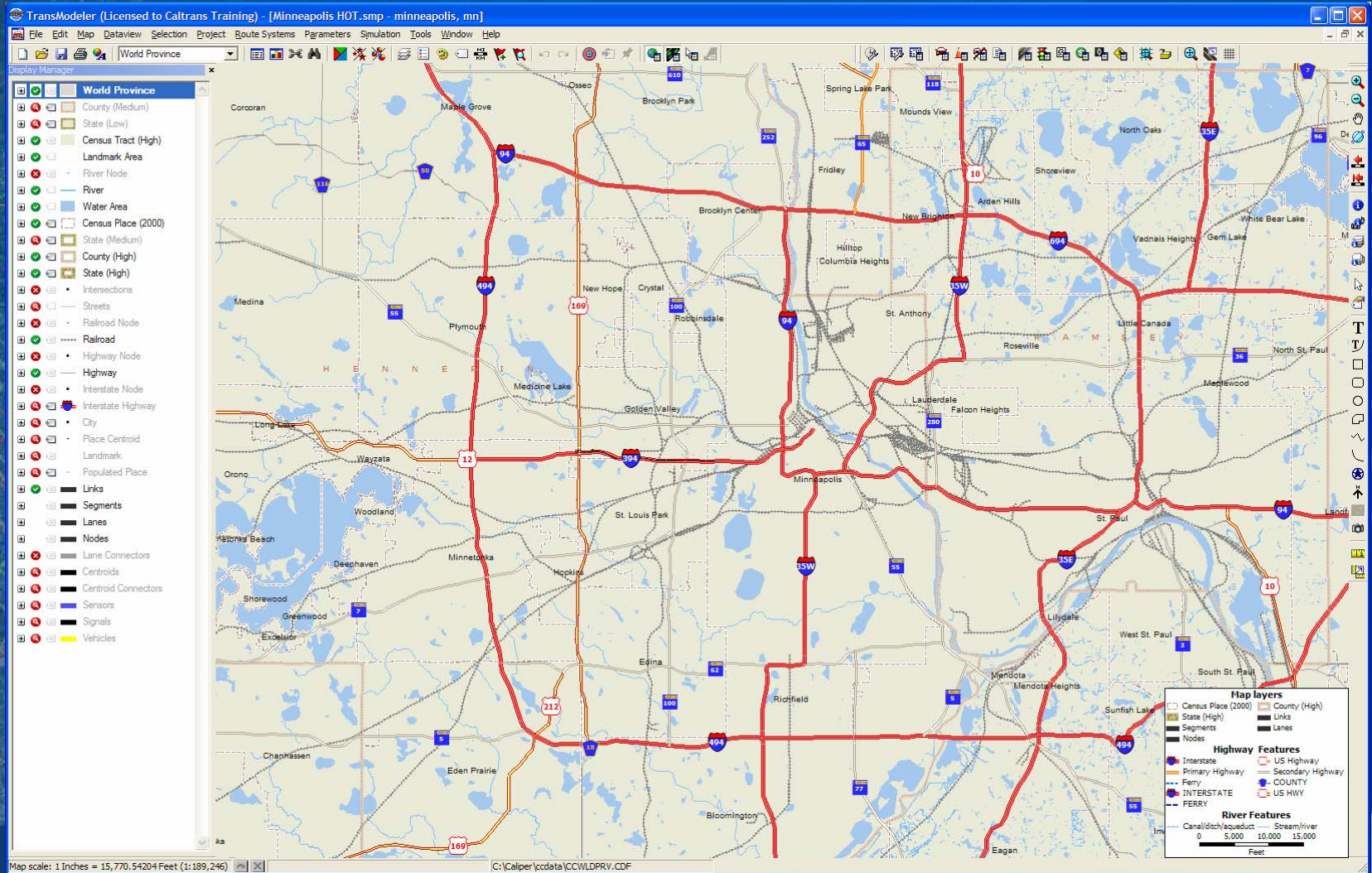
