

# **2010 MUNICIPAL SCREENING BOARD DATA**



**2009 CEAM Honorable Mention  
Project of the Year - City of St. Michael**



## **JUNE 2010**



### **St. Michael One Way Pair Project:**

The St. Michael One-Way Pair project was an innovative and cost-effective design that addressed increasing traffic congestion on two major arterial roadways bisecting the City's historic downtown area. The unique one-way pair of roadways proposed that the east-west segment of Trunk Highway 241/County State Aid Highway 35 be rebuilt as a two-lane one-way roadway carrying westbound traffic. A new two-lane eastbound one-way roadway was built approximately one block to the south. The unconventional one-way pair option was thoroughly studied and ultimately selected because it minimized impacts to adjacent property owners, increased pedestrian safety, provided a reasonable alternative to accommodate significant traffic volume increases, and was compatible with the desired image of the future downtown. The thoughtful planning and design of this project involved coordination with multiple agencies, significant right of way acquisition, multiple funding sources (Federal, State, County, Municipal State Aid, and Local) and a tremendous amount of public input and education. It was also very important to provide uninterrupted access to businesses and residents during construction.

The innovative one-way pair concept was initially controversial; however, the extensive public involvement and education process led to a broad community consensus. In addition to its transportation benefits, a very important safety aspect of the project also included separating the regular school bus loading area from the parent drop off area to increase safety at the elementary school (see picture below). Since the project's completion, the school district has reported a noticeable increase in safety and circulation since school started in fall 2009. Pedestrian crossing safety improvements have also been noted due to the reduction in traffic created by splitting the highway in half and allowing traffic to flow in only one direction.

The One-Way Pair project was originally planned to be constructed in phases over 15 years. Due to extensive coordination and advanced funding from multiple sources (including Municipal State Aid), the project was completed 11 years ahead of schedule. This highly successful and cost effective project will serve the community well for decades to come.



Thank you to Steve Bot, City Engineer for the City of St. Michael for providing this aerial photo for our cover.





# Memo

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

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

**Date: April 30, 2010**

**To: Municipal Engineers  
City Clerks**

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

**Subject: 2010 Municipal Screening Board Data booklet**

**Enclosed is a copy of the June 2010 "Municipal Screening Board Data" booklet.**

**The data included in this report will be used by the Municipal Board at its May 25 and May 26, 2010 meeting to establish unit prices for the 2010 Needs Study that is used to compute the 2011 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 (651) 366-3815.**

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



# The State Aid Program Mission Study

## Mission Statement:

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

## Program Goals:

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

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

## Key Program Concepts:

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

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

- A. Is projected to carry a relatively heavier traffic volume or is functionally classified as collector or arterial
- B. Connects towns, communities, shipping points, and markets within a county or in adjacent counties; provides access to rural churches, schools, community meeting halls, industrial areas, state institutions, and recreational areas; serves as a principal rural mail route and school bus route; or connects the points of major traffic interest, parks, parkways, or recreational areas within an urban municipality.
- C. Provides an integrated and coordinated highway and street system affording, within practical limits, a state-aid highway network consistent with projected traffic demands.

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

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

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





# 2010 MUNICIPAL SCREENING BOARD DATA

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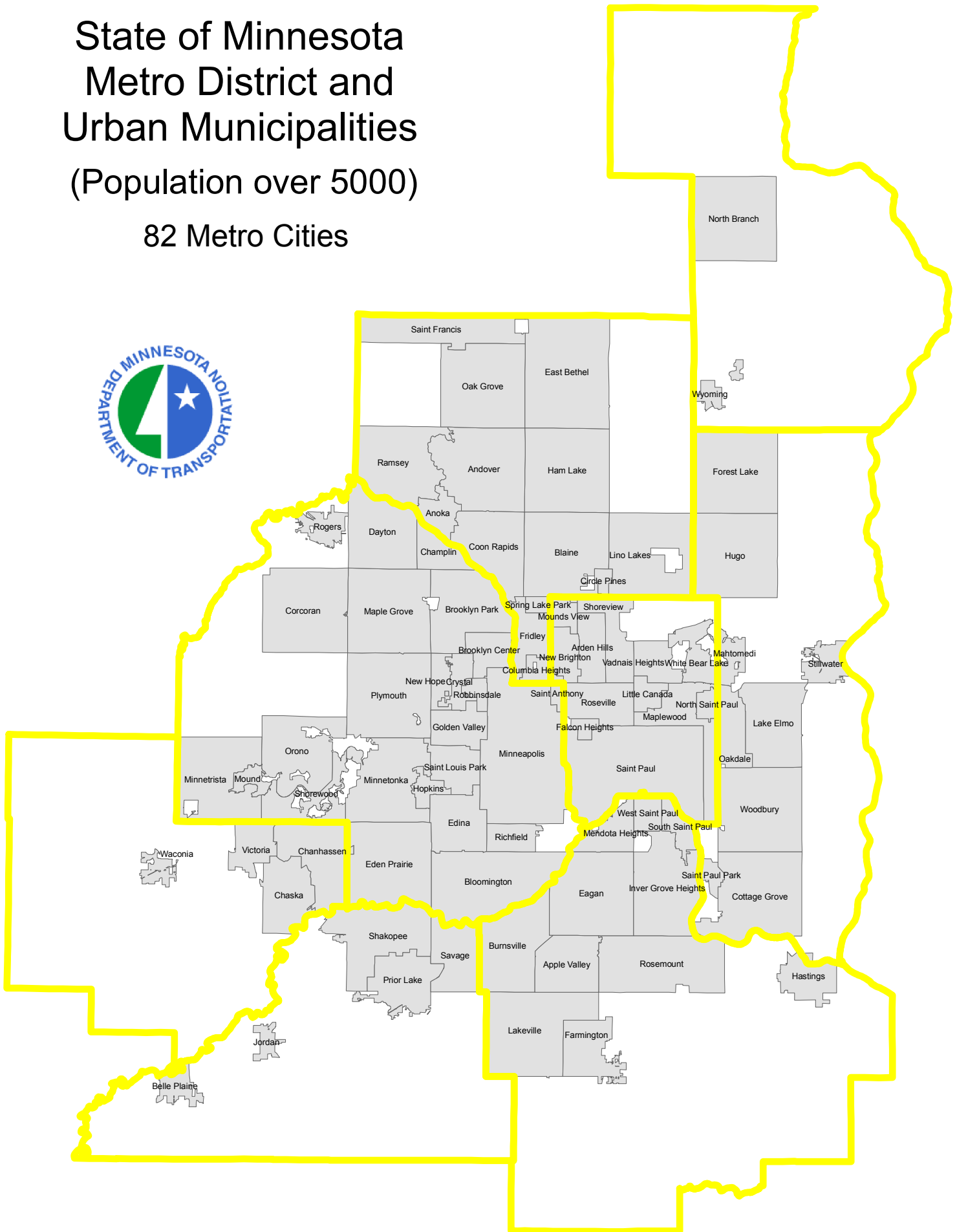
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# State of Minnesota Metro District and Urban Municipalities (Population over 5000)

82 Metro Cities

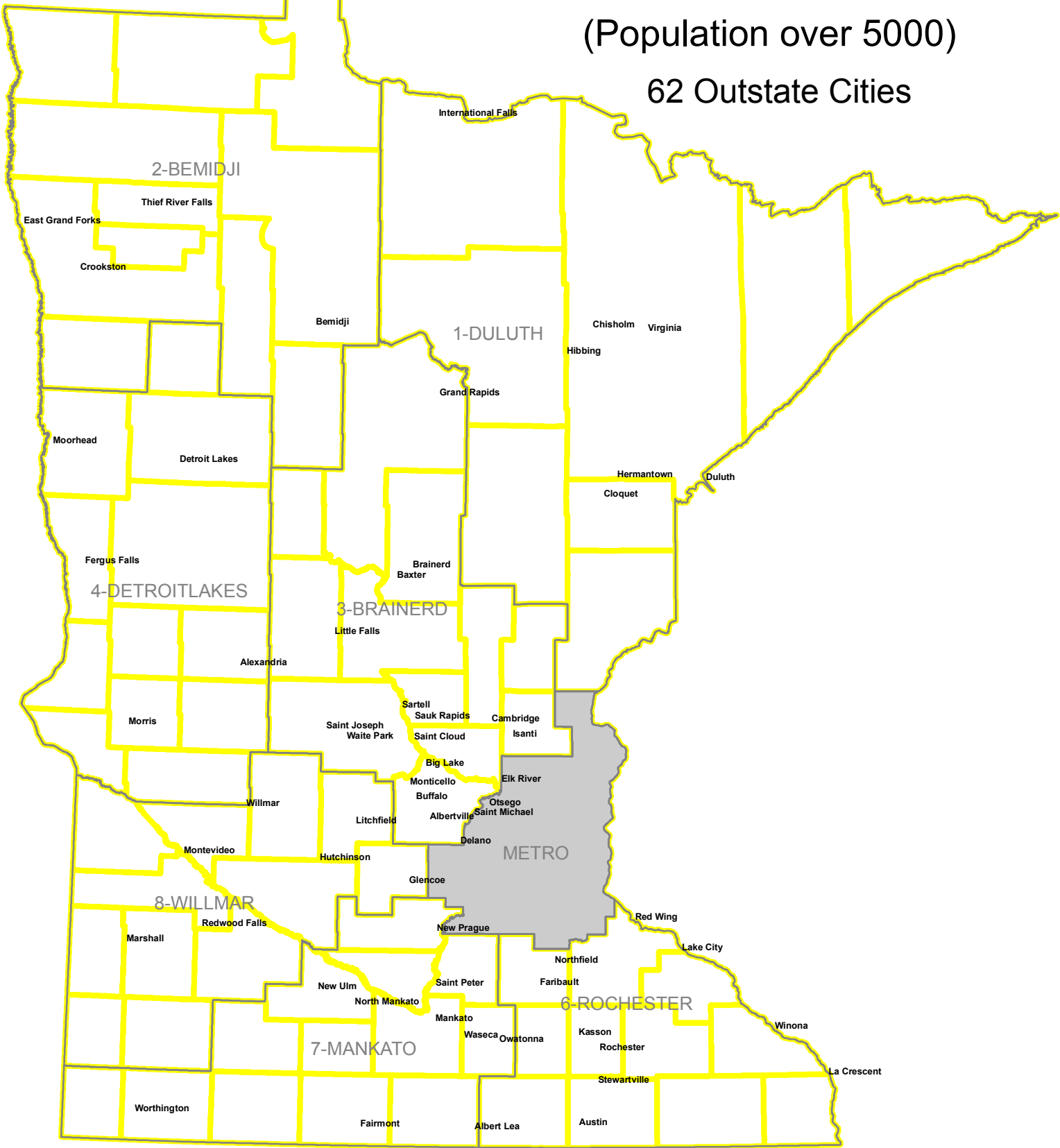




# State of Minnesota MnDOT Districts and Urban Municipalities

(Population over 5000)

62 Outstate Cities



# 2010 MUNICIPAL SCREENING BOARD

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22-Apr-10

OFFICERS			
Chair	Jeff Hulsether	Brainerd	(218) 828-2309
Vice Chair	Jean Keely	Blaine	(763) 784-6700
Secretary	Kent Exner	Hutchinson	(320) 234-4212

MEMBERS				
District	Years Served	Representative	City	Phone
1	2008-2010	Jim Prusak	Cloquet	(218) 879-6758
2	2009-2011	Greg Bopppe	East Grand Forks	(218) 773-1185
3	2009-2011	Steve Bot	St. Michael	(763) 497-2041
4	2010-2012	Tim Schoonhoven	Alexandria	(320) 762-8149
Metro-West	2010-2012	Tom Mathisen	Crystal	(763) 531-1160
6	2010-2012	David Strauss	Stewartville	(507) 288-6464
7	2008-2010	Jon Rippke	North Mankato	(507) 387-8631
8	2009-2011	Kent Exner	Hutchinson	(320) 234-4212
Metro-East	2008-2010	Russ Matthys	Eagan	(651) 675-5637
<u>Cities</u>	Permanent	Cindy Voigt	Duluth	(218) 730-5200
<u>of the</u>	Permanent	Don Elwood	Minneapolis	(612) 673-3622
<u>First Class</u>	Permanent	Paul Kurtz	Saint Paul	(651) 266-6203

ALTERNATES				
District	Year Beginning		City	Phone
1	2011	David Salo	Hermantown	(218) 727-8796
2	2012	Dave Kildahl	Thief River Falls	(218) 281-6522
3	2012	Brad DeWolf	Buffalo	(320) 231-3956
4	2013	Vacant		
Metro-West	2013	Rod Rue	Eden Prairie	(952) 949-8314
6	2013	Jon Erichson	Austin	(507) 437-7674
7	2011	Troy Nemmers	Fairmont	(507) 625-4171
8	2012	John Rodeberg	Glencoe	(952) 912-2600
Metro-East	2011	Mark Graham	Vadnais Heights	(651) 204-6050

## 2010 SUBCOMMITTEES

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

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

NEEDS STUDY SUBCOMMITTEE	UNENCUMBERED CONSTRUCTION FUNDS SUBCOMMITTEE
<p>Deb Bloom, Chair Roseville (651) 792-7000 Expires after 2010</p> <p>Terry Maurer Elk River (763) 635-1051 Expires after 2011</p> <p>Katy Gehler-Hess Northfield (507) 645-3006 Expires after 2012</p>	<p>Chuck Ahl, Chair Maplewood (651) 770-4552 Expires after 2010</p> <p>Mel Odens Willmar (320) 235-4202 Expires after 2011</p> <p>Shelly Pederson Bloomington (952) 563-4870 Expires after 2012</p>

**2009 MUNICIPAL SCREENING BOARD  
FALL MEETING MINUTES  
October 27 & 28, 2009**

**Tuesday Afternoon Session, October 27, 2009**

**I. Opening by Municipal Screening Board Chair Shelly Pederson**

The 2009 Fall Municipal Screening Board was called to order at 1:10 PM on Tuesday, October 27, 2009.

**A. Chair Pederson introduced the Head Table and Subcommittee members:**

Shelly Pederson, Bloomington - Chair, Municipal Screening Board  
Jeff Hulsether, Brainerd - Vice Chair, Municipal Screening Board  
Rick Kjonaas, Mn\DOT – Deputy State Aid Engineer  
Marshall Johnston, Mn\DOT - Manager, Municipal State Aid Needs Unit  
Craig Gray, Bemidji - Chair, Needs Study Subcommittee (Not present.)  
Mike Metso - Chair, Unencumbered Construction Funds Subcommittee  
(Arrived later Tuesday afternoon.)  
Chuck Ahl, Maplewood - Past Chair, Municipal Screening Board  
Mel Odens, Willmar - Past Chair, Municipal Screening Board  
Jean Keely, Blaine - Secretary, Municipal Screening Board

**B. Secretary Keely conducted the roll call of the members present:**

District 1	Jim Prusak, Cloquet
District 2	Greg Boppre, East Grand Forks (Not present due to a family emergency.)
District 3	Steve Bot, St. Michael
District 4	Bob Zimmerman, Moorhead
Metro West	Jean Keely, Blaine
District 6	Katy Gehler-Hess, Northfield
District 7	Jon Rippke, North Mankato
District 8	Kent Exner, Hutchinson
Metro East	Russ Matthys, Eagan
Duluth	Cindy Voigt
Minneapolis	Don Elwood
St. Paul	Paul Kurtz

**C. Recognized Screening Board Alternates:**

District 6	David Strauss, Stewartville
Metro West	Tom Mathisen, Crystal
District 4	Gary Nansen, Detroit Lakes (Not present.)

D. Recognized Department of Transportation personnel:

Julie Skallman	State Aid Engineer (Wednesday meeting only.)
Patti Loken	State Aid Programs Engineer
Walter Leu	District 1 State Aid Engineer
Lou Tasa	District 2 State Aid Engineer
Kelvin Howison	District 3 State Aid Engineer
Merle Earley	District 4 State Aid Engineer
Steve Kirsch	District 6 State Aid Engineer
Doug Haeder	District 7 State Aid Engineer
Tom Behm	District 8 State Aid Engineer
Greg Coughlin	Metro State Aid Engineer
Mike Kowski	Assistant Metro State Aid Engineer
Julee Puffer	Municipal State Aid Needs

E. Recognized others in Attendance:

Larry Veek, Minneapolis  
Jim Vanderhoof, St. Paul  
Patrick Mlakar, Duluth  
Glenn Olson, Marshall  
Dave Sonnenberg, Chair of CEAM Legislative Committee  
Fausto Cabral, District 6 Assistant State Aid Engineer

**II. Review of the 2009 Municipal State Aid Street Needs Report Booklet.**

- A. Chair Pederson stated that the June 2009 Screening Board meeting minutes are presented for approval (Pages 20-35). The minutes were reviewed at all District meetings. Screening Board Member Matthys said that he was contacted by the City of Rosemount that their non existing route information that had been discussed at the Spring Screening Board was not reported accurately and that their issue referenced in the minutes on Page 26 had been previously resolved. Chair Pederson said that a note could be added to the end of the minutes as per Rosemount's request. There were no additional comments or questions; therefore the minutes were not read in full.

**Motion by Gehler-Hess, seconded by Bot to approve the minutes as presented. Motion carried unanimously.**

- B. Introductory information in the booklet (Pages 1-19)

Johnston stated that the booklet was reviewed at each District meeting. There were no new Cities added to the system this year. There are still 144 Cities sharing the allocation distribution. Three Screening Board Members will be completing their term with this meeting. There were no questions on this section of the booklet.

C. Unencumbered Construction Funds (UCF) Subcommittee (Minutes on Pages 39-40)

a. Johnston stated that he presented to the UCFS a history of excess balance adjustments and several different comparison options for adjustments that are listed on Pages 41-45. Johnston went over some of the examples and comparisons on the spreadsheets for Screening Board Members. He stated that this information was also discussed at each District Prescreening Board meeting.

Chuck Ahl, a member of the UCFS, reported that the \$1M construction fund balance seems to be working. It is hard to convince Legislators that there is a need for additional dollars when the book shows a high fund balance. The Committee discussed if \$1M is too low, then \$2M seemed too high. A lot of people say stop changing the rules. The Committee discussed that if they recommend an excess balance change to \$1.25M, the balance could be reviewed again in a couple of years. **The UCFS recommended to the Screening Board an increase in the excess balance floor to \$1,250,000, but leave the multiplier at 3X.**

Russ Matthys, Metro East Screening Board Member (SBM) stated that a change to \$1.5M was the recommendation from the East and West Metro District. There was discussion that the original \$1M was the cost of one mile of new road construction and the Metro District felt that \$1.5M would be more appropriate for today's construction.

Katy Gehler-Hess, District 6 SBM stated that her District supports a change to \$1.5M. This will help smaller Cities build a fund balance for a larger project without penalty. It is harder for small Cities to have the resources to come up with extra construction cost, especially with volatile construction prices.

Jon Rippke, District 7 SBM stated that with construction costs going up over time, the \$1.25M is adequate for the current market. This value should be looked at on a 3 to 5 year basis. Understands why the Metro District might prefer \$1.5M, but are satisfied to accept the recommendation.

Steve Bot, District 3 SBM stated that \$1.5M is preferred. Each City needs to manage their fund balance to keep it down. With higher construction expenses, the higher balance would be appropriate. Could look at raising the advancement amount to construct larger projects.

Kent Exner, District 8 SBM stated that his District is comfortable with \$1.25M as outstate project costs run less than metro costs. Felt that \$1.25M step would be appropriate at this time.

Jim Prusak, District 1 SBM stated that his District is good with \$1.25M with a 3X multiplier.



Cindy Voight, Duluth SBM said she prefers \$1.5M and hope it sticks for five years. Doesn't want the value changed too often. Urban reconstruction costs keep going up and thinks \$1.5M is a better idea.

Johnston said that there was a couple of Districts that discussed why we need an adjustment. This hasn't been brought forward for additional discussion.

b. Johnston provided the UCFS an update on the issue of non-existing segments on the Municipal State Aid system. Julie Skallman sent out a letter to all MSAS Cities and it is included in the booklet on Page 46-47. Some Cities have corresponded with their District State Aid Engineer (DSAE). Some Cities will be revoking routes and others are showing justification for their non-existing routes to stay on their system. Johnston stated that December, January, and February is a good time for Cities to review their MSA system. At the Spring Screening Board meeting, Johnston will report on how many non-existing routes were in the system before the letter was sent out and how many remain after the letter. He said to use the website listed in Skallman's letter on Page 47 to review non-existing route information for your City.

D. Tentative 2010 Population Apportionment (Pages 49-56)

Johnston went over this section of the booklet. He stated that the estimates are based on January of 2009 allocation numbers. This calculates to just over \$16.60 per person in each City in State Aid allocations. This is the first half of the allocation.

E. Effects of the 2009 Needs Study Update (Pages 57-60)

Johnston went over the tabulation of the effects of the 2009 MSAS Needs Study update. North Branch had the highest increase because they justified to their DSAE that their routes should be considered for urban improvements rather than rural standards. Minneapolis and St Paul both went up due to the size of their systems. Circle Pines shows a significant decrease due to the construction of a large percentage of their small system.

F. Mileage, Needs and Apportionment (Pages 61-64)

Johnston explained that the allocation amount for 2010 is unknown at this time, therefore the booklet was developed utilizing the 2009 apportionment. The 2010 apportionment estimate is \$12.89/\$1000 of adjusted needs. Needs are increasing faster than the money each City receives. This year there are the same number of MSA Cities. On Page 64, Grand Rapids has a large difference in mileage due to a County Road turnback and designation of mileage. Owatonna also had a County Road turnback and Brainerd designated mileage this year.

G. Itemized Tabulation of Needs (Pages 65-69)

Johnston reported that the overall average needs cost per mile is \$1,242,445. The overall statewide apportionment needs total is just under \$4.8 billion.

