

Users Guide for the

EIGHT SAN JOAQUIN VALLEY MPO TRAFFIC MODELS TO MEET THE REQUIREMENTS OF SB 375



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SJV MIP Trip Based Model Users Guide

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INTRODUCTION

This document briefly describes the model installation and supplements training videos and the recording of the in-person training that took place at FresnoCOG on February 9, and other training sessions that occurred on an as-needed basis or scheduled after February 9. Each main task references video that precedes a bullet list of the high level tasks or objectives covered in the video.

Recordings of webinars, training sessions, or presentations are also provided but are longer and not directly related to specific tasks. The videos are located under TrainingVideos\Meetings and include:

- 2012-01-04 11.04 SJV MIP - Cube Land.wmv: Overview of Cube Land from the Kern pilot study and potential for updates as part of the SJV MIP
- 2012-01-27 SJV MIP - Master Network Review and Basic GIS.wmv: Overview of master network concept, checking the master and scenario networks, and review of GIS files.
- 2012-01-30 11.12 Installing and running your new model.wmv: From unzipping the model files from checking scenario keys to the parameter workbook.
- 2012-02-09 10.04 SJV MIP - Trip Based Model Training.wmv: Recording of in-person training that covered the items listed below in a free-form Q&A style.
- 2012-02-23 09.06 SJV MIP - Cube Land Training.wmv: Recoding of Cube Land Training
- 2012-02-24 10.08 SJV MIP - ABM Training.wmv: Recoding of ABM training

Note: When XX is used throughout this document, it refers to the 2 or 3 digit character abbreviation for each model and YY refers to the calibration/validation year of the model. Abbreviations and base years are as follow:

- FresnoCOG (FC) – 2008
- KernCOG (KE) – 2008
- KCAG (KN) – 2005
- MCTC (MD) -2010
- Three-County Model (TCM) – 2008
- TCAG (TU) – 2007



INSTALLING SOFTWARE

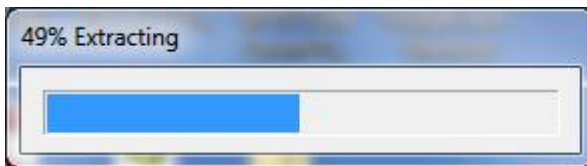
Software Licensing

- Enterprise licensing for SJV MPOs
- Cube Base, Cube Voyager, Cube Cluster, Cube Land

Software Setup

Installation Procedure¹

- Locate the Cube setup file included with the deliverables. This will be Version 6.0.1, with ArcGIS Support. Double click the **.exe** file to initiate the install.
- The Windows installer will extract the necessary files. This may take a few minutes.



- The Cube 6 Installer welcome screen will open. Review the End User Software License Agreement and click **Accept**.



¹ For more information, please see SJV MIP Video 1 – SoftwareInstall.wmv



- Review the software eligible to be installed with your licensing. Cube Base, Cube Voyager, Cube Cluster (Recommended) or Cube Land (Optional) may be listed depending on the installed license. Click **Install**.

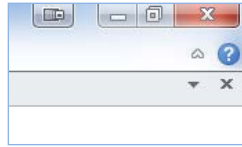


- Once the installation is complete, click **Exit** to close the application. To automatically open Cube or the *What's New* documentation, leave each box checked. Otherwise uncheck both boxes.

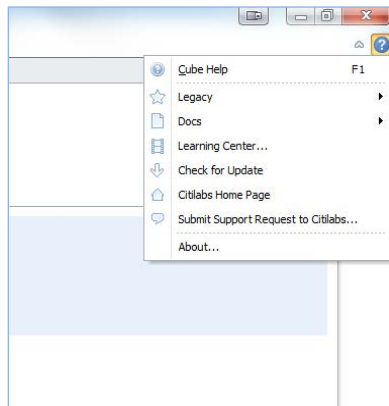


Review Software Version²

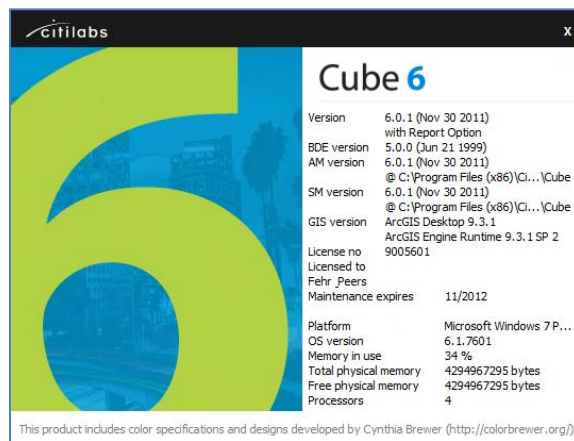
- Open Cube6 via the Start menu or by double-clicking the icon on your desktop
- Verify the version of your software
 - Click on the **question mark** at the top right corner of the program window.



- Click **About...** in the drop down menu.



- Review and note the version of Cube, License No., and number of processors in your computer.



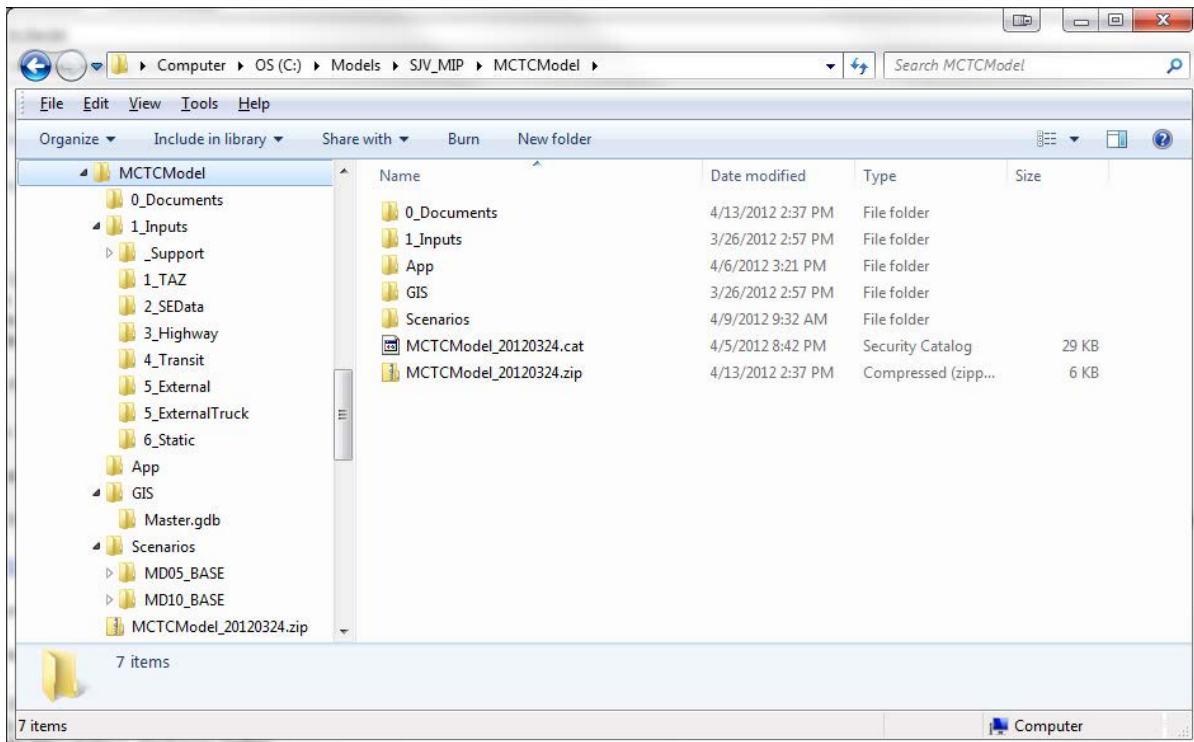
² For more information, please see SJV MIP Video 2 – StartingCube.wmv



INSTALLING MODEL

Directory Setup

- Unzip the contents to a directory where you would like to store the model run data.
 - This can be on a different drive or partition than the Citilabs software
 - It is recommended that the directory be local rather than on the network and have at least 10GB of storage for each scenario than you plan to run
- The directory structure for the model will look similar to the image below, along with a general description of each directory and its contents.



Folder Descriptions

0_Documents

Documentation and support documents not directly related to the model run itself. Contents and description of this directory:

- MIP Conformity Request (4).docx - Memo from Cari Anderson describing the conformity years



- MPO TDT.xls – Data template referred to in Cari Anderson’s memo on conformity year that MPO staff should fill in.

1_Inputs

The inputs listed by type for SB 375 scenario years and the validation year

- _Support – This directory has scenario summary spreadsheets and parameters files used to generate the inputs in the other input directories. Within the “1_Inputs_Support” directory there are Excel spreadsheets for preparing a majority of the scenario data. The consultant team has coordinated with the MPO staff and assembled the files for the SB 375 years and the validation year.
 - !!XX_Parameters_Summary.xlsx – Summary of scenario inputs and change from default parameters. This file is used to document and summarize each scenario, the data files to export from the parameters workbook, and the key values to modify in the Cube Application. The file begins with !! to have it always at the top of the directory listing.
 - XX_SJV_Interregional_DATEMODIFIED.xlsx – Excel spreadsheet used to develop interregional data for any given year. Instructions on the “Introduction” tab for entering a specific year. Copy and Paste Special as Values from the “Gateway_Inputs” and “Through_Trips” tabs in the appropriate tabs in the scenario year parameters workbook.
 - SB 375 scenario years and validation year parameters workbooks – Each workbook contains tabs with descriptions of variables, input/output files, and macros used to prepare and export the data into the user defined directories used for the model run.
 - XX05_Base_StandardParameters_DATEMODIFIED.xlsx
 - XXXY_Base_StandardParameters_DATEMODIFIED.xlsx
 - XX20_Base_StandardParameters_DATEMODIFIED.xlsx
 - XX35_Base_StandardParameters_DATEMODIFIED.xlsx
 - XX40_Base_StandardParameters_DATEMODIFIED.xlsx
- 1_TAZ → 10_Reporting – Recommended directory structure and default output location from the Parameter workbooks to organize input data. Nearly all input files are exported from the parameters workbook in CSV format. The exceptions to this are:
 - 3_Highway – Master network in Voyager binary .NET format



- 4_Transit – Drive access block file, walk access block file, and transit line file in plain text format
- 5_Trucks – Files from the interregional goods movement model: Auto and Truck interregional matrix files in Voyager binary .MAT format, Regional and sub-area network in Voyager .Net format
- 6_Static – transit fare (FAR), public transport system (PTS), and transit factors (FAC) files in plain text format

App

The scripts and applications for the model. This directory should not be modified except to review or delete PRN files for model runs, and all changes to the scripts should be made from the Cube Catalog.

GIS

Master geodatabase with base GIS layers, blank personal geodatabase and default map documents used to create scenario specific geodatabases, Model map document containing links to all SB 375 scenario input summary data.

File Descriptions

Parameters Workbook

The parameters workbook allows the user to edit the following model parameters

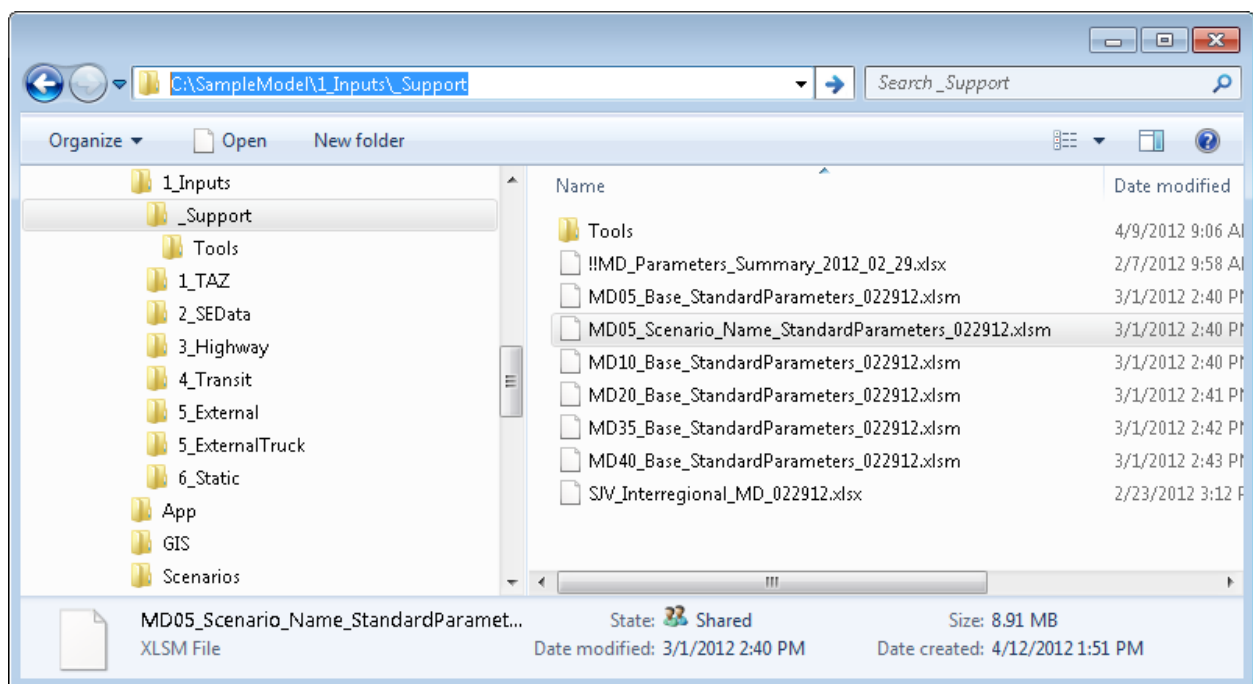
- TAZ Data
- Special Generators
- Model Gateway Data
- Socioeconomic Data by TAZ
- Cross Classified Trip Rates
- Cross Classified Truck Trip Rates
- Friction Factors
- Auto Ownership Parameters
- Auto Operating Costs
- Mode Choice Parameters
- Non-highway transit nodes
- Non-highway transit links
- Smart Growth Parameters



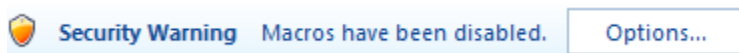
- Diurnal Factors
- Traffic Assignment Parameters
- Turn Penalties
- Through Trips
- Level of Service Thresholds

Not all of the model parameters need to be changed for each model run.

- Navigate to your model directory and find the parameters workbook associated with your model scenario run and open it.



- Before using the parameter workbook, macros must be enabled in Excel. Click **Options...** and enable macros in Excel



- 'Introduction' tab **Introduction**
 - Information on each tab of the parameters workbook
 - A running log of changes for the parameter workbook. Changes for the associated model scenario should be noted here.
 - Tab should be modified only to log changes to scenario

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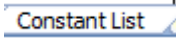
- 'Parameter List' tab

Parameter List

- List of parameters used in model process with description, file type, sample file name, source, and who/when should modify
- Tab should not be modified, for review only

A1	Parameter Name						
	Parameter Name	Description	File type	Sample File Name	Source (PW = Parameters Workbook)	Who should mod	How often should be mod
1	Road Network Inputs						
2	Master Network	Highway network including base, imp 1, imp 2 links and variables	.NET	Madera_MASTER.NET	External File	Model User	Often
3	Turn Penalties	Highway turn penalties by set and magnitude of penalty	.PEN	MD05_Base.PEN	PW - 'Turn Pen'	Model User	Often
4	Transit Inputs						
5	Transit XY Nodes	XY model coordinates with transit only nodes	.CSV	MD10_NonHighwayPTNodes.CSV	PW - 'NonHighwayTransit'	Model User	Rarely
6	Non-Highway transit links	AB and time values for non-highway transit links	.CSV	MD10_NonHighwayPTLinks.CSV	PW - 'NonHighwayTransit'	Model User	Rarely
7	Transit Lines Peak	Transit line file	.LIN	MD10_Base_TRANLPK.LIN	External File	Model User	Rarely
8	Transit Drive Access Peak	Drive access block file including park and ride	.BLOCK	MD10_Base_DRIVEACC.BLOCK	External File	Model User	Rarely
9	Transit Walk Access Peak	Walk access block file	.BLOCK	MD10_Base_WALKACC.BLOCK	External File	Model User	Rarely
10	Transit Lines Off-Peak	Transit line file	.LIN	MD10_Base_TRANLOPK.LIN	External File	Model User	Rarely
11	Transit Drive Access Off-Peak	Drive access block file including park and ride	.BLOCK	MD10_Base_DRIVEACC.BLOCK	External File	Model User	Rarely
12	Transit Walk Access Off-Peak	Walk access block file	.BLOCK	MD10_Base_WALKACC.BLOCK	External File	Model User	Rarely
13	External Inputs						
14	Through Trips	Through trip matrices by purpose	.CSV	MD05_Base_Through_Trips.CSV	PW - 'Through Trips'	Model Developer	Rarely
15	Trip Generation Inputs						
16	TAZ Data	Zonal specific data such as parking cost, developed acres	.CSV	MD05_Base_TAZData.CSV	PW - 'TAZ_Inputs'	Model User	Often
17	SE Detail	Detailed cross-class socioeconomic data by TAZ	.CSV	MD05_Base_SE_Detail.CSV	PW - 'SE_Detail_Inputs'	Model User	Often
18	Gateways	Trip ends by purpose for external zones	.CSV	MD05_Base_Gateways.CSV	PW - 'Gateways_Inputs'	Model User	Rarely
19	Special Generators	Trip ends by purpose of special internal zones	.CSV	MD05_Base_SpecialGenerators.CSV	PW - 'SpecialGenerator_Inputs'	Model User	Rarely
20	Static Input						
21	Speed and Capacity Lookup	Capacity/alpha/beta values by facility/terrain/area	.CSV	MD10_Base_Traffic_Assignment.csv	PW - 'Traffic_Assignment'	Model User	Rarely
22	Transit Fares	Transit fare structure by mode	.FAR	MD10_Base_TRANFAR	External File	Model Developer	Rarely
23	Transit Factors	Transit route factors (i.e. Wait time curves, nodes)	.FAC	MD10_Base_TRANFAC	External File	Model Developer	Rarely
24	Transit System	Transit mode definitions	.PTS	MD10_Base_TRANPTS	External File	Model Developer	Rarely
25	Trip Generation Rates	Trip generations for all land uses including cross classified residential	.CSV	MD10_Base_CrossClass_TripRates.csv	PW - 'CrossClass_TripRates'	Model Developer	Rarely
26	Trip Generation Rates - Trucks	Truck trip generations for all land uses	.CSV	MD10_Base_CrossClass_TripRates_Truck.csv	PW - 'CrossClass_TripRates'	Model Developer	Rarely
27	Auto Operating Costs	Auto operating cost by year 2000-2040	.CSV	MD10_Base_AutoOperatingCost.csv	PW - 'AutoOpCost'	Model Developer	Rarely
28	Mode Choice Parameters	Mode choice parameters by trip purpose	.CSV	MD10_Base_ModeChoiceParam.csv	PW - 'ModeChoice'	Model Developer	Rarely
29	Smart Growth Parameters	Smart growth parameters (MID model)	.CSV	MD10_Base_SmartGrowthParam.csv	PW - 'SmartGrowth'	Model Developer	Rarely
30	Vehicle/Auto Ownership Parameters	Vehicle ownership model parameters by household type	.CSV	MD10_Base_AutoOwnParam.csv	PW - 'AutoOwnParam'	Model Developer	Rarely
31	Friction Factor Parameters	Friction factor parameters by trip purpose	.CSV	MD10_Base_FFPParam.csv	PW - 'Friction Factors'	Model Developer	Rarely
32	Diurnal Factors	Daily to peak periods factors	.CSV	MD10_Base_DiurnalFactors.csv	PW - 'Diurnal Factors'	Model Developer	Rarely
33	LOS Lookup	Florida DOT level of service thresholds by facility type	.CSV	MD10_Base_LOS_FDOT.csv	PW - 'LOS_FDOT'	Model User	Rarely
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- 'Constant List' tab 
 - List of constants used in model process with description, file type, sample constant name, source, and who/when should modify
 - Tab should not be modified, for review only

Constant Name						
A	B	C	D	E	F	G
Constant Name	Description	Variable Name	Sample Value	Source	Who should modify	How often should be mod
Land Use Development						
Land Use Year		Year	2008	Cube application key	Model User	Often
Road Network Inputs						
Network Year		Net_Year	2008	Cube application key	Model User	Often
TAZ Identification						
Number of Zones		NumZones	6600	Cube application key	Model Developer	Rarely
Non-motorized values						
Bike Speed		Speed_Bike	10	Cube application key	Model Developer	Rarely
Walk Speed		Speed_Walk	3	Cube application key	Model Developer	Rarely
Maximum Bike Distance		MaxBikeDist	100	Cube application key	Model Developer	Rarely
Maximum Walk Distance		MaxWalkDist	60	Cube application key	Model Developer	Rarely
Transit time factors						
Transit Time Factors by facility - Freeway	To increase time of transit relative to highway network	TimeFacB_1	1	Cube application key	Model Developer	Rarely
Transit Time Factors by facility - Highway		TimeFacB_2	1	Cube application key	Model Developer	Rarely
Transit Time Factors by facility - Expressway		TimeFacB_3	1	Cube application key	Model Developer	Rarely
Transit Time Factors by facility - Arterial		TimeFacB_4	1	Cube application key	Model Developer	Rarely
Transit Time Factors by facility - Collector		TimeFacB_5	1	Cube application key	Model Developer	Rarely
Transit Time Factors by facility - Local		TimeFacB_6	1	Cube application key	Model Developer	Rarely
Transit Time Factors by facility - Ramp Fwy to Fwy		TimeFacB_7	1	Cube application key	Model Developer	Rarely
Transit Time Factors by facility - Ramp Slip		TimeFacB_8	1	Cube application key	Model Developer	Rarely
Transit Time Factors by facility - Ramp Loop		TimeFacB_9	1	Cube application key	Model Developer	Rarely
Value of time						
Value of Time - 0 Vehicles	Placeholders - values will be calculated from data	VOT_0Veh	6	Cube application key	Model Developer	Rarely
Value of Time - 1 Vehicles		VOT_1Veh	12	Cube application key	Model Developer	Rarely
Value of Time - 2 Vehicles		VOT_2Veh	18	Cube application key	Model Developer	Rarely
Auto Occupancy factors for Shared Ride 3+						
Auto Occupancy Factor, Home-Work Trip Purpose, Shared Ride 3+		AOF_HW_SR3	4.35	Cube application key	Model Developer	Rarely
Auto Occupancy Factor, Home-Shop Trip Purpose, Shared Ride 3+		AOF_HS_SR3	3.65	Cube application key	Model Developer	Rarely
Auto Occupancy Factor, Home-K12 Trip Purpose, Shared Ride 3+		AOF_HK_SR3	4.35	Cube application key	Model Developer	Rarely
Auto Occupancy Factor, Home-College Trip Purpose, Shared Ride 3+		AOF_HC_SR3	4.35	Cube application key	Model Developer	Rarely
Auto Occupancy Factor, Home-Other Trip Purpose, Shared Ride 3+		AOF_HO_SR3	3.42	Cube application key	Model Developer	Rarely
Auto Occupancy Factor, Work-Other Trip Purpose, Shared Ride 3+		AOF_WO_SR3	3.16	Cube application key	Model Developer	Rarely
Auto Occupancy Factor, Other-Other Trip Purpose, Shared Ride 3+		AOF_OO_SR3	3.37	Cube application key	Model Developer	Rarely
Auto Occupancy Factor, Highway Trip Purpose, Shared Ride 3+		AOF_HY_SR3	4.35	Cube application key	Model Developer	Rarely
Mode Choice						
Mode Choice Constant Shift		MC_Const_Shift	-1	Cube application key	Model Developer	Rarely
Trip Distribution						
Equivalent time scaling factor for friction factors - Work, 0		ET_Wrk_0Veh	2.0	Cube application key	Model Developer	Rarely



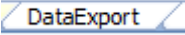
- 'Model Intermediate-Output Files' tab

Model Intermediate-Output Files

- List of intermediate and output files from model process with description, file name, and its use
- Tab should not be modified, for review only

A	B	C	D	E	F
Model Step	Intermediate/Output File	File type	File Location	Sample File name	Note
INPUT PROCESSING					
Folder Setup					
	Scenario Network Attributes (GIS)	MDB	\	results.mdb\unloaded	
	ArcMap project file with network and TAZ inputs and outputs	MXD	\	XXXX_Base.MXD	
Network Processor					
	Scenario Network (Cube)	NET	\00_InputProcessing\	XXXX_Net	
	Scenario Network Link data	DBF	\00_InputProcessing\	XXXX_Base_LINK.DBF	
	Scenario Network node data	DBF	\00_InputProcessing\	XXXX_Base_NODE.DBF	
Network Check					
	Base Network for Comparison	NET	\00_InputProcessing\	Base2005_Compare.NET	
	Summary 2005 Lane Miles	CSV	\00_Reporting\	LaneMiles_2005.CSV	
	Summary Scenario Lane Miles	CSV	\00_Reporting\	LaneMiles_XXXX_Base.CSV	
	2008 Network Attributes (GIS)	MDB	\	results.mdb\base	
	List of unconnected zones	TEXT	\01_SKIMS\	XXXX_Base_UNCONNECTEDZONES.TXT	List of all TAZs not connected to highway network
XX trips					
	Through trip matrix	MAT	\00_InputProcessing\	XXXX_Base_XX.MAT	
Friction Factors					
	Friction factor lookup table	DBF	\00_InputProcessing\	XXXX_Base_FRICTIONFACTORS.DBF	
External Truck					
	Interpolated external truck trip table	MAT	\00_InputProcessing\	XXXX_Base_ExternalTruckTripTable.MAT	
SJV MODEL					
Skims and Demand					
Skims					
Skim highway					
	Peak Period - Drive Alone - Skim Matrix	MAT	\01_Skims\	XXXX_Base_SKM_PK_D1.MAT	
	Peak Period - Shared Ride 2 - Skim Matrix	MAT	\01_Skims\	XXXX_Base_SKM_PK_S2.MAT	
	Peak Period - Shared Ride 3+ - Skim Matrix	MAT	\01_Skims\	XXXX_Base_SKM_PK_S3.MAT	
	OffPeak Period - Drive Alone - Skim Matrix	MAT	\01_Skims\	XXXX_Base_SKM_OK_D1.MAT	
	OffPeak Period - Shared Ride 2 - Skim Matrix	MAT	\01_Skims\	XXXX_Base_SKM_OK_S2.MAT	
	OffPeak Period - Shared Ride 3+ - Skim Matrix	MAT	\01_Skims\	XXXX_Base_SKM_OK_S3.MAT	
	All Periods - Nonmotorized - Skim Matrix	MAT	\01_Skims\	XXXX_Base_SKM_NM.MAT	
Skim transit if transit network available					
	Transit Walk Access - Peak Period - Transit Network	NET	\Temp\01_Skims\	XXXX_Base_TRN_PK_TW.NET	
	Transit Walk Access - Peak Period - Skim Matrix	MAT	\01_Skims\	XXXX_Base_SKM_PK_TW.MAT	
	Transit Walk Access - Peak Period - Route	RTE	\Temp\01_Skims\	XXXX_Base_SKM_PK_TW.RTE	
	Transit Walk Access - Peak Period - Report	PRN	\Temp\01_Skims\	XXXX_Base_SKM_PK_TW.PRN	
	Transit Drive Access - Peak Period - Transit Network	NET	\Temp\01_Skims\	XXXX_Base_TRN_PK_TD.NET	
	Transit Drive Access - Peak Period - Skim Matrix	MAT	\01_Skims\	XXXX_Base_SKM_PK_TD.MAT	
	Transit Drive Access - Peak Period - Route	RTE	\Temp\01_Skims\	XXXX_Base_SKM_PK_TD.RTE	
	Transit Drive Access - Peak Period - Report	PRN	\Temp\01_Skims\	XXXX_Base_SKM_PK_TD.PRN	
	Transit Walk Access - OffPeak Period - Transit Network	NET	\Temp\01_Skims\	XXXX_Base_TRN_OK_TW.NET	
	Transit Walk Access - OffPeak Period - Skim Matrix	MAT	\01_Skims\	XXXX_Base_SKM_OK_TW.MAT	
	Transit Walk Access - OffPeak Period - Route	RTE	\Temp\01_Skims\	XXXX_Base_SKM_OK_TW.RTE	
	Transit Walk Access - OffPeak Period - Report	PRN	\Temp\01_Skims\	XXXX_Base_SKM_OK_TW.PRN	
	Transit Drive Access - OffPeak Period - Transit Network	NET	\Temp\01_Skims\	XXXX_Base_TRN_OK_TD.NET	
	Transit Drive Access - OffPeak Period - Skim Matrix	MAT	\01_Skims\	XXXX_Base_SKM_OK_TD.MAT	
	Transit Drive Access - OffPeak Period - Route	RTE	\Temp\01_Skims\	XXXX_Base_SKM_OK_TD.RTE	
	Transit Drive Access - OffPeak Period - Report	PRN	\Temp\01_Skims\	XXXX_Base_SKM_OK_TD.PRN	



- 'DataExport' tab 
 - Process and path and file names for exported data
 - This page allows the user to export the data as they modified within the parameter workbook for use in the model process
 - This tab should be modified to point to the appropriate model run directory

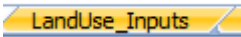
B27		
A	B	C
1	This tab contains path and filename information for the export process of data preparation.	
2	Folders will be created if they do not exist.	
3		
4	Tab	Path and Filename
5	TAZ Data	C:\MaderaCTCModeM1_Inputs\1_TAZMD05_Base_TAZData_120222.csv
6	Special Generators	C:\MaderaCTCModeM1_Inputs\2_SEDataMD05_Base_SpecialGenerators_120222.csv
7	Gateways	C:\MaderaCTCModeM1_Inputs\2_SEDataMD05_Base_Gateways_120222.csv
8	SE_Detail	C:\MaderaCTCModeM1_Inputs\2_SEDataMD05_Base_SE_Detail_120222.csv
9	CrossClass_TripRates	C:\MaderaCTCModeM1_Inputs\6_StaticMD10_Base_CrossClass_TripRates.csv
10	CrossClass_TripRates_Trucks	C:\MaderaCTCModeM1_Inputs\6_StaticMD10_Base_CrossClass_TripRates_Trucks.csv
11	Friction Factors	C:\MaderaCTCModeM1_Inputs\6_StaticMD10_Base_FFParam.csv
12	Auto Ownership Parameters	C:\MaderaCTCModeM1_Inputs\6_StaticMD10_Base_AutoOwnParam.csv
13	Auto Operating Costs	C:\MaderaCTCModeM1_Inputs\6_StaticMD10_Base_AutoOperatingCost.csv
14	Mode Choice Parameters	C:\MaderaCTCModeM1_Inputs\6_StaticMD10_Base_ModeChoiceParam.csv
15	Non-highway transit nodes	C:\MaderaCTCModeM1_Inputs\4_TransitMD10_Base_NonHighwayPTNodes.csv
16	Non-highway transit links	C:\MaderaCTCModeM1_Inputs\4_TransitMD10_Base_NonHighwayPTLinks.csv
17	Smart Growth Parameters	C:\MaderaCTCModeM1_Inputs\4_TransitMD10_Base_SmartGrowthParam_NoReduction.csv
18	Diurnal Factors	C:\MaderaCTCModeM1_Inputs\6_StaticMD10_Base_DiurnalFactors.csv
19	Traffic Assignment Parameters	C:\MaderaCTCModeM1_Inputs\6_StaticMD10_Base_Traffic_Assignment.csv
20	Turn Penalties	C:\MaderaCTCModeM1_Inputs\3_HighwayMD05_Base_TurnPen_120222.csv
21	Through Trips	C:\MaderaCTCModeM1_Inputs\5_ExternalMD05_Base_Through_Trips_120222.csv
22	LOS_FDOT	C:\MaderaCTCModeM1_Inputs\6_StaticMD10_Base_LOS_FDOT.csv
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- 'Descriptions' tab
 - Definitions of ranges, values, variables, and descriptions for use in workbook
 - Tab should not be modified, for review only

A		B		C	D	E
1	Define Zone Range					
2	Min	Max	Description (no spaces)			
3		1	60	External		
4		61	100	External_to_County		
5		101	200	Chowchilla		
6		201	300	Madera		
7		301	805	MaderaCo		
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36						
37	Define Area Density Range					
38	Min	Max	AREATYP	AREATYP_STR		
39		0	0	0 Vacant		
40		0	6	1 Rural		
41		6	30	2 Suburban		
42		30	55	3 Urban		
43		55	100	4 Fringe		
44		100	500	5 CBD		
45		500	500	00 Empty		

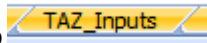


- 'LandUse_Inputs' tab 
 - Basic residential, employment, and enrollment inputs for internal zones
 - Tab should be modified by user to match desired model scenario

B102		192.2774562																				
1	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	
1	TAZ	RU1	RU2	RU3	RU4	RU5	RU6	RU7	RU8	RU9	RU10	AGRICULTUR	MINING	UTILITIES	CONSTRUCTN	MANUFACTUR	WHOLESALE	RETAIL	WAREHOUSE	INFORMATN	FINAN	INSR
102	101	192.28	4.1	5.886	2.6	0	0	0	0	33	0	0	0	0	2.06	0	0	0	0	0	0	0
103	102	138.08	0	15.61	32	33	0	5.5	0	3	0	0	0	0	0	0	0	1.03	0	0	0	0
104	103	85.14	0	9.627	20	21	0	3.4	0	1.9	0	0	0	0	0	0	0	36.05	0	1.03	0	0
105	104	157.18	0	17.77	36	38	0	6.2	0	3.5	0	0	0	0	0	0	0	0	0	0	0	0
106	105	222.96	2.9	0	0	0	0	0	0	0	0	0	0	0	47.38	8.24	0	20.6	0	0	0	0
107	106	154.07	9.8	9.814	0	0	0	0	0	0	0	0	0	0	0	0	0	7.21	0	0	0	0
108	107	64.401	0	7.282	15	16	0	2.6	0	1.4	0	1.03	0	0	4.12	0	0	0	0	0	0	0
109	108	192.78	32	9.38	19	20	6.9	3.3	0	1.8	0	0	0	0	4.12	1.03	0	8.24	0	0	0	2.06
110	109	121.8	10	9.369	16	25	0	0	0	0	0	0	0	0	0	0	0	16.48	2.06	1.03	0	0
111	110	30.202	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
112	111	0.7283	0	0.022	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0
113	112	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
114	113	154.49	20	19.52	19	6.1	2.3	0	0	0	0	0	0	0	3.09	12.36	0	12.36	0	0	0	3.09
115	114	184.64	0	0.679	17	1.5	0	0.2	0	0.1	0	0	0	0	9.27	6.18	3.09	19.57	0	4.12	32.96	0
116	115	1.6541	0	0	0.1	0	0	0	0	0	0	0	0	25.75	12.36	9.27	1.03	21.63	0	0	0	0
117	116	137.02	10	26.93	24	0	0	0	0	0	0	0	0	0	12.36	4.12	2.06	37.08	7.21	0	14.42	0
118	117	23.044	1.7	4.529	4	0	0	0	0	0	0	0	0	0	0	174.07	10.3	0	6.18	0	0	0
119	118	6.228	0.5	1.224	1.1	0	0	0	0	0	0	0	0	0	3.09	133.9	17.51	0	0	0	0	0
120	119	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
121	120	1.2456	0.1	0.245	0.2	0	0	0	0	0	0	0	0	0	0	0	3.09	0	0	0	0	0
122	121	6.8508	0.5	1.346	1.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
123	122	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20.6	0	0	0	0
124	123	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	124	552.07	12	16.9	7.3	0	0	0	0	94	0	0	0	0	3.09	0	3.09	0	0	0	0	3.09
126	125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
127	126	1.4566	0	0.045	0	0	0	0	0	0.2	0	0	0	0	0	5.15	10.3	0	0	0	0	0
128	127	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
129	128	2.185	0	0.067	0	0	0	0	0	0.4	0	0	0	0	0	0	0	0	0	0	0	0
130	129	2.9133	0.1	0.089	0	0	0	0	0	0.5	0	0	0	0	0	0	0	0	0	0	0	0
131	130	29.861	0.6	0.914	0.4	0	0	0	0	5.1	0	0	0	0	0	2.06	2.06	1.03	0	0	1.03	0
132	131	79.057	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4.12	0	0	0	0	0
133	132	8.8829	0.1	0	0	0	0	0	0	0	0	0	0	0	3.09	0	0	0	5.15	0	0	0
134	133	37.145	0.8	1.137	0.5	0	0	0	0	6.3	0	0	0	0	7.21	0	0	0	0	0	0	0
135	134	19.665	0.4	0.602	0.3	0	0	0	0	3.4	0	0	0	0	0	0	0	5.15	0	0	0	0
136	135	2.9133	0.1	0.089	0	0	0	0	0	0.5	0	0	0	0	6.18	0	0	0	0	0	0	0
137	136	10.197	0.2	0.312	0.1	0	0	0	0	1.7	0	0	0	0	0	0	0	8.24	0	0	0	0
138	137	0	0	0	0	0	0	0	0	0	0	0	0	0	0	360.5	4.12	0	5.15	0	0	0
Introduction Parameter List Constant List Model Intermediate-Output Files DataExport Descriptions LandUse_Inputs TAZ_Inputs SpecialGenerator_Inputs																						



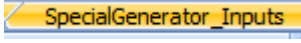
- 'TAZ_Inputs' tab

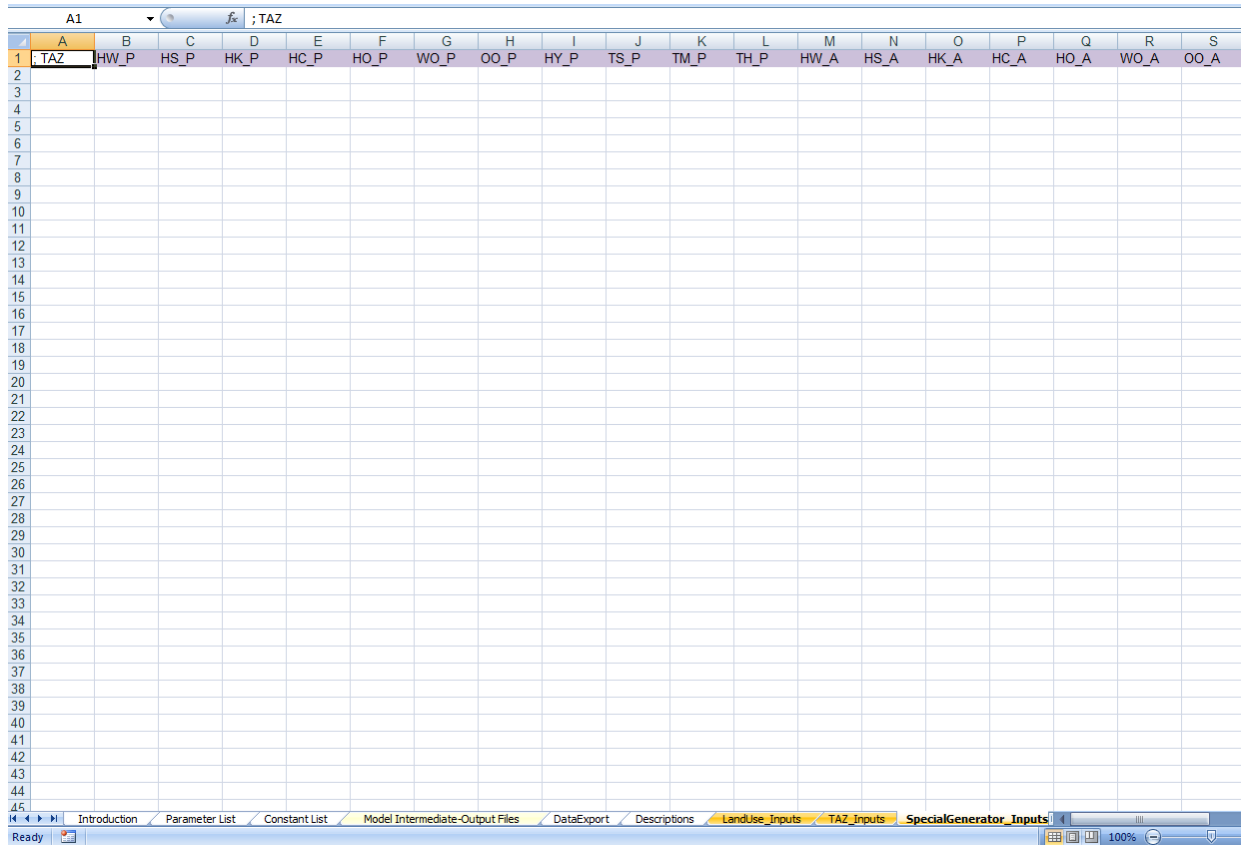


- School boundary, parking cost, terminal time, transit frequency, and other zonal specific data for internal zones
- Tab should be modified by user to match desired model scenario

