids	41.85	38,366
23	Brooklyn Center	21.40	21,739	23	New Hope	12.70	19,557	23	Plymouth	22.57	37,432
24	Northfield	13.74	21,569	24	Albert Lea	21.74	19,424	24	Sauk Rapids	11.87	37,353
22	Shoreview	19.52	21,552	22	Maplewood	33.60	19,412	25	Apple Valley	35.67	37,236
56	Chaska	16.22	21,273	56	Moorhead	38.06	19,095	26	Eden Prairie	45.41	37,231
27	Eden Prairie	45.41	21,232	27	Kasson	5.12	19,046	27	Crystal	17.88	37,133
78		72.91	20,743	28	Minnetrista	11.41	18,798	28	Fridley	22.87	36,455
53	Arden Hills	7.55	20,387	29	Little Canada	10.54	18,633	29	Maplewood	33.60	36,447
က	Crystal	17.88	20,363	30	Alexandria	17.58	18,513	30	St. Paul Park	4.92	36,308
31	Plymouth	55.57	20,284	31	St. Anthony	5.63	18,485	31	Woodbury	51.07	35,982
32	Blaine	40.52	20,072	32	Waseca	6.71	18,428	32	New Brighton	14.92	35,981
33	White Bear Lake	20.35	19,530	33	Burnsville	44.76	18,272	33	Brooklyn Center	21.40	35,951
8	Winona	22.29	19,478	34	Inver Grove Heights	29.68	17,953	34	La Crescent	5.64	35,868
32	Farmington	13.85	19,372	32	Hermantown	14.08	17,927	35	Winona	22.29	35,369
38	South St. Paul	16.82	19,198	36	St. Peter	15.26	17,882	36	Kasson	5.12	35,348
37	Fridley	22.87	19,140	37	Owatonna	25.24	17,807	37	Arden Hills	7.55	35,334
88	Champlin	19.81	19,045	38	Buffalo	16.53	17,777	38	Inver Grove Heights	29.68	35,250
33	Edina	40.27	19,028	39	Lakeville	57.12	17,768	39	Faribault	23.60	35,110
4	Mound	8.17	19,012	40	Rochester	72.91	17,761	40	North St. Paul	11.40	34,762
4	Roseville	29.12	18,663	41	Little Falls	16.73	17,598	4	Northfield	13.74	34,633