H. Tentative 2010 Construction Needs Apportionment (Pages 70-76)

Johnston stated that the 2009 adjusted construction needs on Page 71-73 are an estimate for the January 2010 apportionment. The unencumbered balance as of December 31, 2009 will be used for the actual 2010 apportionment.

I. Adjustments to the Construction Needs (Pages 79-99)

Johnston indicated that on Page 79-81, the unencumbered construction fund balance adjustments can still be modified until December 31<sup>st</sup> if payment requests are received to bring fund balances down. As of September 1<sup>st</sup>, the unencumbered fund balance is just over \$83M. There are ten Cities that currently exceed three times their January construction allotment and \$1M. This would be redistributed to 82 Cities with less than one time their construction balance in their account. Johnston noted that Ham Lake has a positive and negative adjustment shown due to previous Screening Board actions, but also a large remaining balance. He also stated that Redwood Falls should be removed from the chart on Page 88 due to their having taken care of their bond. On Page 89, Johnston noted that Thief River Falls had a new bridge added. On Page 90, Minneapolis should be removed from the spread sheet as it was a miscoded item. Johnston noted that on Page 91, right of way adjustments are the largest adjustment to the needs. He stated that if a City uses MSA or local dollars on the MSA system for right of way, it could be included in these adjustments. Johnston noted that six Cities are receiving after the fact retaining wall needs as indicated on Page 94. Pages 95-98 list individual adjustments for Ham Lake, Orono (see Page 75 for the new column added to the spread sheet for actual dollar adjustment), and multiple Cities that received a correction to their railroad crossings that were not updated in the January 2009 allocations. Page 99 indicates the Cities that receive trunk highway turnback maintenance allowances.

J. Recommendation to the Commissioner (Pages 100-102)

Johnston noted that the Screening Board members will be asked to sign the letter to Commissioner Sorel on Page 100 at tomorrow's meeting. He pointed out that the third paragraph indicates that the money needs as listed will be modified as required when the final numbers are calculated at the end of the year.

K. Tentative 2010 Total Apportionment, Comparisons, and Apportionment Rankings (Pages 103-112)

There was no additional discussion on this section of the book. This book does not contain a comparison of this year's needs to last year's needs. Need to compare last year's book to this year's book.

#### L. Other Topics

- a. Certification of MSAS system as Complete (Pages 115-117)  
Four Cities have certified that their MSA System is complete. They must be recertified every two years. To qualify, they must have 100% of their MSA routes built to state aid standards. The portion of the dollars that they receive that is based on their population can be spent on their 80% of local roads. The formula is on Page 115. Several Cities have applied to be considered complete, but have been denied because all of their MSA routes did not meet MSA standards. Dave Sonnenberg asked if we have a process for if a City is taken off of the list. Johnston stated that there is not a process in place, but it is something that should be considered.
- b. History of the Administration Account (Page 118)  
In 2010, the value will raise from 1 1/2% to 2% of total funds available to be set aside for the administration of State Aid. Any excess dollars at the end of the year go back into the MSA account for the next year.
- c. Research Account (Pages 119-120)  
This item will require Screening Board action at tomorrow's meeting. The amount recommended each year to the Commissioner shall not exceed 1/2 of 1% of the preceding apportionment to go into the Local Road Research Board. The proposed allotment for 2010 is \$608,806.
- d. Transportation Revolving Loan Fund (Pages 121-122)  
Last year, the Screening Board recommended to the Commissioner that zero MSA dollars be put into this fund. At tomorrow's meeting, the Screening Board will be asked how much if any MSA dollars should be put in this fund for 2010. Chair Pederson said that the Metro District recommended that zero dollars should go into this fund. Rippke stated that District 7 also recommended zero dollars.
- e. County Highway Turnback Policy (Pages 123-124)  
There was no discussion on this item.
- f. Current Resolutions of the Municipal Screening Board (Pages 125-134)  
The only changes to this section are the updated unit costs approved at the Spring Screening Board meeting on Pages 130-131.

### III. Other Discussion Items

- A. State Aid Report – Rick Kjonaas reported that the Counties needs dollars are divided 80% to rural and 20% to metro. This has always been a discussion item and the Counties will be looking at how their needs dollars are calculated for distribution. The Counties are considering a new formula for needs calculations and have set up a needs task force. The task force is proposing to simplify their system by having each County look back at the last five year

history of their system and calculate the average cost per mile to construct their low, medium, and high volume urban and rural roads. Each County will be calculating their own unique County unit costs. They will multiple their unique unit costs per their total of each volume of road type to calculate a net asset value for their road system. That will be their competitive needs number prepared on an excel spreadsheet. Kjonaas said that the Counties will probably move to this new system in 2011 or 2012 and this will provide more valuable information to the Legislature. If the Counties stop utilizing the existing software, the maintenance of the existing 8 to 10 year old system will fall to the Cities. The last system cost \$2M. The existing software is already a problem to update and is costly to maintain. The cost will keep going up.

Kjonaas also reported that small Cities have called about annexation of adjacent townships to get them to the size that will qualify them for MSA funds. If smaller Cities become MSA eligible, they will lose their County State Aid funds. There are ten Cities that are over 4500 in population. This is a growing force. This should be considered in discussions of dilution of the system. Small Cities continue to go after existing County and Municipal State Aid funds. Need to figure out how the political need can be addressed.

Rippke asked if smaller Cities were satisfied with their County State Aid dollars. Kjonaas stated that their lobbyist state that they are not satisfied. There are 709 Cities in the League of Greater Minnesota Cities Under 5000 group.

Kjonaas tied the two topics together. He said Cities have tried to simplify needs for a long time. He said the primer that was created didn't draw on the needs data as much as it could have. There are 77 Cities under 15,000 population. He said the Cities may want to look at the Counties new system. If you look at all Cities under 15,000, then maybe they wouldn't have to report needs each year? It would simplify the administration of the system. A Microsoft based system would also be an easy transition. He suggested that a task force could be formed in the next year or so or an existing committee could look at the Counties proposed system for calculating needs.

Ahl stated that we do a lot of work now on how to slice the pie. Kjonaas is hitting on the point that we are certifying that these are the needs to distribute our money. We have \$83M sitting here and Ahl said we need to spend the dollars given to us and do a better job of telling our story.

Chair Pederson suggested that we have two subcommittees that might be a good group to work on these issues. The committee members have all spent time on the Screening Board and have a lot of experience. She said to start thinking about these issues for additional discussion tomorrow and at District meetings in the Spring.

- B. Legislative Update - Dave Sonnenberg provided an update. He stated that the League of MN Cities (LMC) just sent out a link to their draft policies and

are asking for comment. The CEAM Legislative Committee will be meeting to discuss these early in 2010.

The LMC and CEAM are bringing forward several items for additional discussion:

- Looking at private underground utility responsibilities – recommend that if contractors directional drill, that they expose all sewer, water, and storm utilities. If records are not adequate enough to do a good job of locating private services, that responsibility should fall to the contractor.
- Mn/DOT Design Build requirement that Cities relocate all City utilities at City expense.
- Grant local authorization to use photo enforcement technologies.
- Impaired waters – clean water revenue source.
- Urban forest management – state matching grant program.
- Statutory approval time line - repeal of the 60 day rule or at least increase 60 day time limit to 90 days.
- Grant local authority to create a transportation utility.
- Right of way management – private companies want a response by a certain time or they can just go in.
- Adequate Funding for Transportation – Need MVST split of 60% roads and 40% transit to become permanent.
- Storm water funding that Cities have to contribute to State projects.
- Sales tax exemption for local project construction.
- Development impact fees.
- No County turnback can occur without equivalent turnback funds or transfer of authority to tax for that roadway.
- Mn/DOT maintenance of Trunk Highways – mowing and trash cleanup.
- Local road and transit funding for Cities under 5000 population.

There were no additional topics raised for discussion.

**IV. Motion to adjourn until 8:30 AM Wednesday morning by Bot and seconded by Matthys. Motion carried unanimously.**

Meeting was adjourned at 3:40 PM.

**2009 MUNICIPAL SCREENING BOARD  
FALL MEETING MINUTES  
October 27 & 28, 2009**

**Wednesday Morning Session, October 28, 2009**

- I. Chair Pederson called the session to order at 8:40 AM.

Chair Pederson stated that we will review Tuesday's business and take action on the following items:

- A. Recommendation of the Unencumbered Construction Funds Subcommittee (UCFS) to increase the amount in a City's construction account to \$1,250,000 and 3 times its annual construction allotment before receiving the Excess Balance Adjustment (Pages 39-40).

Chair Pederson said that the original resolution is on Page 132 and the motion would be amending the original resolution dollar amount of \$1M (listed in two places in the original resolution) to either \$1.25M or \$1.5M as discussed.

**Motion by Matthys, seconded by Bot to amend the floor of the excess unencumbered construction fund balance adjustment from \$1,000,000 to \$1,500,000.**

Don Elwood, Minneapolis SBM said that the history of this was put in place to lower the balance and we were reminded of our excess balance. From a global perspective, this could result in Cities going back to a higher balance. As more Cities come on line, this will become harder to do and he can not support the ability to go higher.

Paul Kurtz, St Paul SBM said he agrees with Elwood that an increase could risk unencumbered fund balances going up when we are trying to get balances down. He feels this is an excessive amount for smaller Cities. Kurtz questioned what the magic of building one mile at a time is and is it that different between metro and out state? He felt that a reconstruction would be less expensive in out state then in an urban area. He doesn't see the need to increase the dollar value at this point. Kurtz hopes that the ten Cities that are over the 3 times will get their dollars down. He thinks looking at a mile is a lot for a smaller City. He will not support any increase because he doesn't think we have a problem.

Rippke, District 7 SBM said the goal was to change the amount to be able to do the same project they could have done five years ago and still be within the limit. Bringing down the fund balance is a new discussion and was not part of the prescreening board meetings. What is the right thing to do – do projects the same as we could five years ago or spend down the balance?

Matthys, East Metro District SBM said the balance is a new issue. He said that should be a separate discussion from the motion as made. He said in smaller Cities, you don't do projects without MSA funds and \$1.5M is more realistic with less local dollars. He shares the concerns raised by Minneapolis and St Paul, but there are other methods to address these concerns.

Chair Pederson stated that we all have to use MSA funds to partner on County and State projects. Smaller Cities need to save funds for their own projects as well as larger agency projects. Costs more to do projects then it did five years ago.

Voight, Duluth SMB stated that for unencumbered construction funds, one mile seems like a nice reasonable size project for Cities in our state to do in one year. It is more cost effective to do one big project then three smaller projects. It was a good comment about the possibility of this raising the total fund balance, but that should be a separate issue. Smaller Cities need to save longer to be able to build one mile. Maybe there should be more of the funds loaned out to bring the balance down.

Chair Pederson said that Matthys also raised the advanced loan issue yesterday. She suggested that the advanced loan issue and unencumbered funds balance should be kept separate from the motion in front of us today, but do warrant additional discussion. With no further comments, Chair Pederson called for a vote on the motion.

**Motion carried with 9 ayes and 2 nays. Kurtz and Elwood voted no. Motion carries.**

B. Needs and Apportionment Data (Pages 57-102).

Chair Pederson asked if there were any comments or changes to the needs and apportionment data before we sign the letter to the Commissioner.

Glenn Olson asked if Ham Lake's County project had been awarded yet and Johnston confirmed that it had.

**Motion by Zimmerman, seconded by Gehler-Hess to accept the needs and apportionment data as presented. Motion carried unanimously. The original letter to the Commissioner of Transportation was then signed by each Screening Board Member.**

C. Research Account (Pages 119-120).

Chair Pederson stated that in the past, a certain amount of money has been set aside by the Municipal Screening Board for research projects. The maximum amount to be set aside from the Municipal State Aid Street (MSAS) funds is ½ of 1 percent of the preceding year's apportionment sum. There was no additional discussion or comments.

**Motion by Bot, seconded by Rippke to approve an amount of \$608,806 (not to exceed ½ of 1% of the 2009 MSAS Apportionment sum of \$121,761,230) to be set aside from the 2010 Apportionment fund and be credited to the Research Account. Motion carried unanimously.**

D. Transportation Revolving Loan Fund (Pages 121-122).

Chair Pederson asked if there were any comments. If we do not want to have funds placed in this loan fund, then no motion is necessary. There was no discussion or comments.

**Motion by Bot, seconded by Matthys to set zero dollars aside. Motion passed unanimously.**

## **II. Continuation of State Aid Report and Legislative Update**

- A. Rick Kjonaas stated that two snow plow simulators are being installed at the Arden Hills facility and will free up the portable training facility. In the next six months, more time will be available for City staff. It is a good defense in court to be able to report that your snow operators have this training.

Kjonaas also stated that audits have increased thru the State and have gone back to 2006 projects. The Inspector General told Federal Highways to pull finance dollars if materials on the job were not certified. Federal Highways did pull \$500,000 of funds from two County projects until they could prove material specs were met. The Counties just had their funds reinstated last week.

Kjonaas said in the next week he will hear the results of the 2009 audits that were just completed this summer. He has heard there were a lot of findings. He will schedule meetings for December to bring up issues raised in these audits. He said that in two weeks, they will be meeting on the 2008 audit results. Federal Highways doesn't want to pull funding back and are hoping there will be fewer findings in the future.

One thing learned from this process is that the specifications or reports may be unreasonable for local MSA projects. The State Aid Manual is being revised for MSA projects to reduce the requirements that are not appropriate for local jobs. The current schedule of material testing is the same for an Interstate as it is for low volume roads and this is an example of what is being updated.

Bot asked if Cities already know of the 2008 audits. Kjonaas said the 2008 audit Cities are well into their audit documentation. Mn/DOT will be meeting on the 2009 audits next week and he doesn't know who is on the list yet. They will try to wrap up this round of audits before our January conference.



Bot asked if Mn/DOT wants to know about material testing issues that Cities are aware of and Kjonaas said they definitely want to know of issues.

Voight asked about City special provisions that require less material testing. Kjonaas said if special provisions have been approved by the DSAE that should be fine.

Kjonaas said that every one involved needs to be respectful of the auditors and offer as much assistance as possible.

Kjonaas stated that the new Design Build Authority Committee has been set up including Anne Finn of LMC as an exofficio, Carol Duff of Red Wing City Council as a member, Scott Schulte of Coon Rapids City Council as an alternate member, Gary Brown as the CEAM representative, and Richard Freese of Rochester as the CEAM alternate. He said the first meeting will be next week Monday to talk about the processes. It is more complicated than he originally envisioned. The general provisions of the spec book need to be rewritten and the role of Cities to help move the projects forward. They will put out an information paper in the next month or so on the type of projects that they think will be appropriate for the pilot program to get some success stories out there. If you have a small project out there and want to use the process, Mn/DOT will work with you but probably not in the first year. Federal Highways said they might pull funding if federal dollars are on the project unless Mn/DOT does a lot of over sight on the project. Anoka County has a \$30M project on old TH 242 that has federal dollars and Mn/DOT will be working with them to hire consultants to provide the over sight responsibility. If consultants can provide general contracting over sight on the Anoka County project, then maybe Mn/DOT staff can attend once a month meetings. Mn/DOT is hoping that this will be the project that will help build the templates for the process before other projects are considered.

Kjonaas said he wanted to recap what he talked about yesterday. First, the needs program is in need of substantial investment. Given the fact that the Counties are thinking of changing how they are going to calculate their needs, it might make sense to go to a new program. If they do that and you don't, you will be stuck with an albatross. He said that Cities could go to their own simple program or maybe look at some of the things the County is looking at doing. That will be one of the duties for the Committees to look at. Secondly, we all need to find a way to dampen the fire of the Cities under 5000 because they are not going to go away. They want more say so and if they are going to get money distributed to them differently then it is now based on lane miles and population. If Cities are going to write their own program, he can see some logic for a simplified method for Cities under 15,000. Maybe Mn/DOT could meet with the League and look at a similar simplified method for smaller Cities.

Sonnenberg said he talked last night about needs and what the Counties are doing. We have had previous discussions that our needs aren't really our needs; it is just a formula for distributing the money. If Cities went back over

their last five or ten years and looked at what it cost per mile in their City to build their state aid streets and use the ENR cost index to update the dollars, then Cities would have real numbers for our needs. It would simplify the process and we would be more consistent with the Counties. He encourages the Screening Board to look at more sweeping changes to the calculations to more adequately reflect the needs and simplify the administration of the money at the same time.

Mathisen questioned how each City will calculate their needs. Isn't that what the needs book already does? If a City includes other construction features, the costs could vary greatly. Chair Pederson said she understands Tom's concerns and that is why she recommends that we combine our two existing subcommittees and have them look at this issue together. They could follow what the Counties are doing and have meetings between now and next Spring. They can bring information to our Spring Screening Board meeting for additional discussion. We are not going to get this done over night.

Chuck Ahl said he wants to add perspective to our State Aid system. He stated that for 52 years, this has been a self-policing system. We rely on the professionalism of our City Engineers to turn in what it costs to build your system. That is the entire basis. Our State Aid staff does some audits, but we don't hire our State Aid staff to police us. That is why this group is here on this Board, not to represent their individual Cities, but to run the State Aid system. That basis has to be what we build the system on. That is the number one issue for next year - what are our needs and how do we put it together.

Mathisen said we have a system that works. He is fine with looking at something new, but he is not convinced that it is that complicated.

Chair Pederson asked for a motion to ask our Subcommittees to look at our needs and report back to the Municipal Screening Board in 2010.

**Motion by Matthys, seconded by Rippke that the Needs Subcommittee and the Unencumbered Construction Funds Subcommittee consider the question of updating the current needs program and report back to the Municipal Screening Board at the Spring meeting in 2010. Motion passed unanimously.**

B. Sonnenberg had no additional Legislative update information to report.

### **III. Other Discussion Topics**

A. Chair Pederson spoke about RT Vision – One Office. She said that Counties are using the project management software. Bloomington uses the software for all of their projects. She feels the use of the software would help with the audit process because it is very thorough on State Aid paperwork. Nine Cities are using the software. Financially it would be better for Cities to do

this together. Right now Bloomington is paying to upgrade the software. It is possible that these upgrades are not being made available to other Cities. Counties used their administration funds to pay for the software. Cities need to take a look at this. Electronic paperwork is the way it will go in the future. If more Cities were using it, it would be more efficient for the State Aid staff. Pederson is planning to host a demo in Bloomington in December.

Voight said that Duluth is also using the software and felt it would help with the audit process. She said Cities need to share the software and get the word out that it is convenient, it is here, and it helps with consistency. She runs local projects on the software also.

Bot asked what the business make up of the private software development company is. If more Cities went together, would there be more power with negotiating a better contract price. He is concerned with the process he has heard of so far. Chair Pederson said we would have more control over it as a group – what we get and what it costs.

Gehler-Hess said that they just purchased the software. She said there is a County user group and they make recommendations to the software company for changes. She said that more Cities need to get on the user group. Chair Pederson said that Bloomington and Duluth have paid for City system changes, but are not sure if everyone is getting the same tool. She suggested bringing this item back for discussion at the Spring Meeting when we have a better idea of the cost.

Bot said we need the scope of what it takes to set this up. Some of the smaller Cities would have a concern on what the staff needs would be to set this up.

- B. Chair Pederson stated that the Complete Streets document that the Legislature ordered is now out to Cities for review. She is encouraging that all Cities review this document. She said that this document affects everyone and has financial implications to all projects. This is not yet policy, but once the Legislature has the document, they may ask Mn/DOT to develop a Complete Streets policy for the State. If this moves to policy making, they will be looking at lane widths and ADTs. The definitions included will be very important.

Kjonaas stated that Mn/DOT has been working towards zero deaths. Safety is important and mixing modes can be a safety issue. Advocates are making a point that engineers need to look at corridor modes needed at the start of the project and you design what is needed for all modes and vehicles get what is left. Kjonaas said that not every street can be for every mode. Communities need to be looked at as a whole. Thru a network of streets, we can accommodate all modes. Mn/DOT is proceeding with complete streets on their own projects. The Federal Government might add complete street design to the federal bill as a requirement of federal funding.

Chair Pederson said you will have to document that you are using a Complete Streets policy. She was on the Committee and she emphasized that it is not all modes for all roads; it's the right mode for that road.

Julie Skallman said that each City needs to review the Complete Streets report and provide comments. It has to allow you the freedom to say not every road is a complete street for every mode. If we don't get that message across, it could come back to us thru the Legislative process that we have to have trucks and bikes and peds and school buses and metro transit buses all on the same corridor. You need to stress that we need to do a systematic review of our entire system when we are doing our Complete Streets for our City. Skallman said they need to hear from Cities because that is where they will be looking at most of the streets and want to apply this to.

Chair Pederson said that District reps need to contact other Cities and let them know they need to send in comments on the Complete Streets report that will be before the Legislature in December.

Mathisen asked if this covers every street in Minnesota because some Cities already have this information in their Comprehensive Plans. Chair Pederson said that this could affect every street. She stated that not every City is including this information in their Comp Plans. All modes are not being taken into account for every street. You need to figure out which modes for which road.

Mel Odens stated that this report is available on MnDOT's website. Chair Pederson sent it out once and will send it out to the CEAM membership again. She will send a stronger request for comments since Commissioner Sorel is asking for comments.

Ahl said that Complete Streets will be a break out session at this winter's CEAM Conference. There should be discussion at our annual business meeting in January and CEAM should take a formal stand as an organization.

Chair Pederson stated that City Engineers need to send in comments to Mn/DOT. She asked if the CEAM officers could view the comments received by Mn/DOT prior to our winter business meeting. Skallman said she will group the comments into themes and share with CEAM to bring to the meeting.

Voight has dealt with complete street issues. She asked if there will be exceptions to the design standards for complete streets? Kjonaas stated that Mn/DOT will have to make design documents more consistent, simplify the variance process, and possibly in the future create a new classification for complete streets.

Chair Pederson said that she will send out another email on this topic. The Legislative Committee for CEAM will be meeting in early December. She expects much discussion on this topic this next Legislative session.

