

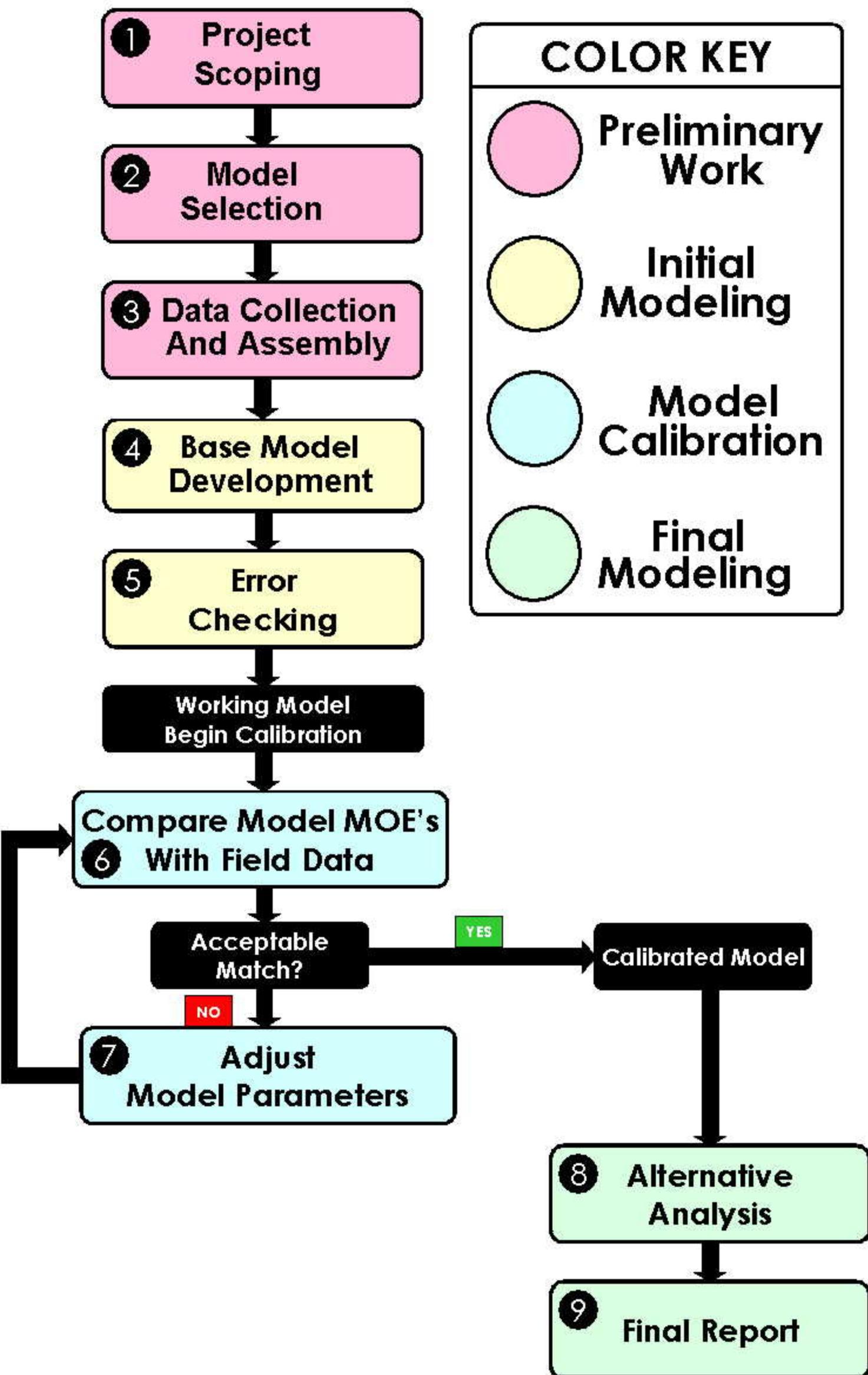
# Chapter 14

## Appendix

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651-634-2413

# General Information

# MODELING PROCESS FLOW CHART



# Mn/DOT Metro Program Delivery:

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 Jon Chiglo (New TH 212)  
 (651) 582-1340

