

# 1990 County Screening Board Data



Gordon M. Fay "The End of an Era"

MNDOT HE 356 .M6 M54a 1990 June

June 1990



#### Minnesota Department of Transportation



Transportation Building,

St. Paul, MN 55155

May 18, 1990

TO

: County Highway Engineers

District State Aid Engineers

SUBJECT

: County Engineers' Screening Board Report

Enclosed herewith is a copy of the 1990 Spring County Engineers' Screening Board Report. This report has been prepared by the State Aid Needs Unit, Office of State Aid, Minnesota Department of Transportation.

The unit price data included in this booklet has been analyzed by the County State Aid Highway General Subcommittee and will be recommeded to the Screening Board to be used in the 1990 C.S.A.H. Needs Study.

Also, the mileage requests, have been reviewed by the Mileage Subcommittee and their recommendations are included in this booklet.

If you have any comments, questions, or recommendations regarding this report, please forward them to your District Representative with a copy to this office prior to the meeting which is scheduled for June 13-14, 1990.

If you have a picture that represents your county that could be used for future book covers please send them to our office. It must be at least a 5" x 7" original or negative photo.

Sincerely,

Kenneth M. Hoeschen

Manager

County State Aid Needs Unit

Enclosure: County Screening Board Report

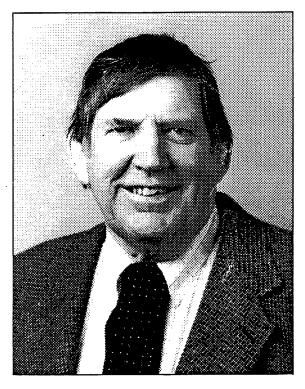
# 1990 County Screening Board Data



MINNESOTA DEPARTMENT OF TRANSPORTATION

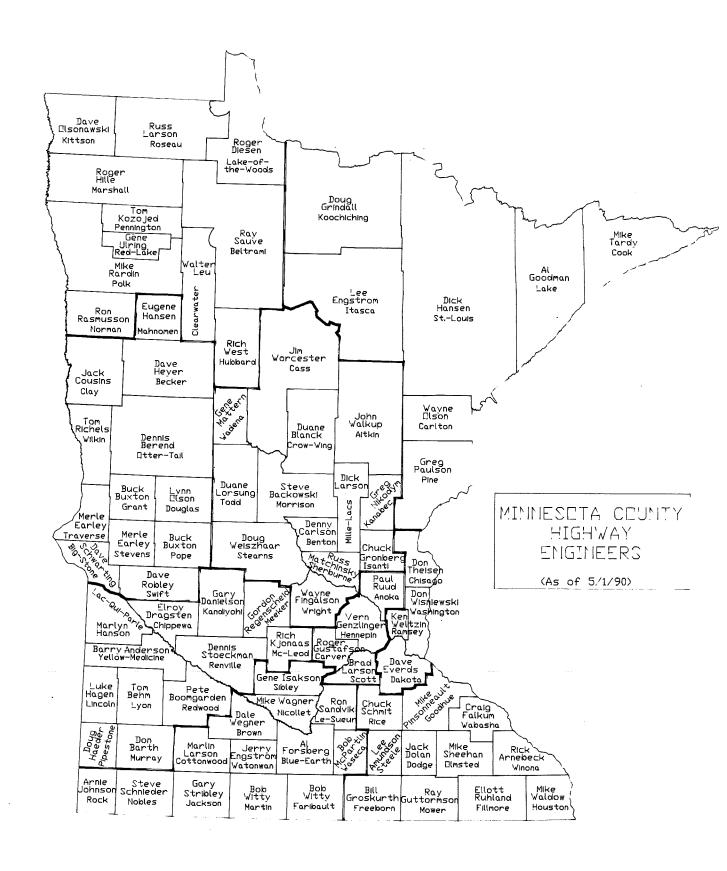
Gordon M. Fay "The End of an Era"

#### MINNESOTA DEPARTMENT OF TRANSPORTATION STATE AID ENGINEER



GORDON M. FAY

GORDY BEGAN HIS ENGINEERING CAREER WITH THE MINNESOTA DEPARTMENT OF HIGHWAYS ON JULY 9, 1942. He WORKED IN THE ROCHESTER AREA UNTIL DECEMBER 13, 1942 WHEN HE ENTERED THE UNITED STATES NAVY. HE SERVED IN THE NAVY UNTIL JANUARY 28, 1946. GORDY RETURNED TO THE MINNESOTA DEPARTMENT OF HIGHWAYS AND CONTINUED TO WORK IN THE ROCHESTER AREA UNTIL JULY 2, 1954 WHEN HE WAS APPOINTED WINONA COUNTY ENGINEER. HE SERVED IN THIS CAPACITY UNTIL HIS APPOINTMENT AS STATE AID ENGINEER ON MARCH 1, 1968. GORDY HAS ANNOUNCED HIS RETIREMENT FROM THE MINNESOTA DEPARTMENT OF TRANSPORTATION TO TAKE EFFECT JUNE 29, 1990. HIS WORKING CAREER HAS SPANNED 48 YEARS. WE WISH GORDY AND HIS WIFE PEARL THE BEST THAT RETIREMENT CAN PRODUCE. GOOD LUCK GORDY.



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#### 1990 COUNTY SCREENING BOARD

AL GOODMAN	(89-90) - LAKE COUNTY	- District 1
ROGER HILLE	(90-91) - Marshall County	- District 2
GENE MATTERN	(89-90) - WADENA COUNTY	- DISTRICT 3
JACK COUSINS	(90-91) - CLAY COUNTY	- District 4
Vern Genzlinger	(89-90) - HENNEPIN COUNTY	- District 5
Mike Sheehan	(90-91) - OLMSTED COUNTY	- District 6
BOB WITTY	(89-90) - FARIBAULT/MARTIN COUNTIE	s - District 7
Doug Haeder	(90-91) - PIPESTONE COUNTY	- District 8
Dave Everds	(89-90) - DAKOTA COUNTY	- District 9
AL FORSBERG (SECRETARY)	- BLUE EARTH COUNTY	
199	O SCREENING BOARD ALTERNATES	
LEE ENGSTROM	- Itasca County	District 1
WALTER LEU	- CLEARWATER COUNTY	DISTRICT 2
JOHN WALKUP	- AITKIN COUNTY	DISTRICT 3
Dave Heyer	- Becker County - Scott County	District 4 District 5
Brad Larson Bill Groskurth	- SCOTT COUNTY - FREEBORN COUNTY	DISTRICT 6
ARNIE JOHNSON	- ROCK COUNTY	DISTRICT 7
GARY DANIELSON	- KANDIYOHI COUNTY	DISTRICT 8
DON THEISEN	- CHISAGO COUNTY	DISTRICT 9
199	O CSAH GENERAL SUBCOMMITTEE	
BILL GROSKURTH, CHAIR. (	JUNE. 90)- FREEBORN COUNTY	
DENNIS BEREND (	JUNE, 90)- FREEBORN COUNTY JUNE, 91)- OTTER TAIL COUNTY	
KEN WELTZIN (	JUNE, 92) - RAMSEY COUNTY	
199	O CSAH MILEAGE SUBCOMMITTEE	
Duane Lorsung, Chair.	(Oct. 90) - Todd County	
GENE ISAKSON	(OCT. 91) - SIBLEY COUNTY	
Paul Ruud	(Oct. 92) - Anoka County	
CSA	H VARIANCE SUBCOMMITTEE (STANDING)	•
Ron Sandvik	- Le Sueur County	
PETE BOOMGARDEN	- REDWOOD COUNTY	·
Don Wisniewski	<ul> <li>Washington County</li> </ul>	

JUNE, 1990

#### INTRODUCTION

THE PRIMARY TASKS OF THE SCREENING BOARD AT THIS MEETING ARE TO ESTABLISH UNIT PRICES TO BE USED FOR THE 1990 COUNTY STATE AID HIGHWAY NEEDS STUDY, TO REVIEW AND GIVE APPROVAL OR DENIAL TO THE ADDITIONAL MILEAGE REQUESTS INCLUDED IN THIS BOOKLET, AND TO REVIEW THE RESULTS OF STUDIES PREVIOUSLY REQUESTED BY THE SCREENING BOARD.

As in other years, in order to keep the five-year average unit price study current, we have removed the 1984 construction projects and added the 1989 construction projects. The abstracts of bids on all State Aid and Federal Aid projects, let from 1985 through 1989, are the basic source of information for compiling the data used for computing the recommended 1990 unit prices. As was directed by the 1986 Screening Board, urban design projects have been included in the five year average unit price study. The gravel base unit price data obtained from the 1989 projects was transmitted to each county engineer for his approval. Any necessary corrections or changes received from the county engineers were made prior to the Subcommittee's review and recommendation.

MINUTES OF THE SUBCOMMITTEE MEETING HELD APRIL 27, 1990 ARE INCLUDED IN THE "REFERENCE MATERIAL" SECTION OF THIS REPORT. BILL GROSKURTH, FREEBORN COUNTY, CHAIRMAN OF THE GENERAL SUBCOMMITTEE AND DUANE LORSUNG, TODD COUNTY, CHAIRMAN OF THE MILEAGE SUBCOMMITTEE WILL ATTEND THE SCREENING BOARD MEETING TO REVIEW AND EXPLAIN THE RECOMMENDATIONS OF THEIR RESPECTIVE GROUPS.

TREND OF C.S.A.H. UNIT PRICES
(Base on State Averages from 1978-1989)

THE FOLLOWING GRAPHS AND TABULATIONS INDICATE THE UNIT PRICE TRENDS OF THE VARIOUS CONSTRUCTION ITEMS. AS MENTIONED EARLIER, ALL UNIT PRICE DATA WAS RETRIEVED FROM THE ABSTRACTS OF BIDS ON STATE AID AND FEDERAL AID PROJECTS. THREE TRENDS ARE SHOWN FOR EACH CONSTRUCTION ITEM:

ANNUAL AVERAGE, FIVE-YEAR AVERAGE, AND NEEDS STUDY AVERAGE.

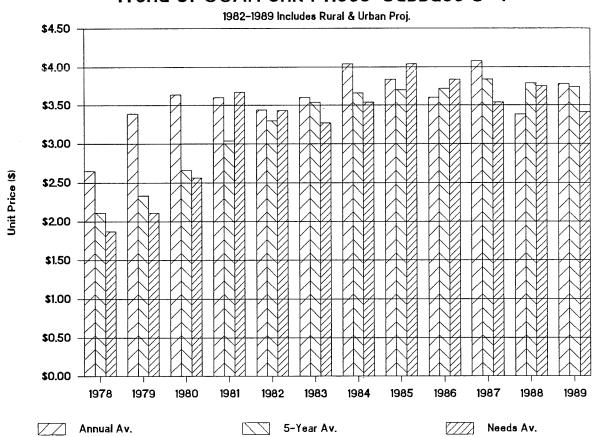
PLEASE NOTE THAT URBAN DESIGN PROJECTS WERE INCLUDED IN THE STUDY BEGINNING WITH THE 1982 PROJECTS.

#### TREND OF C.S.A.H. UNIT PRICES FOR SUBBASE - CLASS 3 & 4

1982-1989 INCLUDES RURAL & URBAN DESIGN PROJECTS

Year	QUANTITIES	Соѕт	Annual Average	5-YEAR Average	(UNLY) (RURAL DESIGN) NEEDS STUDY AVERAGE
1978 1979 1980 1981 1982 1983 1984 1985 1986 1987 1988 1989	1,408,202 1,148,672 1,006,473 1,274,775 474,716 838,004 645,084 729,577 798,321 1,015,708 981,435 1,599,066	\$3,725,724 3,891,149 3,665,775 4,589,136 1,633,375 3,015,160 2,605,291 2,804,858 2,871,121 4,147,919 3,316,895 6,040,886	\$2.65 3.39 3.64 3.60 3.44 3.60 4.04 3.84 3.60 4.08 3.38	\$2.11 2.33 2.66 3.04 3.54 3.66 3.70 3.72 3.84 3.79 3.74	\$1.87 2.11 2.56 3.67 3.43 3.27 3.54 4.04 3.84 3.54 3.75 3.41

#### Trend of CSAH Unit Prices-Subbase 3-4



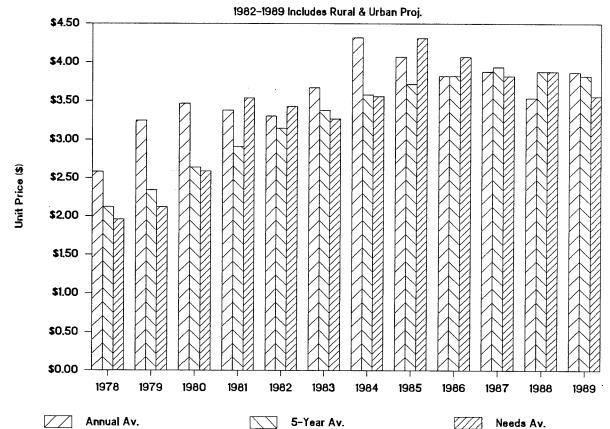
#### LOTUS-FILE\_456 (BASE\_5&6)

#### 1990 COUNTY SCREENING BOARD DATA JUNE, 1990

# TREND OF C.S.A.H. UNIT PRICES FOR GRAVEL BASE - 2211 CLASS 5 & 6

YEAR	Quantities	Соѕт	Annual Average	5-YEAR Average	NEEDS STUDY Average
1978 1979 1980 1981 1982 1983 1984 1985 1986 1987 1988 1989	2,383,648 2,115,430 1,468,830 1,840,881 2,467,051 1,938,168 1,862,681 2,574,482 2,296,457 2,856,606 3,413,807 3,251,033	\$6,150,942 6,885,598 5,099,343 6,218,533 8,167,357 7,113,486 8,042,583 10,479,018 8,768,366 11,084,646 12,092,134 12,581,030	\$2.58 3.25 3.47 3.38 3.31 3.67 4.32 4.07 3.82 3.88 3.54 3.87	\$2.12 2.34 2.64 2.91 3.15 3.38 3.72 3.82 3.94 3.88 3.82	\$1.96 2.12 2.59 3.54 3.43 3.27 3.56 4.31 4.07 3.82 3.88 3.56

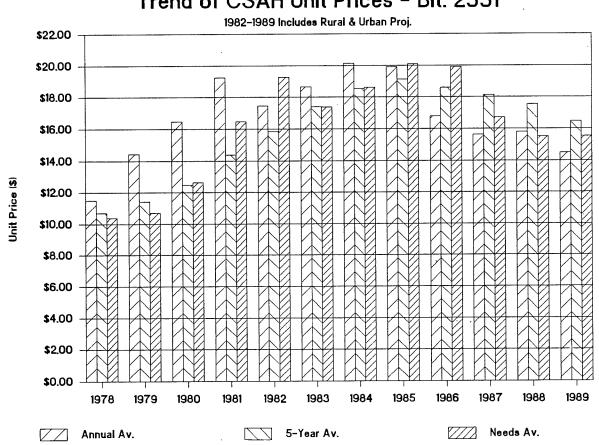
#### Trend of CSAH Unit Prices-Base 5 & 6



# TREND OF C.S.A.H. UNIT PRICES FOR BITUMINOUS - 2331 1982-1989 INCLUDES RURAL & URBAN DESIGN PROJECTS

YEAR QUANTITII	es Cost	Annual Average	5-YEAR Average	(Only) (Rural Design) Needs Study Average
1978 1,738,38 1979 1,640,93 1980 1,218,69 1981 1,825,70 1982 1,911,93 1983 2,141,60 1984 2,115,13 1985 2,491,20 1986 2,546,30 1987 2,483,49 1988 2,582,83 1989 2,962,50	23,711,868 20,084,084 20,084,084 22 35,165,185 29 33,405,746 39,959,758 42,616,496 49,596,550 42,789,582 38,875,784 40,775,683	\$11.51 14.45 16.48 19.26 17.47 18.66 20.15 19.91 16.80 15.65 15.79	\$10.70 11.43 12.47 14.39 15.85 17.40 18.55 19.13 18.60 18.15 17.55 16.46	\$10.38 10.70 12.64 16.48 19.27 17.39 18.61 20.10 19.91 16.71 15.51

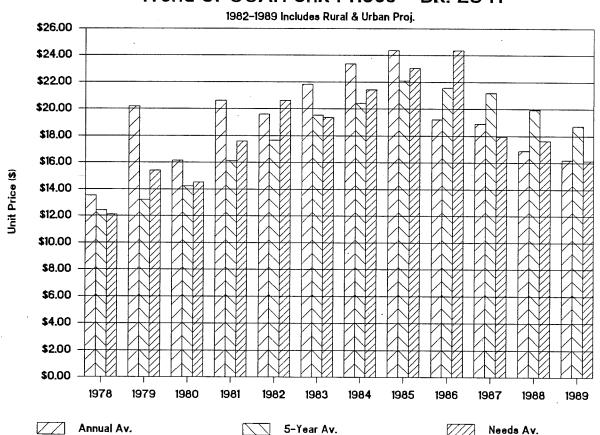
#### Trend of CSAH Unit Prices - Bit. 2331



# TREND OF C.S.A.H. UNIT PRICES FOR BITUMINOUS - 2341 1982-1989 INCLUDES RURAL & URBAN DESIGN PROJECTS

Year	Quantities	Соѕт	Annual Average	5-YEAR Average	(Only) (Rural Design) Needs Study Average
1978	122,544	\$1,656,383	\$13.52	\$12.41	\$12.11
1979	64,840	1,308,883	20.18	13.20	15.41
1980	87,488	1,413,751	16.16	14.24	14.52
1981	63,541	1,310,395	20.63	16.13	17.58
1982	191,268	3,749,375	19.60	17.66	20.63
1983	146,503	3,199,774	21.84	19.54	19.39
1984	172,277	4,028,081	23.39	20.42	21.44
1985	223,479	5,451,659	24.39	22.10	23.06
1986	258,737	4,976,856	19.24	21.58	24.39
1987	299,548	5,666,289	18.92	21.19	17.95
1988	355,070	6,001,226	16.90	19.96	17.64
1989	307,106	4,980,376	16.22	18.76	16.15

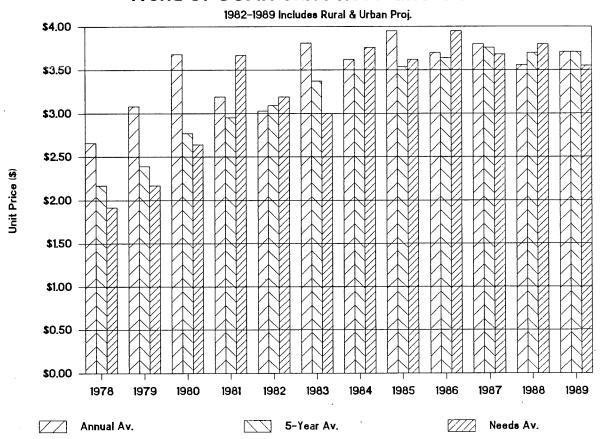
#### Trend of CSAH Unit Prices - Bit. 2341