Rippke asked what we think the Legislature will do with this report this year. Chair Pederson said she expects that the Legislature will require a state policy be prepared.

- C. Chuck Ahl asked for additional clarification on the motion to Subcommittees. He stated that the Subcommittees were asked to look at the needs program, look at Cities under 5,000 population or 15,000 population, and look at balances that are too high and encouragements to use it.

Matthys said that the motion did not include looking at fund balances, but could be an additional item to be addressed. What about looking at advancements – is this a policy issue or a Board resolution? Johnston said it is currently policy based on recommendations of the Screening Board. The advancing of funds is looked at each year.

Kjonaas said that if the end of the year balance is approximately \$20 to \$25M, then they look at advancements at the beginning of the next year. Cities should speak to their DSAEs of their needs. If you don't get prioritized, you might have to wait. Cities are never turned down after August 1<sup>st</sup>. Some Cities are stressed by the limit cap and Mn/DOT has had to say no.

Bot said that if getting the balance down is the issue, how can the limit be changed. Kjonaas said the January book is at the lowest fund balance and that is the one that goes to the Legislature. Kjonaas said that if a City asks to borrow 5 or 7 times their allotment, then they wouldn't have any new MSA work for 5 or 7 years. This binds future Councils and he has asked to see a City's five year CIP. Do they really want to be in debt in their state aid account for that long? He understands that some Cities get caught with cost participation that has been a problem.

Bot asked why the cap was changed from 5Xs to 3Xs? Kjonaas stated that in 2001, with large fund balances, Cities used all the MSA funds up. MSA had to pay the price for several years. Bot asked if it could be looked at again?

Matthys asked if Mn/DOT is currently looking at this and it is working, then we should look favorably to the Legislature.

Chair Pederson stated that many Cities will be making requests until the end of the year and the year end balance will go down. Johnston stated that the year end balance of 2008 was \$41.7M and in 2007 the balance was \$27M. As of September 30, 2009, there is an \$83M balance, but there are a lot of project payment requests coming in to bring that balance down.

**IV. Chair Pederson thanked the following people:**


- A. Craig Gray, Chair of the Needs Study Subcommittee. Gray was unable to attend this meeting, but he was recognized for his several years of service.
- B. Mike Metso, Chair of the Unencumbered Construction Funds Subcommittee. Metso was also recognized for having served for 11 or 12 years.
- C. Chuck Ahl and Mel Odens, Past Chairs of the Municipal Screening Board.
- D. Screening Board members.
- E. Screening Board members Gehler-Hess, Zimmerman, and Keely were recognized as this was their last meeting as a Screening Board member.
- F. State Aid staff and Mn/DOT staff for all their hard work through out the year.

**V. The 2010 Spring Screening Board meeting has not been scheduled yet. We need to have additional discussion with the Counties on how to set up our joint meetings, but it is typically in late May.**

**VI. Chair Pederson said she would entertain a motion for adjournment.**

**Motion by Zimmerman, seconded by Gehler-Hess to adjourn the meeting at 10:10 AM. Motion approved unanimously.**

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Jean M. Keely". The signature is fluid and cursive, with the first name "Jean" and last name "Keely" clearly distinguishable.

Jean M. Keely  
Municipal Screening Board Secretary  
Blaine City Engineer

# UNIT PRICES



# AND GRAPHS



## This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.



## **UNIT PRICE STUDY**

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

**In 2007, the Municipal Screening Board made a motion to conduct the Unit Price study every three years with the option to request a Unit Price study on individual items in “off years”.**

**These prices will be applied against the quantities in the Needs Study computation program to compute the 2010 construction (money) needs apportionment.**

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

**MN/DOT’s hydraulic office furnished a recommendation of costs for storm sewer construction and adjustment based on 2009 construction costs.**

**MN/DOT railroad office furnished a letter detailing railroad costs from 2009 construction projects.**

**Due to lack of data, a study is not done for traffic signals, maintenance, and engineering. Every segment, except those eligible for THTB funding, receives needs for traffic signals, engineering, and maintenance. All deficient segments receive street lighting needs. The unit prices used in the 2009 needs study are found in the Screening Board resolutions included in this booklet.**

**ENR Construction Cost Index Percent of Increase**

Year	Year end Percent of Increase from Base Year	Annual Percent of Increase	Five Year Average Percent of Increase	Ten Year Average Percent of Increase
1990	4732			
1991	4835	2.18		
1992	4985	3.10		
1993	5210	4.51		
1994	5408	3.80		
1995	5471	1.16	2.95	
1996	5620	2.72	3.06	
1997	5826	3.67	3.17	
1998	5920	1.61	2.59	
1999	6059	2.35	2.30	
2000	6221	2.67	2.60	2.78
2001	6343	1.96	2.45	2.76
2002	6538	3.07	2.33	2.75
<b>2003</b>	6694	2.39	2.49	2.54
2004	7115	6.29	3.28	2.79
<b>2005</b>	7446	4.65	3.67	3.14
2006	7751	4.10	4.10	3.28
<b>2007</b>	7967	2.79	4.04	3.19
<b>2008</b>	8310	4.31	4.43	3.46
2009	8570	3.13	3.79	3.54
<b>2010</b>				

The ENR CCI percent of increase from the previous year is used to calculate the Unit Prices in the bolded years. Example: The 2009 Annual Percent of Increase is used in the 2010 Needs Study to compute the January 2011 apportionment

**ENR Construction Cost Index**  
*for 2009*  
*Used in the 2010 Needs Study*  
*for the January 2011 allocation*

***In 2008, the annual average CCI increased 8310% from the base year of 1913.***

***In 2009, the annual average CCI increased 8570% from the base year of 1913.***

***The annual CCI increased 3.13% in 2009. This is computed by:***

$$(8570-8310) *100 /8310 = 3.13\%$$

***Unit Costs used in the 2009 Needs Study to compute the January 2010 allocation were based on actual State Aid projects awarded in 2008.***

**ENR Construction Cost Index**  
*for 2007*  
*Used in the 2008 Needs Study*  
*for the January 2009 allocation*

***In 2006, the annual average CCI increased 7751% from the base year of 1913.***

***In 2007, the annual average CCI increased 7967% from the base year of 1913.***

***The annual CCI increased 2.79% in 2007. This is computed by:***

$$(7967 - 7751) *100 /7751 = 2.79\%$$

2010 UNIT PRICE RECOMMENDATIONS				
Needs Item		2009 Need Prices	Subcommittee Recommended Prices for 2010	Screening Board Approved Prices For 2010
Grading (Excavation)	Cu. Yd.	\$4.75	\$4.90 *	
Class 5 Base #2211	Ton	9.81	10.10 *	
All Bituminous	Ton	55.00	56.75 *	
Sidewalk Construction	Sq. Yd.	27.00	27.85 *	
Curb and Gutter Construction	Lin.Ft.	10.70	11.00 *	
Storm Sewer Adjustment	Mile	92,800	94,200	
Storm Sewer	Mile	289,300	295,400	
Street Lighting	Mile	100,000	100,000 *	
Traffic Signals	Per Sig	130,000	136,000 *	
<b><u>Signal Needs Based On Projected Traffic</u></b>				
Projected Traffic	Percentage	X Unit Price =	Needs Per Mile	
0 - 4,999	.25	\$130,000 =	\$32,500	\$34,000 *
5,000 - 9,999	.50	130,000 =	65,000	68,000 *
10,000 & Over	1.00	130,000 =	130,000	136,000 *
Right of Way (Needs Only)	Acre	98,850	98,850 *	
Engineering	Percent	22	22	
<b><u>Railroad Grade Crossing</u></b>				
Signs	Unit	2,000	2,500	
Pavement Marking	Unit	1,500	2,500	
Signals (Single Track-Low Speed)	Unit	225,000	250,000	
Signals & Gate (Multiple Track - High & Low Speed)	Unit	250,000	275,000	
Concrete Xing Material(Per Track)	Lin.Ft.	1,300	1,800	
<b><u>Bridges</u></b>				
0 to 149 Ft.	Sq. Ft.	115.00	120.00	
150 to 499 Ft.	Sq. Ft.	115.00	120.00	
500 Ft. and over	Sq. Ft.	115.00	120.00	
<b><u>Railroad Bridges over Highways</u></b>				
Number of Tracks - 1	Lin.Ft.	10,200	10,200 *	
Additional Track (each)	Lin.Ft.	8,500	8,500 *	

\*3.13% Construction Cost Index can be applied based on the Engineering News Record

## ANNUAL MAINTENANCE NEEDS COST

The prices below are used to compute the maintenance needs on each segment. Each street, based on its existing data, receives a maintenance need. This amount is added to the segment's street needs. The total statewide maintenance needs based on these costs in 2009 was \$32,826,139 or 0.71% 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 \$11,340 in maintenance needs per mile.

**3.13% Construction Cost Index from the Engineering News Record applied to all maintenance needs costs**

### EXISTING FACILITIES ONLY

	2009 NEEDS PRICES		SUBCOMMITTEE SUGGESTED PRICES		SCREENING BOARD RECOMMENDED PRICES	
	Under 1000 ADT	Over 1000 ADT	Under 1000 ADT	Over 1000 ADT	Under 1000 ADT	Over 1000 ADT
3.13% CCI <b>Traffic Lane Per Mile</b>	\$1,900	\$3,100	\$1,959 <b>\$1,950</b>	\$3,197 <b>\$3,200</b>		
3.13% CCI <b>Parking Lane Per Mile</b>	1,900	1,900	1,959 <b>1,950</b>	1,959 <b>1,950</b>		
3.13% CCI <b>Median Strip Per Mile</b>	670	1,260	691 <b>700</b>	1,299 <b>1,300</b>		
3.13% CCI <b>Storm Sewer Per Mile</b>	670	670	691 <b>700</b>	691 <b>700</b>		
3.13% CCI <b>Per Traffic Signal</b>	670	670	691 <b>700</b>	691 <b>700</b>		
3.13% CCI <b>Normal M.S.A.S. Streets</b>			6,373	6,373		
<b>Minimum Allowance Per Mile</b>	6,180	6,180	<b>6,375</b>	<b>6,375</b>		

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

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

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

**This item was 0.71% of the total needs last year**

## A HISTORY OF THE ANNUAL MAINTENANCE NEEDS COSTS

(COMPUTED ON EXISTING MILEAGE ONLY)

15-Apr-10

Year	Traffic Lane Per Mile		Parking Lane Per Mile		Median Strip Per Mile		Storm Sewer Per Mile		Per Traffic Signal		Minimum Maintenance Allowance Per Mile	
	Under 1000 ADT	Over 1000 ADT	Under 1000 ADT	Over 1000 ADT	Under 1000 ADT	Over 1000 ADT	Under 1000 ADT	Over 1000 ADT	Under 1000 ADT	Over 1000 ADT	Under 1000 ADT	Over 1000 ADT
1986	\$300	\$500	\$100	\$100	\$100	\$200	\$100	\$100	\$100	\$100	\$1,000	\$1,000
1987	300	500	100	100	100	200	100	100	100	100	1,000	1,000
1988	600	1,000	200	200	200	400	200	200	400	400	2,000	2,000
1989	1,200	2,000	1,200	1,200	400	800	400	400	400	400	4,000	4,000
1990	1,200	2,000	1,200	1,200	400	800	400	400	400	400	4,000	4,000
1991	1,200	2,000	1,200	1,200	400	800	400	400	400	400	4,000	4,000
1992	1,200	2,000	1,200	1,200	400	800	400	400	400	400	4,000	4,000
1993	1,320	2,200	1,320	1,320	440	880	440	440	440	440	4,400	4,400
1994	1,320	2,200	1,320	1,320	440	880	440	440	440	440	4,400	4,400
1995	1,320	2,200	1,320	1,320	440	880	440	440	440	440	4,400	4,400
1996	1,320	2,200	1,320	1,320	440	880	440	440	440	440	4,400	4,400
1998	1,320	2,200	1,320	1,320	440	880	440	440	440	440	4,400	4,400
1999	1,360	2,260	1,360	1,360	450	900	450	450	450	450	4,500	4,500
2000	1,400	2,300	1,400	1,400	460	910	460	460	460	460	4,600	4,600
2001	1,450	2,400	1,450	1,450	480	950	480	480	480	480	4,800	4,800
2002	1,450	2,400	1,450	1,450	480	950	480	480	480	480	4,800	4,800
2003	1,500	2,500	1,500	1,500	500	980	500	500	500	500	5,000	5,000
2004	1,550	2,575	1,550	1,550	515	1,000	515	515	515	515	5,150	5,150
2005	1,650	2,735	1,650	1,650	550	1,065	550	550	550	550	5,475	5,475
2006	1,725	2,850	1,725	1,725	575	1,125	575	575	575	575	5,720	5,720
2007	1,800	2,970	1,800	1,800	600	1,180	600	600	600	600	5,960	5,960
2008	1,850	3,050	1,850	1,850	620	1,210	620	620	620	620	6,130	6,130
2009	1,900	3,100	1,900	1,900	670	1,260	670	670	670	670	6,180	6,180
2010												

THESE MAINTENANCE COSTS ARE USED IN COMPUTING NEEDS .

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

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

15-Apr-10

ITEM	2008 APPORTIONMENT NEEDS COST FOR THE JANUARY 2009 DISTRIBUTION	2009 APPORTIONMENT NEEDS COST FOR THE JANUARY 2010 DISTRIBUTION	DIFFERENCE	2009 % OF THE TOTAL
Grading/Excavation	\$503,865,155	\$481,934,748	(\$21,930,407)	10.36%
Storm Sewer Adjustment	86,802,690	94,354,400	7,551,710	2.03%
Storm Sewer Construction	297,621,240	308,576,059	10,954,819	6.63%
<b>SUBTOTAL GRADING</b>	<b>\$888,289,085</b>	<b>\$884,865,207</b>	<b>(\$3,423,878)</b>	<b>19.03%</b>

Aggregate Base	\$482,383,800	\$537,042,986	\$54,659,186	11.55%
Bituminous Base	457,504,380	573,802,460	116,298,080	12.34%
<b>SUBTOTAL BASE</b>	<b>\$939,888,180</b>	<b>\$1,110,845,446</b>	<b>\$170,957,266</b>	<b>23.88%</b>

Bituminous Surface	410,443,095	506,044,058	95,600,963	10.88%
Surface Widening	3,297,285	3,930,300	633,015	0.09%
<b>SUBTOTAL SURFACE</b>	<b>\$413,740,380</b>	<b>\$509,974,358</b>	<b>\$96,233,978</b>	<b>10.97%</b>

Curb and Gutter	\$238,973,093	\$251,542,163	\$12,569,070	5.41%
Sidewalk	313,184,978	302,823,144	(10,361,834)	6.51%
Traffic Signals	209,263,600	210,297,100	1,033,500	4.52%
Street Lighting	229,117,000	234,214,000	5,097,000	5.04%
<b>SUBTOTAL MISCELLANEOUS</b>	<b>\$990,538,671</b>	<b>\$998,876,407</b>	<b>\$8,337,736</b>	<b>21.48%</b>

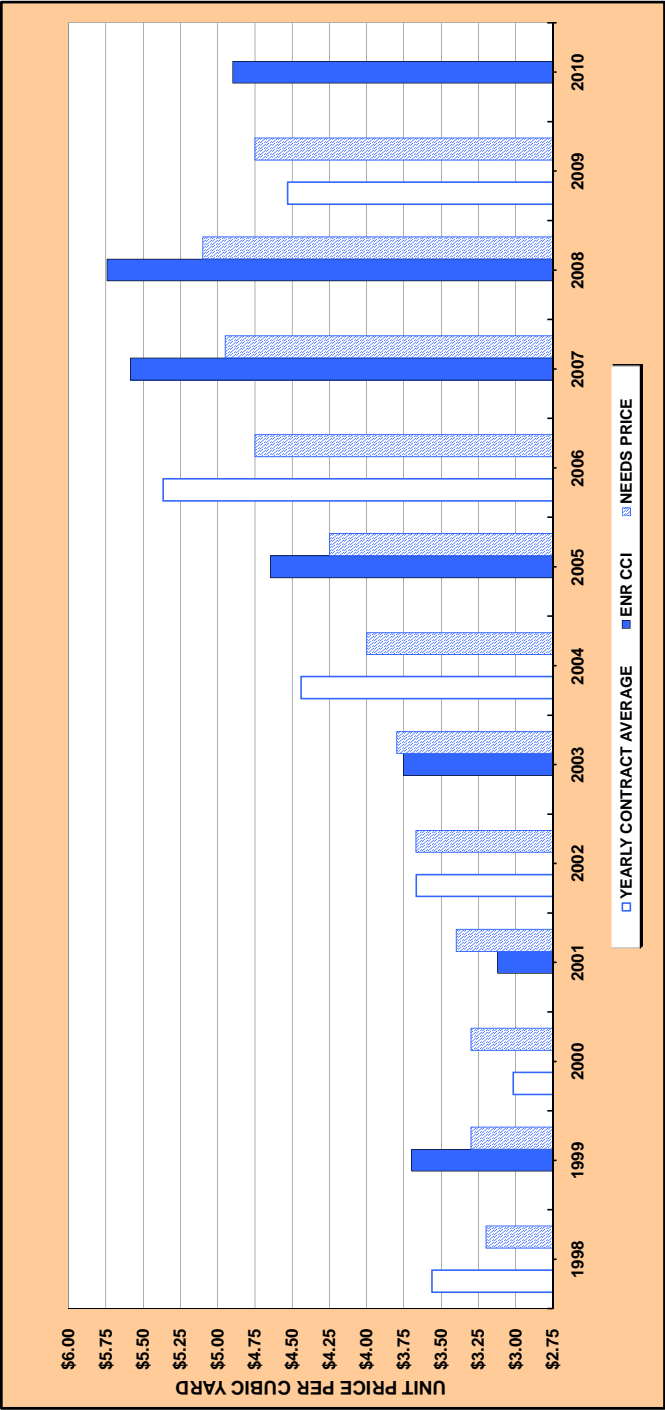
<b>TOTAL ROADWAY</b>	<b>\$3,232,456,316</b>	<b>\$3,504,561,418</b>	<b>\$272,105,102</b>	<b>75.35%</b>
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Structures	\$186,151,319	\$201,542,625	\$15,391,306	4.33%
Railroad Crossings	61,260,450	79,218,050	17,957,600	1.70%
Maintenance	31,784,488	32,826,139	1,041,651	0.71%
Engineering	765,594,944	832,771,185	67,176,241	17.91%
<b>SUBTOTAL OTHERS</b>	<b>\$1,044,791,201</b>	<b>\$1,146,357,999</b>	<b>\$101,566,798</b>	<b>24.65%</b>

<b>TOTAL</b>	<b>\$4,277,247,517</b>	<b>\$4,650,919,417</b>	<b>\$373,671,900</b>	<b>100.00%</b>
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N:\msas\books\2010 June book\Individual Construction Items.xls

# GRADING/EXCAVATION



Needs Year	Number of Cities	Quantity (Cu.Yd)	Total Cost	Yearly Average Contract Price	State Aid Construction Cost Index	Price Used in Needs
1998	60	919,379	\$3,273,588	\$3.56		\$3.20
1999					\$3.70	3.30
2000	56	1,157,353	3,490,120	3.02		3.30
2001					3.12	3.40
2002	50	893,338	3,275,650	3.67		3.67
2003					3.75	3.80

Needs Year	Number of Cities	Quantity (Cu. Yd.)	Total Cost	Yearly Average Contract Price	Engineering News Record Construction Cost Index	Price Used in Needs
2004	56	1,018,912	\$4,523,089	\$4.44		\$4.00
2005					\$4.65	4.25
2006	48	587,442	3,152,838	5.37		4.75
2007					5.59	4.95
2008					5.74	5.10
2009	47	1,334,769	6,052,005	4.53		4.75
2010					4.90	

SUBCOMMITTEE'S RECOMMENDED PRICE FOR THE 2010 NEEDS STUDY IS \$4.90 PER CUBIC YARD

Applying the ENR Construction Cost Index of 3.13% to last years Unit Cost Study will result in an increase of \$0.15 to the 'Price Used in Needs' in 2009 for a 2010 ENR CCI Cost of \$4.90

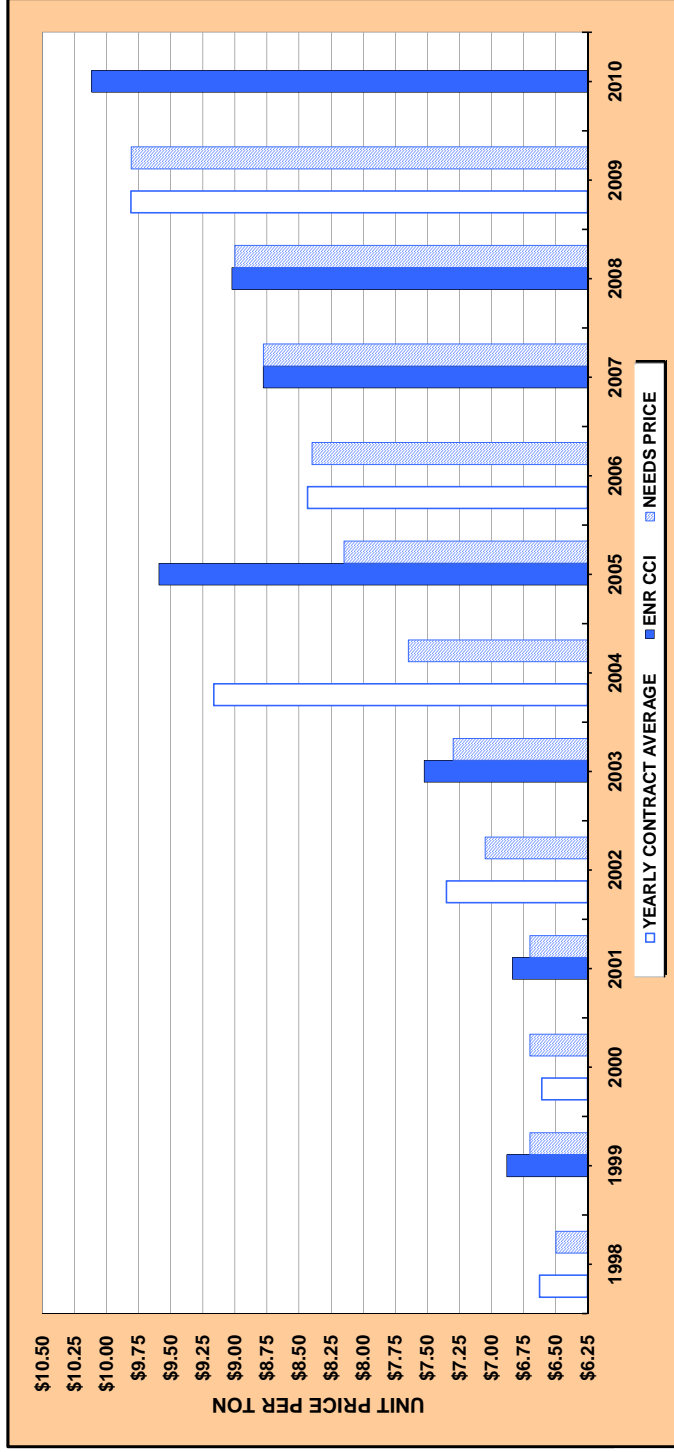
This item was 10.36% of the total needs last year

Applying the Urban Grading Factor of 1.78 results in an Urban Grading Cost of \$8.72/Cu. Yd.