 Mark Panek (TH 169/I-494)  
 (952) 826-6778

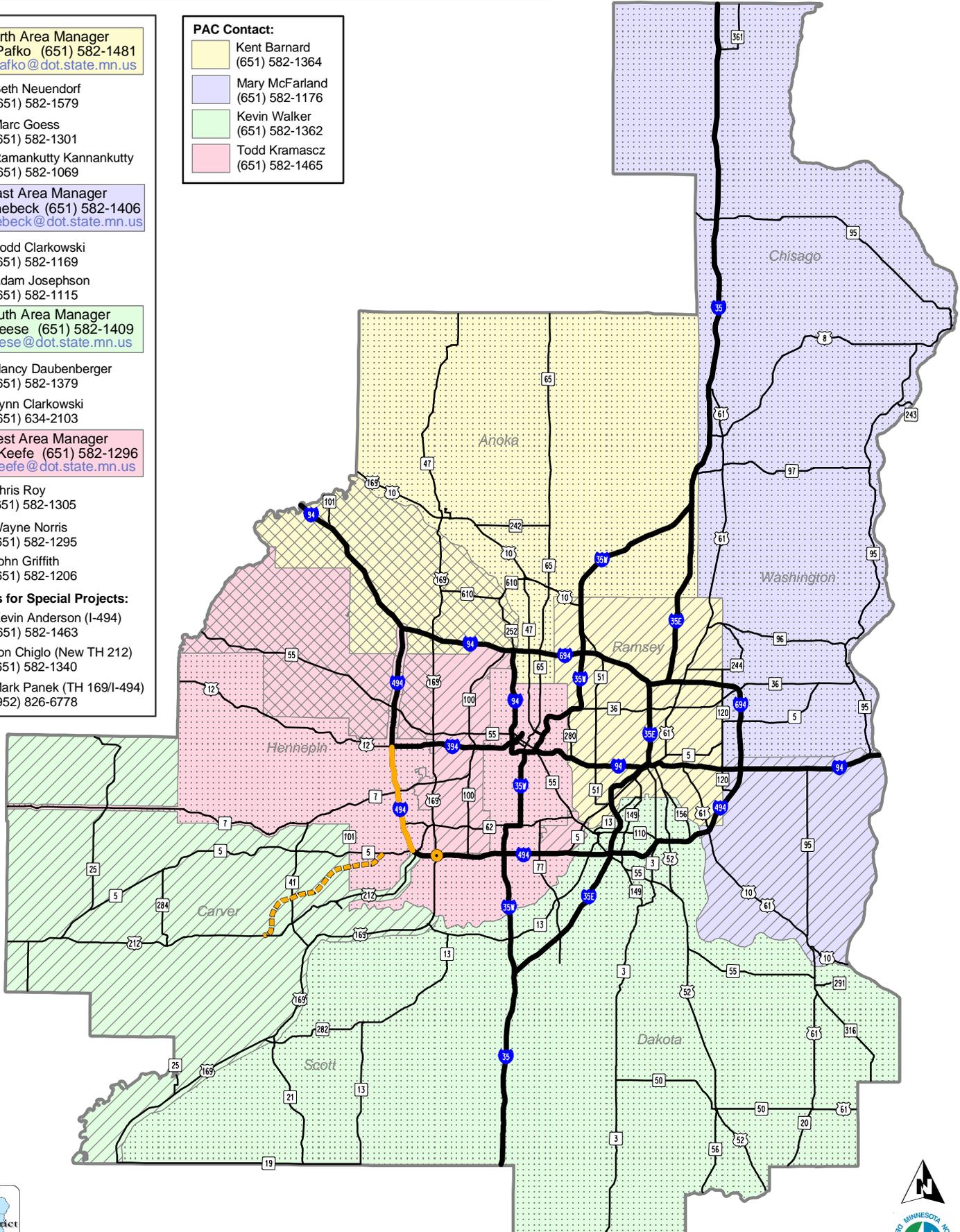
**PAC Contact:**

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# Forecasting Information



## Minnesota Department of Transportation

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### Office Memorandum

**Metro District - Waters Edge**

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November 6, 2003

To: Khani Sahebjam  
Gary Workman  
Lisa Freese  
Rick Arnebeck  
Tom O'Keefe  
Frank Pafko  
Michael Christensen  
Amr Jabr  
Keith Baker

From: Patrick C. Hughes 

Subject: Twin City Travel Demand Forecasts Prepared for the Metropolitan District

At its meeting on October 27, 2003, the Metro Program Committee endorsed guidelines regarding travel demand forecasts prepared by and for the Metropolitan District. The guidelines are included as a separate attachment to the GroupWise note transmitting the electronic copy of this memorandum.