# TREND OF C.S.A.H. UNIT PRICES FOR GRAVEL SURFACE - 2118 1982-1989 INCLUDES RURAL & URBAN DESIGN PROJECTS

Year	QUANTITIES	Соѕт	Annual Average	5-YEAR Average	(ONLY) (RURAL DESIGN) NEEDS STUDY AVERAGE
1978 1979 1980 1981 1982 1983 1984 1985 1986 1987 1988 1989	388,427 261,637 291,915 177,479 169,755 176,024 283,698 194,555 257,323 252,093 393,590 417,908	\$1,032,379 806,744 1,072,984 565,415 514,181 669,773 1,027,910 769,340 951,855 957,420 1,400,145 1,548,428	\$2.66 3.08 3.68 3.19 3.03 3.81 3.62 3.95 3.70 3.80 3.56 3.71	\$2.17 2.39 2.77 2.95 3.09 3.37 3.50 3.54 3.76 3.70 3.71	\$1.92 2.17 2.64 3.67 3.19 3.00 3.76 3.62 3.95 3.68 3.80 3.55

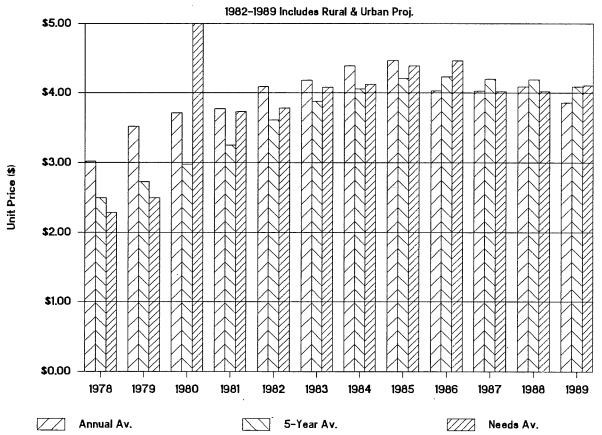
#### Trend of CSAH Unit Prices Gr.Surf. 2118



# TREND OF C.S.A.H. UNIT PRICES FOR GRAVEL SHOULDERS - 2221 1982-1989 INCLUDES RURAL & URBAN DESIGN PROJECTS

YEAR	Quantities	Соѕт	Annual Average	5-YEAR Average	(Only) (Rural Design) Needs Study Average
1978 1979 1980 1981 1982 1983 1984 1985 1986 1987 1988	748,028 641,380 528,325 606,762 760,901 838,572 812,267 988,140 1,094,004 1,118,478 1,050,781	\$2,259,804 2,255,009 1,963,507 2,287,661 3,111,555 3,504,333 3,565,540 4,411,565 4,402,874 4,505,873 4,300,402 4,531,872	\$3.02 3.52 3.71 3.77 4.09 4.18 4.39 4.47 4.03 4.03 4.09 3.86	\$2.50 2.73 2.98 3.25 3.61 3.88 4.06 4.21 4.23 4.20 4.19 4.08	\$2.29 2.50 5.00 3.73 3.78 4.08 4.12 4.39 4.46 4.02 4.02 4.11

#### Trend of CSAH Unit Prices Gr.Shld. 2221



# NOTES & COMMENTS

#### 1990 C.S.A.H. Gravel Base Unit Price Data

The map (figure A) indicates each county's 1989 CSAH needs study gravel base unit price, the gravel base data in the 1985-1989 five-year average unit price study for each county, and an <a href="inflated">inflated</a> gravel base unit price which is the Subcommittee's recommendation for 1990. As directed by the 1986 Screening Board, all urban design projects were also included in the five year average unit price study for all counties.

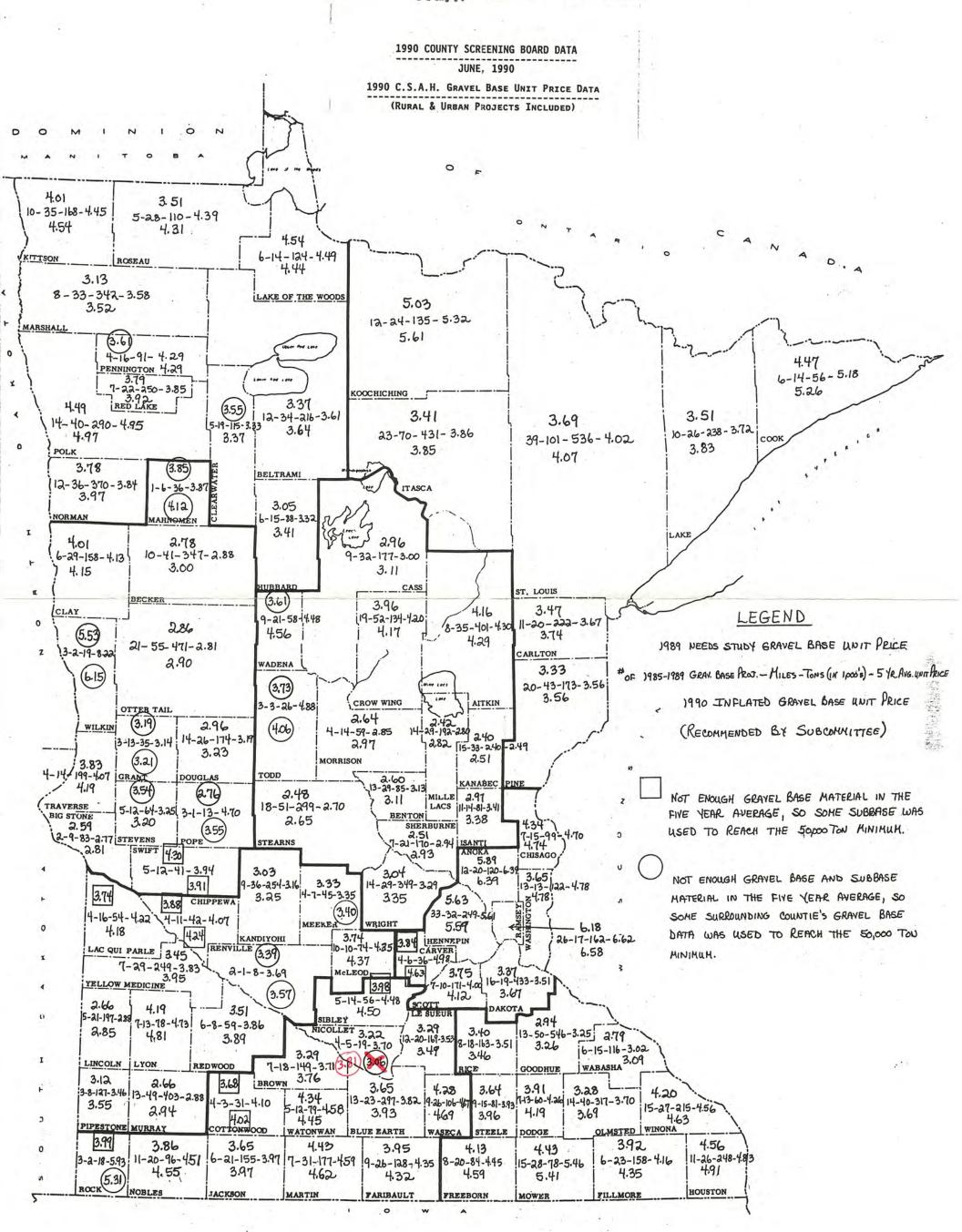
The following procedure, initially adopted at the 1981 Spring Screening Board meeting, was implemented by the Subcommittee at their April 27, 1990 meeting to determine the 1990 gravel base unit prices:

If a county has at least 50,000 tons of gravel base in its current five-year average unit price study, that five-year average unit price, <u>inflated</u> by the factors shown in the inflation factor report, is used.

If a county has less than 50,000 tons of gravel base material in its five-year average unit price study, then enough subbase material from that county's five-year average unit price study is added to the gravel base material to equal 50,000 tons, and a weighted average unit price <u>inflated</u> by the proper factors is determined.

If a county has less than 50,000 tons of combined gravel base and subbase material in its five-year average unit price study, then enough gravel base material from the surrounding counties which do have 50,000 tons in their five-year averages is added to the combined gravel base and subbase material to equal 50,000 tons, and a weighted average unit price <u>inflated</u> by the proper factors is determined.

As you can see, the counties whose recommended unit prices have either a square or a circle around them have less than 50,000 tons of gravel base material in their current five-year average unit price study. Therefore, these prices were determined using either the second or third part of the procedure above. Bill Groskurth, the Subcommittee Chairman, will attend the Screening Board meeting to discuss their recommendations.



#### LOTUS-FILE\_456(INFLATIO)

#### 1990 COUNTY SCREENING BOARD DATA JUNE, 1990

#### Unit Price Inflation Factor Study

BECAUSE OF THE DRASTIC FLUCTUATION IN UNIT PRICES IN RECENT YEARS, THE SUBCOMMITTEE IS RECOMMENDING CONTINUING THE INFLATION OF THE COST, IN THE FIVE-YEAR AVERAGE UNIT PRICE STUDY FOR THE DETERMINATION OF NEEDS STUDY PRICES.

SINCE THE GRAVEL BASE AND SUBBASE PRICES ARE THE BASIS FOR THE OTHER NEEDS STUDY CONSTRUCTION ITEM UNIT PRICES, THE NEEDS UNIT CONCENTRATED ON THESE TWO ITEMS TO GENERATE INFLATION FACTORS.

THE INFLATION FACTORS ARRIVED AT WERE COMPUTED BY DIVIDING THE AVERAGE UNIT PRICE OF THE LATEST YEAR IN THE FIVE-YEAR AVERAGE BY THE AVERAGE UNIT PRICE OF THE YEAR INVOLVED. THESE CALCULATIONS ARE SHOWN IN THE CHARTS BELOW.

GRAVEL BASE - #2211 CLASS 5 - 6

YEAR	QUANTITY	Соѕт	Annual Average	INFLATION Factor	
1985	2,574,482	\$10,479,018	\$4.07	\$3.87/\$4.07 =	0.95
1986	2,296,457	\$8,768,366	\$3.82	\$3.87/\$3.82 =	1.01
1987	2,856,606	\$11,084,646	\$3.88	\$3.87/\$3.88 =	1.00
1988	3,413,807	\$12,092,134	\$3.54	\$3.87/\$3.54 =	1.09
1989	3,251,033	\$12,581,030	\$3.87		

#### SUBBASE BASE - #2211 CLASS 3 - 4

YEAR	QUANTITY	Соѕт	Annual Average	INFLATION Factor	
1985	729,577	\$2,804,858	\$3.84	\$3.78/\$3.84 =	0.98
1986	798,321	\$2,871,121	\$3.60	\$3.78/\$3.60 =	1.05
1987	1,015,708	\$4,147,919	\$4.08	\$3.78/\$4.08 =	0.93
1988	981,435	\$3,316,895	\$3.38	\$3.78/\$3.38 =	1.12
1989	1,599,066	\$6,040,886	\$3.78		

IN ORDER TO REFLECT CURRENT PRICES IN THE 1985-1989 FIVE-YEAR AVERAGE UNIT PRICE STUDY, EACH PROJECT'S GRAVEL BASE AND SUBBASE COSTS WERE MULTIPLIED BY THE APPROPRIATE INFLATION FACTOR.

#### C.S.A.H. ROADWAY UNIT PRICE REPORT

THE FOLLOWING TABULATION OF ROADWAY CONSTRUCTION PRICES SHOWS THE AVERAGE UNIT PRICES IN THE 1989 C.S.A.H. NEEDS STUDY, THE 1985-1989 C.S.A.H. FIVE-YEAR AVERAGE UNIT PRICES, THE 1989 AVERAGE AND THE SUBCOMMITTEE'S RECOMMENDED UNIT PRICES FOR USE IN THE 1990 NEEDS STUDY.

THE SUBCOMMITTEE'S RECOMMENDED PRICES WERE DETERMINED AT THEIR MEETING ON APRIL 27, 1990. MINUTES DOCUMENTING THESE PROCEEDINGS ARE INCLUDED IN THE "REFERENCE MATERIAL" PORTION OF THIS BOOKLET.

#### C.S.A.H. ROADWAY UNIT PRICE REPORT

CONSTRUCTION ITEM	NEEDS Study	1985-1989 CSAH 5-YEAR Construction Average	1989 CSAH Construction Average	1990 CSAH NEEDS STUDY UNIT PRICE RECOMMENDED BY CSAH SUBCOMMITTEE
Rural & Urban Design				
GRAV. BASE CL 5 & 6/TON	\$3.56	\$3.82	\$3.87	*
RURAL DESIGN	15.53 16.15 11.80	16.25 17.59 	14.29 15.82 (11.80) (1987-Mn/DC 3.70	G.B. + 11.95 11.80 )T) G.B 0.17
URBAN DESIGN  SUBBASE CL 3 & 4/TON BIT.BASE & SURF. 2331/TO BIT.SURF. 2341/TON CON.SURF. 2301/SQ.YD.	\$3.56 N 18.34 19.26 14.89	\$5.41 19.07 23.16	\$5.91 17.13 18.41 (14.89) (1987-Mn/D	14.89

<sup>\*</sup> THE RECOMMENDED GRAVEL BASE UNIT PRICE FOR EACH INDIVIDUAL COUNTY IS SHOWN ON THE STATE MAP FOLDOUT (FIG. A).

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

#### C.S.A.H. MISCELLANEOUS UNIT PRICE REPORT

THE FOLLOWING REPORT LISTS THE MISCELLANEOUS UNIT PRICES USED IN THE 1989 C.S.A.H. NEEDS STUDY, THOSE RECOMMENDED BY THE M.S.A.S. SUB-COMMITTEE OR MN/DOT AND THE UNIT PRICES RECOMMENDED BY THE C.S.A.H. SUBCOMMITTEE.

DOCUMENTATION OF THE SUBCOMMITTEE'S RECOMMENDATIONS CAN BE FOUND IN THE MINUTES OF THEIR MEETING ON APRIL 27, 1990 WHICH ARE PRINTED IN THE "REFERENCE MATERIAL" SECTION OF THIS BOOKLET.

#### C.S.A.H. MISCELLANEOUS UNIT PRICE REPORT

CONSTRUCTION ITEM	1989 CSAH Needs Study Average	PRICES RECOMMENDED FOR 1990 BY MSAS SUBCOMMITTEE OR MN/DOT	1990 CSAH UNIT PRICE RECOMMENDED BY CSAH SUBCOMMITTEE
OTHER URBAN DESIGN			
STORM SEWER - COMPLETE/MI. STORM SEWER - PARTIAL/MI. CURB & GUTTER CONST./LIN.FT.	\$196,000 62,000 5.50	\$196,000 62,000 5.50	\$196,000 62,000 5.50
Bridges			·
0-149 Ft.Long/Sq.Ft. 150-499 Ft.Long/Sq.Ft. 500 Ft. & Longer/Sq.Ft. Widening/Sq.Ft. RR over Hwy - 1 Track/Lin.ft. Each Add.Track/Lin.ft.	\$45.00 50.00 60.00 100.00 2,250 1,750	\$55.00 60.00 65.00 150.00 4,000 3,000	\$55.00 60.00 65.00 150.00 4,000 3,000
Railroad Protection			
Signs Signals Signals & Gates	\$300 70,000 99,000	\$400 75,000 110,000	\$400 75,000 110,000 (IF POSSIBLE)

#### NOTES & COMMENTS

#### LOTUS-2.01-3(CRITERIA)

#### 1990 COUNTY SCREENING BOARD DATA JUNE, 1990

CRITERIA NECESSARY FOR COUNTY STATE AID HIGHWAY DESIGNATION

In the past, there has been considerable speculation as to which requirements a road must meet in order to qualify for designation as a County State Aid Highway. The following section of the Minnesota Department of Transportation Rules which was updated in March, 1984, definitely sets forth what criteria are necessary.

PORTION OF MINNESOTA RULES FOR STATE AID OPERATIONS

STATE AID ROUTES SHALL BE SELECTED ON THE BASIS OF THE FOLLOWING CRITERIA:

- A. A COUNTY STATE-AID HIGHWAY WHICH:
  - (1) IS PROJECTED TO CARRY A RELATIVELY HEAVIER TRAFFIC VOLUME OR IS FUNCTIONALLY CLASSIFIED AS COLLECTOR OR ARTERIAL AS IDENTIFIED ON THE COUNTY'S FUNCTIONAL PLANS AS APPROVED BY THE COUNTY BOARD;
  - (2) CONNECTS TOWNS, COMMUNITIES, SHIPPING POINTS, AND MARKETS WITHIN A COUNTY OR IN ADJACENT COUNTIES;
    - (A) OR PROVIDES ACCESS TO RURAL CHURCHES, SCHOOLS, COMMUNITY MEETING HALLS, INDUSTRIAL AREAS, STATE INSTITUTIONS, AND RECREATIONAL AREAS;
    - (B) OR SERVES AS A PRINCIPAL RURAL MAIL ROUTE AND SCHOOL BUS ROUTE;
  - (3) OCCURS AT REASONABLE INTERVALS CONSISTENT WITH THE DENSITY OF POPULATION; AND
  - (4) PROVIDES AN INTEGRATED AND COORDINATED HIGHWAY SYSTEM AFFORDING, WITHIN PRACTICAL LIMITS, A STATE-AID HIGHWAY NETWORK CONSISTENT WITH PROJECTED TRAFFIC DEMANDS.