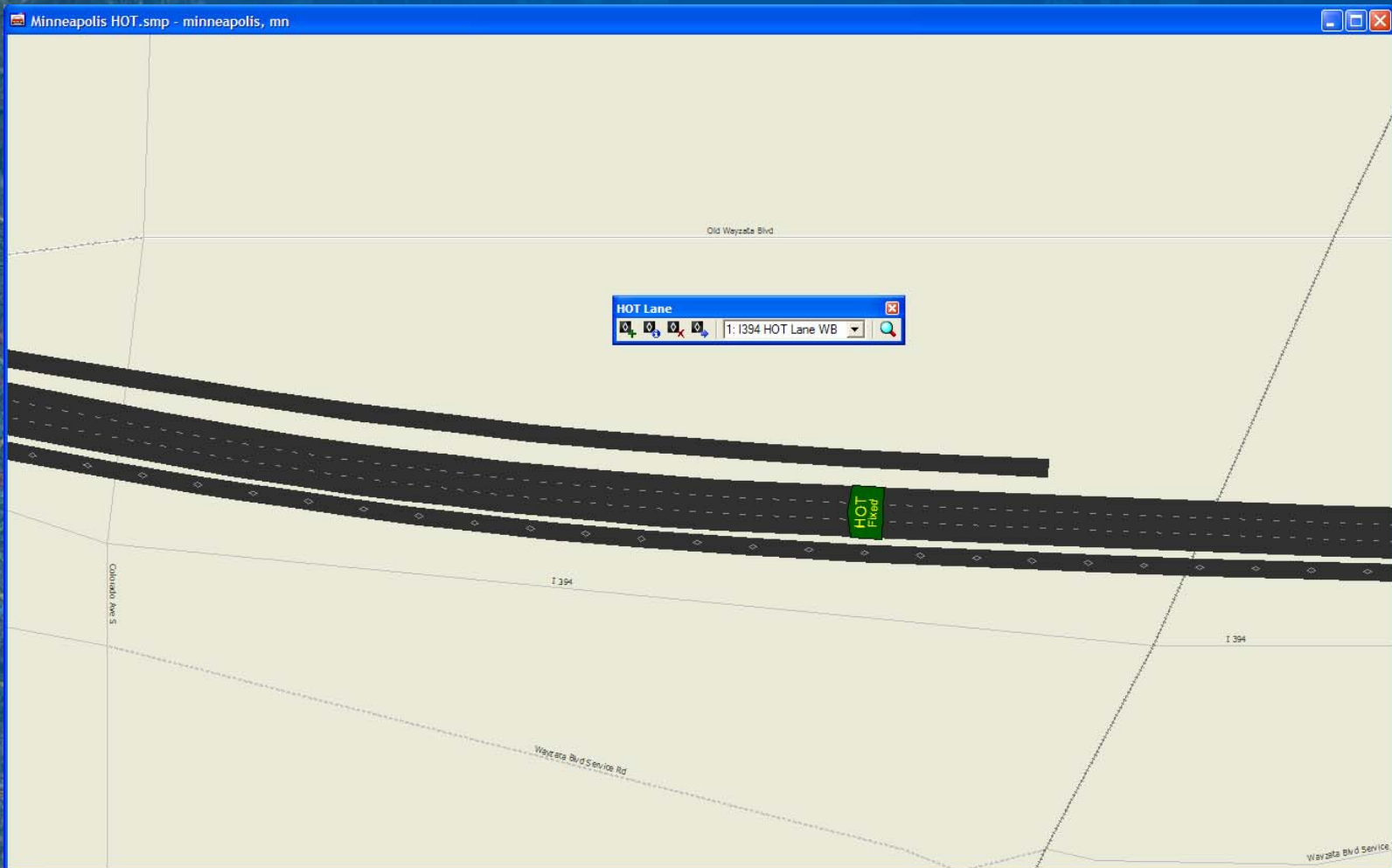