Applying the Rural Grading Factor of 1.56 results in a Rural Grading Cost of \$7.64/Cu. Yd.



# AGGREGATE BASE



Needs Year	Number of Cities	Quantity (Ton)	Total Cost	Yearly Average Contract Price	State Aid Construction Cost Index	Price Used in Needs
1998	67	470,633	\$3,118,365	\$6.63		\$6.50
1999					\$6.88	6.70
2000	58	680,735	4,498,220	6.61		6.70
2001					6.84	6.70
2002	52	527,592	3,877,688	7.35		7.05
2003					7.53	7.30

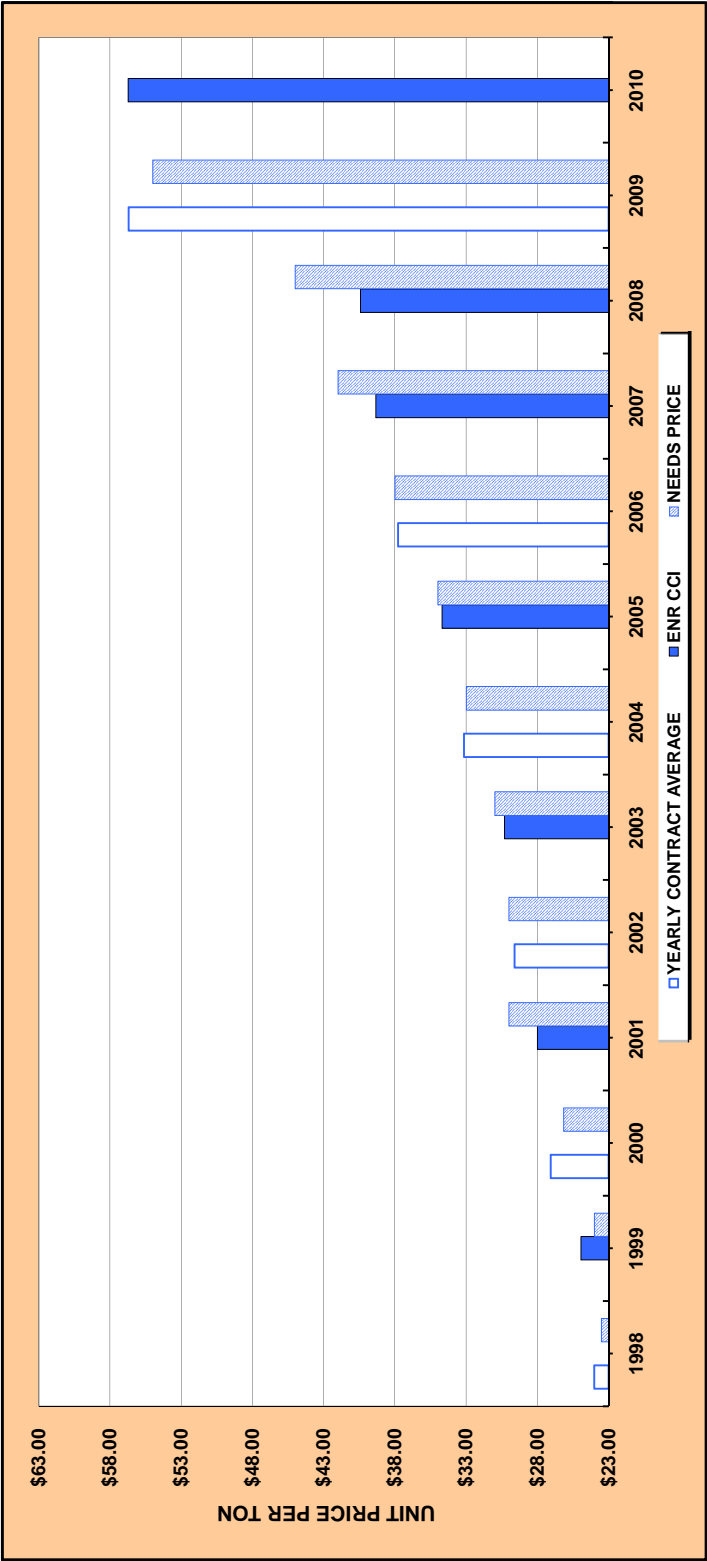
Needs Year	Number of Cities	Quantity (Ton)	Total Cost	Yearly Average Contract Price	Engineering News Record Construction Cost Index	Price Used in Needs
2004	58	573,153	\$5,252,804	\$9.16		\$7.65
2005					\$9.59	8.15
2006	46	355,866	3,000,906	8.43		8.40
2007					8.78	8.78
2008					9.02	9.00
2009	45	436,802	4,284,174	9.81		9.81
2010					10.12	

## SUBCOMMITTEE'S RECOMMENDED PRICE FOR THE 2010 NEEDS STUDY IS \$10.10 PER TON

Applying the ENR Construction Cost Index of 3.13% to last years Unit Cost Study will result in an increase of \$0.31 to the 'Price Used in Needs' in 2009 for a 2010 ENR CCI Cost of \$10.12

This item was 11.55% of the total needs last year

# ALL BITUMINOUS BASE & SURFACE



Needs Year	Number of Cities	Quantity (Ton)	Total Cost	Yearly Average Contract Price	State Aid Construction Cost Index	Price Used in Needs
1998	67	505,372	\$12,132,901	\$24.01	\$24.93	\$23.50
1999						24.00
2000	51	434,005	11,739,821	27.05	27.99	26.17
2001						30.00
2002	50	371,198	10,989,206	29.60	30.31	30.00
2003						31.00

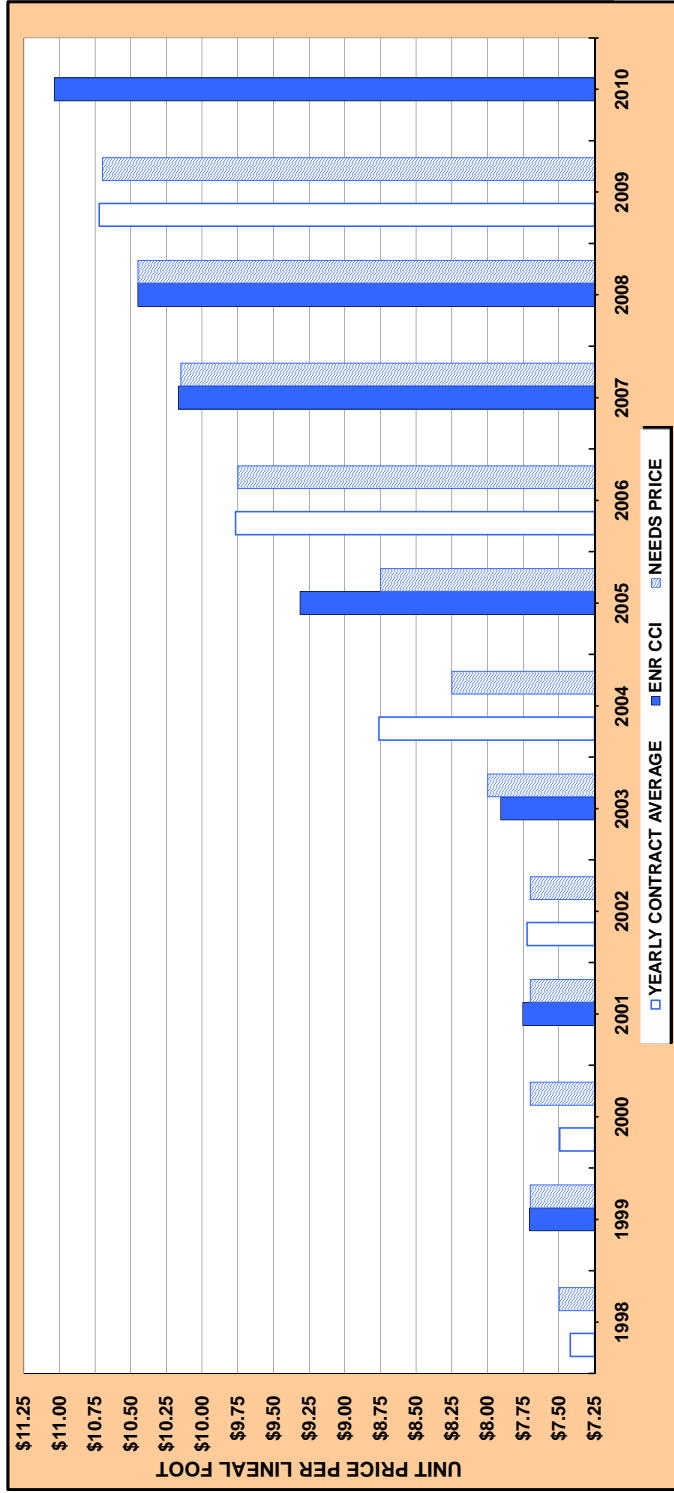
Needs Year	Number of Cities	Quantity (Ton)	Total Cost	Yearly Average Contract Price	Engineering News Record Construction Cost Index	Price Used in Needs
2004	60	459,606	\$15,229,960	\$33.14	\$34.68	\$33.00
2005						35.00
2006	51	305,073	11,524,574	37.78	39.33	38.00
2007					40.42	42.00
2008	44	277,797	15,744,901	56.68	56.72	45.00
2009						55.00
2010						

## SUBCOMMITTEE'S RECOMMENDED PRICE FOR THE 2010 NEEDS STUDY IS \$56.75 PER TON

Applying the ENR Construction Cost Index of 3.13% to last years Unit Cost Study will result in an increase of \$1.72 to the 'Price Used in Needs' in 2009 for a 2010 ENR CCI Cost of \$56.72

This item was 23.31% of the total needs last year

# CURB AND GUTTER CONSTRUCTION



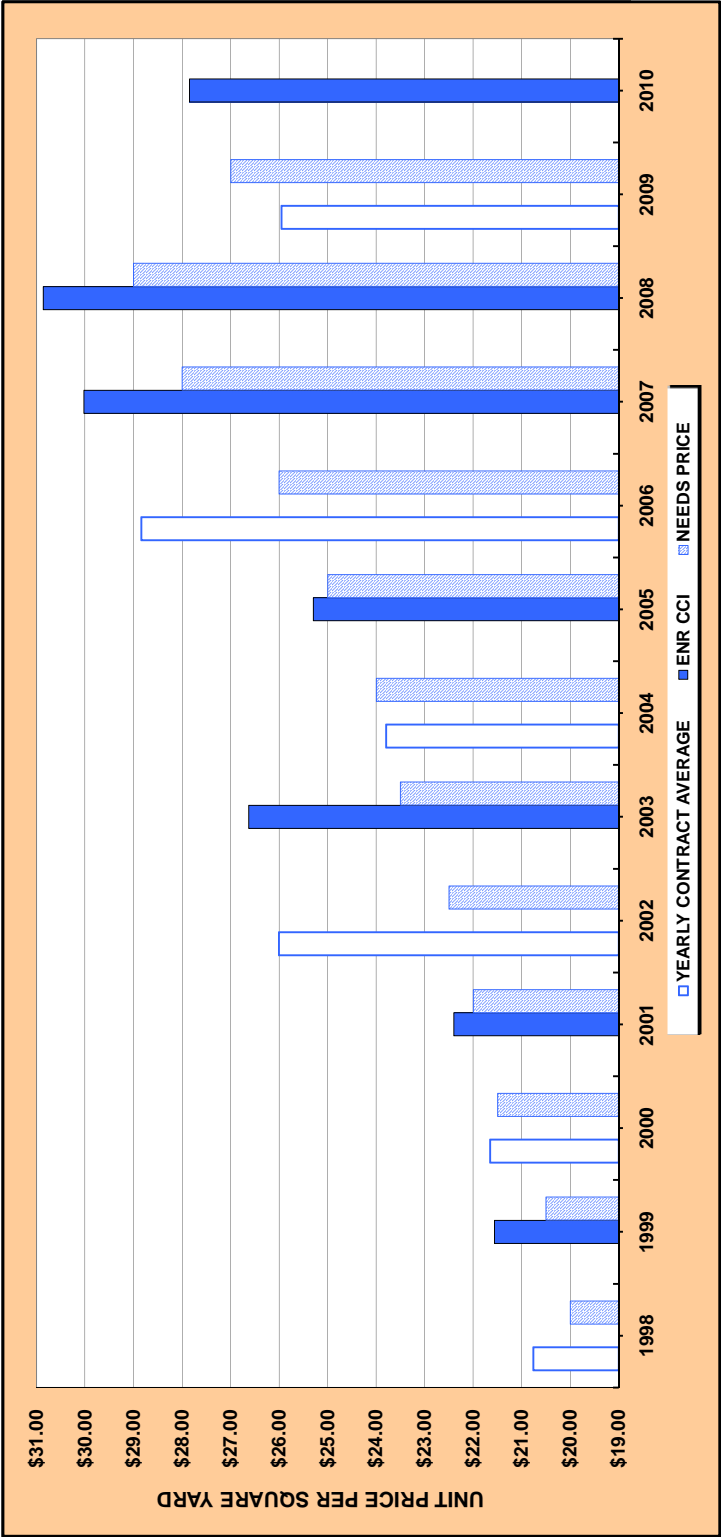
Needs Year	Number of Cities	Quantity (Ln. Ft.)	Total Cost	Yearly Average Contract Price	State Aid Construction Cost Index	Price Used in Needs
1998	64	347,973	\$2,581,523	\$7.42		\$7.50
1999					\$7.70	7.70
2000	55	418,211	3,133,900	7.49	7.75	7.70
2001				7.72		7.70
2002	50	363,497	2,807,345		7.91	7.70
2003						8.00
Needs Year	Number of Cities	Quantity (Ln. Ft.)	Total Cost	Yearly Average Contract Price	Engineering News Record Construction Cost Index	Price Used in Needs
2004	59	469,131	\$4,110,211	\$8.76		\$8.25
2005					\$9.31	8.75
2006	52	327,171	3,195,201	9.77	10.17	9.75
2007					10.45	10.15
2008						10.45
2009	43	262,251	2,812,246	10.72	11.03	10.70
2010						

SUBCOMMITTEE'S RECOMMENDED PRICE FOR THE 2010 NEEDS STUDY IS \$11.00 PER LIN. FT.

Applying the ENR Construction Cost Index of 3.13% to last years Unit Cost Study will result in an increase of \$0.33 to the 'Price Used in Needs' in 2009 for a 2010 ENR CCI cost of \$11.03

This item was 5.41% of the total needs last year

SIDEWALK CONSTRUCTION #2521



Needs Year	Number of Cities	Quantity (Sq. Yd)	Total Cost	Yearly Average Contract Price	State Aid Construction Cost Index	Price Used in Needs
1998	54	71,578	\$1,486,101	\$20.76	\$21.56	\$20.00
1999						20.50
2000	45	88,562	1,917,075	21.65		21.50
2001					22.40	22.00
2002	38	61,390	1,596,409	26.00		22.50
2003					26.63	23.50

Needs Year	Number of Cities	Quantity (Sq. Yd.)	Total Cost	Yearly Average Contract Price	Engineering News Record Construction Cost Index	Price Used in Needs
2004	47	123,460	\$2,937,553	\$23.79		\$24.00
2005					\$25.29	25.00
2006	43	69,500	2,004,367	28.84		26.00
2007					30.02	28.00
2008					30.86	29.00
2009				25.95		27.00
2010		95,689	2,482,820		27.85	

SUBCOMMITTEE'S RECOMMENDED PRICE FOR THE 2010 NEEDS STUDY IS \$27.85 PER SQ. YD.

Applying the ENR Construction Cost Index of 3.13% to last years Unit Cost Study will result in an increase of \$0.85 to the 'Price Used in Needs' in 2009 for a 2010 ENR CCI Cost of \$27.85

This item was 6.51% of the total needs last year

## 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)
1994	\$67,100	\$216,500	\$20,000	\$20,000-80,000
1995	69,100	223,000	20,000	20,000-80,000
1996	71,200	229,700	20,000	20,000-80,000
1998	76,000	245,000	20,000	24,990-99,990
1999	79,000	246,000	35,000	24,990-99,990
2000	80,200	248,500	50,000	24,990-99,990
2001	80,400	248,000	78,000 **	30,000-120,000
2002	81,600	254,200	78,000	30,000-120,001
2003	82,700	257,375	80,000	31,000-124,000
2004	83,775	262,780	80,000	31,000-124,000
2005	85,100	265,780	82,500	32,500-130,000
2006	86,100	268,035	100,000	32,500-130,000
2007	88,100	271,000	100,000	32,500-130,000
2008	89,700	278,200	100,000	32,500-130,000
2009	92,800	289,300	100,000	32,500-130,000
2010				

\*\* Lighting needs were revised to deficient segment only.

### MNDOT'S HYDRAULIC OFFICE RECOMMENDED PRICES FOR 2010:

	Storm Sewer Adjustment	Storm Sewer Construction
2010	\$94,164	\$295,365

### SUBCOMMITTEE'S RECOMMENDED PRICES FOR 2010:

	Storm Sewer Adjustment	Storm Sewer Construction	Lighting	Signals
2010	<u>\$94,200</u>	<u>\$295,400</u>	<u>\$100,000</u>	<u>\$136,000</u>

## RAILROAD CROSSINGS NEEDS COSTS

NEEDS YEAR	SIGNS (Per Unit)	PAVEMENT MARKING	SIGNALS (Low Speed) (Per Unit)	SIGNALS & GATES (High Speed) (Per Unit)	CONCRETE CROSSING MATERIAL (Per foot/track)
1994	\$800	\$750	\$80,000	\$110,000	\$750
1995	800	750	80,000	110,000	750
1996	800	750	80,000	110,000	750
1998	1,000	750	80,000	130,000	750
1999	1,000	750	85,000	135,000	850
2000	1,000	750	110,000	150,000	900
2001	1,000	750	120,000	160,000	900
2002	1,000	750	120,000	160,000	1,000
2003	1,000	750	120,000	160,000	1,000
2004	1,000	750	150,000	187,500	1,000
2005	1,000	750	150,000	187,000	1,000
2006	1,000	750	150,000	200,000	1,000
2007	1,000	750	175,000	200,000	1,000
2008	1,500	1,100	175,000	200,000	1,100
2009	2,000	1,500	225,000	250,000	1,300
2010					

### MNDOT'S RAILROAD OFFICE RECOMMENDED PRICES FOR 2010:

	Signs	Pavement Marking	Signals	Sig. & Gates	Concrete X-ing Surf.
2010	<u>\$2,500</u>	<u>\$2,500</u>	<u>\$250,000</u>	<u>\$275,000-\$350,000</u>	<u>\$1,800</u>

### SUBCOMMITTEE'S RECOMMENDED PRICES FOR 2010:

	Signs	Pavement Marking	Signals	Sig. & Gates	Concrete X-ing Surf.
2010	<u>\$2,500</u>	<u>\$2,500</u>	<u>\$250,000</u>	<u>\$275,000</u>	<u>\$1,800</u>



## Minnesota Department of Transportation

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# Memo

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

Date: March 11, 2010

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

From: Mike Leuer  
State Aid Hydraulic Specialist

Phone: (651) 366-4469

Subject: State Aid Storm Sewer  
Construction Costs for 2009

We have completed our analysis of storm sewer construction costs incurred for 2009 and the following assumptions can be utilized for planning purposes per roadway mile:

- Approximately \$295,365 for new construction, and
- Approximately \$94,164 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 82 plans for 2009.

CC: Andrea Hendrickson (file)

# Memo

## Office of Freight and Commercial Vehicle Operations

Railroad Administration Section  
Mail Stop 470  
395 John Ireland Blvd.  
St. Paul, Minnesota 55155-1899

Office Tel: 651/366-3644  
Fax: 651/366-3720

March 30, 2010

To: Marshall Johnson  
Needs Unit – State Aid

From: Susan H. Aylesworth  
Manager, Rail Administration Section

Subject: Projected Railroad Grade Crossing  
Improvements – Cost for 2010

We have projected 2009 costs for railroad/highway improvements at grade crossings. For planning purposes, we recommend using the following figures:

Signals (single track, low speed, average price)*	\$250,000.00
Signals & Gates (multiple track, high/low speed, average price)*	\$275,000 - \$350,000.00
Signs (advance warning signs and crossbucks)	\$2,500 per crossing
Pavement Markings (tape)	\$7,500 per crossing
Pavement Markings (paint)	\$2,500 per crossing
Crossing Surface (concrete, complete reconstruction)	\$1,800 per track ft.