History of C.S.A.H. Additional Mileage Requests

Approved by the County Engineers' Screening Board

Miles Requested

Total

			• •	_									Requested	
	1958-	1965-	1971-	1977-									& Approved	
County	1964	1970	1976	1982	1983	1984	1985	1986	1987	1988	1989	1990 	To Date	County 
A: 41.: -	6.10			0.60									6.70	Aitkin
Aitkin Anoka	1.33	0.71		0.00						10.42			12.46	Anoka
Becker	1.33	10.07											10.07	8ecker
Beltrami	6.84 *	0.69	0.16	<b>;</b>			•						7.69	Beltrami
Benton	3.18 *												3.18	Benton
Big Stone	1.40		0.16	5									1.56	Big Stone
Blue Earth	15.29 *			0.25										Blue Earth
Brown	3.81	3.63	0.13	3									7.57	
Carlton	3.62												3.62	Carlton
Carver	1.55	0.94	0.48	3					0.08					Carver
Cass	1.55	7.90		•										Cass
Chippewa	14.00	1.00									0.05		15.05	Chippewa
Obiana	2 24												3.24	Chisago
Chi sago	3.24 1.18	0.82	0.10	n										Clay
Clay Clearwater	0.30 '		1.0								,		1.30	Clearwater
Cli	3.60													Cook
Cook Cottonwood	3.80	1.80	1.3	n										Cottonwood
Crow Wing	13.00		1.0	<b>U</b>									13.00	Crow Wing
Daliata	1.65	*	2.4	7			2.26							Dakota
Dakota	1.05		2.4	•			0.11							Dodge
Dodge Douglas	7.40	* 3.25	i										10.65	Douglas
F 11 31	•	0.27	1.2	0 0.09										Faribault
Faribault	1 10	0.37	1.2	1.10										Fillmore
Fillmore Freeborn	1.12 0.05	0.90	0.6										1.60	Freeborn
FIEEDOIII	0.03	0.50	, 0.0	. •										Goodhue
Goodhue			0.0	18									5.42	
Grant	5.30	0.12												Hennepin
Hennepin	4.50		0.2	0.85									3.33	пеннерти

#### History of C.S.A.H. Additional Mileage Requests

'Approved by the County Engineers' Screening Board

Total Miles Regueste

	1958-	1965-	1971-	1977-									Requested & Approved	
County 	1964	1970	1976	1982 	1983	1984	1985	1986	1987	1988	1989	1990	To Date	County
Houston			0.12										0.12	Houston
Hubbard	0.60	1.25	0.26	0.06									2.17	Hubbard
Isanti	1.06	0.74											1.80	Isanti
Itasca													0.00	Itasca
Jackson		0.10											0.10	Jackson
Kanabec														Kanabec
Kandiyohi		0.44											0.44	Kandiyohi
Kittson	6.60 *													Kittson
Koochiching	9.27 *	•						0.12						Koochiching
Lac Qui Parle	1.70	0.23					-						1.93	Lac Qui Parle
Lake	3.24 *	1.58	0.56											Lake
Lake of the Woods	0.56	0.33												Lake of the Woods
Le Sueur	2.70		0.83				0.02						3 55	Le Sueur
Lincoln	5.65 *	0.90												Lincoln
Lyon	2.00									1.50				Lyon
Mc Leod	0.09		0.50										0.59	Mc Leod
Mahnomen	1.00	0.42												Mahnomen
Marshall	15.00 *		1.00											Marshall
Martin		1.52											1 52	Martin
Meeker	0.80		0.50											Meeker
Mille Lacs			0.74											Mille Lacs
Morrison													0.00	Morrison
Mower	9.28 *	3.83		0.09										
Murray	3.52		1.10										13.20 4.62	mower Murray
Nicollet					0.60								0.00	N2 11 - 4
.Nobles		13.71	0.23		5.00									Nicollet
Norman	1.31		3.20										,	Nobles
				•									1.31	Norman

History of C.S.A.H. Additional Mileage Requests

Approved by the County Engineers' Screening Board

Miles Requested & Approved 1977-1958-1965-1971-To Date 1987 1988 1989 1990 County 1986 1983 1984 1985 1964 1970 1976 1982 County 15.32 Olmsted 10.77 \* 4.55 01msted 0.36 Otter Tail 0.36 Otter Tail 0.84 Pennington Pennington 0.84 9.25 Pine 9.25 Pine 0.50 Pipestone 0.50 Pipestone 6.22 Polk 1.55 0.67 4.00 Po1k 4.83 Pope 1.63 2.00 1.20 Pope 11.86 Ramsey 0.21 0.92 9.45 \* 0.67 0.61 Ramsey 0.50 Red Lake 0.50 Red Lake 3.54 Redwood 0.13 1.11 2.30 Redwood 0.00 Renville Renville 1.70 Rice Rice 1.70 1.04 Rock 0.54 Rock 0.50 6.80 Roseau 5.20 1.60 Roseau 19.14 St. Louis 7.71 \* 11.43 St. Louis 20.86 Scott 3.50 0.12 5.15 Scott 8.65 \* 3.44 5.42 Sherburne 5.42 Sherburne 1.50 Sibley 1.50 Sibley 4.93 Stearns 0.25 3.90 0.08 0.70 Stearns 1.55 Steele 1:55 Steele 1.00 Stevens 1.00 Stevens 1.02 Swift 0.78 0.24 Swift 1.90 Todd 1.90 \* Todd 2.36 Traverse 1.60 0.56 0.20 Traverse 0.73 Wabasha 0.43 \* 0.30 Wabasha . 0.00 Wadena Wadena

0.05

Total

4.72 Waseca

Waseca

4.10

0.43

0.14

History of C.S.A.H. Additional Mileage Requests

			Approved	by the Cou	nty Engir	neers' Scr	eening Bo	ard					Total Miles	
County	1958- 1964	1965- 1970		1977- 1982	1983	1984	1985	1986	1987	1988	1989	1990	Requested & Approved To Date	County
Washington	2.33 *		0.40	0.33		1.33				8.05			12.44	Washington
Watonwan -			0.04	0.68			0.19						0.91	•
Wilkin													0.00	Wilkin
Winona	7.40 *												7.40	Winona
Wright	0.45			1.38									1.83	Wright
Yellow Medicine			1.39										1.39	Yellow Medicine
Totals	246.60	92.43	25.65	11.39	0.81	2.93	3.55	0.12	0.08	23.47	0.30	0.00	407.33	Totals

<sup>\*</sup> Some Trunk Highway Turnback Mileage

#### RECOMMENDATION

Of The MILEAGE SUBCOMMITTEE

TO The

COUNTY STATE AID HIGHWAY SCREENING BOARD

Date: Spring, 1990

Subcommittee: Duane G. Lorsung, Todd County (Chairman)

Gene Isakson, Sibley County Paul Ruud, Anoka County

1. This subcommittee strongly feels and encourages the Screening Board to adopt some "Banking Policy" of revoked State Aid mileage. Since its existence the subcommittee has noticed a reluctance on the part of Counties requesting additional mileage to consider revoking mileage especially if there were not a near perfect balance.

2. It may be helpful to emphasize that there is a deadline date for mileage requests to be submitted to State Aid and encourage DSAE's to recognize this fact to aid in reviewing such requests.

Mn/DOT-TP30758 MINNESOTA DEPARTMENT OF TRANSPORTATION . (10-80) Rev. 2-84 / 5-88

: April 18, 1990

: Manager, State Aid Needs Unit TO

: J. J. Hoeke District State Aid Engineer FROM

SUBJECT: Request for Approval of a System Revision

(Municipality) (County) of \_\_\_\_McLeod

Attached is a request and supporting data for the revision to the State Aid System The proposed route meets the following criteria (indicated by an "X")

necessary for designation:

#### C.S.A.H. CRITERIA

1	1	Projected to
x -		Projected to carry a relatively heavier traffic volume,
	-1 	or is functionally classified as collector or arterial
×	   	Connects towns, communities, shipping points, and markets within a county or in adjacent counties,
	   	or provides access to rural churches, schools, community meeting halls, industrial areas, state institutions and recreational areas,
	l	or serves as a principal rural mail route and school bus route.
X	1	Occurs at reasonable intervals consistent with the density of population.
х	1	Provides an integrated and coordinated highway system affording, within practical limits, a State-Aid highway network consistent with projected traffic demands.

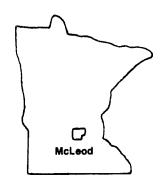
#### M.S.A.S. CRITERIA

Projected to carry a relatively heavier traffic volume,	
or is functionally classified as collector or arterial	
Connects the points of major traffic interest within an urban	municipality.
Provides an integrated street system affording, within practical a State-Aid street network consistent with projected traffic de	al limits, emands.
M.S.A.S. Miles   Comments: Available   Revoked   Requested   Balance	
RECOMMENDED APPROVAL OR DENIAL:  PLATFICT State Aid Engineer  RECOMMENDED APPROVAL OR DENIAL:	April 18, 1990 Date
Manager, State Aid Needs Unit	Date
APPROVAL OR DENIAL:	
State Aid Engineer	Date

#### **COUNTY OF McLEOD**

#### HIGHWAY DEPARTMENT

March 12, 1990



Mr. John J. Hoeke District 8 State Aid Engineer Mn/DOT Box 768 Willmar, MN 56201

Re: Revisions to County State And System in Hutchinson & McLeod County

#### Dear John:

The McLeod County Board of Commissioners has held a series of joint meetings with the City of Hutchinson concerning a need for an extension of CSAH 8 easterly to TH 22. Impacts of the 3.26 mile extension have been studied through the process of incorporating the concept into the City of Hutchinson's Land Use Plan, adopted December 1989.

As a result of the planning process and joint meetings, McLeod County is requesting the following changes be made on their County State Aid Highway system.

#### Revocations

- 1. CSAH 28 from County Road 72 to CSAH 8. This segment is 1.00 miles and would become part of County Road 58.
- 2. CSAH 7 from the South Limits of Hutchinson to TH 15.

  This segment length is 1.94 miles. The 0.40 miles on South Grade Road would become County Road 82. The 1.54 miles on Dale Street and Second Avenue would be added to the City Street systems. The City of Hutchinson has some undesignated mileage they wish to assign in 1990. Upon approval of this request the City of Hutchinson will determine whether any of Dale Street or Second Avenue will be on their State Aid system.

#### New Designation

1. CSAH 8 from CSAH 7 to TH 22.

This segment is 3.26 miles. A centerline has been very closely established. Minor revisions which will likely be made during design will only shorten this mileage. The maximum expected length has been used for this request.

A recap of the proposed system changes would be as follows:

	Additions		
Proposed	Revocations	2.94	miles
	·1		

McLeod County feels that the proposed revisions will create an improved transportation system. We have spent considerable time and effort reviewing the merits of this request and have been unable to identify additional mileage which might be used to offset the requested increase in mileage.

We request your review approval and submittal to the County Screening Board for their consideration. I would be happy to answer any questions concerning this request.

Sincerely

Richard B. Kjoraas, P.E. McLeod County Engineer

st

#### **COUNTY OF McLEOD**

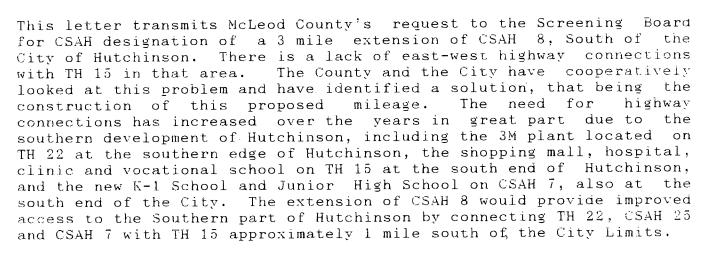
#### HIGHWAY DEPARTMENT

March 22, 1990

Mr. John Hoeke District 8 State Aid Engineer Mn/DOT Box 768 Willmar, MN 56201

Re: CSAH Mileage Request

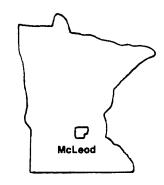
Dear Mr. Hoeke:



The 1976 Functional Classification Map of McLeod County, updated by Mn/DOT in 1988, shows no westerly arterials leading from TH 22 between Glencoe and Hutchinson, a distance of 7 miles, north and south. Within Hutchinson, TH 22 goes to the central business district where it connects with TH 15. The only other city connection between TH 22 and TH 15 are residential streets which are therefore often subjected to amounts and types of traffic in excess of which the City would desire.

The lack of an integrated and coordinated highway system to connect CSAH 7, CSAH 25 and TH 22 with TH 15 has been the subject of discussion and planning over the years. However the deficiency has remained. Growth and development have increased the need for this highway connection and therefore this request has the whole-hearted support of the County and its population.

The proposed alignment is expected to carry a relatively heavy traffic volume. The center mile (between TH 15 and CSAH 25), currently existing as County Road 89, has a traffic count of 395 vehicles per day. Oakland Avenue in Hutchinson has a traffic count of 7350 vehicles per day and runs through a residential area and past a cemetery. It is expected that some of the traffic using Oakland Avenue as a connection between TH 22 and TH 15 will use the proposed CSAH 8 extension as a preferred route. Also some of the existing



2805 vehicles per day using South Grade Road past the new school complex to get from TH 15 to CSAH 7 will use the proposed CSAH 8 extension as a better highway connection. Considering these amounts of traffic, it is felt that the proposed CSAH 8 extension will carry a minimum of 1000 vehicles per day which, for highway design purposes, would project to 1500 vehicles per day.

The need sheets for the proposed CSAH 8 extension are attached. The County Commission feels that if this mileage request is granted, construction will take place within a few years. CSAH 7 is currently being improved to a 9 ton highway with 8 foot shoulders. From the intersection of CSAH 8 and CSAH 7, the proposed alignment would be new for one mile to TH 15. From TH 15 to CSAH 25 existing CR 89, which is a 5 ton highway with 2 foot shoulders, would require widening and strengthening for the projected traffic. From CSAH 25 to TH 22, the proposed highway would follow a low grade gravel township road, assumed non-existent as a highway on the needs sheets, for 1/2 mile and then cross the South Fork of the Crow River over a new bridge.

Funding for the new bridge would be a major construction item. mile south of this request is CR 67 which is a gravel County highway between CSAH 25 and TH 22. This highway contains a deficient bridge with a sufficiency rating of 32.7, eligible and prioritized by County Commission for replacement with Federal Funding. The County Commission feels that functional replacement of this bridge might better accomplished at the requested alignment of CSAH 8. Therefore some Federal Funding for the new bridge might be received if it done as a bridge replacement project for the structure on CR 67. District State Aid Engineer has approved the CR 67 replacement, a consultant has been hired to do waterway analysis replacements in several locations and public meetings on alternatives are planned for this summer after the decision of Screening Board concerning this request is known.

McLeod County has thoroughly reviewed its State Aid system and has no segments which could be deleted without loss of system integrity. The County Commission feels that the projected traffic count and highway function qualify the proposed CSAH 8 extension to be added to the State Aid system and, upon approval of this mileage request, they pledge to continue their commitment to a progressive highway construction program and to make this 3 mile extension of CSAH 8 a priority project in that program.

Respectfully submitted.

McLeod County Highway Engineer

Enclosures: Hutchinson Letter of Support & excerpt from their

Comprehensive Plan Color Coded Map

Functional Classification Maps, County and City

Traffic Count Maps, County and City

Needs Sheets

 $ar{5}$  Year Highway Construction Plan



#### **MEMORANDUM**

October 27, 1989

TO:

Mayor and City Council

FROM:

Director of Engineering

RE:

Municipal State Aid Streets County State Aid Highways

I met with Rick Kjonaas, County Engineer, relative to the transfer and change of road status by city and county to assist the county in obtaining approval of County State Aid Highway status on roadway from CSAH 7 to State Highway 22 as now shown on our Comprehensive Plan.

#### Proposal by County:

Terminate CSAH 7 status at School Road and South Grade Road. This would remove Dale Street from South Grade Road to Second Ave. S.W. and Second Ave. S.W. from Dale St. to Main St. from CSAH 7 status. In so doing this would become a city street.

#### Proposal for City:

Terminate Municipal State Aid Street No. 107, Juul Road from Dale Street to Lynn Road, 0.34 mile. Terminate Municipal State Aid Street No. 109, Second Ave. S.W. from Dale Street to Lake Street, 0.22 mile. Terminate Municipal State Aid Street No. 113, Lake Street from Second Ave. S.W. to Lewis Ave., 0.06 mile. Terminate Municipal State Aid Street No. 114, Lake Street, Lewis Ave. to Roberts Road, 0.25 mile. Total removal would be 0.87 mile.

Designate a new Municipal State Aid Street on Dale Street from Linden Avenue to Roberts Road, 0.27 mile. Designate a new Municipal State Aid Street or extension of MSAS 116 on Roberts Road from Dale Street to Lake Street, 0.14 mile. Designate a new Municipal State Aid Street or extension of 117 on School Road from Roberts Road to South Grade Road. 0.50 mile.

Total addition would be 0.91 mile.

The city presently has 0.35 mile of roadway available for designation. If the above was approved the city would still have 0.31 mile of roadway available for designation at Municipal State Aid Street.

cc: Rick Kjonaas

#### MILEAGE SUBCOMMITTEE REPORT

#### TO THE

#### COUNTY STATE AID HIGHWAY SCREENING BOARD

Date: Spring, 1990

Subcommittee: Duane G. Lorsung, Todd County (Chairman)

Paul Ruud, Anoka County Gene Isakson, Sibley County

Request: McLeod County Mileage Addition

#### PROPOSED SYSTEM REVISION(S)

- \* Designations 1) CSAH 8 Extended easterly from CSAH 7
  to T.H. 22 + 3.26 Mile(s)
  (Existing CR 89 extended east & west)
- \* Revocations 1) CSAH 28 (C.R. 72 to CSAH 8) 1.00 Mile(s)
  - 2) CSAH 7 (South Limits of Hutchinson to T.H. 15) 1.94 Mile(s)

Total Addition + 0.32 Mile(s)

#### REVIEW RESOURCES

- X Road Tour (April 30, 1990) with County Engineer & DSAE
- X County Engineer's Request Cover Letter
- X TH, CSAH, CR, MSAS System Map(s)
- X Functional Classification Map(s)
- X Comprehensive Transportation Plan(s)
  - X Traffic Map(s) and Data
- X Construction "Needs" of System Revision
- X Anticipated Construction Program
- X Recommendation(s) of District State Aid Engineer
- X Conference with DSAE & County Engineer April 31, 1990
- Y Mileage Verification(s) by State Aid Engineer

#### MERIT(S) OF THE MILEAGE REQUEST

- 1. This request is basically the same request submitted to the Screening Board in Spring, 1989 with some notable exceptions the proposed revocations. It is understood that the City of Hutchinson has updated its community development (comprehensive) plan. It is understood that the east-west extension of CR 89 as a CSAH between CSAH 7 and TH 22 is supported by the City of Hutchinson as a complementing element of the conceptual development plan for the community.
- 2. Possible industrial development and land use changes within and abutting the City of Hutchinson may impact the value and feasibility of extending the CR 89 corridor as a CSAH. Expansion and/or relocations of the 3M plant, the county fairgrounds, and the municipal airport could, it is understood, impact the proposed CSAH corridor.
- 3. The City of Hutchinson has filled its vacant city engineer position 3 months ago. It is understood that an indepth review of the MSAS and CSAH system involving the city engineer, the county engineer, and the district state aid engineer have been accomplished.
- 4. The County and the City of Hutchinson have reviewed their system. The County would revoke the northerly 1.00 mile of CSAH 28 between CR 72 and CSAH 8. The subcommittee noted this leaves a so-called "stub" of the remaining portion at CR 72. Possibly in the future the county may consider some changes in the remaining south 3.50 miles of CSAH 28 if any "banking" of CSAH mileage is accomplished. CR 72 does carry a relatively high volume of traffic. Jurisdictional changes of portions of CSAH 7 within the City Limits of Hutchinson amounting to 1.94 miles has been proposed.

#### RECOMMENDATION TO THE SCREENING BOARD

<u>X</u>	Recommend	Approval
	Recommend	Denial

It is the opinion of the mileage subcommittee that the "interval" spacing, the corridor continuity, and the integration and coordination of the existing and proposed TH, CSAH, and MSAS systems within and abutting the City Of Hutchinson is a priority topic in the updating of the community's development plan. It appears that the CR 89 corridor extended is a valid candidate for CSAH designation. The mileage subcommittee recommends the approval of the McLeod County request as the appropriate action since the City and County have made a significant review of their systems and have accomplished a sizeable portion of the items noted by the subcommittee a year ago.