	POPULATION APPORTIONMENT	PPORTIONMEN	<b>-</b>		MONEY NEEDS /	MONEY NEEDS APPORTIONMENT			TOTAL AP	TOTAL APPORTIONMENT	
		2005 Total	2006 Population			2005 Total 2006 Money Needs	spa			2005 Total	2006 Total
Rank	Rank Municipality	Needs Mileage	Apportionment Per Need Mile	Rank	Municipality	Needs Apportionment Per Mileage Need Mile		ž	Rank Municipality	Needs A	Apportionment Per Need Mile
Ç		r		Ç	- 0 3		_		=	1000	000
4 4	Spring Lake Park Waconja	5.82	\$18,646 18,566	4 4	North St. Paul	31 09 17 503 31 09 17 503		7 4 4 7 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	Edina	40.27	433,944
3 4	New Prague	5.31	18,184	4	Hopkins				Little Canada	10.54	33,596
45	St. Joseph	4.78	18,142	45	Stewartville			_	Prior Lake	19.87	33,306
46	Bloomington	75.18	18,124	46	Redwood Falls			46 /	Austin	28.62	33,158
47	Maple Grove	51.26	17,656	47	Fridley	•		47	Moorhead	38.06	33,125
48	Stillwater	15.59	17,609	48	Shoreview	•		48	South St. Paul	16.82	33,025
49	Waite Park	6.12	17,607	49	Plymouth	55.57 17,1		49 E	Eagan	47.12	32,990
20	Inver Grove Heights	29.68	17,297	20	Litchfield			20 /	Albert Lea	21.74	32,896
21	North St. Paul	11.40	17,168	21	International Falls				Owatonna	25.24	32,871
25	Maplewood	33.60	17,035	25	Crystal	17.88 16,7			Minnetonka	49.89	32,595
23	Prior Lake	19.87	17,003	23	Fergus Falls				Mankato	33.30	32,388
75	St. Cloud	60.01	16,951	24	Sartell				White Bear Lake	20.35	32,336
22	Chanhassen	20.78	16,916	22	Cloquet			_	Oakdale 5	19.40	32,225
1 2	Mankato	33.30	16,578	1 20	Anoka	•			Koseville	29.12	32,136
20	Mounds view	12.43	16,505	20,	Minnotonia	19.87	16,303	_	St. Cloud	60.01 111 ED	31,860
8 8	Mirinetonika St. Baril Bark	90.94 CO A	16,433	0 0	Marshall	•		000	Dalatri	114.30	31,000
n (	Ot. Faul Falk	4 .92	10,433	0 0	Viotorio	•			akeville	21.12	01,473
9 6	Sauk Rapius Kasson	11.0/	16,421	9 6	Victoria Eden Prairie	0.44 77.41 15,0	15,099		Albertville Waconia	7.41	31,401
S 6	Worthington	11.30	15 831	5 6	Forest Lake	•			Wacdina	40.52	31,363
