

#### 1987 ESTIMATE OF THE COST OF

# COMPLETING THE NATIONAL SYSTEM OF INTERSTATE AND DEFENSE HIGHWAYS IN THE STATE OF MINNESOTA

This 1987 Estimate of the cost of completing the National System of Interstate and Defense Highways in the State of Minnesota as of December 31, 1985, was prepared in accordance with Title 23, USC, Section 104 [b][5] and the FHWA Instruction Manual by the Minnesota Department of Transportation in cooperation with the Federal Highway Administration.

Richard P. Braun, Commissioner

Minnesota Department of Transportation

Roger Borg, Division Administrator Federal Highway Administration

> Prepared by: Highway Studies Unit William Strand, Manager October 1986

OVERSIZE MNDOT TE 24 .M6 E88x 1987

### BREAKDOWN OF '87 I.C.E. COSTS

The eligible costs to complete Minnesota's Interstate System are \$533 Million. Of this total, the Interstate "gaps" are:

\$533 Mil	lion. Of this total, the Inte	rstate "gaps" ai	re:
I <b>-</b> 35	Duluth: Mesaba to 26th Ave. E.	3.39 miles	\$ 90 million
135 <b>E</b>	Ramsey Co.: St. Clair Ave. to I-94	1.88 miles	\$ 42 million
1394	Hennepin Co.: I-494 to Washington Ave.	10.03 miles	\$394 million
	Subtotal	15.30 miles	\$526 million
The Inte	rstate "stage construction" co	sts are:	
I-694	Ramsey Co.: I-694 and TH 61 in Maplewood		\$ 1 million
I <b>-</b> 694	Anoka Co.: BNRR underpass in Fridley		\$ 6 million
	1	Subtotal	\$ 7 million
	Total	Estimate	\$533 million

## 1987 INTERSTATE COST ESTIMATE

50175	W	W11.50	DDEL IMINADY	RIGHT O	F WAY	UTU ITIES	CONSTRUCTION	TOTAL	
	MILE POINT	MILES	ENGINEERING				COST	COST	
	258.14	0.29	1689 990 574	1833	0 41 233	207	44019 18871 11608	22042	
ROUTE	TOTAL:	3.39	3253	•	274		74498	89899	
35E	105.50	1.88	1611				37434	41754	
ROUTE	TOTAL:	1.88	1611	2050	0	659	37434	41754	
394	0.73 2.50 3.86 5.84	0.73 1.77 1.36 1.98 0.93 1.45	760 1474 154	12365 13119 15873 10487	10 21 135 39 0	2014 1608 1986 768 1389	31452 41732 29655 41366	35549 55562 50092 54596 33753 41899	
ROUTE	9.03	1.00	4354 8470	6746	185	1893	95470 313519	108648	
	47.07			0	0 0 0	3	1400	5993 1403 7396	
STATE	TOTAL:	15.30	13617	74329	678	11386	432561	532571	

#### 1983 INTERSTATE COST ESTIMATE AMENDED TO 1987

#### Summary of Project Elements Reviewed

Route	
	•

I-35 (in Duluth)

#### Elements Approved

- . Grade lowering from 14th Ave. E. to 21st Ave. E. . Historic district – 2 structures and sidewalks
- for Superior St./I-35.
- Lief Erickson Park cut/cover section, rose garden restoration, relandscaping.
- . Graduated span lengths-Mesaba Ave. to 7th Ave. W.
- Lake Place Protection structures for wave spray only.
- . Closure walls and timber walls if necessary for noise mitigation and access control.
- . Ped/bike trail downtown.
- . Median glare screen treatment.
- . Modifications to 5th Ave. W. Bridge rail and fascia.
- . Frontage Road and street modifications as shown on Layout M-10-E.
- . Relocation of Endion Depot.
- . Transition to London Rd. at 26th Ave. E.
- Signing/lighting modifications outside gap limits at M.P. 258.85.
- Variable message signs and traffic detectors at Lief Erickson Park and Lake Place.
- \* Storm water retention pond near 18th Ave. E.
- \* Modification of the half-diamond at 21st Ave. E.

#### Elements Disapproved

- Historic district-cut/cover section unless it is shown mitigates specific environmental effects.
- Lief Erickson Park bike accommodations on pedestrian facility.
- Lake Place Protection-Extended railroad portion, landscaping and multiple use facilities.
- . Replacement of bridge rail with Type J barrier.
- . Tunnel air quality monitoring system.
- . Traffic surveillance.
- . CB radio monitoring, roadway condition detection, and surveillance at Superior St.

\* 1985 Amendment

I 35E (Ramsey County)

. Noise mitigation (5' walls).

. Design modifications on "Common Section" of I35E/I94 in lieu of interchange.

. Pedestrian crossings at Duke, Sherman and Bayard Streets.