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

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

## **2010 MSAS SCREENING BOARD DATA**

### **JUNE, 2010**

#### **2009 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 2009. 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.



# BRIDGES LET IN CALENDAR YEAR 2009

New Bridge Number	Project Type	Project Number	Length	Beam Type Code	Area	Cost	Unit Cost
23580	SP	023-598-011	44.58	C-SLAB	1,308	\$360,301	\$275
85563	SAP	085-607-009	45.00	C-SLAB	1,666	454,443	273
30514	SAP	030-613-012	48.42	PCB	1,711	230,288	135
29528	SAP	029-607-006	48.58	C-SLAB	1,835	242,017	132
31560	SAP	031-608-009	53.67	PCB	2,111	240,269	114
04526	SAP	004-598-017	57.42	PCB	2,029	303,485	150
27B71	*SP*	109-020-012	62.17	TRUSS	840	138,238	165
07590	SP	007-090-002	66.00	TRUSS	792	147,433	186
17533	SP	017-608-009	68.90	PCB	2,986	260,527	87
05535	SAP	005-599-024	70.42	PCB	2,206	237,705	108
74537	*SP*	153-135-001	70.67	PCB	3,416	285,493	84
33536	SP	033-090-001	72.17	TRUSS	840	71,343	85
24548	SAP	024-599-039	73.42	PCB	2,301	230,923	100
32564	*SP*	032-620-020	74.50	C-SLAB	2,930	275,585	94
05536	SAP	005-599-023	77.58	PCB	2,431	266,412	110
25605	SP	025-599-097	79.48	PCB	2,491	263,713	106
43551	*SP*	043-607-013	80.48	PCB	3,488	289,906	83
30515	*SP*	030-606-032	81.68	PCB	3,213	264,475	82
79545	SAP	079-602-034	82.50	C-SLAB	3,245	337,721	104
29529	*SP*	029-609-022	84.04	C-SLAB	3,306	321,541	97
34528	SAP	034-599-031	86.76	C-SLAB	3,330	233,592	70
80536	SP	080-602-008	88.13	PCB	3,466	281,429	81
56540	*SP*	126-121-007	92.50	C-SLAB	5,057	576,889	114
65562	*SP*	065-609-011	93.00	C-SLAB	4,030	282,888	70
55583	SAP	055-610-020	95.69	PCB	3,764	334,914	89
16523	SAP	016-605-003	100.00	TRUSS	1,200	186,149	155
42565	*SP*	042-603-022	100.50	C-SLAB	3,953	307,407	78
71525	*SP*	071-605-028	120.10	C-SLAB	5,205	385,992	74
63517	SP	063-601-016	121.03	PCB	4,760	475,238	100
01529	SAP	001-599-032	123.21	C-SLAB	3,450	336,588	98
24545	SAP	024-619-009	124.50	C-SLAB	5,395	587,177	109
31551	SAP	031-610-014	126.58	C-SLAB	5,485	576,313	105
07578	SP	007-090-002	128.92	TRUSS	1,547	320,754	207
35535	SP	035-599-111	137.35	PCB	4,853	499,173	103
07591	SP	007-599-051	138.50	C-SLAB	4,225	445,465	105
70543	SP	070-686-001	138.67	PCB	6,564	706,281	108
69675	*SP*	069-090-009	140.00	TRUSS	2,100	267,972	128
35536	*SP*	035-601-031	140.50	C-SLAB	5,526	557,009	101
70544	SP	070-686-001	141.07	PCB	6,701	808,462	121
81530	*SP*	081-603-029	141.92	PCB	6,150	556,140	90
23579	SP	023-599-163	143.04	C-SLAB	4,196	447,248	107

New Bridge Number	Project Type	Project Number	Length	Beam Type Code	Area	Cost	Unit Cost
62627	SAP	062-649-015	147.42	PCB	9,546	\$1,510,186	\$158
28546	SAP	028-599-069	152.50	C-SLAB	4,778	439,635	92
12551	*SP*	012-632-001	168.50	C-SLAB	6,291	474,797	75
01531	*SP*	001-614-011	172.56	PCB	8,686	874,947	101
55588	*SP*	159-119-015	180.92	PCB	18,247	2,673,137	146
67557	SP	067-616-002	182.92	PCB	6,463	559,453	87
50589	SP	104-090-004	188.67	TRUSS	2,275	167,653	74
07589	*SP*	007-612-010	218.52	PCB	17,325	2,369,100	137
01527	*SP*	001-601-017	219.92	PCB	8,650	728,025	84
45573	*SP*	045-605-020	221.46	C-SLAB	8,710	949,236	109
68540	SAP	068-624-004	225.92	PCB	9,790	952,185	97
19563	SAP	019-599-034	292.93	PCB	10,350	1,050,028	101
08552	SP	008-611-018	387.56	PCB	16,795	1,655,807	99
60561	*SP*	060-609-021	1112.67	STEEL	48,216	3,011,794	123
55587	SP	159-090-015	1802.05	TRUSS	21,643	2,864,376	132
TOTAL					333,867	\$34,675,259	\$104

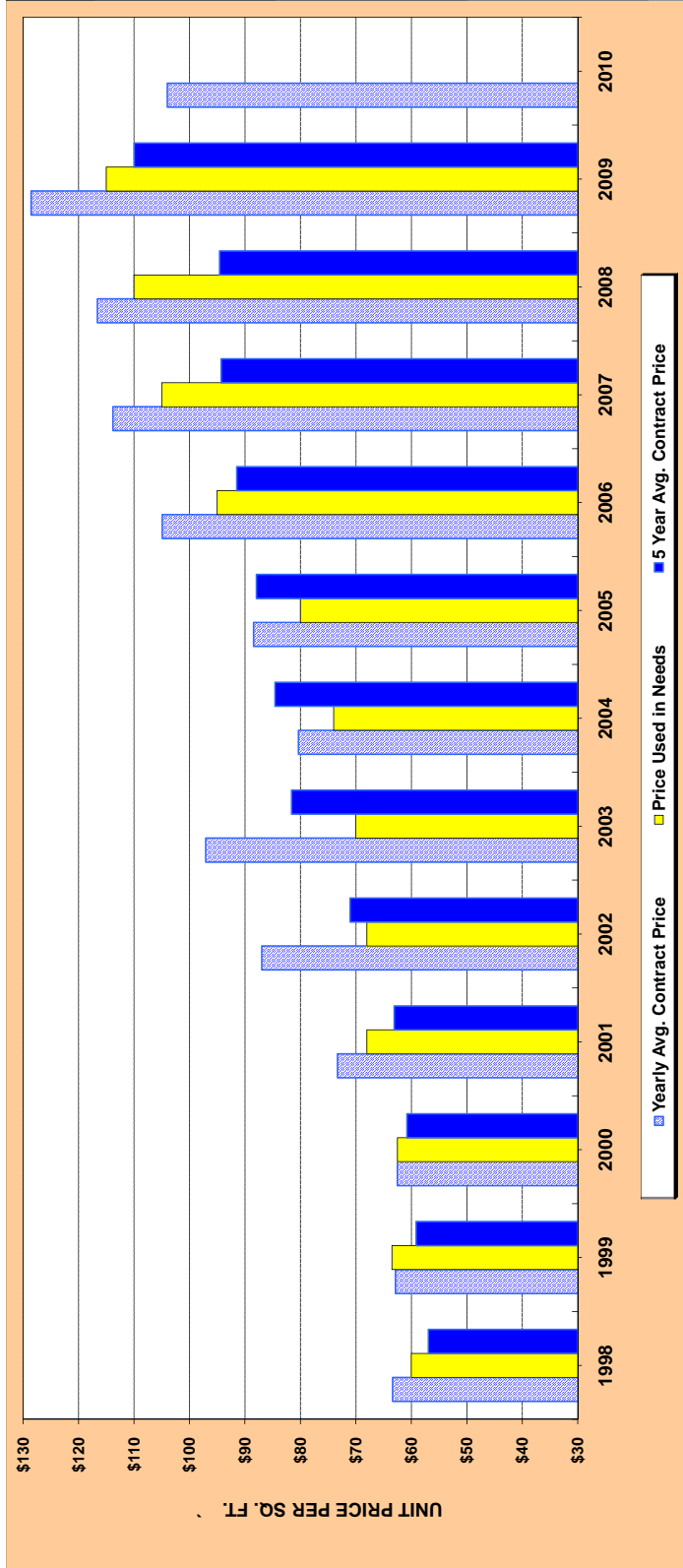
\*SP\* DENOTES ECONOMIC STIMULUS (ARRA) PROJECT

If the Lowery St. bridge in Minneapolis was included, the average cost would be \$183 per sq. ft.

#### RAILROAD BRIDGES

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

# ALL BRIDGES



NEEDS YEAR	NUMBER OF PROJECTS	DECK AREA	TOTAL COST	YEARLY AVERAGE CONTRACT PRICE	PRICE USED IN NEEDS	5-YEAR AVERAGE CONTRACT PRICE
2004	126	977,400	\$78,528,140	\$80.34	\$74.00	\$84.58
2005	44	252,713	22,351,485	88.45	80.00	87.93
2006	53	533,871	55,999,602	104.89	95.00	91.47
2007	49	235,505	26,798,183	113.79	105.00	94.26
2008	37	247,120	28,815,052	116.60	110.00	94.58
2009	46	301,827	38,797,162	128.54	115.00	109.97
2010	56	333,867	34,675,259	104.00		

NEEDS YEAR	NUMBER OF PROJECTS	DECK AREA	TOTAL COST	YEARLY AVERAGE CONTRACT PRICE	PRICE USED IN NEEDS	5-YEAR AVERAGE CONTRACT PRICE
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

SUBCOMMITTEES RECOMMENDED PRICE FOR THE 2010 NEEDS STUDY IS \$120.00 PER SQ. FT.

# RAILROAD BRIDGES OVER HIGHWAYS

15-Apr-10

Needs Year	Number Of Projects	Number of Tracks	Bridge Length	Bridge Cost per Lin. Ft. (Actual)	Cost per Lin. Ft. of 1st Track (Unit Price Study)	Cost per Lin. Ft. of Additional Tracks (Unit Price Study)
1990	1	2	433.38	8,536	4,000	3,000
1991	0	0			4,000	3,000
1992	1	1	114.19	7,619	4,000	3,000
1993	1	1	181.83	7,307	5,000	4,000
1994	0	0			5,000	4,000
1995	0	0			5,000	4,000
1996	1	1	80.83	12,966	5,000	4,000
1998	1	1	261.02	8,698	8,000	6,500
1999	1	1	150.3	8,139	8,200	6,700
2000	2	1	108.58	12,112		
		1	130.08	10,569	9,000	7,500
2001	1	1	163.00	14,182	9,000	7,500
2002	0	0			9,000	7,500
2003	0	0			9,300	7,750
2004	0	0			9,600	8,000
2005	0	0			10,200	8,500
2006	0	0			10,200	8,500
2007	2	1	56.00	12,760	10,200	8,500
		1	135.00	6,483	10,200	8,500
2008	0	0			10,200	8,500
2009	0	0			10,200	8,500
2010						

SUBCOMMITTEE'S RECOMMENDED PRICE FOR THE 2010 NEEDS STUDY IS \$10,200  
PER LINEAL FOOT FOR THE FIRST TRACK

SUBCOMMITTEE'S RECOMMENDED PRICE FOR THE 2010 NEEDS STUDY IS \$8,500  
PER LIN. FT. FOR ADDITIONAL TRACKS

## All Structures on the MSAS System

Number of Adequate Structures	Number of Deficient Structures	Structures in Needs for Information	Total Structures	Existing Structure Type
174	132	99	405	1 - Bridge
10	11	0	21	3 - Structural Plate Arch
8	11	8	27	4 - Other
39	20	4	63	5 - Box Culvert Single
23	3	1	27	6 - Box Culvert Double
7			7	7 - Box Culvert Triple
1			1	8 - Box Culvert Quad
		28	28	Unknown Structure Type
<b>262</b>	<b>177</b>	<b>140</b>	<b>579</b>	<b>TOTAL</b>

There are 439 Structures on the MSAS system that qualify for Needs



## This image shows a full page of blank, lined paper. It features approximately 20 evenly spaced horizontal grey lines across its entire width, providing a guide for writing. The paper itself is a clean, off-white color. There are no margins, text, or other markings present on the page.

# Subcommittee



## Issues

# **Combined Subcommittee of the MSB Meeting as the**

## **MSAS Needs Study Task Force**

### **Meeting Minutes**

**February 9, 2010**

**Attendees:** Chuck Ahl, Deb Bloom, Marshall Johnston, Rick Kjonaas, Terry Maurer, Shelly Pederson, Julee Puffer, Mel Odens, Julie Skallman, Kim DeLaRosa

\* \* \* \*

Chuck Ahl was elected Chair and Shelly Pederson was elected Secretary.

#### **Overview of Task Force Issues and Direction – Rick Kjonaas/Julie Skallman**

Rick Kjonaas discussed the potential of the cities exploring the possibility of being able to use the proposed new County Needs Program and still maintain their own methodology on a cost per mile basis.

The software for the Needs Program online in 2001 or 2002 is eight years old. Most of the IT people feel that software that old is due for a major update. It was written in a language that MnDOT no longer has programmers in house that know it. When you do things like the grading cost adjustment, etc. or bugs that we found in the initial program, we do “work arounds.” So essentially it means that Marshall hand calculates off to the side or with a spreadsheet or something like that and stops the program, recalculates and re-enters and restarts the program. Now there are many recalculations and since we are being told the software is growing obsolete, there are more efficient software programs on the market. In fact, the server that we are on right now is in need of replacement. We probably should look at making a new investment to a more modern software possibly Microsoft Office Suite.

The counties would like to freshen it up so the Needs number has some relationship to their five year plans and what their Needs are (in the legislature when Ann Finn and her counterpart with the counties ask for that information or you work on your primer update, etc. that the needs number might have some meaning). The counties may be making substantial changes in two years. They started out having one or two supporters and now have 30 or 40. The ground rules are that no county wants to receive less money with the new funding than they are getting under the current funding. Of course, that is not going to happen. We thought with the Chapter 152 bill passing the infusion of new money, we had an opportunity to slip in the new formula and the new money would disguise the redistribution and that didn't happen.

#### **Update and Review of County Progress – Kim DeLaRosa**

Kim DeLaRosa reviewed the “Needs Task Force Progress Outline” (see next page)



## Needs Task Force Progress Outline

### MCEA Board of Directors

September 16, 2009

Prepared by: Brian Giese and Mitch Rasmussen NTF Co-Chairs

#### 1) Proposed New Needs System Details – Changes from Existing Needs System

- a. Reinstatement Period – None vs. 25 years
  - i. The new system has continuous reinstatement which is to say that all miles and bridges on the CSAH system will draw needs every year rather than just the segments or structures that exceed a particular age. This eliminates the Credit for Local Effort adjustment since every segment will draw needs all the time.
- b. Grading costs – 5-yr rolling average of actual cost/mile vs. 1980's unit costs
  - i. The new system incorporates a formula to compute a 5-year rolling average of actual reconstruction costs/mile for roadways within a particular traffic category. This eliminates the need to reinstate the grading needs and apply a grading cost adjustment.
- c. Segments – long segments based on traffic volume vs. based on construction accomplishments.
  - i. The new system will require re-segmentation. The plan is to use actual horizontal lengths rather than commissioner's orders. The segments will extend to major intersections, municipal boundaries, and county boundaries. The segments will be sorted by predominant traffic volume. This will eliminate the need to report construction accomplishments within the needs system.

#### 2) Elements of the Proposed System

- a. Four Basic Needs Categories
  - i. Reconstruction Needs
  - ii. Preservation Needs
  - iii. Bridge (Structure) Needs
  - iv. Right-of-Way Needs
- b. After-the-Fact and Life Cycle based – Every element of the needs system is based on an after-the-fact cost calculation and a set life cycle.
- c. 8 Traffic Categories (4 Rural, 4 Urban) – All segments fall into one traffic category or another.

#### 3) Reconstruction Needs – A measurement of the cost to reconstruct a County's CSAH system every 60 years.

- a. Math – A 5-year average cost to construct a mile of road in each traffic category is computed for each county using up to 50% of the individual county's actual costs to construct a similar mile of roadway in the past 5 years. This cost is calculated for each traffic category and applied to all miles within each traffic category. The sum of total costs for each traffic category is then divided by 60 in order to annualize the reconstruction need based on a 60 year life cycle.

- 4) Preservation Needs – A measurement of the cost to preserve a County's CSAH system based on a standard surface preservation practice.
  - a. Standard Practice – The proposed standard preservation practice for gravel surfaced roads is a 1" deep, 24' wide gravel surface added every year. The proposed standard preservation practice for hard surfaced roads (bit or concrete) is a 1.5"-2" bituminous overlay every 15-20 years. The depths, widths, and life cycle vary by traffic category, but are uniform across every county. Each practice results in a calculated tonnage of gravel or bituminous.
  - b. Math – An annual unit cost of gravel and bituminous is calculated for each county. The gravel cost is determined by the Screening Board general subcommittee for each MnDot district based on available gravel cost data in the area. The bituminous unit cost is calculated by not more than 50% of an individual's actual bituminous prices and surrounding county bituminous prices. Again the cost is approved by the Screening Board. These determined unit prices are multiplied by the calculated tonnage of gravel or bituminous needed per mile and applied to every mile in the traffic category. The sum of all miles results in the annual preservation need for each county.
- 5) Bridge (Structure) Needs – A measurement of the cost to replace every eligible structure on the CSAH system every 85 years.
  - a. Math – Similar to the system used today, a cost will be determined by the Screening Board General Subcommittee for each bridge and culvert based on statewide data. The appropriate costs are then applied to each structure (based on existing size) in a county and the sum is divided by 85 years. This results in the annual Bridge Needs for each county.
- 6) Right-of-Way Needs – A measurement of the cost to acquire necessary right-of-way for reconstruction of the CSAH system every 100 years.
  - a. Math – A county submits actual right-of-way costs of reconstruction projects which are used to determine a 5-year average cost per mile for ROW. The cost calculations are subject to the same criteria as the reconstruction costs included being sorted by traffic category and applied to every mile on the system. The sum of the ROW calculations is then divided by 100 to represent a 100 year life cycle and determine an annual ROW need for each county.
- 7) Adjustments – We have yet to determine all specific adjustment calculations. A general list of adjustments to consider is: Needs Restrictions, Mill Levy Deduction, Minimum Allotment, TH Turnback. There may be more, but generally speaking a goal would be to limit the number of adjustments.
  - a. Needs Restrictions – It is proposed that the needs factor be restricted by the same percentages as currently restricted. That is to say that no county's money needs shall be reduced by more than 5% or increased by more than 20% of the statewide average change in money needs.
  - b. The specifics of the other adjustments have not been determined at this time.

8) Transition Period – The current plan would phase in the new system of calculating the needs factor over a 10 year period of time. There are 3 components to the phase in period.

- a. Rate of Phase In: The proposed method to phase in the new needs system is to lock in an existing needs factor and calculate a new needs factor based on the new system. Then the weight of the “fixed” existing system factor will be reduced by 10% per year while the weight of the new system factor will be increased by 10% per year. So, at year 1 the needs factor used for CSAH distribution purposes will be computed using 90% of the existing system factor and 10% of the new system factor for each county and by year 10 the fixed needs factor will be completely phased out.
- b. Calculating the “fixed” needs factor: A five-year average of the needs factor for each county will be used to calculate the existing system factor. The five year period will be the 5 years prior to approval of the new system. Since a different needs factor is used for the apportionment sum and excess sum distribution, a composite needs factor will be used for those years where the apportionment sum and excess sum distribution exists.
- c. Monitoring of the proposed system: The Needs Task Force recommends that the various elements of the proposed needs system be monitored by a group outside of the screening board during the transition period. This group could be the current membership of the task force, but should include some members of the task force at a minimum. This group would be charged with recommending possible revisions of the system to the screening board.

She discussed:

- Factor method was studied but unable to apply to 87 counties equally.
- Life cycle of a roadway – roads on the system have a purpose and continuing cost.
- How the Counties figure their grading cost.
- The issue of creating 200-500 more segments a year – MSA has 12,000 segments.

The counties looked and studied several different systems and came down to what we have today and call it a life cycle. If there is a road on the system and there is a purpose for it to be there, it's in use; it has a cost. The need doesn't stop. We are not going to reinstate any more. Nothing is based on the last year it was graded. Some roads are not adequate after 5 years. Some roads will last 100 years. It doesn't matter. Everything is on the system. Everything is in use.

The statute says we have to come up with a 25 year cost. What they are going to do is come up with a cost and say, we are really doing this on a 60 year cycle so we will divide it by 60. To get an annual cost, we'll multiply it by 2 to get our 25 year cost. That is how we are going to satisfy the statute. Every mile will always draw a construction component which will be a cost per mile to completely reconstruct, every component will draw a preservation need which will basically be a 1-1/2" – 2" bituminous overlay for however many years – 15 years for the higher volume roads and 20 years for the lower volume roads. Gravel roads will draw 1 inch of gravel annually. Bridges will be kept the same but instead of basing costs on what you are proposing to build, we will base it on what you have built.

We know that you propose to build things and when you get to build it, you don't. We are not making adjustments when you build less than proposed. You are going to get what it is you build so it is a real cost and the cost will be in a five year rolling average. We will go back 5 years and each year we drop year one off. We are not going to inflate it, we are doing a five year average and hope that across the state, the district and each county that they are continuing to build enough bridges to give a good average.

The handout explains what the parameters are and how the calculations are going to work. The biggest change is no reinstatement period: we are eventually going to get to the point where we will resegment our system based on logical termini. If you update every year based on a project, you end up with more data than what is necessary. If there is no reinstatement, there is no need to be breaking segments apart. The update for the county each year will be reporting the previous year's costs and updating any system changes.

### **Options & Discussion of three new possible computation methods**

Marshall Johnston began the discussion.