## NOTES & COMMENTS

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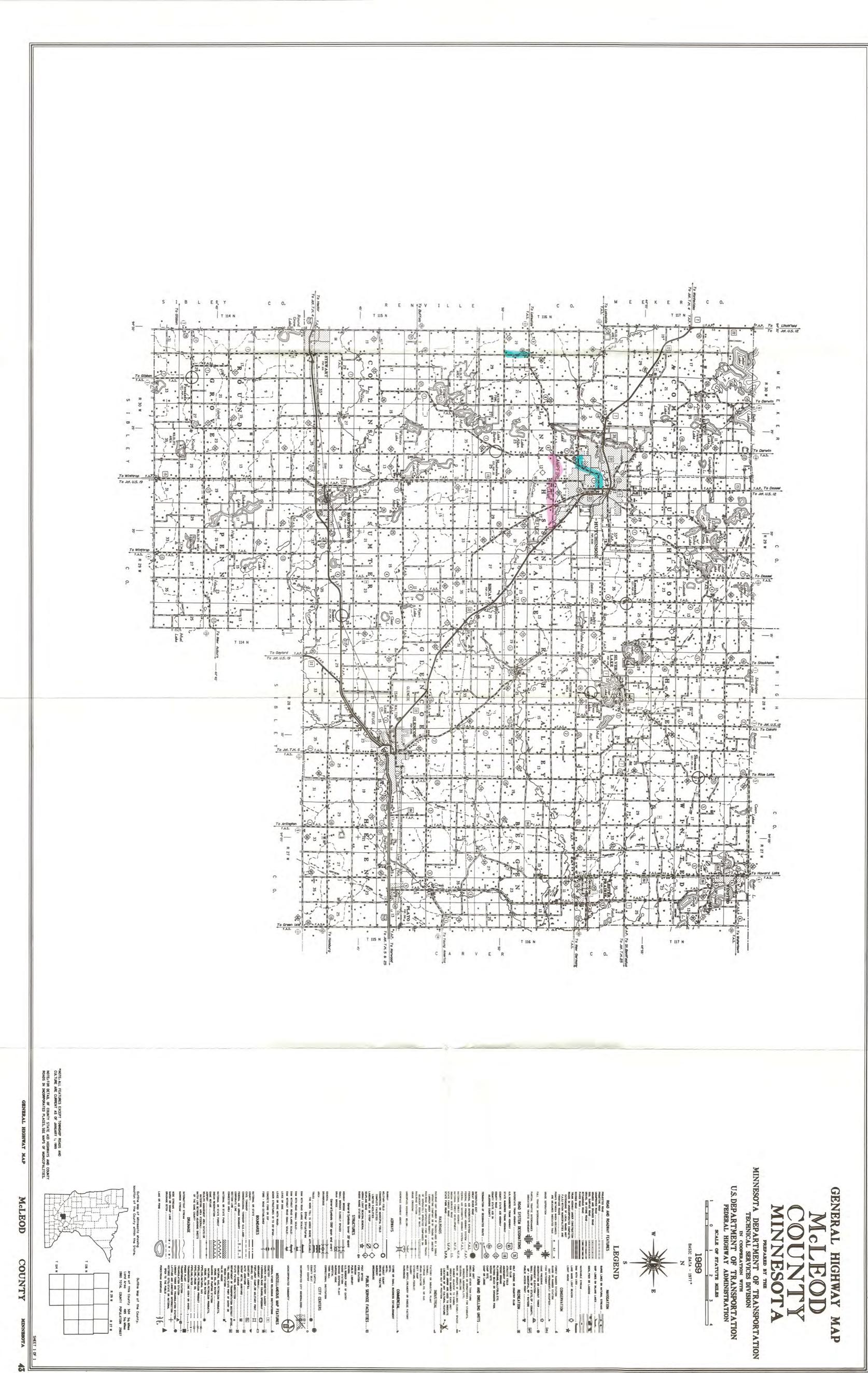


FIG. B



DATE:	 sion to the State Aid System
C.S.A.H. CRITERIA	
✓   Projected to carry a relatively heavier traffic volume,	
or is functionally classified as collector or arterial	
Connects towns, communities, shipping points, and markets with county or in adjacent counties,	ithin a
or provides access to rural churches, schools, community med halls, industrial areas, state institutions and recreations.	eting l areas,
or serves as a principal rural mail route and school bus rou	ute.
Occurs at reasonable intervals consistent with the density of	of population.
Provides an integrated and coordinated highway system afford limits, a State-Aid highway network consistent with project	ding, within practical ed traffic demands.
M.S.A.S. CRITERIA	
Projected to carry a relatively heavier traffic volume,	
or is functionally classified as collector or arterial	
Connects the points of major traffic interest within an ur	ban municipality.
Provides an integrated street system affording, within prac a State-Aid street network consistent with projected traffi	tical limits, c demands.
	the State Mich is the contract of the miles grand as in the terms of the contract of the contr
RECOMMENDED APPROVAL OR DENIAL:  District State Aid Engineer	<u>11-26-89</u> Date
RECOMMENDED APPROVAL OR DENIAL:	Date
APPROVAL OR DENIAL:State Aid Engineer	 Date

Mn/DOT-TP30758 MINNESOTA DEPARTMENT OF TRANSPORTATION (10-80) Rev. 2-84 / 5-88

## **DEPARTMENT OF HIGHWAYS**

AGRICULTURAL INSPECTION
DITCH SYSTEM INSPECTION
PARK DEPARTMENT

BOX 518 ST. PETER, MINNESOTA 56082

\_\_\_\_

PHONE (507) 931-1760

MICHAEL C. WAGNER, P.E

Highway Engineer

July 24, 1989

Mr. Larry Hoben
District State Aid Engineer
P.O Box 4039
Mankato, MN 56001

Dear Mr. Hoben:

RE: Mileage request for existing CSAH 36

As part of a plan to re-align highways and build a by-pass along the west side of the City of St. Peter, we need the existing 0.8 mile of CSAH 36 (Minnesota Ave.) This segment of Old T.H. 169 was a turnback to the County in June of 1967.

It is a part of our State Aid system now, but in order for Nicollet County to revoke it and re-designate the mileage on the by-pass, I understand that Screening Board approval of a 0.8 mile mileage request is needed.

The City of St. Peter has annexed most of CSAH 36 and is presently in the process of annexing the north end where it junctions with T.H. 169. The City is also willing to accept the revocation of CSAH 36 in its existing condition to expedite the by-pass project and adjust any MSA or FAU, if required.

I just learned from Ken Hoeschen that the Screening Board has now adopted a new mileage request procedure. The enclosed supporting information is somewhat complicated, but hopefully satisfactory.

If the Screening Board approves this 0.8 mile, CSAH 36 turnback, mileage request, the planned revocations and designations fit. This request does not ask for any additional mileage to the Nicollet County State Aid System.

Sincerely,

Michael C. Wagner

County Highway Engineer

MCW:clb

Enclosures

cc: Martin Menk

Nicollet County - CSAH 36 Turnback Mileage Request

#### COMMENTS

The planned revocations and re-designations for the proposed new highways are as follows:

- 1. Beginning at T.H. 99 on the south end of St. Peter, the first one mile from T.H. 333 to existing CSAH 5 (Fort Road/Grace St.) has already been redesignated CSAH 46. It is not constructed.
- 2. Existing CSAH 5 from Twp. Rd. T206 to T.H. 169 is planned for revocation. The City will take this Grace St. from a yet undetermined point just west of Sunrise Drive to T.H. 169. Upon completion of a new CSAH 5 the Fort Road between T206 and the City's Grace Street will be obliterated.
- 3. A new CSAH 5 is planned on new alignment from T206 to Broadway Avenue at Sunrise Drive.
- 4. Existing CSAH 15 from Sunrise Drive to existing T.H. 22 (Washington Avenue) is planned for revocation.
- 5. Existing CSAH 36 (Minnesota Avenue) from Center Street to T.H. 169 (this mileage request) is planned for revocation.
- 6. The mileage from the planned CSAH 15 and CSAH 36 revocations, plus the excess from the CSAH 5 relocation is planned for designation of continued CSAH 46 from the existing CSAH 5 to CSAH 20 at T.H. 22.

The following breakdown of the above mileage adjustments indicates the exchange to be a nearly even trade.

<u>Revoke</u>	CSAH 3 CSAH 1 CSAH 5	5 Sui	nrise Drive to T.H. 22 06 to T.H. 169	0.80 0.40 1.39 2.59 miles
<u>Designate</u> Additi			T206 to Sunrise Drive Old CSAH 5 to T.H. 22	0.87 1.70 2.57 miles

The enclosed colored map showing the existing routes and the anticipated changes is our City/County Comprehensive Plan. The City is working an exchange with Mn/DOT for T.H. 22 and Dodd Road, but it does not affect our City/County plans.

Nicollet County CSAH 36 Turnback Mileage Request Page 2

Traffic data is available only for the existing routes, It is 1987 traffic counts and the County has not yet received the printed maps that could have been enclosed. The following listing is taken from the large scale rough map:

CSAH 36 CSAH 15 CSAH 5 CSAH 5	Sunrise Drive to T.H. 22 just west of Sunrise Drive near T.H. 169	500 1,360 1,995 2,050	ADT
Other data			
CSAH 5	One mile west of City	780	ADT
CSAH 15	One mile west of City	450	ADT
T.H. 22	just west of CSAH 20	880	ADT
	just north of T.H. 22	530	ADT
Sunrise Drive		1,840	ADT
т.н. 169	in St. Peter	14,600	ADT

It is anticipated that both CSAH 46 and new CSAH 5 will carry a minimum of 500 ADT when opened to traffic. There presently is no road or direct route available between T.H. 99 and the west side of the City. Gustavus Adolphus College desires to expand north and the City is close to building a downtown mall that closes a block of Grace Street. Both developments compliment moving CSAH 5 to Broadway, a route that is far superior for traffic when compared to Grace Street.

The proposed construction is CSAH 46 from T.H. 99 to new CSAH 5 and new CSAH 5, as the first stage, in 1990. The remainder of CSAH 46 should follow shortly thereafter.

Enclosed with these comments and the colored maps are the NEEDS sheets for the existing CSAH routes proposed for revocation. Regarding the proposed routes, NEEDS sheets do not yet exist nor has the cross-section been determined. The decision process for selecting "rural" or "urban" design is actively taking place at this time. In either case the surfacing design will be for a minimum 9 ton capacity.

MCW:clb

Enclosures

#### MILEAGE SUBCOMMITTEE REPORT

#### TO THE

#### COUNTY STATE AID HIGHWAY SCREENING BOARD

Date:

Spring, 1990 (Same request as fall, 1989)

Subcommittee:

Duane G. Lorsung, Todd County (Chairman)

Gene Isakson, Sibley County Paul Ruud, Anoka County

Request:

Nicollet County Mileage Addition

#### PROPOSED SYSTEM REVISION(S)

Designations	1) CSAH 5 (T206 to Sunrise Dr.) 2) CSAH 46 (Old CSAH 5 to TH 22)	+0.87 Mile(s) +1.70 Mile(s)
Revocations	1) CSAH 5 (T206 to TH 169) 2) CSAH 15 (Sunrise Dr. to TH 22)	-1.39 Mile(s) -0.40 Mile(s)
	Total Addition	+0.78 Mile(s)

#### REVIEW RESOURCES

Х	Road Tour (April 23, 1990 W/DSAE & County Engineer
X	County Engineer's Request Cover Letter
X	TH, CSAH, CR, MSAS Systems Map(s)
X	Functional Classification Map(s)
X	Comprehensive Transportation Plan(s)
X	Traffic Map(s) and Data
X	Construction "Needs" of System Revision
X	Anticipated Construction Program
X	Recommendation(s) of DSAE (Revised with all CSAH Criteria Checked)
Y	Mileage Verification(s) by State Aid Engineer

#### MERIT(S) OF THE MILEAGE REQUEST

- 1. This request is basically the same request submitted to the screening Board last fall with the exception that this spring the DSAE and County Engineer attended the road tour and discussed with the sub-committee the merits of the request.
- 2. Two requests of the Screening Board are contained in the CSAH redesignation plans of Nicollet County. The first request is to approve 0.78 miles of additional CSAH. The second request is for the Screening Board to accept the revocation of a TH turnback to CSAH designation as an offset for the new CSAH mileage.
- 3. The "Mileage Limitation" resolution adopted by the Screening Board in October of 1961, and most recently revised in June of 1986, specifically addresses the use of TH turnback CSAH mileage. This resolution contains the following statement:

"That, whereas, Trunk Highway Turnback mileage is allowed in excess of the normal County State Aid Highway mileage limitations, revocation of said Turnbacks designated after July 1, 1965, shall not create eligible mileage for State Aid designation on other roads in the county".

- 4. It is the opinion of the Mileage Subcommittee that the use of CSAH 36 trunk highway turnback mileage to make "the planned revocations and designations fit" in Nicollet County is inconsistent with the herein referenced Screening Board resolution.
- 5. The mileage subcommittee now concurs with the district state aid engineer's (DSAE) opinion that all four of the criteria needed to meet the definition of a CSAH are met by the Nicollet County request. (Same date as last year's recommendation) Having reviewed functional classification maps, traffic maps, construction needs sheets, and MSAS system maps made available by Nicollet County highway department staff and having driven the major street corridors within St. Peter, the mileage subcommittee is of the opinion that the proposed CSAH changes within St. Peter result in a system of roadways meeting the criteria for CSAH's. (The engineer assured the subcommittee that our concern of last fall involving 3 different jurisdictions responsible for CSAH 5 West Broadway would be reduced to two jurisdictions with the New MNDOT realignment of TH 22 by way of Dodd Road which is already in progress.

- The mileage subcommittee did identify two existing segments of CSAH within the county that did appear to be possible candidates for revocation. The 0.9 mile segment of CSAH 16 between CSAH 21 and CSAH 5 in the western portion of the county is a functionally classified "local" gravel surfaced road having a 1987 traffic volume of 30 ADT. This CSAH runs parallel and one mile to the west of CSAH 14, a functionally classified "major collector" bituminous surfaced road having 1987 traffic volume of 470 ADT. The engineer has informed the subcommittee that the county has future plans for the use of this 0.9 mile segment in other parts of the system. The other possible candidate is CSAH 26 between CSAH 20 and TH 169 in the northeastern area of Nicollet County. This CSAH is functionally classified a "minor collector", is 1.3 miles in length, and has a 1987 traffic volume of 40 ADT. This segment, according to the engineer, is needed for an east-west link from TH 169 to CSAH 20 to maintain some pattern of a grid system in this corner of the county.
- 7. Revision of a portion of the MSAS system appears necessary if the request is approved. Minnesota Street between St. Julien Street and CSAH 36 would become a one block "stub" of MSAS mileage. Also, Sunrise Drive south of Broadway Avenue would become a "stub" MSAS under the proposed plan.

#### RECOMMENDATION TO THE SCREENING BOARD

RECOMMEND APPROVAL

#### X RECOMMEND DENIAL

The mileage subcommittee recommends, as it has previously last fall, that the request to add 0.78 mile to the CSAH system in Nicollet County be denied. It is the opinion of the mileage subcommittee that further review of the two mentioned revocation candidates along with a search for other possible candidates is warranted. It appears to the mileage subcommittee that an internal revision of the Nicollet CSAH system without the need for a mileage addition to the system is possible and is reasonable.

To reiterate, it is again urged by the mileage subcommittee that the Screening Board give careful consideration to the ramifications of supporting and approving any proposal to revoke TH turnback mileage to the CSAH system as an offset for the addition of new mileage to a county's CSAH system. It is recommended by the mileage subcommittee that no such action be taken without the Screening Board first referring the subject to the general subcommittee for study. The subcommittee feels that some new or additional documentation possibly should be required to support continual review of previously submitted requests.

## NOTES & COMMENTS

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(10-80) Rev. 2-84 / 5-88	
PATE : 12/17/89 1/4/90  CO : Manager, State Aid Needs Unit  CROM : Elmer Morris  District State Aid Engineer	
SUBJECT: Request for Approval of a System Revision (Montcipality) (County) of Ramsey	
Attached is a request and supporting data for the revision The proposed route meets the following criteria (indicated necessary for designation:	to the State Aid System. by an "X")
C.S.A.H. CRITERIA	
Projected to carry a relatively heavier traffic volume,	
or is functionally classified as collector or arterial	
Connects towns, communities, shipping points, and markets within county or in adjacent counties,	n a
or provides access to rural churches, schools, community meetin halls, industrial areas, state institutions and recreational ar	g eas,
imes : or serves as a principal rural mail route and school bus route.	
imes   Occurs at reasonable intervals consistent with the density of p	opulation.
Provides an integrated and coordinated highway system affording limits, a State-Aid highway network consistent with projected t	, within practical raffic demands.
M.S.A.S. CRITERIA	
Projected to carry a relatively heavier traffic volume,	
or is functionally classified as collector or arterial	
Connects the points of major traffic interest within an urban	municipality.
Provides an integrated street system affording, within practics a State-Aid street network consistent with projected traffic de	al limits, emands.
Available	
+Revoked	
DECOMPRISED ADDROVAL OF DEVIAL	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
RECOMMENDED APPROVAL OR DENIAL:  District State Aid Engineer	Date
RECOMMENDED APPROVAL OR DENIAL:	Date
APPROVAL OR DENIAL:State Aid Engineer	 Date

DEPARTMENT :

OF TRANSPORTATION
METRO DISTRICT - OAKDALE

STATE OF MINNESOTA

## Office Memorandum

DATE:

January 2, 1990

TO:

G. M. Fay, Director Office of State Aid Attn: Ken Heeschen

FROM :

Eliper Morris

District State Aid Engineer

PHONE:

779-1173

SUBJECT :

System Addition

Attached is a request from Ramsey County for the addition of Eustis Street between Como (M.S.A. No. 121) and Roselawn (C.S.A.H. No. 26) in St. Paul and Lauderdale. This addition will require action by the Screening Board because the request does not concurrently request a releast of other C.S.A.H. mileage within their system.

After review of the request with Mr. Weltzin, I find that:

- The proposed roadway appears to meet criteria for designation.
- The improvement of Eusis Street will help reduce trips on T.H. 280, which is operating over capacity.
- The elimination of existing mileage elsewhere in their system does not appear feasible.

I recommend the request as presented.

Attachments

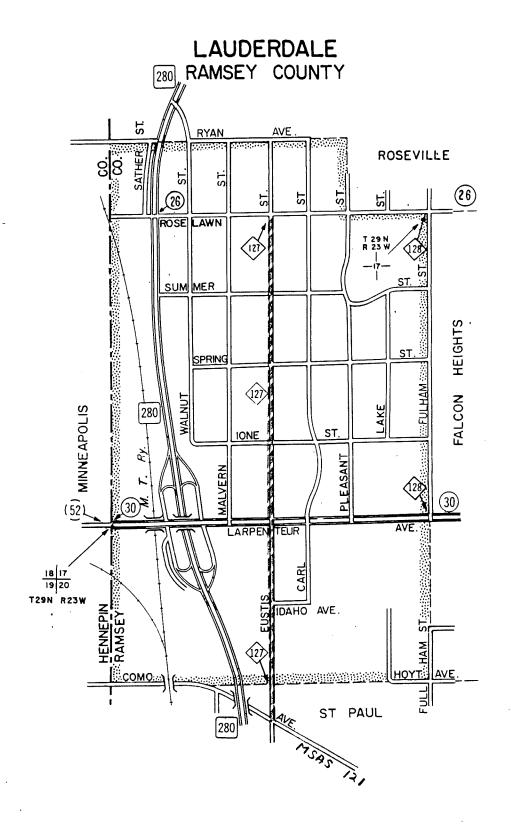
cc:

Ken Weltzin - Ramsey County W. M. Crawford - 413 Ramsey County C.S.A.H. File

EM:kh

\* Functional classification e.
PROPOSED ROUTE IS URBAN
COLLECTOR.

## PROJECT LOCATION MAP





#### Ramsey County Department of Public Works

350 St. Peter Street Suite 270 Saint Paul, Minnesota 55102 (612) 298-4127 Kenneth E. Weltzin
Director
and
County Engineer
Paul L. Kirkwold
Deputy Director
and
Assistant County Engineer

December 21, 1989

Mr. Elmer Morris, Jr.
District State Aid Engineer
Metro District - Oakdale
3485 Hadley Avenue North
Oakdale, Minnesota 55128

Designation Change - Eustis Street (County Road 127)

Ramsey County requests approval to add Eustis Street, County Road 127, from Como Avenue to Roselawn Avenue to the county state-aid highway system of Ramsey County.