. Four lanes on parkway.

. Major design change, Grand-Ramsey to 9th St. Depressed roadway section, removal of lower foundation/retaining wall at Hill

. Interchanges at Grand-Ramsey and Kellogg Boulevard, separation structure at 5th/6th Streets, E.B. Grand Ave. over I35E. College/Summit over 5th/6th Streets.

. Retaining walls where supported by previous studies.

. Costs to move stockpiled materials.

. Frontage roads/streets connections in addition to those inplace if justified for estimate.

\* Alignment and interchange revision to preserve the J.J. Hill Wall.
\* Replacement of the Jackson St. bridge

\* Design revisions on I-35E mainline to eliminate a previous exception to AASHTO design standards.

\* Pedestrian bridge at College St.

+ Replacement bridge for Wabasha St. limited to 2 lanes FAI cost participation.

+ Grade separation at College Ave. relocated to Mulberry St. over 5th/6th Streets. Ten foot sidewalks on both sides.

+ Pedestrian crossing at Walnut Street.

+ A cassion wall to stablize bluff in the vicinity of the Irving Hill Condiminiums and the J.J. Hill House.

+ A counterbalance to insure stability of the Chancery crib wall.

+ Grade separation at 10th St.

\* 1985 Amendment

+ 1987 Amendment

Elements Disapproved

, Landscaping and routine aesthetic treatment

. Sixteen foot clearances on bridges.

. Pavement design for trucks

. Bikeway and pedestrian trails.

. Design change to avoid historic (J.J. Hill

site) property.

\* Revision of 194 downtown ramp.

#### Elements Approved

. I-94 to Washington Ave. (3rd Ave. Dist.). Through and auxiliary lanes, four exit and four entrance ramps, seven overpass structures, retaining walls as required by mainline or ramps.

. Surface type and design.

. Separation structures at TH 100 and CSAH 18 carrying frontage roads thru interchanges.

. Pedestrian bridges at Penn, Cedar Lake Rd., June Ave., and Florida Ave.

. Wirth Parkway and Brownie Lake Park plantings in character with present use.

. Additional lanes for capacity on Henn. CR. 73 and Louisiana Ave. contingent upon L.O. 3D for 11 interchange concept and L.O. 3F for six interchange concept.

. Plymouth Rd. and Louisiana added to the 6 interchange concept.

. Boone Ave. extension.

. Replacement of bridge over BNRR between Penn Ave. and Wayzata Blvd.

. Replacement MN & S RR overpass between Vernon and Florida Ave.

. Paved 5' inside shoulder, TH 100 and 194 (adjacent to median barrier).

. TH 100 participation limits as shown on L.O. 2D.

. Sidewalk/trail at Theo. Wirth Parkway over I394.

. Sidewalk on 10th St. over I394.

. Two-lane frontage road concept.

. Grade separations at Ridgedale Drive, Shelard Parkway, Boone Ave., Winetka Ave., and Vernon/Xenia.

. Oakland Road to I-494. Reconstruction of interchange.

. 10th Street Bridge.

. Grade lowering, TH 100 to Penn Ave.

. HOV concept, Vernon to I-94, with associated features (e.g., signing,

access lanes, surveillance, metering).
Five interchanges: I-494, CR 73, CR 18,

TH 100, Penn Ave.

. Six separation structures: Linden Ave., Glenwood Ave., 12th St., 7th, 11th St., 5th, Theodore Wirth Parkway.

#### Elements Disapproved

- . I-94 to Washington Ave. in Minneapolis TM&S, bus lanes, ramps and stops, garages, and appurtenances.
- . Landscaping at five locations.
- , Landscaping at N. Tyrol Park.
- . R/W access damages (± \$42 million). . Diamond lane appurtenances: I-494 to Vernon Ave. (lanes eligible as basic construction).
- Brownie Lake drainage diversion.
  Ped, facilities at S. frontage Rds. under TH 100 and CR 18.
- . Sidewalk/trail along Glenwood Ave. over TH 100.
- \* Carbon Monoxide Monitoring System.

Elements Approved Route Pedestrian facilities at 15 locations.
 Wetlands mitigation as described and I-394 approved in Wetlands Findings. . Section 4(f) commitments at Brookview Golf Course and Brownie Lake.
\* Routine design refinements/advancements at 23 locations. \* Storm sewer and Breck Pond system in Golden Valley.
\* Interim HOV from Plymouth Road to Highway 100. \* Three Parking Garages on 3rd Ave. Distributor. + Modifications to North Frontage Road at Xenia interchange. + Additional retaining wall at Hawthorne Interchange. + Move and modify Pedestrian Bridge at Thomas Ave. + Additional Right of Way at Wirth Parkway connector. + Hampshire Storm Sewer Phase II. + Additional length on Pedestrian Bridges at Florida Ave. and Pennsylvania Ave. -+ Bassett Creek storm tunnel. + Slip ramp from EB I-394 to S. Frontage Road at Plymouth Road. . Replacement of Br. 6493 (B.N. Inc.) with limitations as to length and depth I-694 in Fridley (20' median, four thru lanes, two auxiliary lanes and clear zones). Grade change as

required for shorter span bridge.