Effective immediately, these guidelines shall be included within or be explicitly referenced in all requests for proposals and consultant contracts which call for the preparation of travel demand forecasts as part of the projected work. With regard to requests for proposals and consultant contracts currently in process, prospective and contracted consultants should be provided with a copy of the guidelines as soon as practicable.

Any questions about the guidelines should be directed to Brian Vollum. Brian's phone number is (651) 582-1408.

cc: Tim Henkel  
Pat Bursaw  
Gene Hicks  
Brian Vollum  
Mark Filipi, Met Council

# **Twin City Travel Demand Forecasts Prepared for Mn/DOT Metro: Model and Parameters for Adjustments to Model Inputs**

Revised March 24, 2003

## **Model:**

- Twin Cities Regional Model
- Consistent with Current Regional Transportation Policy Plan Adopted by the Metropolitan Council
  - Demographics
  - Metropolitan Highway System
  - Metropolitan Transit System

## **Adjustments:\***

- Socio-economic file
  - Within Regional Control Totals
- Highway Network
  - Consistent with Fiscally Constrained County/Local Plans and/or Capital Improvement Programs...County/Local 5 year Capital Improvement Programs (CIPs) are generally considered to be fiscally constrained...County/Local 5 year project lists (beyond their CIPs) are also generally considered to be fiscally constrained in that the projects listed in them should be affordable by the County/Local agency within the 20 year planning/forecasting horizons typically used for Mn/DOT projects.
  - No Build of Proposed Project
- Transit Network
  - No Build of Proposed Project or TSM alternative consistent with FTA guidelines
- External Station Data File
  - Only if Based on New Observed Data

## **Inputs Not to be Adjusted:\***

- Intrazonal Times
- Transit Skim Weighting Penalties
- Fare Factors
- Coefficient Files
- Special Generator File
- Parking Cost Files
- Trip Distribution F and K Factors
- Mode Choice Calibration Factors
- Mode Choice Coefficients and Constants
- Highway Assignment Delay Function Data

- Trip Diurnal Factoring
- Highway Assignment
  - Damping Factor
  - EPS
  - Peak Conversion Factor
- Terminal Times
- Auto Ownership Model
- Seed Matrix

\*It is recognized there may be unique circumstances where even those model parameters listed as “not to be changed” should be changed. If this circumstance should arise; it is recommended that the modeler contact Mn/DOT Metro and Metropolitan Council Forecasting and discuss the circumstances and proposed model changes prior to implementing them. In any event, the rationale for making all adjustments to the model and the selection of the adjustment(s) used should be documented and included with the forecast.

# **Twin City Travel Demand Forecasts Prepared for Mn/DOT Metro: Model Output Checks for Reasonableness and Post Processing Adjustments**

Revised October 21, 2003

## **Checks for Reasonableness:\***

- **Peak Hour Percentage of Daily Traffic...**The peak hour percentages of daily traffic produced by the model for the forecast year should be compared to existing/observed peak hour percentages within the project limits and on other routes nearby with the same functional classification. The general expectation is that the peak hour percentage of daily traffic in an approximately 20 years future forecast year should be lower than those currently observed on the existing route and comparable routes near the project. For projects on routes ten miles or more from the Minneapolis Central Business District (CBD); the general expectation is that the peak hour percentage of daily traffic in an approximately 20 years future forecast year should be similar to the peak hour percentages of daily traffic currently observed on comparable routes a few miles closer to the CBD.
- **Directional Split of Peak Hour Traffic...**The directional splits of peak hour traffic forecasts produced by the model for the forecast year should be compared to existing/observed directional splits within the project limits and on other routes nearby with the same functional classification. The general expectation is that directional splits in an approximately 20 years future forecast year should be more balanced than those currently observed on the existing route and comparable routes near the project.
- **Capacity of Road Segments Beyond Limits of Project...**Peak hour traffic forecast volumes assigned to road segments beyond the limits of the project which feed traffic to the project should be compared to the respective capacities of those road segments. The general expectation is that the capacities of feeder roadways should not be exceeded.
- **Daily Traffic Growth Factors...**For projects on existing routes, the daily traffic forecasts from the model should be compared with the daily forecasts yielded by factoring using the last 20 years record of daily volumes. The general expectation is that the model should yield forecast values which are lower than those based on an extrapolation of the last 20 years of increases in daily traffic.