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
1	TAZ	ELEM_BNDY	MID_BNDY	HIGH_BNDY	GENPARKCOST	EMPPARKCOST	INTDEN	WALKPERC	MHHINC	RESACRE	EMPACRE	HWYCOM	PTERM	ATERM	PKFREQ	OPFREQ	AIRBASIN	EJ	
2	101								53327	88.98182			1.00	1.00	0	0	1		
3	102								46462	56.901276			1.00	1.00	180	180	1		
4	103								46462	75.549395			1.00	1.00	180	180	1		
5	104								46462	40.619987			1.00	1.00	180	180	1		
6	105								45522	101.50532			1.00	1.00	0	0	1		
7	106								39213	70.972863			1.00	1.00	0	0	1		
8	107								46462	51.974712			1.00	1.00	0	0	1		
9	108								46462	107.0468			1.00	1.00	0	0	1		
10	109								24808	70.456908			1.00	1.00	0	0	1		
11	110								45522	5.1936719			1.00	1.00	0	0	1		
12	111								53327	54.251334			1.00	1.00	0	0	1		
13	112								45522	43.010531			1.00	1.00	0	0	1		
14	113								24808	106.89449			1.00	1.00	0	0	1		
15	114								39238	91.876138			1.00	1.00	180	180	1		
16	115								35073	67.421026			1.00	1.00	0	0	1		
17	116								35073	114.14087			1.00	1.00	180	180	1		
18	117								35073	190.79592			1.00	1.00	0	0	1		
19	118								35073	114.11938			1.00	1.00	0	0	1		
20	119								35073	85.164036			1.00	1.00	0	0	1		
21	120								35073	41.821743			1.00	1.00	0	0	1		
22	121								35073	0			1.00	1.00	0	0	1		
23	122								42365	18.114102			1.00	1.00	0	0	1		
24	123								42365	20.466173			1.00	1.00	0	0	1		
25	124								42365	673.99196			1.00	1.00	0	0	1		
26	125								42365	7.7583879			1.00	1.00	0	0	1		
27	126								53327	20.552784			1.00	1.00	0	0	1		
28	127								53327	2.4740264			1.00	1.00	0	0	1		
29	128								53327	0			1.00	1.00	0	0	1		
30	129								53327	6.8582813			1.00	1.00	0	0	1		
31	130								53327	68.155998			1.00	1.00	0	0	1		
32	131								45522	27.647288			1.00	1.00	180	180	1		
33	132								45522	14.144463			1.00	1.00	0	0	1		
34	133								53327	82.312854			1.00	1.00	0	0	1		
35	134								53327	160.80125			1.00	1.00	0	0	1		
36	135								53327	0.0248921			1.00	1.00	0	0	1		
37	136								53327	32.645893			1.00	1.00	0	0	1		
38	137								53327	89.780747			1.00	1.00	0	0	1		
39	138								53327	90.988788			1.00	1.00	0	0	1		
40	139								53327	29.156338			1.00	1.00	0	0	1		
41	140								53327	28.922895			1.00	1.00	0	0	1		
42	141								53327	0			1.00	1.00	0	0	1		
43	142								53327	9.962997			1.00	1.00	0	0	1		
44	143								53327	0.7945364			1.00	1.00	0	0	1		
45	144								0	0			1.00	1.00	0	0	1		
46	145								0	0			1.00	1.00	0	0	1		
47	146								0	0			1.00	1.00	0	0	1		
48	147								0	0			1.00	1.00	0	0	1		
49	148								0	0			1.00	1.00	0	0	1		
50	149								0	0			1.00	1.00	0	0	1		
51	150								0	0			1.00	1.00	0	0	1		
52	151								0	0			1.00	1.00	0	0	1		
53	152								0	0			1.00	1.00	0	0	1		
54	153								0	0			1.00	1.00	0	0	1		

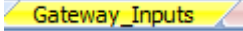


- 'SpecialGenerator_Inputs' tab 
 - Person production and attraction trip ends to represent special generators by purpose for internal zones
 - Tab should be modified by user to match desired model scenario



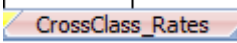
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
1	TAZ	HW_P	HS_P	HK_P	HC_P	HO_P	WO_P	OO_P	HY_P	TS_P	TM_P	TH_P	HW_A	HS_A	HK_A	HC_A	HO_A	WO_A	OO_A
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- 'Gateway_Inputs' tab 
 - Person production and attraction trip ends by purpose for external zones
 - Tab should be modified by user to match desired model scenario

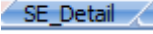
A1		; TAZ																	
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	
1	TAZ	HW_P	HS_P	HK_P	HC_P	HO_P	WO_P	OO_P	HY_P	TS_P	TM_P	TH_P	HW_A	HS_A	HK_A	HC_A	HO_A	WO_A	O
2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	24	28	2	0	0	15	24	28	6	5	0	0	127	43	0	22	118	19	0
26	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	26	199	1	0	0	24	26	210	20	14	1	0	116	138	0	112	604	155	0
28	27	282	37	0	0	44	46	76	22	14	3	3	50	3	0	200	1077	33	0
29	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33	32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34	33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36	35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
37	36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
38	37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39	38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40	39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43	42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0




- 'CrossClass_Rates' tab 
 - Percentages to cross-classify residential data, calculated percentages for employment
 - Tab is populated with census data. Should be modified by user to match desired model scenario if better data is available


A1 ; TAZ															
1	TAZ	STATE	COUNTY	PUMA	TRACT	BLOCKGROUP	STFID	RU1_HHPOP	RU2_HHPOP	RU3_HHPOP	RU4_HHPOP	RU5_HHPOP	RU6_HHPOP	RU7_HHPOP	RU8_HI
102	101						060390002001	3.10	3.81	3.18	2.95	2.74	3.45	1.63	1.9
103	102						060390003006	3.10	3.81	3.18	2.95	2.74	3.45	1.63	1.9
104	103						060390003006	3.10	3.81	3.18	2.95	2.74	3.45	1.63	1.9
105	104						060390003006	3.10	3.81	3.18	2.95	2.74	3.45	1.63	1.9
106	105						060390003001	3.10	3.81	3.18	2.95	2.74	3.45	1.63	1.9
107	106						060390003004	3.10	3.81	3.18	2.95	2.74	3.45	1.63	1.9
108	107						060390003006	3.10	3.81	3.18	2.95	2.74	3.45	1.63	1.9
109	108						060390003006	3.10	3.81	3.18	2.95	2.74	3.45	1.63	1.9
110	109						060390003003	3.10	3.81	3.18	2.95	2.74	3.45	1.63	1.9
111	110						060390003001	3.10	3.81	3.18	2.95	2.74	3.45	1.63	1.9
112	111						060390002001	3.10	3.81	3.18	2.95	2.74	3.45	1.63	1.9
113	112						060390003001	3.10	3.81	3.18	2.95	2.74	3.45	1.63	1.9
114	113						060390003003	3.10	3.81	3.18	2.95	2.74	3.45	1.63	1.9
115	114						060390003007	3.10	3.81	3.18	2.95	2.74	3.45	1.63	1.9
116	115						060390003002	3.10	3.81	3.18	2.95	2.74	3.45	1.63	1.9
117	116						060390003002	3.10	3.81	3.18	2.95	2.74	3.45	1.63	1.9
118	117						060390003002	3.10	3.81	3.18	2.95	2.74	3.45	1.63	1.9
119	118						060390003002	3.10	3.81	3.18	2.95	2.74	3.45	1.63	1.9
120	119						060390003002	3.10	3.81	3.18	2.95	2.74	3.45	1.63	1.9
121	120						060390003002	3.10	3.81	3.18	2.95	2.74	3.45	1.63	1.9
122	121						060390003002	3.10	3.81	3.18	2.95	2.74	3.45	1.63	1.9
123	122						060390002004	3.10	3.81	3.18	2.95	2.74	3.45	1.63	1.9
124	123						060390002004	3.10	3.81	3.18	2.95	2.74	3.45	1.63	1.9
125	124						060390002004	3.10	3.81	3.18	2.95	2.74	3.45	1.63	1.9
126	125						060390002004	3.10	3.81	3.18	2.95	2.74	3.45	1.63	1.9
127	126						060390002001	3.10	3.81	3.18	2.95	2.74	3.45	1.63	1.9
128	127						060390002001	3.10	3.81	3.18	2.95	2.74	3.45	1.63	1.9
129	128						060390002001	3.10	3.81	3.18	2.95	2.74	3.45	1.63	1.9
130	129						060390002001	3.10	3.81	3.18	2.95	2.74	3.45	1.63	1.9
131	130						060390002001	3.10	3.81	3.18	2.95	2.74	3.45	1.63	1.9
132	131						060390003001	3.10	3.81	3.18	2.95	2.74	3.45	1.63	1.9
133	132						060390003001	3.10	3.81	3.18	2.95	2.74	3.45	1.63	1.9
134	133						060390002001	3.10	3.81	3.18	2.95	2.74	3.45	1.63	1.9
135	134						060390002001	3.10	3.81	3.18	2.95	2.74	3.45	1.63	1.9
136	135						060390002001	3.10	3.81	3.18	2.95	2.74	3.45	1.63	1.9
137	136						060390002001	3.10	3.81	3.18	2.95	2.74	3.45	1.63	1.9
138	137						060390002001	3.10	3.81	3.18	2.95	2.74	3.45	1.63	1.9
139	138						060390002001	3.10	3.81	3.18	2.95	2.74	3.45	1.63	1.9
140	139						060390002001	3.10	3.81	3.18	2.95	2.74	3.45	1.63	1.9
141	140						060390002001	3.10	3.81	3.18	2.95	2.74	3.45	1.63	1.9
142	141						060390002001	3.10	3.81	3.18	2.95	2.74	3.45	1.63	1.9
143	142						060390002001	3.10	3.81	3.18	2.95	2.74	3.45	1.63	1.9
144	143						060390002001	3.10	3.81	3.18	2.95	2.74	3.45	1.63	1.9
145	144						0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0



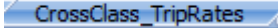
- 'SE_Detail' tab 
 - Detailed cross-classification socioeconomic data using 'LandUse_Inputs' tab and 'CrossClass_Rates' tab
 - Tab should not be modified by user, combination of other tabs and for review only. 'LandUse_Inputs' and 'CrossClass_Rates' should be modified instead

D102  =SUM(F102:O102)

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	TAZ	ATYPE	JURISDICTION	TOTHH	HHPOP	RU1	RU2	RU3	RU4	RU5	RU6	RU7	RU8	RU9	RU10	RU1 HHPOP	RU2 HHPOP	RU3 HHPOP	RU4 HHPOP	RU5 HHPOP
102	101	1	Chowchilla	238	721	192	4	6	3	0	0	0	0	33	0	596	16	19	8	0
103	102	1	Chowchilla	228	681	138	0	16	32	33	0	5	0	3	0	428	0	50	95	92
104	103	1	Chowchilla	140	420	85	0	10	20	21	0	3	0	2	0	264	0	31	58	57
105	104	1	Chowchilla	259	775	157	0	18	36	38	0	6	0	3	0	488	0	56	108	104
106	105	1	Chowchilla	226	703	223	3	0	0	0	0	0	0	0	0	692	11	0	0	0
107	106	1	Chowchilla	174	547	154	10	10	0	0	0	0	0	0	0	478	37	31	0	0
108	107	1	Chowchilla	106	318	64	0	7	15	16	0	3	0	1	0	200	0	23	44	43
109	108	1	Chowchilla	285	894	193	32	9	19	20	7	3	0	2	0	598	121	30	57	55
110	109	1	Chowchilla	183	563	122	10	9	16	25	0	0	0	0	0	378	39	30	47	69
111	110	1	Chowchilla	31	95	30	0	0	0	0	0	0	0	0	0	94	2	0	0	0
112	111	1	Chowchilla	1	3	1	0	0	0	0	0	0	0	0	0	2	0	0	0	0
113	112	1	Chowchilla	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
114	113	1	Chowchilla	221	698	154	20	20	19	6	2	0	0	0	0	479	76	62	56	17
115	114	1	Chowchilla	204	630	185	0	1	17	1	0	0	0	0	0	573	0	2	51	4
116	115	1	Chowchilla	2	6	2	0	0	0	0	0	0	0	0	0	5	0	0	0	0
117	116	1	Chowchilla	198	620	137	10	27	24	0	0	0	0	0	0	425	39	86	70	0
118	117	1	Chowchilla	33	104	23	2	5	4	0	0	0	0	0	0	71	7	14	12	0
119	118	1	Chowchilla	9	28	6	0	1	1	0	0	0	0	0	0	19	2	4	3	0
120	119	1	Chowchilla_Vacant	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
121	120	1	Chowchilla	2	6	1	0	0	0	0	0	0	0	0	0	4	0	1	1	0
122	121	1	Chowchilla	10	31	7	1	1	1	0	0	0	0	0	0	21	2	4	4	0
123	122	1	Chowchilla	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
124	123	1	Chowchilla_Vacant	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	124	1	Chowchilla	682	2069	552	12	17	7	0	0	0	0	94	0	1713	45	54	22	0
126	125	1	Chowchilla_Vacant	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
127	126	1	Chowchilla	2	5	1	0	0	0	0	0	0	0	0	0	5	0	0	0	0
128	127	1	Chowchilla_Vacant	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
129	128	1	Chowchilla	3	8	2	0	0	0	0	0	0	0	0	0	7	0	0	0	0
130	129	1	Chowchilla	4	11	3	0	0	0	0	0	0	0	0	0	9	0	0	0	0
131	130	1	Chowchilla	37	112	30	1	1	0	0	0	0	0	5	0	93	2	3	1	0
132	131	1	Chowchilla	80	249	79	1	0	0	0	0	0	0	0	0	245	4	0	0	0
133	132	1	Chowchilla	9	28	9	0	0	0	0	0	0	0	0	0	28	0	0	0	0
134	133	1	Chowchilla	46	139	37	1	1	0	0	0	0	0	6	0	115	3	4	1	0
135	134	1	Chowchilla	24	74	20	0	1	0	0	0	0	0	3	0	61	2	2	1	0
136	135	1	Chowchilla	4	11	3	0	0	0	0	0	0	0	0	0	9	0	0	0	0
137	136	1	Chowchilla	13	38	10	0	0	0	0	0	0	0	2	0	32	1	1	0	0
138	137	1	Chowchilla	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
139	138	1	Chowchilla	14	44	12	0	0	0	0	0	0	0	2	0	36	1	1	0	0
140	139	1	Chowchilla	15	46	12	0	0	0	0	0	0	0	2	0	38	1	1	0	0
141	140	1	Chowchilla	32	98	26	1	1	0	0	0	0	0	4	0	81	2	3	1	0
142	141	1	Chowchilla	1	3	1	0	0	0	0	0	0	0	0	0	2	0	0	0	0

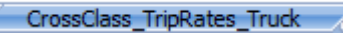
Gateway_Inputs CrossClass_Rates **SE_Detail** CrossClass_TripRates CrossClass_TripRates_Truck TGRate_Check CrossClass_PATrips Summary_Detail  100%



- 'CrossClass_TripRates' tab 
 - Cross-classified person trip generation rates
 - Tab should usually not be modified by user, for review only

AC1		fx																		
C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	
1	LU_Type	HW_P	HS_P	HK_P	HC_P	HO_P	WO_P	LO_P	HY_P	IS_P	IM_P	TH_P	HW_A	HS_A	HK_A	HC_A	HO_A	WO_A	LO_A	HY_A
2	TOTHH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	RU1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	RU2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	RU3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	RU4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	RU5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	RU6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	RU7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	RU8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	RU9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	RU10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	RUL_HHPOP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	RUL_HHPOP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	RUL_HHPOP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	RUL_HHPOP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	RUL_HHPOP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	RUL_HHPOP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	RUL_HHPOP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	RUL_HHPOP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	RUL_HHPOP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	RUL_HHPOP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	RUL_HHSIZE1_INC1	0.24	0.49	0.00	0.00	1.27	0.00	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.32	0.00	0.18	0.00	0.00
24	RUL_HHSIZE1_INC2	0.61	0.60	0.00	0.00	1.08	0.00	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.37	0.00	0.21	0.00	0.00
25	RUL_HHSIZE1_INC3	1.06	0.74	0.00	0.00	0.77	0.00	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.42	0.00	0.23	0.00	0.00
26	RUL_HHSIZE1_INC4	1.07	0.75	0.00	0.00	1.00	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.46	0.00	0.25	0.00	0.00
27	RUL_HHSIZE1_INC5	0.98	0.53	0.00	0.00	0.82	0.00	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.38	0.00	0.21	0.00	0.00
28	RUL_HHSIZE2_INC1	0.85	1.24	0.00	0.00	1.53	0.00	0.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.58	0.00	0.32	0.00	0.00
29	RUL_HHSIZE2_INC2	1.16	1.06	0.00	0.00	1.79	0.00	0.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.65	0.00	0.36	0.00	0.00
30	RUL_HHSIZE2_INC3	1.34	1.43	0.00	0.00	1.90	0.00	0.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.76	0.00	0.42	0.00	0.00
31	RUL_HHSIZE2_INC4	2.13	1.60	0.00	0.00	1.98	0.00	0.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.92	0.00	0.51	0.00	0.00
32	RUL_HHSIZE2_INC5	2.22	1.40	0.00	0.00	2.07	0.00	0.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.92	0.00	0.51	0.00	0.00
33	RUL_HHSIZE3_INC1	0.79	1.04	0.00	0.00	2.01	0.00	0.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.62	0.00	0.34	0.00	0.00
34	RUL_HHSIZE3_INC2	1.40	1.00	0.00	0.00	3.43	0.00	0.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.94	0.00	0.52	0.00	0.00
35	RUL_HHSIZE3_INC3	2.57	1.37	0.00	0.00	2.26	0.00	0.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.56	0.00	0.00
36	RUL_HHSIZE3_INC4	2.80	1.40	0.00	0.00	3.19	0.00	0.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.20	0.00	0.66	0.00	0.00
37	RUL_HHSIZE3_INC5	3.45	1.30	0.00	0.00	2.28	0.00	0.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.14	0.00	0.63	0.00	0.00
38	RUL_HHSIZE4_INC1	1.64	1.57	0.00	0.00	5.27	0.00	0.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.37	0.00	0.76	0.00	0.00
39	RUL_HHSIZE4_INC2	1.67	1.23	0.00	0.00	4.84	0.00	0.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.25	0.00	0.70	0.00	0.00
40	RUL_HHSIZE4_INC3	2.60	1.28	0.00	0.00	4.67	0.00	0.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.38	0.00	0.77	0.00	0.00
41	RUL_HHSIZE4_INC4	2.70	1.19	0.00	0.00	5.56	0.00	0.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.53	0.00	0.85	0.00	0.00
42	RUL_HHSIZE4_INC5	3.26	1.65	0.00	0.00	4.33	0.00	0.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.49	0.00	0.83	0.00	0.00
43	RUL_HHSIZE5_INC1	1.26	1.22	0.00	0.00	2.89	0.00	0.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.87	0.00	0.48	0.00	0.00
44	RUL_HHSIZE5_INC2	1.97	1.50	0.00	0.00	5.83	0.00	0.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.50	0.00	0.84	0.00	0.00
45	RUL_HHSIZE5_INC3	2.87	1.22	0.00	0.00	6.00	0.00	0.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.63	0.00	0.91	0.00	0.00
46	RUL_HHSIZE5_INC4	2.53	1.83	0.00	0.00	7.47	0.00	1.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.91	0.00	1.06	0.00	0.00
47	RUL_HHSIZE5_INC5	3.06	1.72	0.00	0.00	7.39	0.00	1.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.97	0.00	1.09	0.00	0.00
48	RUL_HHSIZE6_INC1	0.19	0.49	0.00	0.00	1.04	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.28	0.00	0.16	0.00	0.00
49	RUL_HHSIZE6_INC2	0.89	0.54	0.00	0.00	0.93	0.00	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.38	0.00	0.21	0.00	0.00
50	RUL_HHSIZE6_INC3	1.17	0.80	0.00	0.00	1.52	0.00	0.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.56	0.00	0.31	0.00	0.00
51	RUL_HHSIZE6_INC4	1.60	0.53	0.00	0.00	0.40	0.00	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41	0.00	0.23	0.00	0.00
52	RUL_HHSIZE6_INC5	1.74	0.12	0.00	0.00	0.86	0.00	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.44	0.00	0.24	0.00	0.00
53	RUL_HHSIZE7_INC1	0.63	0.15	0.00	0.00	1.26	0.00	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33	0.00	0.18	0.00	0.00
54	RUL_HHSIZE7_INC2	1.49	0.73	0.00	0.00	1.54	0.00	0.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61	0.00	0.34	0.00	0.00
55	RUL_HHSIZE7_INC3	1.37	0.47	0.00	0.00	1.87	0.00	0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.00	0.33	0.00	0.00
56	RUL_HHSIZE7_INC4	2.81	1.21	0.00	0.00	1.12	0.00	0.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.83	0.00	0.46	0.00	0.00
57	RUL_HHSIZE7_INC5	1.35	0.87	0.00	0.00	2.02	0.00	0.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.69	0.00	0.38	0.00	0.00
58	RUL_HHSIZE8_INC1	0.51	1.31	0.00	0.00	4.34	0.00	0.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.55	0.00	0.00
59	RUL_HHSIZE8_INC2	1.47	1.09	0.00	0.00	4.02	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.90	0.00	0.50	0.00	0.00



- 'CrossClass_TripRates_Truck' tab 
 - Cross-classified truck trip generation rates
 - Tab should usually not be modified by user, for review only

A1		/* LU Code																
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
1	/* LU Code	LU Type	TS_People	TS_Mail	TS_UrbFrt	TS_Const	TS_Service	TM_People	TM_Mail	TM_UrbFrt	TM_Const	TM_Service	TH_People	TH_Mail	TH_UrbFrt	TH_Const	TH_Service	*/
2	101	TOTHH	0.0075	0.00167	0.03551	0.03041	0.35243	0.0077	0.00012	0.01085	0.01615	0.14309	0	0.00001	0.00323	0.00369	0.00151	
3	102	TOTEMP	0.0121	0.00167	0	0.03041	0.32839	0.00238	0.00012	0	0.01615	0.12736	0	0.00001	0	0.00369	0.00151	
4	103	RETAIL	0	0	0.12571	0	0	0	0	0.02769	0	0	0	0	0.00554	0	0	
5	104	AG	0	0	0.15714	0	0	0	0	0.03167	0	0	0	0	0.01482	0	0	
6	105	MINING	0	0	0.15714	0	0	0	0	0.03167	0	0	0	0	0.01482	0	0	
7	106	CONSTR	0	0	0.15714	0.03041	0	0	0	0.03167	0.01615	0	0	0	0.01482	0.00369	0	
8	107	MFGPRO	0	0	0.13278	0	0	0	0	0.02653	0	0	0	0	0.00885	0	0	
9	108	MFGEQUI	0	0	0.13278	0	0	0	0	0.02653	0	0	0	0	0.00885	0	0	
10	109	TRANSP	0	0	0.13278	0	0	0	0	0.02653	0	0	0	0	0.00885	0	0	
11	110	WHLSALE	0	0	0.13278	0	0	0	0	0.02653	0	0	0	0	0.00885	0	0	
12	111	FINANCE	0	0	0.06186	0	0	0	0	0.0074	0	0	0	0	0.00076	0	0	
13	112	EDUGOV	0	0	0.06186	0	0	0	0	0.0074	0	0	0	0	0.00076	0	0	
14																		
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- 'TGRate_Check' tab
 - Person trip generation rate and percentage distribution by purpose
 - Tab should not be modified by user, for review only

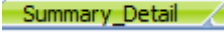
A1 ; TRIP RATES AND FRACTIONS BY TRIP PURPOSE														
TRIP RATE	TR_ID = ATYPE*1000 + LU_ID	UNIT	Daily Person Trip Rate	HW_P	HS_P	HK_P	HC_P	HO_P	WO_P	OO_P	HY_P	TS_P	TM_P	TH_P
AREA 1														
1001 TOTHH	Dwelling Units	0.00	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1002 RU1	Dwelling Units	0.00	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1003 RU2	Dwelling Units	0.00	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1004 RU3	Dwelling Units	0.00	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1005 RU4	Dwelling Units	0.00	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1006 RU5	Dwelling Units	0.00	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1007 RU6	Dwelling Units	0.00	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1008 RU7	Dwelling Units	0.00	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1009 RU8	Dwelling Units	0.00	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1010 RU9	Dwelling Units	0.00	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1011 RU10	Dwelling Units	0.00	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1012 RU1_HHPOP	People	0.00	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1013 RU2_HHPOP	People	0.00	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1014 RU3_HHPOP	People	0.00	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1015 RU4_HHPOP	People	0.00	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1016 RU5_HHPOP	People	0.00	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1017 RU6_HHPOP	People	0.00	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1018 RU7_HHPOP	People	0.00	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1019 RU8_HHPOP	People	0.00	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1020 RU9_HHPOP	People	0.00	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1021 RU10_HHPOP	People	0.00	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1022 RU1_HHSIZE1_INC1	Dwelling Units	2.69	9.1%	18.2%	0.0%	0.0%	47.3%	0.0%	6.7%	0.0%	0.0%	0.0%	0.0%	0.0%
1023 RU1_HHSIZE1_INC2	Dwelling Units	3.07	19.9%	19.5%	0.0%	0.0%	35.2%	0.0%	6.7%	0.0%	0.0%	0.0%	0.0%	0.0%
1024 RU1_HHSIZE1_INC3	Dwelling Units	3.44	30.7%	21.5%	0.0%	0.0%	22.4%	0.0%	6.7%	0.0%	0.0%	0.0%	0.0%	0.0%
1025 RU1_HHSIZE1_INC4	Dwelling Units	3.78	28.4%	19.7%	0.0%	0.0%	26.4%	0.0%	6.7%	0.0%	0.0%	0.0%	0.0%	0.0%
1026 RU1_HHSIZE1_INC5	Dwelling Units	3.13	31.3%	16.9%	0.0%	0.0%	26.3%	0.0%	6.7%	0.0%	0.0%	0.0%	0.0%	0.0%
1027 RU1_HHSIZE2_INC1	Dwelling Units	4.85	17.5%	25.5%	0.0%	0.0%	31.6%	0.0%	6.7%	0.0%	0.0%	0.0%	0.0%	0.0%
1028 RU1_HHSIZE2_INC2	Dwelling Units	5.38	21.5%	19.7%	0.0%	0.0%	33.3%	0.0%	6.7%	0.0%	0.0%	0.0%	0.0%	0.0%
1029 RU1_HHSIZE2_INC3	Dwelling Units	6.27	21.4%	22.9%	0.0%	0.0%	30.3%	0.0%	6.7%	0.0%	0.0%	0.0%	0.0%	0.0%
1030 RU1_HHSIZE2_INC4	Dwelling Units	7.65	27.8%	20.9%	0.0%	0.0%	25.9%	0.0%	6.7%	0.0%	0.0%	0.0%	0.0%	0.0%
1031 RU1_HHSIZE2_INC5	Dwelling Units	7.64	29.0%	18.4%	0.0%	0.0%	27.1%	0.0%	6.7%	0.0%	0.0%	0.0%	0.0%	0.0%
1032 RU1_HHSIZE3_INC1	Dwelling Units	5.15	15.3%	20.2%	0.0%	0.0%	39.0%	0.0%	6.7%	0.0%	0.0%	0.0%	0.0%	0.0%
1033 RU1_HHSIZE3_INC2	Dwelling Units	7.82	17.9%	12.8%	0.0%	0.0%	43.8%	0.0%	6.7%	0.0%	0.0%	0.0%	0.0%	0.0%
1034 RU1_HHSIZE3_INC3	Dwelling Units	8.33	30.9%	16.5%	0.0%	0.0%	27.2%	0.0%	6.7%	0.0%	0.0%	0.0%	0.0%	0.0%
1035 RU1_HHSIZE3_INC4	Dwelling Units	9.91	28.2%	14.2%	0.0%	0.0%	32.1%	0.0%	6.7%	0.0%	0.0%	0.0%	0.0%	0.0%
1036 RU1_HHSIZE3_INC5	Dwelling Units	9.43	36.6%	13.8%	0.0%	0.0%	24.1%	0.0%	6.7%	0.0%	0.0%	0.0%	0.0%	0.0%
1037 RU1_HHSIZE4_INC1	Dwelling Units	11.38	14.5%	13.8%	0.0%	0.0%	46.3%	0.0%	6.7%	0.0%	0.0%	0.0%	0.0%	0.0%
1038 RU1_HHSIZE4_INC2	Dwelling Units	10.40	16.1%	11.9%	0.0%	0.0%	46.6%	0.0%	6.7%	0.0%	0.0%	0.0%	0.0%	0.0%
1039 RU1_HHSIZE4_INC3	Dwelling Units	11.47	22.7%	11.2%	0.0%	0.0%	40.7%	0.0%	6.7%	0.0%	0.0%	0.0%	0.0%	0.0%
1040 RU1_HHSIZE4_INC4	Dwelling Units	12.68	24.3%	0.4%	0.0%	0.0%	47.0%	0.0%	6.7%	0.0%	0.0%	0.0%	0.0%	0.0%



- CrossClass_PATrips

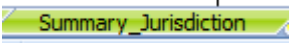
Ready 66%



- 'Summary_Detail' tab 
 - Numeric and percentage break down of socioeconomic data and productions / attractions by cross-classified variables
 - Tab should not be modified by user, for review only

Summary by Land Use Category															
Category	Development	Productions	Attractions	Total	% Dev	%Prod	%Attr	% Tot							
TOTHH	38,985	0.00	0.00	0.00				N/A							
RU1	29,366	0.00	0.00	0.00	75%	Trips generated by cross-classified residential									
RU2	830	0.00	0.00	0.00	2%										
RU3	1,020	0.00	0.00	0.00	3%										
RU4	2,113	0.00	0.00	0.00	5%										
RU5	747	0.00	0.00	0.00	2%										
RU6	133	0.00	0.00	0.00	0%										
RU7	124	0.00	0.00	0.00	0%										
RU8	329	0.00	0.00	0.00	1%										
RU9	4,049	0.00	0.00	0.00	10%										
RU10	274	0.00	0.00	0.00	1%										
RU1_HHPOP	91,095	0.00	0.00	0.00	77%	Trips generated by cross-classified residential									
RU2_HHPOP	3,159	0.00	0.00	0.00	3%										
RU3_HHPOP	3,242	0.00	0.00	0.00	3%										
RU4_HHPOP	6,236	0.00	0.00	0.00	5%										
RU5_HHPOP	2,048	0.00	0.00	0.00	2%										
RU6_HHPOP	459	0.00	0.00	0.00	0%										
RU7_HHPOP	202	0.00	0.00	0.00	0%										
RU8_HHPOP	652	0.00	0.00	0.00	1%										
RU9_HHPOP	10,162	0.00	0.00	0.00	9%										
RU10_HHPOP	323	0.00	0.00	0.00	0%										
RU1_HHSIZE1_INC1	1,727	3773.45	871.05	4644.50	4%	1%	1%	1%							
RU1_HHSIZE1_INC2	1,583	3948.64	911.49	4860.13	4%	2%	2%	2%							
RU1_HHSIZE1_INC3	690	1930.58	445.65	2376.23	2%	1%	1%	1%							
RU1_HHSIZE1_INC4	622	1911.64	441.28	2352.91	2%	1%	1%	1%							
RU1_HHSIZE1_INC5	187	475.43	109.75	585.17	0%	0%	0%	0%							
RU1_HHSIZE2_INC1	912	3591.70	829.10	4420.79	2%	1%	1%	1%							
RU1_HHSIZE2_INC2	1,919	8382.23	1934.93	10317.16	5%	3%	3%	3%							
RU1_HHSIZE2_INC3	1,825	9300.36	2146.86	11447.22	5%	4%	4%	4%							
RU1_HHSIZE2_INC4	2,466	15333.20	3539.47	18872.67	6%	6%	6%	6%							
RU1_HHSIZE2_INC5	2,668	16555.78	3821.68	20377.47	7%	7%	7%	7%							
RU1_HHSIZE3_INC1	245	1025.79	236.79	1262.58	1%	0%	0%	0%							
RU1_HHSIZE3_INC2	849	5395.54	1245.49	6641.03	2%	2%	2%	2%							
RU1_HHSIZE3_INC3	1,041	7043.10	1625.81	8668.91	3%	3%	3%	3%							
RU1_HHSIZE3_INC4	1,407	11329.05	2615.16	13944.21	4%	4%	4%	4%							
RU1_HHSIZE3_INC5	1,219	9339.58	2155.92	11495.50	3%	4%	4%	4%							
RU1_HHSIZE4_INC1	497	4590.56	1059.67	5650.23	1%	2%	2%	2%							
RU1_HHSIZE4_INC2	888	7496.59	1730.49	9227.07	2%	3%	3%	3%							
RU1_HHSIZE4_INC3	1,205	11228.61	2591.98	13820.58	3%	4%	4%	4%							
RU1_HHSIZE4_INC4	1,217	12532.93	2893.06	15425.99	3%	5%	5%	5%							
RU1_HHSIZE4_INC5	1,197	12047.15	2780.92	14828.07	3%	5%	5%	5%							
RU1_HHSIZE5_INC1	492	2882.43	665.37	3547.80	1%	1%	1%	1%							
RU1_HHSIZE5_INC2	1,803	18274.01	4218.31	22492.32	5%	7%	7%	7%							

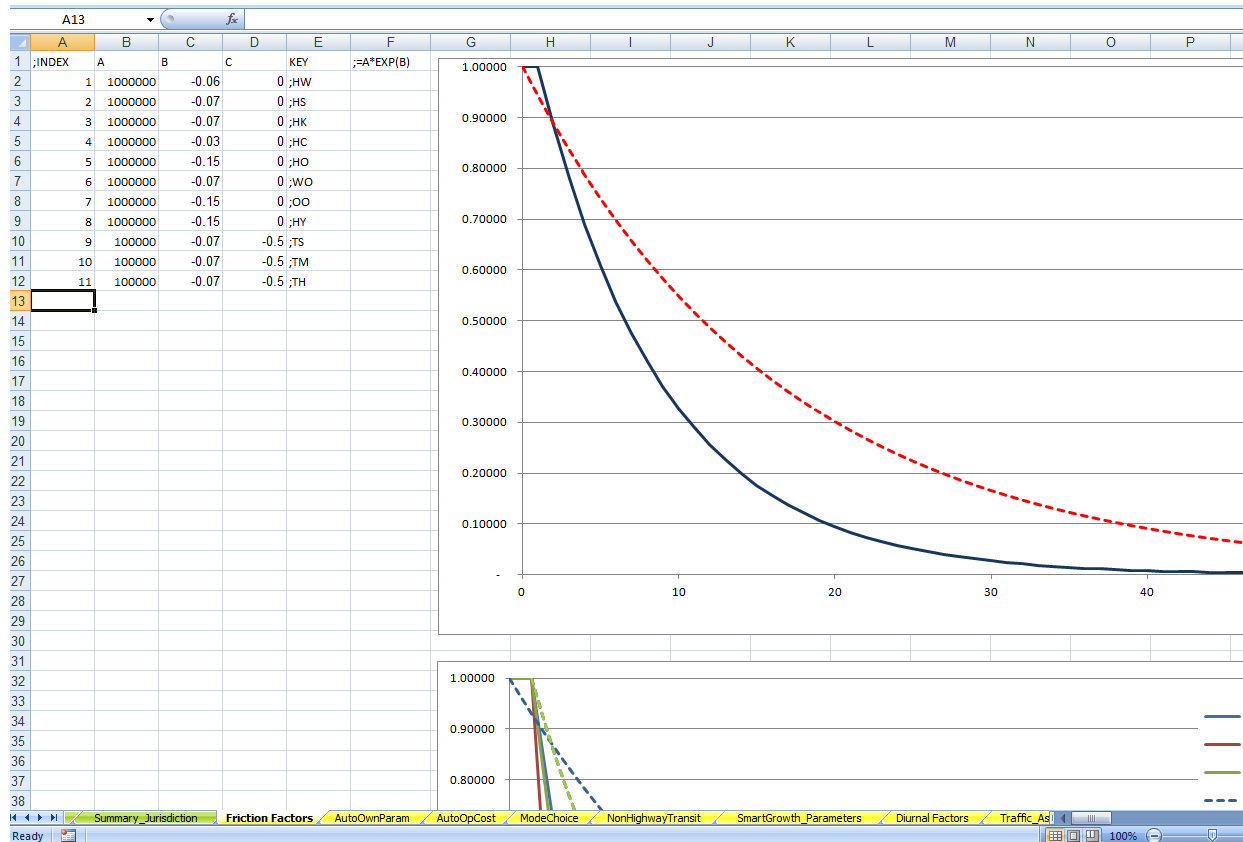


- 'Summary_Jurisdiction' tab 
 - Summary of land use inputs by jurisdiction
 - Tab should not be modified by user, for review only. 'LandUse_Inputs' and 'CrossClass_Rates' should be modified if desired

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
		TOTHH	HHPOP	RU1	RU2	RU3	RU4	RU5	RU6	RU7	RU8	RU9	RU10	TOTEMP	AGRICULTUR	MINING	UTILIT
3	Chowchilla	3,523	10,799	2,678	109	161	###	161	9	21	-	167	-	2,633	1	-	-
4	Madera	14,313	43,196	9,651	380	647	###	458	###	78	###	1,329	24	13,897	82	-	-
5	MaderaCo	21,150	63,584	17,037	341	212	###	128	5	25	###	2,554	251	24,848	2,724	6	-
6	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	Total	38,985	117,579	29,366	830	1,020	###	747	###	###	###	4,049	274	41,377	2,808	6	-
30																	
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- 'Friction Factors' tab **Friction Factors**
 - Composite cost impedance factors by purpose
 - Tab should usually not be modified by user

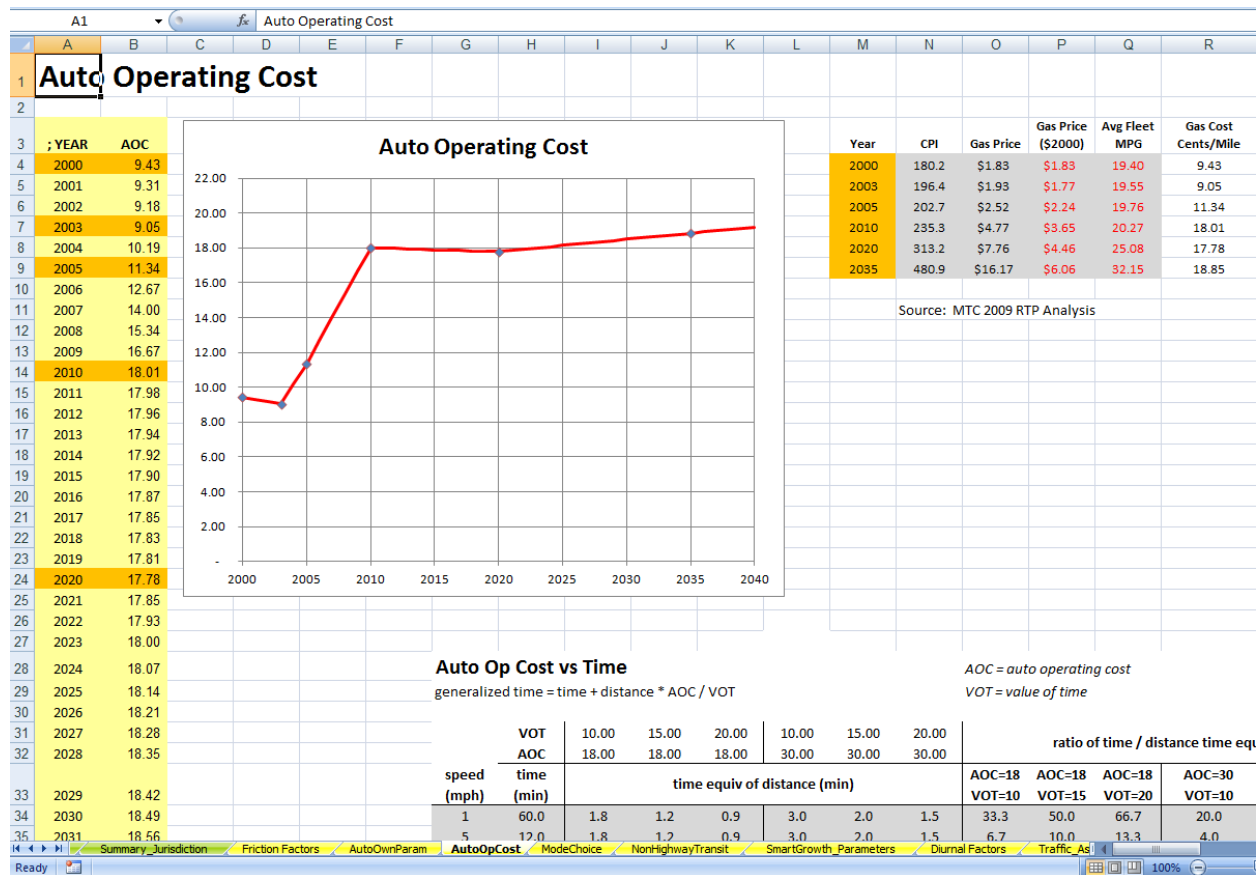


- 'AutoOwnParam' tab **AutoOwnParam**
 - Auto ownership model parameters
 - Tab should usually not be modified by user