3 6	Monticello	10.33	15,031	83 6	Virginia	•			Mest St Daul	13.54	31,302
3 2	Woodbirv	51.07	15,629	8 9	Winona	•			Prooklyn Park	50.39	31,069
65	Hastings	21.43	15.289	65	Cottage Grove	•		_	Cottage Grove	33.39	31,038
99	Big Lake	8.71	15,222	99	Mankato				New Prague	5.31	30,868
29	Cottage Grove	33.39	15,175	29	East Grand Forks	•		8 29	St. Joseph	4.78	30,756
89	Owatonna	25.24	15,064	89	Hutchinson	•		89	Stillwater	15.59	30,733
69	Faribault	23.60	15,027	69	Chisholm	•		69 F	Red Wing	24.06	30,631
20	Mahtomedi	8.62	14,994	70	North Mankato	•		70 F	Fairmont	19.70	30,516
71	Little Canada	10.54	14,964	71	Apple Valley	•	_		Mounds View	12.43	30,236
72	Shorewood	8.26	14,721	72	St. Michael			_	International Falls	8.06	30,182
73	Savage	26.04	14,709	73	Oak Grove	•		_	Buffalo	16.53	30,073
4 5	Shakopee	31.72	14,536	74	Willmar	` `		47	North Mankato	13.72	29,950
2 2	Notification of the Control of the C	13.72	14,320	2 4	Olollo Arden Hills	7 FF 7 14,0	7,070		Mornicello	6.44	29,674
2 2	Lino Lakes	20.76	14,384	2/	Otsego	•			Fhief River Falls	15.23	29,583
78	Moorhead	38.06	14,030	78	Edina	`		/ 8/	Waite Park	6.12	29,465
79	Golden Valley	23.57	13,988	79	St. Cloud			1 6/	Litchfield	8.77	29,383
80	New Ulm	16.11	13,795	80	Glencoe	•		_	Marshall	15.64	29,254
8	Lakeville	57.12	13,707	8	Belle Plaine			_	Grand Rapids	14.18	29,179
82	Brainerd	16.12	13,651	82	Coon Rapids				St. Francis	11.02	29,144
83	Victoria	6.44	13,570	83	Andover				Sartell	16.14	29,119
8	Albert Lea	21.74	13,472	84	Rosemount	27.26 14,5			St. Peter	15.26	28,751
82	International Falls	8.06	13,270	82	Hibbing				Shorewood	8.26	28,305
98	Austin	28.62	13,233	86	Lake City	•		_	Lino Lakes	20.76	28,095
87	Marshall	15.64	13,127	87	Brooklyn Center			`	Alexandria	17.58	27,966
8 8	Mendota Heights	14.39	12,988	χ ς	Monticello				Kedwood Falls	8.20	27,966
8 6	Sartell	16.14	12,488	20 0	Ham Lake			 	Hermantown	14.08	27,666
S	willmar	73.91	12,445	99	South St. Paul	16.82	_		Hutchinson	10.11	61.0,12