HOT Modeling in TransModeler



Network Elements – Variable Message Signs



HOT Lane Pricing - Fixed

HOT Lane Message Editor

Message Sign Properties

Segment ID Position (feet)

Signal ID Visibility (feet)

HOT Lane Facility

Facility Name

Facility ID Signal IDs

Toll Pricing

Type

User Class	Toll
SOV	3.50
HOV2	1.50
HOV3+	0.00

HOT Lane Pricing – Time-Dependent

HOT Lane Message Editor

Message Sign Properties

Segment ID Position (feet)

Signal ID Visibility (feet)

HOT Lane Facility

Facility Name

Facility ID Signal IDs

Toll Pricing

Type

Start Time	SOV	HOV2	HOV3+
00:00:00	1.00	1.00	1.00
00:00:00	1.00	1.00	1.00
00:00:00	1.00	1.00	1.00

HOT Lane Pricing – Traffic Responsive

HOT Lane Message Editor

Message Sign Properties

Segment ID Position (feet)

Signal ID Visibility (feet)

HOT Lane Facility

Facility Name

Facility ID Signal IDs

Toll Pricing

Type Detector IDs

Min. Occupancy	and/or	Min. Speed	SOV	HOV2	HOV3+
25.0 %	or	30.0 mph	1.00	1.00	1.00
25.0 %	or	30.0 mph	1.00	1.00	1.00
25.0 %	or	30.0 mph	1.00	1.00	1.00

HOT Lane Pricing – User-Programmed

HOT Lane Message Editor

Message Sign Properties

Segment ID Position (feet)

Signal ID Visibility (feet)

HOT Lane Facility

Facility Name

Facility ID Signal IDs

Toll Pricing

Type

Parameters	Values
Default SOV Toll	1.00
Default HOV2 Toll	1.00
Default HOV3+ Toll	1.00
Macro	My HOT Macro
Data	

Your Macro will be called with arguments including the Data string to calculate tolls.

Users and User Behavior

Driver Behavior

- Route Choice
 - General
 - Driver Groups**
- Acceleration
 - Car-Following
 - Variance
 - Headway
- Lane Changing
 - Discretionary
 - Model Selection
 - Neighboring Lane Model
 - Target Lane Model
 - Mandatory
 - Critical Distance
 - Gap Acceptance
 - Model Selection
 - Linear Model
 - Non-Linear Model
 - NGSIM Model
- Crossing, Merging and Yielding
 - Headway Thresholds
 - Yielding
 - Roundabouts
- Response to Traffic Control
 - General
 - Compliance Rates
 - Response Range
 - Stop Signs

Route Choice - Driver Groups

Route Choice Parameters by Driver Group

Description	Rich	Middle Class	Blue Collar
Fraction of Population	0.20	0.50	0.30
Informed	No	Yes	No
Relative Travel Time	-4.00	-4.00	-4.00
Travel Time (1/min)	0.00	0.00	0.00
Non-Freeway Length (/ft)	0.00	0.00	0.00
Freeway Length (/ft)	0.00	0.00	0.00
Controlled Intersection	0.00	0.00	0.00
Toll Cost Coefficient	-1.00	-2.00	-4.00
Different from Current Path	-1.00	-1.00	-1.00
Travel Time Threshold (%)	50.0	50.0	50.0
Update Delay Threshold (%)	100.0	50.0	100.0
Value of Time (\$/hr)	15.00	7.50	1.00

Path-Size Gamma

OK Apply Cancel Help

TransModeler (Licensed to Caltrans Training)

File Edit Project Route Systems Parameters Simulation Tools Window Help

100% 1 of 25

U.S. Interstate Highways (NHPN)

Toll Revenue Report - By Payment (8:00:00AM - 9:00:00AM)

Date & Time of Run: 01/21/07 16:51:30

HOT Lane I394

	Entry Time	Vehicle ID	No
1	8:01:57AM	6101	No
2	8:02:11AM	769	No
3	8:02:21AM	779	No
4	8:02:49AM	801	No
5	8:02:51AM	820	No
6	8:02:54AM	807	No
7	8:03:00AM	818	No
8	8:03:08AM	849	No
9	8:03:10AM	852	No
10	8:03:13AM	6124	No
11	8:03:22AM	767	No
12	8:03:31AM	889	No
13	8:03:34AM	6136	No
14	8:03:39AM	895	No
15	8:03:48AM	7597	No
16	8:03:52AM	7598	No
17	8:04:02AM	6143	No
18	8:04:04AM	945	No
19	8:04:08AM	814	No
20	8:04:14AM	948	No
21	8:04:16AM	7600	No
22	8:04:20AM	828	No
23	8:04:24AM	785	No
24	8:04:30AM	980	No
25	8:04:45AM	863	No
26	8:04:46AM	993	No
27	8:04:47AM	871	No
28	8:05:12AM	1011	No
29	8:05:19AM	1039	No
30	8:05:28AM	1022	No
31	8:05:31AM	1037	No
32	8:05:33AM	1054	No
33	8:05:35AM	930	No
34	8:05:36AM	1057	No
35	8:05:48AM	1082	No
36	8:05:51AM	941	No
37	8:06:02AM	1113	No
38	8:06:12AM	988	No
39	8:06:17AM	1132	No
40	8:06:22AM	6191	No
41	8:06:28AM	6200	No
42	8:06:49AM	1004	No
43	8:07:14AM	1050	No
44	8:07:18AM	1209	No