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
1	INDEX	VEH0	VEH1	VEH2	VEH3	VEH4	KEY												
2	1	-0.88953	-0.37808	0.041146	-0.34796		0 ;CONSTANT												
3	2	0.44	0	0	0	0	0 ;Veh accessibility												
4	11	0	0	0	0	0	0 ;RU1												
5	12	0	0	0	0	0	0 ;RU3												
6	13	1.95	0.98	0	0	0	0 ;RU9												
7	21	-8.268	0.44	0	-0.94	-3.22	HH1												
8	22	-10.85	-2.2	0	-0.88	-1.17	HH2												
9	23	-11.1	-2.26	0	0.13	-0.64	HH3												
10	24	-11.7	-2.45	0	-0.33	-0.36	HH4												
11	25	-11.7	-2.45	0	0.67	-0.37	HH5P												
12	31	4.65	2.33	0	-0.56	-1.47	V0												
13	32	1.97	1.41	0	-0.52	-1.13	V1												
14	33	0	0.76	0	-0.21	-0.58	V2												
15	34	0	0	0	0	0	V3												
16	35	-2	-0.43	0	0	0	V4P												
17																			
18																			
19																			
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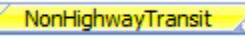
- 'AutoOpCost' tab **AutoOpCost**
 - Auto operating cost
 - Tab should be modified by user to match desired model scenario



- 'ModeChoice' tab **ModeChoice**
 - Mode choice model parameters by purpose
 - Tab should usually not be modified by user

;Mode Choice Coefficients																		
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
1	;Mode Choice Coefficients																	
2	INDEX	PURP	SEGMENT	Period	CLC_TIME	CL_FAC	CL_PKCOS	CL_C_D1	CL_C_S2	CL_C_S3	CL_C_TW	CL_C_TD	CL_C_BK	CL_C_WK	TIMEPEN	TIMEPEN	DACC_PE	KEY
3	11	1	1 PK	-0.025	2	0.25	0.0004	-3.3842	-3.4843	-2.6367	-6.3812	-9.7499	-2.4001	5	7	2	HW	0 Veh HH
4	12	1	2 PK	-0.025	2	0.25	0.0004	-1.9057	-1.8337	-3.6367	-7.3249	-10.5476	-1.2528	5	7	2	HW	1 Veh-2PHH
5	13	1	3 PK	-0.025	2	0.25	0.0004	-1.6061	-1.2596	-9.7971	-12.1374	-13.5009	-4.8022	5	7	2	HW	All Other HH
6	21	2	1 OK	-0.025	2	0.25	0.7926	-0.7863	-0.4578	-2.2526	-3.0754	-2.0119	-1.4428	5	7	2	HS	0 Veh HH
7	22	2	2 OK	-0.025	2	0.25	0.7926	-0.0901	0.4142	-3.2465	-5.481	-3.5764	-2.8885	5	7	2	HS	1 Veh-2PHH
8	23	2	3 OK	-0.025	2	0.25	0.7926	0.1113	0.8068	-7.5488	-7.6465	-3.633	-5.0663	5	7	2	HS	All Other HH
9	31	3	1 OK	-0.025	2	0.25	0.7926	-0.365	-0.9907	2.3635	2.2173	-2.7004	0.2354	5	7	2	HK	0 Veh HH
10	32	3	2 OK	-0.025	2	0.25	0.7926	1.602	0.9297	-1.9196	-3.0016	-4.1505	-0.752	5	7	2	HK	1 Veh-2PHH
11	33	3	3 OK	-0.025	2	0.25	0.7926	1.5346	1.5939	-1.2934	-2.4954	-4.9516	-0.5623	5	7	2	HK	All Other HH
12	41	4	1 OK	-0.025	2	0.25	0.7926	-0.365	-0.9907	2.3635	2.2173	-2.7004	0.2354	5	7	2	HC	0 Veh HH
13	42	4	2 OK	-0.025	2	0.25	0.7926	1.602	0.9297	-1.9196	-3.0016	-4.1505	-0.752	5	7	2	HC	1 Veh-2PHH
14	43	4	3 OK	-0.025	2	0.25	0.7926	1.5346	1.5939	-1.2934	-2.4954	-4.9516	-0.5623	5	7	2	HC	All Other HH
15	51	5	1 OK	-0.025	2	0.25	0.7926	-0.6017	-1.5449	-2.0945	2.4301	-4.9984	1.3008	5	7	2	HO	0 Veh HH
16	52	5	2 OK	-0.025	2	0.25	0.7926	0.5905	-0.0694	-6.542	-3.7247	-6.6367	-1.3237	5	7	2	HO	1 Veh-2PHH
17	53	5	3 OK	-0.025	2	0.25	0.7926	1.0681	0.5044	-7.795	-5.4266	-7.6164	-1.5929	5	7	2	HO	All Other HH
18	61	6	1 OK	-0.025	2	0.25	-0.0105	-1.7447	-1.719	-0.8822	4.3988	-3.0117	-0.0061	5	7	2	WO	0 Veh HH
19	62	6	2 OK	-0.025	2	0.25	-0.0105	-0.4088	-1.0042	-6.0947	-2.7219	-4.8244	-3.1885	5	7	2	WO	1 Veh-2PHH
20	63	6	3 OK	-0.025	2	0.25	-0.0105	-0.0103	-0.467	-6.265	-2.7884	-6.617	-3.5016	5	7	2	WO	All Other HH
21	71	7	1 OK	-0.025	2	0.25	-0.0105	-1.7447	-1.719	-0.8822	4.3988	-3.0117	-0.0061	5	7	2	OO	0 Veh HH
22	72	7	2 OK	-0.025	2	0.25	-0.0105	-0.4088	-1.0042	-6.0947	-2.7219	-4.8244	-3.1885	5	7	2	OO	1 Veh-2PHH
23	73	7	3 OK	-0.025	2	0.25	-0.0105	-0.0103	-0.467	-6.265	-2.7884	-6.617	-3.5016	5	7	2	OO	All Other HH
24	81	8	1 OK	-0.025	2	0.25	-0.0105	-1.7447	-1.719	3.2886	4.3988	-1.0117	-0.0061	5	7	2	HY	0 Veh HH
25	82	8	2 OK	-0.025	2	0.25	-0.0105	-0.4088	-1.0042	-3.0947	-2.7219	-3.8244	-3.1885	5	7	2	HY	1 Veh-2PHH
26	83	8	3 OK	-0.025	2	0.25	-0.0105	-0.0103	-0.467	-2.765	-2.7884	-5.617	-3.5016	5	7	2	HY	All Other HH
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- 'NonHighwayTransit' tab 
 - XY coordinates for transit only nodes and node coordinates for non-highway transit links
 - Tab should be modified by user to match desired model scenario

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	N	X	Y		A	B	AM_TIME_B	MD_TIME_B	PM_TIME_B	NT_TIME_B		;Only input one-way links. Macro will mirror			
2	40001	6252383.731	2343693.256		40001	10455	2	2	2	2					
3															
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7															
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- 'SmartGrowth_Parameters' tab
 - Smart Growth adjustment (MXD model) parameters
 - Tab should usually not be modified by user

B1		A																	
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
1	INDEX	A	KEY																
2	1	-999	.INTCAP_HBW_CONSTANT																
3	2	-999	.INTCAP_HBW_MXD_EMP																
4	3	-999	.INTCAP_HBW_MXD_AREA																
5	4	-999	.INTCAP_HBW_DIVERSITY																
6	5	-999	.INTCAP_HBW_INTDEN																
7	6	-999	.INTCAP_HBW_HHSIZE																
8	7	-999	.INTCAP_HBW_VEHOWN																
9	8	-999	.INTCAP_HBO_CONSTANT																
10	9	-999	.INTCAP_HBO_MXD_EMP																
11	10	-999	.INTCAP_HBO_MXD_AREA																
12	11	-999	.INTCAP_HBO_DIVERSITY																
13	12	-999	.INTCAP_HBO_INTDEN																
14	13	-999	.INTCAP_HBO_HHSIZE																
15	14	-999	.INTCAP_HBO_VEHOWN																
16	15	-999	.INTCAP_NHB_CONSTANT																
17	16	-999	.INTCAP_NHB_MXD_EMP																
18	17	-999	.INTCAP_NHB_MXD_AREA																
19	18	-999	.INTCAP_NHB_DIVERSITY																
20	19	-999	.INTCAP_NHB_INTDEN																
21	20	-999	.INTCAP_NHB_HHSIZE																
22	21	-999	.INTCAP_NHB_VEHOWN																
23	22	-999	.EXTWALK_HBW_CONSTANT																
24	23	-999	.EXTWALK_HBW_MXD_AREA																
25	24	-999	.EXTWALK_HBW_DENSITY																
26	25	-999	.EXTWALK_HBW_DIVERSITY																
27	26	-999	.EXTWALK_HBW_RETAIL_DIVERSITY																
28	27	-999	.EXTWALK_HBW_INTDEN																
29	28	-999	.EXTWALK_HBW_EMP_1WALK																
30	29	-999	.EXTWALK_HBW_HHSIZE																
31	30	-999	.EXTWALK_HBW_VEHOWN																
32	31	-999	.EXTWALK_HBO_CONSTANT																
33	32	-999	.EXTWALK_HBO_MXD_AREA																
34	33	-999	.EXTWALK_HBO_DENSITY																
35	34	-999	.EXTWALK_HBO_DIVERSITY																
36	35	-999	.EXTWALK_HBO_RETAIL_DIVERSITY																
37	36	-999	.EXTWALK_HBO_INTDEN																
38	37	-999	.EXTWALK_HBO_EMP_1WALK																
39	38	-999	.EXTWALK_HBO_HHSIZE																
40	39	-999	.EXTWALK_HBO_VEHOWN																
41	40	-999	.EXTWALK_NHB_CONSTANT																
42	41	-999	.EXTWALK_NHB_MXD_AREA																
43	42	-999	.EXTWALK_NHB_DENSITY																
44	43	-999	.EXTWALK_NHB_DIVERSITY																
45	44	-999	.EXTWALK_NHB_RETAIL_DIVERSITY																



- 'Diurnal Factors' tab
 - Diurnal (peaking) factors by purpose and mode
 - Tab should usually not be modified by user

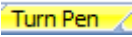
AS134																
f _s 0																
Diurnal factors by mode and purpose																
Drive Alone																
Lookup	Hour	DEP_HV	DEP_HS	DEP_HK	DEP_HC	DEP_HO	DEP_VO	DEP_OO	DEP_HY	DEP_TS	DEP_TM	DEP_TH	RET_HV	RET_HS	RET_HK	
101	1	0.0018	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0121	0.0007	0.0108	0.0042	0.0037	0.0
102	2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0121	0.0007	0.0108	0.0025	0.0000	0.0
103	3	0.0000	0.0020	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0020	0.0000	0.0000	0.0000	0.0014	0.0020	0.0
104	4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0121	0.0007	0.0108	0.0000	0.0000	0.0
105	5	0.0217	0.0045	0.0000	0.0000	0.0004	0.0000	0.0000	0.0000	0.0045	0.0000	0.0000	0.0108	0.0004	0.0000	0.0
106	6	0.0339	0.0000	0.0000	0.0000	0.0050	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0045	0.0000	0.0
107	7	0.0916	0.0064	0.0196	0.0196	0.0210	0.0034	0.0000	0.0064	0.0000	0.0025	0.0408	0.0345	0.0061	0.0000	0.0
108	8	0.1748	0.0081	0.2190	0.2190	0.1823	0.0120	0.0228	0.0181	0.0000	0.0025	0.0408	0.0345	0.0004	0.0009	0.0
109	9	0.0575	0.0238	0.0524	0.0524	0.0514	0.0164	0.0138	0.0238	0.0000	0.0000	0.0000	0.0000	0.0019	0.0167	0.0
110	10	0.0313	0.0554	0.0537	0.0537	0.0335	0.0586	0.0170	0.0554	0.0000	0.0000	0.0000	0.0000	0.0015	0.0241	0.0
111	11	0.0174	0.0377	0.0256	0.0256	0.0343	0.0570	0.0251	0.0377	0.0169	0.0252	0.0239	0.0047	0.0184	0.0000	0.0
112	12	0.0054	0.0377	0.0181	0.0181	0.0368	0.0604	0.0462	0.0377	0.0169	0.0252	0.0239	0.0000	0.0000	0.0000	0.0
113	13	0.0057	0.0273	0.0544	0.0544	0.0135	0.0933	0.0305	0.0273	0.0169	0.0252	0.0239	0.0000	0.0000	0.0000	0.0
114	14	0.0203	0.0247	0.0415	0.0415	0.0291	0.0370	0.0569	0.0247	0.0169	0.0252	0.0239	0.0111	0.0337	0.0000	0.0
115	15	0.0075	0.0328	0.0025	0.0025	0.0364	0.0525	0.0370	0.0328	0.0169	0.0252	0.0239	0.0244	0.0352	0.0000	0.0
116	16	0.0062	0.0195	0.0000	0.0000	0.0351	0.0677	0.0373	0.0195	0.0169	0.0252	0.0239	0.0617	0.0468	0.0000	0.0
117	17	0.0021	0.0301	0.0055	0.0055	0.0255	0.0634	0.0285	0.0301	0.0578	0.0414	0.0357	0.1119	0.0459	0.0000	0.0
118	18	0.0045	0.0578	0.0256	0.0256	0.0228	0.0810	0.0302	0.0578	0.0578	0.0414	0.0357	0.1262	0.0785	0.0000	0.0
119	19	0.0103	0.0436	0.0291	0.0291	0.0288	0.0164	0.0187	0.0436	0.0578	0.0414	0.0357	0.0501	0.0510	0.0000	0.0
120	20	0.0008	0.0446	0.0000	0.0000	0.0181	0.0069	0.0060	0.0446	0.0000	0.0000	0.0000	0.0207	0.0473	0.0000	0.0
121	21	0.0015	0.0143	0.0000	0.0000	0.0187	0.0021	0.0036	0.0143	0.0000	0.0000	0.0000	0.0006	0.0212	0.0000	0.0
122	22	0.0034	0.0018	0.0000	0.0000	0.0005	0.0000	0.0000	0.0034	0.0000	0.0000	0.0000	0.0004	0.0182	0.0000	0.0
123	23	0.0019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0072	0.0000	0.0000	0.0000	0.0000	0.0123	0.0000	0.0000	0.0
124	24	0.0008	0.0019	0.0039	0.0039	0.0029	0.0019	0.0019	0.0019	0.0000	0.0000	0.0000	0.0119	0.0000	0.0000	0.0
Shaded 2																
Shaded 2 SR2																
201	2	0.0018	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0042	0.0037	0.0	0.0
202	2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0025	0.0000	0.0	0.0
203	3	0.0000	0.0020	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0020	0.0000	0.0000	0.0000	0.0014	0.0020	0.0
204	4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0
205	5	0.0217	0.0045	0.0000	0.0000	0.0004	0.0000	0.0000	0.0000	0.0045	0.0000	0.0000	0.0000	0.0004	0.0000	0.0
206	6	0.0339	0.0000	0.0000	0.0000	0.0050	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0045	0.0000	0.0
207	7	0.0916	0.0064	0.0196	0.0196	0.0210	0.0034	0.0000	0.0064	0.0000	0.0000	0.0000	0.0061	0.0000	0.0000	0.0
208	8	0.1748	0.0081	0.2190	0.2190	0.1823	0.0120	0.0228	0.0181	0.0000	0.0000	0.0000	0.0004	0.0009	0.0000	0.0
209	9	0.0575	0.0238	0.0524	0.0524	0.0514	0.0164	0.0138	0.0238	0.0000	0.0000	0.0000	0.0000	0.0019	0.0167	0.0
210	10	0.0313	0.0554	0.0537	0.0537	0.0335	0.0586	0.0170	0.0554	0.0000	0.0000	0.0000	0.0000	0.0015	0.0241	0.0
211	11	0.0174	0.0377	0.0256	0.0256	0.0343	0.0570	0.0251	0.0377	0.0000	0.0000	0.0000	0.0047	0.0184	0.0000	0.0
212	12	0.0054	0.0377	0.0181	0.0181	0.0368	0.0604	0.0462	0.0377	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0
213	13	0.0057	0.0273	0.0544	0.0544	0.0135	0.0933	0.0305	0.0273	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0
214	14	0.0203	0.0247	0.0415	0.0415	0.0291	0.0370	0.0569	0.0247	0.0000	0.0000	0.0000	0.0111	0.0337	0.0000	0.0
215	15	0.0075	0.0328	0.0025	0.0025	0.0364	0.0525	0.0370	0.0328	0.0000	0.0000	0.0000	0.0244	0.0352	0.0000	0.0
216	16	0.0062	0.0195	0.0000	0.0000	0.0351	0.0677	0.0373	0.0195	0.0000	0.0000	0.0000	0.0617	0.0468	0.0000	0.0
217	17	0.0021	0.0301	0.0055	0.0055	0.0255	0.0634	0.0285	0.0301	0.0000	0.0000	0.0000	0.1119	0.0459	0.0000	0.0
218	18	0.0045	0.0578	0.0256	0.0256	0.0228	0.0810	0.0302	0.0578	0.0000	0.0000	0.0000	0.1262	0.0785	0.0000	0.0
219	19	0.0103	0.0436	0.0291	0.0291	0.0288	0.0164	0.0187	0.0436	0.0000	0.0000	0.0000	0.0501	0.0510	0.0000	0.0
220	20	0.0008	0.0446	0.0000	0.0000	0.0181	0.0069	0.0060	0.0446	0.0000	0.0000	0.0000	0.0207	0.0473	0.0000	0.0
221	21	0.0015	0.0143	0.0000	0.0000	0.0187	0.0021	0.0036	0.0143	0.0000	0.0000	0.0000	0.0006	0.0212	0.0000	0.0
222	22	0.0034	0.0018	0.0000	0.0000	0.0005	0.0000	0.0000	0.0034	0.0000	0.0000	0.0000	0.0004	0.0182	0.0000	0.0
223	23	0.0019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0072	0.0000	0.0000	0.0000	0.0000	0.0123	0.0000	0.0000	0.0
224	24	0.0008	0.0019	0.0039	0.0039	0.0029	0.0019	0.0019	0.0019	0.0000	0.0000	0.0000	0.0119	0.0000	0.0000	0.0
Shaded 3																
Shaded 3 SR3																
301	3	0.0018	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0042	0.0037	0.0	0.0
302	3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0025	0.0000	0.0	0.0
303	3	0.0000	0.0020	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0020	0.0000	0.0000	0.0000	0.0014	0.0020	0.0
304	4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0
305	5	0.0217	0.0045	0.0000	0.0000	0.0004	0.0000	0.0000	0.0000	0.0045	0.0000	0.0000	0.0000	0.0004	0.0000	0.0
306	6	0.0339	0.0000	0.0000	0.0000	0.0050	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0045	0.0000	0.0
307	7	0.0916	0.0064	0.0196	0.0196	0.0210	0.0034	0.0000	0.0064	0.0000	0.0000	0.0000	0.0061	0.0000	0.0000	0.0
308	8	0.1748	0.0081	0.2190	0.2190	0.1823	0.0120	0.0228	0.0181	0.0000	0.0000	0.0000	0.0004	0.0009	0.0000	0.0



- 'Traffic_Assignment' tab **Traffic_Assignment**
 - Capacity for single and multi-lane facilities, alpha and beta values by facility/terrain/area
 - Tab should usually not be modified by user

Roadway parameters by facility and typology													
A	B	C	D	E	F	G	H	I	J	K	L	M	N
Capacity	Class	Terrain	Area Type	Facility Type	Capacity_1	Capacity_2+	Speed Max	Alpha	Beta	OpsCap_1	OpsCap_2+	Description	
1	1	1	1	1	2100	2100	70	0.25	9.0	2205	2310	Flat, Rural, Freeway	
2	2	1	1	2	1600	2000	45	0.08	6.0	1680	2200	Flat, Rural, Highway	
3	3	1	1	3	1600	2000	55	0.08	6.0	1680	2200	Flat, Rural, Expressway	
4	4	1	1	4	1600	1800	45	0.07	6.0	1680	1980	Flat, Rural, Arterial	
5	5	1	1	5	1600	1800	50	0.07	6.0	1680	1980	Flat, Rural, Collector	
6	6	1	1	6	1100	1700	40	0.34	4.0	1155	1870	Flat, Rural, Local	
7	7	1	1	7	1800	1800	50	0.08	6.0	1890	1980	Flat, Rural, Ramp:Freeway-Freeway	
8	8	1	1	8	1500	1500	50	0.74	5.0	1575	1650	Flat, Rural, Ramp:Slip	
9	9	1	1	9	1250	1250	45	0.70	5.0	1313	1375	Flat, Rural, Ramp:Loop	
10	10	1	1	10	0	0	35	0.0	0.0	0	0	Flat, Rural, Connector: Internal	
11	11	1	2	1	2000	2000	70	0.25	9.0	2100	2200	Flat, Suburban, Freeway	
12	12	1	2	2	1600	2000	45	0.08	6.0	1680	2200	Flat, Suburban, Highway	
13	13	1	2	3	1100	1100	55	0.08	6.0	1155	1210	Flat, Suburban, Expressway	
14	14	1	2	4	900	900	45	0.38	5.0	945	990	Flat, Suburban, Arterial	
15	15	1	2	5	700	700	50	0.96	5.0	735	770	Flat, Suburban, Collector	
16	16	1	2	6	600	600	40	1.11	5.0	630	660	Flat, Suburban, Local	
17	17	1	2	7	1800	1800	50	0.08	6.0	1890	1980	Flat, Suburban, Ramp:Freeway-Freeway	
18	18	1	2	8	1500	1500	50	0.74	5.0	1575	1650	Flat, Suburban, Ramp:Slip	
19	19	1	2	9	1250	1250	45	0.70	5.0	1313	1375	Flat, Suburban, Ramp:Loop	
20	20	1	2	11	0	0	15	0.0	0.0	0	0	Flat, Suburban, Connector: External	
21	21	1	3	1	1900	1900	65	0.25	9.0	1995	2090	Flat, Urban, Freeway	
22	22	1	3	2	1600	1600	45	0.34	4.0	1680	1760	Flat, Urban, Highway	
23	23	1	3	3	1000	1000	55	0.74	5.0	1050	1100	Flat, Urban, Expressway	
24	24	1	3	4	800	800	45	0.70	5.0	840	880	Flat, Urban, Arterial	
25	25	1	3	5	700	700	40	1.00	5.0	735	770	Flat, Urban, Collector	
26	26	1	3	6	600	600	40	1.20	5.0	630	660	Flat, Urban, Local	
27	27	1	3	7	1800	1800	50	0.08	6.0	1890	1980	Flat, Urban, Ramp:Freeway-Freeway	
28	28	1	3	8	1500	1500	50	0.74	5.0	1575	1650	Flat, Urban, Ramp:Slip	
29	29	1	3	9	1250	1250	45	0.70	5.0	1313	1375	Flat, Urban, Ramp:Loop	
30	30	1	3	0	0	0	0	0	0	0	0	#N/A	
31	31	1	4	1	1800	1800	65	0.18	8.5	1890	1980	Flat, Fringe, Freeway	
32	32	1	4	2	1500	1500	45	0.07	6.0	1575	1650	Flat, Fringe, Highway	
33	33	1	4	3	900	900	55	0.74	5.0	945	990	Flat, Fringe, Expressway	
34	34	1	4	4	800	800	45	0.70	5.0	840	880	Flat, Fringe, Arterial	
35	35	1	4	5	700	700	40	1.00	5.0	735	770	Flat, Fringe, Collector	
36	36	1	4	6	600	600	40	1.50	5.0	630	660	Flat, Fringe, Local	
37	37	1	4	7	1800	1800	50	0.08	6.0	1890	1980	Flat, Fringe, Ramp:Freeway-Freeway	
38	38	1	4	8	1500	1500	50	0.74	5.0	1575	1650	Flat, Fringe, Ramp:Slip	
39	39	1	4	9	1250	1250	45	0.70	5.0	1313	1375	Flat, Fringe, Ramp:Loop	
40	40	1	4	0	0	0	0	0	0	0	0	#N/A	
41	41	1	5	1	1750	1750	65	0.10	10.0	1838	1925	Flat, CBD, Freeway	
42	42	1	5	2	1300	1300	45	0.07	6.0	1365	1430	Flat, CBD, Highway	
43	43	1	5	3	800	800	45	1.16	6.0	840	880	Flat, CBD, Expressway	
44	44	1	5	4	700	700	40	1.16	6.0	735	770	Flat, CBD, Collector	



- 'Turn Pen' tab 
 - Turn penalty nodes, values, set, and descriptions
 - Tab should be modified by user to match desired model scenario

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
1	A	B	C	SET1	PEN1														
2																			
3	10619	10614	10613	1	-1	;sample turn movement REPLACE WITH OWN DATA													
4																			
5																			
6																			
7																			
8																			
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10																			
11																			
12																			
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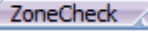


- ### Counts

- 'LOS_FDOT' tab **LOS_FDOT**
 - Level of service volume thresholds from Florida Department of Transportation methodology
 - Tab should usually not be modified by user

A1		; LOS_NO																	
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
1	LOS_NO	TEMP01	U_FWY_G	U_FWY_G	U_FWY_G	U_FWY_G	U_FWY_G	TEMP07	TEMP08	TEMP09	TEMP10	TEMP11	U_FWY_L2	U_FWY_L2	U_FWY_L2	U_FWY_L2	TEMP17	TEMP18	
2	1	0	1270	1970	2660	3360	4050	0	0	0	0	0	1130	1780	2340	3080	3730	0	0
3	2	100	2110	3260	4410	5560	6710	100	100	100	100	100	1840	2890	3940	4990	6040	100	100
4	3	590	2940	4550	6150	7760	9360	590	590	590	590	590	2660	4180	5700	7220	8740	590	590
5	4	810	3580	5530	7480	9440	11390	810	810	810	810	810	3440	5410	7380	9340	11310	810	810
6	5	850	3980	6150	8320	10480	12650	850	850	850	850	850	3910	6150	8380	10620	12850	850	850
7	6	999999	999999	999999	999999	999999	999999	999999	999999	999999	999999	999999	999999	999999	999999	999999	999999	999999	999999
8																			
9																			
10																			
11																			
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36																			
37																			
38																			



- 'ZoneCheck' tab 
 - Check to see whether unconnected zones have land use, special generator, external, or gateway trips
 - Tab should not be modified by user, for review only

A1														
	A	B	C	D	E	F	G	H	I	J	K	L		
1		1. Paste unconnected zones model output on "UnconnectedZones" worksheet												
2		2. Filter column G for "Error"												
3														
4														
5	Zone	Trips Through	Trips Gateway	Land Use Internal	Trips Special	TAZ Unconnected	Condition							
6	1	0	0	0	0	0	0 External_Vacant							
7	2	0	0	0	0	0	0 External_Vacant							
8	3	0	0	0	0	0	0 External_Vacant							
9	4	0	0	0	0	0	0 External_Vacant							
10	5	0	0	0	0	0	0 External_Vacant							
11	6	0	0	0	0	0	0 External_Vacant							
12	7	0	0	0	0	0	0 External_Vacant							
13	8	0	0	0	0	0	0 External_Vacant							
14	9	0	0	0	0	0	0 External_Vacant							
15	10	0	0	0	0	0	0 External_Vacant							
16	11	0	0	0	0	0	0 External_Vacant							
17	12	0	0	0	0	0	0 External_Vacant							
18	13	0	0	0	0	0	0 External_Vacant							
19	14	0	0	0	0	0	0 External_Vacant							
20	15	0	0	0	0	0	0 External_Vacant							
21	16	0	0	0	0	0	0 External_Vacant							
22	17	0	0	0	0	0	0 External_Vacant							
23	18	0	0	0	0	0	0 External_Vacant							
24	19	0	0	0	0	0	0 External_Vacant							
25	20	0	0	0	0	0	0 External_Vacant							
26	21	0	0	0	0	0	0 External_Vacant							
27	22	0	0	0	0	0	0 External_Vacant							
28	23	0	0	0	0	0	0 External_Vacant							
29	24	0	495	0	0	0	0 External							
30	25	0	0	0	0	0	0 External_Vacant							
31	26	4,654	1,782	0	0	0	0 External							
32	27	5,950	2,033	0	0	0	0 External							
33	28	0	0	0	0	0	0 External_Vacant							
34	29	0	0	0	0	0	0 External_Vacant							
35	30	0	0	0	0	0	0 External_Vacant							
36	31	0	0	0	0	0	0 External_Vacant							
37	32	0	0	0	0	0	0 External_Vacant							
38	33	0	0	0	0	0	0 External_Vacant							
39	34	0	0	0	0	0	0 External_Vacant							
40	35	0	0	0	0	0	0 External_Vacant							
41	36	0	0	0	0	0	0 External_Vacant							
42	37	0	0	0	0	0	0 External_Vacant							
43	38	0	0	0	0	0	0 External_Vacant							
44	39	0	0	0	0	0	0 External_Vacant							
45	40	0	0	0	0	0	0 External_Vacant							

Automatic calculation turned off

Calculate when worksheet is activated

Go to different tab and come back for calculate

Ready

Diurnal Factors

Traffic_Assignment

Turn Pen

Through Trips

Counts

LOS_FDOT

ZoneCheck

UnconnectedZones

LogSumCheck

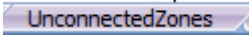
MaxLogSumbYTAZ

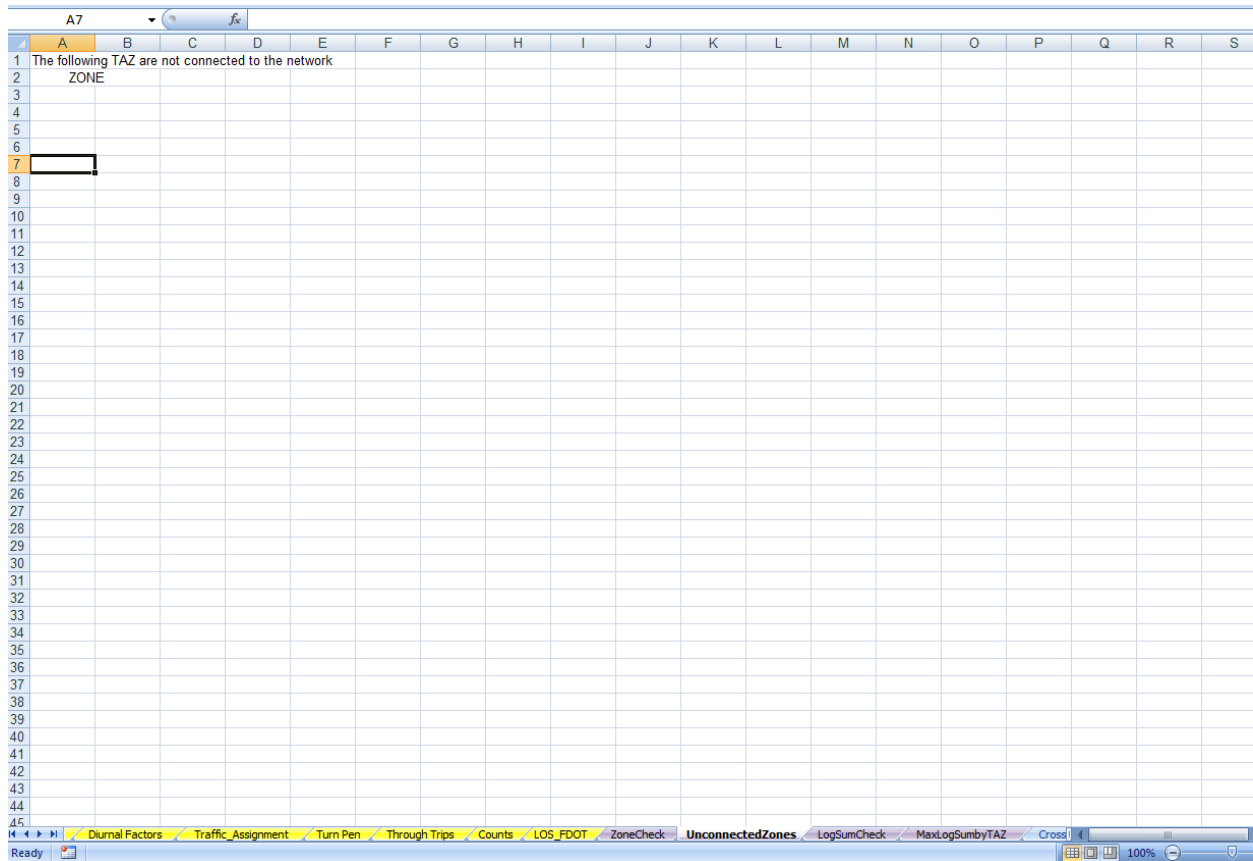
Cross

100%

Automatic calculation turned off
 Calculate when worksheet is activated
 Go to different tab and come back for calculate



- 'UnconnectedZones' tab 
 - Output from model run that feeds into 'ZoneCheck' tab
 - Tab should be modified by user, using output from desired model scenario

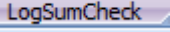


The screenshot shows an Excel spreadsheet with the following structure:

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
1	The following TAZ are not connected to the network																		
2	ZONE																		
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			
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43																			
44																			
45																			

The spreadsheet has a tab bar at the bottom with the following tabs: Diurnal Factors, Traffic_Assignment, Turn Pen, Through Trips, Counts, LOS_FDOT, ZoneCheck, **UnconnectedZones**, LogSumCheck, MaxLogSumbyTAZ, and Cross. The 'UnconnectedZones' tab is currently selected. The status bar at the bottom shows 'Ready' and '100%' zoom.



- 'LogSumCheck' tab 
 - Check to see whether zones with undefined impedance values have land use, special generator, external, or gateway trips
 - Tab should not be modified by user, for review only

J24

fx

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P		
1		1. Paste maximum log sum by TAZ model output on "MaxLogSumbyTAZ" worksheet																
2		2. Filter column G for "Error"																
3																		
4																		
5	Zone	Trips Through	Trips Gateway	Land Use Internal	Trips Special	Max LogSum	Condition											
6	1	0	0	0	0	0	OK											
7	2	0	0	0	0	0	OK											
8	3	0	0	0	0	0	OK											
9	4	0	0	0	0	0	OK											
10	5	0	0	0	0	0	OK											
11	6	0	0	0	0	0	OK											
12	7	0	0	0	0	0	OK											
13	8	0	0	0	0	0	OK											
14	9	0	0	0	0	0	OK											
15	10	0	0	0	0	0	OK											
16	11	0	0	0	0	0	OK											
17	12	0	0	0	0	0	OK											
18	13	0	0	0	0	0	OK											
19	14	0	0	0	0	0	OK											
20	15	0	0	0	0	0	OK											
21	16	0	0	0	0	0	OK											
22	17	0	0	0	0	0	OK											
23	18	0	0	0	0	0	OK											
24	19	0	0	0	0	0	OK											
25	20	0	0	0	0	0	OK											
26	21	0	0	0	0	0	OK											
27	22	0	0	0	0	0	OK											
28	23	0	0	0	0	0	OK											
29	24	0	495	0	0	0	OK											
30	25	0	0	0	0	0	OK											
31	26	4,654	1,782	0	0	0	OK											
32	27	5,950	2,033	0	0	0	OK											
33	28	0	0	0	0	0	OK											
34	29	0	0	0	0	0	OK											
35	30	0	0	0	0	0	OK											
36	31	0	0	0	0	0	OK											
37	32	0	0	0	0	0	OK											
38	33	0	0	0	0	0	OK											
39	34	0	0	0	0	0	OK											
40	35	0	0	0	0	0	OK											
41	36	0	0	0	0	0	OK											
42	37	0	0	0	0	0	OK											
43	38	0	0	0	0	0	OK											
44	39	0	0	0	0	0	OK											
45	40	0	0	0	0	0	OK											

Automatic calculation turned off
Calculate when worksheet is activated
Go to different worksheet and come back for calculation

Journal FactorsTraffic_AssignmentTurn PenThrough TripsCountsLOS_FDOTZoneCheckUnconnectedZonesLogSumCheckMaxLogSumbyTAZCross

Ready

100%



- MaxLogSumbYTAZ

[illegible]

Highway Network

Modify highway network in Cube to match desired scenario.

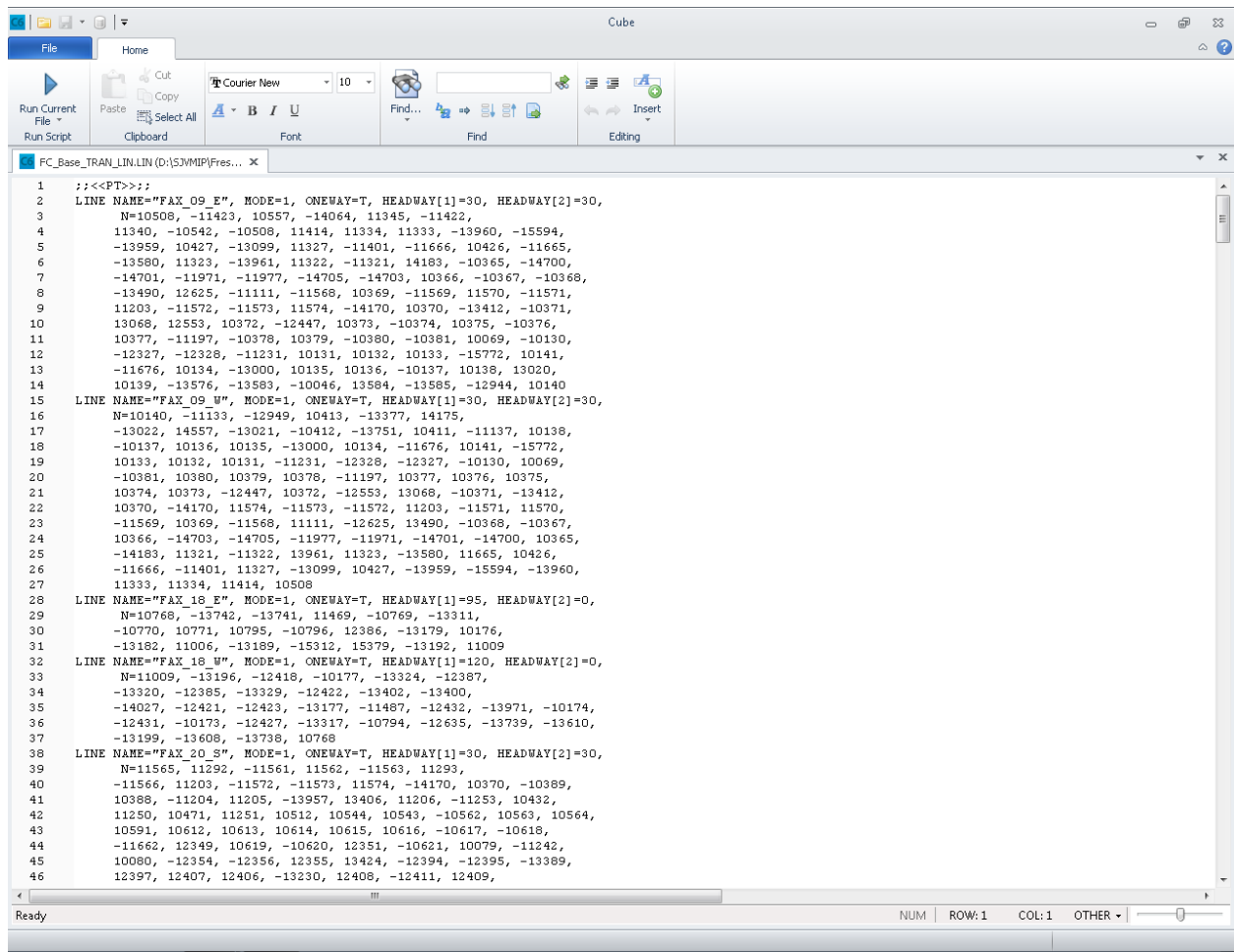
The screenshot displays the Cube software interface. The main window shows a map of a highway network with blue lines representing roads. A 'Highway Links' table is open on the right side of the interface, displaying various attributes for a selected link.