	POPULATION APPORTIONMENT	PPORTIONMEN	Li,		MONEY NEEDS APPORTIONMENT	PPORTIONMEN	1		TOTAL AP	TOTAL APPORTIONMENT	
Rank	Municipality	2005 Total	2006 Population	Rank	Municipality	2005 Total 20 Needs An	2005 Total 2006 Money Needs Needs Apportionment Per	Rank	Municipality	2005 Total	2006 Total
			Need Mile				Need Mile				Need Mile
91	Bemidji	16.66	\$12,407	91	Mounds View	12.43	\$13,731	91	Forest Lake	23.05	\$27,565
3 8	Litchrieid Buffalo	16.53	12,367	92	LINO LAKES New Ulm	20.76 16.11	13,711	35 63	Snakopee Willmar	31.72 23.91	27,456
98	Lake City	6.91	12,195	94	Shorewood	8.26	13,584	94	New Ulm	16.11	27,404
92	Andover	38.29	12,187	92	Vadnais Heights	8.45	13,550	92	Worthington	11.39	27,326
98 1	Duluth	114.50	12,022	96	Elk River	32.80	13,492	96	Spring Lake Park	5.82	27,200
∑6 6	Rogers Hutchinson	7.66	11,992	\ 6 86	Roseville Mendota Heights	29.12	13,472	/6 86	Golden Valley Champlin	23.57	27,131
8 6	Albertville	7.26	11,791	66	Ramsey	32.27	13,335	66	Andover	38.29	26,794
100	Forest Lake	23.05	11,623	100	Golden Valley	23.57	13,143	100	Lake City	6.91	26,584
101		7.88	11,475	101	Stillwater	15.59	13,124	101	Glencoe	7.88	26,347
103	Grookstori Belle Plaine	7.60	11,121	103	Shakopee	31.72	12,930	103	Mendota neignts Brainerd	16.12	26,323
104		15.26	10,869	104	East Bethel	28.37	12,913	104	Minnetrista	11.41	26,135
105		24.06	10,786	105	Waconia	7.41	12,817	105	Big Lake	8.71	26,088
106	Redwood Falls	8.20	10,616	106	White Bear Lake	20.35	12,806	106	Belle Plaine	7.60	25,947
108		20.63	10,378	108	New Prague	5.31	12.684	108	Savage	26.04	25,902
109		8.11	10,172	109	St. Joseph	4.78	12,614	109	Fergus Falls	24.67	25,658
110		8.55	10,158	110	Brainerd	16.12	12,503	110	Hastings	21.43	25,612
7	Chisholm	7.99	9,979	<del>-</del> ;	Chaska	16.22	12,499	117	St. Michael	20.63	25,582
11.2	Crono Orono	12.47	9,962	7 17	Falcon Heights Montevideo	3.29 8.55	12,471	112	Chisholm Little Falls	7.99	25,575 25,513
11	Ramsey	32.27	6,903	11 4	New Brighton	14.92	12,111	114	Virginia	15.93	25,013
115		32.80	9,840	115	Waite Park	6.12	11,858	115	Cloquet	21.67	25,020
116		14.08	9,739	116	Bemidji	16.66	11,597	116	Rosemount	27.26	24,936
11,0	Grand Rapids	14.18	9,534	11,	Hugo Worthington	19.15	11,560	117	Urono	12.43	24,890
119	Alexandria St. Francis	11.02	9,453	100	Worthington Blaine	40.52	11,490	119	Chanhassen	0.62 20.78	24,320
120	Virginia	15.93	9,167	120	Savage	26.04	11,148	120	Bemidji	16.66	24,005
121	Fergus Falls	24.67	8,913	121	Big Lake	8.71	10,866	121	East Grand Forks	15.51	23,727
123		19.23	0,030	123	Morris	47.12 8.11	10,733	123	Ramsev	32.80	23,532
124		21.67	8,498	124	Hastings	21.43	10,322	124	Otsego	19.99	22,821
125		15.11	8,374	125	Cambridge	13.08	9,792	125	Montevideo	8.55	22,282
126	Cambridge	13.08	8,105	126	Mahtomedi Oakdalo	8.62	9,526	126	Ham Lake	30.49	21,613
128		16.73	7.915	128	North Branch	22.53	9,483	128	Morris		20,496
129		19.99	7,892	129	Brooklyn Park	50.39	9,235	129	Oak Grove	23.24	20,365
130		13.94	7,879	130	Lake Elmo	12.47	9,107	130	Rogers	99'.	20,309
131	Ham Lake Minnetrista	30.49	7,588	131	Corcoran Spring Lake Dark	14.80 5.82	8,769	131	Hibbing Fast Bethal	51.22	19,780
122		1.1.1	7,336	122	Spling Lake Fair	13.02	6,004	122	Last Detile	12.07	19,020
134		22.53	7,063	134	Rogers	7.66	8,317	134	Hugo	19.15	18,855
135	East Bethel	28.37	6,411	135	West St. Paul	13.54	8,297	135	Cambridge	13.08	17,897
136		14.80	6,330	136	Champlin	19.81	7,915	136	North Branch	22.53	16,545
137	Hibbing	51.22	5,315	137	Chanhassen	20.78	7,228	137	Baxter	13.94	16,217
130		23.24	9,110	021	AVED A CE	10.1	3,023	021	COICOIAII	14.00	13,100
	AVENAGE		OF4.0.14		AVENAGE		000,01¢		AVENAGE		040,00¢