. Standard diamond interchange as stage construction

Stage construction.

Elements Disapproved

\* 1985 Amendment

I-694/61 (Ramsey County)

+ 1987 Amendment

35

	CODE: 27 STATE:	MINNESOTA		ROUTE:	0350	
			EST	IMATE SECTIO	N MILE POST	
	ITEM	256.30	258.14	258.43		TOTALS
1.	FINANCE CODE	22	. 22	22		3 30
2.	SECTION LENGTH, MILES (0.10)	1.84	0.29	1.26 311		3.39
з.	CLASS: RURAL (R) or URBAN AREA I.D. (Name and Code)	311 1	311 1	1		
4. 5.	MILEAGE INCREMENT: Code (1, 2 or 3) ROUTE SIGNIFICANCE: Code (N or L)	N	Ņ	Ñ		
6.	DESIGN SPEED (V)	70	50	70		
7.	BASE YEAR TRAFFIC (1980 ADT)	35200	37895	37895		
8.	· · · · · · · · · · · · · · · · · · ·	6	6	6		
	b. ADT Design Year	43240 4325	44505 4450	44505 4450		
	c. DHV Design Year d. D. Direction Distribution Factor	55	55	55		
	e. T % Trucks Design Year (DHV)	2	1	1		
	f. T % Trucks Design Year (ADT)	3	3	3		
	NUMBER LANES TO BE CONSTRUCTED THIS ESTIMATE	4	4	4		
-	ULTIMATE NUMBER OF THROUGH TRAFFIC LANES	4 3	4 I	4 3		
	TYPICAL CROSS-SECTION REFERENCE RIGHT-OF-WAY WIDTH: PREVAILING	218	200	200		
	MEDIAN WIDTH: PREVAILING	14	6	6		
	STATUS OF DEVELOPMENT (PR-511)	EAE	5A 1 P	5A1P		
	WORK CLASSIFICATION		EST	TIMATED COSTS	(1,000 DOLLARS)	
1.	PRELIMINARY ENGINEERING	1689	990	574		3253
2.	R.O.W. a. Acquisition	0	1833	9340		11173
	b. Rejocation	0	41	233		274
Э.	UTILITY ADJUSTMENTS	85	307	309		701
4.	EROSION CONTROL, CLEAR, GRUB, GRADE, DRAIN, MINOR STR.	4839	127	1520		6486
5.	SUBBASE, BASE, SURFACING, and SHOULDERS	1037	291	1019		2347
	R.R. GRADE SEPARATIONS	0	0 0	570 0		570 6927
7.	HIGHWAY GRADE SEPARATIONS WITHOUT RAMPS	6927 2662	0	2820		5482
8. 9.	INTERCHANGES OTHER BRIDGES, TUNNELS, and WALLS	20524	14224	3239		37987
10.		1373	1004	791		3168
11.	WEIGH STATIONS, PEDESTRIAN and BICYCLE FACILITIES	416	0	0		416
	SAFETY WORK ON COMPLETED SECTIONS	0	0	0		0 19
13.		0 0	19 0	0 0		0
14.	ROADSIDE IMPROVEMENT a. Landscape Planting b. Rest Areas and Overlooks	0	ŏ	Ö		0
15.	ALL OTHER ITEMS: Maint. of Traf., Training, Mobil., etc.	1525	1184	405		3114
	SUBTOTAL, LINE 4 thru 15	39303	16849	10364		66516
17.	CONSTRUCTION ENG'R and CONTIGENCIES, 12.00 % of line 16		2022	1244		7982 74498
	TOTAL COST OF CONST., LINES 16 and 17	44019 45793	18871 22042	11608 22064		89899
19.	TOTAL ESTIMATE COST, LINES 1, 2, 3 and 18	_	22042	22004		0,000
		Mesaba Ave. (W. End Br 69869) SW Fnd of Timne?	;			
		Mesaba Ave. (W. End Br 69869 SW End of Tunnel	(10th Ave.)			
				12th Ave. 26th Ave. (End FAI 35)		
		. ₽ ₽	S e s	Y & Y		
		z Eg	2 ~ 3	. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4.		•
		Mesaba Ave. (W. End Br SW End of Ti	(10th Ave.)	(12th Ave.) 26th Ave. (End FAI 3		
		# C 7	5 = 3	20 70		