Attribute	Value
AX/BX	6675122
AY/BY	1853015.8
A	11207
B	11206
DISTANCE	2.0151
DIST_ADJ	0
NAME	
ROUTE	0
TERRAIN	F
AREATYP	R
JURISDICTION	Madera Cour
BASE_FACTYP	3
BASE_AREATYP	R
BASE_LANES	0
BASE_ALX	0
BASE_SPEED	0
BASE_USE	0
BASE_TOLL	0
IMP1_PRJID	0
IMP1_PRJYR	2055
IMP1_DESC	
IMP1_FACTYP	8
IMP1_AREATYP	R
IMP1_LANES	2
IMP1_ALX	0
IMP1_SPEED	65
IMP1_USE	0
IMP1_TOLL	0
IMP2_PRJID	0
IMP2_PRJYR	0
IMP2_DESC	
IMP2_FACTYP	0
IMP2_AREATYP	
IMP2_LANES	0
IMP2_ALX	0
IMP2_SPEED	0
IMP2_USE	0



Transit Network

Modify transit network (transit line file) in Cube and non-highway transit nodes and links in parameter workbook to match desired scenario. If model does not have a transit network, modify terminal times in parameter workbook in 'TAZData_Inputs' tab.



```
1 ;;<<PT>>;
2 LINE NAME="FAX_09_E", MODE=1, ONEWAY=T, HEADWAY[1]=30, HEADWAY[2]=30,
3   N=10508, -11423, 10557, -14064, 11345, -11422,
4   11340, -10542, -10508, 11414, 11334, 11333, -13960, -15594,
5   -13959, 10427, -13099, 11327, -11401, -11666, 10426, -11665,
6   -13580, 11323, -13961, 11322, -11321, 14183, -10365, -14700,
7   -14701, -11971, -11977, -14705, -14703, 10366, -10367, -10368,
8   -13490, 12625, -11111, -11568, 10369, -11569, 11570, -11571,
9   11203, -11572, -11573, 11574, -14170, 10370, -13412, -10371,
10  13068, 12553, 10372, -12447, 10373, -10374, 10375, -10376,
11  10377, -11197, -10378, 10379, -10380, -10381, 10069, -10130,
12  -12327, -12328, -11231, 10131, 10132, 10133, -15772, 10141,
13  -11676, 10134, -13000, 10135, 10136, -10137, 10138, 13020,
14  10139, -13576, -13583, -10046, 13584, -13585, -12944, 10140
15 LINE NAME="FAX_09_W", MODE=1, ONEWAY=T, HEADWAY[1]=30, HEADWAY[2]=30,
16   N=10140, -11133, -12949, 10413, -13377, 14175,
17   -13022, 14557, -13021, -10412, -13751, 10411, -11137, 10138,
18   -10137, 10136, 10135, -13000, 10134, -11676, 10141, -15772,
19   10133, 10132, 10131, -11231, -12328, -12327, -10130, 10069,
20   -10381, 10380, 10379, 10378, -11197, 10377, 10376, 10375,
21   10374, 10373, -12447, 10372, -12553, 13068, -10371, -13412,
22   10370, -14170, 11574, -11573, -11572, 11203, -11571, 11570,
23   -11569, 10369, -11568, 11111, -12625, 13490, -10368, -10367,
24   10366, -14703, -14705, -11977, -11971, -14701, -14700, 10365,
25   -14183, 11321, -11322, 13961, 11323, -13580, 11665, 10426,
26   -11666, -11401, 11327, -13099, 10427, -13959, -15594, -13960,
27   11333, 11334, 11414, 10508
28 LINE NAME="FAX_18_E", MODE=1, ONEWAY=T, HEADWAY[1]=95, HEADWAY[2]=0,
29   N=10768, -13742, -13741, 11469, -10769, -13311,
30   -10770, 10771, 10795, -10796, 12386, -13179, 10176,
31   -13182, 11006, -13189, -15312, 15379, -13192, 11009
32 LINE NAME="FAX_18_W", MODE=1, ONEWAY=T, HEADWAY[1]=120, HEADWAY[2]=0,
33   N=11009, -13196, -12418, -10177, -13324, -12387,
34   -13320, -12385, -13329, -12422, -13402, -13400,
35   -14027, -12421, -12423, -13177, -11487, -12432, -13971, -10174,
36   -12431, -10173, -12427, -13317, -10794, -12635, -13739, -13610,
37   -13199, -13608, -13738, 10768
38 LINE NAME="FAX_20_S", MODE=1, ONEWAY=T, HEADWAY[1]=30, HEADWAY[2]=30,
39   N=11565, 11292, -11561, 11562, -11563, 11293,
40   -11566, 11203, -11572, -11573, 11574, -14170, 10370, -10389,
41   10388, -11204, 11205, -13957, 13406, 11206, -11253, 10432,
42   11250, 10471, 11251, 10512, 10544, 10543, -10562, 10563, 10564,
43   10591, 10612, 10613, 10614, 10615, 10616, -10617, -10618,
44   -11662, 12349, 10619, -10620, 12351, -10621, 10079, -11242,
45   10080, -12354, -12356, 12355, 13424, -12394, -12395, -13389,
46   12397, 12407, 12406, -13230, 12408, -12411, 12409,
```



	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	;N	X	Y		;A	B	AM_TIME_B	MD_TIME_B	PM_TIME_B	NT_TIME_B		;Only input one-way links. Macro will mirr			
2	40001	6252383.731	2343693.256		40001	10455	2	2	2	2					
3															
4															
5															
6															
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	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
1	TAZ	ELEM_BNDY	MID_BNDY	HIGH_BNDY	GENPARKCOST	EMPPARKCOST	INTDEN	WALKPERC	MHHNC	RESACRE	EMPACRE	HWYCOM	PTERM	ATERM	PKFREQ	OPFREQ	AIRBASIN	EJ	
2	101								53327	88.98182			1.00	1.00	0	0			
3	102								46462	66.901276			1.00	1.00	180	180	1		
4	103								46462	75.549395			1.00	1.00	180	180	1		
5	104								46462	40.619987			1.00	1.00	180	180	1		
6	105								45522	101.50532			1.00	1.00	0	0	1		
7	106								39213	70.972663			1.00	1.00	0	0	1		
8	107								46462	51.974712			1.00	1.00	0	0	1		
9	108								46462	107.0468			1.00	1.00	0	0	1		
10	109								24808	70.456908			1.00	1.00	0	0	1		
11	110								45522	5.1936719			1.00	1.00	0	0	1		
12	111								53327	54.251334			1.00	1.00	0	0	1		
13	112								45522	43.010531			1.00	1.00	0	0	1		
14	113								24808	106.69449			1.00	1.00	0	0	1		
15	114								39238	91.876138			1.00	1.00	180	180	1		
16	115								35073	67.421026			1.00	1.00	0	0	1		
17	116								35073	114.14087			1.00	1.00	180	180	1		
18	117								35073	190.79592			1.00	1.00	0	0	1		
19	118								35073	114.11938			1.00	1.00	0	0	1		
20	119								35073	85.164036			1.00	1.00	0	0	1		
21	120								35073	41.821743			1.00	1.00	0	0	1		
22	121								35073	0			1.00	1.00	0	0	1		
23	122								42365	18.114102			1.00	1.00	0	0	1		
24	123								42365	20.466173			1.00	1.00	0	0	1		
25	124								42365	673.99196			1.00	1.00	0	0	1		
26	125								42365	7.7583879			1.00	1.00	0	0	1		
27	126								53327	20.552784			1.00	1.00	0	0	1		
28	127								53327	2.4740264			1.00	1.00	0	0	1		
29	128								53327	0			1.00	1.00	0	0	1		
30	129								53327	6.8582813			1.00	1.00	0	0	1		
31	130								53327	68.155998			1.00	1.00	0	0	1		
32	131								45522	27.647288			1.00	1.00	180	180	1		
33	132								45522	14.144463			1.00	1.00	0	0	1		
34	133								53327	82.312854			1.00	1.00	0	0	1		
35	134								53327	160.60125			1.00	1.00	0	0	1		
36	135								53327	0.0248921			1.00	1.00	0	0	1		
37	136								53327	32.645893			1.00	1.00	0	0	1		
38	137								53327	89.780747			1.00	1.00	0	0	1		
39	138								53327	90.888788			1.00	1.00	0	0	1		
40	139								53327	29.156338			1.00	1.00	0	0	1		
41	140								53327	28.922895			1.00	1.00	0	0	1		
42	141								53327	0			1.00	1.00	0	0	1		
43	142								53327	9.962997			1.00	1.00	0	0	1		
44	143								53327	0.7945364			1.00	1.00	0	0	1		
45	144								0	0			1.00	1.00	0	0	1		
46	145								0	0			1.00	1.00	0	0	1		
47	146								0	0			1.00	1.00	0	0	1		
48	147								0	0			1.00	1.00	0	0	1		
49	148								0	0			1.00	1.00	0	0	1		
50	149								0	0			1.00	1.00	0	0	1		
51	150								0	0			1.00	1.00	0	0	1		
52	151								0	0			1.00	1.00	0	0	1		
53	152								0	0			1.00	1.00	0	0	1		
54	153								0	0			1.00	1.00	0	0	1		

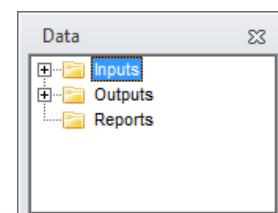
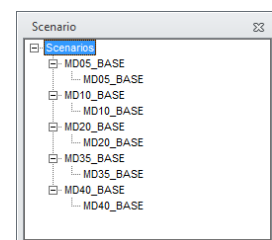
REVIEW OF CUBE APPLICATION AND FUNCTIONALITY OF MODEL

Navigating Application Manager

Window Panes

Once you open your model catalog, you will see four windows, or panes, to the left of the program window. They are as follows:

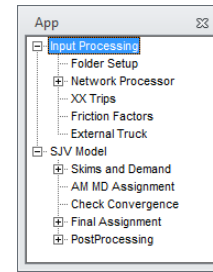
- Scenario Pane
 - Scenarios are hierarchical in nature.
 - Child or sibling scenarios can be added to create variations on the "base" scenario.
 - Child scenarios inherit key values from its parent.
- Data Pane
 - Provides a means of viewing/editing the input files for an application.



- Lists output files and reports from an application run.

- Application (App) Pane

- Organizes model applications.
- Helps the user navigate through the model and quickly access sub-routines.



- Keys Pane

- Lists catalog keys and associated values referenced in the model script.
- Key list and values may change depending on the scenario.

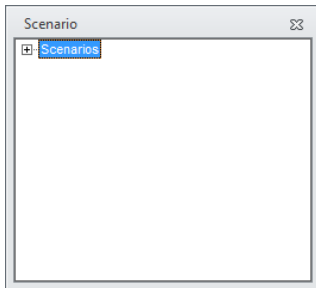
Key	Value
Scen. Name	Scenario_Name
Socio-economic and Highway Inputs	(Note)
ClusterToggle	1
ClusterHandle	Madera05
ClusterNodes	8
NumZones	805
Year	2005

You can modify the panes by resizing, moving, overlapping, or auto-hiding them to suit your needs. For more information, please refer to the Scenario Manager section in Cube6 Help.

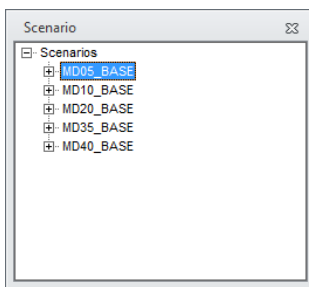


Selecting a Scenario

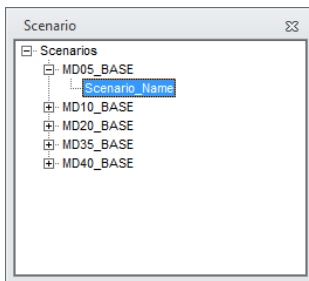
- Locate the Scenario pane and click the **[+]** beside Scenarios



- Click the **[+]** beside the model year you would like to select

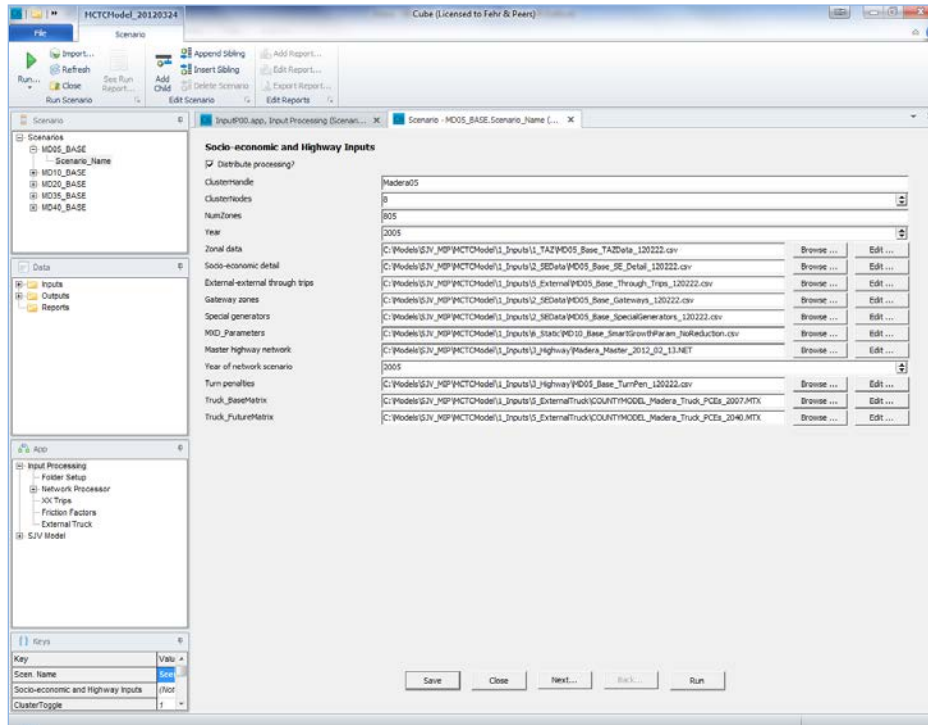


- Click the **scenario name** within the model year you would like to select

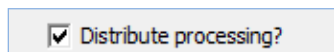


Checking input keys³

- Double-click on the scenario you would like to review
- Review the Socio-economic and Highway Inputs.



- If you have a Cube Cluster license and would like to use Cube Cluster, verify that ***Distribute processing?*** is checked. Otherwise, uncheck it.



- **Note:** If ***Distribute processing?*** is checked, set the number of ***ClusterNodes*** to be 1 less than the number of core processors your computer has. This will prevent the model from utilizing 100% of the computer's CPU. If your computer has less than 2 core processors, do not use Cube Cluster.
- Click ***Next...***

³ For more information, please see SJV MIP Video 3 – Running the Base Scenarios.wmv



- Review the Post-Processing inputs and assumptions.

Post-Processing

☒ Use LOS capacity ranges rather than model VC

Conformity and SB 375

Conformity Speed Bin Size (mph range): 5

Conformity number of speed bins: 14

Airbuses: 5

Compare files to current scenario

Define network to compare: C:\Models\SV_MSP\HCTCModel\Scenarios\MD05_BASE\MD10_BASE\A500PHENT\MD10_BASE_LOADNETW Browse ... Edit ...

Define SE Detail to compare: C:\Models\SV_MSP\HCTCModel\Inputs\2_SRData\MD10_Base_SE_Detail_120222.csv Browse ... Edit ...

ITE Match and Select Link/Zones

☐ Adjust trips to match value.

Zones to adjust to match (ex. 101-105,107): 101

Trip targets by zone (BDF with Zone:AL,N,AL,OUT,PL,N,PL,OUT,DAY,N,DAY,OUT): C:\Models\SV_MSP\HCTCModel\Inputs\Support\Tools\Prata Browse ... Edit ...

Select Link (Zone Listing (ex. N=101 & N=105-110 & L=101-102*)): N=101

Environmental Justice

Collisions per VMT: 1355

Total Collisions: 10913

Collision PDO: 6049

Collision Injuries: 4322

Collision Fatalities: 143

Deaths: 163

Injuries: 7261

Trip Length Frequency

Maximum travel time (minutes): 90

Time Interval for Summary (minutes): 5

Range of Origin Zones for Summary: 101-605

Range of Destination Zones for Summary: 101-605

Buttons: Save, Close, Next..., Back..., Run

- Click **Next...**
- Review the Transit Inputs.

Transit Inputs

☐ pt network available

Non-highway transit links: C:\Models\SV_MSP\HCTCModel\Inputs\Transit\MD10_RailLinks.csv Browse ... Edit ...

XY coordinates for transit only nodes: C:\Models\SV_MSP\HCTCModel\Inputs\Transit\MD10_Transit_XY.csv Browse ... Edit ...

Peak transit lines file: C:\Models\SV_MSP\HCTCModel\Inputs\Transit\MD10_Transit_LineR.in Browse ... Edit ...

Peak drive access block file: C:\Models\SV_MSP\HCTCModel\Inputs\Transit\MD10_Transit_DriveR.BLOCK Browse ... Edit ...

Peak walk access block file: C:\Models\SV_MSP\HCTCModel\Inputs\Transit\MD10_Transit_WalkR.BLOCK Browse ... Edit ...

Off-peak transit lines file: C:\Models\SV_MSP\HCTCModel\Inputs\Transit\MD10_Transit_LineOK.in Browse ... Edit ...

Off-peak transit drive access block: C:\Models\SV_MSP\HCTCModel\Inputs\Transit\MD10_Transit_DriveOK.BLOCK Browse ... Edit ...

Off-peak transit walk access block: C:\Models\SV_MSP\HCTCModel\Inputs\Transit\MD10_Transit_WalkOK.BLOCK Browse ... Edit ...

TransitFares: C:\Models\SV_MSP\HCTCModel\Inputs\Transit\MD10_TRAN.FAR Browse ... Edit ...

TransitFactors: C:\Models\SV_MSP\HCTCModel\Inputs\Transit\MD10_TRAN.FAC Browse ... Edit ...

TransitSystem: C:\Models\SV_MSP\HCTCModel\Inputs\Transit\MD10_TRAN.PTS Browse ... Edit ...

Buttons: Save, Close, Next..., Back..., Run



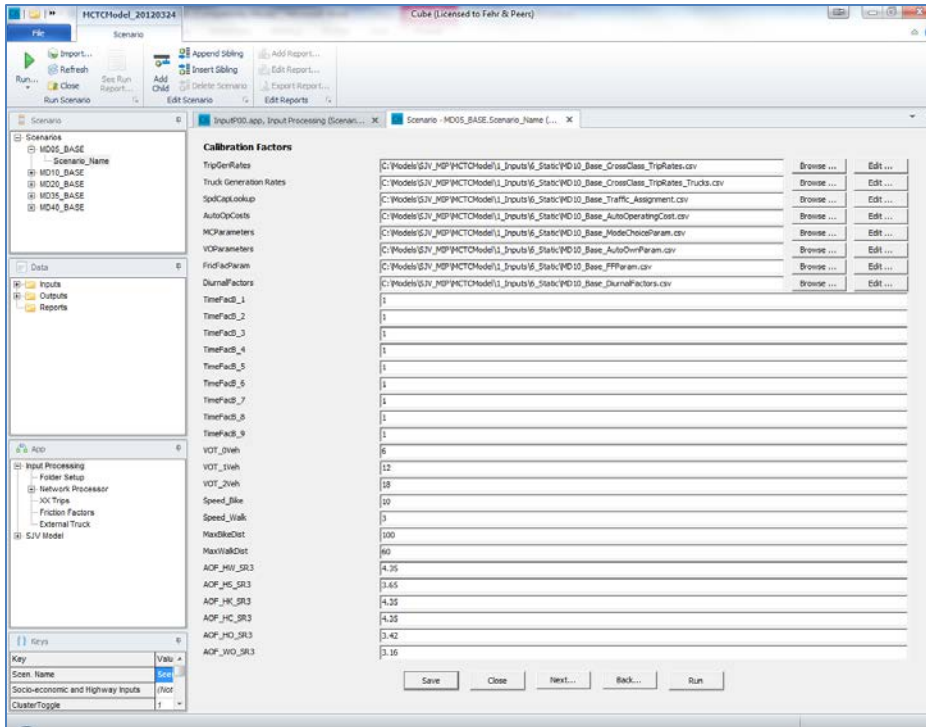
- If your model has transit, verify that **pt network available** is checked. Otherwise, uncheck it.

☐ pt network available

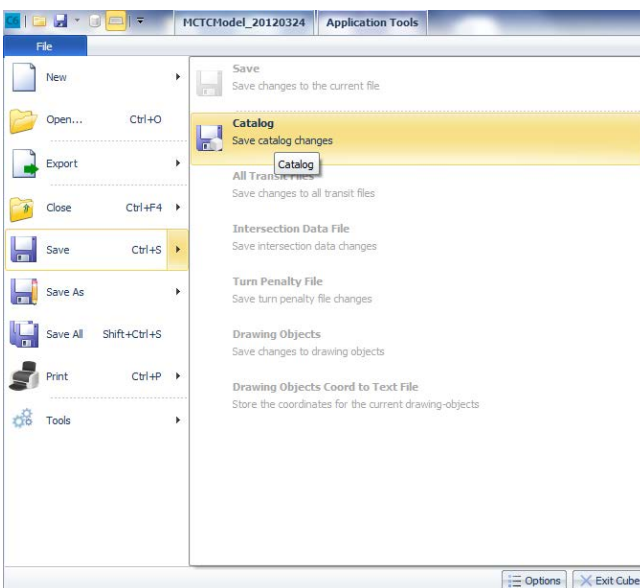
- Click **Next...**
- Review the Cube Land Inputs.

- If you would like to run Cube Land, verify that **RunLand** is checked. Otherwise, uncheck it. **Note:** Currently, Cube Land is only calibrated for Kern County.
- Click **Next...**
- Review the model Calibration Factors. **Note:** Do not update the calibration factors unless you are updating your model.





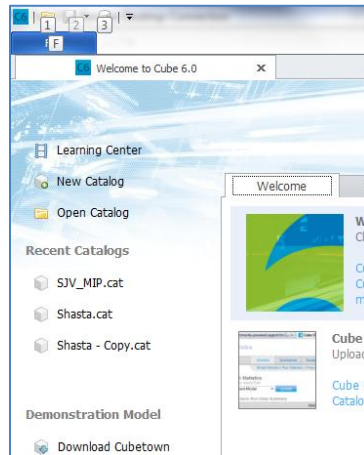
- Click **Next...**
- Review the remaining model Calibration Factors.
- If you make any changes, click **Save** then **Close**. Otherwise, click **Close**.
- To navigate back to any windows you have passed, click **Back...**
- Do not click **Run** to run the model. It is difficult to know which application will be selected.
- Once you exit the inputs tab, be sure to save the catalog file if any changes were made. Click **File**, then **Save**, then select **Catalog**.



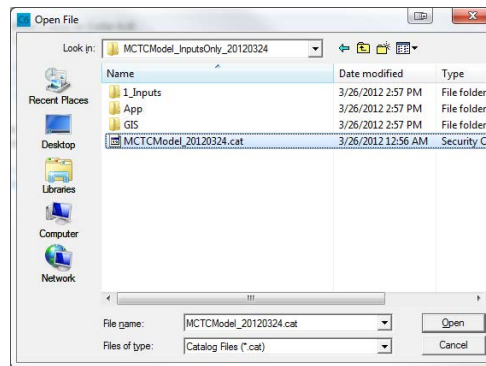
RUNNING THE MODEL⁴

Update Model Directory Structure⁵

- Open Cube and click **Open Catalog**



- Navigate to the catalog file and click **Open**

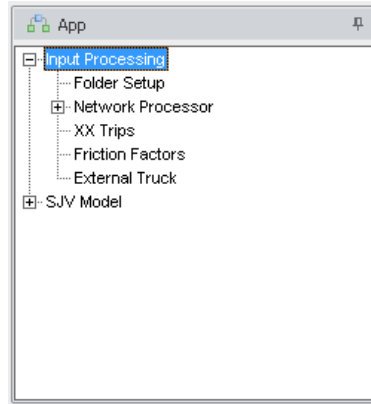


- When the model catalog opens, double-click on **Input Processing** in the Application Manager (App) window pane.

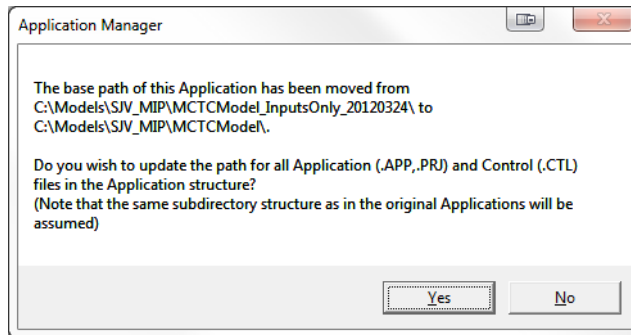
⁴ For more information, please see SJV MIP Video 3 – Running the Base Scenarios.wmv

⁵ For more information, please see SJV MIP Video 3 – Running the Base Scenarios.wmv

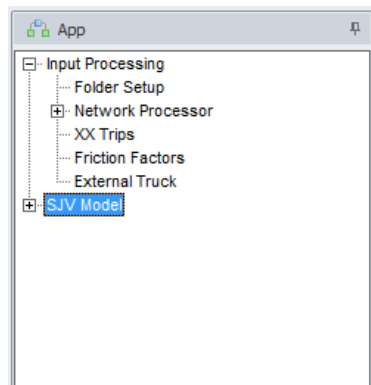




- The first time you open the application, you will be asked to update the application directory. Click **Yes**. This will ensure that the model runs properly.



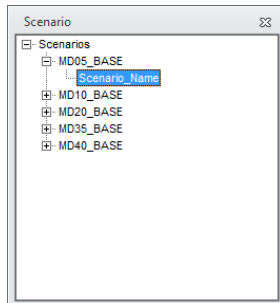
- Double-click and update the paths for ***SJV Model*** in the App window pane.



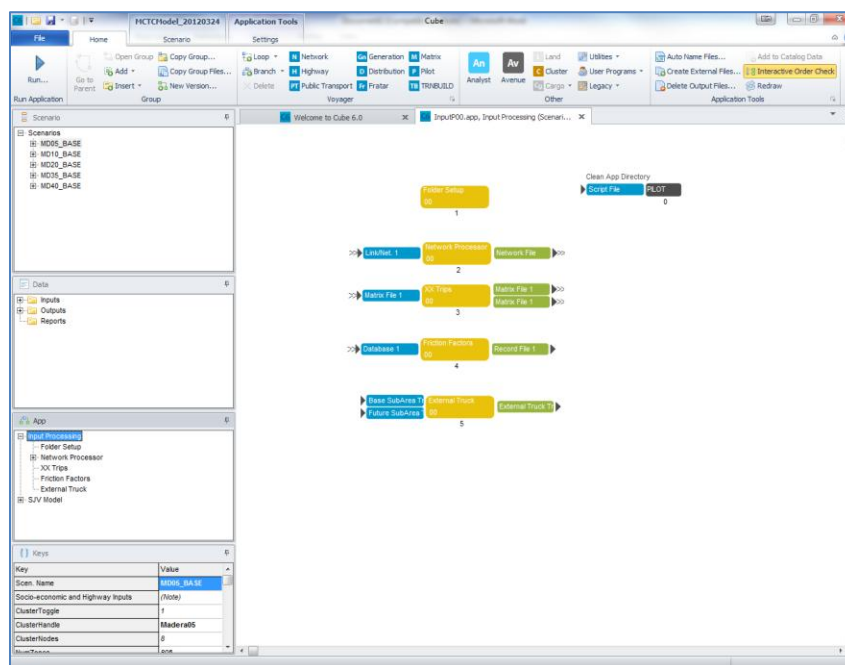
Input Processing

Before running the SJV Model application, run the Input Processing application to prepare the input files and folder structure needed for the full model run.

- Select the scenario you will run in the Scenario Pane.

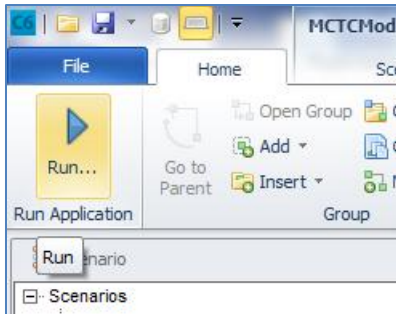


- Double-click on **Input Processing** in the App Pane. This will bring up the Input Processing application flow diagram in the Catalog window.

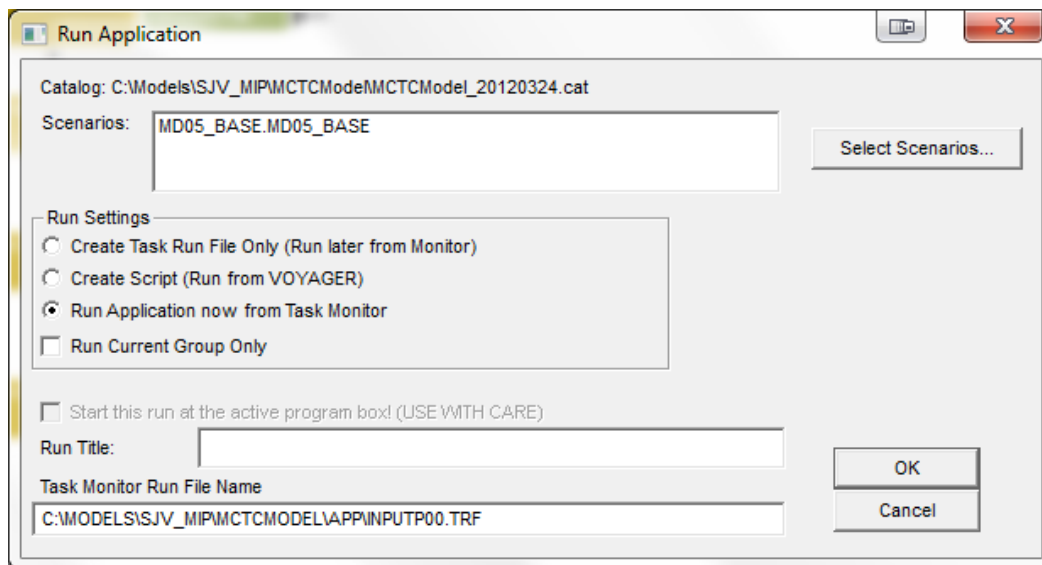


- Click on the **Run...** button located on the top **Home** ribbon. This will open the Run Application window.

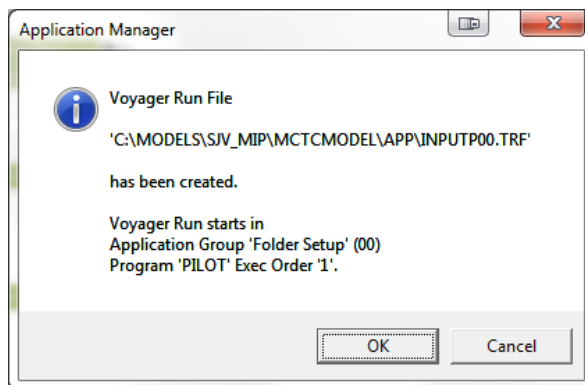




- Select **Run Application now from Task Monitor** from the Run Settings list.

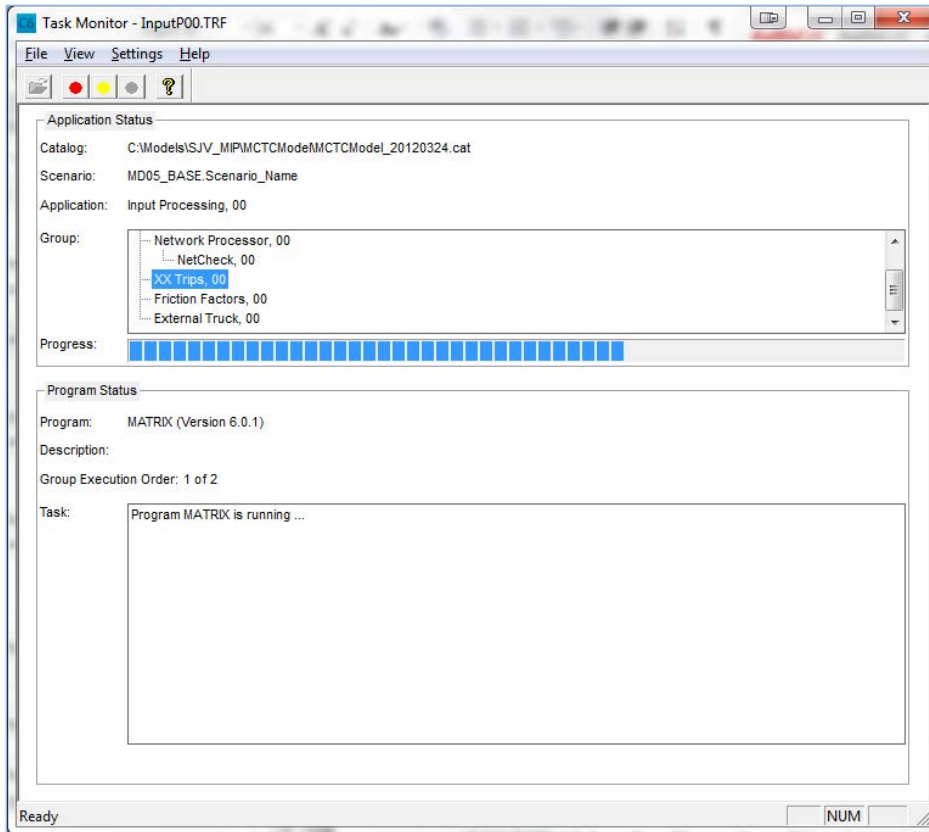


- Click **Ok**. This should activate the Application Manager window.

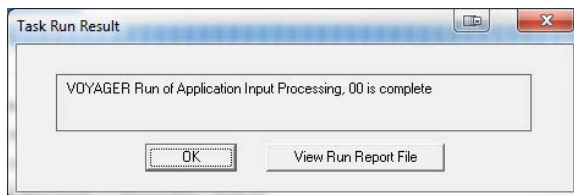


- Click **Ok**. This should activate the Task Monitor window.



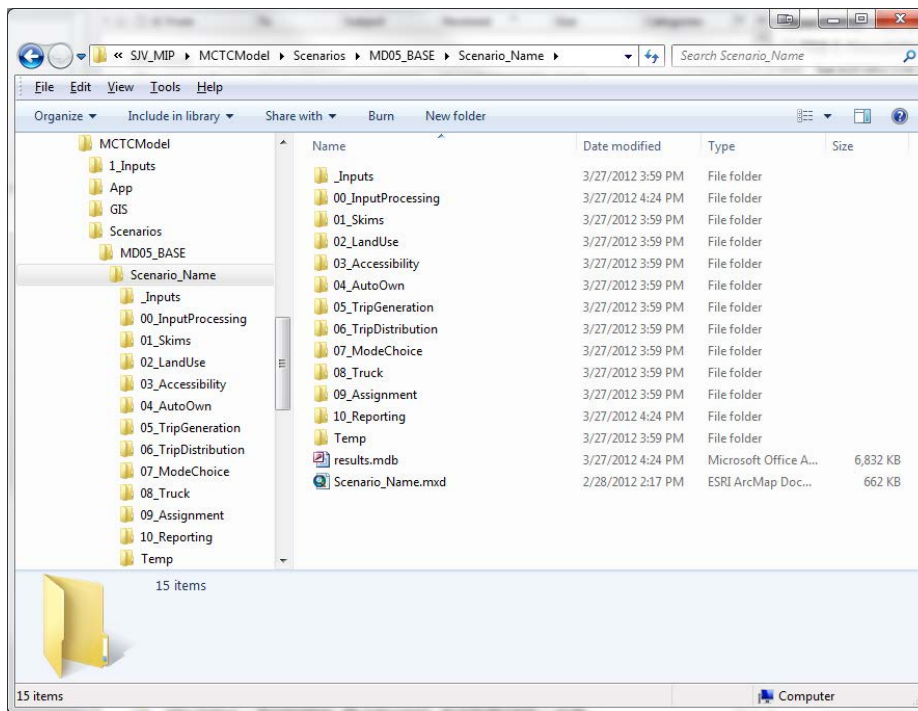


- Once the run has completed successfully, the Task Run Result window will pop-up. Click **OK**. If you would like to view the report file, click **View Run Report File**.

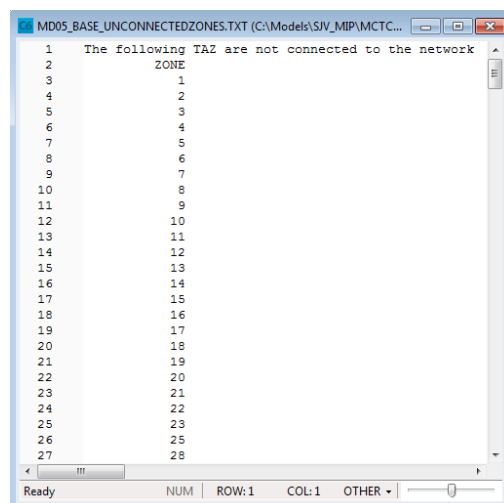


- Close the Inputs window.
- Check to see that the input files and folders were created in the appropriate model folder.



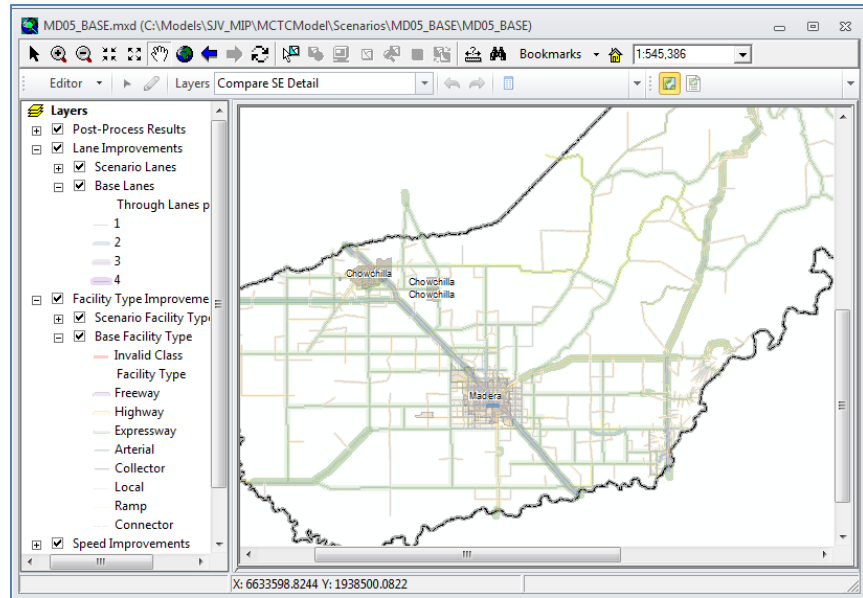


- Once the input processing run is complete, the following key output files will be listed in the Data Pane under Outputs. Review the output files to ensure that the results are reasonable.
 - XX_UNCONNECTEDZONES.TXT – Lists zones that are not connected to the roadway network.



- XX.mxd – GIS map of roadway network showing lanes, speeds, and facility type classifications.





- XX_Lanemiles.CSV – lists each facility type’s total lane and roadway miles.

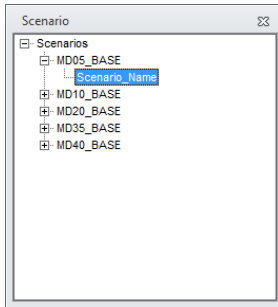
	A	B	C	D	E	F	G	H
1		;Facility_Type	Year	StudyArea	Lane_Miles	Roadway_Miles		
2		Freeway	2005	1	135.83	35.52		
3		Highway	2005	1	174	160.02		
4		Expressway	2005	1	996.39	946.46		
5		Arterial	2005	1	172.25	152.68		
6		Collector	2005	1	100.33	99.53		
7		Local	2005	1	5.05	5.05		
8		Freeway-Freeway	2005	1	14.86	14.1		
9		Slip	2005	1	0	0		
10		Loop	2005	1	0	0		
11		Centroid	2005	1	0	999.62		
12		Total	2005	1	1598.72	2412.98		

Full Model Run

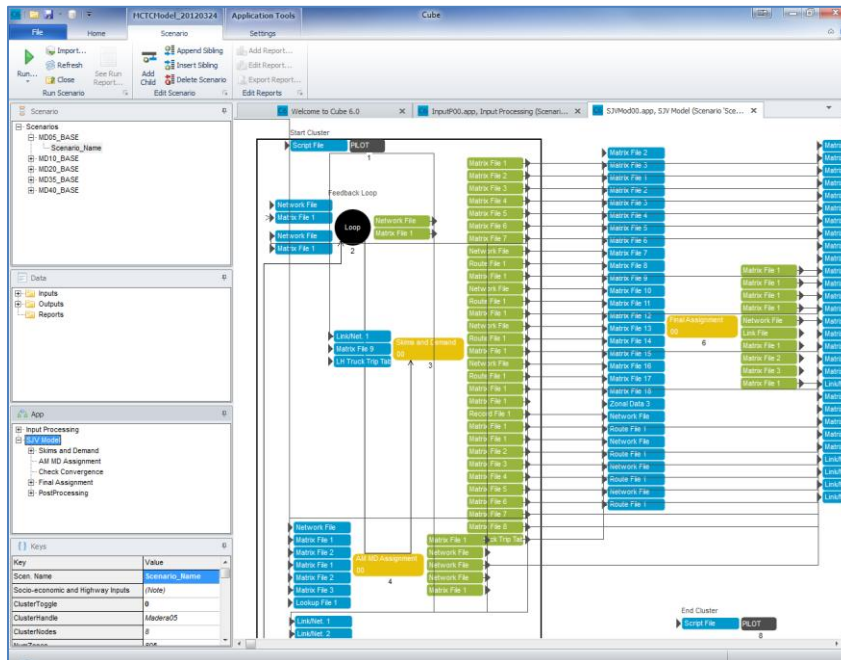
Before running a full model run, verify that you have the appropriate input files created from the Input Processing application.

- Select the scenario you will run in the Scenario Pane.

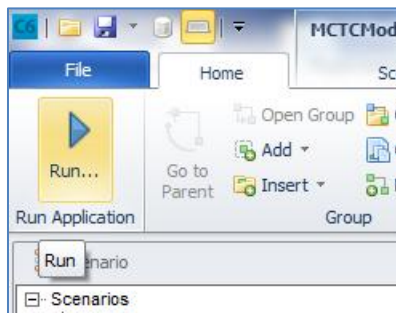




- Double-click on **SJV Model** in the App Pane. This will bring up the SJV Model application flow diagram in the Catalog window.