# 2006 Local Road Research Board Program

	2006 Local Road Res	PROJECT				
INV	TITLE	TOTAL	2005 Spent	2006	2007	2008
645	Implementation of Research Findings	Ongoing	\$200,000	\$200,000	200,000	200,000
668*	Technology Transfer Center, U of M - Base	Ongoing		185,000	185,000	185,000
	Technology Transfer Center, U of M - Cont. Projects:	<u> </u>	,	,		
	Circuit Training & Assist.Program (CTAP), Instructor-\$74,500, T <sup>2</sup>	Ongoing	127,500	158,500	158,500	158,500
	Center-\$84,000	Oligonig	127,000	130,300	700,000	700,000
	Minnesota Maintenance Research Expos	Ongoing	26,000	26,000	26,000	26,000
	Transportation Student Development	Ongoing		5,500	5,500	5,500
676	MN Road Research: Facility Sprt-\$500,000, Staff Sprt-\$60,000	Ongoing		560,000	560,000	560,000
745	Library Services for Local Governments	Ongoing		60,000	60,000	60,000
753	Duration of Spring Road Restrictions on Gravel Roads	51,000	,	45,158	00,000	00,000
768	Geosynthetics in Roadway Design thru CY10	30,000		3,000	3,000	
771	Use of GPR to Review Cross Section Road	75,000	0,000	31,987	0,000	
	Shredded Tires Used for Road Bases	150,000	25,000	36,424		
784	Guidelines for using Rumble Strips	149,659	,	149,659		
787	Risk Asses Tool for Selection of Erosion Control Practicies	100,000		40,000		
791	Safety & Operational Characteristics 2-Way Left Turns	51,456	7,718	43,738		
	Pavement Research Institute funded thru CY2007	800,000	60,000	60,000	60,000	
-	Urbanization of MN's Countryside: 2000-2005 - Future Geographics	138,277	3,000	13,000	00,000	
131	& Trans. Impacts	130,277	3,000	13,000		
801	Adaptation of Mechanistic 2003 Guide for Design of MN-Low Volume	89,900	7,277	68,069		
	PCC	•		,		
804	Determ of Low Temp Fracture Properties on 3 Mn/Road Asphalt	60,914		60,914		
205	Mixtures		47.000			
805	Safety Impacts of Street Lighting at Isolated Rural Intersections –	51,180	17,060	10,072		
808*	Phase II Pavement Rehabilitation Selection	102,000		30,600	20,400	
	Research Tracking for Local Roads funded thru CY08	60,000		20,000	20,400	20,000
	•			-	20,000	20,000
810*	Coal Ash Utilization in Gravel Roads	212,995		149,280	04.000	
812	Resilient Modulus & Strength of Base Course with Recycled Asphalt Pavements	94,000		33,000	61,000	
813	Human-Centered Interventions Twrd Zero Deaths in Rural MN	188,804		188,804		
	Calibration of the 2002 AASHTO Pavement Design Guide for	292,383		126,600		
0.10	Minnesota Portland Cement Concrete Pavements and Hot Mix	232,303		120,000		
	Asphalt Pavements					
817*	Determination of Optimum Time for the Application of Surface	226,000		93,000		
	Treatments to Asphalt Concrete Pavements					
822	Crack Sealing & Filling Performance	72,802		72,802		
823	The Road to a Thoughtful Street Tree Master Plan	30,450		15,225	15,225	
824	Dev of Improved Proof Rolling Methods for Roadway Embankment	110,000		44,825	50,000	15,175
	Construction thru CY07					
825*	Perf Monitoring of Olmsted CR 177/104 & Aggregate Base Material	100,000				
826	Update CY09 \$40K Appropriate Use of RAP	30,789	5770	9,624	15,395	
827	Investigation of Winter Pavement Tenting	25,126		25,126	13,393	
828	Local Road Material Properties and Calibration of MnPAVE	56,000		56,000		
829	Validation of DCP/LWD Moisture Specs for Granular Material	32,700		32,700		
830	Evaluating Roadway Subsurface Drainage Practices			,	50,082	9,350
831*	Investigation of Stripping in MN Class 7 (Rap) & Full Depth	186,734 81,656		127,302 40,828	30,082	9,330
031	Reclamation Base Material	01,000		40,020		
832*	Volume Warrants for Right Turn Lanes	55,000		15,000		
	Design Tool for Controlling Runoff & Sediment from Highway	89,000		10,000	34,500	
	Construction	55,555		10,000	- 1,222	
834	Assessment of Storm Water Management Practices on the Water	138,000		87,728	50,272	
	Quality of Runoff					
	Best Use of Cone Penetration Testing	55,000		22,000	33,000	
836	Design Procedures for Bituminous Stabilized Road Surfaces for low	60,080		32,137	27,943	
007	Volume Roads	FF 000	04.000	20.000		
837	Mn/Road Low Volume Road Reconstruction Assistance	55,000	24,980	30,020		
	Petroleum Glass Spun Glass Paving Fabric	30,000		10,000	10.001	
839	Warrants for Roundabouts	39,988		19,994	19,994	10.000
840	Performance of PG 52-34 Oil thru CY 08	76,200		40,000	20,000	16,200
841	Long-Term Maintenace Effect on Hot Mix Asphalts	43,257		14,419	28,838	
842	Best Practices for Dust Control on Agg Surfc Road	75,000		18,750	37,500	18,750
843	Predicting Bumps in Overlays	64,540		19,680	25,320	19,540