# 1987 Interstate Cost Estimate

F.A.I. 35

District	No. of Lanes	S.P.	Local or Nat'l	Mile Point	Subsection	Chah	Mileage to
District			Nat I	POITIL	Point Location	Status	Next Point
6	4	2480	N	0.00	S. Minnesota State Line	l(a)f	13.25
6	4	2480 7480 6680	N	13.25	Jct. F.A.I. 90	***	61.56
9	4	7080	N	74.81	S. Scott County Line (begin Rte. Section 2)	Ħ	6.02
9	4	1980	· N	80.83	S. Dakota County Line (So. Urban Boundary)	**	7.44
				88.27	S. Jct. F.A.I. 35 with F.A.I. 35E & 35W	11	0.00
9	6	0283 8280	N	127.50	N. Jct. F.A.I. 35 with F.A.I. 35E & 35W	ŧr	4.78
9	4	8280 1380	N	132.28	Jct. T.H. 8	**	30.92
1	4	5880 0980 6982	N	163.20	S. Pine County Line (begin Rte. Section 6)	**	85.36
1	4	6982	N	248.56	W. Limit of Proctor (W. Urban Boundary)	71	6.84
1	4	6982	N	255.40	Jct. F.A.I. 535	11	0.90
1	4	6982	N	256.30	Mesaba Ave. (W. end of Bridge 69869)	3a(3)	1.84
1	`4	6982	N	258.14	SW end of Tunnel (10th Ave. E.)	5a(1)p	0.29
1	4	6982	N	258.43	NE end of Tunnel (13th Ave. E.)	5a(1)p	1.26
		6982		259.69	26th Ave. E. (End F.A.I. 35)		<del></del> ,

F.A.I. 35 Total 220.46

# TABLE B DESIGN CLASSIFICATION AND COST ESTIMATE BY ESTIMATE SECTIONS WITH ROUTE TOTALS

	CODE: 27 STATE:	MINNESOTA	ROUTE: 035E	
			ESTIMATE SECTION MILE POST	
	ITEM	105.50	ESTIMATE SECTION TITLE 1001	TOTALS
ı.	FINANCE CODE	22		
2.	SECTION LENGTH, MILES (0.10)	1.88		1.88
3.	CLASS: RURAL (R) or URBAN AREA 1.D. (Name and Code)	312		
4.	MILEAGE INCREMENT: Code (1, 2 or 3)	I		
5.	ROUTE SIGNIFICANCE: Code (N or L)	L 50		
6.	DESIGN SPEED (V)	31500		
7. 8.	BASE YEAR TRAFFIC (1980 ADT) TRAFFIC a. Design Year (19 ) or (20 )	6		
ο.	b. ADT Design Year	45570		
	c. DHV Design Year	4050		
	d. D. Direction Distribution Factor	- 55		
	e. T % Trucks Design Year (DHV)	0		
	f. T% Trucks Design Year (ADT)	0		
	NUMBER LANES TO BE CONSTRUCTED THIS ESTIMATE	4	•	
10.	ULTIMATE NUMBER OF THROUGH TRAFFIC LANES	3		
	TYPICAL CROSS-SECTION REFERENCE RIGHT-OF-WAY WIDTH: PREVAILING	200		
	MEDIAN WIDTH: PREVAILING	20		
14.		4A I		
	WORK CLASSIFICATION		ESTIMATED COSTS (1,000 DOLLARS)	
	MOKIC CENSS ILLEY LOIL			
1.	PRELIMINARY ENGINEERING	1611		1611
2.	R.O.W. a. Acquisition	2050		2050 0
	b. Relocation	0		659
з.	UTILITY ADJUSTMENTS	659		037
	EROSION CONTROL, CLEAR, GRUB, GRADE, DRAIN, MINOR STR.	4734		4734
4. 5.	SUBBASE, BASE, SURFACING, and SHOULDERS	1229		1229
6.	R.R. GRADE SEPARATIONS	1030		1030
7.	HIGHWAY GRADE SEPARATIONS WITHOUT RAMPS	6290		6290
8.	INTERCHANGES	8768		8768 6095
9.	OTHER BRIDGES, TUNNELS, and WALLS	6095		1105
10.	TRAFFIC CONTROL DEVICES	1105 274		274
11.	WEIGH STATIONS, PEDESTRIAN and BICYCLE FACILITIES	0	•	0
12.	SAFETY WORK ON COMPLETED SECTIONS	. 0	•	0
13.	NOISE ABATEMENT MEASURES ROADSIDE IMPROVEMENT a. Landscape Planting	Ö		0
14.	b. Rest Areas and Overlooks	Ō		0
15.	ALL OTHER ITEMS: Maint. of Traf., Training, Mobil., etc	. 3898		3898
	CURTOTAL LINE 4 throw 15	33423		33423
16.	SUBTOTAL, LINE 4 thru 15 CONSTRUCTION ENG'R and CONTIGENCIES, 12.00 % of line 1			4011
18	TOTAL COST OF CONST., LINES 16 and 17	37434		37434
19.		41754		41754
• - •		·		-
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# 1987 Interstate Cost Estimate