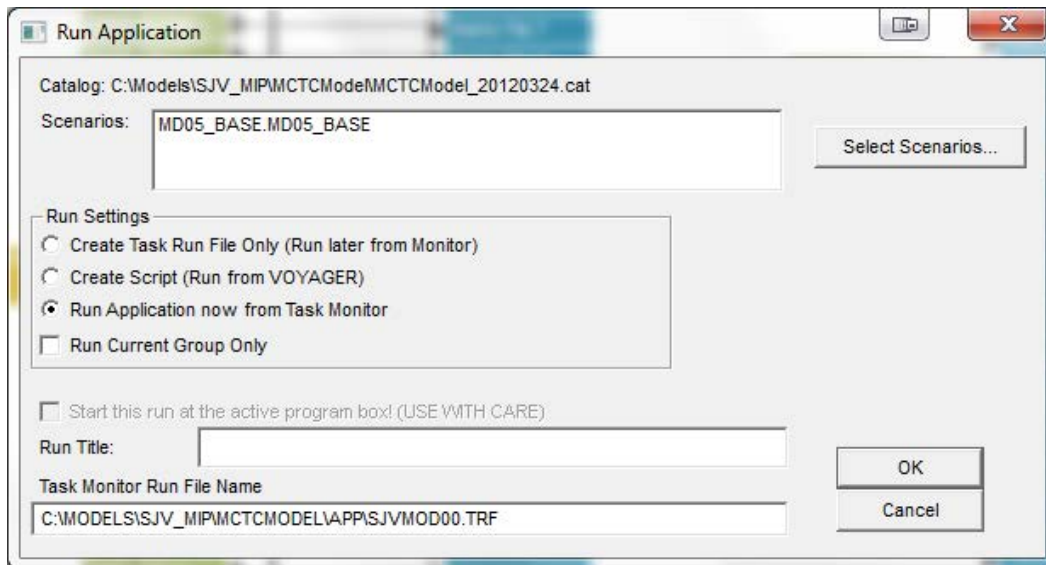


- Click on the **Run...** button located on the top **Home** ribbon. This will open the Run Application window.

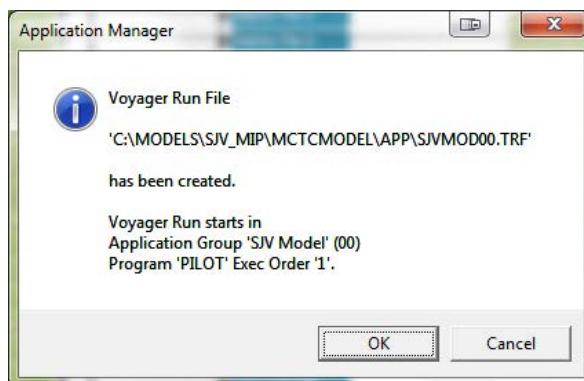


- Select **Run Application now from Task Monitor** from the Run Settings list.



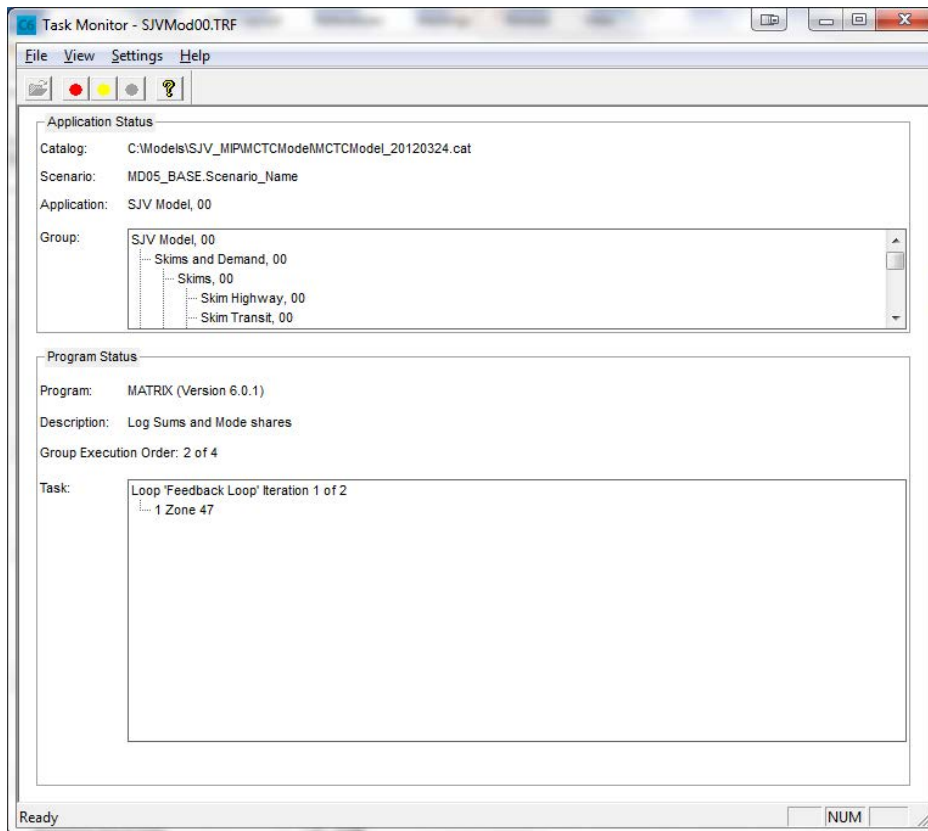


- Click **Ok**. This should activate the Application Manager window.

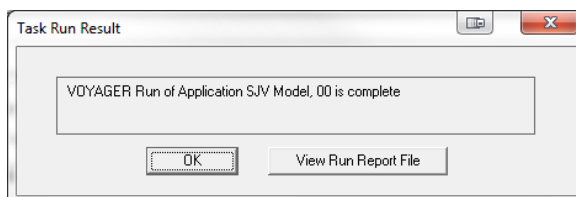


- Click **Ok**. This should activate the Task Monitor window.





- Once the run has completed successfully, the Task Run Result window will pop-up. Click **OK**. If you would like to view the report file, click **View Run Report File**.

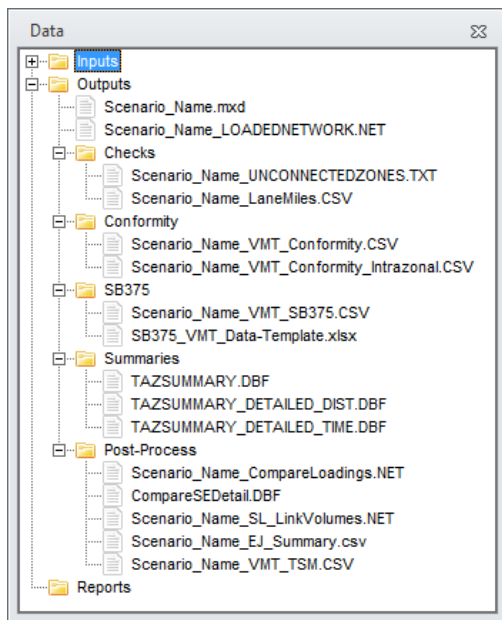


- Close the Inputs window.

Review Scenario Run

Once a full model run is complete, the output network file (XX_LOADEDNETWORK.NET) will be listed in the Data Pane under Outputs. Review the model volumes to ensure that the results are reasonable. The additional output files listed in the Data Pane will be populated once you have run the post-processing scripts (post-processing discussion to follow).

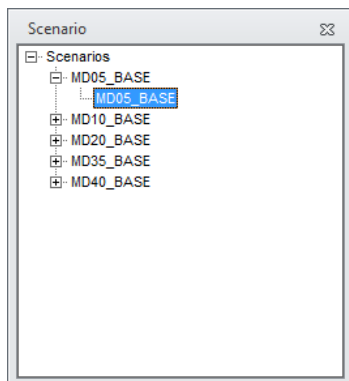




Review Run Report File⁶

A run report file for a previous model run can be viewed at any time by navigating to the file location in the file directory or accessing it directly in the catalog window.

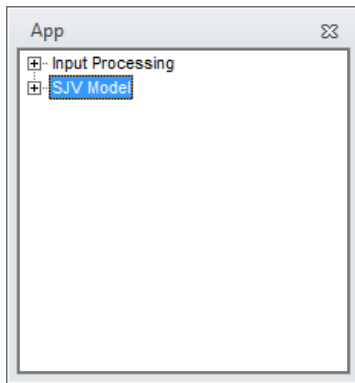
- Select the scenario to review



- Double-click on the application to review

⁶ For more information, please see SJV MIP Video 6 – View PRN Files.wmv





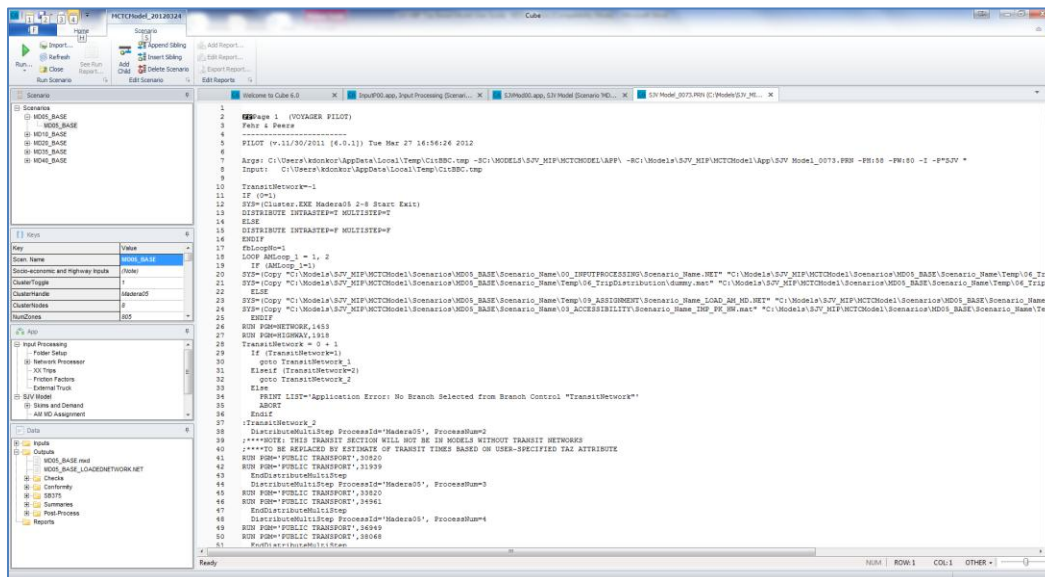
- Click on the **Scenario** ribbon tab



- Click **See Run Report...**



- The report .PRN file will open in the Catalog window for review.

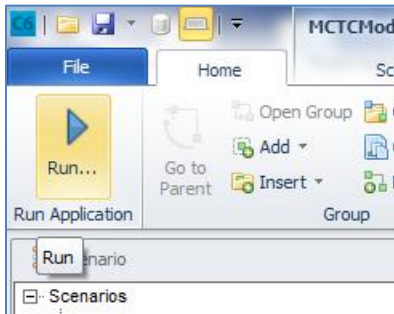


Running Multiple Scenarios

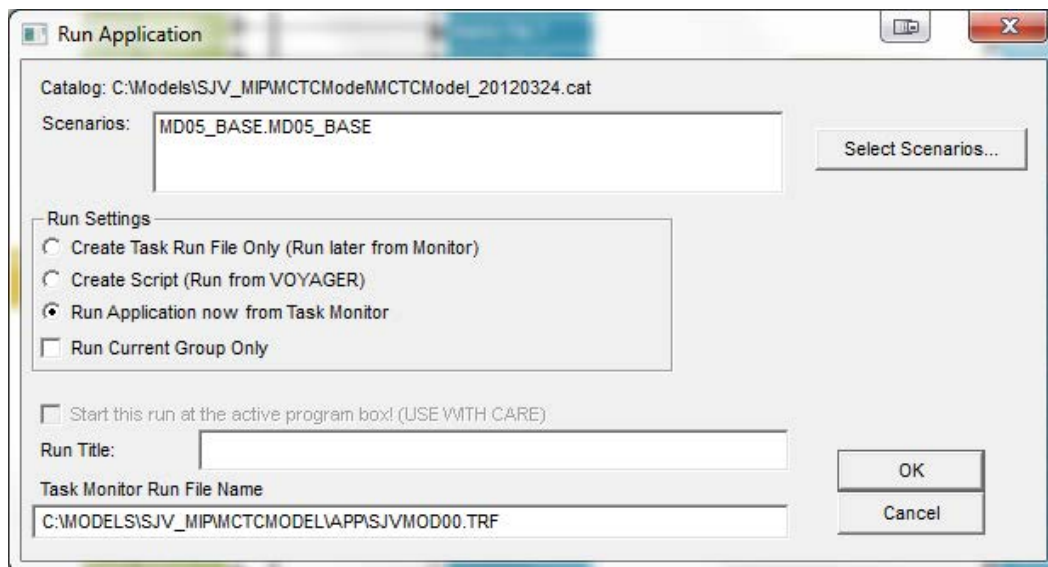


If you would like to run multiple scenarios automatically, you can specify what scenarios to run before you run the model.

- Click on the **Run...** button located on the top **Home** ribbon. This will open the Run Application window.

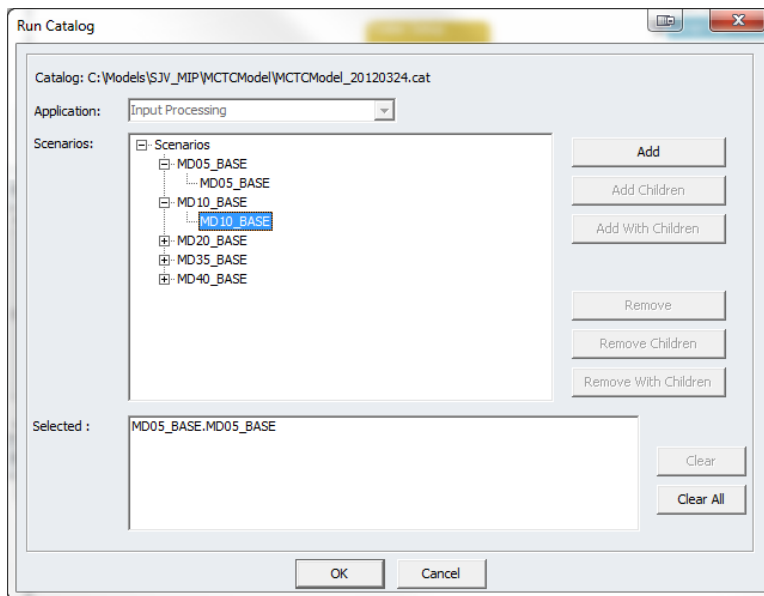


- Click the **Select Scenarios...** button in the upper right corner.

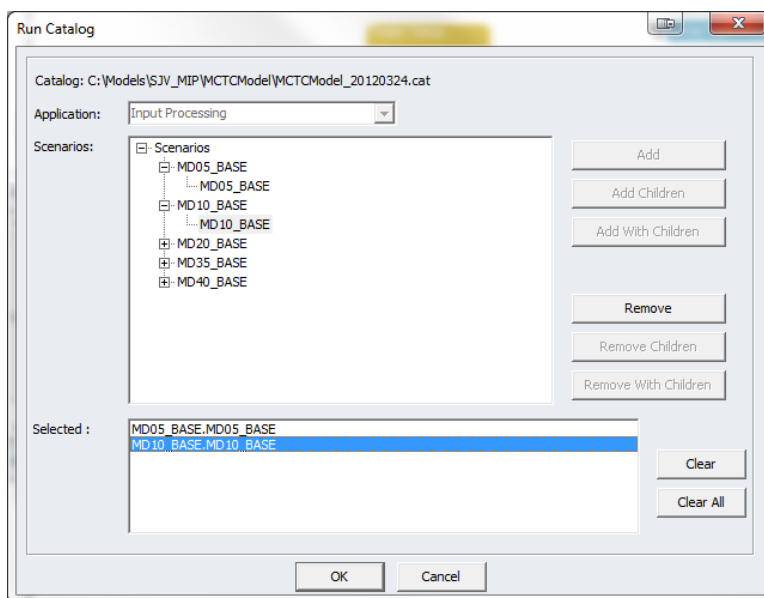


- Select additional scenarios you would like to run in the **Scenarios:** window. Click **Add**.



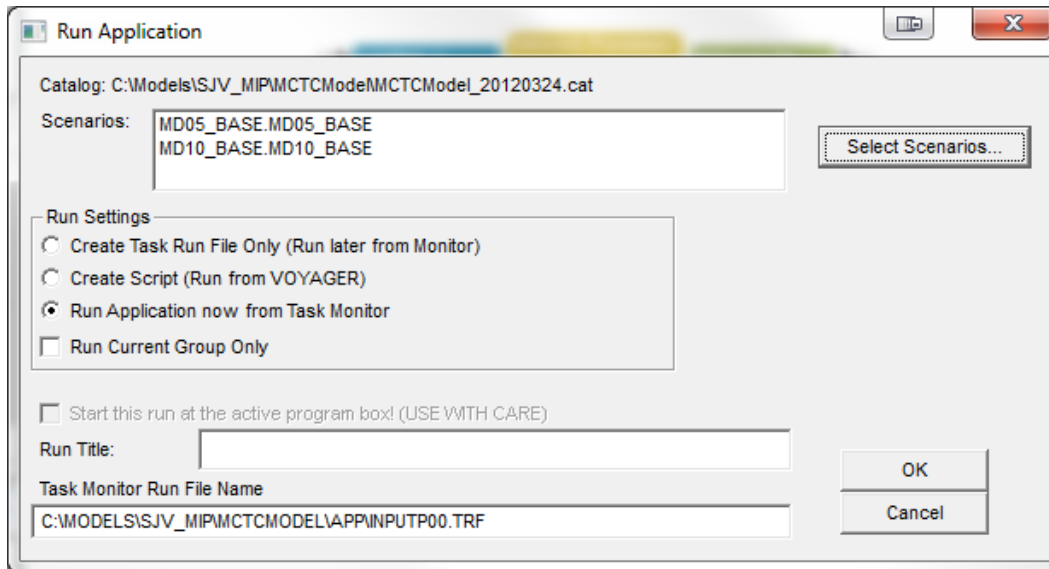


- The additional scenario will be listed in the **Selected:** window.



- To remove a scenario listed in the **Selected:** window, click on the scenario and click **Remove**.
- Once you have the final list of scenarios to run, click **OK**. This will re-open the Run Application window. **Note:** the scenarios to be run will be listed in the Scenarios: window.





Run Application

Catalog: C:\Models\ISJV_MIPMCTCModel\MCTCModel_20120324.cat

Scenarios: MD05_BASE.MD05_BASE
MD10_BASE.MD10_BASE

Select Scenarios...

Run Settings

- ☐ Create Task Run File Only (Run later from Monitor)
- ☐ Create Script (Run from VOYAGER)
- ☒ Run Application now from Task Monitor
- ☐ Run Current Group Only

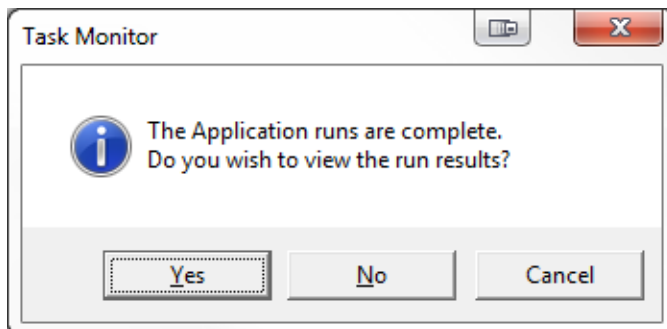
☐ Start this run at the active program box! (USE WITH CARE)

Run Title:

Task Monitor Run File Name
C:\MODELS\ISJV_MIPMCTCModel\APP\INPUTP00.TRF

OK
Cancel

- Select **Run Application now from Task Monitor** from the Run Settings list.
- Click **Ok** to proceed with the run. The scenarios will run in series (i.e. one after another).
- Once the run has completed successfully, a Task Monitor window will pop-up. If you would like to view the run results for each scenario, click **Yes**. Otherwise, click **No**.

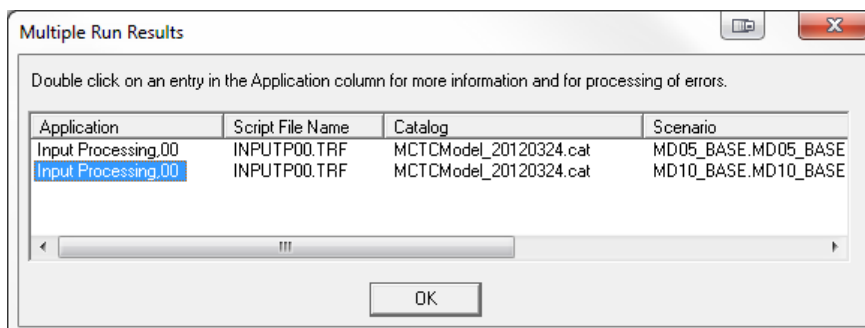


Task Monitor

The Application runs are complete.
Do you wish to view the run results?

Yes No Cancel

- If you click **Yes** to view the run results, the Multiple Run Results window will open. Double-click the **Application** name for the scenario you would like to view. This will open the Task Run Result window for your scenario.



Multiple Run Results

Double click on an entry in the Application column for more information and for processing of errors.

Application	Script File Name	Catalog	Scenario
Input Processing.00	INPUTP00.TRF	MCTCModel_20120324.cat	MD05_BASE.MD05_BASE
Input Processing.00	INPUTP00.TRF	MCTCModel_20120324.cat	MD10_BASE.MD10_BASE

OK

- Click on the **View Run Report File** button. Click **OK**.



Task Run Result

Catalog: C:\Models\SJV_MIP\MCTCModel\MCTCModel_20120324.cat

Scenario: MD10_BASE.MD10_BASE

Application: Input Processing.00

Current Group:

Execution Order:

Program Description:

Application completed successfully

View Program Print File

View Run Report File

OK

Cancel

Do you want to:

- ☐ Return to current Application Manager Session to view the failed program
- ☐ Start new Application Manager session to view the failed program
- ☐ Exit

- Click **OK** to close the Multiple Run Results window and close the Task Monitor Window.
- The run report .PRN file will open in the Catalog window for review.

The screenshot shows the HCTCModel_20120324 application window. The Catalog pane on the left shows the hierarchy: Scenario > MD10_BASE > MD10_BASE. The Scenario pane shows the application: Input Processing.00. The Run Report pane shows the output of the application, including the command line and the list of input files.

Command Line:

```

C:\Users\kdonkor\AppData\Local\Temp\Cit629A.tmp -SC:\Models\SJV_MIP\MCTCModel\APP\ -RC:\Models\SJV_MIP\MCTCModel\APP\

```

Input Files:

```

C:\Users\kdonkor\AppData\Local\Temp\Cit629A.tmp
C:\Models\SJV_MIP\MCTCModel\Scenario\MD10_BASE\MD10_BASE\Inputs
C:\Models\SJV_MIP\MCTCModel\Scenario\MD10_BASE\MD10_BASE\00_InputProcessing
C:\Models\SJV_MIP\MCTCModel\Scenario\MD10_BASE\MD10_BASE\01_Skims
C:\Models\SJV_MIP\MCTCModel\Scenario\MD10_BASE\MD10_BASE\02_LandUse
C:\Models\SJV_MIP\MCTCModel\Scenario\MD10_BASE\MD10_BASE\03_Accessibility
C:\Models\SJV_MIP\MCTCModel\Scenario\MD10_BASE\MD10_BASE\04_AutoOwn
C:\Models\SJV_MIP\MCTCModel\Scenario\MD10_BASE\MD10_BASE\05_TripGeneration
C:\Models\SJV_MIP\MCTCModel\Scenario\MD10_BASE\MD10_BASE\06_TripDistribution
C:\Models\SJV_MIP\MCTCModel\Scenario\MD10_BASE\MD10_BASE\07_ModeChoice
C:\Models\SJV_MIP\MCTCModel\Scenario\MD10_BASE\MD10_BASE\08_Truck
C:\Models\SJV_MIP\MCTCModel\Scenario\MD10_BASE\MD10_BASE\09_Assignment
C:\Models\SJV_MIP\MCTCModel\Scenario\MD10_BASE\MD10_BASE\10_Reporting
C:\Models\SJV_MIP\MCTCModel\Scenario\MD10_BASE\MD10_BASE\Temp
C:\Models\SJV_MIP\MCTCModel\Scenario\MD10_BASE\MD10_BASE\Temp\00_InputProcessing
C:\Models\SJV_MIP\MCTCModel\Scenario\MD10_BASE\MD10_BASE\Temp\01_Skims
C:\Models\SJV_MIP\MCTCModel\Scenario\MD10_BASE\MD10_BASE\Temp\02_LandUse
C:\Models\SJV_MIP\MCTCModel\Scenario\MD10_BASE\MD10_BASE\Temp\03_Accessibility
C:\Models\SJV_MIP\MCTCModel\Scenario\MD10_BASE\MD10_BASE\Temp\04_AutoOwn
C:\Models\SJV_MIP\MCTCModel\Scenario\MD10_BASE\MD10_BASE\Temp\05_TripGeneration
C:\Models\SJV_MIP\MCTCModel\Scenario\MD10_BASE\MD10_BASE\Temp\06_TripDistribution
C:\Models\SJV_MIP\MCTCModel\Scenario\MD10_BASE\MD10_BASE\Temp\07_ModeChoice
C:\Models\SJV_MIP\MCTCModel\Scenario\MD10_BASE\MD10_BASE\Temp\08_Truck
C:\Models\SJV_MIP\MCTCModel\Scenario\MD10_BASE\MD10_BASE\Temp\09_Assignment
C:\Models\SJV_MIP\MCTCModel\Scenario\MD10_BASE\MD10_BASE\Temp\10_Reporting
C:\Models\SJV_MIP\MCTCModel\Scenario\MD10_BASE\MD10_BASE\Temp\11_ExternalMD10_Base_ThroughTrips_120222.csv

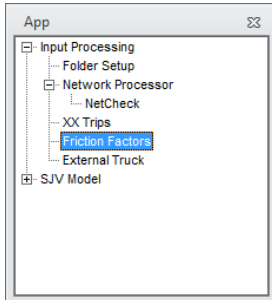
```

Running Individual Sub-Groups

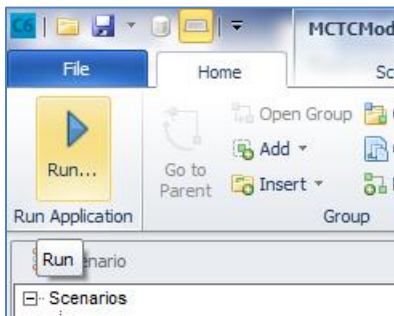


If you would like to run only a portion of the model, you can specify and run application sub-group scripts within the model catalog.

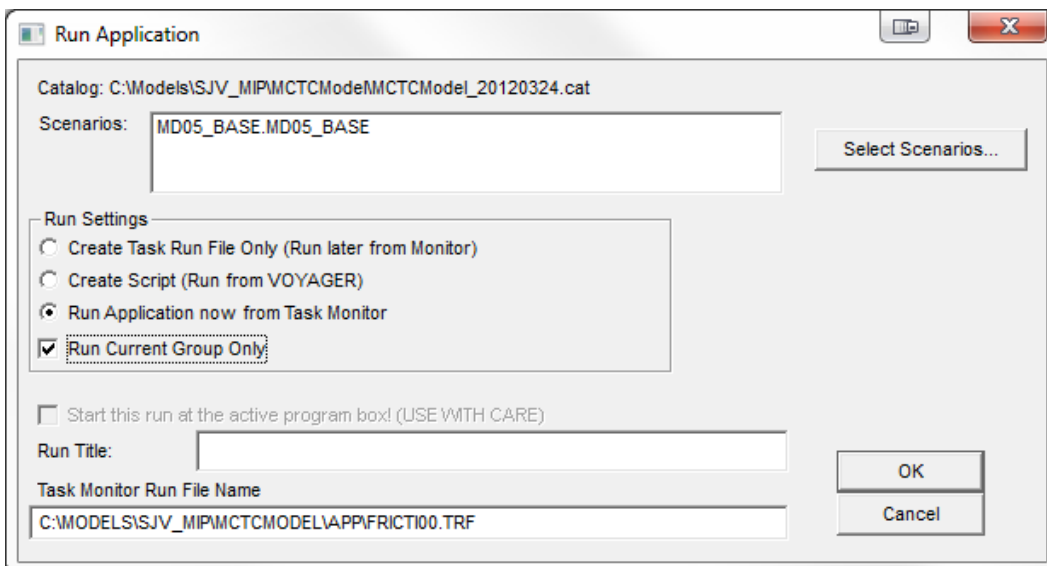
- Click on the application sub-group you would like to run.



- Click on the **Run...** button located on the top **Home** ribbon. This will open the Run Application window.



- Check the **Run Current Group Only** button. The Task Monitor Run File Name will switch from the parent application file to the sub-group application file.



- Click **OK** and proceed with model run.

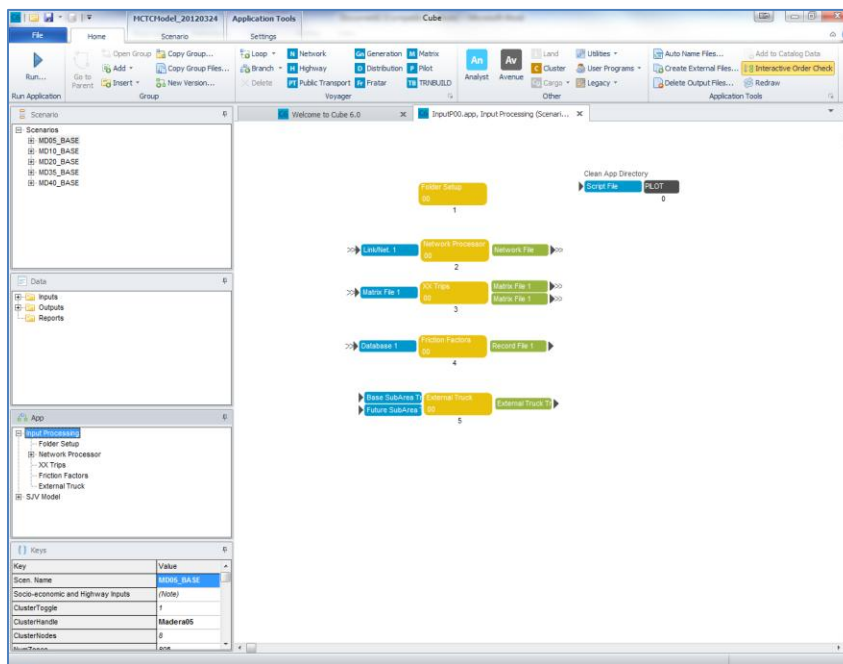


Application Directory Maintenance⁷

After multiple model runs, the application directory will contain temporary .PRN and miscellaneous files that may take up a sizeable portion of file space. Periodically, it is recommended that these files be removed by the model user.

The model contains a script in the Input Processing application to do the clean-up. However, the sub-group application does not run automatically as part of the Input Processing application. The user must run the sub-group application manually.

- Double-click on **Input Processing** in the App Pane. This will bring up the Input Processing application flow diagram in the Catalog window.



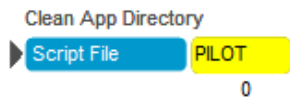
- Locate the **Clean App Directory** sub-group application in the top right corner of the Catalog window.

⁷ For more information, please see SJV MIP Video 7 – Clean App Directory.wmv

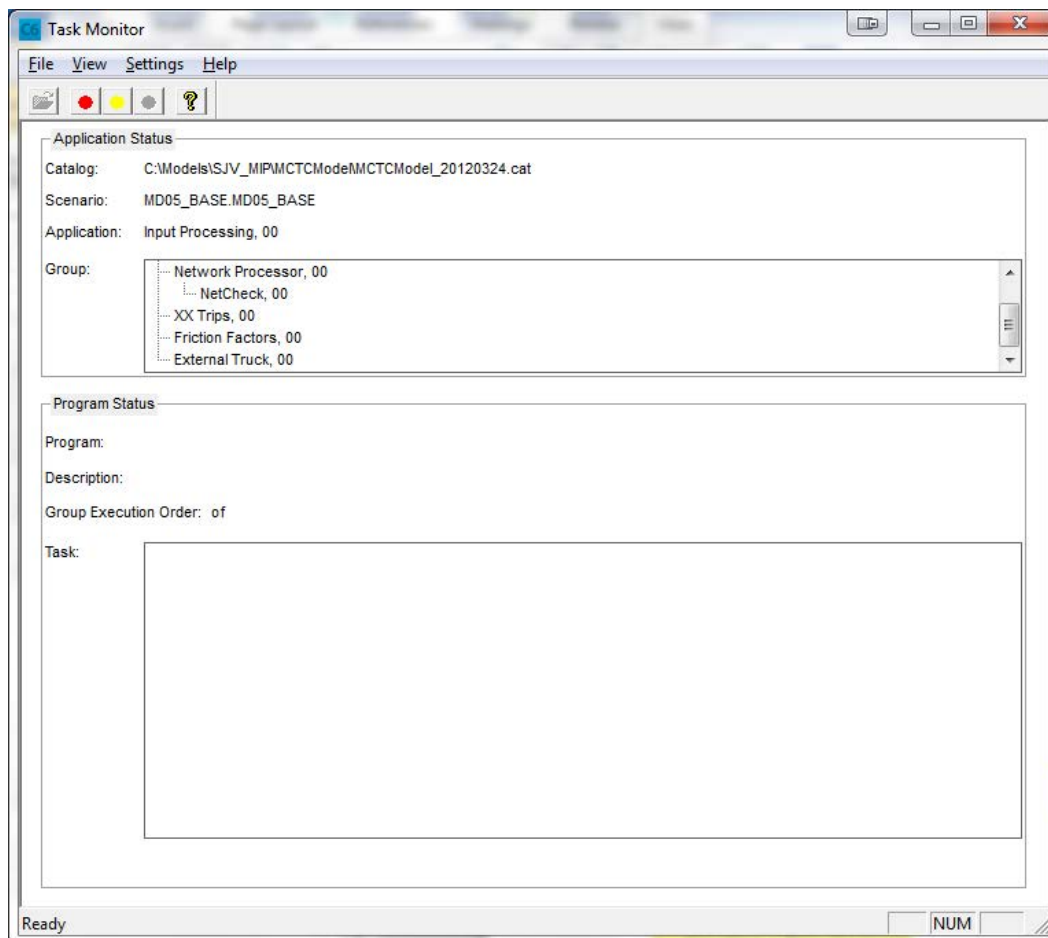




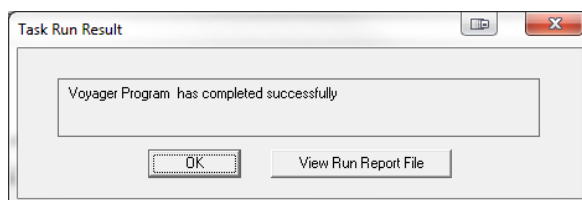
- Double-click on the PILOT icon.



- The Task Monitor window will automatically open.

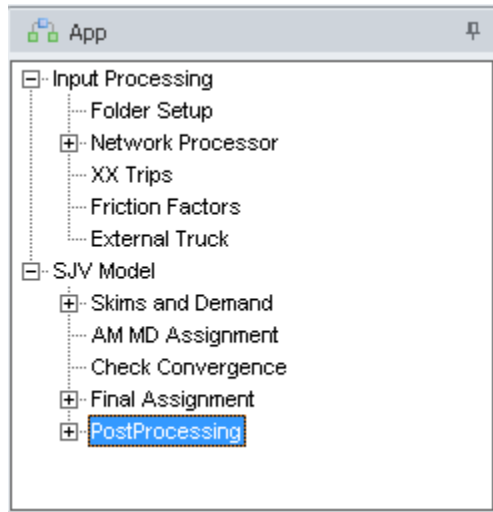


- Click **OK** after the run has completed successfully.



POST PROCESSORS

After the model is run there are a number of post-processors that can be run to prepare model data. The post-processors can be found in the App Pane in the SJV Model application group.

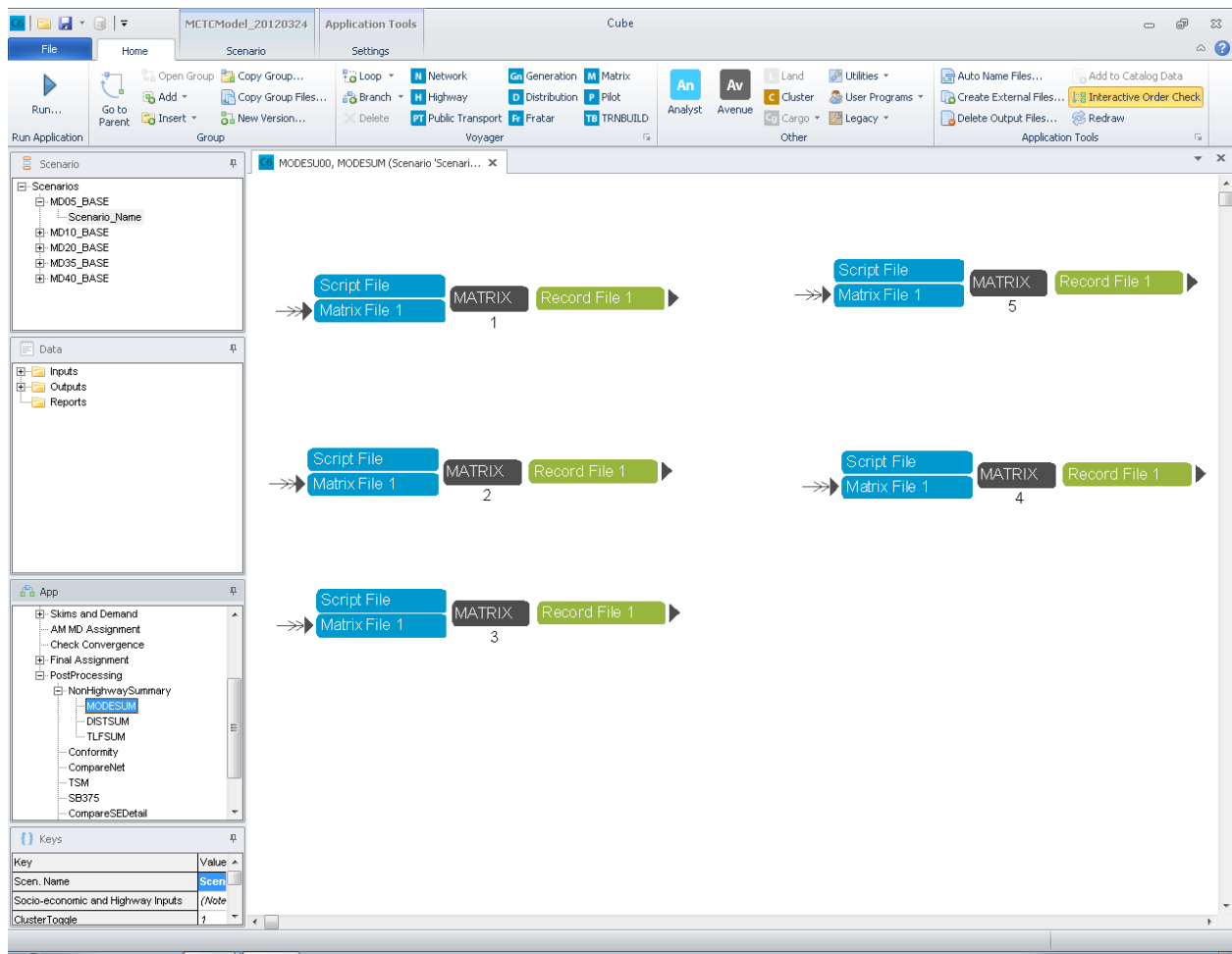


Mode Split Summary

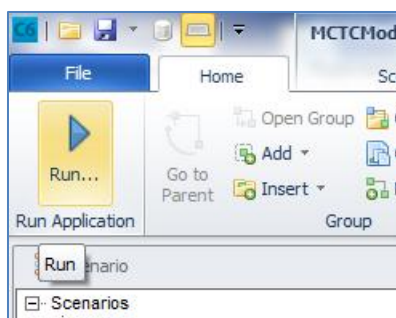
Outputs detailed mode split summary information.

- Double click on **MODESUM** in the App Pane. This will bring up the **MODESUM** application group.





- Click on the **Run...** button located on the top **Home** ribbon. This will open the Run Application window.



- Check the **Run Current Group Only** button.



Run Application

Catalog:

Scenarios: MD05_BASE.Scenario_Name Select Scenarios...