Eustis Street from Como Avenue to Roselawn Avenue is .81 miles in length. From Como Avenue to .07 miles north, Eustis Street is entirely within the City of St. Paul. From .07 miles north of Como Avenue to Roselawn Avenue, Eustis Street is entirely within the City of Lauderdale.

Eustis Street is classified as a collector. It connects neighborhoods within and between subregions. The average daily traffic (ADT) counts for 1989 and projected for 2009 are illustrated in the following table:

Section of Eustis Street	1989 A.D.T.	Projected 2009 A.D.T.
Como Avenue - Larpenteur Avenue	4,050	6,075
Larpenteur Avenue - Roselawn Avenue	1,100	1,650

Land use adjacent to Eustis Street is a mixture of single and multiple-family residential. An area of commercial land use is located adjacent to the Eustis Street/Larpenteur Avenue intersection. Since the area is developed, no major changes are anticipated which would affect the transportation system.

Eustis Street meets the criteria of county state-aid highways in the following ways:

46 - 18 S

it connects communities within Ramsey County

- it is part of a school bus route for District 623
- it acts as a collector of several roads of local interest
- it serves a park and ride lot located northwest of the Como Avenue intersection
- it occurs at a reasonable interval (one-half mile) from other county state-aid highways, consistent with the density of population. Lauderdale is the most densely populated city in suburban Ramsey County.
- it is part of MTC bus route 5C
- it is part of the University of Minnesota's bus route 13 GJNS
- according to an analysis by Mr. Leonard W. Levine, Commissioner, Minnesota Department of Transportation (see attachment), the City of Lauderdale is deficient in county state-aid highway mileage when compared to the statewide average for cities. If this request is approved, Lauderdale's county state-aid highway mileage would be increased by 11%.
- it will help provide an integrated and coordinated highway system, affording within practical limits a state-aid highway network consistent with local traffic demands.

For these reasons, I request your approval to add Eustis Street from Como Avenue to Roselawn Avenue to the county state-aid highway system.

Nemeth E. Weltzin, P.E.

Director and County Engineer

TM:mk:ptd Attachments

cc: Senator John J. Marty
Mr. Dan Dunford
Mrs. LaVanche Peterson

JOHN J. MARTY Senator 63rd District



Senate
State of Minnesota

November 13, 1989

Commissioner Len Levine
Department of Transportation
411 Transportation Building
St. Paul, MN 55155

Dear Commissioner Levine:

I am writing concerning further funding to small municipalities to work on needed road repairs.

In my district, the City of Lauderdale, which has a population of 2,455, needs to do about \$3 million in repairs on local streets. The one street that could conceivably qualify for state aid is Eustis Street which is a county road. However, Eustis Street has not been designated a county state aid highway.

Eustis Street is in poor condition and will need to be repaired in the near future. Lauderdale will have to borrow money to pay for the feasibility study. The project will probably cost \$300,000 of which \$160,000 will be the city's cost share. This is in addition to the money the city has to spend repairing local streets. Obviously, this small municipality has a small tax base.

I'm sure you are well aware of this problem. Do you have any ideas about how small municipalities could be creatively financed? Is there any way of funneling more money to small municipalities, short of leaving them to heavily increase property taxes?

I would appreciate hearing your views or legislative suggestions on this topic.

( John

John Marty

JJM/kl



Minnesota Department of Transportation Transportation Building St. Paul, Minnesota 55155

#### RECEIVED

NOV 28 1989

RAMSEY COUNTY PUBLIC WORKS

(612) 296-3000

Office of Commissioner

November 22, 1989

Senator John J. Marty 235 State Capitol St. Paul, Minnesota 55155

In reply refer to: Funding to Small Municipalities City of Lauderdale RAMSEY COUNTY

Dear Semator Marty:

In your letter of November 13, 1989, you ask for information on funding streets in the City of Lauderdale. Lauderdale having only 2,455 population does get Municipal State Aid funding. However, Ramsey County has County State Aid Highways and County Roads within.

The City of Lauderdale has the following:

12.4% State Trunk Highways

7.0% Ramsey County - County State Aid Highways

19.2% Ramsey County Roads

61.4% Local City Streets

The Statewide Average for Cities are as follows:

12.7% State Trunk Highway

County State Aid Highways 18.7%

5.3% County Roads

63.3% Local City Streets

The City may work with the County in making improvements on 26.2% of its total mileage. In addition, many Cities use Chapter 429 for Special Assessments to do needed improvements.

Of course, Bonding is another way of going about funding needed for improvements, and many small cities are doing this. Funding continues to be a problem at all levels of governmental agencies.

Sincerel

LEONARD W. LEVINE Commissioner

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#### MILEAGE SUBCOMMITTEE REPORT

#### TO THE

#### COUNTY STATE AID HIGHWAY SCREENING BOARD

Date:

Spring, 1990

Subcommittee: Duane G. Lorsung, Todd County (Chairman)

Gene Isakson, Sibley County

Paul Ruud, Anoka County

Request:

Ramsey County Mileage Addition

#### PROPOSED SYSTEM REVISION(S).

Designations 1) Eustis Street (C.R.127) between Como

Ave. (M.S.A. #12) and Roselawn Ave.

(C.S.A.H.#26)

+0.81 miles

Revocations

None

0.00 miles

Total Addition

+0.81 miles

#### REVIEW RESOURCES

- Road Tour (April 23, 1990) w/Ass't County Engineer
- County Engineer's Request Cover Letter
- T.H., CSAH, CR, MSAS Systems Map(s)
- Functional Classification Map(s)
  - Comprehensive Transportation Plan(s)
- Traffic Map(s) and Data
- Construction "Needs" of System Revision
- Anticipated Construction Program
- Recommendation(s) of DSAE
- Mileage Verification(s) by State Aid Engineer Х
- Conference with DSAE

#### MERIT(S) OF THE MILEAGE REQUEST

- 1. This request appears to have justification for addition into the C.S.A.H. System for the southerly fourty (40%) per cent but the subcommittee's direction was to review as submitted.
- The subcommittee agrees with the submitted data that Eustis Street is in poor condition and there is need for improvements as suggested in letters by Commissioner Levine and Senator Marty.

#### RECOMMENDATION TO THE SCREENING BOARD

RECOMMEND APPROVAL

X RECOMMEND DENIAL

It is the opinion of the mileage subcommittee that due to only partial access of Roselawn Ave. with T.H. 280 and that several unbuilt C.S.A.H. segments exist within Ramsey County and there is a need for further review by them of their system, that this subcommittee recommends denial. Further it is of the opinion that the northerly sixty (60%) is not necessarily a valid candidate for inclusion into the C.S.A.H. system.

## NOTES & COMMENTS

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# GENERAL HIGHWAY MAP RAMSEY COUNTY **MINNESOTA** MINNESOTA DEPARTMENT OF TRANSPORTATION TECHNICAL SERVICES DIVISION IN COOPERATION WITH THE U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION SCALE OF STATUTE MILES 1989 BASIC DATA 1978\* PUBLIC SERVICE FACILITIES...... MINOR STRUCTURES (5' TO 20' SPAN).... CONCRETE FORD OR DIP..... BOUND ARIES NATIONAL OR STATE. COURT COVERSIONAL TO WHISHER U.S. LAND. COVER TOWNSHIP. CONGESSIONAL TO WHISHER U.S. LAND. CORROBATE UNE. CONGESSIONAL TO WHISHER U.S. LAND. CONGESTED AREA. NATIONAL OR STATE FORES. NATIONAL HORSE WITHOUT COMMENT STATES. NATIONAL OR STATE FORES. NATIONAL PROPERTY. NOTIONAL PROPERTY. NOTIONAL PROPERTY. NOTIONAL BOUNDARIES Outline Map of this County, Shaded portion being area delineated on this sheet. Area of this County 170 Sq. Miles Land Area 154 Sq. Miles 101AL COUNTY POPULATION 459,784 T 30 N T 29 N T 28 N R 23 W R 22 W

GENERAL HIGHWAY MAP

To M. T.H. 55

ARE CURRENT AS OF JANUARY 1, 1989.

\* NOTE: ALL FEATURES, EXCEPT TOWNSHIP ROADS AND CULTURE,

NOTE: ALL NON-DESIGNATED ROADS WITHIN LARGE INCORPORATIONS ARE CITY STREETS SHOWN FOR ORIENTATION PURPOSES ONLY AND ARE NOT REPRESENTED AS TO SURFACE TYPE.

C

0.

MINNEAPOLIS 3

To Jet. T.H. 88

COLUMBIA 5

0.

FRIDLEY

T 30 N

0

To Lexington

To Jet. T.H. 65

RAMSEY

COUNTY MINNESOTA

#### STUDY FOR DETERMINING TRAFFIC VOLUME PROJECTION FACTORS

# PREPARED FOR THE MINNESOTA DEPARTMENT OF TRANSPORTATION

PREPARED BY STRGAR-ROSCOE-FAUSCH, INC.

APRIL, 1990

SRF NO. 0891221

#### PURPOSE OF THE STUDY

The estimation of future year traffic volumes is a key component in the process of designing roadways. Traffic projections are required to estimate construction needs and develop cost estimates. Accurate and reliable traffic projections contribute significantly to proper roadway designs and to prudent expenditure of funds.

Traffic projection factors are currently a key component in the design process of county highways and the estimation of county highway needs for purposes of allocating County State Aid Highway (C.S.A.H.) funds. The determination of highway funding needs is based upon the cost to upgrade the C.S.A.H. system to meet the minimum standards for geometrics and pavement that correspond to the projected traffic volumes. Without the use of a traffic projection component, the validity of funding need estimates would be questioned.

Recent reports by the Legislative Auditor have concluded that the current method of developing traffic projections by the Minnesota Department of Transportation (Mn/DOT) are "statistically unreliable". The Legislative Auditor has recommended that Mn/DOT and the counties develop more reliable methods for projecting future year traffic volumes.

As a result, the Local Road Research Board has authorized Investigation No. 674 to evaluate alternative traffic projection methods.

The purpose of this study is to evaluate the existing procedure for calculating traffic volume projection factors, to examine and evaluate other available methods, and to develop a more accurate and reliable method. The primary work tasks associated with this study included conducting a literature search to determine alternative traffic volume projection methods in use in other areas, a thorough evaluation of the method currently used by Mn/DOT, and development and testing of alternative methods. The results of this study will be considered for adoption by the County Screening Board.

#### RECOMMENDATIONS

The basic recommendations formulated upon conclusion of this study are as follows:

- 1. The current method used by Mn/DOT to calculate traffic projection factors should be modified to provide a method that is more sensitive to changes in roadway segment traffic volumes.
- 2. The proposed method of calculating traffic projection factors should be applied to all counties to assess potential impacts in a test parallel to the current method.
- 3. The Mn/DOT database should be expanded to include additional years of historical data and some of the manual calculations should be converted to computer operations.
- The policy of having 1.0 as the lowest allowable projection factor should be reassessed as declining traffic volumes are realistic for some roadways.
- The policy of allowing manual changes to the factors should be reassessed to allow such changes only when special studies justify the change.
- 6. Continue the current practice of using all data points within the last twelve years for rural counties and the four most recent data points to calculate the projection factors for urban counties.

#### BACKGROUND

The current method of estimating future year traffic volumes has been used by Mn/DOT since the late 1970s. The basic procedure used to estimate a traffic volume projection factor for each county can be summarized as follows:

- Conduct traffic counts on C.S.A.H. roadway segments and determine average annual daily traffic (AADT).
- Calculate vehicle miles of travel (VMT) for each segment by multiplying AADT and segment length.
- . Calculate the county average VMT per mile of roadway by dividing county VMT by total roadway miles.
- Use the current year average VMT per mile and similar values from recent years as input to a least squares regression analysis to determine an equation representing the data points.
- . The extrapolated value of VMT per mile twenty years into the future is divided by the current year value of VMT per mile to yield the county 20-year traffic projection factor.
- The factor is applied to all roadway segments within the county to estimate future year traffic volumes. These projected volumes help identify construction needs.

Several special conditions must be followed in the development of the individual county factors. Traffic count data from the four most recent counts are used for all rural counties, and all data within the last twelve years are used for the counties in the seven county metro area. Most rural counties undertake traffic counts every four years and the metro area counties counts every two years. Within the metro area, an additional condition is imposed as data collected under the so-called "System 70" procedure used in the mid-1970s are not used in the procedure. This data represents only a limited number of C.S.A.H.s and therefore has been determined not to be representative of the entire county.

The AADTs used in the process are determined from the traffic maps containing the recent count data. Each C.S.A.H. is split into segments using logical break points at intersecting roadways or the limits of previous construction activities. The length of the individual segments vary from a few hundredths of a mile to over ten miles. For segments that have multiple traffic count values, the highest AADT is used in the projection factor process.

Whenever new approved traffic counts are made, new traffic projection factors are computed. As a matter of policy, factors are never allowed to fall below 1.0. The computed factor is initially applied to all roadway segments in the county, but requests for changes may be made by the county engineer for any specific segment where conditions warrant the change. These changes must be approved by the Mn/DOT District State Aid Engineer.

### Advantages and Disadvantages of Current Method

There are several advantages of using the current method to develop traffic projection factors. The amount of data required for the process is relatively low as only new traffic volumes and segment length are needed. The data is relatively easy to obtain since counts are undertaken at the local level and transferred to maps by Mn/DOT. The method is relatively easy to apply. As new AADTs are recorded for each C.S.A.H. segment in the county database, the corresponding VMTs are calculated and the overall county VMT per mile is calculated. Following this, the appropriate year's values of VMT per mile are entered into an easy to use computer program and the new traffic projection factor is calculated.

There are, however, concerns about the use of the current method to estimate traffic projection factors. The projection factors in counties experiencing rapid increases in traffic may be lower than expected. Similarly, counties experiencing declining traffic volumes may have factors higher than expected. Because the method is a straightforward regression analysis, it does not reflect sudden changes in demographics nor socioeconomic conditions, it does not differentiate among diverse geographic areas that may exist within a county, nor does it differentiate between fast and slow growing roadways.

In an effort to gauge the effectiveness of the current method, several test counties were selected for detailed analysis as part of this study. The test counties were Aitkin, Norman, Ramsey, Redwood and Scott counties. This group represents a mix of rural and urban along with stable and fast growth areas. One step in the review of the method was to evaluate the accuracy of past projection factors. The database maintained by Mn/DOT allowed calculation of actual VMT per mile changes since the early 1950s. This data was used to develop actual 20-year growth factors by county as well as estimated future 20-year growth factors.

Tables 1 through 5 show the comparison of actual versus estimated growth factors for each of the five test counties examined. Table 1 shows that the rate of traffic growth in Aitkin County has steadily declined between 1952 and 1986, whereas the vehicle-miles per mile doubled in the first 20-year period (1952 to 1971), in the last 20-year period (1967 to 1986) the growth factor was only 1.4.

When the first Mn/DOT growth projection factor was estimated for Aitkin County for the 20-year period (1972 to 1991), its value was 1.8. Given the steady decline in the rate of traffic growth that the County experienced between 1952 and 1986, and the fact that the 1967 to 1986 actual growth factor was 1.4, it appears that the projection factor of 1.8 estimated the period 1972 to 1991 using Mn/DOT's method was high. However, over time, the method has reflected the steady decline in the rate of traffic growth in Aitkin County. The most recent projection factor, estimated in 1988 for the year 2007, was 1.2.

In the case of Norman County (Table 2), the growth factors calculated from actual traffic volumes between 1952 and 1988 shows ups and downs but, overall, the growth factor has been fairly stable, fluctuating between 1.5 and 1.8. Again, the Mn/DOT method has picked up this pattern of stability showing a practically constant growth factor between 1972 and 2007. However, if the actual growth factor of 1.7 for the period 1972 to 1988 is compared to the value of 1.4 estimated via the method for a similar but somewhat longer period (1972 to 1991), it would appear that the method underestimated the actual growth factor in Norman County.

Regarding Ramsey County (Table 3), the actual growth values are limited because of the incompleteness of traffic data collected in the 70s. The few available points indicate the projection method results in estimated growth factors in the 80s that are lower than the actual growth factors in the 60s.

## 1990 COUNTY SCREENING BOARD DATA JUNE, 1990

1985-1989 Five-Year Average Subbase (Class 3 & 4) Unit Price Data

THE FOLLOWING MAP INDICATES THE SUBBASE (CLASS 3 & 4) UNIT PRICE INFORMATION THAT IS IN THE 1985-1989 FIVE-YEAR AVERAGE UNIT PRICE STUDY AND THE INFLATED SUBBASE UNIT PRICE, THE DETERMINATION OF WHICH IS EXPLAINED IN ANOTHER WRITE-UP IN THIS SECTION. THIS DATA IS BEING INCLUDED IN THE REPORT BECAUSE IN SOME CASES THE GRAVEL BASE UNIT PRICES RECOMMENDED BY THE SUBCOMMITTEE, AS SHOWN ON FIG. A, WERE DETERMINED USING THIS SUBBASE INFORMATION.

## FAS Fund Balance Deductions

THE FOLLOWING RESOLUTION WAS ADOPTED BY THE COUNTY SCREENING BOARD IN OCTOBER 1973, REVISED IN JUNE, 1980, IN OCTOBER, 1982, IN JUNE, 1985 AND AGAIN IN JUNE, 1989.

THAT IN THE EVENT ANY COUNTY'S FAS FUND BALANCE EXCEEDS EITHER AN AMOUNT WHICH EQUALS A TOTAL OF THE LAST FIVE YEARS OF THEIR FAS ALLOTMENTS OR \$350,000, WHICHEVER IS GREATER, THE EXCESS OVER THE AFOREMENTIONED AMOUNT SHALL BE DEDUCTED FROM THE 25-YEAR COUNTY STATE AID HIGHWAY CONSTRUCTION NEEDS IN THEIR REGULAR ACCOUNT. THIS DEDUCTION WILL BE BASED ON THE FAS FUND BALANCE AS OF SEPTEMBER 1 OF THE CURRENT YEAR. FURTHER, IN THE EVENT THAT A COUNTY HAS A FEDERAL AID PROJECT TO THE POINT THAT A RIGHT-OF-WAY CERTIFICATE NO. 1 HAS BEEN SIGNED AND THE PROJECT PLAN HAS BEEN APPROVED BY THE STATE AID OFFICE PRIOR TO SEPTEMBER 1ST AND THE PROJECT CANNOT PROCEED BECAUSE OF THE NON-AVAILABILITY OF FEDERAL FUNDS, THE STATE AID ESTIMATE OF THE F.A.S. PORTION OF THE PROJECT COST SHALL BE DEDUCTED FROM THE F.A.S. FUND BALANCE.

IN CONFORMING WITH THIS RESOLUTION, THE FOLLOWING DATA IS PRESENTED.