F.A.I. 35E

District	No. of Lanes	S.P.	Local or Nat'l	Mile Point	Subsection Point Location	Status	Mileage to Next Point
9	4	1982	L	88.27	S. Jct with F.A.I. 35 & 35W	1a(1)f	4.36
9	6	1982	L	92.63	Jct. TH 77	la(1)f	0.50
9	6	1982	L	93.13	0.5 Mi. N. of TH 77	la(2)f	4.88
9	6	1982	L	98.01	0.4 Mi S. of CSAH 26	la(1)f	1.54
9	4	1982 6280	L	99.55	Jct. F.A.I. 494	1a(1)f	3.92
9	4	6280	L	103.47	Fort Road	1a(2)f	2.03
9	4	6280	L	105.50	St. Clair Ave.	3a(3)	1.88
9	8	6280	L	107.38	W. Jct. F.A.I. 94	la(1)f	0.12
9	6	6280	L .	107.50	E. Jct. F.A.I. 94	**	5.92
9	6	6280	N	113.42	W. Jct. F.A.I. 694	11	0.65
9	4	6281	N	114.07	E. Jct. F.A.I. 694	"	5.05
9	4	6281 0282	N	119.12	C.S.A.H. 5 (N. Urban Boundary)	Ħ	8.38
		0282	N	127.50	N. Jct. F.A.I. 35W & 3	5	<b></b>

F.A.I. 35E Total 39.23

TABLE B
DESIGN CLASSIFICATION AND COST ESTIMATE BY ESTIMATE SECTIONS WITH ROUTE TOTALS

	CODE: 27	STATE:	MIN	NESOTA		ROU	TE: 3940		
					FS.	TIMATE SE	CTION MILI	F POST	
	ITEM			0.00	0.73	2.50	3.86	5.84	6.77
1.	FINANCE CODE			22	22	22	22	22	22
ż.	SECTION LENGTH, MILES (0.10)			0.73	1.77	1.36	1.98	0.93	1.45
Э.	CLASS: RURAL (R) or URBAN AREA 1.D. (Name an	d Code)		312	312	312	312	312	312
4.	MILEAGE INCREMENT: Code (1, 2 or 3)			1	1	. 1	1	1	1 L
5.	ROUTE SIGNIFICANCE: Code (N or L)			L	L	L	_L	L 70	70
6.	DESIGN SPEED (V)			70	70	70 56320	70 74910	91080	87450
	BASE YEAR TRAFFIC (1980 ADT)			49280 6	44000 6	56320	74910	6	6
8.	TRAFFIC a. Design Year (19 ) or (20 )			83320	93460	100440	109110	112940	112940
	b. ADT Design Year c. DHV Design Year			7820	8790	9290	10050	10580	10580
	d. D. Direction Distribution Facto	r		55	55	55	55	60	60
	e. T % Trucks Design Year (DHV)	•		5	5	5	4	4	4
	f. T% Trucks Design Year (ADT)			5	5	5	4	4	4
9.	NUMBER LANES TO BE CONSTRUCTED THIS ESTIMATE			6	6	6	6	6	6
	ULTIMATE NUMBER OF THROUGH TRAFFIC LANES			6	6	6	6	6	6
	TYPICAL CROSS-SECTION REFERENCE			2	2	2	2	8	8
12.	RIGHT-OF-WAY WIDTH: PREVAILING			400	375	375	375	375	230
	MEDIAN WIDTH: PREVAILING			400	375	375	375	375 4A1	230 4A I
14.	STATUS OF DEVELOPMENT (PR-511)			3A3	4A1	4A 1	4A I	4A 1	44.1
	WORK CLASSIFICATION				ES	TIMATED C	OSTS (1,0	00 DOLLAR	5)
	boel tuttiany fuoting bing			56	927	212	760	1474	154
1.	PRELIMINARY ENGINEERING			0	12365	13119	15873	10487	2516
2.	R.O.W. a. Acquisition b. Relocation			ő	14	10	21	135	39
з.	UTILITY ADJUSTMENTS			365	2014	1608	1986	· 768	1389
٠.									-070
4.	EROSION CONTROL, CLEAR, GRUB, GRADE, DRAIN,	MINOR STR.		3503	3712	17873	6692	2330	2873
5.	SUBBASE, BASE, SURFACING, and SHOULDERS			2197	2536	2208	4486 1968	1353 0	1915 10402
6.	R.R. GRADE SEPARATIONS			0	0	0 944	1612	0	1634
7.	HIGHWAY GRADE SEPARATIONS WITHOUT RAMPS			0 4622	9429	7853	7787	22293	2714
8.	INTERCHANGES			4622	889	2624	1319	3339	1710
9.	OTHER BRIDGES, TUNNELS, and WALLS			668	315	675	438	1992	1175
10.	TRAFFIC CONTROL DEVICES WEIGH STATIONS, PEDESTRIAN and BICYCLE FACIL	ITIES		0	0	0	838	145	276
12.				0	0	0	0	0	0
13.	NOISE ABATEMENT MEASURES			0	0	45	458	1311	2056
14.	ROADSIDE IMPROVEMENT a. Landscape Planting	3		0	0	0	0	0	0
	b. Rest Areas and Ove	rlooks		0	0	0	0	0	0
15.	ALL OTHER ITEMS: Maint. of Traf., Training,	Mobil., etc	•	619	1181	4040	2484	4498	1723
16.	SUBTOTAL, LINE 4 thru 15			11609	18062	36262	28082	37261	26478
17.	CONSTRUCTION ENG'R and CONTIGENCIES, 12.00	% of line i	6	1393	2167	4351	3370	4471	3177
18.	TOTAL COST OF CONST., LINES 16 and 17			13002	20229.	40613	31452	41732	29655
19.				13423	35549	55562	50092	54596	33753
				of	of Rd	<b>₽</b>	٠ .	of _	100
				0.25 Mi W FAI 494	æ.∉	۳. ع	ш »	<b>-</b> 5	<b>=</b>
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	•			F.2	0.2 Mi W Plymouth	-	0.3 Mi Boone A		Mi E of T (Lim Mpls)
				<b>.</b>					Æ Ë
									<b>6</b>