Run Settings

☐ Create Task Run File Only (Run later from Monitor)
☐ Create Script (Run from VOYAGER)
☒ Run Application now from Task Monitor
☒ Run Current Group Only

☐ Start this run at the active program box! (USE WITH CARE)

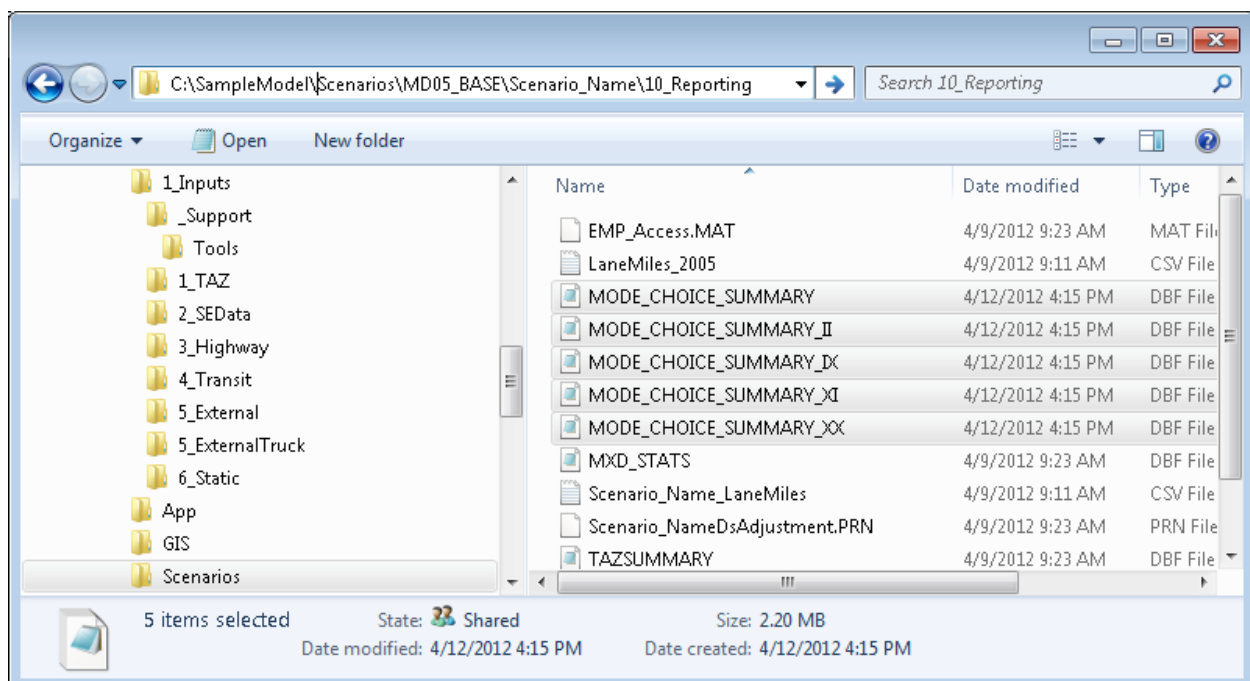
Run Title:

Task Monitor Run File Name

D:\SJV\MIP\MCTCMODEL-20120324\MCTCMODEL_INPUTONLY_20120324\APP\MODESU00

OK Cancel

- Click **OK** and proceed with model run.
- The following five summaries are generated in Scenario_Name\Reporting
 - MODE_CHOICE_SUMMARY
 - MODE_CHOICE_SUMMARY_II
 - MODE_CHOICE_SUMMARY_IX
 - MODE_CHOICE_SUMMARY_XI
 - MODE_CHOICE_SUMMARY_XX



MCTCModel_20120324 Cube

File Home Scenario

Database Tools: Compute..., Create Report..., Information..., Data Tabulation..., Create Report..., Delete Fields..., Modify Structure..., Form View, Add Fields..., Compress, Edit Database, View Database, Clear Sort

Scenario Pane:

- Scenarios
 - MD05_BASE
 - Scenario_Name
 - MD10_BASE
 - MD20_BASE
 - MD35_BASE
 - MD40_BASE
- Data
 - Inputs
 - Outputs
 - Reports
- App
 - Skims and Demand
 - AM MD Assignment
 - Check Convergence
 - Final Assignment
 - PostProcessing
 - NonHighwaySummary
 - MODESUM
 - DISTSUM
 - TLFSUM
 - Conformity
 - CompareNet
 - TSM
 - SB375
 - CompareSEDetail
- Keys

Key	Value
Scen. Name	Scen
Socio-economic and Highway Inputs	(Note)
ClusterToggle	1

Table: MODE_CHOICE_SUMMARY.DBF (D:\JVM\...)

Z	D1_HW	D1_HS	D1_HK	D1_HC	D1_HO	D1_WO	D1_OO	D1_HY	S2_HW	S2_HS	S2_HK	S2_HC	S2_HO	S2_WO	S2_OO
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	16.56	0.72	0	0	4.68	7.28	18.25	1.01	3.49	0.38	0	0	5.72	7.07	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	119.52	0.37	0	0	7.87	61.88	49.1	2.96	23.93	0.19	0	0	9.05	56.52	0
27	166.94	13.75	0	0	14.24	13.05	39.67	2.71	33.66	6.96	0	0	16.64	12.08	0
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

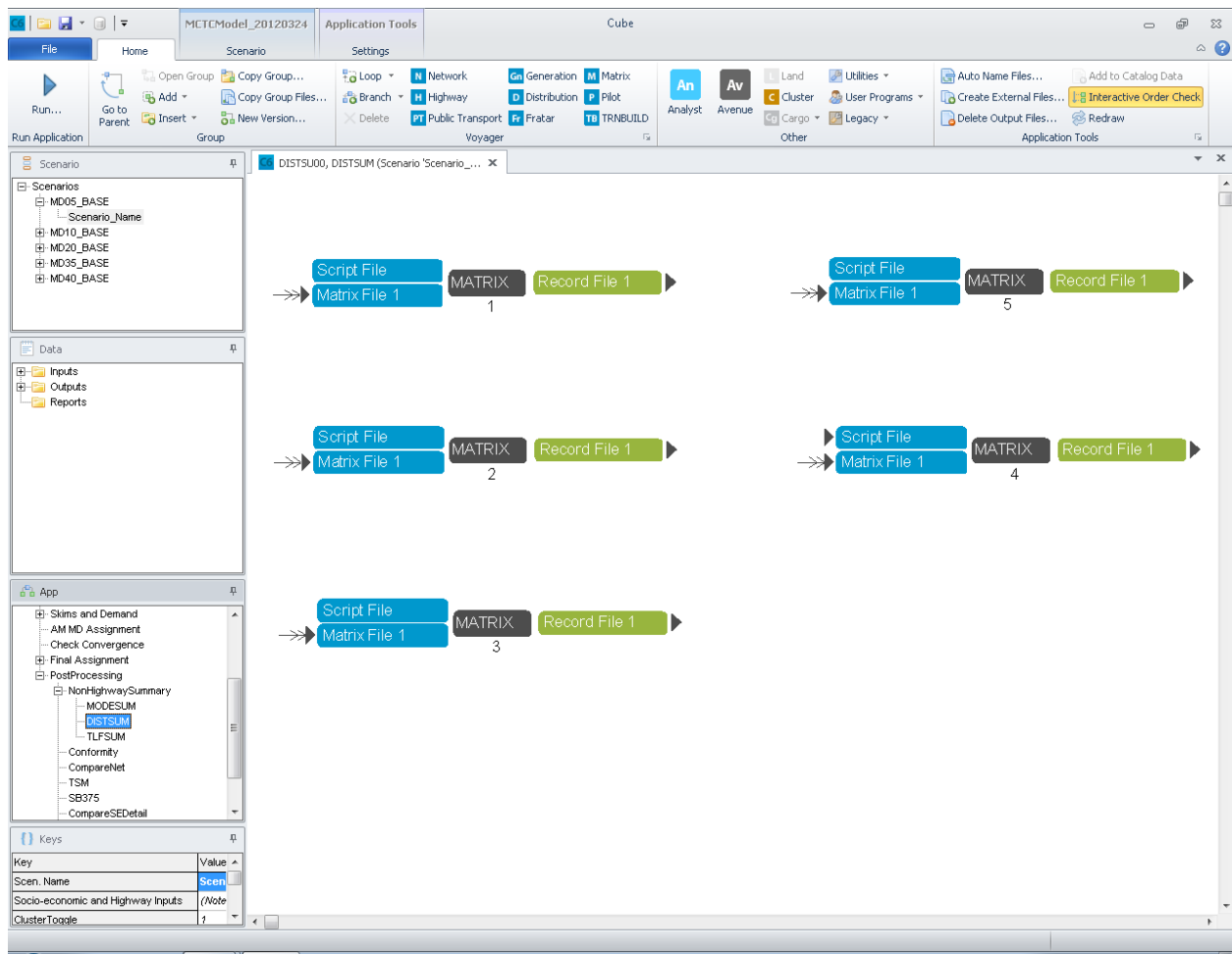
1 of 805

Distribution Summary

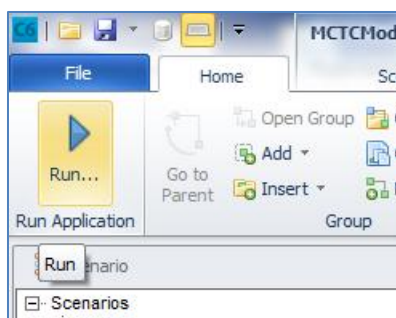
Outputs detailed distribution by purpose summary information.

- Double click on **DISTSUM** in the App Pane. This will bring up the **DISTSUM** application group.





- Click on the **Run...** button located on the top **Home** ribbon. This will open the Run Application window.



- Check the **Run Current Group Only** button.



Run Application

Catalog:

Scenarios: MD05_BASE.Scenario_Name Select Scenarios...

Run Settings

☐ Create Task Run File Only (Run later from Monitor)
☐ Create Script (Run from VOYAGER)
☒ Run Application now from Task Monitor
☒ Run Current Group Only

☐ Start this run at the active program box! (USE WITH CARE)

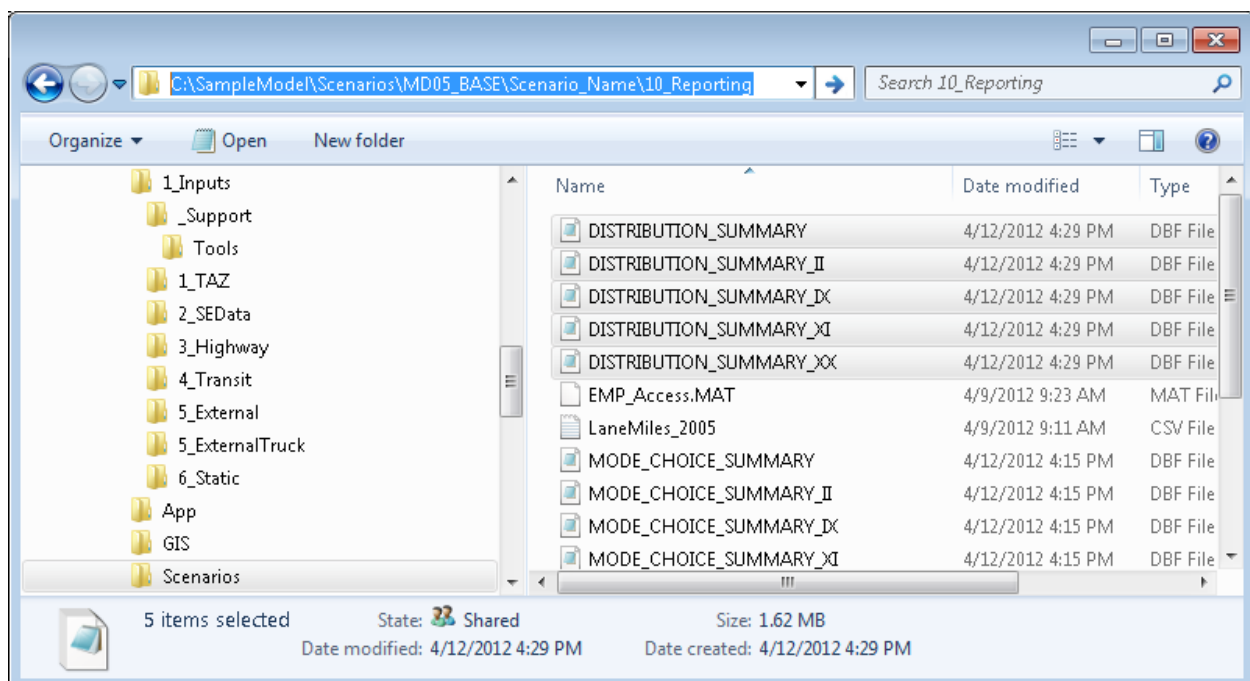
Run Title:

Task Monitor Run File Name

D:\SJVMIP\MCTCMODEL-20120324\MCTCMODEL_INPUTONLY_20120324\APP\DISTSU00.T

OK Cancel

- Click **OK** and proceed with model run.
- The following five summaries are generated in Scenario_Name\Reporting
 - DISTRIBUTION_SUMMARY
 - DISTRIBUTION_SUMMARY_II
 - DISTRIBUTION_SUMMARY_IX
 - DISTRIBUTION_SUMMARY_XI
 - DISTRIBUTION_SUMMARY_XX



The screenshot displays the MCTCModel_20120324 software interface. The App Pane on the left shows the 'DISTSUM' application group selected under 'NonHighwaySummary'. The main window displays a data table with the following columns: Z, HW_OVEH, HS_OVEH, HK_OVEH, HC_OVEH, HO_OVEH, WO_OVEH, OO_OVEH, HY_OVEH, HW_1VEH, HS_1VEH, HK_1VEH, HC_1VEH, HO_1VEH, WO_1VEH, and OO_1VEH. The table contains 39 rows of data, with rows 24 through 39 showing non-zero values for various OVEH and 1VEH categories.

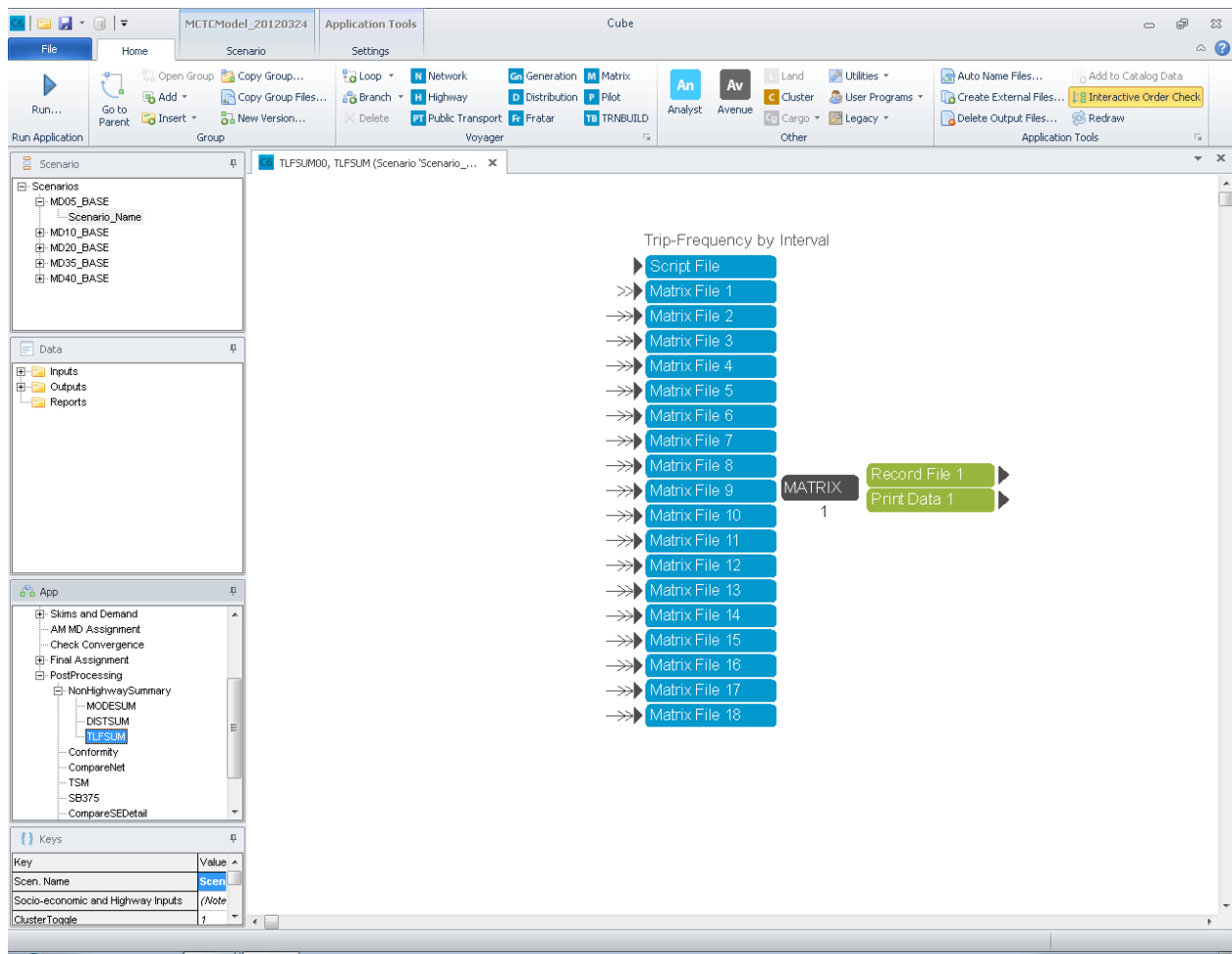
Z	HW_OVEH	HS_OVEH	HK_OVEH	HC_OVEH	HO_OVEH	WO_OVEH	OO_OVEH	HY_OVEH	HW_1VEH	HS_1VEH	HK_1VEH	HC_1VEH	HO_1VEH	WO_1VEH	OO_1VEH
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	1.07	0.08	0	0	0.57	0.79	1.95	1.2	5.99	0.43	0	0	3.21	4.42	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	7.6	0.04	0	0	0.92	6.42	5.03	4	42.58	0.21	0	0	5.14	36.08	0
27	10.78	1.41	0	0	1.68	1.37	4.11	4.4	60.34	7.92	0	0	9.41	7.68	0
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Trip Length Frequency Summary

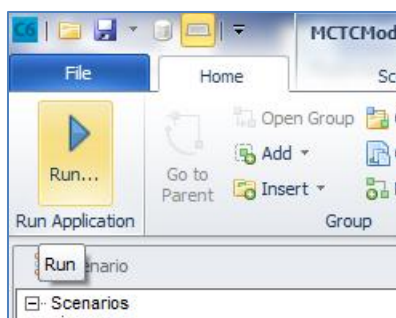
Outputs trip length frequency summary information.

- Double click on **TLFSUM** in the App Pane. This will bring up the **TLFSUM** application group.





- Click on the **Run...** button located on the top **Home** ribbon. This will open the Run Application window.



- Check the **Run Current Group Only** button.



Run Application

Catalog:

Scenarios: MD05_BASE.Scenario_Name Select Scenarios...

Run Settings

☐ Create Task Run File Only (Run later from Monitor)
☐ Create Script (Run from VOYAGER)
☒ Run Application now from Task Monitor
☒ Run Current Group Only

☐ Start this run at the active program box! (USE WITH CARE)

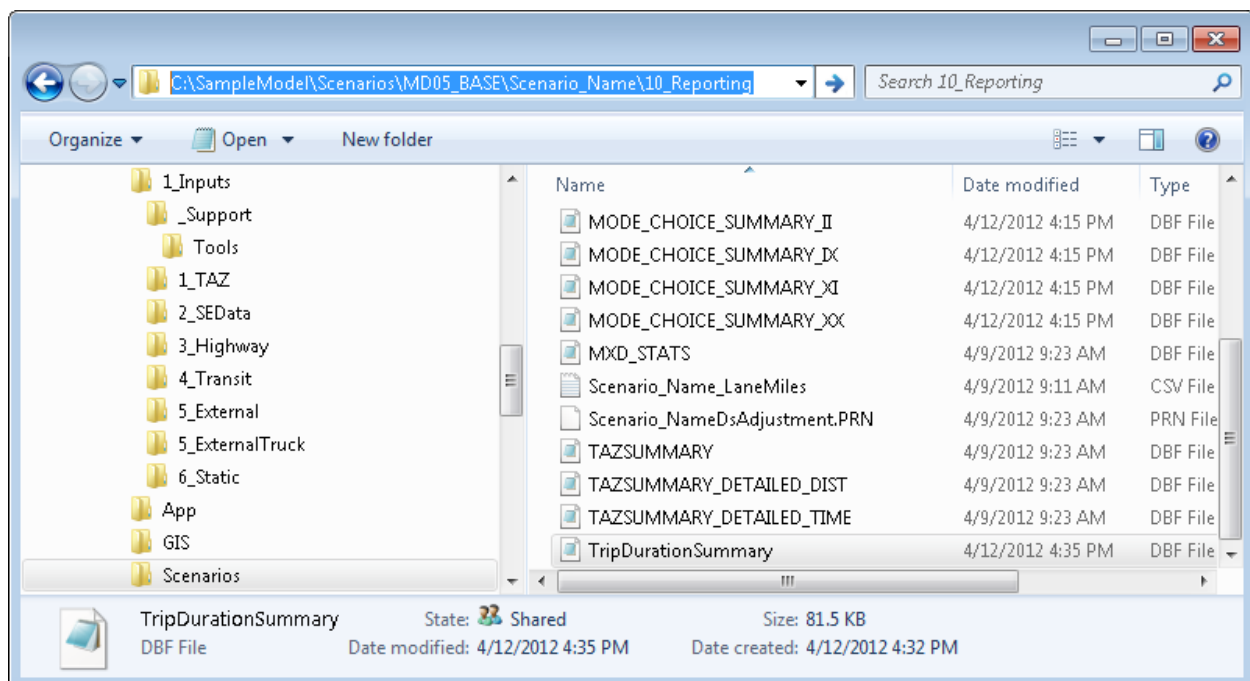
Run Title:

Task Monitor Run File Name

D:\SJVMIP\MCTCMODEL-20120324\MCTCMODEL_INPUTONLY_20120324\APP\TLFSUM00.

OK Cancel

- Click **OK** and proceed with model run.
- The following summary is generated in Scenario_Name\10_Reporting
 - TripDurationSummary.DBF



The screenshot displays the MCTModel_20120324 software interface. The main window shows a data table with columns for various trip types (D1_HW_TRIPS, D1_HS_TRIPS, D1_HK_TRIPS, D1_HC_TRIPS, D1_HO_TRIPS, D1_WO_TRIPS, D1_OO_TRIPS, D1_HY_TRIPS, S2_HW_TRIPS, S2_HS_TRIPS, S2_HK_TRIPS, S2_HC_TRIPS, S2_HO_TRIPS) and a 'TIME' column. The table contains 39 rows of data. The left sidebar shows a tree view of data folders, including 'Scenarios', 'Data', 'App', and 'Keys'. The 'Data' folder is expanded, showing sub-folders like 'Inputs', 'Outputs', and 'Reports'. The 'App' folder is also expanded, showing sub-folders like 'Skims and Demand', 'AM MD Assignment', 'Check Convergence', 'Final Assignment', 'PostProcessing', and 'NonHighwaySummary'. The 'Keys' folder is expanded, showing a table with columns for 'Key' and 'Value'.

TIME	D1_HW_TRIPS	D1_HS_TRIPS	D1_HK_TRIPS	D1_HC_TRIPS	D1_HO_TRIPS	D1_WO_TRIPS	D1_OO_TRIPS	D1_HY_TRIPS	S2_HW_TRIPS	S2_HS_TRIPS	S2_HK_TRIPS	S2_HC_TRIPS	S2_HO_TRIPS
1	1173.159944	953.984921	667.895469	4.721296	3923.51709	1365.755091	18654.715744	0	204.430941	428.336267	1290.753367	9.215838	4277.584
2	6425.946077	4580.116046	3083.574015	62.508751	13543.179055	3250.7234	46014.116209	0	1134.872696	2069.495509	5988.596008	125.110771	14948.008
3	4395.543388	2262.063971	1185.177093	409.236785	6347.312932	1146.374687	14036.630299	0	792.088142	1045.655124	2336.581292	822.718266	7217.869
4	3585.981352	2621.629005	946.028506	134.641714	5059.812123	1492.030704	13175.592787	0	663.551477	1245.173431	1947.251987	275.181532	5908.029
5	3817.539324	2371.847885	1333.97446	80.062201	3516.836175	1201.81983	7715.077531	0	721.703957	1146.215124	2805.314273	165.576364	4127.264
6	2063.041197	1060.687766	426.642434	87.417837	1446.565969	398.56173	2568.11043	0	397.594417	523.467105	918.695034	197.563387	1733.4
7	938.404589	612.493316	194.817079	11.908257	658.219995	174.145003	1028.657985	0	183.776644	306.973764	430.898247	27.536364	810.541
8	741.330397	433.09505	192.997674	8.983298	347.163191	180.735145	657.662647	0	148.08278	222.049074	435.475162	21.208488	433.530
9	1106.482803	576.856624	204.804894	25.64023	316.348445	324.420149	837.981436	0	225.694141	302.957481	477.138419	61.259312	401.999
10	792.500555	316.041632	178.739132	44.857496	123.892361	151.119249	229.986869	0	165.524445	171.629271	431.076932	109.21501	160.093
11	490.302441	192.729884	83.473265	23.1984	48.715592	91.589855	73.787378	0	106.830997	108.734021	218.49698	57.026248	63.990
12	548.45596	203.458189	117.113716	37.905846	42.888995	113.165228	75.949685	0	121.330408	120.025028	306.664235	101.95191	58.850
13	462.555842	112.525726	78.414943	29.614541	12.697981	49.10634	22.200345	0	104.732228	67.781806	215.5462	78.96908	18.139
14	214.34514	51.420592	25.861766	10.099524	3.390773	35.400935	8.904173	0	50.033733	32.868823	73.922878	27.767296	5.169
15	129.513773	33.663933	16.518122	1.989939	1.813607	15.787074	3.324441	0	30.450367	21.651623	52.50561	5.3228	2.871
16	52.192955	14.175115	4.911984	0.346497	0.517318	4.05935	0.81243	0	12.300423	9.116862	14.326214	1.006722	0.836
17	42.740988	10.255483	3.936859	0.337077	0.310426	5.691399	0.712751	0	10.074485	6.416391	11.677548	1.001803	0.505
18	14.821569	3.172837	0.469773	0.046209	0.132206	1.093931	0.103569	0	3.582106	2.065713	1.398605	0.148869	0.213
19	3.602108	0.63231	0.191519	0	0.0075	1.719064	0.073853	0	0.906985	0.445806	0.576095	0	0.016
20	9.794343	1.624542	0.066697	0	0.019744	0.372647	0.017225	0	2.456033	1.080136	0.235956	0	0.034
21	6.141001	0.838092	0.004912	0	0.004348	0.279561	0.005687	0	1.539375	0.549488	0.019211	0	0.007
22	2.587772	0.322677	0.001348	0	0.000977	0.147971	0.001408	0	0.663662	0.2229	0.004315	0	0.00
23	0.162757	0.028892	0	0	0.000138	5.2E-5	1.7E-5	0	0.041143	0.018932	0	0	0.000
24	0.081625	0.009969	0	0	1.4E-5	0.004167	9.2E-5	0	0.02157	0.007242	0	0	4.6
25	0	0	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0	0	0	0	0	0
32	0	0	0	0	0	0	0	0	0	0	0	0	0
33	0	0	0	0	0	0	0	0	0	0	0	0	0
34	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0
36	0	0	0	0	0	0	0	0	0	0	0	0	0
37	0	0	0	0	0	0	0	0	0	0	0	0	0
38	0	0	0	0	0	0	0	0	0	0	0	0	0
39	0	0	0	0	0	0	0	0	0	0	0	0	0

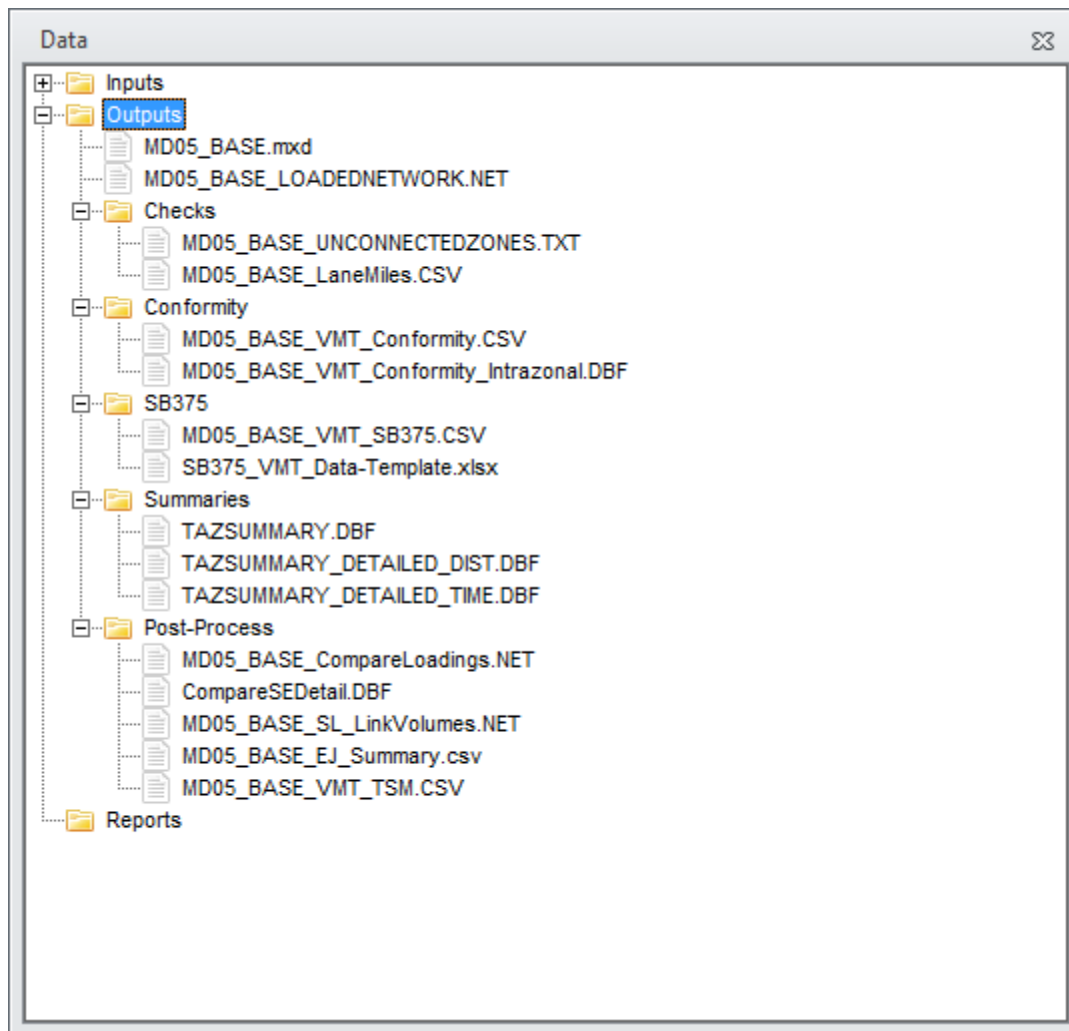
Conformity

To access the files described below:

1. In the Data pane, click the + symbol next Outputs
2. In the Data pane, click the + symbol next to Checks
3. In the Data pane, click the + symbol next to Conformity
4. In the Data pane, click the + symbol next to SB375
5. In the Data pane, click the + symbol next to Summaries
6. In the Data pane, click the + symbol next to Post-Process

Individual Data folders are referenced as part of the instructions for each post-process. The resulting Data pane will look like the image below.





Input preparation

This process uses a network variable for Study Area to determine how to aggregate the VMT. The Study Area is a token in the Cube Catalog that can represent multiple air basins, counties, or sub-areas of a model to report VMT separately. As delivered, this variable is set to 1 for all models with the following exceptions:

- TCM separate by county: 1=Merced, 2=San Joaquin, 3=Stanislaus
- Kern separate by air basin: 1=SJV , 2=MD, 3=IWV, 4=PM10 SLIVER

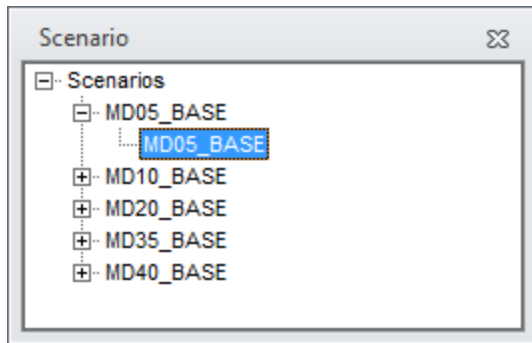
If summary by other areas is desired, the network variable should be updated before running the model so that the variable is included on all roadway network files.

Files Used

The files below can be accessed through the data pane on the left hand side of the catalog. The sub-bullets refer to the directory in Data pane or Windows Explorer.



- SB375_VMT_Data-Template.xlsx: Template Excel spreadsheet used to combine and report VMT by speed range.
 - Cube Catalog Data Pane: SB375
 - Windows Explorer: 1_Inputs\Support\Tools\
 - XYYY_VMT_Conformity.CSV: VMT on roadways by II, IX, XI, XX by speed range
 - Cube Catalog Data Pane: Conformity
 - Windows Explorer: 10_Reporting\
 - XYYY_VMT_Conformity_Intrazonal.DBF : Intrazonal VMT by speed range
 - Cube Catalog Data Pane: Conformity
 - Windows Explorer: 10_Reporting\
1. Open the Cube Catalog (see instructions above)
 2. Click to select the scenario to summarize, MD05_BASE in this example.



3. Run the model scenario if it has not already been run (see instructions above)
4. In the SJV Model Application, run the Conformity and SB375 Sub-groups by

- a. double click on step 7, PostProcessing

PostProcessing
00

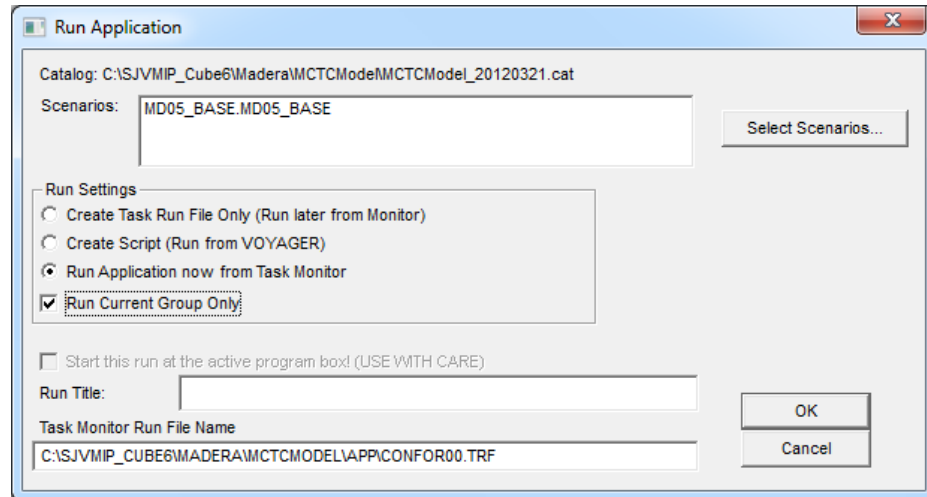
7

- b. double click on Conformity

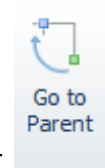
Conformity
00

- c. Run the current application only





- d. After the model is done, close the message window by clicking OK



- e. Click the Go to Parent button on the top of menu bar
- f. Double click on SB375
- g. Run the current application only as shown above
- h. The SB375 application re-runs assignment and could take a few hours for large models.
- i. After the model is done, close the message window by clicking OK
5. Expand all the Output folders in the Data pane as described above.
6. Double click the SB375_VMT_Data-Template.xlsx in the Data pane to open the file. The file will open in Excel.



7. Once the file is in Excel, save the Template file as a new name using the File->Save As option.
8. Click on the Cube window to return to the Cube Application.
9. Double click on the XX_VMT_Conformity.CSV in the Data pane to open in Excel.
10. Once open in Excel, copy cells for the VMT for the appropriate study area and year, excluding the Total row (E2 through T15 if there is only 1 study area)
11. Switch to the Excel window with the file SB375 template
12. Click the VMTData tab to the far right
13. Click in the row for the 0.0-7.5 speed range in the appropriate year under AM_II (cell C3 for 2005)
14. Right click with the mouse button and select Paste. The values will update in the spreadsheet.





15. Click the top left windows icon in Excel, and then Open
16. Brows to the scenario directory under 10_Reporting and open the
XXYY_VMT_Conformity_Intrazonal.DBF (in this example
MD05_BASE_VMT_Conformity_Intrazonal.DBF)
17. Copy cells for the VMT for the appropriate study area and year (D2 through G15 if there
is only 1 study area)
18. Click in the row for the 0.0-7.5 speed range in the appriate year under intrazonal AMVMT
(cell U3 for 2005)
19. Right click with the mouse button and select Paste. The values will update in the
spreadsheet.
20. Selecting Conformity or SB 375 values
 - a. After pasting the roadway VMT and intrazonal VMT, select the Instructions tab to
the far left
 - b. Set the II, IX, XI, and XX values as appropriate
 - i. For Conformity, set the II, IX, XI, and XX values highlighted in yellow to
100%

12	4) enter values for allocation of II, IX, XI, and XX trips below			
13	II	100%		
14	IX	100%		
15	XI	100%		
16	XX	100%		

- ii. For SB 375, set the II, IX, XI, and XX values as appropriate. Based on past
submittals, the values for each are shown below

12	4) enter values for allocation of II, IX, XI, and XX trips below			
13	II	100%		
14	IX	50%		
15	XI	50%		
16	XX	0%		

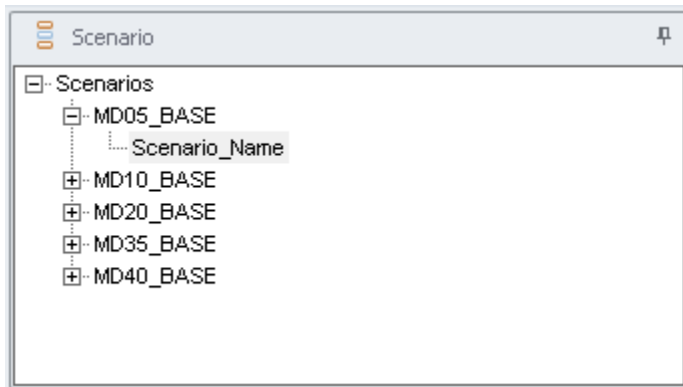
- c. Click on the color coded year tab for the appropriate year (green 2005 in this
example) to see the summary of VMT.
21. Repeat the steps above for other years or scenarios as needed.
22. Save the file periodically and before exiting.

Network Compare

Compare user-defined network against model scenario network in personal geodatabase



- Define network to compare against model scenario network in Cube Application keys
- Select scenario in Scenario pane



- Click **Next** for second page of scenario keys
- Define network to compare



Scenario - MD05_BASE.Scenario_Name (...)

Post-Processing

☒ Use LOS capacity ranges rather than model VC

Conformity and SB 375

Conformity Speed Bin Size (mph range) 5

Conformity number of speed bins 14

Airbasins 5

Compare files to current scenario

Define network to compare D:\SJVMI\MCTCModel-20120324\MCTCModel_InputsOnly_20120324\Scenarios\MD10_BASE\MD10_ Browse ... Edit ...

Define SE Detail to compare D:\SJVMI\MCTCModel-20120324\MCTCModel_InputsOnly_20120324\1_Inputs\2_SEData\MD10_Ba Browse ... Edit ...

ITE Match and Select Link/Zone

☐ Adjust trips to match value.

Zones to adjust to match (ex. 101-105,107) 101

Trip targets by zone (DBF with Zone,A1_IN, A1_OUT, P1_IN, P1_OUT, DAY_IN, DAY_OUT) D:\SJVMI Browse ... Edit ...

Select Link/Zone Listing (ex. N=101 & N=105-110 & L=101-102*) N=101

Environmental Justice

Collisions per VMT 1355

Total Collisions 10513

Collision PDO 6049

Collision Injuries 4322

Collision Fatalities 143

Deaths 163

Injuries 7261

Trip-Length Frequency

Maximum travel time (minutes) 90

Time Interval for Summary (minutes) 5

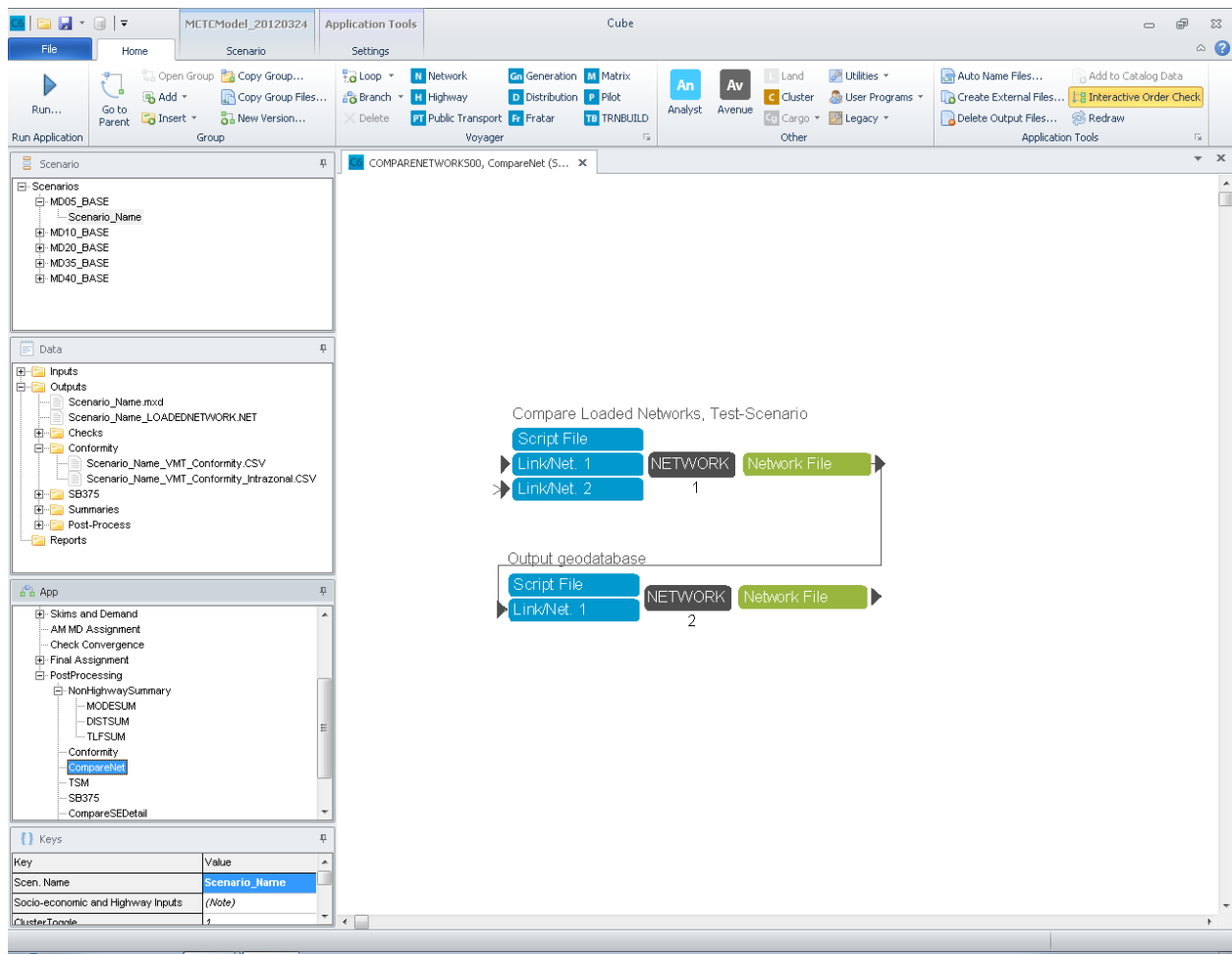
Range of Origin Zones for Summary 101-805

Range of Destination Zones for Summary 101-805

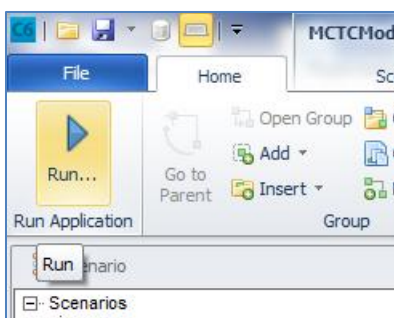
Save Close Next... Back... Run

- Double click on **CompareNet** in the App Pane. This will bring up the **CompareNet** application group.