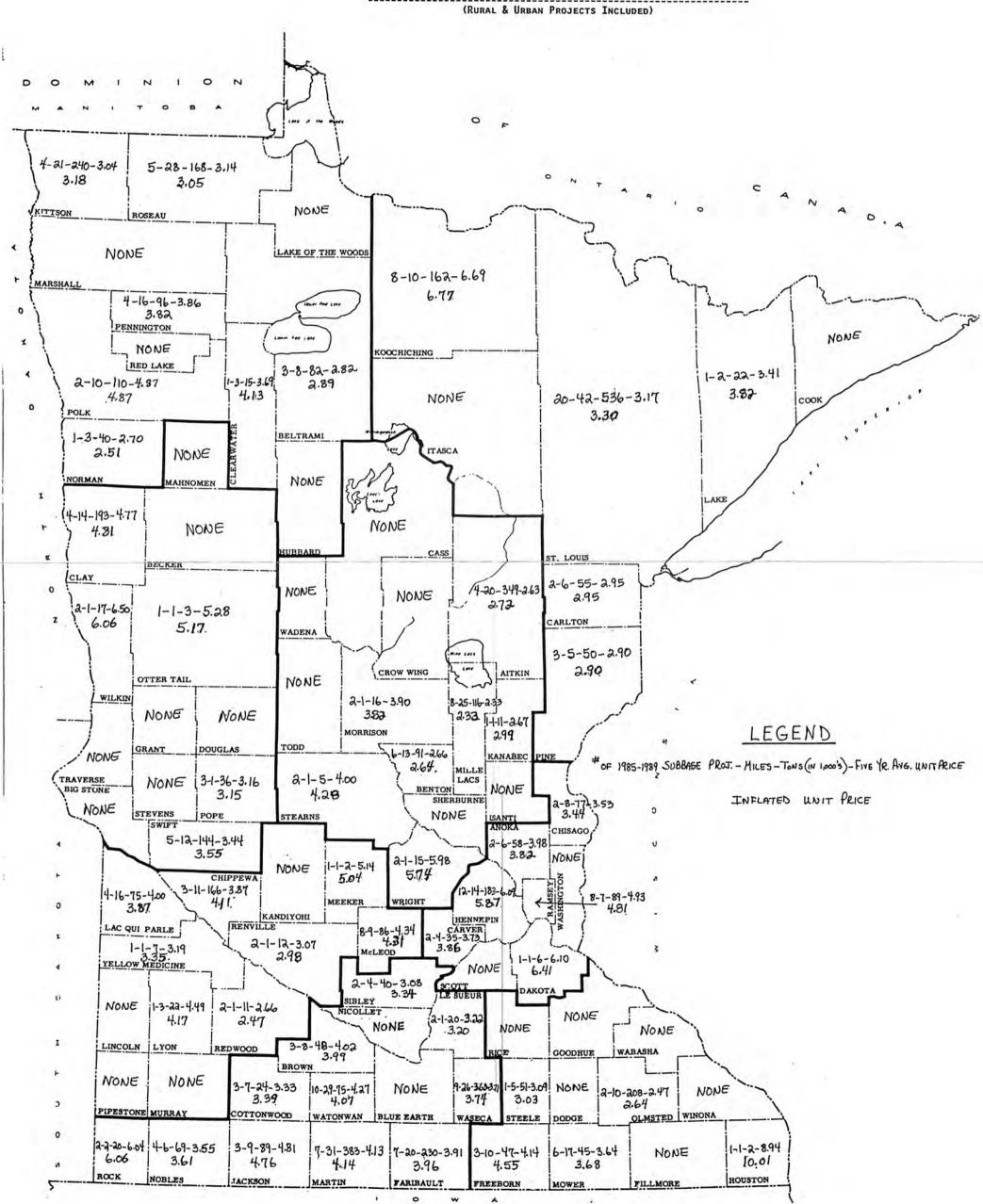
County	FAS FUND Balance as of May 7, 1990	Maximum Balance	NEEDS DEDUCTION FROM THE 1990 25-YEAR C.S.A.H. CONSTRUCTION NEEDS
BELTRAMI	\$964,171	\$753,036	\$211,135
CARLTON	704,109	503,000	201,109
CHISAGO	562,182	479,056	83,126
CLAY	896,909	689,412	207,497
CROW WING	919,056	732,350	186,706
DAKOTA	602,830	552,892	49,938
Fillmore	989,305	608,734	380,571
Hennepin	709,027	521,150	187,877
Houston	846,254	412,090	434,164
Hubbard	611,504	458,372	153,132
ITASCA	1,319,264	818,122	501,142
Kandiyohi	754,739	556,674	198,065
Le Sueur	465,596	368,437	97,159
Lincoln	430,361	378,953	51,408
McLeod	430,760	424,135	6,625
MEEKER	450,290	350,000	
Nobles	866,429	692,146	
Otter Tail	1,199,420	1,187,345	
Pope	398,144	350,000	
Ramsey	446,985	350,000	
RENVILLE	1,036,506	788,665	
Rice	671,618	401,704	
Roseau	939,149	558,267	
Scott	574,014	393,691	
Steele	502,403	405,675	

FIG. E

1990 COUNTY SCREENING BOARD DATA

JUNE. 1990

1985-1989 Five Year Average Subbase (CLASS 3 & 4) Unit Price Data



## 1990 COUNTY SCREENING BOARD DATA

#### JUNE, 1990

## COUNTY STATE AID MAINTENANCE TRANSFERS

County	Transfers	32-YEAR Total 1958-1989	County	Transfers	32-YEAR Total 1958-1989
CARLTON COOK LAKE PINE ST. LOUIS	1 4 4 6 3	\$20,839 128,598 115,000 311,194 853,000	CARVER HENNEPIN SCOTT DISTRICT 5	1 5 3 Totals 9	\$20,000 575,219 75,000 670,219
DISTRICT 1 BELTRAMI CLEARWATER HUBBARD NORMAN	TOTALS 18 2 1 2 1	1,428,631 26,330 20,000 93,630 32,000	FILLMORE GOODHUE HOUSTON MOWER RICE	2 2 1 2 1 4 4 2	37,610 46,000 30,000 69,700 44,100 34,135
DISTRICT 2 AITKIN BENTON ISANTI KANABEC	9 1 2 2 8 4 1	_,_,,	STEELE WABASHA DISTRICT 6 COTTONWOOD JACKSON	Totals 18	101,188 33,714 396,447 25,000 85,000
MILLE LACS SHERBURNE TODD WRIGHT DISTRICT 3	Totals 28	768,000	Le Sueur Rock Sibley Waseca Watonwan District 7	1 2 3 2 3 2 3 Totals 16	175,000 53,000 45,235 45,000 124,000 552,235
BIG STONE DOUGLAS POPE STEVENS SWIFT TRAVERSE DISTRICT 4	2 3 4 1 4 Totals 17	46,007 110,000 72,700 259,501 40,000 430,000 958,208	LAC QUI PARI LYON MEEKER MURRAY RENVILLE DISTRICT 8	1 4 3 1	220,264 48,110 58,236 104,000 10,800 441,410
			STATE TOTALS		\$5,387,110

# of Tranfers 124

The last year for a Maintenance Transfer was in 1980 for Traverse County for \$120,000.

# 1990 COUNTY SCREENING BOARD DATA JUNE, 1990

## COUNTY STATE AID HARDSHIP TRANSFERS

County	Transfers	32-YEAR Total 1958-1989	County	[RANSFERS	32-YEAR Total 1958-1989
Cook Koochiching Lake Pine District 1	17 4 1 11 Totals 33	\$619,625 155,000 65,000 534,600 1,374,225	BIG STONE GRANT MAHNOMEN TRAVERSE DISTRICT 4 TOTA	1 1 15 1 Ls 18	\$35,000 30,000 223,000 75,000 363,000
Beltrami Clearwater	1 1 5	30,000 12,000	Fillmore District 6 Tota	Ls 1	40,000 40,000
HUBBARD LAKE OF THE NORMAN		100,000	Watonwan District 7 Tota	1 Ls 1	40,000 40,000
PENNINGTON RED LAKE ROSEAU DISTRICT 2	1 1 6 Totals 34		LAC QUI PARLE Pipestone District 8 Tota	1 1 2	100,000 75,000 175,000
AITKIN BENTON Cass	18 5		CHISAGO Ramsey District 9 Tota	1 1 2	30,000 75,000 1 <b>0</b> 5,000
CROW WING KANABEC WRIGHT DISTRICT 3	5 6 1 5 2 Totals 37	20,000 150,000 30,000 1,545,000	STATE TOTALS		\$5,523,725
			# of Transfers	128	

THE LAST YEAR OF A HARDSHIP TRANSFER WAS IN 1982 FOR AITKIN COUNTY FOR \$250,000.

DW4: VARIANCE

# 1990 COUNTY SCREENING BOARD DATA JUNE, 1990 Needs Adjustments for Variances Granted on CSAHs

The adjustments shown below are for those variances granted for which projects have been awarded prior to May 1, 1990 and for which no adjustments have been previously made. These adjustments were computed using guidelines established by the Variance Subcommittee. These guidelines are a part of the Screening Board resolutions.

County	<u>Project</u>	Recommended 1990 Needs <u>Adjustments</u>
BELTRAMI	04-630-11	\$ 88,452
BELTRAMI	04-632-13	79,240
CHISAGO	13-616-10	133,596
FILLMORE	23-623-08	532,920
NICOLLET	52-604-02	3,167,060
TOTAL		\$4,001,268

If the counties involved have any questions regarding these adjustments, the State Aid Office can be contacted directly. Also the calculation of the adjustments will be available at the various district meetings and the Screening Board meeting.

#### Minutes of the County Engineers Screening Board Meeting

#### October 24 & 25, 1989

Meeting was called to order at 1:00 P.M. October 24, 1989 by Chairman Mike Rardin.

#### Roll Call of members:

Al GoodmanLake CountyDistrict	lPresent
Mike RardinPolk CountyDistrict	2Present
Gene MatternWadena CountyDistrict	3Present
Tom RichelsWilkin CountyDistrict	4Present
Vern GenzlingerHennepin CountyDistrict	5Present
Rick ArnebeckWinona CountyDistrict	6Present
Bob WittyFaribault/Martin CountiesDistrict	7Present
Tom BehmLyon CountyDistrict	8Present
Dave EverdsDakota CountyDistrict	9Present
Dave Everus	• • • • • • • • •

Chairman Rardin called for approval of the June 14 & 15, 1989 Screening Board Minutes. Bob Witty moved and Al Goodman second a motion to approve the Minutes as distributed. Motion carried unanimously.

Chairman Rardin introduced the Mn/DOT personnel from State Aid in attendance:

Gordon Fay	
Der Hangen	
ROY HallSull	Manager County State Aid Needs Unit
Ken Hoeschen	Manager, County State Aid Needs Unit
Ken Straus	Manager, Municipal State Aid Needs Unit

Bill CrokeDistrict	1	State	Aid	Engineer
Tack Tsaacson	2	State	Aid	Engineer
Dave ReedDistrict	3	State	Aid	Engineer
Chuck WeichselbaumDistrict	5	State	Aid	Engineer
Farl Welshons	6	State	Aid	Engineer
Larry Hoben	7	State	Aid	Engineer
John HoekeDistrict	8	State	Aid	Engineer
Elmer MorrisDistrict	9	State	Aid	Engineer

Chairman Rardin then introduced Bill Groskurth, Freeborn County, Chairman of the General Subcommittee.

#### · Chairman Rardin recognized others present:

Roger Hille	.Marshall County	.District	2 Alternate
John Walkup	.Aitkin County	.District	3 Alternate
Tallack Johnson	.Swift County	.District	4 Alternate
Brad Larson	Scott County	.District	5 Alternate
Arnie Johnson	.Rock County	.District	7 Alternate
Doug Haeder	.Pipestone County	.District	8 Alternate
Don Theisen	.Chisago County	.District	9 Alternate
Mike Tardy			
Mike Pinsonneault			

Chairman Rardin turned to Ken Hoeschen to review the Screening Board booklet of information related to the County State-Aid Highway system mileage, needs and apportionment. Ken noted that he had been able to attend all District meetings to go over the booklet and would proceed in a similar manner.

#### Page 3 & Figure "A" - Comparison of 1988 to 1989 Basic Construction Needs

Ken went through each of the effects of Needs changes on Figure "A" noting the four major areas of: 1) Normal Update; 2) Unit Price Update; 3) Bridge & Railroad Cost Update, and 4) Traffic & Traffic Factor Update. Ken noted this is a summary of the Needs changes from last year to this year.

Ken pointed out that St. Louis County was last counted in 1987 and the effects are included this year; the Metro counties were counted in 1988 but information was not received in time to be included in update. Al Goodman commented on behalf of St. Louis County regarding the one-year delay in Traffic updating in that it is of no fault of St. Louis County; is there a rememdy that can be provided? Ken Hoeschen indicated that in the past that if data is not received in time, no corrections have been Al Goodman asked for reason for such delay. Ken advised they simply did not receive the data from the Traffic Section and he is not sure it is the fault of anyone in particular. Dave Everds asked what the factor was before and is now for St. Louis County. Ken advised it was 1.6 and stayed at 1.6. Dave Everds noted that since corrections have not been retroactive, it should remain that way and since there is no change, there is no effect for St. Louis County. Ken suggested that Pages 97-98, "Traffic Projection Factors", be reviewed at this time. He noted the factors on the map were used for the 1989 Needs Study and explained the information in general noting the tempering factor of 0.3 plus or minus change which affected four counties: Chippewa, Cottonwood, Jackson and Koochiching. No questions or further comments about traffic factors.

Ken asked for any further clarification of Figure "A" advising he had gone into more detail at the District meetings. No further comments or questions were raised.

#### Pages 5 thru 7 - Restriction of 25-Year Construction Needs Change

Ken pointed out that there are two counties that have restrictions which are Koochiching and Big Stone. The Statewide needs decreased 1.4%; therefore, the limiting range is minus 21.4% to plus 18.6%. No questions.

#### Page 8 - FAS Fund Balance Deductions

Ken H. noted that the adjustment is to the 25-Year Needs and not Apportionment. No questions or comments.

#### Pages 9 thru 12 - CSAH Fund Balance "Needs" Deductions

Ken reviewed this data and pointed out these are adjustments to the 25-Year Needs and not Apportionment. Ken noted that Cook County has a positive adjustment due to a project being reported in 1988, but data was

lost in the mail; he also advised that an error exists in the Waseca. County balances and no adjustment is to be made. No questions.

#### Pages 13 thru 15 - Special Resurfacing Projects

Ken reviewed the current Screening Board resolution and explained the information regarding these type of projects. Tom Behm expressed a concern by District #8 regarding the definition of a Special Resurfacing Project, particularly involving a Pipestone County project which was an overlay a year before reinstatement of complete grading needs. Doug Haeder, Pipestone County, was given an opportunity to address the issue; he requested that the Screening Board delete this project from the Special Resurfacing adjustments and believes the resolution or definition needs clarification. Rick Arnebeck asked Ken to explain current practice in making adjustments, which he did. Bob Witty asked for clarification of when project was done and when Needs adjusted; Ken advised update information is current based on Letting dates of contracts. Al Goodman suggested policy should remain the same as it has been applied consistently since such adjustments have been made. Doug Haeder expressed a need for a clear definition. Chairman Rardin asked about cut-off dates for the Needs Study, and Ken again emphasized that the Needs Study is current as of December 31st of the previous year but noted there are different cut-off dates for reporting just so a report can be put together on a timely basis. No further questions or comments.

## Pages 17 thru 27 - Comparison of 1984-1988 Rural Design Grading Construction Costs to Needs Study Costs

Ken briefly reviewed in general the information dealing with grading cost adjustments. He pointed out that there have been over 1,300 miles of complete grading accomplished in the last five years and that the Statewide average of the Construction Costs is within 6% of the average Needs Costs; no comments or questions.

## Pages 29 thru 39 - Comparison of 1987-1988 Urban Design Grading Construction Costs to Needs Study Costs

Ken pointed out this is the same type of comparison dealing with Urban Design Grading Construction Costs as with Rural Design but with only two years of comparison. He noted the Steele County data which may be a unique situation and perhaps should be revised. Ken also noted the Statewide average Construction Costs is within 1% of the Needs Costs. No questions or comments.

#### Page 40 - Needs Adjustments for Variances Granted on CSAHs

Ken reviewed this data and noted these adjustments were approved at the Spring meeting. No comments.

#### Pages 41 & 42 - Bond Account Adjustments

Ken briefly reviewed. No questions.

#### Pages 43 thru 46 - After-the-Fact Needs

Ken commented these are Needs which have to be reported and are not in the regular Needs Study. No questions.

#### Pages 47 thru 49 - Mill Levy Deductions

Ken noted this is based on a county's "ability to pay" and this adjustment is made to the annual Money Needs. He also called attention to the change in legislation eliminating the terminology of mill rates.

#### Page 51 & Figure "B" - Tentative 1990 Money Needs Apportionment

The tentative apportionment was developed on the basis of 1989 Apportionment Dollars. No questions.

#### Pages 52 thru 54 - Recommendation to Commissioner of Transportation

Must be sent to the Commissioner by November 1st each year. Slight adjustments to the data are necessary due to the corrections already noted and any action taken by the Screening Board. No questions.

#### Pages 55 thru 58 - Tentative 1990 CSAH Apportionment

No discussion and no questions.

## Pages 59 thru 61 - Comparison of Actual 1989 to Tentative 1990 CSAH Apportionment

This is based on 1989 Apportionment Dollars. No discussion or questions.

#### Pages 62 thru 67 - History of Mileage Requests

Information only; no discussion. Duane Lorsung, Todd County, member of the Mileage Subcommittee, was noted as being present.

#### Pages 68 thru 77 & Figure "C" - Cook County Mileage Request

The request involves an addition of 1.6 miles as the result of certain proposed revocations and designations. Mike Tardy, Cook County, withdrew the Cook County request for further study and review. Chairman Rardin thanked Mike for simplifying things and moved to the next request.

#### Pages 78 thru 83 & Figure "D" - LeSueur County Mileage Request

The request involves an addition of 0.05 mile as the result of certain proposed revocations and designations. Bob Witty advised that LeSueur County withdraws the request.

#### Pages 84 thru 89 & Figure "E" - Nicollet County Mileage Request

The request involves an addition of 0.78 mile as the result of certain proposed revocations and designations. Ken advised that a letter has been received from Mike Wagner, Nicollet County, withdrawing the request.

Ken noted one issue of the Nicollet County request related to trunk highway turnback mileage and called on Duane Lorsung to comment. Duane referred to the Mileage Subcommittee's Report on Pages 88 & 89 indicating that there may be situations that are appropriate for consideration but the current Screening Board resolution does not allow any flexibility in this matter; of course, the Screening Board can make changes if it desires. Al Goodman questioned just what is the issue? Several comments were made. Duane Lorsung again emphasized that the issue is the existing resolution restricts using turnback mileage in the manner proposed by Nicollet County and that there may be some justification for some flexibility and a further review by a subcommittee.

Chairman Rardin declared a recess for refreshments.

#### Pages 90 thru 95 - State Park Road Account

Ken advised the information included on Page 91 has been revised and he distributed copies of the current legislation. He reviewed the Law noting that any State Park Road funds that are spent on CSAH projects must be approved by the Screening Board. There are four projects: Lake of the Woods County, Brown County, Murray County and Rock County. No discussion.