# TABLE B DESIGN CLASSIFICATION AND COST ESTIMATE BY ESTIMATE SECTIONS WITH ROUTE TOTALS

	CODE: 27 STATE:	MINNESOTA		ROUTE:	3940	
			EST	MATE SECTI	ON MILE POST	
		8.22	9.03	9.03	<u></u>	TOTALS
	ITEM	25	22	25		
1.	FINANCE CODE	0.81	1.00	0.00		10.03
2.	SECTION LENGTH, MILES (0.10)	312	312	312		
з.	CLASS: RURAL (R) or URBAN AREA I.D. (Name and Code)	1	1	1		
4.	MILEAGE INCREMENT: Code (1, 2 or 3)	Ë	L	L		
5.	ROUTE SIGNIFICANCE: Code (N or L)	60	50	0		
6.	DESIGN SPEED (V) BASE YEAR TRAFFIC (1980 ADT)	84480	30500	0		
/.	TRAFFIC a. Design Year (19 ) or (20 )	6	6	0		
θ.	b. ADT Design Year	121830	46500	. 0		
	c. DHV Design Year	11390	4570	0		
	d. D. Direction Distribution Factor	60	65	0		
	e. T% Trucks Design Year (DHV)	4	<u>,6</u>	0		
	f. T % Trucks Design Year (ADT)	4	6	0		
a	NUMBER LANES TO BE CONSTRUCTED THIS ESTIMATE	2	6	0		
10	ULTIMATE NUMBER OF THROUGH TRAFFIC LANES	6	_6	6		
11	TYPICAL CROSS-SECTION REFERENCE	1	3	•		
12	RIGHT-OF-WAY WIDTH: PREVAILING	500	350	0		
12.	MEDIAN WIDTH: PREVAILING	500	350	0		
14.	STATUS OF DEVELOPMENT (PR-511)	2A2F	3A3	2A2F		•
	WORK CLASSIFICATION	•	EST	IMATED COS	TS (1,000 DOLLARS)	
	WORN CEASSITICATION					8470
	PRELIMINARY ENGINEERING	<b>533</b>	460	3894		61106
1. 2.	R.O.W. a. Acquisition	0	6746	0		404
۷.	b. Relocation	0	185	0		10023
з.	UTILITY ADJUSTMENTS	0	1893	0		
٠.		0	1654	0		38637
4.	EROSION CONTROL, CLEAR, GRUB, GRADE, DRAIN, MINOR STR.	0	597	ő		152 <b>92</b>
5.	SUBBASE, BASE, SURFACING, and SHOULDERS	n	0	Ŏ		12370
6.	P P GRADE SEPARATIONS	0	5759	Ö		9949
7.	HIGHWAY GRADE SEPARATIONS WITHOUT RAMPS	33927	8849	63635		161109
8.	INTERCHANGES	0	710	0		10591
9.	OTHER BRIDGES, TUNNELS, and WALLS	1341	549	0		7153
10.	TRAFFIC CONTROL DEVICES	.5-1.	0	0		1259
11.	WEIGH STATIONS, PEDESTRIAN and BICYCLE FACILITIES	Õ	0	0		0
12.	SAFETY WORK ON COMPLETED SECTIONS	245	0	0		4115
13.	NOISE ABATEMENT MEASURES	0	0	0		0 .
14.	ROADSIDE IMPROVEMENT a. Landscape Planting b. Rest Areas and Overlooks	0	0	0		0 19454
	with as Table Mobil . etc	. 1421	943	2545		19454
15.	ALL OTHER TIENS: Harrie: OF TISTLY TOWNS,			44100		279929
16	SUBTOTAL, LINE 4 thru 15	36934	19061	66180		33590
17	CONSTRUCTION FNG'R and CONTIGENCIES, 12.00 % or line i	6 4432	2287	7942		313519
17.	TOTAL COST OF CONST., LINES 16 and 17	7,500	21348	74122	*	393522
19	TOTAL ESTIMATE COST, LINES 1, 2, 3 and 18	41899	30632	78016		
		31	ź.	Washington Ave.		
		27831	St	at .		
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	<i>,</i>	P.	15th	ds 💉		
		end		₽		
		ē	•			