## **Post Processing Adjustments:**

- Traffic forecast volumes should be rounded as follows:  
20,000 plus.....to closest 1000  
1,000 to 20,000.....to closest 100  
less than 1000.....to closest 10

- All products depicting the forecast numbers (maps, tables, layouts, etc.) should contain a very visible caution that the forecast numbers depicted have a likely confidence range of plus or minus 15 percent.
- Peak hour forecast values should be adjusted to reflect the results of the reasonableness checks identified above.
- Traffic smoothing and corridor diversion adjustments should be accomplished using the procedures described in Chapter 9 of NCHRP Report 365, “Travel Estimation Techniques for Urban Planning”.

\*The checks for reasonableness section identifies a number of general expectations. It is recognized that for some road segments the generally expected outcome listed may not be appropriate. In these situations the rationale for varying from the outcome generally expected should be documented.

# **Twin City Travel Demand Forecasts Prepared for Mn/DOT Metro: Documentation of Forecast**

July 29, 2003

Each travel demand forecast prepared for Mn/DOT should be accompanied by a short (under ten pages) report which documents the methodologies used to develop the forecast. Documentation for multiple forecasts on the same segment of highway (multiple forecast years) can/should be combined in one report. Five copies of the forecast and the documentation report should be provided to the Mn/DOT project manager for each forecast. The Mn/DOT project manager will be responsible for timely distribution of the forecasts and documentation reports to the District Forecasting Engineer and other appropriate individuals within the Department. Draft forecasts presented for review/comment should be accompanied by draft documentation reports.

Each documentation report should address every bulleted item in the previous sections of these guidelines (“Model and Parameters for Adjustments to Model Inputs” and “Model Output Checks for Reasonableness and Post Processing Adjustments”). In addition, forecasts used for benefit/cost analyses should include the rationale for selecting the forecast area for which benefits are calculated.