### 3/27/2006

# 2006 Local Road Research Board Program

INV	TITLE	PROJECT TOTAL	2005 Spent	2006	2007	2008
844	Update Vehicle Classification for CR Pavement Dsgn	54,094		37,094	17,000	-
	Documentation of Crash Characteristics & Safety Strategies at horizontal curves on Rural Highways	70,373		46,000	24,373	
	Hydraulic, Mechanical, and Leaching Characteristics of Recylcled Materials	135,000		33,750	67,500	33,750
847	Use of Fly Ash for Reconstruction of Bitum Roads	170,056		42,514	85,028	42,514
848	Warning Efficacy of Active Passive Warnings for Unsignalized Intersection & Mid-Block Pedestrian Sidewalks	119,000		50,000	69,000	
	Environmental Effects of De-Icing Salt on Water Quality	94,000		68,000	26,000	
850	Mechanistic Modeling of DCP Test	105,000		62,200	42,800	
851	Allowable Axle Loads on Pavements	110,000		30,000	55,000	25,000
852	Subsurface Drainage Manual for Pavements in MN	71,638		23,879	47,759	
853	Development of Flexural Vibration Equipment PhsII	52,980		47,682	5,298	
	Pavement Peformance/Failure under Overweight Farm Loads- Pooled Fund Project	475,000		35,000	35,000	35,000
855*	A Property-Based Spec for Coarse Aggregate in Pavement Apps	65,550		21,850	10,925	
	Investigation of In-Place Asphalt Film Thickness and Performance of MN Hot Mix Asphalt Mixtures	78,000		26,000	13,000	
857*	Report & Analysis of Effects of Seasonal and Climatic Changes on Ride Quality as Observed in MnROAD Low & High Volume Roads	79,500		39,750		
858*	Crack & Concrete Deck Sealant Performance-Pooled Fnd Prjct	75,000		37,500		
859	Toward Next Generation of Traffic Counting & Predicition Methods	55,000		18,000	37,000	
860	Compaction Specifications for Unbound Materials	105,000		52,500	52,500	
861	Best Mgmt Practices for Pavement Preservation of Hot mix Asphalt	71,050		35,525	35,525	
862*	Real Time Arterial Performance - co-fund W/ITS	140,000		10,000	60,000	
863*	Optimal Timing of Preventive Maintenance for Addressing Environmental Aging in HMA Pavements- Pooled Fund Prict	335,000		75,000		
864*	Recycled Asphalt Pavements-Pooled Fund Prjct	350,000		75,000		
865*	Low Temp Cracking in Asphalt Phase II-Pooled Fund Prjct	400,000		100,000		
866*	Recycled Unbound Pavement Materials-Pooled Fund Prjct	525,000		75,000		
997	TERRA Board Support	Ongoing		30,000		12,500
998	Operational Research Program	Ongoing	33,000	70,000	70,000.00	70,000
999	Program Administration	Ongoing	331,400	250,000	250,000.00	250,000
	TOTALS		\$1,685,205	\$4,534,709	2,771,177.00	1,762,779.00

# Footnotes from Page 1 & 2:

\*Projects co-funded from other sources

# **Funding Approval Notes:**

INV 822 -836 approved 12/2004 for 2005 Program

INV 837 - Apprvd 3/05 and increase approved of \$15K 3/16/06

INV 838 - Apprvd 6/05

INV 839 -858 approved 12/2005 for 2006 Program

INV 859 -866 & 997 Approved 3/16/06 for 2006 Program

INV 999 - Increase approved of \$30K 3/16/06

# 2006 SUMMARY:

Funds Allotted for 2006 (rcv July 07)	\$ 2,352,127	\$556,984	City
		1,795,143	County
TOTAL AVAILABLE	\$ 2,352,127		
Funded Projects in 06 (includes new & old)	4,534,709		
Projects Under Contract & Encumbered	-2,358,097		
TOTAL NEED	2,176,612		
2006 Funds Available for Programming	\$175,515		
(Total Available - Total Need)	ψ110,010		

# <u>COUNTY HIGHWAY TURNBACK</u> <u>POLICY</u>

# 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

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 2005 and updated in the needs in 2006

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

# **Metro District**

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

Anoka Maplewood Roseville
Arden Hills Mound Shorewood
Columbia Heights New Brighton South Saint Paul
Crystal New Hope Spring Lake Park
Edina North Branch Stillwater

Falcon Heights North St. Paul St. Louis Park
Fridley Oak Grove St. Paul
Golden Valley Orono West St. Paul
Hopkins Richfield White Bear Lake

Mahtomedi Robbinsdale

### **Outstate**

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

Northfield Sartell

St. Cloud

# Outstate

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

Rochester

# **Outstate**

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

Brainerd

# **Outstate**

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

Bemidji Hibbing Saint Joseph
Big Lake Hutchinson Saint Peter
Cambridge La Crescent Sauk Rapids
Chisholm Lake City Thief River Falls

DuluthLitchfieldVirginiaElk RiverNorth MankatoWaite ParkFergus FallsOwatonnaWasecaGlencoeRed WingWinona

Hermantown Redwood Falls

# 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 2005 and updated in the needs in 2006

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 2006 and be updated in the needs in 2007

Alexandria Stewartville Worthington

Cloquet Willmar

Duluth counts 1/4 of the city each year.