### 1987 Interstate Cost Estimate

F.A.I. 394

District	No. of Lanes	S.P.	Local or Nat'l	Mile Point	Subsection Point Location	Status	Mileage to Next Point
5	6	2789	L	0.00	0.25 Mi. W. of F.A.I. 494	3a(3)	0.73
5	6	2789	L	0.73	0.2 Mi. W. of Plymouth Rd.	<b>4</b> a(1)	1.77
5	6	2789	L	2.50	0.3 Mi. E. of C.S.A.H. 73	"	1.36
5	6	2789	L	3.86	0.3 Mi. W. of T.H. 100	11	1.98
5	6	2789	L	5.84	0.6 Mi. E. of T.H. 100 (W. Limits of Mpls.)	**	0.93
5 .	6	2789	L	6.77	W. End of Bridge 27831	2a(2)f	1.45
5	6	2789	L	8.22	15th St. N.	3a(3)	0.81
5	6	2789	L	9.03	Washington Ave.		1.00
				10.03	Washington Ave.		

F.A.I. 394 Total 10.03

STATE: MINNESOTA **ROUTE: 6940** CODE: 27 ESTIMATE SECTION MILE POST **TOTALS** 36.18 ITEM 47.07 - 21 1. FINANCE CODE 21 1.97 SECTION LENGTH, MILES (0.10) 0.52 1.45 312 CLASS: RURAL (R) or URBAN AREA I.D. (Name and Code) 312 MILEAGE INCREMENT: Code (1, 2 or 3) 1 Ν 5. ROUTE SIGNIFICANCE: Code (N or L) Ν 70 6. DESIGN SPEED (V) 70 7. BASE YEAR TRAFFIC (1980 ADT) 74000 31300 75 ) or (20 TRAFFIC a. Design Year (19 88 71700 b. ADT Design Year 42400 7170 c. DHV Design Year 4240 50 d. D. Direction Distribution Factor 60 5 e. T % Trucks Design Year (DHV) 5 f. T % Trucks Design Year (ADT) 10 9. NUMBER LANES TO BE CONSTRUCTED THIS ESTIMATE 0 10. ULTIMATE NUMBER OF THROUGH TRAFFIC LANES 3 11. TYPICAL CROSS-SECTION REFERENCE 1 284 12. RIGHT-OF-WAY WIDTH: PREVAILING 284 60 13. MEDIAN WIDTH: PREVAILING 60 2A2F 14. STATUS OF DEVELOPMENT (PR-511) 1A3F ESTIMATED COSTS (1,000 DOLLARS) WORK CLASSIFICATION 283 283 PRELIMINARY ENGINEERING 0 R.O.W. a. Acquisition 0 0 b. Relocation UTILITY ADJUSTMENTS 0 4. EROSION CONTROL, CLEAR, GRUB, GRADE, DRAIN, MINOR STR. 5. SUBBASE, BASE, SURFACING, and SHOULDERS 4784 4784 6. R.R. GRADE SEPARATIONS 0 7. HIGHWAY GRADE SEPARATIONS WITHOUT RAMPS 0 1202 1202 8. INTERCHANGES 0 9. OTHER BRIDGES, TUNNELS, and WALLS 118 118 10. TRAFFIC CONTROL DEVICES 0 II. WEIGH STATIONS, PEDESTRIAN and BICYCLE FACILITIES 0 12. SAFETY WORK ON COMPLETED SECTIONS 13. NOISE ABATEMENT MEASURES 0 0 ROADSIDE IMPROVEMENT a. Landscape Planting 0 n b. Rest Areas and Overlooks 244 196 ALL OTHER ITEMS: Maint. of Traf., Training, Mobil., etc. 48 6348 5098 1250 16. SUBTOTAL, LINE 4 thru 15 762 612 17. CONSTRUCTION ENG'R and CONTIGENCIES, 12.00 % of line 16 150 7110 18. TOTAL COST OF CONST., LINES 16 and 17 5710 1400 7396 5993 1403 19. TOTAL ESTIMATE COST, LINES 1, 2, 3 and 18