Time 08:00:00 Not Started Time Factors 0.00 0.00 Vehicles

Map scale: 1 Inches = 80.4649 Feet (1:965)

TransModeler (Licensed to Caltrans Training)

File Edit Project Route Systems Parameters Simulation Tools Window Help

100% 24 of 25

U.S. Interstate Highways (NHPN) Page 24 of 25

Toll Revenue Report - By Payment (8:00:00AM - 9:00:00AM)

Date & Time of Run: 01/21/07 16:51:30

HOT Lane I394 HOT Lane WB

	Entry Time	Vehicle ID	Toll Class	Number of Occupants	Toll Paid (Units of Currency)	
1081	8:59:11AM	4669	Non-commercial 2 Axles	1	3.50	
1082	8:59:14AM	4692	Non-commercial 2 Axles	1	3.50	
1083	8:59:16AM	3572	Non-commercial 2 Axles	1	3.50	
1084	8:59:17AM	3936	Non-commercial 2 Axles	1	3.50	
1085	8:59:20AM	4710	Non-commercial 2 Axles	1	3.50	
1086	8:59:21AM	3976	Non-commercial 2 Axles	2	1.50	
1087	8:59:24AM	4725	Non-commercial 2 Axles	1	3.50	
1088	8:59:26AM	7022	Non-commercial 2 Axles	1	3.50	
1089	8:59:27AM	4583	Non-commercial 2 Axles	1	3.50	
1090	8:59:30AM	7082	Non-commercial 2 Axles	1	3.50	
1091	8:59:33AM	4480	Non-commercial 2 Axles	1	3.50	
1092	8:59:36AM	4745	Non-commercial 2 Axles	1	3.50	
1093	8:59:41AM	4499	Commercial 2 Axles	1	3.50	
1094	8:59:45AM	3431	Non-commercial 2 Axles	2	1.50	
1095	8:59:48AM	3956	Non-commercial 2 Axles	1	3.50	
1096	8:59:51AM	4039	Non-commercial 2 Axles	1	3.50	
1097	8:59:53AM	4724	Non-commercial 2 Axles	1	3.50	
1098	8:59:56AM	4718	Non-commercial 2 Axles	1	3.50	
1099	8:59:58AM	4734	Non-commercial 2 Axles	1	3.50	
Summary					1,154	3,736.50

Summary by Toll Class and Number of Occupants:

	1	2	Total
Commercial 2 Axles	346.50 99	0.00 0	346.50 99
Non-commercial 2 Axles	3,307.50 945	82.50 55	3,390.00 1,000
Total	3,654.00 1,044	82.50 55	3,736.50 1,099

Time 08:00:00 Not Started Time Factors 0.00 0.00 Vehicles 0 0 0 0

Map scale: 1 Inches = 80.4649 Feet (1:965)

Crystal Report Viewer Control - Toll Revenue - By Time

100% 1 of 1

U.S. Interstate Highways (NHPN)

Page 1 of 1

Toll Revenue Report
(8:00:00AM - 9:00:00AM)

Date & Time of Run: 01/21/07 16:51:30

HOT Lane I394 HOT Lane WB					
Interval Ending	Number of Vehicles	Total Occupants	Average Occupants	Total Revenue (Units of Currency)	Average Toll Paid (Units of Currency)
8:05:00AM	27	30	1.11	88.50	3.28
8:50:00AM	108	116	1.07	362.00	3.35
8:55:00AM	125	131	1.05	425.50	3.40
9:00:00AM	118	127	1.08	395.00	3.35
8:10:00AM	33	33	1.00	115.50	3.50
8:15:00AM	44	46	1.05	150.00	3.41
8:20:00AM	38	40	1.05	129.00	3.39
8:25:00AM	111	114	1.03	382.50	3.45
8:30:00AM	112	118	1.05	380.00	3.39
8:35:00AM	131	136	1.04	448.50	3.42
8:40:00AM	130	138	1.06	439.00	3.38
8:45:00AM	122	125	1.02	421.00	3.45
Summary	1,099	1,154	1.05	3,736.50	3.40

Output Manager

Run: 01/21/07 16:51:30

Report: Toll Revenue - By Time

Variable: []

Selection: []

Start at: 08:00:00 Stop at: 09:00:00

Interval: 5 min. Preload