#### Pages 97 & 98 - CSAH 20-Year Traffic Projection Factors

Data reviewed earlier. Vern Genzlinger commented on the latest counts being taken but not available for updating and addressed the plus or minus 0.3 tempering factor relating directly to Scott County where the traffic projection factor changes from 1.7 to 2.6 and that it will take six years to realize the full adjustment or affect of traffic. Further, we have a plus or minus 20 percent overall tempering factor and as a result, the 0.3 factor for traffic projection factors does not seem appro-Questions and comments specifically about Scott County were made. Dave Everds asked how often or how many times delays occurred in traffic counting and receiving the information. Ken H. responded he felt it was mostly isolated cases and never whole areas like the Metro County area this year. Bob Witty asked if information were available, would it be difficult to include, and Ken said no, adjustments could easily be done prior to making apportionment upon direction of the Screening Board. Vern G. commented if data/information were available, it should be used and also noted there are two issues involved when considering the tempering factors. Dave Everds recalled the General Subcommittee studied this issue and his recollection was that the 0.3 factor was initiated to protect against rapidly falling rural traffic counts. Various other comments were made of a general nature.

## Pages 99 thru 112 - January Special Meeting Screening Board Minutes and June Meeting

No comments.

#### Page 113 - General Subcommittee Meeting Minutes

Ken noted this meeting was in September and passed out Minutes from a meeting held in October. The October meeting was a continuation of the investigation, as charged at the previous Screening Board meeting, of Needs Credit for Local effort. A recommendation was made at the October meeting as follows:

"That annually a Needs Adjustment for Local effort shall be made to the CSAH 25-Year Construction Needs.

"The adjustment (credit for Local effort) shall be the Local (not State Aid or Federal Aid) dollars spent on State Aid Construction Projects for items eligible for State Aid participation. This adjustment shall be annually added to the 25-Year County State Aid Highway construction needs of the county involved for a period of ten years."

Several comments were made about the logic of length of adjustment, the general merits of the resolution as a whole, distinction in types of project, approved State Aid plans or project, impact of such adjustment, leveraging of various funds, general support, conditions for adjustment, defining types of projects eligible, construction fund balances, source of Local funds, etc.

#### Pages 114 thru 128 - History of Screening Board Resolutions

No discussion or comments.

#### Other Business

Chairman Rardin called for any other comments or questions on the book-let; there were none. Chairman Rardin advised that he has not received any reply from Commissioner Levine regarding the resquest for information and an explanation about FAS funding as directed at the last meeting.

Meeting recessed at approximately 3:00 P.M. on October 24, 1989 to 8:30 A.M., October 25, 1989.

Chairman Rardin reconvened the meeting at 8:35 A.M. on October 25, 1989.

Roll call by Secretary; all present.

Chairman Rardin advised the meeting would proceed in similar manner to the previous day and asked Ken Hoeschen to proceed.

## <u>Page 3 and Figure "A" - Comparison of 1988 to 1989 Basic Construction</u> <u>Needs</u>

Ken noted this is a summary as a result of updates. Bob Witty moved and Vern Genzlinger second a motion to include traffic count information which is available as of December 1, 1989 for those counties which have recently been counted. Motion carried unanimously by voice vote. Vern

Genzlinger moved and Rick Arnebeck second a motion to limit a decrease in traffic projection factors by 0.3 but no limit for an increase. After much discussion, the motion carried by voice vote with one naye.

#### Pages 4 thru 51 - Needs and Adjustments

Tom Behm moved and Al Goodman second a motion to amend the existing Screening Board resolution regarding Special Resurfacing Projects by adding the language proposed by Pipestone County as follows:

"An overlay project for which a constract is let prior to reinstatement of complete grading needs will not be considered to be a Special Resurfacing Project."

Dave Everds moved and Bob Witty second a motion to refer this matter to the General Subcommittee. Motion to refer carried unanimously by voice vote.

Rick Arnebeck referred to Page 35 and the data regarding Steele County; the project involved should not have been considered as Urban Construction since in fact it was Rural Construction and the matter really is an administrative error. Bob Witty moved and Rick Arnebeck second a motion to make the appropriate adjustment in the Steele County Urban Grading Costs data on Page. 35. Motion carried unanimously by voice vote.

#### Pages 52 thru 58 - Report to Commissioner

Rick Arnebeck moved and Dave Everds second a motion to approve the Mileage and Money Needs of the County State Aid Highway System as presented and herein corrected by direction of the Screening Board and so recommends to the Commissioner of Transportation. Motion carried unanimously by voice vote. The original draft of Page 52 was signed by all representatives.

#### Pages 68 thru 89 - Mileage Requests

All Mileage requests withdrawn. Ken referred to the current Screening Board resolution on Pages 119 and 120 regarding Mileage Limitation and trunk highway turnback mileage. Considerable discussion followed, particularly about the second paragraph on Page 120 as well as the third and fourth paragraphs on Page 119 with comments about flexibility, no changes needed, keeping turnbacks separate from original CSAH designation, "banking" of other mileage, etc. Dave Everds moved and Bob Witty second a motion to refer this subject to the General Subcommittee. Motion carried unanimously by voice vote.

Chairman Rardin declared a recess for refreshments.

#### Pages 90 thru 95 - State Park Road Account

Al Goodman moved and Tom Richels second a motion to approve the four projects as submitted and discussed previously. Various comments made

about the general use of these funds. Motion carried unanimously by voice vote.

#### Pages 97 & 98 - CSAH 20-Year Traffic Projection Factors

No further comments; no further action required or taken. (See comments under Page 3.)

#### Pages 99 thru 112 - Screening Board Minutes

Minutes were approved on June 15, 1989 and October 24, 1989. No further comments or action.

#### Page 113 - General Subcommittee Meeting Minutes

Ken called attention to the recommendation of the General Subcommittee from the October meeting as discussed previously. Several comments were made noting that "credit for Local effort" has been discussed for some time and there was general concurrence that "credit for Local effort" needed to be in accordance with State Aid Rules and reduce Needs. Dave Everds moved and Vern Genzlinger second the following motion:

"That annually a Needs Adjustment for Local effort which reduces State Aid needs shall be made to the CSAH 25-Year Construction Needs.

"The Adjustment (credit for Local effort) shall be the Local (not State Aid or Federal Aid) dollars spent on State Aid construction projects for items eligible for State Aid participation. This Adjustment shall be annually added to the 25-Year County State Aid Highway construction needs of the County involved for a period of ten years.

"It shall be the County Engineers' responsibility to submit this data to their District State Aid Engineer. His submittal and approval must be received in the Office of State Aid by July 1st."

After further discussion, the Motion carried by voice vote with two nayes.

#### Pages 114 thru 128 - History of Screening Board Resolutions

No comments; no action required.

#### Other Business

Bob Witty moved and Tom Behm second a motion that an amount of \$560,165 (not to exceed 1/4 of 1% of the 1989 CSAH Apportionment) shall be set aside from the 1990 CSAH Apportionment Fund and be credited to the Research Account. No discussion. Motion carried unanimously by voice vote.

Chairman Rardin called upon Gordon Fay, State Aid Engineer, for remarks. Gordon made the following comments:

- Transportation Study Board is conducting a series of meetings; one being held today. Among some of the topics being discussed are the Citizens League Report, the Legislative Auditor's Report and MVET.
- 2. The Certification of Technicians Committee is to begin work and information will be forthcoming.
- 3. State Aid funds will be participating in the Minnesota Test Road project which will include weigh-in-motion scales and other instrumentation.
- 4. The Training Questionnaire needs to be returned so future training needs and schedules can be satisfied.
- 5. A new metro combined Mn/DOT District has been formed and is undergoing re-organization but is operational.
- 6. The State Aid Rules are undergoing the rule-making process and any and all comments or input are requested; the committees have been appointed representing the Cities and Counties, and hearings and meetings will follow.
- 7. FAS funds expired last year and advance encumbrances were allowed; FAS projects will be taken on a "first come, first served" basis for 1990.
- 8. The District #4 District State Aid Engineer position remains open; the overall process to fill the position is underway.

Question was asked about AMC, and Bob Witty commented on the AMC Physical Development Committee's effort in developing a new policy/platform position; a lobbyist dealing just with transportation has been proposed.

Rick Arnebeck inquired about any discussion about makeup of the Screening Board due to the new metro Mn/DOT District. Bob Witty replied that the AMC platform supports the Metro-Rural Task Force Report recommendation about the Screening Board without specific reference to the new district. Gordon Fay commented that no doubt there will have to be a change in the legislation about the Screening Board composition.

Chairman Rardin recognized Roger Gustafson, Carver County, for his efforts in chairing the Mileage Subcommittee and his role in developing this procedure for reviewing mileage requests. A thankyou round of applause was offered.

Chairman Rardin noted the outgoing members of the Board from the evennumbered districts and thanked them for their efforts. A thankyou round of applause was offered. Rick Arnebeck moved and Dave Everds second a motion to adjourn. Motion carried. Meeting adjourned at 11:15 A.M. October 25, 1989.

Respectfully submitted,

Duane A. Blanck

Crow Wing County

Screening Board Secretary

## Minutes of the CSAH General Subcommittee Meeting November 30, 1989

Members present: Bill Groskurth, Chairman - Freeborn County

Dennis Berend - Otter Tail County

Ken Weltzin - Ramsey County

Others in attendance: Ken Hoeschen - State Aid, Mn/DOT

The meeting was called to order by Chairman Groskurth at 1:00 P.M. on November 30, 1989 in Room 419 of the Transportation Building in St. Paul.

The first item for discussion was the direction by the Screening Board to further define "Special Resurfacing Projects" and to review the present policy regarding the needs adjustments for these types of projects. After considerable discussion, the Subcommittee decided to incorporate the recommendation from the "Metro-Rural Partnership Report" with the present Screening Board resolution and the policy presently being used to determine needs adjustments. The recommendation of the General Subcommittee is to add the following paragraph to the present Screening Board resolution regarding "Special Resurfacing Projects".

For needs purposes, a Special Resurfacing Project shall be defined as a bituminous resurfacing or concrete joint repair project which has been funded at least partially with money from the CSAH Construction Account and is considered deficient (i.e. segments drawing needs for more than additional surfacing) in the CSAH Needs Study in the year after the resurfacing project is let.

The other topic to be discussed involved the question of "banking" of revoked CSAH mileage. This topic arose at the October, 1989 Screening Board meeting when the mileage requests were being reviewed. Several proposals were introduced but no definite recommendation was agreed upon by the General Subcommittee. They did request a clarification from the Office of State Aid for the underlined phrase in the following excerpt from the Screening Board resolution on Mileage Limitations.

That any request, after July 1, 1966, by any county for County State Aid Highway designation, other than Trunk Highway Turnbacks, or minor increases due to construction proposed on new alignment, that results in a net increase over the county's approved apportionment mileage for the preceding year shall be submitted to the Screening Board for consideration.

The Subcommittee decided to get input from other county engineers concerning "mileage banking" and to meet again at the Institute in January, 1990.

The meeting was adjourned at 3:35 P.M.

Respectfully submitted,

Ken Hoeschen

Acting Secretary

#### Minutes of the CSAH General Subcommittee Meeting January 31, 1990

Members present: Bill Groskurth, Chairman - Freeborn County

Dennis Berend - Otter Tail County

Ken Weltzin - Ramsey County

Others in attendance: Ken Hoeschen - State Aid, Mn/DOT

The meeting was called to order by Chairman Groskurth at 1:10 P.M. on January 31, 1990 at Cragun's near Brainerd, Minnesota.

This meeting was expressly called to discuss the subject of "banking CSAH mileage". The County Screening Board directed the Subcommittee to look into this matter.

The Subcommittee reviewed the section of the Screening Board resolutions on "mileage" in great detail. After considerable discussion on all paragraphs of the resolution, the Subcommittee unanimously recommended the following paragraph be revised as shown by removing the word "not".

Mileage made available by an internal revision will not be held in abeyance for future designation. (Banked mileage)

If this recommendation is approved, the Office of State Aid will include a list of available (banked) mileage for each county in each Screening Board Report.

The Subcommittee also discussed CSAH mileage increases and decreases due to construction. The majority of the Subcommittee felt that the wording of the present resolution regarding these types of mileage changes was still appropriate.

The next meeting will be called by the Office of State Aid as soon as "unit price data" is available.

The meeting was adjourned at 2:40 P.M.

Respectfully submitted,

Ken Hoeschen

Acting Secretary

### MINUTES OF THE CSAH GENERAL SUBCOMMITTEE MEETING APRIL 27, 1990

Members Present: Bill Groskurth, Chairman - Freeborn County

Dennis Berend - Otter Tail County
Don Theisen - Chisago County
(Don is replacing Ken Weltzin, Ramsey County

for this meeting).

Others in Attendance: Ken Hoeschen - State Aid, Mn/DOt

The meeting was called to order by Chairman Groskurth at 10:00 A.M. on April 27, 1990 in Room 515 of the Transportation Building in St. Paul.

The Subcommittee first discussed the procedure used in the past for the determination of each county's gravel base unit price in their CSAH needs study. Maps showing the 1985-1989 five year average gravel base unit price data for all counties was sent to the Subcomittee members prior to the meeting. After reviewing the data presented, the Subcommittee directed that the prices shown on the map, which were computed using past procedure, be recommended to the Screening Board for use in the 1990 CSAH needs study. Also the Subcommittee requested the Office of State Aid send a copy of the map showing all recommended gravel base unit prices to each county.

The Subcommittee then reviewed the unit price data presented regarding the other roadway items. After a short discussion, the Subcommittee recommended using the "increment method" to determine each county's bituminous base, bituminous surface, gravel surface, gravel shoulders and rural design subbase unit prices. Simply explained, the "increment method" involves applying the difference between the 1989 state average CSAH construction unit price of gravel base (\$3.87) and the 1989 state average CSAH construction unit price of each of the other items to each county's previously determined gravel base unit price.

One of the members requested the Office of State Aid to look at individual county five year averages for bituminous # 2331. A comparison of these averages and the unit prices determined by the "increment method" was presented for the Subcommittee information. The consensus of the Subcommittee was that perhaps this option could be examined further if the Screening Board so directed.

For urban design subbase, the Subcommittee recommends using a unit price the same as gravel base. The reason for this being that the increment method would result in each county's urban design subbase price being \$2.04 higher than their gravel base price. This did not seem realistic to the Subcommittee.

For concrete surface, the Subcommittee recommends using the same unit prices as last year (\$11.80 for rural design - \$14.89 for urban design). The Mn/DOT Estimating Section informed us that their experience has shown that concrete prices have not changed in the last three years. These prices were arrived at in the following manner:

```
Rural Des.-90% (Reg.8"Conc.$11.53) + 10% (Irr.8"Conc.$14.22) = $11.80 Urban Des.-30% (Reg.9"Conc.$11.94) + 70% (Irr.9"Conc.$16.15) = $14.89
```

For the other unit prices; storm sewer, curb and gutter construction, bridges and railroad crossing protection; the Subcommittee agreed with the prices recommended by Mn/DOT and the MSAS Subcommittee. One problem which may occur is that the needs cost of signals and gates may be limited to five digits (\$99,999) until computer programming can be accomplished to handle 6 digits.

The Subcommittee then reviewed action that they have taken from previous meetings since direction was given by the Screening Board at their October, 1989 meeting. The items reviewed were: clarification of special resurfacing projects and the addition of CSAH mileage "banking" to the Screening Board resolutions.

There being no further items for discussion, the meeting was adjourned at 12:10 P.M.

Respectfully submitted,

Ken Hoeschen

Acting Secretary

### CURRENT RESOLUTIONS OF THE COUNTY SCREENING BOARD

January, 1990

#### BE IT RESOLVED:

#### **ADMINISTRATIVE**

#### Improper Needs Report - Oct. 1961 (Rev. Jan. 1969)

That the Office of State Aid and the District State Aid Engineer be requested to recommend an adjustment in the needs reporting whenever there is 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 county engineer involved.

#### Type of Needs Study - Oct. 1961 (Rev. June 1965)

That the Screening Board shall, from time to time, make recommendations to the Commissioner of Transportation as to the extent and type of needs study to be subsequently made on the County State Aid Highway System consistent with the requirements of law.

#### Appearance at Screening Board - Oct. 1962

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 Commissioner of Transportation through proper channels. The Commissioner 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 to appear before the Screening Board for discussion purposes.

#### Construction Cut Off Date - Oct. 1962 (Rev. June 1983)

That for the purpose of measuring the needs of the County State Aid Highway System, the annual cut off date for recording construction accomplishments based upon the project letting date shall be December 31.

#### Screening Board Vice-chairman - June 1968

That at the first County Screening Board meeting held each year, a Vice-chairman shall be elected and he shall serve in that capacity until the following year when he shall succeed to the chairmanship.

#### Screening Board Secretary - Oct. 1961

That, annually, the Commissioner of Transportation may be requested to appoint a secretary, upon recommendation of the County Highway Engineers' Association, as a non-voting member of the County Screening Board for the purpose of recording all Screening Board actions.

#### Research Account - Oct. 1961

That the Screening Board annually consider setting aside a reasonable amount of County State Aid Highway Funds for the Research Account to continue local road research activity.

#### Annual District Meeting - Oct. 1963 (Rev. June 1985)

That the District State Aid Engineer call a minimum of one district meeting annually at the request of the District Screening Board Representative to review needs for consistency of reporting.

#### General Subcommittee - Oct. 1986

That the Screening Board Chairman appoint a Subcommittee to annually study all unit prices and variations thereof, and to make recommendations to the Screening Board. The Subcommittee will consist of three members with initial terms of one, two and three years, and representing the north (Districts 1, 2, 3 and 4), the south (Districts 6, 7 and 8) and the metro area (Districts 5 and 9) of the state. Subsequent terms will be for three years.

#### Mileage Subcommittee - Jan. 1989

That the Screening Board Chairman appoint a Subcommittee to review all additional mileage requests submitted and to make recommendations on these requests to the County Screening Board. The Subcommittee will consist of three members with initial terms of one, two and three years and representing the metro (Districts 5 and 9), the north (Districts 1, 2, 3 and 4) and the south area (Districts 6, 7 and 8) of the state respectively. Subsequent terms will be for three years and appointments will be made after each year's Fall Screening Board Meeting. Mileage requests must be in the District State Aid Engineer's Office by April 1 to be considered at the spring meeting and by August 1 to be considered at the fall meeting.

#### NEEDS ADJUSTMENTS

#### Deficiency Adjustment - Oct. 1961 (Rev. June 1965)

That any money needs adjustment made to any county within the deficiency classification pursuant to Minnesota Statutes Chapter 162.07, Subdivision 4, shall be deemed to have such money needs adjustment confined to the rural needs only, and that such adjustment shall be made prior to computing the Municipal Account allocation.

#### Minimum Apportionment - Oct. 1961 (Latest Rev. Dec. 1966)

That any county whose total apportionment percentage falls below .586782, which is the minimum percentage permitted for Red Lake, Mahnomen and Big Stone Counties, shall have its money needs adjusted so that its total apportionment factor shall at least equal the minimum percentage factor.

#### Fund to Townships - April 1964 (Rev. June 1965)

That this Screening Board recommend to the Commissioner of Transportation, that he equalize the status of any county allocating County State Aid Highway Funds to the township by deducting the township's total annual allocation from the gross money needs of the county for a period of twenty-five years.

#### Bond Adjustment - Oct. 1962 (Latest Rev. Oct. 1985)

That a separate annual adjustment shall be made in total money needs of a county that has sold and issued bonds pursuant to Minnesota Statutes, Section 162.181 for use on State Aid projects except bituminous overlay or concrete joint repair projects. That this adjustment, which covers the amortization period, which annually reflects the net unamortized bonded debt, shall be accomplished by adding said net unamortized bond amount to the computed money needs of the county. For the purpose of this adjustment, the net unamortized bonded debt shall be the total unamortized bonded indebtedness less the unencumbered bond amount as of December 31, of the preceding year.