69

61

			85 ICE			
Dist.	No. Lanes	<u>S.P.</u>	Mile <u>Point</u>	Subsection Point Location	Status	Mileage to Next Point
5	4	2787 0285	35.50	W. Jct. F.A.I. 94 Bryant Avenue	1a(1)f	0.68
5	4	0285	36.18	Jct. East River Rd. (C.S.A.H. 1)	2a(2)f	0.52
5	4	0285 6285	36.70	Jct. TH 47	1a(1)f	4.06
9	4	6285	40.76	Jct. F.A.I. 35W	1a(1)f	5.66
9	6	6285	46.42	W. Jct. of F.A.I. 35E (F.A.I. 35E Governs for 0.65 Mi.)	1a(1)f	0.00
9	4	6286	47.07	E. Jct. F.A.I. 35E	1a(3)f	1.44
9	4	6286	48.52	Jct. TH 61	1a(1)f	9.62
			58.13	E. Jct. F.A.I. 94 (Jct. F.A.I. 494)	_	
				F.A.I. 694 T	OTAL	39.23

T A B L E C
COST ESTIMATES BY ROUTES AND STATE TOTAL
STATE: MINNESOTA

(Includes Only Those Costs and Associated Mileage Eligible for FA1 Funding, Finance Code 21, 22, 23 and 25)

	rstate Route Number th, miles	0350 3.39	035E 1.88	3940 1.73	3940 8.30	6940 1.97	TOTALS 17.27
1.	PRELIMINARY ENGINEERING	3253 11173	1611 2050	516 6746	7954 54360	283 0	13617 74329
2.	R.O.W. a. Acquisition b. Relocation	274	0	185	219	0	678
з.	UTILITY ADJUSTMENTS	701	659	2258	7765	3	11386
	EROSION CONTROL, CLEAR, GRUB, GRADE, DRAIN, MINOR STR.	6486	4734	5157	33480	0	49857
4.	SUBBASE, BASE, SURFACING, and SHOULDERS	2347	1229	2794	12498	0	18868
5.	SUBBASE, BASE, SURFACTIONS, SING STROUBLERS	570	1030	0	12370	4784	18754
6.	R.R. GRADE SEPARATIONS HIGHWAY GRADE SEPARATIONS WITHOUT RAMPS	6927	6290	5759	4190	0	23166
7.		5482	8768	13471	147638	1202	176561
8.	INTERCHANGES	37987	6095	710	9881	0	54673
9.	OTHER BRIDGES, TUNNELS, and WALLS	3168	1105	1217	5936	118	11544
10.	TRAFFIC CONTROL DEVICES WEIGH STATIONS, PEDESTRIAN and BICYCLE FACILITIES	416	274	0	1259	0	1949
11.	WEIGH STATIONS, PEDESTRIAN and Incident Activities	0	0	0	0	. 0	0
12.	SAFETY WORK ON COMPLETED SECTIONS	19	0	. 0	4115	0	4134
13.	NOISE ABATEMENT MEASURES	0	0	0	. 0	0	0
14.	ROADSIDE IMPROVEMENT a. Landscape Planting b. Rest Areas and Overlooks	0	0	0	0	0	0
15.	ALL OTHER ITEMS: Maint. of Traf., Training, Mobil., etc.	3114	3898	1562	17892	244	26710
	CURTOTAL LINE 4 thru 15	66516	33423	30670	249259	6348	386216
	SUBTOTAL, LINE 4 thru 15 CONSTRUCTION ENG'R and CONTIGENCIES, 12.00 % of line 16	7982	4011	3680	29910	762	46345
17.	CONSTRUCTION ENG R BING CONTIGENCIES, TELLO & OF THE CONTIGENCY OF CONET LINES 16 and 17	74498	37434	34350	279169	7110	432561
18. 19.	TOTAL COST OF CONST., LINES 16 and 17 TOTAL ESTIMATE COST, LINES 1, 2, 3 and 18	89899	41754	44055	349467	7396	532571

TOTAL MILES

1987 INTERSTATE COST ESTIMATE

ROUTE	1987	1985	DIFF.	(N)	(L)
35	220.46	220.46		220.46	
35W	41.78	41.78		41.78	
35E	39.23	39.23		14.08	25.15
90	275.70	275.70		275.70	
94	259.22	259.22		234.93	24.29
394	10.03	10.03		<del></del>	10.03
494	42.73	42.73		42.73	
535	1.57	1.57		1.57	
694	21.98	21.98	<b></b>	21.98	
TOTAL	912.70	912.70	0.00	853.23	59.47