# Truck Data Information

**BODY TYPE REPORT BASED ON PRELIMINARY ADJUSTED VEHICLE CLASSIFICATION COUNT**

1/13/2004

**SITE: 1354 ROUTE: I-94**

**DESCRIPTION: .3 MI E OF JCT 494 AND 694**

**COUNTY: WASHINGTON**

**DIST: 5**

**RECORDER: RMH**

	Begin	Date	Pass. Vehicle	<i>Single Units</i>				<i>Semis</i>									<i>Trailers</i>		<i>Twins</i>	Total Vehicles				
				2ax	3ax	3ax+	3ax	3ax	4ax	5ax dump	5ax grain	5ax	5ax	5ax other	6ax+	Bus	HTWT	HTWT	T5ax+					
<b>East</b>	8:00	10/31/03	0	44	0	34	0	5	0	7	0	4	20	2	21	6	185	33	44	1	0	9	415	
	9:00	10/31/03	0	44	0	35	0	5	0	6	0	9	21	5	45	9	213	28	13	3	0	11	447	
	10:00	10/31/03	0	58	0	33	0	1	0	7	0	6	16	12	34	9	262	26	8	1	0	8	481	
	11:00	10/31/03	0	57	0	24	0	4	0	9	0	8	16	5	21	15	243	23	4	1	0	3	433	
	12:00	10/31/03	0	70	0	41	0	3	0	7	0	15	14	7	28	8	221	22	8	1	0	11	456	
	13:00	10/31/03	0	57	0	31	0	4	0	3	0	9	8	7	16	8	183	23	57	3	0	9	418	
	14:00	10/31/03	0	55	0	27	0	0	0	5	0	6	12	2	16	4	179	20	14	3	0	6	349	
	15:00	10/31/03	0	52	0	24	0	4	0	8	0	6	12	3	14	4	167	22	15	2	0	4	337	
	<b>Directional Totals:</b>		0	437	0	249	0	26	0	52	0	63	119	43	195	63	1653	197	163	15	0	61	3336	
<b>West</b>	8:00	10/31/03	0	64	0	45	0	1	0	4	0	20	13	10	5	15	141	23	64	4	0	5	414	
	9:00	10/31/03	0	67	0	26	0	2	0	4	0	7	22	4	27	15	162	22	10	2	0	5	375	
	10:00	10/31/03	0	53	0	31	0	0	0	8	0	8	17	10	31	13	199	26	6	5	0	7	414	
	11:00	10/31/03	0	75	0	21	0	3	0	5	0	13	13	8	20	11	216	31	11	4	0	6	437	
	12:00	10/31/03	0	72	0	44	0	3	0	7	0	14	19	6	23	11	252	16	7	3	0	3	480	
	13:00	10/31/03	0	71	0	28	0	1	0	7	0	13	23	3	27	19	211	20	71	1	0	7	502	
	14:00	10/31/03	0	42	0	24	0	1	0	3	0	6	14	6	20	8	215	25	8	1	0	4	377	
	15:00	10/31/03	0	48	0	19	0	2	0	2	0	5	4	2	13	10	172	13	11	0	0	5	306	
	<b>Directional Totals:</b>		0	492	0	238	0	13	0	40	0	86	125	49	166	102	1568	176	188	20	0	42	3305	
16	<b>Site Totals:</b>		0	929	0	487	0	39	0	92	0	149	244	92	361	165	3221	373	351	35	0	103	6641	
<b>16 Hour Totals for Calculating ESALS by Month:</b>			<i>Pass. Vehicles</i>	<i>2 Axle SU</i>			<i>3+ Axle SU</i>			<i>3 Axle Semi</i>			<i>4 Axle Semi</i>			<i>5+ Axle Semi</i>			<i>Trk Trl/Bus</i>		<i>Twins</i>		<i>Directional</i>	
			0	1347.0			681.8			62.01			149.04			6999.6			633.04		265.7		0.47%	