**Method 1:** The percentage of cities over a certain population receive their allocation based upon some kind of Needs calculation. The percentage of cities under a certain population receive their allocation based upon a Cost Per Mile.

Options: Both Needs and Cost/Mile calculations could be based on projected traffic, roadbed widths, etc.

Issues: What % of the dollars distributed between the larger cities and what % goes to smaller cities.

Reporting Method

**Method 2:** All cities receive their allocation based upon the amount of their MSAS mileage. This Methodology is close to the current method of computing Needs.

Options:

Mileage could be split into different categories based upon roadbed width, projected traffic, type of construction – complete mill & overlay, rehabilitation, preservation, etc.

Issues:

What % of the dollars is distributed between the larger cities and what % goes to smaller cities.

Reporting Method

Needs reinstatement?

**Method 3:** The cities over a certain mileage receive a percentage of the allocation based upon some kind of Needs calculation. It is then distributed based upon the percentage of the total Needs a city has.

The cities under a certain mileage allocation based upon their mileage. It is then distributed based upon the percentage of the total mileage a city has. They receive the percentage of the distribution that their mileage is of the total mileage of all cities.

Issues:

What % of the dollars is distributed between the cities with larger MSAS systems and what % goes to smaller systems?

Method of computing Needs for larger cities?

Different method of computing Needs for cities with smaller systems?

Reporting Method?

Needs Reinstatement?

The Committee discussed at length the fact that the computer system is old and very expensive to upgrade and also that the Counties are leaving the system after 2-3 years of study.

#### **Other Discussion Topics**

Cities under 5000 population will and are pushing at the legislature this year for transportation funding in their cities. Where could the funding come from: CSAH, MSAS or other source.

#### **Recommendation:**

It is recommended that the Screening Board develop a process to create a committee of stakeholders to evaluate a new system (calculations and/or software) to determine the Needs for the Municipal State Aid Cities. It is recommended that the stakeholders group have a representative from each district and one city of the first class. This committee may need to commit to a 2-3 year term, based on how long of a process this has been for the Counties. This Committee would present updates at the fall and spring Screening Board Meetings.

Minutes Respectfully Submitted,

Shelly A. Pederson

**MUNICIPAL STATE AID SCREENING BOARD  
NEEDS STUDY SUBCOMMITTEE  
APRIL 5, 2010**

The Needs Study Subcommittee meeting was held on April 5, 2010 at the Transportation Building Conference Room 521 at 11:30 a.m. NSS members present were Debra Bloom - Roseville, Terry Maurer - Elk River. Also present were Marshall Johnston - Manager, Municipal State Aids Unit, Rick Kjonaas - Deputy State Aid Engineer and Julee Puffer - State Aid. NSS member absent was Katy Gehler-Hess - Northfield.

The meeting was called to order by Chairman Bloom at 11:55 a.m. and turned over to Johnston to review the 2010 Needs Study Subcommittee data. Johnston indicated that in 2007, the Municipal Screening Board made a motion to conduct a Unit Price study every three years with the option to request a Unit Price study on individual items in "off years". In off years, the Needs Study Subcommittee is to use the percentage of increase in the annual National Engineering News Record Construction Cost Index to recommend unit costs to the Screening Board. Johnston went on to indicate that according to data from ENR Construction Cost Index, the percentage for use in the 2010 Needs Study is 3.13%.

Johnston turned the meeting back over to Chairman Bloom to begin discussion on individual items. Chairman Bloom indicated it would be appropriate to discuss all items and then have a resolution at the end approving them as a group, since this year the ENR percentage is being used. Discussion on individual items was as follows:

➤ ***Maintenance Needs.***

	<b>Under 1000 ADT</b>	<b>Over 1000 ADT</b>
Traffic Lane per Mile	\$1,950	\$3,200
Parking Lane per Mile	\$1,950	\$1,950
Median Strip per Mile	\$700	\$1,300
Storm Sewer per Mile	\$700	\$700
Per Traffic Signal	\$700	\$700
Normal M.S.A.S. Streets Minimum Allowance per Mile	\$6,375	\$6,375

➤ ***Grading (Excavation).***

Applying the ENR 3.13%, the cost is increased from \$4.75 per cubic yard to \$4.90 per cubic yard.

➤ ***Aggregate Base 2211.***

Applying the ENR 3.13%, the cost is increased from \$9.81 per ton to \$10.10 per ton.

➤ ***Bituminous.***

Applying the ENR 3.13%, the cost is increased from \$55.00 per ton to \$56.75 per ton.

➤ ***Curb and Gutter.***

Applying the ENR 3.13%, the cost is increased from \$10.70 per lineal foot to \$11.00 per lineal foot.

➤ ***Sidewalk.***

Applying the ENR 3.13%, the cost is increased from \$27.00 per square yard to \$27.85 per square yard.

➤ ***Storm Sewer.***

Based on a memo from Mike Leuer, State Aid Hydraulics Specialist, the costs were increased as follows:

- Storm sewer adjustment increased from \$92,800 per mile to \$94,200 per mile.
- Storm sewer construction increased from \$289,300 per mile to \$294,500 per mile.

➤ ***Street Lighting.***

Street lighting was left unchanged at \$100,000 per mile.

➤ ***Traffic Signals.***

Applying the ENR 3.13%, the cost is increased from \$130,000 per signal to \$136,000 per signal.

➤ ***Right-of-Way.***

Right-of-way is an "after-the-fact" need, so there is no need to adjust the cost for the Needs study.

➤ ***Engineering.***

Engineering is automatically added to all segments, based on 22% of the Needs cost. There is no need to adjust this item for the Needs study.

➤ ***Railroad Crossings.***

Based on a memo received from Susan Aylesworth - Manager, Rail Administration Section, the costs are increased as follows:

- Signs increased from \$2,000 per unit to \$2,500 per unit.
- Pavement markings increased from \$1,500 per unit to \$2,500 per unit.
- Signals (single track - low speed) increased from \$225,000 per unit to \$250,000 per unit.

- Signals and gate (multiple track - high and low speed) increased from \$250,000 per unit to \$275,000 per unit.
- Concrete crossing material (per track) increased from \$1,300 per track foot to \$1,800 per track foot.

➤ **Bridges.**

Bridges in all three length categories increased from \$115 per square foot to \$120 per square foot.

➤ **Railroad Bridges over Highways.**

Costs for railroad bridges over highways were left unchanged.

➤ **Culverts.**

In the past, the NSS has always used the County's Determination of Culvert Costs, since there are many more culverts on the County system and the County does a much more extensive analysis of their costs. This year, the County is not meeting on needs costs analysis until later, so the number is not available. The NSS decided to use the County's Determination of the Costs for Culverts when it becomes available.

A motion was made by Maurer, seconded by Chairman Bloom, to approve all of the above discussed needs costs. Motion passed unanimously.

At 1:00, Mike Kowski - Assistant Metro State Aid Engineer; and Tom Collins - RFC Engineering Consultants, representing the City of Ham Lake, joined the meeting to discuss the issue of soil factor changes for the City of Ham Lake.

In 2005, the Municipal Screening Board adopted a resolution requiring that if greater than 10% of a 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.

Chairman Bloom asked Collins to make a presentation on behalf of Ham Lake. Collins indicated that Ham Lake has 32.3 miles on their MSAS road system, 6.15 of these miles are non-existing roadways. Using geotechnical reports from previous projects, in addition to 84 new borings, they have determined that 4.36 miles of the system should have the soil factor changed. Approximately half of these miles are existing, half are non-existing. All but a 1/2 mile of the requested modified mileage would have its soil factor increased. 0.58 mile would actually have the soil factor decreased. Collins indicated that if these



changes were approved, this would cover the entire current Ham Lake system. Attached is a summary of the Ham Lake request provided by Tom Collins.


Kowski indicated that they had an engineer review all of the documentation submitted by Ham Lake, and concur with the proposed changes.


Discussion followed regarding the increase in annual increase to needs funding for Ham Lake if these changes were approved. Marshall had calculated approximately a \$13,000 annual increase based on last year's values. There was also discussion regarding where the original soil factor determination comes from. Questions were asked of Collins to confirm that if these were approved, there would be no further changes requested to the current Ham Lake system. Collins indicated that that was correct. These requested changes cover the entire Ham Lake system. A motion was made by Maurer, seconded by Chairman Bloom, to recommend approval of these changes for the Ham Lake soil factor to the full Screening Board.

Under other discussion items, Kjonaas stated, as he has been considering the simplification of the MSAS Needs System based on the minutes of the combined subcommittee held on February 9, 2010. He felt that all of the Needs Study cost items could be converted to a roadway cost per mile. He also felt that by converting to a cost per mile, many of the short route segments on the current MSAS system could be eliminated. These types of simplifications would lend themselves to utilizing a much simpler format for upkeep of the annual needs study, minimizing effort by the State Aid staff and cities involved. He indicated he has other suggestions the Screening Committee may want to consider, but by simply converting to a cost-per-mile, there would not have to be winners and losers. One of the other considerations he put forward was to model after the County system and come up with minimum city categories whereby smaller cities on the MSAS system (annual allocations of under \$1 million) would not even have to do annual reporting unless they chose to. There was brief discussion of these ideas put forward by Kjonaas. The consensus of the NSS was these types of ideas deserved consideration in an effort to simplify the MSAS Needs reporting.

Being no more business, the meeting was adjourned at 1:45 p.m.

Minutes prepared by:



 Terry Maurer, Secretary  
Needs Study Subcommittee

Current City of Ham Lake MSA Streets summary

Existing Streets	26.15 miles
Non-Existing Streets	<u>6.15 miles</u>
Total Streets	32.30 miles

Summary of Proposed Revisions to Subgrade Factor:

Existing MSA Streets

From 50% to 130%	1.19 miles
From 100% to 130%	<u>1.24 miles</u>
Total Increased	2.43 miles (9.3% of existing MSA Streets)

Non-Existing MSA Streets

Increase:

From 50% to 130%	1.84 miles
From 100% to 130%	<u>0.09 miles</u>
Total Increased	1.93 miles (31.4% of non-existing MSA Streets)

Decrease:

From 100% to 50%	0.58 miles (9.4% of non-existing MSA Streets)
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Total Non-Existing revisions 2.51 miles (40.8% of non-existing MSA Streets)

Total proposed revisions for 4.94 miles, which is 15.3% of total MSA Streets length

## **HAM LAKE SOIL FACTORS REVISIONS**

**Last Year's Unit Cost for Grading (Excavation) = \$4.75 /Cu, Yd.**

**Last Year's Unit Cost for Gravel Base = \$9.81 /Ton**

**Assuming all segments are 44 Ft. wide with a projected ADT < 10,000**

### **EXISTING SEGMENTS**

#### **1.19 miles increase from 50% to 130%**

Excavation increase of \$13,335 Cu. Yds.

Gravel Base increase of \$27,854 Tons

Estimated Needs increase:

Excavation     \$63,341

Gravel Base   \$273,247

#### **1.24 miles increase from 100% to 130%**

Excavation increase of 5,140 Cu. Yds.

Gravel Base increase of 10,772 Tons

Estimated Needs increase:

Excavation     \$24,415

Gravel Base   \$105,673

## **HAM LAKE SOIL FACTORS REVISIONS**

### **NON EXISTING SEGMENTS**

#### **1.84 miles increase from 50% to 130%**

Excavation increase of 20,619 Cu. Yds.

Gravel Base increase of 43,069 Tons

Estimated Needs Increase:

Excavation     \$97,940

Gravel Base    \$422,507

#### **0.09 miles increase from 100% to 130%**

Excavation increase of 373 Cu. Yds.

Gravel Base increase of 782 Tons

Estimated Needs Increase:

Excavation     \$1,772

Gravel Base    \$7,671

#### **0.58 miles decrease from 100% to 50%**

Excavation decrease of 4,095 Cu. Yds.

Gravel Base decrease of 8,538 Tons

Estimated Needs Decrease:

Excavation     \$19,451

Gravel Base    \$83,758

### **ESTIMATED NEEDS INCREASE OF \$893,357**

### **ESTIMATED ANNUAL DOLLAR INCREASE BASED ON LAST YEARS VALUE OF**

**\$13.36/\$1000= \$11,935**

# OTHER



# TOPICS



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## **MUNICIPAL STATE AID CONSTRUCTION ACCOUNT ADVANCE GUIDELINES**

### **State Aid Advances**

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

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

### **State Aid Advance Code Levels**

Guidelines for advances are determined by the following codes.

#### **SEVERE**

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

#### **HIGH**

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

#### **GUARDED**

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

#### **LOW**

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

### **General Guidelines for State Aid Advances & Federal Aid Advance Construction**

#### **1. City Council Resolution**

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

- Good for year of submission only. If advance amount is not maximized, the resolution amount is reduced to actual advance amount and repayments are adjusted accordingly. If more funds are required, a new resolution must be submitted in the following year.
  - Form can be obtained from SALT website.
    - #SALT 512(4/04) for State Aid projects.
    - #SALT 515(4/04) for Federal Aid projects.
  - Mail completed form to Sandra Martinez in State Aid Finance.
    - E-mail will be sent to Municipal Engineer acknowledging receipt of resolution.
2. "Request to Reserve Advanced Funding" form
- Not required.
  - Will allow the funds to be reserved for up to twelve weeks from date form is signed by Municipal Engineer.
  - Not used for Federal Aid Advance Construction projects.
  - Used in Code Green only.
  - Form #SALT 513(4/04), obtain from SALT website.
  - Mail completed form to Sandra Martinez in State Aid Finance.
    - Form will be signed and returned to Municipal Engineer
3. Pain-O-Meter
- Resolution required.
    - Mail completed form to Sandra Martinez in State Aid Finance.
      - E-mail will be sent to Municipal Engineer acknowledging receipt of resolution.
  - Projects include, but are not limited, to projects where agreements with other agencies have mandated the municipality's participation or projects using Advance Federal Aid.
  - Requests are submitted to DSAE for prioritization within each district.
  - Requests should include negative impact if project had to be delayed or advance funding was not available; include significance of the project.
  - DSAE's submit prioritized lists to SALT for final prioritization.
  - Funds may be reserved (if available) prior to bid advertisement by phone call to Joan Peters. Do not use Request to Reserve Form.
  - Small over-runs and funding shortfalls may be funded, but require State Aid approval.

### **Advance Limitations**

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

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



## RELATIONSHIP OF CONSTRUCTION BALANCE TO CONSTRUCTION ALLOTMENT

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

JUNE 2010 BOOK/RELATIONSHIP OF CONSTRUCTION BALANCE TO ALLOTMENT.XLS

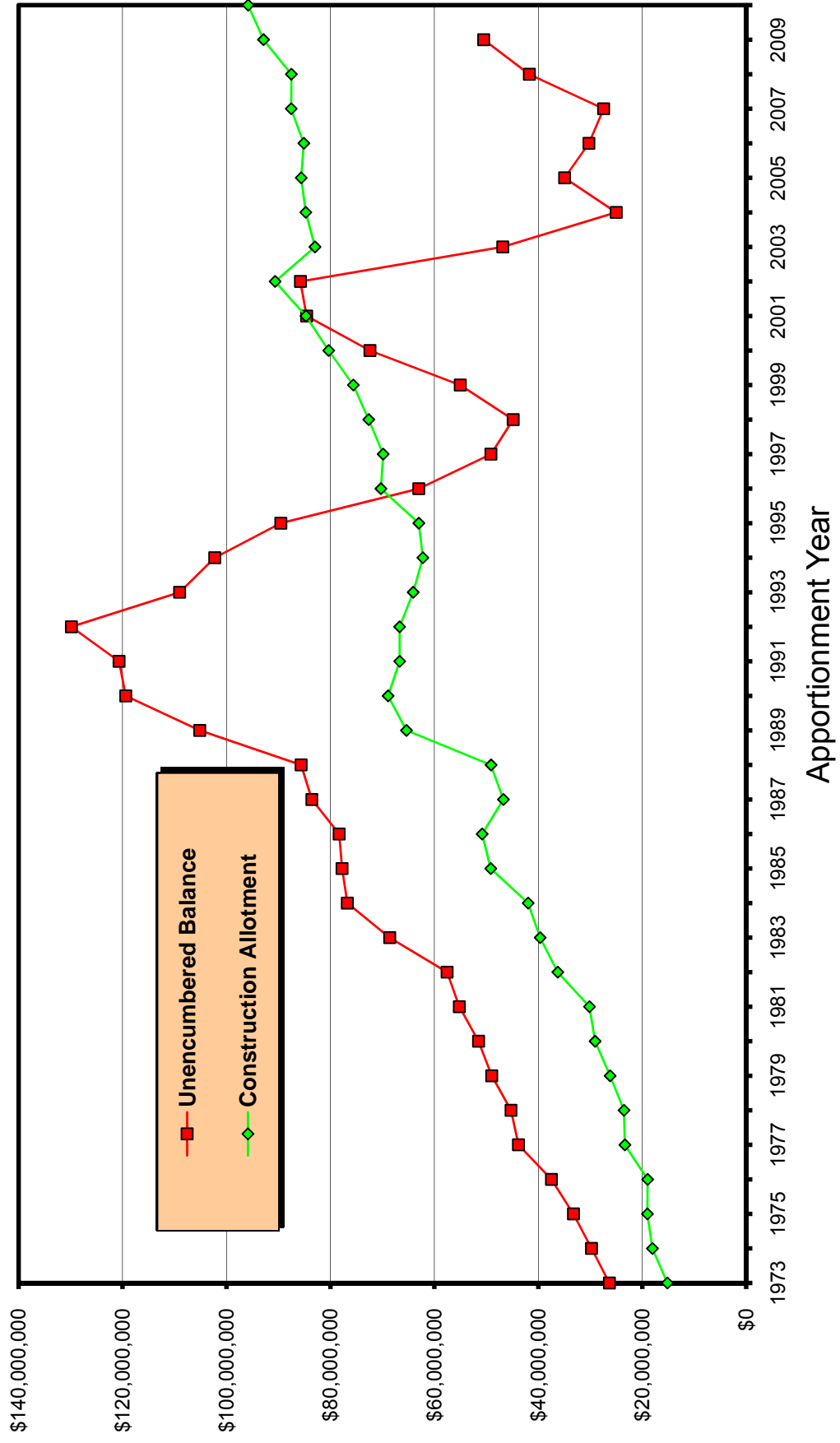
20-Apr-10

App. Year	No. of Cities	Needs Mileage	January Construction Allotment	31-Dec Unencumbered Construction Balance	Amount Spent on Construction Projects	Ratio of Construction Balance to Construction Allotment	Ratio of Amount spent to Amount Received
1973	94	1,580.45	\$15,164,273	\$26,333,918	\$12,855,250	1.7366	0.8477
1974	95	1608.06	18,052,386	29,760,552	14,625,752	1.6486	0.8102
1975	99	1629.30	19,014,171	33,239,840	15,534,883	1.7482	0.8170
1976	101	1718.92	18,971,282	37,478,614	14,732,508	1.9755	0.7766
1977	101	1748.55	23,350,429	43,817,240	17,011,803	1.8765	0.7285
1978	104	1807.94	23,517,393	45,254,560	22,080,073	1.9243	0.9389
1979	106	1853.71	26,196,935	48,960,135	22,491,360	1.8689	0.8585
1980	106	1889.03	29,082,865	51,499,922	26,543,078	1.7708	0.9127
1981	106	1933.64	30,160,696	55,191,785	26,468,833	1.8299	0.8776
1982	105	1976.17	36,255,443	57,550,334	33,896,894	1.5874	0.9349
1983	106	2022.37	39,660,963	68,596,586	28,614,711	1.7296	0.7215
1984	106	2047.23	41,962,145	76,739,685	33,819,046	1.8288	0.8059
1985	107	2110.52	49,151,218	77,761,378	48,129,525	1.5821	0.9792
1986	107	2139.42	50,809,002	78,311,767	50,258,613	1.5413	0.9892
1987	*	2148.07	46,716,190	83,574,312	41,453,645	1.7890	0.8874
1988		2171.89	49,093,724	85,635,991	47,032,045	1.7443	0.9580
1989		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	**	2740.46	69,856,915	49,110,546	83,739,877	0.7030	1.1987
1998		2815.99	72,626,164	44,845,521	76,891,189	0.6175	1.0587
1999		2859.05	75,595,243	55,028,453	65,412,311	0.7279	0.8653
2000	127	2910.87	80,334,284	72,385,813	62,976,924	0.9011	0.7839
2001	129	2972.16	84,711,549	84,583,631	72,513,731	0.9985	0.8560
2002	130	3020.39	90,646,885	85,771,900	89,458,616	0.9462	0.9869
2003	131	3080.67	82,974,496	46,835,689	121,910,707	0.5645	1.4693
2004	133	3116.44	84,740,941	25,009,033	106,567,597	0.2951	1.2576
2005	136	3190.82	85,619,350	34,947,345	75,681,038	0.4082	0.8839
2006	138	3291.64	85,116,889	30,263,685	89,800,549	0.3556	1.0550
2007	142	3382.28	87,542,451	27,429,964	90,376,172	0.3133	1.0324
2008	143	3453.10	87,513,283	41,732,629	73,210,618	0.4769	0.8366
2009	144	3504.00	92,877,123	50,501,664	84,108,088	0.5437	0.9056
2010	144	3533.22	95,826,833				