#### FAS Fund Balances - Oct. 1973 (Latest Rev. June 1989)

That in the event any county's FAS Fund balance exceeds either an amount which equals a total of the last five years of their FAS allotments or \$350,000, whichever is greater, the excess over the aforementioned amount shall be deducted from the 25-year County State Aid Highway construction needs in their regular account. This deduction will be based on the FAS fund balance as of September 1 of the current year. Further, in the event that a County has a Federal Aid project to the point that a Right-of-Way Certificate No. 1 has been signed and the project plan has been approved by the State Aid Office prior to September 1st and the project cannot proceed because of the non-availability of Federal Funds, the State Aid estimate of the F.A.S. portion of the project cost shall be deducted from the F.A.S. Fund Balance.

<u>County State Aid Construction Fund Balances - May 1975 (Latest Rev. October 1988)</u>

That, for the determination of County State Aid Highway needs, the amount of the unencumbered construction fund balance as of September 1 of the current year; not including the current year's regular account construction apportionment and not including the last three years of municipal account construction apportionment or \$100,000, whichever is greater; shall be deducted from the 25-year construction needs of each individual county. Also, that for the computation of this deduction, the estimated cost of right-of-way acquisition which is being actively engaged in shall be considered encumbered funds.

That, for the computation of this deduction, a Report of State Aid Contract (Form #30172) that has been received before September 1 by the District State Aid Engineer for processing or Federally-funded projects that have been let but not awarded shall be considered as being encumbered and the construction balances shall be so adjusted.

#### Needs Credit for Local Effort - Oct. 1989

That annually a needs adjustment for local effort which reduces State Aid needs shall be made to the CSAH 25 year construction needs.

The adjustment (credit for local effort) shall be the local (not State Aid or Federal Aid) dollars spent on State Aid Construction Projects for items eligible for State Aid participation. This adjustment shall be annually added to the 25 year County State Aid Highway construction needs of the county involved for a period of ten years.

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

#### Grading Cost Adjustment - Oct. 1968 (Latest Rev. June, 1988)

That, annually, a separate adjustment to the rural and the urban complete grading costs in each county be considered by the Screening Board. Such adjustments shall be made to the regular account and shall be based on the relationship of the actual cost of grading to the estimated cost of grading reported in the needs study. The method of determining and the extent of the adjustment shall be approved by the Screening Board. Any "Final" costs used in the comparison must be received by the Needs Section by July 1 of the Needs Study year involved.

Restriction of 25-Year Construction Needs Increase - Oct. 1975 (Latest Rev. Oct. 1985)

The CSAH construction needs change in any one county from the previous year's restricted CSAH needs to the current year's basic 25-year CSAH construction needs shall be restricted to 20 percentage points greater than or lesser than the statewide average percent change from the previous year's restricted CSAH needs to the current year's basic 25-year CSAH construction needs. Any needs restriction determined by this Resolution shall be made to the regular account of the county involved.

#### Trunk Highway Turnback - June 1965 (Latest Rev. June 1977)

That any Trunk Highway Turnback which reverts directly to the county and becomes part of the State Aid Highway System shall not have its construction needs considered in the money needs apportionment determination as long as the former Trunk Highway is fully eligible for 100 percent construction payment from the County Turnback Account. During this time of eligibility, financial aid for the additional maintenance obligation of the county imposed by the Turnback shall be computed on the basis of the current year's apportionment data and the existing traffic, and shall be accomplished in the following manner:

Existing ADT	Turnback Maintenance/Mile/2 Lanes					
0 - 999 VPD	Current mileage apportionment/mile					
1,000 - 4,999 VPD	2 X current mileage apportionment/mile					
For every additional 5,000 VPD	Add current mileage apportionment/mile					

Initial Turnback Maintenance Adjustment - Fractional Year
Reimbursement:

The initial Turnback adjustment, when for less than 12 full months, shall provide partial maintenance cost reimbursement by adding said initial adjustment to the money needs which will produce approximately 1/12 of the Turnback maintenance per mile in apportionment funds for each month, or part of a month, that the county had maintenance responsibility during the initial year.

Turnback Maintenance Adjustment - Full Year, Initial or Subsequent:

To provide an advance payment for the coming year's additional maintenance obligation, a needs adjustment per mile shall be added to the annual money needs. This needs adjustment per mile shall produce sufficient needs apportionment funds so that when added to the mileage apportionment per mile, the Turnback maintenance per mile prescribed shall be earned for each mile of Trunk Highway Turnback on the County State Aid Highway System. Turnback adjustments shall terminate at the end of the calendar year during which a construction contract has been awarded that fulfills the County Turnback Account payment provisions, or at the end of the calendar year during which the period of eligibility for 100 percent construction payment from the County Turnback Account expires. The needs for these roadways shall be included in the needs study for the next apportionment.

That Trunk Highway Turnback maintenance adjustments shall be made prior to the computation of the minimum apportionment county adjustment.

Those Turnbacks not fully eligible for 100 percent reimbursement for reconstruction with County Turnback Account funds are not eligible for maintenance adjustments and shall be included in the needs study in the same manner as normal County State Aid Highways.

#### MILEAGE

#### Mileage Limitation - Oct. 1961 (Latest Rev. June 1986)

That any request, after July 1, 1966, by any county for County State Aid Highway designation, other than Trunk Highway Turnbacks, or minor increases due to construction proposed on new alignment, that results in a net increase over the county's approved apportionment mileage for the preceding year shall be submitted to the Screening Board for consideration. request should be accompanied by supporting data and be concurred on by the District State Aid Engineer. All mileage requests submitted to the County State Aid Highway Screening Board will be considered as originally proposed only, and no revisions to such mileage requests will be considered by the Screening Board without being resubmitted through the Office of State Aid. The Screening Board shall review such requests and make its recommendation to the Commissioner of Transportation. If approved, the needs on mileage additions shall be submitted to the Office of State Aid for inclusion in the subsequent year's study of needs.

Revisions in the County State Aid Highway System not resulting in an increase in mileage do not require Screening Board review.

Mileage made available by an internal revision will not be held in abeyance for future designation. Mileage made available by reason of shortening a route by construction shall not be considered as designatable mileage elsewhere.

That any additions to a county's State Aid System, required by State Highway construction, shall not be approved unless all mileage made available by revocation of State Aid roads which results from the aforesaid construction has been used in reducing the requested additions.

That in the event a County State Aid Highway designation is revoked because of the proposed designation of a Trunk Highway over the County State Aid Highway alignment, the mileage revoked shall not be considered as eligible for a new County State Aid Highway designation.

That, whereas, Trunk Highway Turnback mileage is allowed in excess of the normal County State Aid Highway mileage limitations, revocation of said Turnbacks designated after July 1, 1965, shall not create eligible mileage for State Aid designation on other roads in the county.

That, whereas, former Municipal State Aid street mileage located in municipalities which fell below 5,000 population under the 1980 Federal census, is allowed in excess of the normal County State Aid Highway mileage limitations, revocation of said former M.S.A.S.'s shall not create eligible mileage for State Aid Designation on other roads in the county.

That, whereas, the county engineers are sending in many requests for additional mileage to the C.S.A.H. system up to the date of the Screening Board meetings, and whereas this creates a burden on the State Aid Staff to prepare the proper data for the Screening Board, be it resolved that the requests for the spring meeting must be in the State Aid Office by April 1 of each year, and the requests for the fall meeting must be in the State Aid Office by August 1 of each year. Requests received after these dates shall carry over to the next meeting.

#### TRAFFIC

<u>Traffic Projection Factors - Oct. 1961 - (Latest Rev. Oct. 1989)</u>

That new Traffic Projection Factors for the needs study be established for each county using a "least squares" projection the vehicle miles from the last four traffic counts and in the case of the seven county metro area from the number of latest traffic counts which fall in a minimum of a twelve year period. This normal factor can never fall below 1.0. Also, new traffic factors will be computed whenever an approved traffic count is made. These normal factors may, however, be changed by the county engineer for any specific segments where conditions warrant, with the approval of the District State Aid Engineer.

Because of the limited number of CSAH's counted in the metro area under a "System 70" procedure used in the mid-1970's, those "System 70" count years shall not be used in the least squares traffic projection. Count years which show representative traffic figures for the majority of their CSAH system will be used until the "System 70" count years drop off the twelve year minimum period mentioned previously.

Also, the adjustment to traffic projection factors shall be limited to a 0.3 point  $\phi h \phi h \phi \phi \phi$  decrease per traffic count interval.

#### Minimum Requirements - Oct. 1963 (Rev. June 1985)

That the minimum requirements for 4 - 12 foot traffic lanes be established as 5,000 projected vehicles per day for rural design and 7,000 for urban design. Traffic projections of over 20,000 vehicles per day for urban design will be the minimum requirements for 6 - 12 foot lanes. The use of these multiple-lane designs in the needs study, however, must be requested by the county engineer and approved by the District State Aid Engineer.

#### ROAD NEEDS

#### Method of Study - Oct. 1961 (Rev. Nov. 1965)

That, except as otherwise specifically provided, the Manual of Instruction for Completion of Data Sheets shall provide the format for estimating needs on the County State Aid Highway System.

#### Soil - Oct. 1961 (Latest Rev. June 1985)

Soil classifications established using a U.S. Soil Conservation Service Soil Map must have supporting verification using standard testing procedures; such as soil borings or other approved testing methods. A minimum of ten percent of the mileage requested to be changed must be tested at the rate of ten tests per mile. The mileage to be tested and the method to be used shall be approved by the District State Aid Engineer. Soil classifications established by using standard testing procedures, such as soil borings or other approved testing methods, shall have one hundred percent of the mileage requested to be changed tested at the rate of ten tests per mile.

All soil classification determinations must be approved by the District State Aid Engineer.

#### <u>Unit Costs - Oct. 1961 (Rev. Nov. 1965)</u>

That the unit costs for base, surface and shouldering quantities obtained from the 5-Year Average Construction Cost Study and approved by the Screening Board shall be used for estimating needs.

#### Design - Oct. 1961 (Latest Rev. June 1982)

That all roads be divided into proper segments and the highest estimated ADT, consistent with adjoining segments, be used in determining the design geometrics for needs study purposes.

Also, that for all roads which qualify for needs in excess of additional surfacing, the proposed needs shall be based solely on projected traffic, regardless of existing surface types or geometrics.

And, that for all roads which are considered adequate in the needs study, additional surfacing and shouldering needs shall be based on existing geometrics but not greater than the widths allowed by the State Aid Design Standards currently in force.

#### <u>Grading - Oct. 1961 (Rev. June, 1988)</u>

That all grading costs shall be determined by the county engineer's estimated cost per mile.

#### Rural <u>Design Grade Widening - June 1980</u>

That rural design grade widening needs be limited to the following widths and costs:

#### Feet of Widening

#### Needs Cost/Mile

- 4 8 Feet 50% of Average Complete Grading Cost/Mile
- 9 12 Feet 75% of Average Complete Grading Cost/Mile

Any segments which are less than 4 feet deficient in width shall be considered adequate. Any segments which are more than 12 feet deficient in width shall have needs for complete grading.

#### Storm Sewer - Oct. 1961 (Rev. Nov. 1965)

That storm sewer mains may be located off the County State Aid Highway if, in so doing, it will satisfactorily accommodate the drainage problem of the County State Aid Highway.

#### Base and Surface - June 1965 (Rev. June 1985)

That base and surface quantities shall be determined by reference to traffic volumes, soil factors, and State Aid standards. Rigid base is not to be used as the basis for estimating needs on County State Aid Highways. Replacement mats shall be 3" bituminous surface over existing concrete or 2" bituminous surface over existing bituminous. To be eligible for concrete pavement in the needs study, 2,500 VPD or more per lane projected traffic is necessary.

### <u>Construction Accomplishments - June 1965 (Latest Rev. Oct. 1983)</u>

That any complete grading accomplishments be considered as complete grading construction of the affected roadway and grading needs shall be excluded for a period of 25 years from the project letting date or date of force account agreement. At the end of the 25-year period, needs for complete reconstruction of the roadway will be reinstated in the needs study at the initiative of the County Engineer with costs established and justified by the County Engineer and approved by the State Aid Engineer.

Needs for resurfacing shall be allowed on all county state aid highways at all times.

That any bridge construction project shall cause the needs on 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 County Engineer and with approval of the State Aid Engineer.

The restrictions 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 County Engineer, and justification to the satisfaction of the State Aid Engineer (e.g., a deficiency due to changing standards, projected traffic, or other verifiable causes).

#### Special Resurfacing Projects - May 1967 (Latest Rev. Oct. 1985)

That any county using non-local construction funds for special bituminous resurfacing or concrete joint repair projects shall have the non-local cost of such special resurfacing projects annually deducted from its 25-year County State Aid Highway construction needs for a period of ten (10) years.

## <u>Items Not Eliqible For Apportionment Needs - Oct. 1961 (Latest Rev. June 1985)</u>

That Adjustment of Utilities, Miscellaneous Construction, or Maintenance Costs shall not be considered a part of the Study of Apportionment Needs of the County State Aid Highway System.

#### Right of Way - Oct. 1979

That for the determination of total needs, proposed right-of-way widths shall be standardized in the following manner:

			Projected ADT			<u>I</u>	<u>Proposed</u> R/W Width			
Proposed	Rural	Design	-	0 -	749			100	Feet	
			75	0 -	999			110	Feet	
			1,00	0 &	Over	(2	Lane)	120	Feet	
			5,00	0 &	Over	(4	Lane	184	Feet	

Proposed Roadbed Proposed Width R/W Width

Proposed Urban Design - 0 - 44 Feet

60 Feet

45 & Over Proposed Roadbed Width + 20 Feet

Also, that the total needs cost for any additional right of way shall be based on the estimated market value of the land involved, as determined by each county's assessor.

Forest Highways and State Park Access Roads - Oct. 1961 (Latest Rev. June 1985)

That for the determination of needs for those County State Aid Highways which are designated as a part of the Forest Highway System or are state park access roads, the appropriate standards documented in the "Rules for State Aid Operations" shall be used.

#### Loops and Ramps - May 1966

That any county may include the cost of loops and ramps in the needs study with the approval of the District State Aid Engineer.

#### BRIDGE NEEDS

Bridge Widening - April 1964 (Latest Rev. June 1985)

That the minimum bridge widening be 4 feet.

Bridge Cost Limitations - July 1976 (Rev. Oct. 1986)

That the total needs of the Minnesota River bridge between Scott and Hennepin Counties be limited to the estimated cost of a single 2-lane structure of approved length until the contract amount is determined. Also, that the total needs of the Mississippi River bridge between Dakota and Washington Counties be limited to the estimated cost of a 2-lane structure of approved length until the contract amount is determined. In the event the allowable apportionment needs portion (determined by Minnesota Chapter 162.07, Subdivision 2) of the contract amount from normal funds (FAU, FAS, State Aid, Local) exceeds the "apportionment needs cost", the difference shall be added to the 25-year needs of the respective counties for a period of 15 years.

#### AFTER THE FACT NEEDS

#### Bridge Deck Rehabilitation - Dec. 1982 (Latest Rev. Oct. 1986)

That needs for bridge deck rehabilitation shall be earned for a period of 15 years after the construction has been completed and shall consist of only those construction costs actually incurred by the county. It shall be the County Engineer's responsibility to justify any costs incurred and to report said costs to the District State Aid Engineer. His approval must be received in the Office of State Aid by July 1.

#### Right of Way - June 1984 (Latest Rev. Oct. 1986)

That needs for Right-of-Way on County State Aid Highways shall be earned for a period of 25 years after the purchase has been made by the County and shall be comprised of actual monies paid to property owners. Only those Right of Way costs actually incurred by the county will be eligible. Acceptable justification of R/W purchases will be copies of the warrants paid to the property owners. It shall be the County Engineer's responsibility to submit said justification in the manner prescribed to the District State Aid Engineer. His approval must be received in the Office of State Aid by July 1.

<u>Traffic Signals, Lighting, Retaining Walls, and Sidewalk - June 1984 (Latest Rev. Oct. 1986)</u>

That needs for Traffic Signals, Lighting, Retaining Walls, and Sidewalk (as eligible for State Aid participation) on County State Aid Highways shall be earned for a period of 25 years after the construction has been completed and shall consist of only those construction costs actually incurred by the county. It shall be the County Engineer's responsibility to justify any costs incurred and to report said costs to the District State Aid Engineer. His approval must be received in the Office of State Aid by July 1.

#### **VARIANCES**

#### Variance Subcommittee - June 1984

That a Variance Subcommittee be appointed to develop guidelines for use in making needs adjustments for variances granted on County State Aid Highways.

<u>Guidelines for Needs Adjustments on Variances Granted - June</u> 1985 (Latest Rev. June 1989)

That the following guidelines be used to determine needs adjustments due to variances granted on County State Aid Highways:

- There will be no needs adjustments applied in instances where variances have been granted, but because of revised rules, a variance would not be necessary at the present time.
- 2) No needs deduction shall be made for those variances which allow a width less than standard but greater than the width on which apportionment needs are presently being computed.
  - Examples: a) Segments whose needs are limited to the center 24 feet.
    - b) Segments which allow wider dimensions to accommodate diagonal parking but the needs study only relates to parallel parking (44 feet).

- Those variances granted for acceptance of design speeds less than standards for grading or resurfacing projects shall have a 10 year needs adjustment applied cumulatively in a one year deduction.
  - a) The needs deduction shall be for the complete grading cost if the segment has been drawing needs for complete grading.
  - b) The needs deduction shall be for the grade widening cost if the segment has been drawing needs for grade widening.
  - c) In the event a variance is granted for resurfacing an existing roadway involving substandard width, horizontal and vertical curves, etc., but the only needs being earned are for resurfacing, and the roadway is within 5 years of probable reinstatement of full regrading needs based on the 25-year time period from original grading; the previously outlined guidelines shall be applied for needs reductions using the county's average complete grading cost per mile to determine the adjustment. If the roadway is not within 5 years of probable reinstatement of grading needs, no needs deduction shall be made.
- 4) Those variances requesting acceptance of widths less than standard for a grading and/or base and bituminous construction project shall have a needs reduction equivalent to the needs difference between the standard width and constructed width for an accumulative period of 10 years applied as a single one year deduction.
  - On grading and grade widening projects, the needs deduction for bridge width variances shall be the difference between the actual bridge needs and a theoretical needs calculated using the width of the bridge left in place. This difference shall be computed to cover a 10 year period and will be applied cumulatively in a one year deduction.

Exception:

If the county, by resolution, indicates that the structure will be constructed within 5 years, no deduction will be made.

On resurfacing projects, the needs deduction for bridge width variances shall be the difference between theoretical needs based on the width of the bridge which could be left in place and the width of the bridge actually left in place. This difference shall be computed to cover a ten year period and will be applied cumulatively in a one year deduction.

Exception:

If the county, by resolution, indicates that the structure will be constructed within 5 years, no deduction will be made.

- There shall be a needs reduction for variances which result in bridge construction less than standard, which is equivalent to the needs difference between what has been shown in the needs study and the structure which was actually built, for an accumulative period of 10 years applied as a single one year deduction.
- 8) No needs adjustments will be applied where variances have been granted for a recovery area or inslopes less than standard.
- Those variances requesting acceptance of pavement strength less than standard for a grading and/or base and bituminous construction project shall have a needs reduction equivalent to the needs difference between the standard pavement strength and constructed pavement strength for an accumulative period of 10 years applied as a single one year deduction.