**Portable Vehicle Classification 1/14/2004**

**Site 8761 Route TH 36 Description E OF JCT I-694 County WASHINGTON DIST 5**

	DATE	TIME	M-CYCLE	CAR	PICKUP	BUS	2AXSU	3AXSU	4+AXSU	3+4SEMI	5AXSEMI	HTWT	TWINS	TWINS	TWINS	OTHER
East	05/20/02	15:00	9	1568	548	7	65	8	0	11	6	14	0	1	1	0
	05/20/02	16:00	6	1889	558	6	65	10	1	0	7	15	0	1	1	0
	05/20/02	17:00	9	2103	596	6	59	6	0	9	2	9	1	2	0	0
	05/20/02	18:00	10	1382	353	3	33	1	0	2	2	3	0	0	0	0
	05/20/02	19:00	9	872	226	0	25	1	0	1	0	0	0	0	0	0
	05/20/02	20:00	7	779	206	1	15	1	0	2	1	0	0	0	0	0
	05/20/02	21:00	0	663	142	0	16	0	0	1	3	1	0	0	0	0
	05/20/02	22:00	3	423	99	1	8	1	0	0	2	0	0	0	0	0
	05/20/02	23:00	2	246	38	0	1	2	0	0	4	0	0	0	0	0
	05/21/02	0:00	1	118	31	0	2	1	0	0	0	0	0	0	0	0
	05/21/02	1:00	1	66	17	1	4	0	0	0	1	0	0	0	0	0
	05/21/02	2:00	0	40	7	1	1	0	0	1	0	0	0	0	0	0
	05/21/02	3:00	1	38	15	0	2	0	0	0	2	0	0	0	0	0
	05/21/02	4:00	0	45	17	0	4	0	2	0	3	0	0	0	0	0
	05/21/02	5:00	2	147	60	5	13	7	0	2	8	2	0	0	0	0
	05/21/02	6:00	1	505	221	6	38	14	1	9	7	4	0	0	0	0
	05/21/02	7:00	5	836	269	9	63	10	2	4	10	3	0	0	0	0
	05/21/02	8:00	1	786	278	14	73	13	1	12	14	11	0	0	1	0
	05/21/02	9:00	2	630	235	13	37	17	1	5	11	7	1	0	4	0
	05/21/02	10:00	2	680	254	15	56	14	0	11	19	5	2	1	3	0
	05/21/02	11:00	6	767	258	14	48	19	2	10	16	6	0	0	1	0
	05/21/02	12:00	11	852	263	17	44	11	0	7	11	4	0	0	1	0
	05/21/02	13:00	9	921	321	15	50	13	3	12	15	3	1	0	0	0
	05/21/02	14:00	10	1161	382	21	71	11	1	10	11	6	0	0	0	0
	05/21/02	15:00	12	1467	482	8	67	4	0	7	8	7	0	0	0	0
	05/21/02	16:00	15	1592	521	4	37	6	1	7	3	4	0	1	1	0
	05/21/02	17:00	15	1983	495	3	51	1	0	9	10	12	4	1	2	0
	05/21/02	18:00	20	1529	366	4	43	2	0	2	4	2	0	0	0	0
	05/21/02	19:00	21	991	260	4	20	1	0	0	6	1	0	0	0	0
	05/21/02	20:00	10	796	192	2	22	0	0	2	2	2	0	0	0	0
	05/21/02	21:00	4	728	156	1	22	2	0	2	2	0	0	0	0	0
	05/21/02	22:00	3	465	103	0	10	1	0	0	2	1	0	0	0	0
	05/21/02	23:00	4	250	51	0	4	2	0	0	5	0	0	0	0	0
	05/22/02	0:00	1	127	34	1	3	0	0	1	2	0	0	0	0	0
	05/22/02	1:00	0	78	16	1	2	0	0	0	2	0	0	0	0	0
	05/22/02	2:00	0	62	11	0	1	0	0	0	4	0	0	0	0	0
	05/22/02	3:00	0	42	7	1	2	0	0	0	2	0	0	0	0	0
	05/22/02	4:00	1	43	13	0	8	2	0	1	3	0	0	0	0	0
	05/22/02	5:00	3	149	67	4	10	9	0	0	5	1	0	0	0	0
	05/22/02	6:00	4	528	220	9	41	7	2	5	17	6	1	0	1	0
	05/22/02	7:00	4	908	265	9	53	17	0	10	13	3	1	1	0	0
	05/22/02	8:00	5	758	261	11	75	13	0	8	22	8	0	0	1	0
	05/22/02	9:00	5	701	251	8	54	13	1	7	23	9	0	0	1	0
	05/22/02	10:00	5	768	282	17	51	11	3	7	23	7	0	0	1	0
	05/22/02	11:00	4	830	299	12	50	15	7	10	20	7	0	2	0	0
	05/22/02	12:00	3	902	304	16	51	15	7	10	13	7	1	0	1	0
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	05/22/02	14:00	3	681	217	6	28	9	3	3	1	1	0	0	0	0
<b>DIRECTION TOTALS</b>			252	34830	10578	294	1548	300	41	205	366	175	12	10	20	0