- Click on the **Run...** button located on the top **Home** ribbon. This will open the Run Application window.



- Check the **Run Current Group Only** button.



Run Application

Catalog:

Scenarios: MD05_BASE.Scenario_Name Select Scenarios...

Run Settings

☐ Create Task Run File Only (Run later from Monitor)
☐ Create Script (Run from VOYAGER)
☒ Run Application now from Task Monitor
☒ Run Current Group Only

☐ Start this run at the active program box! (USE WITH CARE)

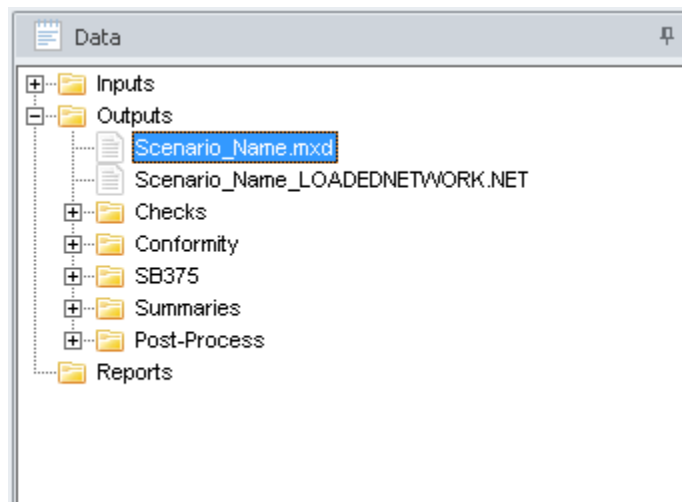
Run Title:

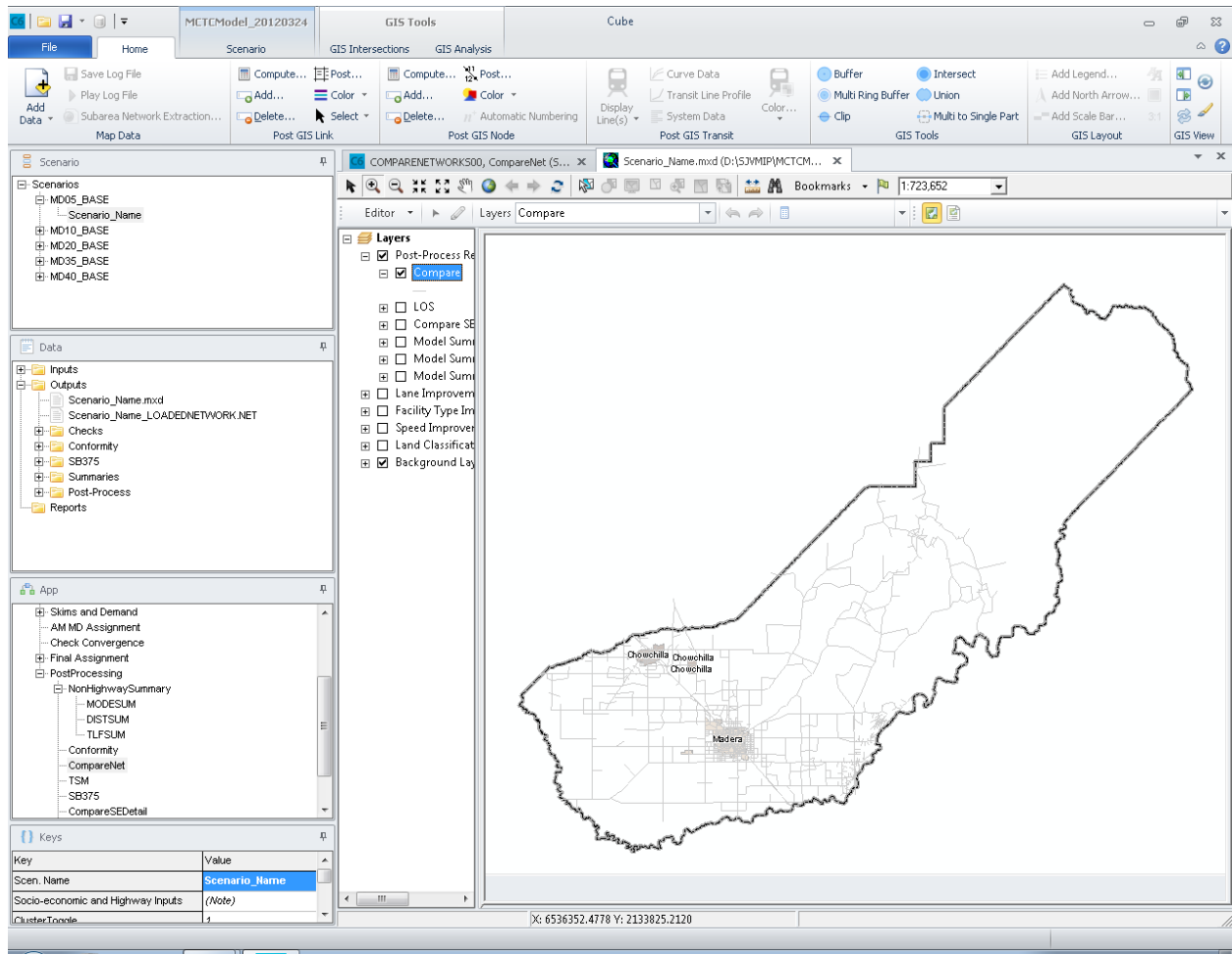
Task Monitor Run File Name

D:\SJVMIP\MCTCMODEL-20120324\MCTCMODEL_INPUTONLY_20120324\APP\COMPAREN

OK Cancel

- Click **OK** and proceed with model run.
- To view results double click on the personal geodatabase in the Data pane





Senate Bill 375 (SB375)

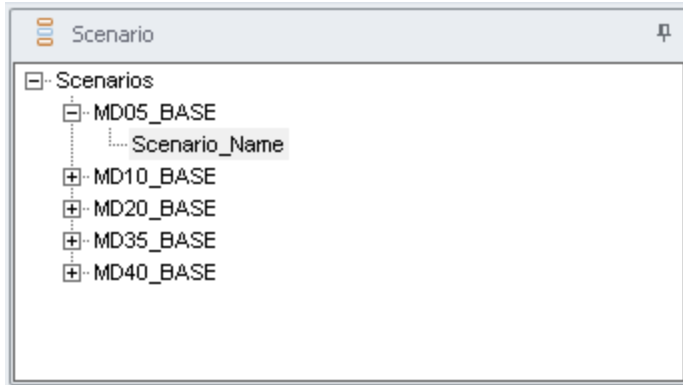
See Conformity section above

Socioeconomic Detail Compare

Compare user-defined socioeconomic detail against model scenario socioeconomic detail

- Define socioeconomic detail to compare against model scenario socioeconomic detail in Cube Application keys
- Select scenario in Scenario pane





- Click **Next** for second page of scenario keys
- Define socioeconomic detail to compare

Scenario - MD05_BASE.Scenario_Name (...)

Post-Processing

☒ Use LOS capacity ranges rather than model VC

Conformity and SB 375

Conformity Speed Bin Size (mph range)

Conformity number of speed bins

Airbasins

Compare files to current scenario

Define network to compare

Define SE Detail to compare

ITE Match and Select Link/Zone

☐ Adjust trips to match value.

Zones to adjust to match (ex. 101-105,107)

Trip targets by zone (DBF with Zone,A1_IN, A1_OUT, P1_IN, P1_OUT, DAY_IN, DAY_OUT)

Select Link/Zone Listing (ex. N=101 & N=105-110 & L=101-102*)

Environmental Justice

Collisions per VMT

Total Collisions

Collision PDO

Collision Injuries

Collision Fatalities

Deaths

Injuries

Trip-Length Frequency

Maximum travel time (minutes)

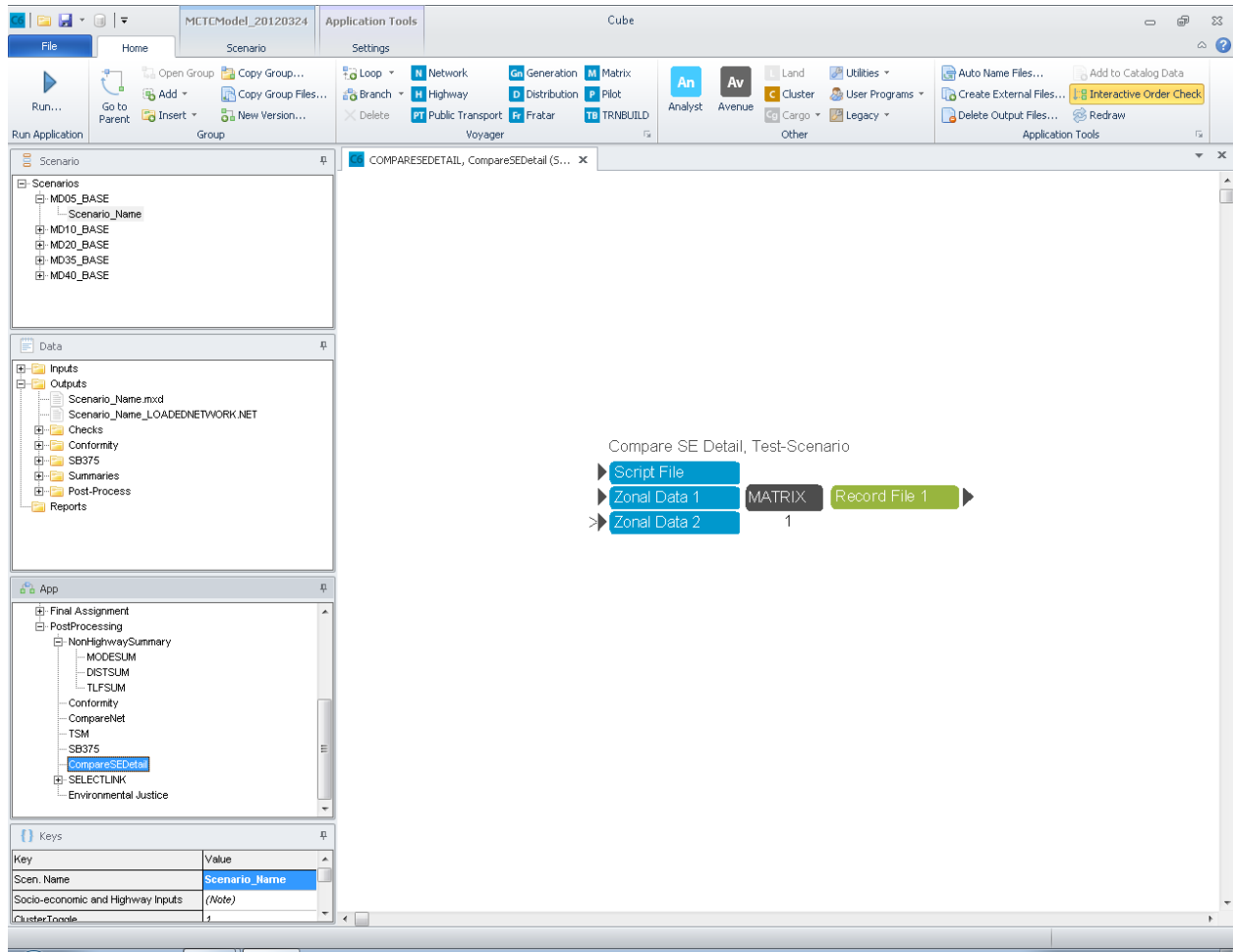
Time Interval for Summary (minutes)

Range of Origin Zones for Summary

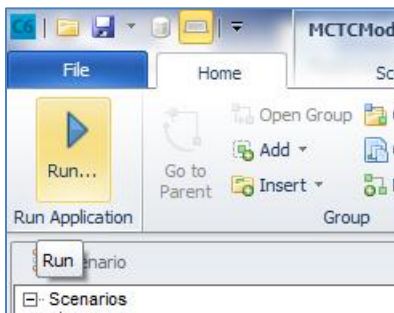
Range of Destination Zones for Summary



- Double click on **CompareSEDetail** in the App Pane. This will bring up the **CompareSEDetail** application group.



- Click on the **Run...** button located on the top **Home** ribbon. This will open the Run Application window.



- Check the **Run Current Group Only** button.



Run Application

Catalog:

Scenarios: MD05_BASE.Scenario_Name Select Scenarios...

Run Settings

☐ Create Task Run File Only (Run later from Monitor)
☐ Create Script (Run from VOYAGER)
☒ Run Application now from Task Monitor
☒ Run Current Group Only

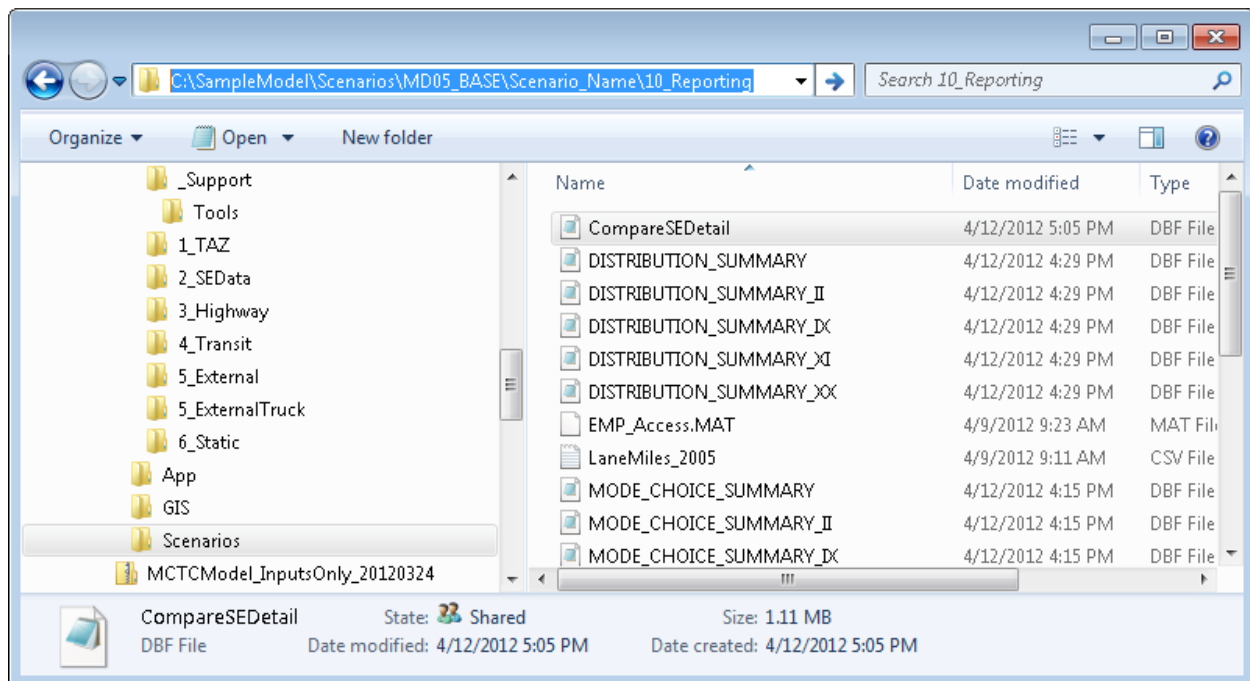
☐ Start this run at the active program box! (USE WITH CARE)

Run Title:

Task Monitor Run File Name
D:\SJVMIP\MCTCMODEL-20120324\MCTCMODEL_INPUTONLY_20120324\APP\COMPARES

OK Cancel

- Click **OK** and proceed with model run.
- The following files are generated in Scenario_Name\10_Reporting
 - CompareSEDetail.DBF



The screenshot shows the MCTCModel_20120324 application window. The main data table has the following columns: Z, D_TOTHH, D_POP, D_R1, D_R2, D_R3, D_R4, D_R5, D_R6, D_R7, D_R8, D_R9, D_R10, and D_R1_POP. The table contains 39 rows of data, all with values of 0. The interface includes a menu bar, a toolbar, and a sidebar with a tree view of the application structure.

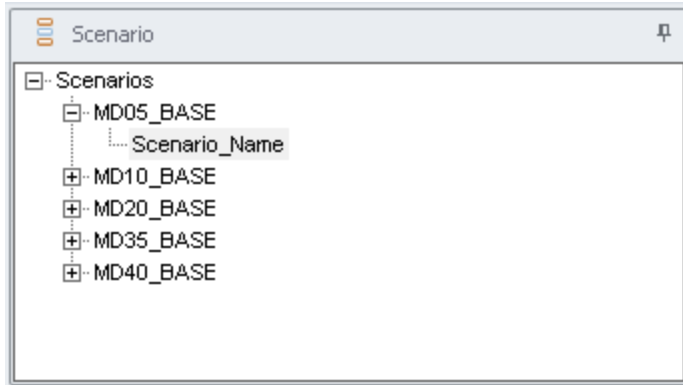
Z	D_TOTHH	D_POP	D_R1	D_R2	D_R3	D_R4	D_R5	D_R6	D_R7	D_R8	D_R9	D_R10	D_R1_POP
1	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0	0	0	0	0	0
32	0	0	0	0	0	0	0	0	0	0	0	0	0
33	0	0	0	0	0	0	0	0	0	0	0	0	0
34	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0
36	0	0	0	0	0	0	0	0	0	0	0	0	0
37	0	0	0	0	0	0	0	0	0	0	0	0	0
38	0	0	0	0	0	0	0	0	0	0	0	0	0
39	0	0	0	0	0	0	0	0	0	0	0	0	0

Select Link Analysis / FRATAR to ITE control totals

Creates select link or zone analysis for review in personal geodatabase file. If desired, select zone can be adjusted to match ITE control totals for easier review of select zone.

- Define socioeconomic detail to compare against model scenario socioeconomic detail in Cube Application keys
- Select scenario in Scenario pane





- Click **Next** for second page of scenario keys
- Define ITE Match and Select Link/Zone options to compare

SELECTLINK00, SELECTLINK (Scenario 'S... x Scenario - MD05_BASE.Scenario_Name (... x

Post-Processing

☒ Use LOS capacity ranges rather than model VC

Conformity and SB 375

Conformity Speed Bin Size (mph range) 5

Conformity number of speed bins 14

Airbasins 5

Compare files to current scenario

Define network to compare D:\SJVMIP\MCTCModel-20120324\MCTCModel_InputsOnly_20120324\Scenarios\MD05_BASE\Scenai Browse ... Edit ...

Define SE Detail to compare D:\SJVMIP\MCTCModel-20120324\MCTCModel_InputsOnly_20120324\1_Inputs\2_SEData\MD05_Ba Browse ... Edit ...

ITE Match and Select Link/Zone

☐ Adjust trips to match value.

Zones to adjust to match (ex. 101-105,107) 101

Trip targets by zone (DBF with Zone,A1_IN, A1_OUT, P1_IN, P1_OUT, DAY_IN, DAY_OUT) D:\SJVMIP Browse ... Edit ...

Select Link/Zone Listing (ex. N=101 & N=105-110 & L=101-102*) N=101

Environmental Justice

Collisions per VMT 1355

Total Collisions 10513

Collision PDO 6049

Collision Injuries 4322

Collision Fatalities 143

Deaths 163

Injuries 7261

Trip-Length Frequency

Maximum travel time (minutes) 90

Time Interval for Summary (minutes) 5

Range of Origin Zones for Summary 101-805

Range of Destination Zones for Summary 101-805

Save Close Next... Back... Run



-
- The screenshot displays the MCTC Modeler software interface. The top menu bar includes File, Home, Scenario, and Settings. The left sidebar contains a project tree with folders for Scenarios, Data, App, and Keys. The main workspace shows a flowchart with the following steps:
- Start Cluster**: A blue button labeled "Script File" and a grey button labeled "PILOT".
 - ITEFratar 00**: A yellow box with the number "2" below it.
 - Select Link AM Period Assignment**: A sequence of blue buttons: "Script File", "Matrix File 1", "Network File", "Turn Penalties", and "Lookup File 1". A grey button labeled "HIGHWAY" is positioned between the "Network File" and "Turn Penalties" buttons.
 - Select Link MD Period Assignment**: A blue button labeled "Script File".
 - Select Link PH**: A sequence of blue buttons: "Script File", "Matrix File 1", "Network File", "Turn Penalties", and "Lookup File 1".
 - Clean Select**: A sequence of blue buttons: "Script File" and "Link/Net. 1".
- The "Keys" panel at the bottom shows the following table:
- | Key | Value |
|-----------------------------------|---------------|
| Scen. Name | Scenario_Name |
| Socio-economic and Highway Inputs | (None) |
| Cluster/Tools | 1 |

-
- The screenshot shows the MCTCMod software interface. The 'Run' button is highlighted in the 'Run Application' group. The interface includes a menu bar with 'File', 'Home', and 'Scenarios'. The 'Run' button is a yellow square with a blue play icon and the text 'Run...'. Below it, the text 'Run Application' is visible. To the right, there are buttons for 'Open Group', 'Add', 'Insert', 'Go to Parent', and 'Group'. The 'Scenarios' list is visible at the bottom, showing 'Run' and 'Scenario'.

-

Run Application

Catalog:

Scenarios: MD05_BASE.Scenario_Name Select Scenarios...

Run Settings

☐ Create Task Run File Only (Run later from Monitor)
☐ Create Script (Run from VOYAGER)
☒ Run Application now from Task Monitor
☒ Run Current Group Only

☐ Start this run at the active program box! (USE WITH CARE)

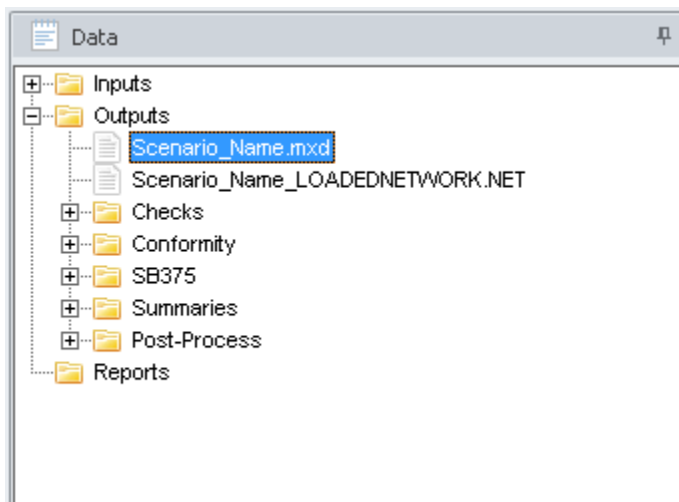
Run Title:

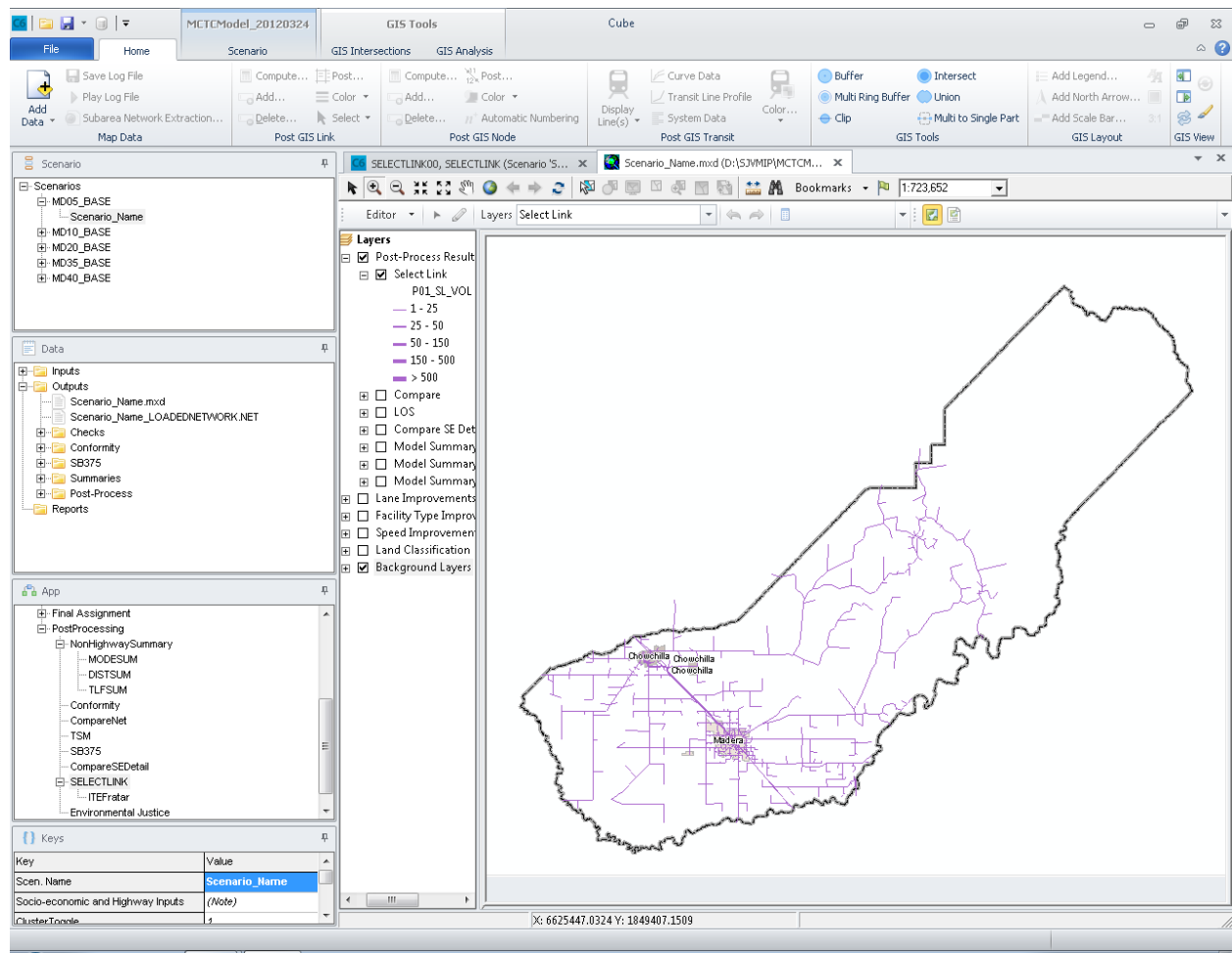
Task Monitor Run File Name

D:\SJVMIP\MCTCMODEL-20120324\MCTCMODEL_INPUTONLY_20120324\APP\COMPARES

OK
Cancel

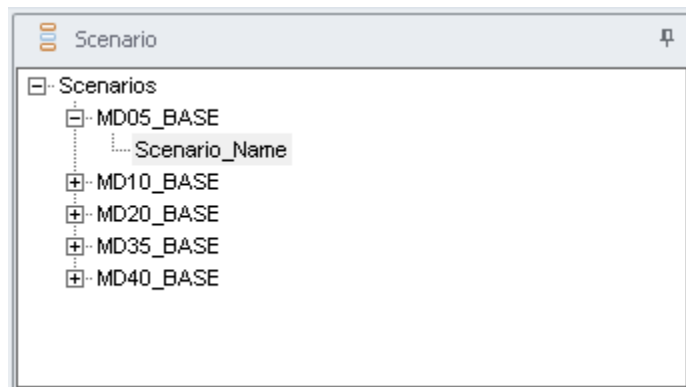
- Click **OK** and proceed with model run.
- To view results double click on the personal geodatabase in the Data pane





Environmental Justice

- Define environmental justice data in Cube Application keys
- Select scenario in Scenario pane



- Click **Next** for second page of scenario keys



- Define environmental justice data

Post-Processing

☒ Use LOS capacity ranges rather than model VC

Conformity and SB 375

Conformity Speed Bin Size (mph range)

Conformity number of speed bins

Airbasins

Compare files to current scenario

Define network to compare

Define SE Detail to compare

ITE Match and Select Link/Zone

☐ Adjust trips to match value.

Zones to adjust to match (ex. 101-105,107)

Trip targets by zone (DBF with Zone,A1_IN, A1_OUT, P1_IN, P1_OUT, DAY_IN, DAY_OUT)

Select Link/Zone Listing (ex. N=101 & N=105-110 & L=101-102*)

Environmental Justice

Collisions per VMT	<input type="text" value="1355"/>
Total Collisions	<input type="text" value="10513"/>
Collision PDO	<input type="text" value="6049"/>
Collision Injuries	<input type="text" value="4322"/>
Collision Fatalities	<input type="text" value="143"/>
Deaths	<input type="text" value="163"/>
Injuries	<input type="text" value="7261"/>

Trip-Length Frequency

Maximum travel time (minutes)

Time Interval for Summary (minutes)

Range of Origin Zones for Summary

Range of Destination Zones for Summary

- Define the Environmental Justice zones in column 'EJ' of the "TAZData_Inputs" tab in the parameters workbook. Make sure this 'TAZData' parameter file is the one used in your scenario



	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
1	TAZ	ELEM_BNDRY	MID_BNDRY	HIGH_BNDRY	GENPARKCOST	EMPPARKCOST	INTDEN	WALKPERC	MHHINC	RESACRE	EMPACRE	HWYCOM	PTERM	ATERM	PKFREQ	OPFREQ	AIRBASIN	EJ	
2	101								53327	88.98182			1.00	1.00	0	0	1		
3	102								46462	66.901276			1.00	1.00	180	180	1		
4	103								46462	75.549395			1.00	1.00	180	180	1		
5	104								46462	40.619987			1.00	1.00	180	180	1		
6	105								45522	101.50532			1.00	1.00	0	0	1		
7	106								39213	70.972663			1.00	1.00	0	0	1		
8	107								46462	51.974712			1.00	1.00	0	0	1		
9	108								46462	107.0468			1.00	1.00	0	0	1		
10	109								24808	70.456908			1.00	1.00	0	0	1		
11	110								45522	5.1936719			1.00	1.00	0	0	1		
12	111								53327	54.251334			1.00	1.00	0	0	1		
13	112								45522	43.010531			1.00	1.00	0	0	1		
14	113								24808	106.69449			1.00	1.00	0	0	1		
15	114								39238	91.876138			1.00	1.00	180	180	1		
16	115								35073	67.421026			1.00	1.00	0	0	1		
17	116								35073	114.14087			1.00	1.00	180	180	1		
18	117								35073	190.79592			1.00	1.00	0	0	1		
19	118								35073	114.11938			1.00	1.00	0	0	1		
20	119								35073	85.164036			1.00	1.00	0	0	1		
21	120								35073	41.821743			1.00	1.00	0	0	1		
22	121								35073	0			1.00	1.00	0	0	1		
23	122								42365	18.114102			1.00	1.00	0	0	1		
24	123								42365	20.466173			1.00	1.00	0	0	1		
25	124								42365	673.99196			1.00	1.00	0	0	1		
26	125								42365	7.7583879			1.00	1.00	0	0	1		
27	126								53327	20.552784			1.00	1.00	0	0	1		
28	127								53327	2.4740264			1.00	1.00	0	0	1		
29	128								53327	0			1.00	1.00	0	0	1		
30	129								53327	6.8582813			1.00	1.00	0	0	1		
31	130								53327	68.155998			1.00	1.00	0	0	1		
32	131								45522	27.647288			1.00	1.00	180	180	1		
33	132								45522	14.144463			1.00	1.00	0	0	1		
34	133								53327	82.312854			1.00	1.00	0	0	1		
35	134								53327	160.60125			1.00	1.00	0	0	1		
36	135								53327	0.0248921			1.00	1.00	0	0	1		
37	136								53327	32.645893			1.00	1.00	0	0	1		
38	137								53327	89.780747			1.00	1.00	0	0	1		
39	138								53327	90.888788			1.00	1.00	0	0	1		
40	139								53327	29.156338			1.00	1.00	0	0	1		
41	140								53327	28.922895			1.00	1.00	0	0	1		
42	141								53327	0			1.00	1.00	0	0	1		
43	142								53327	9.962997			1.00	1.00	0	0	1		
44	143								53327	0.7945364			1.00	1.00	0	0	1		
45	144								0	0			1.00	1.00	0	0	1		
46	145								0	0			1.00	1.00	0	0	1		
47	146								0	0			1.00	1.00	0	0	1		
48	147								0	0			1.00	1.00	0	0	1		
49	148								0	0			1.00	1.00	0	0	1		
50	149								0	0			1.00	1.00	0	0	1		
51	150								0	0			1.00	1.00	0	0	1		
52	151								0	0			1.00	1.00	0	0	1		
53	152								0	0			1.00	1.00	0	0	1		
54	153								0	0			1.00	1.00	0	0	1		
55	154								0	0			1.00	1.00	0	0	1		



EJ00, Environmental Justice (Scenario 'S... x Scenario - MD05_BASE.Scenario_Name (... x

Socio-economic and Highway Inputs

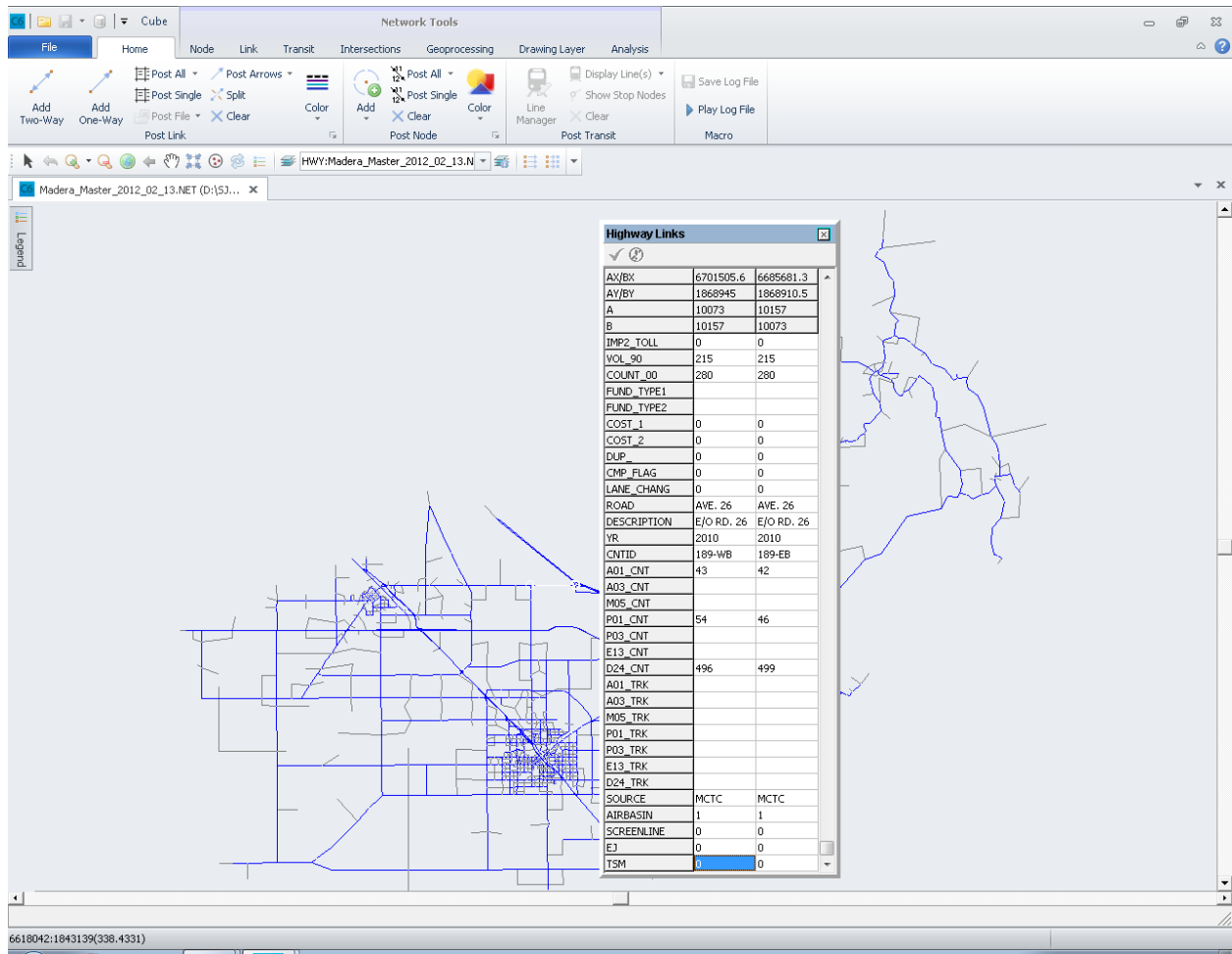
☒ Distribute processing?

ClusterHandle	Madera05	
ClusterNodes	8	
NumZones	805	
Year	2005	
Zonal data	D:\SJMIP\MCTCModel-20120324\MCTCModel_InputsOnly_20120324\1_Inputs\1_TAZ\MD05_Base_	Browse ... Edit ...
Socio-economic detail	D:\SJMIP\MCTCModel-20120324\MCTCModel_InputsOnly_20120324\1_Inputs\2_SEData\MD05_Ba	Browse ... Edit ...
External-external through trips	D:\SJMIP\MCTCModel-20120324\MCTCModel_InputsOnly_20120324\1_Inputs\5_External\MD05_B	Browse ... Edit ...
Gateway zones	D:\SJMIP\MCTCModel-20120324\MCTCModel_InputsOnly_20120324\1_Inputs\2_SEData\MD05_Ba	Browse ... Edit ...
Special generators	D:\SJMIP\MCTCModel-20120324\MCTCModel_InputsOnly_20120324\1_Inputs\2_SEData\MD05_Ba	Browse ... Edit ...
MXD_Parameters	D:\SJMIP\MCTCModel-20120324\MCTCModel_InputsOnly_20120324\1_Inputs\6_Static\MD10_Bas	Browse ... Edit ...
Master highway network	D:\SJMIP\MCTCModel-20120324\MCTCModel_InputsOnly_20120324\1_Inputs\3_Highway\Madera_	Browse ... Edit ...
Year of network scenario	2005	
Turn penalties	D:\SJMIP\MCTCModel-20120324\MCTCModel_InputsOnly_20120324\1_Inputs\3_Highway\MD05_B	Browse ... Edit ...
Truck_BaseMatrix	D:\SJMIP\MCTCModel-20120324\MCTCModel_InputsOnly_20120324\1_Inputs\5_ExternalTruck\CC	Browse ... Edit ...
Truck_FutureMatrix	D:\SJMIP\MCTCModel-20120324\MCTCModel_InputsOnly_20120324\1_Inputs\5_ExternalTruck\CC	Browse ... Edit ...

[Save](#) [Close](#) [Next...](#) [Back...](#) [Run](#)

- Define the Environmental Justice links in variable 'EJ' of the master highway network. Make sure this master highway network file is the one used in your scenario





Scenario - MD05_BASE.Scenario_Name (...)