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

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

# Relationship of Balance to Allotment



# 2010 APPORTIONMENT RANKINGS

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

NIMAS/Brinks 2010 June Book 2010 Apportionment Rankings.ch

POPULATION APPORTIONMENT				MONEY NEEDS APPORTIONMENT				TOTAL APPORTIONMENT			
Rank	Municipality	2009 Total Needs Mileage	2010 Population Apportionment Per Need Mile	Rank	Municipality	2009 Total Needs Mileage	2010 Money Needs Apportionment Per Need Mile	Rank	Municipality	2009 Total Needs Mileage	2010 Total Apportionment Per Need Mile
1	MINNEAPOLIS	206.01	\$32,858	1	CROOKSTON	11.65	\$29,291	1	MINNEAPOLIS	206.01	\$56,615
2	HOPKINS	9.99	30,361	2	DELANO	6.11	26,127	2	ST PAUL	164.74	55,051
3	ST PAUL	164.74	30,338	3	BLOOMINGTON	73.94	25,116	3	HOPKINS	9.99	48,733
4	FALCON HEIGHTS	3.29	30,303	4	THIEF RIVER FALLS	15.78	24,846	4	COON RAPIDS	41.83	47,736
5	NEW HOPE	12.70	28,516	5	ST MICHAEL	22.92	24,797	5	COLUMBIA HEIGHTS	12.50	46,716
6	COON RAPIDS	41.83	26,134	6	ST PAUL	164.74	24,713	6	NEW HOPE	12.70	45,904
7	ST LOUIS PARK	31.45	26,051	7	MOUND	8.17	24,676	7	MOUND	8.17	45,422
8	COLUMBIA HEIGHTS	12.50	25,707	8	MINNEAPOLIS	206.01	23,757	8	BURNSVILLE	45.04	45,259
9	CIRCLE PINES	3.53	25,613	9	HERMANTOWN	15.50	22,910	9	BLOOMINGTON	73.94	45,118
10	NEW BRIGHTON	15.26	25,595	10	MAPLE GROVE	56.25	22,658	10	NEW BRIGHTON	15.26	45,040
11	WEST ST PAUL	13.54	24,866	11	GRAND RAPIDS	22.72	22,361	11	EAGAN	47.72	44,674
12	VADNAIS HEIGHTS	9.17	24,750	12	FERGUS FALLS	24.67	22,330	12	ST LOUIS PARK	31.45	43,773
13	ST ANTHONY	5.95	24,603	13	ALEXANDRIA	23.17	21,970	13	ST ANTHONY	5.95	43,703
14	BROOKLYN CENTER	21.40	24,591	14	BURNSVILLE	45.04	21,729	14	RICHFIELD	25.17	42,639
15	OAKDALE	19.30	24,480	15	NEW ULM	16.11	21,694	15	CIRCLE PINES	3.53	42,533
16	ROBBINSDALE	10.11	24,238	16	COON RAPIDS	41.83	21,602	16	FALCON HEIGHTS	3.29	41,753
17	EAGAN	47.72	23,941	17	JORDAN	5.89	21,526	17	CROOKSTON	11.65	41,492
18	ANOKA	13.14	23,868	18	NORTH MANKATO	15.07	21,144	18	DELANO	6.11	41,345
19	RICHFIELD	25.17	23,740	19	COLUMBIA HEIGHTS	12.50	21,010	19	ANOKA	13.14	41,187
20	BURNSVILLE	45.04	23,530	20	ST FRANCIS	11.94	20,829	20	MAPLE GROVE	56.25	41,144
21	APPLE VALLEY	36.91	23,496	21	DULUTH	114.84	20,812	21	FARMINGTON	16.24	39,728
22	SHOREVIEW	19.52	23,142	22	ST CLOUD	64.78	20,804	22	APPLE VALLEY	36.91	39,538
23	EDEN PRAIRIE	47.08	23,074	23	INVER GROVE HEIGHTS	32.51	20,776	23	WEST ST PAUL	13.54	39,343
24	ARDEN HILLS	7.53	22,572	24	EAGAN	47.72	20,733	24	EDEN PRAIRIE	47.08	39,236
25	WASECA	7.61	22,319	25	FARIBAULT	24.27	20,689	25	WINONA	22.29	39,200
26	BROOKLYN PARK	59.36	21,968	26	MAPLEWOOD	36.16	20,568	26	STEWARTVILLE	4.63	38,897
27	CRYSTAL	17.94	21,952	27	NORTH ST PAUL	11.39	20,529	27	INVER GROVE HEIGHTS	32.51	38,878
28	STEWARTVILLE	4.63	21,892	28	MOORHEAD	44.38	20,428	28	WASECA	7.61	38,724
29	WINONA	22.29	21,470	29	BUFFALO	17.19	20,421	29	NORTH ST PAUL	11.39	38,701
30	PLYMOUTH	58.40	21,253	30	LA CRESCENT	5.84	20,395	30	SHOREVIEW	19.52	38,588
31	WHITE BEAR LAKE	20.35	21,041	31	ST PETER	15.24	20,121	31	PLYMOUTH	58.40	38,480
32	ROCHESTER	85.45	21,011	32	REDWOOD FALLS	8.50	19,819	32	ST CLOUD	64.78	38,387
33	CHAMPLIN	19.92	20,889	33	ALBERTVILLE	7.15	19,732	33	ROCHESTER	85.45	38,205
34	SOUTH ST PAUL	16.82	20,889	34	FARMINGTON	16.24	19,712	34	MAPLEWOOD	36.16	38,185
35	FRIDLEY	22.87	20,824	35	FAIRMONT	19.70	19,703	35	FRIDLEY	22.87	38,124
36	EDINA	40.27	20,754	36	LITTLE FALLS	18.34	19,684	36	MANKATO	33.31	37,825
37	MOUND	8.17	20,746	37	COTTAGE GROVE	35.51	19,620	37	EDINA	40.27	37,600
38	ROSEVILLE	29.12	20,464	38	RED WING	24.65	19,540	38	JORDAN	5.89	37,486
39	CHASKA	20.47	20,383	39	ALBERT LEA	23.40	19,485	39	CHASKA	20.47	37,433
40	BLAINE	48.71	20,264	40	NEW BRIGHTON	15.26	19,445	40	FARIBAULT	24.27	37,001
41	SPRING LAKE PARK	5.82	20,189	41	OWATONNA	28.35	19,194	41	WOODBURY	54.21	36,858
42	NORTHFIELD	17.06	20,177	42	AUSTIN	29.18	19,115	42	VADNAIS HEIGHTS	9.17	36,824

POPULATION APPORTIONMENT				MONEY NEEDS APPORTIONMENT				TOTAL APPORTIONMENT			
Rank	Municipality	2009 Total Needs Mileage	2010 Population Apportionment Per Need Mile	Rank	Municipality	2009 Total Needs Mileage	2010 Money Needs Apportionment Per Need Mile	Rank	Municipality	2009 Total Needs Mileage	2010 Total Apportionment Per Need Mile
43	FARMINGTON	16.24	\$20,016	43	ST ANTHONY	5.95	\$19,100	43	ARDEN HILLS	7.53	\$36,419
44	BLOOMINGTON	73.94	20,002	44	FOREST LAKE	24.08	18,974	44	BROOKLYN CENTER	21.40	36,401
45	PRIOR LAKE	20.49	19,406	45	RICHFIELD	25.17	18,899	45	NEW ULM	16.11	36,335
46	ST JOSEPH	5.52	19,350	46	MANKATO	33.31	18,730	46	COTTAGE GROVE	35.51	36,241
47	MANKATO	33.31	19,095	47	MINNETONKA	50.86	18,519	47	ST MICHAEL	22.92	36,235
48	WAITE PARK	6.12	19,083	48	LITCHFIELD	8.77	18,506	48	MINNETONKA	50.86	36,175
49	KASSON	5.08	18,929	49	CHISHOLM	8.39	18,504	49	NORTH MANKATO	15.07	36,115
50	WOODBURY	54.21	18,701	50	HOPKINS	9.99	18,372	50	SOUTH ST PAUL	16.82	35,706
51	MAPLE GROVE	56.25	18,486	51	WOODBURY	54.21	18,156	51	KASSON	5.08	35,706
52	HASTINGS	21.24	18,372	52	MARSHALL	18.47	18,079	52	LA CRESCENT	5.84	35,642
53	CHANHASSEN	21.47	18,256	53	LAKEVILLE	60.02	17,780	53	ROBINS DALE	10.11	35,396
54	NORTH ST PAUL	11.39	18,172	54	WINONA	22.29	17,731	54	ROSEVILLE	29.12	35,313
55	INVER GROVE HEIGHTS	32.51	18,101	55	ST LOUIS PARK	31.45	17,721	55	CRYSTAL	17.94	35,070
56	VICTORIA	6.44	17,957	56	ST PAUL PARK	6.08	17,506	56	STILLWATER	17.68	34,916
57	MOONDS VIEW	12.43	17,780	57	MENDOTA HEIGHTS	14.67	17,463	57	CHAMPLIN	19.92	34,766
58	MINNETONKA	50.86	17,656	58	NEW HOPE	12.70	17,388	58	OWATONNA	28.35	34,728
59	STILLWATER	17.68	17,618	59	ANOKA	13.14	17,319	59	BUFFALO	17.19	34,707
60	MAPLEWOOD	36.16	17,618	60	FRIDLEY	22.87	17,299	60	MOORHEAD	44.38	34,591
61	ST CLOUD	64.78	17,584	61	STILLWATER	17.68	17,298	61	ALBERTVILLE	7.15	34,542
62	NEW PRAGUE	6.95	17,490	62	VIRGINIA	17.14	17,291	62	THIEF RIVER FALLS	15.78	34,174
63	WORTHINGTON	11.39	17,354	63	PLYMOUTH	58.40	17,226	63	WORTHINGTON	11.39	33,948
64	SAVAGE	27.01	17,249	64	ROCHESTER	85.45	17,194	64	DULUTH	114.84	33,854
65	COTTAGE GROVE	35.51	16,621	65	ANDOVER	43.07	17,151	65	MOONDS VIEW	12.43	33,800
66	MONTECELLO	12.08	16,325	66	CHASKA	20.47	17,049	66	LAKEVILLE	60.02	33,485
67	FRIBAULT	24.27	16,313	67	ROSEMOUNT	30.96	17,042	67	WHITE BEAR LAKE	20.35	33,402
68	MAHTOMEDI	8.61	16,218	68	STEWARTVILLE	4.63	17,005	68	HERMANTOWN	15.50	33,340
69	SAUK RAPIDS	14.01	16,202	69	LINO LAKES	22.62	16,965	69	PRIOR LAKE	20.49	33,308
70	WACONIA	10.74	16,090	70	GLENCOE	8.02	16,947	70	AUSTIN	29.18	33,222
71	SHAKOPEE	36.77	16,029	71	CIRCLE PINES	3.53	16,920	71	OAKDALE	19.30	33,213
72	JORDAN	5.89	15,960	72	SAUK RAPIDS	14.01	16,852	72	WAITE PARK	6.12	33,185
73	LAKEVILLE	60.02	15,705	73	EDINA	40.27	16,846	73	NORTHFIELD	17.06	33,110
74	OWATONNA	28.35	15,533	74	KASSON	5.08	16,778	74	ALBERT LEA	23.40	33,103
75	LITTLE CANADA	11.25	15,489	75	EAST GRAND FORKS	16.82	16,740	75	SAUK RAPIDS	14.01	33,054
76	LINO LAKES	22.62	15,331	76	ELK RIVER	36.36	16,738	76	ST PAUL PARK	6.08	32,611
77	SHOREWOOD	8.61	15,279	77	WORTHINGTON	11.39	16,595	77	WACONIA	10.74	32,520
78	LA CRESCENT	5.84	15,247	78	INTERNATIONAL FALLS	8.06	16,530	78	ST PETER	15.24	32,512
79	DELANO	6.11	15,218	79	WACONIA	10.74	16,430	79	BROOKLYN PARK	59.36	32,468
80	ST PAUL PARK	6.08	15,105	80	WASECA	7.61	16,406	80	LINO LAKES	22.62	32,296
81	NORTH MANKATO	15.07	14,971	81	BRainerd	19.17	16,379	81	BLAINE	48.71	32,190
82	GOLDEN VALLEY	23.57	14,963	82	OAK GROVE	24.52	16,316	82	LITCHFIELD	8.77	32,048
83	ALBERTVILLE	7.15	14,810	83	CLOQUET	21.67	16,176	83	FERGUS FALLS	24.67	32,046
84	BELLE PLAINE	8.46	14,660	84	EDEN PRAIRIE	47.08	16,162	84	CHANHASSEN	21.47	31,814
85	NEW ULM	16.11	14,641	85	SARTELL	17.97	16,148	85	ST FRANCIS	11.94	31,588
86	ORONO	9.45	14,497	86	APPLE VALLEY	36.91	16,042	86	FOREST LAKE	24.08	31,524
87	INTERNATIONAL FALLS	8.06	14,438	87	MOONDS VIEW	12.43	16,019	87	MENDOTA HEIGHTS	14.67	31,359
88	BUFFALO	17.19	14,286	88	EAST BETHEL	28.78	15,972	88	ALEXANDRIA	23.17	31,276
89	BIG LAKE	11.52	14,246	89	WILLMAR	26.73	15,920	89	RED WING	24.65	31,014
90	MOORHEAD	44.38	14,163	90	NORTH BRANCH	23.93	15,860	90	INTERNATIONAL FALLS	8.06	30,967
91	AUSTIN	29.18	14,108	91	HUTCHINSON	18.70	15,653	91	REDWOOD FALLS	8.50	30,962
92	SARTELL	17.97	14,012	92	MINNETRISTA	12.71	15,548	92	ST JOSEPH	5.52	30,844

POPULATION APPORTIONMENT			
Rank	Municipality	2009 Total Needs Mileage	2010 Population Apportionment Per Need Mile
93	ISANTI	6.89	\$13,991
94	BEMIDJI	16.66	13,969
95	MENDOTA HEIGHTS	14.67	13,896
96	ALBERT LEA	23.40	13,618
97	LITCHFIELD	8.77	13,542
98	HUTCHINSON	18.70	13,114
99	DULUTH	114.84	13,041
100	BRainerd	19.17	12,630
101	FOREST LAKE	24.08	12,550
102	ANDOVER	43.07	12,497
103	GLENCOE	8.02	12,466
104	WILLMAR	26.73	12,417
105	ST PETER	15.24	12,391
106	MARSHALL	18.47	12,345
107	CROOKSTON	11.65	12,201
108	ROSEMOUNT	30.96	11,744
109	RED WING	24.65	11,473
110	ST MICHAEL	22.92	11,438
111	ELK RIVER	36.36	11,399
112	REDWOOD FALLS	8.50	11,143
113	MONTEVIDEO	8.55	11,031
114	LAKE CITY	8.39	10,967
115	ST FRANCIS	11.94	10,759
116	RAMSEY	38.15	10,663
117	HUGO	20.61	10,585
118	ROGERS	11.84	10,552
119	HERMANTOWN	15.50	10,430
120	CHISHOLM	8.39	10,340
121	OTSEGO	22.51	10,266
122	CAMBRIDGE	13.08	10,157
123	LAKE ELMO	14.39	10,115
124	MORRIS	9.03	10,001
125	FERGUS FALLS	24.67	9,716
126	FAIRMONT	19.70	9,590
127	CLOQUET	21.67	9,432
128	THIEF RIVER FALLS	15.78	9,327
129	ALEXANDRIA	23.17	9,307
130	VIRGINIA	17.14	9,269
131	DAYTON	9.72	8,959
132	WYOMING	13.45	8,953
133	MINNETRISTA	12.71	8,449
134	BAXTER	16.48	8,240
135	HAM LAKE	32.12	8,183
136	EAST GRAND FORKS	16.82	8,142
137	GRAND RAPIDS	22.72	8,020
138	LITTLE FALLS	18.34	7,968
139	NORTH BRANCH	23.93	7,519
140	EAST BETHEL	28.78	7,313
141	CORCORAN	14.80	6,769
142	DETROIT LAKES	22.35	6,675
143	OAK GROVE	24.52	6,017
144	HIBBING	53.74	5,512
AVERAGE			\$16,435

MONEY NEEDS APPORTIONMENT			
Rank	Municipality	2009 Total Needs Mileage	2010 Money Needs Apportionment Per Need Mile
93	SHOREVIEW	19.52	\$15,446
94	LITTLE CANADA	11.25	15,246
95	BELLE PLAINE	8.46	15,238
96	HIBBING	53.74	15,035
97	ROSEVILLE	29.12	14,849
98	SOUTH ST PAUL	16.82	14,817
99	SHOREWOOD	8.61	14,754
100	WEST ST PAUL	13.54	14,477
101	RAMSEY	38.15	14,437
102	BEMIDJI	16.66	14,405
103	OTSEGO	22.51	14,332
104	GOLDEN VALLEY	23.57	14,293
105	WAITE PARK	6.12	14,102
106	BIG LAKE	11.52	13,988
107	PRIOR LAKE	20.49	13,902
108	CHAMPLIN	19.92	13,876
109	ARDEN HILLS	7.53	13,847
110	MORRIS	9.03	13,638
111	CHANHASSEN	21.47	13,558
112	LAKE CITY	8.39	13,422
113	MONTEVIDEO	8.55	13,370
114	HAM LAKE	32.12	13,122
115	CRYSTAL	17.94	13,118
116	NORTHFIELD	17.06	12,934
117	SHAKOPEE	36.77	12,838
118	HUGO	20.61	12,812
119	ISANTI	6.89	12,765
120	MONTECELLO	12.08	12,624
121	WYOMING	13.45	12,430
122	WHITE BEAR LAKE	20.35	12,361
123	VADNAIS HEIGHTS	9.17	12,074
124	VICTORIA	6.44	11,993
125	BLAINE	48.71	11,927
126	BROOKLYN CENTER	21.40	11,810
127	ST JOSEPH	5.52	11,494
128	FALCON HEIGHTS	3.29	11,450
129	SAVAGE	27.01	11,431
130	LAKE ELMO	14.39	11,385
131	HASTINGS	21.24	11,243
132	BAXTER	16.48	11,209
133	ROBBINSDALE	10.11	11,159
134	NEW PRAGUE	6.95	10,989
135	DETROIT LAKES	22.35	10,717
136	BROOKLYN PARK	59.36	10,500
137	DAYTON	9.72	10,472
138	SPRING LAKE PARK	5.82	10,447
139	MAHTOMEDI	8.61	9,888
140	CAMBRIDGE	13.08	9,657
141	ROGERS	11.84	9,527
142	OAKDALE	19.30	8,734
143	ORONO	9.45	8,707
144	CORCORAN	14.80	8,410
AVERAGE			\$16,763

TOTAL APPORTIONMENT			
Rank	Municipality	2009 Total Needs Mileage	2010 Total Apportionment Per Need Mile
93	LITTLE CANADA	11.25	\$30,735
94	SPRING LAKE PARK	5.82	30,636
95	MARSHALL	18.47	30,423
96	GRAND RAPIDS	22.72	30,381
97	SARTELL	17.97	30,159
98	SHOREWOOD	8.61	30,033
99	VICTORIA	6.44	29,950
100	BELLE PLAINE	8.46	29,898
101	ANDOVER	43.07	29,648
102	HASTINGS	21.24	29,615
103	GLENCOE	8.02	29,412
104	FAIRMONT	19.70	29,294
105	GOLDEN VALLEY	23.57	29,255
106	BRainerd	19.17	29,008
107	MONTECELLO	12.08	28,949
108	SHAKOPEE	36.77	28,867
109	CHISHOLM	8.39	28,844
110	ROSEMOUNT	30.96	28,786
111	HUTCHINSON	18.70	28,767
112	SAVAGE	27.01	28,680
113	NEW PRAGUE	6.95	28,479
114	BEMIDJI	16.66	28,374
115	WILLMAR	26.73	28,338
116	BIG LAKE	11.52	28,235
117	ELK RIVER	36.36	28,137
118	LITTLE FALLS	18.34	27,652
119	ISANTI	6.89	26,756
120	VIRGINIA	17.14	26,560
121	MAHTOMEDI	8.61	26,106
122	CLOQUET	21.67	25,608
123	RAMSEY	38.15	25,100
124	EAST GRAND FORKS	16.82	24,882
125	OTSEGO	22.51	24,598
126	MONTEVIDEO	8.55	24,401
127	LAKE CITY	8.39	24,389
128	MINNETRISTA	12.71	23,997
129	MORRIS	9.03	23,639
130	HUGO	20.61	23,397
131	NORTH BRANCH	23.93	23,378
132	EAST BETHEL	28.78	23,284
133	ORONO	9.45	23,205
134	OAK GROVE	24.52	22,334
135	LAKE ELMO	14.39	21,500
136	HAM LAKE	32.12	21,304
137	HIBBING	53.74	20,546
138	ROGERS	11.84	20,080
139	CAMBRIDGE	13.08	19,814
140	BAXTER	16.48	19,449
141	DAYTON	9.72	19,431
142	WYOMING	13.45	15,497
143	DETROIT LAKES	22.35	17,393
144	CORCORAN	14.80	15,179
AVERAGE			\$33,158