Site 8761 Route TH 36

Description E OF JCT I-694

County WASHINGTON DIST 5

	DATE	TIME	M-CYCLE	CAR	PICKUP	BUS	2AXSU	3AXSU	4+AXSU	3+4SEMI	5AXSEMI	HTWT	TWINS	TWINS	TWINS	OTHER
West	05/20/02	15:00	5	1143	402	12	60	11	2	5	27	14	0	0	3	0
	05/20/02	16:00	4	1146	368	7	46	10	3	6	13	10	0	0	0	0
	05/20/02	17:00	12	1160	323	4	31	3	0	9	10	10	1	1	0	0
	05/20/02	18:00	8	1015	329	11	42	2	0	3	2	2	1	1	0	0
	05/20/02	19:00	9	723	257	3	27	2	0	5	3	2	1	0	0	0
	05/20/02	20:00	11	613	203	1	16	2	0	1	1	1	0	0	0	0
	05/20/02	21:00	3	530	153	0	12	2	0	1	1	0	0	0	0	0
	05/20/02	22:00	4	309	84	1	11	0	0	0	3	0	0	0	0	0
	05/20/02	23:00	1	172	35	0	2	1	0	0	2	0	0	0	0	0
	05/21/02	0:00	1	87	16	0	2	0	0	0	3	0	0	0	0	0
	05/21/02	1:00	0	35	18	0	0	0	0	0	4	0	0	0	0	0
	05/21/02	2:00	2	46	11	1	3	0	0	1	0	0	0	0	0	0
	05/21/02	3:00	0	35	13	0	1	1	0	2	1	0	0	0	0	0
	05/21/02	4:00	1	120	52	1	1	1	0	0	3	0	0	0	1	0
	05/21/02	5:00	4	509	254	0	36	2	0	2	2	0	0	0	0	0
	05/21/02	6:00	12	1555	563	3	68	12	0	6	7	8	0	0	0	0
	05/21/02	7:00	12	2018	602	8	48	9	3	7	15	15	2	2	1	0
	05/21/02	8:00	5	1395	423	10	73	16	2	7	16	6	1	0	0	0
	05/21/02	9:00	7	939	372	13	62	17	0	6	20	9	0	0	2	0
	05/21/02	10:00	5	806	295	14	68	16	0	3	22	2	0	0	1	0
	05/21/02	11:00	1	806	308	21	53	17	0	5	13	9	0	0	3	0
	05/21/02	12:00	4	814	307	17	51	16	0	9	23	5	1	0	0	0
	05/21/02	13:00	9	850	303	19	54	19	4	7	19	5	0	1	0	0
	05/21/02	14:00	8	958	344	29	60	11	2	5	16	4	2	0	0	0
	05/21/02	15:00	14	1234	440	13	62	11	1	12	10	7	0	0	0	0
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	05/21/02	19:00	12	737	261	3	27	5	0	1	3	1	0	0	0	0
	05/21/02	20:00	16	623	180	0	19	2	0	2	3	0	1	0	0	0
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	05/22/02	4:00	0	100	44	0	7	1	0	2	4	0	0	0	0	0
	05/22/02	5:00	8	524	255	1	24	2	0	2	4	0	0	0	0	0
	05/22/02	6:00	8	1592	548	1	63	7	0	2	6	15	0	4	0	0
	05/22/02	7:00	10	2059	575	6	50	9	1	8	9	22	1	1	3	0
	05/22/02	8:00	3	1443	458	11	65	15	7	7	15	11	1	1	1	0
	05/22/02	9:00	4	1026	382	12	67	10	2	5	32	16	2	1	0	0
	05/22/02	10:00	1	831	353	14	42	16	5	1	13	10	1	0	1	0
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	05/22/02	14:00	11	1037	368	20	64	16	4	6	19	17	0	0	1	0
	<b>DIRECTION TOTALS</b>		294	36030	12156	348	1614	337	51	186	436	278	21	14	27	0
	<b>SITE TOTALS</b>		546	70860	22734	642	3162	637	92	391	802	453	33	24	47	0

Veh. Type Breakdown for ESAL Calc

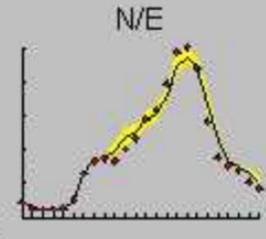
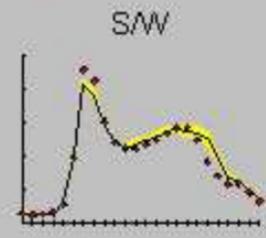
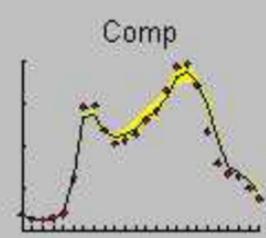
PASS VEH	2 AX SU	3+ AX SU	3 AX SEMI	4 AX SEMI	5+ AX SEMI	TRKTRLR/BUS	TWINS	TOTAL
47,070	1581	364	68	127	582	366	52	50210

# Traffic Analysis Expert System Hourly Editor

Editor Options Reports Graphs Help

Station:  Day:  N/E Growth:   
 Date:  Holiday:  S/W Growth:

Hour	Prior	Count	Next	Hist	Flag	N/E Edit	Prior	Count	Next	Hist	Flag	S/W Edit
01	00429	00454	00592	00434	OV	00454	00255	00308	00454	00314	OV	00308
02	00245	00262	00435	00308	OA	00262	00238	00272	00323	00232	OA	00272
03	00211	00235	00308	00241	OV	00235	00222	00277	00294	00247	OV	00277
04	00225	00246	00236	00231	OV	00246	00328	00327	00220	00281	OV	00327
05	00240	00255	00265	00252	OV	00255	00645	00554	00289	00590	OV	00554
06	00522	00540	00373	00498	OV	00540	02158	01956	00489	01996	OV	01956
07	01280	01292	00692	01263	OA	01292	04781	04550	00815	04113	OA	04550
08	01647	01674	01053	01711	OV	01674	04483	04235	01137	03797	OV	04235
09	01489	01745	01539	01774	OV	01745	03272	03009	01711	02864	OV	03009
10	01606	01685	01904	01972	OV	01685	02481	02409	02124	02426	OV	02409
11	01784	02023	02170	02343	OV	02023	02098	02246	02405	02187	OV	02246
12	01955	02340	02339	02524	OV	02340	02146	02233	02589	02338	OV	02233
13	02104	02899	02503	02877	OV	02899	02087	02326	02536	02447	OV	02326
14	02301	03196	02490	03106	OV	03196	02134	02477	02547	02539	OV	02477
15	02877	03957	02519	03594	OV	03957	02237	02655	02522	02726	OV	02655
16	04147	04898	02497	04483	OV	04898	02322	02814	02435	02810	OV	02814
17	04390	05045	02506	04725	OV	05045	02547	02829	02618	02746	OV	02829
18	04322	04425	02435	04444	OV	04425	02398	02454	02440	02675	OV	02454
19	03585	02836	01982	03377	OA	02836	01896	01830	02019	02499	OA	01830
20	02097	01783	01687	02285	OA	01783	01341	01414	01334	01925	OA	01414
21	01711	01549	01420	01670	OV	01549	01087	01160	01119	01368	OV	01160
22	01719	01416	01387	01477	OA	01416	00950	01187	00930	01246	OA	01187
23	01185	01061	01281	01290	OA	01061	00723	00927	00826	00971	OA	00927
24	00722	00862	00853	01024	OV	00862	00508	00656	00638	00735	OV	00656
Totals	042793	046678	035466	047905	XX	046678	043337	045105	034814	046076	XX	045105



# Exercises

## **Classroom Exercises for Traffic Modeling Data Programs** **Freeway Modeling Workshop**

1. From the National Weather Service Forecast Office website at <http://www.crh.noaa.gov/mpx/mpxmoncli/>, upload the September 2003 file. From this data, determine feasible data collection dates for modeling.
2. Using the MIST program, pull all incidents along I-694 from Matterhorn Drive to White Bear Ave. during the month of September 2003. The data collection time frames are from 5:00 to 10:00 AM and from 2:00 to 7:00 PM. Of the data collection dates remaining after exercise 1, which are still available for data collection?
3. Using the Data Plot program, determine the Modeling Influence area and the peak periods for the stretch of Westbound I-694 for a new project from TH 10 to Lexington Ave. List the mainline detector stations within the modeling influence area.
4. Using the Data Extract program, pull the volume and speed data for the Westbound I-694 modeling influence area from exercise 3 for September 30, 2003 using the data file format and the row option. What data is missing from the detector list? What detectors are not working?
5. Using the provided ramp meter location map, find detector S25 along I-694. Where is this meter located? According to the map, when is the meter active? If you wanted to view the traffic operations at this detector, which TMC camera would you use?
6. From the IRIS website, select the Ramp Meter Analysis report. Pull up the September 30, 2003 information for ramp meter S25 for a typical AM time frame (6-9 AM). At what time would you start the ramp meter in the model? At what time is the meter turned off and how would you simulate this in the model?
7. Again from the IRIS website, select the Continuity Report. Pull up the report for Westbound I-694 for September 30, 2003. From this report, list any detectors that are not working. Also, list any detectors that require further investigation as to whether they are working correctly. What is missing from this report?
8. You can continue to explore the programs until 4:00.

Solutions:

1. 3<sup>rd</sup>, 4<sup>th</sup>, 9<sup>th</sup>, 16<sup>th</sup>, 17<sup>th</sup>, 23<sup>rd</sup>, 24<sup>th</sup>, and 30<sup>th</sup>
2. 4<sup>th</sup> and 30<sup>th</sup>
3. DS 180 to DS 1083
4. Exit to Hamline Ave. and the exit to TH 10 : 4398 and 4399
5. Loop from Westbound I-694 to Southbound I-35W : AM only : Camera 705
6. start at 6:15 and end at 8:30 : Set release time for last 2 time steps to max release
7. 4398 and 4399 : 737, 800, 859, 860, 861 : Hamline exit and TH 10 exit