N:\MSAS\Word Documents\2006\June 2006 Book\Traffic Counting Schedules.doc

# CURRENT RESOLUTIONS OF THE MUNICIPAL SCREENING BOARD

June 2006

Bolded wording (except headings) are the most recent revisions made by the Municipal Screening Board

**BE IT RESOLVED:** 

# <u>ADMINISTRATION</u>

**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.

# <u>Appearance Screening Board</u> - 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 \$559,118 (not to exceed 1/2 of 1% of the 2005 MSAS Apportionment sum of \$111,823,549) shall be set aside from the 2004 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.

# 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.

# <u>Greater Than Minimum Width</u> (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 31<sup>st</sup> 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 Price	ces (Reviewed Annually)		
Right of Way (Needs Only)			\$98,850 per Acre
Grading (Excavation)			\$4.25 per Cu. Yd.
Base:			
	Class 5 Gravel	Spec. #2211	\$8.15 per Ton
	Bituminous	Spec. #2350	\$35.00 per Ton

Surface:				
	Gravel	Spec. #2118	\$5.70 per Ton	
	Bituminous	Spec. #2350	\$35.00 per Ton	
Shoulders:				
	Gravel	Spec. #2221	\$14.25 per Ton	
Miscellaneous:				
	Storm Sewer Construction		\$265,780 per Mile	
	Storm Sewer Adjustment		\$85,100 per Mile	
	Special Drainage (rural segments only)		\$40,000 per Mile	
	Street Lighting		\$82,500 per Mile	
	Curb & Gutter Construction		\$8.75 per Lineal Foot	
	Sidewalk Construction		\$25.00 per Sq. Yd.	
	Project Development		20%	
Removal Items:				
	Curb & Gutter		\$2.75 per Lineal Foot	
	Sidewalk		\$5.50 per Sq. Yd.	
	Concrete Pavement		\$5.40 per Sq. Yd.	
	Tree Removal		\$250.00 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

# **<u>Bridge Width & Costs</u>** - (Reviewed Annually)

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

Bridge Unit Costs	
Bridges 0 to 149 Feet long	\$80.00 per Sq. Ft.

Bridges 150 to 499 Feet long	\$80.00 per Sq. Ft.
Bridges 500 Feet and Over	\$80.00 per Sq. Ft.

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

# "Non-existing" bridge costs - Revised October 1997

That the Construction Needs for all "non-existing" bridges and grade separations be removed from the Needs Study until such time that a construction project is awarded. At that time a Construction Needs adjustment shall be made by annually adding the total amount of the structure cost, project development cost and construction engineering that is eligible for State Aid reimbursement for a 15-year period excluding all Federal or State grants. Project Development costs, at the current percentage, shall be included with all Non Existing Bridge Needs.

# RAILROAD CROSSINGS

# Railroad Crossing Costs - (Reviewed Annually)

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

Railroad Grade Crossings		
Signals - (Single track - low speed)	\$150,000 per Unit	
Signals and Gates (Multiple Track – high speed)	\$187,500 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	\$1,650 per Mile	\$2,735 per Mile

Parking Lanes: Segment length times number of parking lanes times cost per mile	\$1,650 per Mile	\$1,650 per Mile
Median Strip: Segment length times cost per mile	\$550 per Mile	\$1,065 per Mile
Storm Sewer: Segment length times cost per mile	\$550 per Mile	\$550 per Mile
Traffic Signals: Number of traffic signals times cost per signal	\$550 per Unit	\$550 per Unit
Minimum allowance per mile is determined by segment length times cost per mile.	\$5,475 per Mile	\$5,475 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.

<u>Unencumbered Construction Fund Balance Adjustment</u> - 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 31<sup>st</sup> 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.

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

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

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

When "After the Fact" Needs are requested for right-of-way projects that have been funded with local funds, but qualify for State Aid reimbursement, documentation (copies of warrants and description of acquisition) must be submitted to the State Aid Engineer.

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

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

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

That to provide an advance payment for the coming year's additional maintenance obligation, a Needs adjustment per mile shall be added to the annual Construction Needs. This Needs adjustment per mile shall produce sufficient apportionment funds so that at least \$7,200 in apportionment shall be earned for each mile of trunk highway turnback on Municipal State Aid Street System.

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

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# 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.
- 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.

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