Socio-economic and Highway Inputs

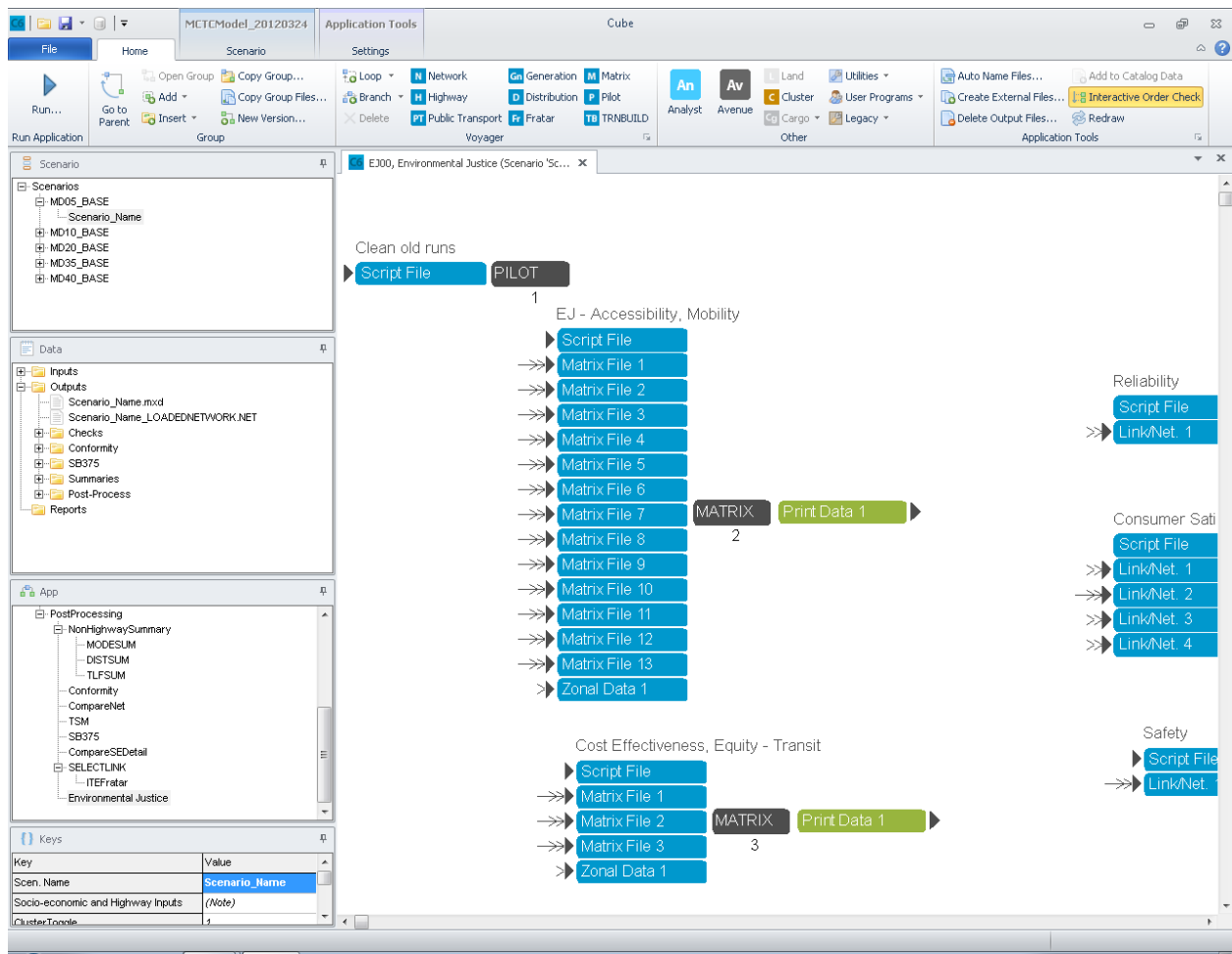
☒ Distribute processing?

ClusterHandle	Madera05	
ClusterNodes	8	
NumZones	805	
Year	2005	
Zonal data	D:\SJVMIPI\MCTCModel-20120324\MCTCModel_InputsOnly_20120324\1_Inputs\1_TAZ\MD05_Base_TAZData_120	Browse ... Edit ...
Socio-economic detail	D:\SJVMIPI\MCTCModel-20120324\MCTCModel_InputsOnly_20120324\1_Inputs\2_SEData\MD05_Base_SE_Detail	Browse ... Edit ...
External-external through trips	D:\SJVMIPI\MCTCModel-20120324\MCTCModel_InputsOnly_20120324\1_Inputs\5_External\MD05_Base_Through	Browse ... Edit ...
Gateway zones	D:\SJVMIPI\MCTCModel-20120324\MCTCModel_InputsOnly_20120324\1_Inputs\2_SEData\MD05_Base_Gateways	Browse ... Edit ...
Special generators	D:\SJVMIPI\MCTCModel-20120324\MCTCModel_InputsOnly_20120324\1_Inputs\2_SEData\MD05_Base_SpecialGen	Browse ... Edit ...
MXD_Parameters	D:\SJVMIPI\MCTCModel-20120324\MCTCModel_InputsOnly_20120324\1_Inputs\6_Static\MD10_Base_SmartGrowt	Browse ... Edit ...
Master highway network	D:\SJVMIPI\MCTCModel-20120324\MCTCModel_InputsOnly_20120324\1_Inputs\3_Highway\Madera_Master_2012	Browse ... Edit ...
Year of network scenario	2005	
Turn penalties	D:\SJVMIPI\MCTCModel-20120324\MCTCModel_InputsOnly_20120324\1_Inputs\3_Highway\MD05_Base_TurnPen	Browse ... Edit ...
Truck_BaseMatrix	D:\SJVMIPI\MCTCModel-20120324\MCTCModel_InputsOnly_20120324\1_Inputs\5_ExternalTruck\COUNTYMODEL_I	Browse ... Edit ...
Truck_FutureMatrix	D:\SJVMIPI\MCTCModel-20120324\MCTCModel_InputsOnly_20120324\1_Inputs\5_ExternalTruck\COUNTYMODEL_I	Browse ... Edit ...

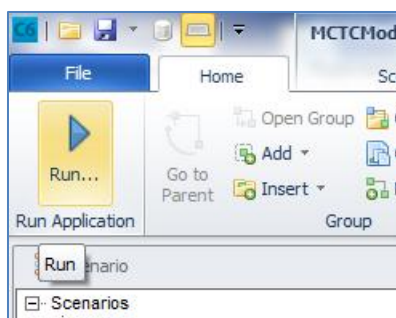
Save Close Next... Back... Run

- Double click on **Environmental Justice** in the App Pane. This will bring up the **Environmental Justice** application group.





- Click on the **Run...** button located on the top **Home** ribbon. This will open the Run Application window.



- Check the **Run Current Group Only** button.



Run Application

Catalog:

Scenarios: MD05_BASE.Scenario_Name Select Scenarios...

Run Settings

☐ Create Task Run File Only (Run later from Monitor)
☐ Create Script (Run from VOYAGER)
☒ Run Application now from Task Monitor
☒ Run Current Group Only

☐ Start this run at the active program box! (USE WITH CARE)

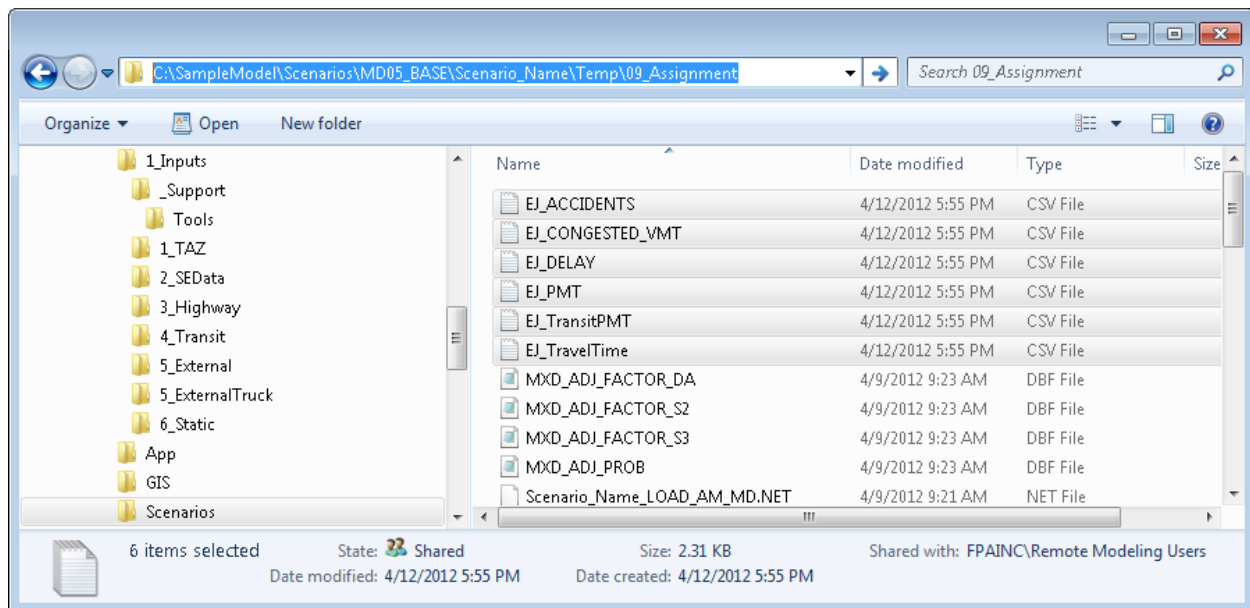
Run Title:

Task Monitor Run File Name

D:\SJVMIP\MCTCMODEL-20120324\MCTCMODEL_INPUTONLY_20120324\APP\EJ00.TRF

OK Cancel

- Click **OK** and proceed with model run.
- The following files are created in Scenario_Name\Temp\09_Assignment\
 - EJ_Accidents.csv
 - EJ_TravelTime.csv
 - EJ_TransitPMT.csv
 - EJ_Congested_VMT.csv
 - EJ_Delay.csv
 - EJ_Accidents.csv

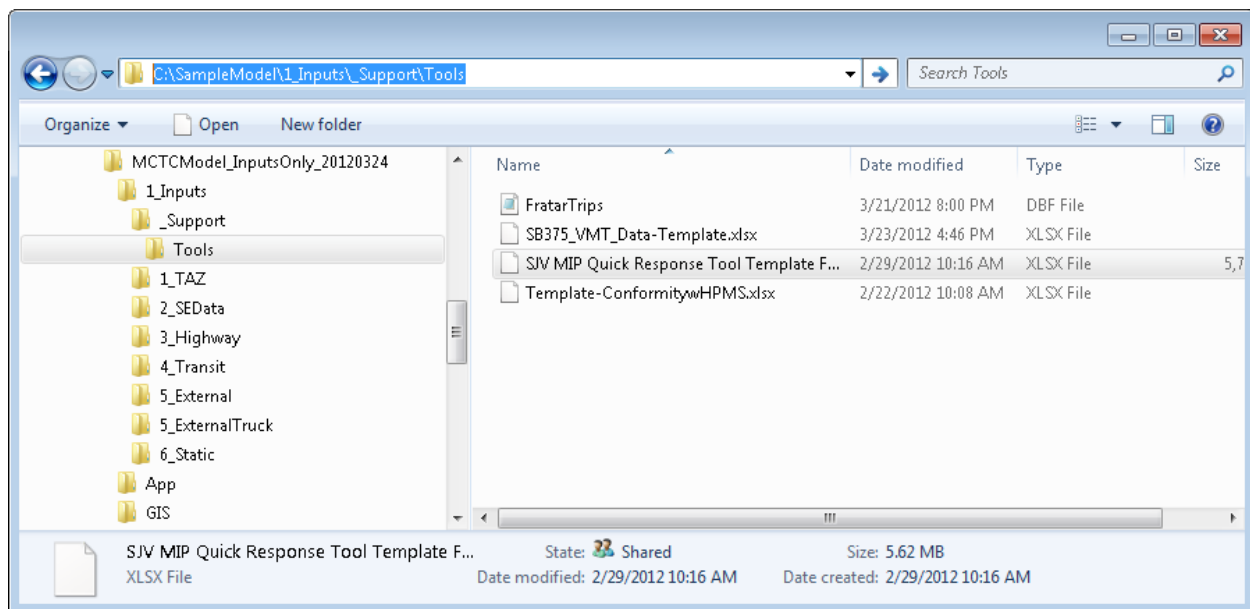


QUICK-RESPONSE TOOL

The quick-response tool allows the user to quickly determine impacts of smart growth, travel demand management (TDM), and transportation system management (TSM) in an off-model tool.

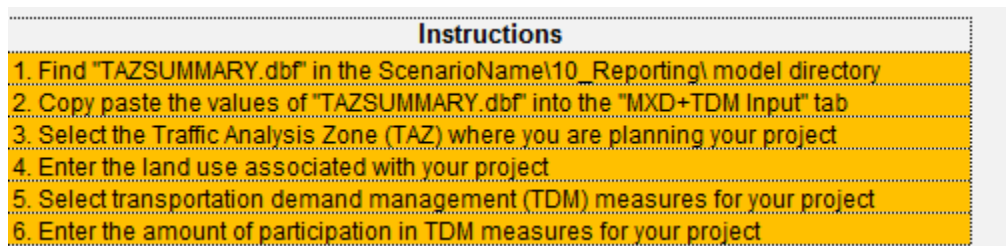
The quick response tool contains two modules: the Mixed Use Development (MXD) Trip Generation and Travel Demand Management (TDM) Module and the Transportation System Management (TSM) Module.

The quick-response tool template can be found in 1_Inputs\Support\Tools

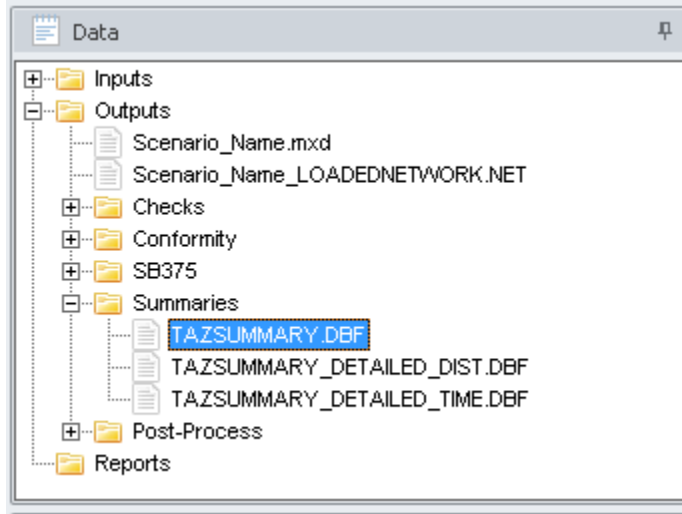


Mixed Use Development (MXD) Trip Generation and Travel Demand Management (TDM) Module

The effects of smart growth and TDM are quantified in this module. The user inputs a land use and TDM profile in a user-defined TAZ with smart growth characteristics.



- Open "TAZSUMMARY.dbf" from the Data Pane



- Paste values into the quick response tool

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
1	I	TOTHH_SF	HHPOP_SF	TOTHH_MF	HHPOP_MF	RETEMP	NONRETEMP	ELEM	HS	COLLEGE	INTDEN	WALKPERC	RESACRE	EMPACRE	TOT_OVEH	TOT_1VEH	TOT_2VEH	TOT_3VEH	TOT_4VEH
2	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
32	31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
33	32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
34	33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
35	34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
36	35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
37	36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
38	37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
39	38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40	39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

- Input TAZ and land use for development intended for analysis



Traffic Analysis Zone	101	
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Land Use Input

Number of Dwelling Units	Quantity	Units
Single Family	770	DU
Multi-Family	2,748	DU
High Rise Condo	3,482	DU

Retail

General Retail other than those listed below	140	ksf
Supermarket	0	ksf
Bank	0	ksf
Health Club	0	ksf
Restaurant (non-fast food)	0	ksf
Fast-Food Restaurant	0	ksf
Gas Station	0	ksf
Auto Repair	0	ksf

Office

Non-Medical	3,000	jobs
Medical	0	jobs

Industrial

Light Industrial	0	jobs
Manufacturing	0	ksf
Warehousing / Self-Storage	0	ksf

Lodging

Hotel (including restaurant, facilities, etc...)	0	Rooms
Motel	0	Rooms

Movie Theater

	0	Screens
--	---	---------

School

University	0	Students
High School	0	Students
Middle School	0	Students
Elementary	0	Students

Trips from Land uses not covered above ==>	0
Jobs in those Land Uses	0

- Input TDM measures for development intended for analysis



Transportation Demand Management (TDM) Input

	Implement?	Participation %
San Joaquin Valley Air District Rule 9410	No	0%

Requires employers with >100 employees to
attain a Average Vehicle Ratio (AVR)
(employees on site / vehicles on site) of 1.3

	New target
Modify target AVR?	No 1.3

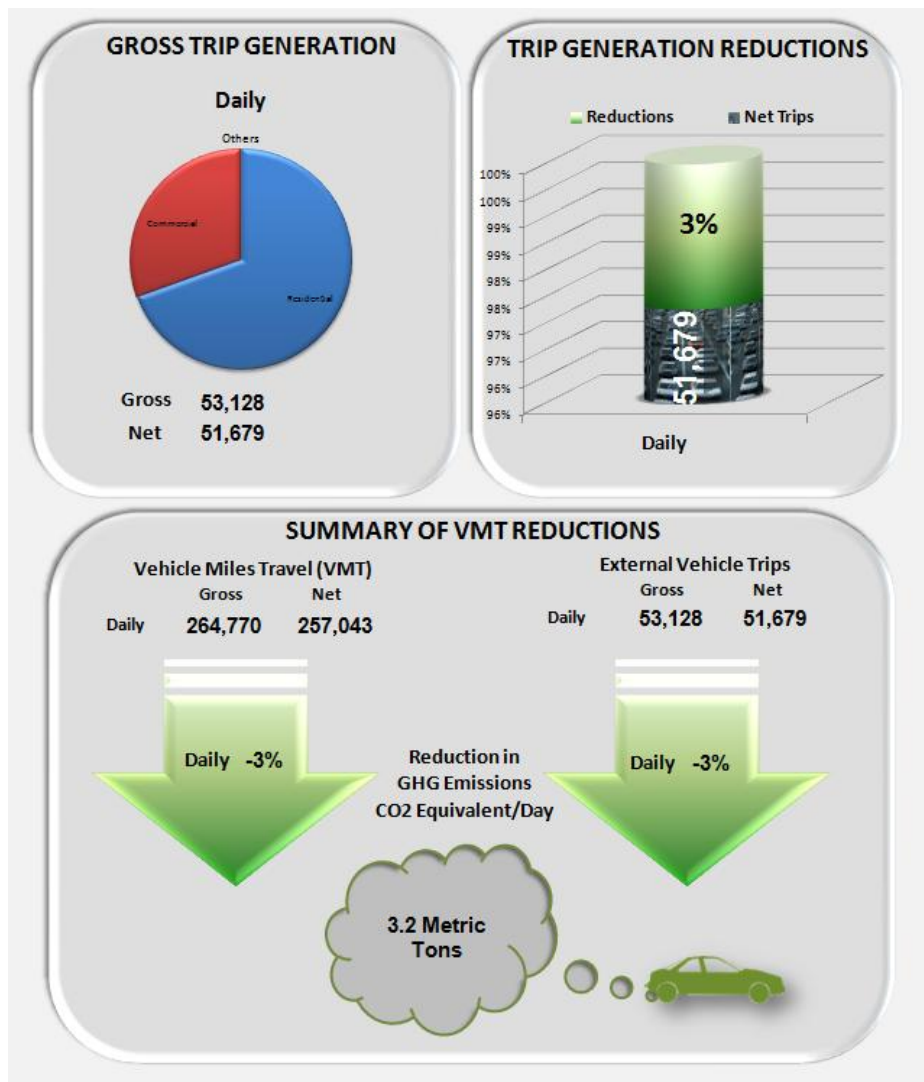
Other TDM Measures

To be calculated by trip purpose separately

	Implement?	Participation %
Home-based Work TDM Measure Trip Reduction	No	0%
Home-based Other TDM Measure Trip Reduction	0%	0%
Non home-based TDM Measure Trip Reduction	0%	0%

- Review outputs



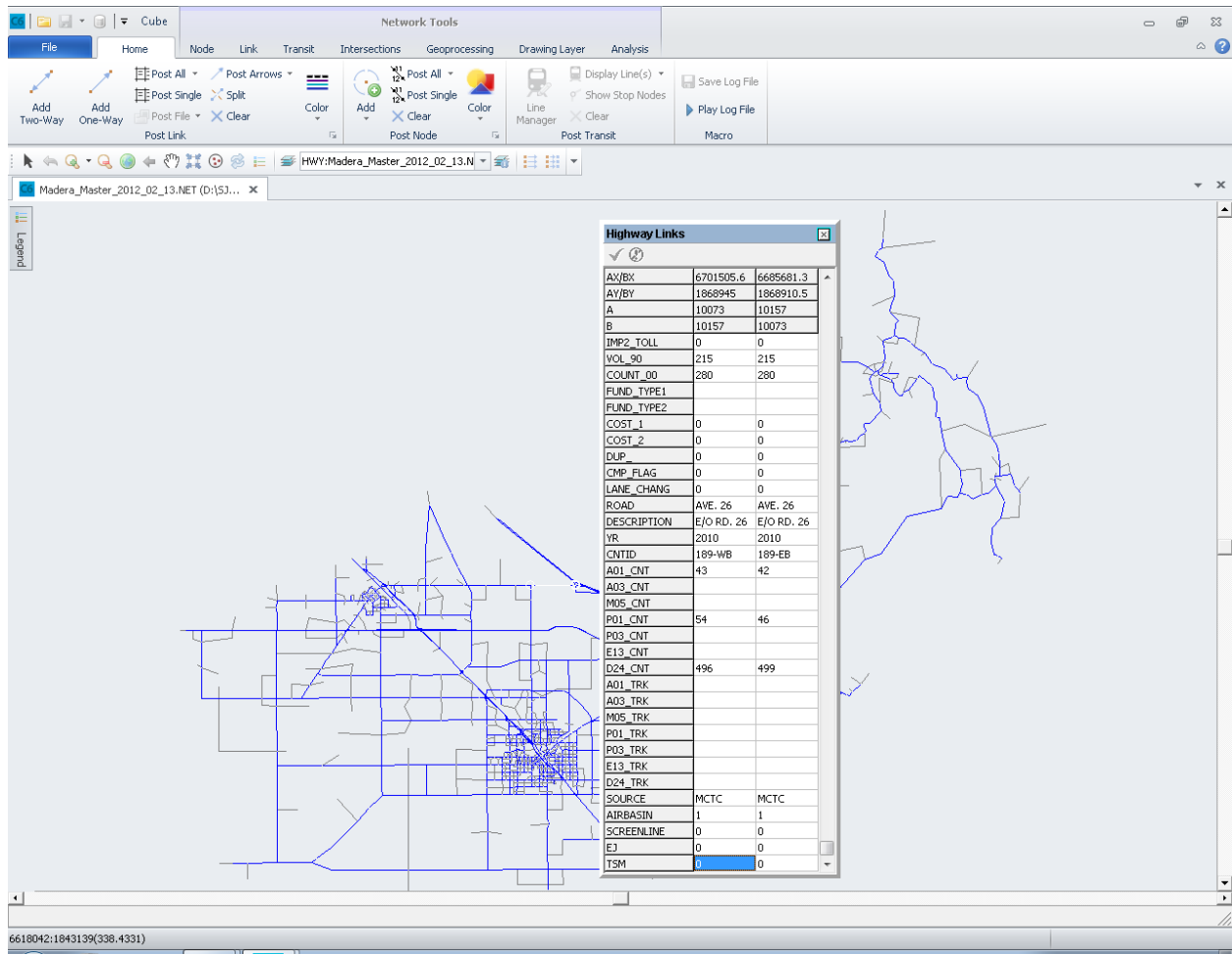


Transportation System Management (TSM) Module

The effects of Transportation System Management (TSM) are quantified in this module.

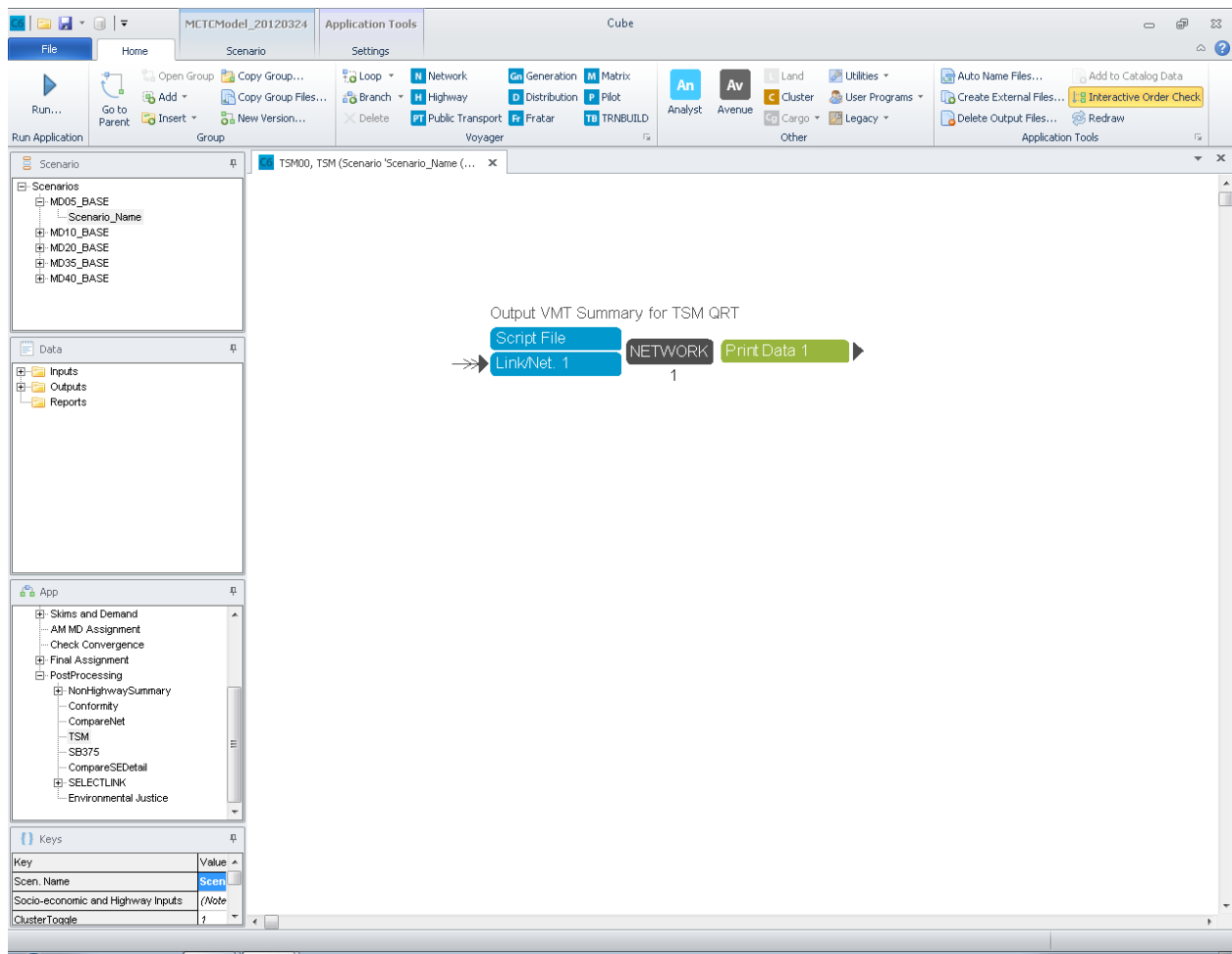
- Edit the variable "TSM" on the master highway network to assign management measures to links
 - Value of 1 means Congestion Mitigation
 - Value of 2 means Traffic Smoothing
 - Value of 3 means Speed Management
 - Value of 4 means Congestion Mitigation and Traffic Smoothing



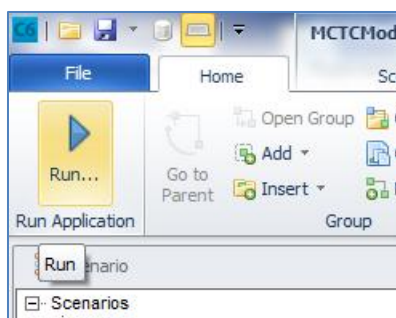


- Double click on **TSM** in the App Pane. This will bring up the **TSM** application group.





- Click on the **Run...** button located on the top **Home** ribbon. This will open the Run Application window.



- Check the **Run Current Group Only** button.



Run Application

Catalog:

Scenarios: MD05_BASE.Scenario_Name Select Scenarios...

Run Settings

☐ Create Task Run File Only (Run later from Monitor)
☐ Create Script (Run from VOYAGER)
☒ Run Application now from Task Monitor
☒ Run Current Group Only

☐ Start this run at the active program box! (USE WITH CARE)

Run Title:

Task Monitor Run File Name

D:\SJVMIP\MCTCMODEL-20120324\MCTCMODEL_INPUTONLY_20120324\APP\TSM00.TRF

OK
Cancel

- Click **OK** and proceed with model run.

Instructions

1. Find "VMT_TSM_ScenarioName.CSV" in the ScenarioName\10_Reporting\model directory
2. Copy paste values of "VMT_TSM_ScenarioName.CSV" into "TSM Input" tab
3. Return to "TSM Tool" tab to view reductions attributable to TSM measures

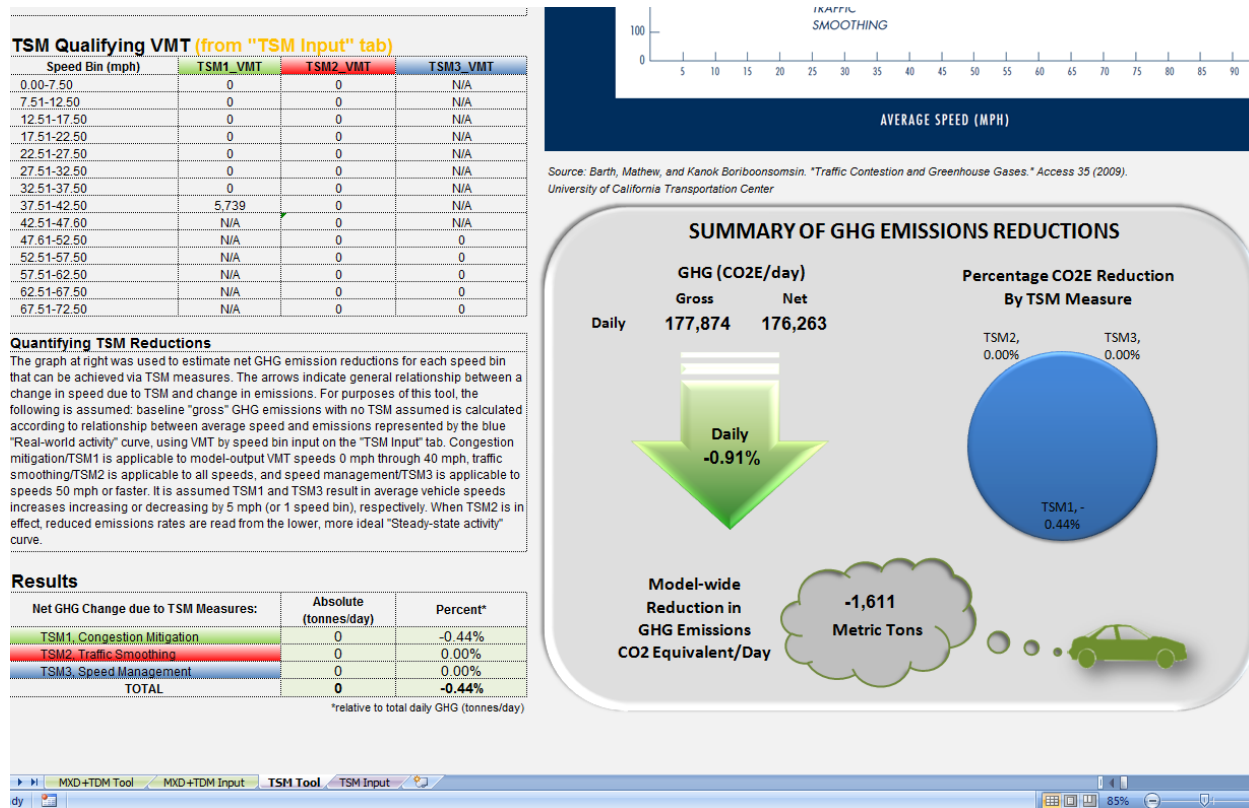
- Paste values from VMT_TSM_ScenarioName.csv to 'TSM Input' tab



	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1	SpeedBin	TSM1_VMT	TSM2_VMT	TSM3_VMT												
2	0.00-7.50	0	0	0												
3	7.51-12.50	0	0	0												
4	12.51-17.50	0	0	0												
5	17.51-22.50	0	0	0												
6	22.51-27.50	0	0	0												
7	27.51-32.50	0	0	0												
8	32.51-37.50	0	0	0												
9	37.51-42.50	5739.23	0	2865.26												
10	42.51-47.50	0	0	0												
11	47.51-52.50	0	0	0												
12	52.51-57.50	0	0	0												
13	57.51-62.50	0	0	0												
14	62.51-67.50	0	0	0												
15	67.51-72.50	0	0	0												
16																
17																
18																
19																
20																
21																
22																
23																
24																
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- Review outputs





CREATING A NEW SCENARIO⁸

Setting up a new scenario can be very helpful to test the effects of variations in your input data (i.e. land use, network).

Prepare Scenario Input Data

Input data is generated using the parameters workbook and Cube editing functionality.

Parameters Workbook Preparation

⁸ For more information, please see SJV MIP Video 8 – New Scenario.wmv



The parameters workbook from the most similar scenario to the new scenario should be used as a starting point. Changes should be made to reflect the new scenario and other inputs in the parameters workbook reviewed for consistency with new scenario.

Highway Network Preparation

The highway network from the most similar scenario to the new scenario should be used as a starting point. Changes should be made to reflect the new scenario and other assumptions in the highway network reviewed for consistency with new scenario.

Transit Network Preparation

The transit network from the most similar scenario to the new scenario should be used as a starting point. Changes should be made to reflect the new scenario and other assumptions in the transit network reviewed for consistency with new scenario.

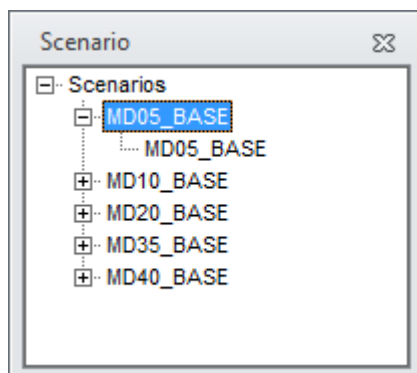
Create a Scenario in Cube

In the Cube model catalog, scenarios are hierarchical in nature and can be managed in the **Scenario** pane. Cube has helpful tools to easily create or delete scenarios.

Child Scenario

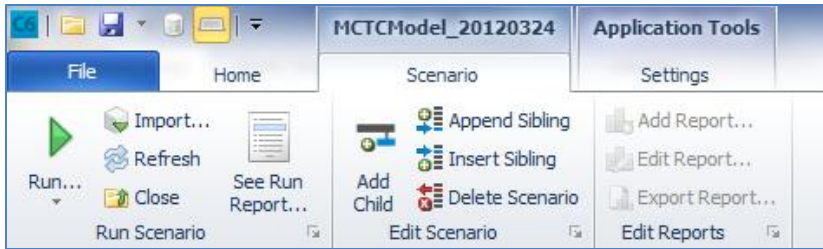
A child scenario will inherit the key values from its parent. This means that all files and parameter settings will be copied to this new scenario. Any variation will have to be edited after the scenario is created. A child scenario will be placed a level below the parent scenario.

- In the Scenario pane, Click on the scenario from which you would like to create a new child scenario.



- Click on the **Scenario** ribbon tab.

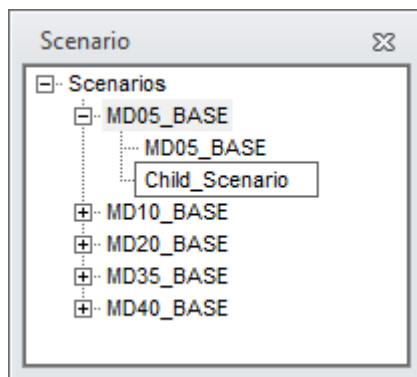




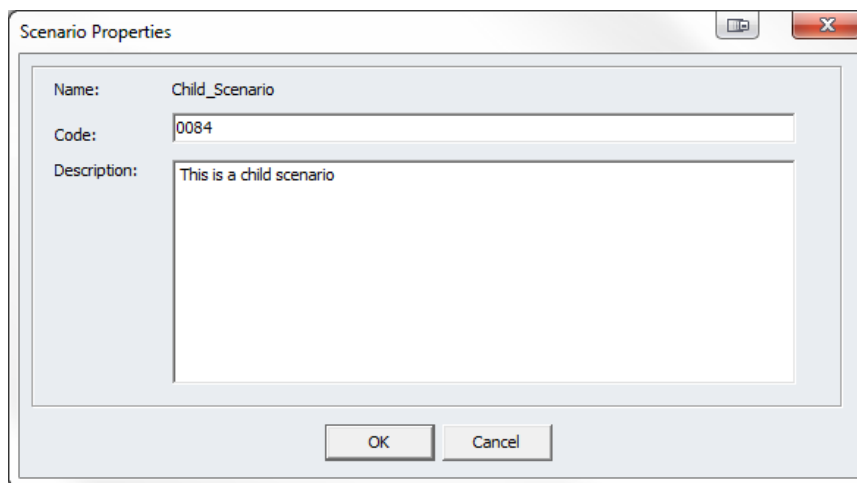
- Click on **Add Child**.



- Type in the name of the new scenario. Press **Enter**. This will open the Scenario Properties window.



- Type in a description of the new scenario. Click **OK**.



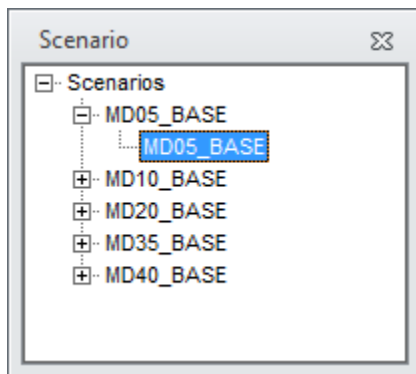
- To edit scenario specific input data, double-click on the child scenario to open the input key window.



Sibling Scenario

A sibling scenario is placed at the same level of the scenario it was created from. It will inherit the key values from that scenario as well. A sibling scenario cannot be created from the base scenario automatically created in the model catalog (**Scenarios**). You can insert or append a sibling scenario to a list of existing scenarios.

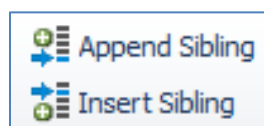
- In the Scenario pane, Click on the scenario from which you would like to create a new sibling scenario.



- Click on the **Scenario** ribbon tab.

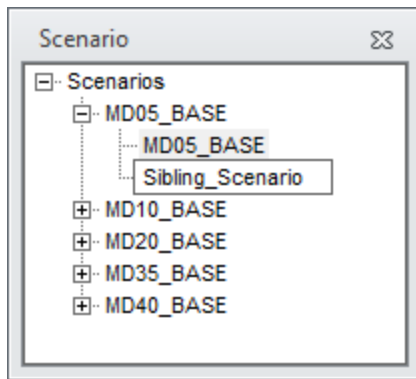


- Click on **Append Sibling** or **Insert Sibling**.

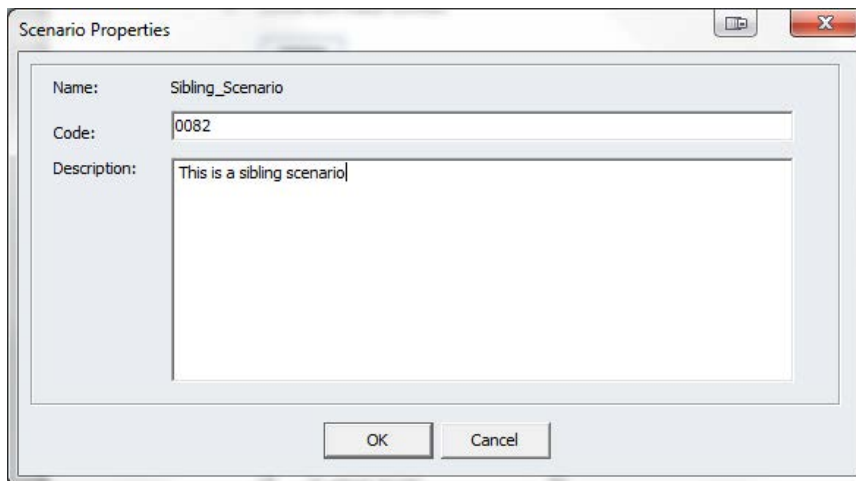


- Type in the name of the new scenario. Press **Enter**. This will open the Scenario Properties window.





- Type in a description of the new scenario. Click **OK**.



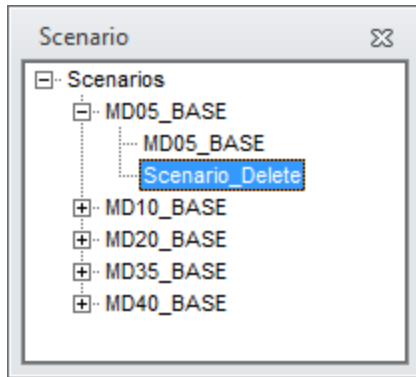
- To edit scenario specific input data, double-click on the sibling scenario to open the input key window.

Delete Scenario

Deleting a scenario will remove the scenario and any of its children.

- In the Scenario pane, Click on the scenario you would like to delete.

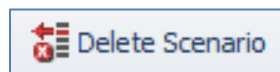




- Click on the **Scenario** ribbon tab.



- Click on **Delete Scenario**.



Run the Scenario

Once the scenario is set up, run it using the procedures outlined in the **Running the Model** chapter above. Be sure to review the model output files. If applicable, run the post-processors as well.