Mar-10 FY10 Local Road Research Board Program													Funding that is encumbered or tentative for these Fiscal Years				
	TITLE	PROJECT TOTAL	LRRB \$	LRRB Paid to Date	Mn/DOT Paid to Date	FY2007	FY2008	FY2009	FY2010	FY2011	FY2012	FY2013	FY2014				
645	2007-2008 Implementation of Research Findings	596,633	399,989	399,989													
645	FY2009-2011 Implementation of Research Findings	645,000	645,000	126,620					247,459	270,921							
	Technology Transfer Center, U of M - Cont. Projects:																
668*	FY2010 Technology Transfer Center. U of M - Base 89261 WO 116	185,000	185,000						159,492	25,508							
	Technology Transfer Center, U of M - Cont. Projects:																
	Circuit Training & Assist. Program (CTAP) T <sup>2</sup> Center-\$84,000	84,000	84,000						84,000								
	Minnesota Maintenance Research Expos	26,000	26,000						26,000								
	Transportation Student Development	5,500	5,500						5,500								
676	FY2010 MnROAD Research: Facility Support (FY10/Half Payment FY11)	500,000	500,000	250,000						250,000							
676	FY2010 MnROAD Research: Tech Transfer & Support	70,000	70,000	35,000						35,000							
768	Geosynthetics in Roadway Design thru 2011	30,000	30,000	22,000					3,000	2,500	2,500						
825	Perf Monitoring of Olmsted CR 177/104 & Aggregate Base Material thru CY2010 @ \$8K/year	40,000	40,000	24,000					8,000	8,000							
840	Performance of PG 52-34 Oil	56,200	56,200	13,600					42,600								
843	Predicting Bumps in Overlays - thru 09- CO PROJECT WITH LAB	64,540	64,540	48,272					15,370	898							
844*	Update Vehicle Classification for CR Pavement Design	92,749	47,749	37,908					9,841								
851*	Allowable Axle Loads on Pavements	126,042	110,000	58,953		0	1,547	48,447	1,053								
853	Development of Flexural Vibration Equipment PhsII	52,980	52,980	52,980			0										
854*	The Effects of Implements of Husbandry - Pooled Fund Prjct	275,239	105,000	34,484				29,516	34,119	6,881							
855*	A Property-Based Spec for Coarse Aggregate in Pavement Apps	92,624	46,312	13,688				4,428	25,630	2,566							
861	Best Mgmt Practices for Pavement Preservation of Hot mix Asphalt	71,050	71,050	71,050													
863*	Optimal Timing of Preventive Maintenance for Addressing Environmental Aging in HMA Pavements Pooled Fund Project	286,185	57,237						3,903	15,610	15,610	15,610	6,504				
864*	Recycled Asphalt Pavements-Pooled Fund Project	392,000	75,000	5,000					40,000	15,000	15,000						
865*	Low Temp Cracking in Asphalt Phase II - Pooled Fund Project	475,000	50,000	0				10,530	23,289	16,181							
867*	Composite Pavements - Pooled Fund Project	671,800	50,000	25,000					12,500	12,500							
868*	HMA Surface Characteristics-Pooled Fund Project	300,000	75,000	0			15,000	15,000	15,000	15,000	15,000						
869	FY2010 TERRA	25,000	12,500	0					12,500								
872*	Mn/ROAD Data Mining, Evaluation and Qualification Phase 1	63,500	27,500	22,581				2,802	2,117								
874*	Assessment of the Underground Stormwater Management Devices	123,000	61,500	61,500													
875*	Estimating Size Distribution of Suspended Sediments in MN Stormwater	55,000	55,000	50,050					4,950								
877	Development and Field Test of Advance Dynamic LED Warning Signals	110,833	110,833	71,440				6,000	33,393								
878	Porous Asphalt Pavement Performance in Cold Regions	247,909	72,729	24,129					48,600								
879	Pervious Concrete Pavement in Mn/ROAD Low Volume Road - Pooled Fund Prjct	226,009	50,000	15,000					35,000								
880*	Snow Plow Route Optimization	45,000	45,000	30,000					15,000								

Funding that is encumbered or tentative for these Fiscal Years

	TITLE	PROJECT TOTAL	LRRB \$	LRRB Paid to Date	Mn/DOT Paid to Date	FY2007	FY2008	FY2009	FY2010	FY2011	FY2012	FY2013	FY2014
	FY2010 Program LRRB Contingency Account	50,000	50,000	7,000					43,000				
885	Research Test Section Tracking Phase II	55,000	55,000						10,000	15,000	10,000	10,000	10,000
886*	Cost-Effective Pavement Preservation Solutions for the Real World	109,984	54,992	0					24,671	30,036	286		
887*	Structural Evaluation of Asphalt Pavements with Full-depth Reclaimed Base	77,308	38,654	0				63	13,620	11,184	13,226	563	
888	MN Local Agency Pavement Marking Practices - Phase 1	18,720	18,720	18,720									
889	Performance of Recycled Asphalt & High RAP Asphalt Mix	60,000	60,000						3,333	36,500	16,167	4,000	
890	Driver Behavior Impacts of Residential Street Warning Signs	79,647	79,647	11,549					55,355	12,743			
891*	Performance Assessment of Oversized Culverts to Accommodate Fish Passage	83,428	41,714	0					23,658	17,492	564		
892	Outreach and Training Program for a Thoughtful Street Tree Master Plan	20,000	20,000						20,000				
893	Performance Based Transportation Construction Contracts	30,000	30,000	0					19,200	10,800			
894	Assessing and Improving Pollution Prevention by Swales	312,000	312,000							44,000	262,000	6,000	
895	BMP for Large Traffic Site Proposal	37,038	37,038						13,894	15,167	7,976		
896*	Quantifying Moisture Effects in DCP and LWD Tests Using Unsaturated Mechanics	109,900	54,950							27,950	24,500	2,500	
897	Developing Salt-Tolerant Sod Mixtures for Use as Roadside Turf in Minnesota	176,516	176,516							44,129	44,129	44,129	44,129
898*	Estimating the Crash Reduction and Vehicle Dynamic Effects of Flashing LED Stop Signs	112,000	36,960							33,264	3,696		
899	Performance Monitoring of Olmsted CR 117 and 104 and Aggregate Base Materials	36,000	36,000							5,000	15,000	16,000	
900	Hennepin/Minneapolis LED Light Study	53,000	50,000							50,000			
901*	Evaluation of Concrete Admixtures to Increase Delivery Time American Engineering Testing	100,000	50,000							14,270	35,730		
TPFXXX	Iowa Peer Exchange -Implements of Husbandry for Bridges	30,000	30,000							30,000			
INV668	FY2011 Technology Transfer Center, U of M - LTAP Program Base									185,000			
	FY2011 Circuit Training & Assist Program (CTAP T2 Center)									84,000			
	FY2011 Mn/DOT Maintenance CTAP Trainer									74,500			
	FY2011 Minnesota Maintenance Research Expos									26,000			
INV998	FY2011 Transportation Student Development									5,500			
	FY2011 OPERA Program- Administration									20,000		90,000	
	FY2011 OPERA Program- Projects									70,000			
INV676	FY2011 MnROAD Research: Facility Support (FY11/Half Payment FY12)									500,000			
	FY2011 MnROAD Research: Tech Transfer & Support									70,000			
INV745	FY2011 Library Services									70,000		700,003	
INV675	FY2011 Research Services Salary Support									160,000			
INV869	FY2011 TERRA Board									12,500			
INV999	FY2011 Program Administration									119,000			
	Sign Reduction & Removal Research									30,000			
	Simplified Materials Control Schedule for Low Volume Roads									25,000			
	Balancing Winter Chemicals with the Environment									10,000			
	Decision Tree for Unpaving Roads									10,000			
998	FY2009 OPERA - Administration	20,000	20,000	20,000				5,175					
998	FY2009 OPERA - Projects	70,000	70,000	70,000									

	TITLE	PROJECT TOTAL	LRRB \$	LRRB Paid to Date	Mn/DOT Paid to Date	FY2007	FY2008	FY2009	FY2010	FY2011	FY2012	FY2013	FY2014
998	FY2010 OPERA - Administration	20,000	20,000	100					19,900				
998	FY2010 OPERA - Projects	70,000	70,000	1,880					68,120				
999	FY2010 Program Administration (includes web & publishing)	112,329	112,329	80,875					31,454				
	<b>TOTALS</b>	7,877,664	4,806,139	1,703,368	0	0	16,547	121,961	1,254,521	2,545,600	481,383	888,805	60,633
	Uncommitted Balance Carryforward								283,367	724,816			
	Apportionment								2,525,135	2,671,499	2,400,000	2,400,000	
	Amount Available								2,808,502	3,396,315	2,400,000	2,400,000	
	(BSR) Less Expended								829,165				
	Less Total Commitments								1,254,521	2,545,600	481,383	888,805	
	Amount Available								<b>724,816</b>	<b>850,715</b>	<b>1,918,617</b>	<b>1,511,196</b>	
	INV668: Tech Tranfer Center										375,000	375,000	
	INV998: Operational Research Program										90,000	90,000	
	INV676: MnROAD										500,000	500,000	
	INV676: MnROAD Technology Transfer and Support										70,000	70,000	
	INV745: Library Services										70,000	70,000	
	INV675: Research Services										160,000	160,000	
	INV999: Project Administration										137,975	107,975	
	INV869: TERRA Board										12,500	12,500	
	INV645 Implementation of Research Findings										200,000	200,000	
	Contingency									50,000	50,000	50,000	
	Total On-going Program Commitments								50,000		1,665,475	1,635,475	
	Total Available after On-going Program Commitments								<b>724,816</b>	<b>800,715</b>	<b>253,142</b>	<b>-124,280</b>	

Notes:

FY10 is from July 1, 2009 to June 30, 2010.

Pending Projects  
Projects co-funded from other sources are marked with an \*

Projects in green are completed.	
Program category	Total LRRB = 1,547,989
Administration category	Total LRRB = 222,329
Project category	Total LRRB = 2,101,395
Research Category	
Implementation Category	

FY12 INV999 was increased \$30,000 due to the potential increase in attendance at the Low Volume Conference (every 4 years).  
FY10 Contingency account was reduced \$7,000 and \$3,433.84 was added to FY09 INV999 and \$3,566.16 was added to FY10 INV999  
Unexpended dollars INV999 FY09 \$210; INV881 \$435  
\$225



## **COUNTY HIGHWAY TURNBACK** **POLICY**

### ***Definitions:***

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

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

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

### ***MILEAGE CONSIDERATIONS***

#### ***County State Aid Highway Turnbacks***

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

#### ***County Road Turnbacks***

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

### ***Jurisdictional Exchanges***

#### ***County Road for MSAS***

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

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

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

### *CSAH for MSAS*

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

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

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

#### NOTE:

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

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

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

### *MSAS designation on a County Road*

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

### **MISCELLANEOUS**

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

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

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

For MSAS purposes, a County or CSAH that has been released to a city cannot be local road for more than two years and still be considered a turnback.

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## **2010 Schedule 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. In 2008, cities were given the option to revise their 2 or 4 year cycle as well as the count year. In 2009, cities were given the option to move to a 4 year cycle with the option to count a subset of locations in the “off cycle” or 2<sup>nd</sup> year of a 4 year cycle.

### **Metro District**

**Two year** traffic counting schedule – counted in 2009 and updated in the needs in 2010

Blaine	East Bethel	Shoreview
Brooklyn Park	Lake Elmo	Victoria
Chanhassen	Prior Lake	
Cottage Grove	Ramsey	

**Two year** traffic counting schedule – counted in 2010 and updated in the needs in 2011

Coon Rapids	Dayton
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## Metro District

**Four year** traffic counting schedule - counted in 2009 and updated in the needs in 2011

Arden Hills	New Brighton	Shorewood
Eden Prairie ***	New Hope	Stillwater
Edina	North St. Paul	St. Louis Park
Falcon Heights	Oak Grove	St. Paul Park
Fridley	Plymouth ^	West St. Paul
Golden Valley	Richfield	White Bear Lake
Mahtomedi	Robbinsdale	
Maplewood	Roseville	

\*\*\*Will Count Next in 2012, and then every four years

^ Counts a subset of locations on the “off cycle,” no map product is produced in that year

**Four year** traffic counting schedule - counted in 2010 and updated in the needs in 2011

Andover	Forest Lake	Minnetonka *
Apple Valley	Hugo	Minnetrista
Belle Plaine	Inver Grove Heights	Oakdale
Burnsville	Jordan	Rosemount
Champlin	Lino Lakes	St. Francis ^
Chaska	Little Canada	Vadnais Heights
Corcoran	Maple Grove	Waconia ^
Eagan	Mendota Heights	

\* Counts over more than one year

^ Counts a subset of locations on the “off cycle,” no map product is produced in that year

**Four year** traffic counting schedule - counted in 2011 and updated in the needs in 2012

Brooklyn Center	Lakeville	Savage
Circle Pines	Mounds View	Shakopee
Farmington	Orono	Woodbury ^
Ham Lake	Rogers ^	
Hastings	St. Anthony	

^ Counts a subset of locations on the “off cycle,” no map product is produced in that year

**Four year** traffic counting schedule - counted in 2012 and updated in the needs in 2013

Anoka	Hopkins	Spring Lake Park
Bloomington *^	Minneapolis *^	St. Paul *
Columbia Heights	Mound	
Crystal	South Saint Paul	

\* Counts over more than one year

^ Counts a subset of locations on the “off cycle,” no map product is produced in that year

## **Outstate**

**Two year** traffic counting schedule – to be counted in 2009 and updated in the needs in 2010

St. Cloud	Sartell
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**Two year** traffic counting schedule - counted in 2010 and updated in the needs in 2011

Northfield*	Rochester
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\* Northfield counted in 2007 and 2008, then every two years

## **Outstate**

**Four year** traffic counting schedule - counted in 2009 and updated in the needs in 2010

Albert Lea	Hutchinson	New Prague
Crookston	Little Falls	North Branch
East Grand Forks	Mankato	Saint Joseph
Glencoe	Moorhead	Waite Park
Grand Rapids	Morris	

## **Outstate**

**Four year** traffic counting schedule - counted in 2010 and updated in the needs in 2011

Alexandria	Elk River	Marshall
Bemidji	Fairmont	New Ulm
Big Lake	Kasson	Stewartville
Cloquet	Lake City	Willmar

## **Outstate**

**Four year** traffic counting schedule - counted in 2011 and updated in the needs in 2012

Baxter	Litchfield	Thief River Falls
Brainerd	North Mankato	Virginia
Chisholm	Owatonna	Worthington
Duluth*	Red Wing	Winona
Fergus Falls	Redwood Falls	
Hermantown	Saint Peter	
Hibbing	Sauk Rapids	

\*Duluth counts 1/4 of the city each year

## **Outstate**

**Four year** traffic counting schedule - to be counted in 2012 and updated in the needs in 2013

Albertville	Detroit Lakes	Montevideo
Austin	Faribault	Monticello
Buffalo	International Falls	Otsego
Cambridge	Isanti	Saint Michael
Delano	La Crescent	Waseca

**CURRENT RESOLUTIONS  
OF THE  
MUNICIPAL SCREENING BOARD**

June 2010

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

**BE IT RESOLVED:**

**ADMINISTRATION**

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

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

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

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

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

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

**Appointment to Unencumbered Construction Funds Subcommittee** - Revised June 1979

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

**Appearance Screening Board** - Oct. 1962 (Revised Oct. 1982)

That any individual or delegation having items of concern regarding the study of State Aid Needs or State Aid Apportionment amounts, and wishing to have consideration given to these items, shall, in a written report, communicate with the State Aid Engineer. The State Aid Engineer with concurrence of the Chair of the Screening Board shall determine which requests are to be referred

to the Screening Board for their consideration. This resolution does not abrogate the right of the Screening Board to call any person or persons before the Board for discussion purposes.

#### **Screening Board Meeting Dates and Locations** - June 1996

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

#### **Research Account** - Oct. 1961

That an annual resolution be considered for setting aside up to ½ of 1% of the previous years Apportionment fund for the Research Account to continue municipal street research activity.

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

That the soil type classification as approved by the 1961 Municipal Screening Board, for all municipalities under Municipal State Aid be adopted for the 1962 Needs Study and 1963 apportionment on all streets in the respective municipalities. Said classifications are to be continued in use until subsequently amended or revised by using the following steps:

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

That when a new municipality becomes eligible to participate in the MSAS allocation, the soil type to be used for Needs purposes shall be based upon the Mn/DOT Soils Classification Map for Needs purposes. Any requests for changes must follow the above process.

#### **Improper Needs Report** - Oct. 1961

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

#### **New Cities Needs** - Oct. 1983 (Revised June, 2005)

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



### **Unit Price Study- Oct. 2006**

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

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

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

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

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

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

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

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

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

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

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

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

## **Population Apportionment** - October 1994, 1996

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

## **DESIGN**

### **Design Limitation on Non-Existing Streets** - Oct. 1965

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

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

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

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

### **Greater Than Minimum Width** (Revised June 1993)

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

### **Miscellaneous Limitations** - Oct. 1961

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

### **MILEAGE** - Feb. 1959 (Revised Oct. 1994, 1998)

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

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

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

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

That the maximum mileage for Municipal State Aid Street designation shall be based on the Annual Certification of Mileage current as of December 31st of the preceding year. Submittal of a

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

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

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

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

**Grading Factors (or Multipliers)** October 2007

That Needs for tree removal, pavement removal, curb and gutter removal and sidewalk removal shall be removed from urban segments in the Needs study and replaced with an Urban Grading Multiplier approved by the Municipal Screening Board. This Multiplier will be multiplied by the Grading/Excavation Needs of each deficient proposed urban segment in the Needs study.

That Needs for tree removal, pavement removal, special drainage, gravel surface and gravel shoulders shall be removed from the rural segments in the Needs study and be replaced with a Rural Grading Multiplier approved by the Municipal Screening Board. This Multiplier will be multiplied by the Grading/Excavation Needs of each deficient proposed rural segment in the Needs study.

That these Grading Factors shall take effect for the January 2010 allocation.

<b>Roadway Item Unit Prices (Reviewed Annually)</b>			
<b>Right of Way (Needs Only)</b>			\$98,850 per Acre
<b>Grading (Excavation)</b>			\$4.90 per Cu. Yd.
<b>Base:</b>	Class 5 Gravel	Spec. #2211	\$10.10 per Ton
	Bituminous	Spec. #2350	\$56.75 per Ton
<b>Surface:</b>	Bituminous	Spec. #2350	\$56.75 per Ton
<b>Miscellaneous:</b>	Storm Sewer Construction		\$295,400 per Mile
	Storm Sewer Adjustment		\$94,200 per Mile
	Street Lighting		\$100,000 per Mile
	Curb & Gutter Construction		\$11.00 per Lin. Ft.
	Sidewalk Construction		\$27.85 per Sq. Yd.
	Project Development		22%

<b>Traffic Signal Needs Based On Projected Traffic (every segment)</b>			
Projected Traffic	Percentage X	Unit Price =	Needs Per Mile
0 - 4,999	25%	\$130,000	\$34,000 per Mile
5,000 - 9,999	50%	\$130,000	\$68,000 per Mile
10,000 and Over	100%	\$130,000	\$136,000 per Mile

**Bridge Width & Costs** - (Reviewed Annually)

All Bridge Unit Costs shall be \$110.00 per Sq. Ft.

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

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

## **RAILROAD CROSSINGS**

### **Railroad Crossing Costs** - (Reviewed Annually)

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

<b>Railroad Grade Crossings</b>	
Signals - (Single track - low speed)	\$250,000 per Unit
Signals and Gates (Multiple Track – high speed)	\$275,000 per Unit
Signs Only (low speed)	\$2,500 per Unit
Concrete Crossing Material Railroad Crossings (Per Track)	\$1,800 per Linear Foot
Pavement Marking	\$2,500 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.

<b>Maintenance Needs Costs</b>	<b>Cost For Under 1000 Vehicles Per Day</b>	<b>Cost For Over 1000 Vehicles Per Day</b>
Traffic Lanes Segment length times number of Traffic lanes times cost per mile	\$1,950 per Mile	\$3,200 per Mile
Parking Lanes: Segment length times number of parking lanes times cost per mile	\$1,950 per Mile	\$1,950 per Mile
Median Strip: Segment length times cost per mile	\$700 per Mile	\$1,300 per Mile
Storm Sewer: Segment length times cost per mile	\$700 per Mile	\$700 per Mile
Traffic Signals: Number of traffic signals times cost per signal	\$700 per Unit	\$700 per Unit
Minimum allowance per mile is determined by segment length times cost per mile.	\$6,375 per Mile	\$6,375 per Mile

## **NEEDS ADJUSTMENTS**

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

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

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

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

That for the determination of Apportionment Needs, a city with a positive unencumbered construction fund balance as of December 31st of the current year shall have that amount deducted from its 25-year total Needs. A municipality with a negative unencumbered construction fund balance as of December 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, Jan. 2010

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 **\$1,500,000**, 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 **\$1,500,000**, the adjustment to the Needs will be increased to 2, 3, 4, etc. times the December 31 construction fund balance until such time the Construction Needs are adjusted to zero.

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

### **Low Balance Incentive** – Oct. 2003

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

#### **'After the Fact' Non Existing Bridge Adjustment-Revised October 1997**

That the Construction Needs for all 'non existing' bridges and grade separations be removed from the Needs Study until such time that a construction project is awarded. At that time a Construction Needs adjustment shall be made by annually adding the local cost (which is the total cost less county or trunk highway participation) for a period of 15 years. The total cost shall include project development and construction engineering costs based upon the current Project Development percentage used in the Needs Study.

#### **Excess Maintenance Account – June 2006**

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

#### **'After the Fact' Retaining Wall Adjustment Oct. 2006**

That retaining wall Needs shall not be included in the Needs study until such time that the retaining wall has been constructed and the actual cost established. At that time a Needs adjustment shall be made by annually adding the local cost (which is the total cost less county or trunk highway participation) for a 15 year period. Documentation of the construction of the retaining wall, including eligible costs, must be submitted to your District State Aid Engineer by July 1 to be included in that years Needs study. After the Fact needs on retaining walls shall begin effective for all projects awarded after January 1, 2006.

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

That any trunk highway turnback which reverts directly to the municipality and becomes part of the State Aid Street system shall not have its Construction Needs considered in the Construction Needs apportionment determination as long as the former trunk highway is fully eligible for 100 percent construction payment from the Municipal Turnback Account. During

this time of eligibility, financial aid for the additional maintenance obligation, of the municipality imposed by the turnback shall be computed on the basis of the current year's apportionment data and shall be accomplished in the following manner.

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

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

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

### **TRAFFIC** - June 1971

### **Traffic Limitation on Non-Existing Streets** - Oct. 1965

That non-existing street shall not have their Needs computed on a traffic count of more than 4,999 vehicles per day unless justified to the satisfaction of the Commissioner.

That for the 1965 and all future Municipal State Aid Street Needs Studies, the Needs Study procedure shall utilize traffic data developed according to the Traffic Estimating section of the State Aid Manual (section 700). This manual shall be prepared and kept current under the direction of the Screening Board regarding methods of counting traffic and computing average daily traffic. The manner and scope of reporting is detailed in the above mentioned manual.

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

That future traffic data for State Aid Needs Studies be developed as follows:

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



