

NJRTME REVALIDATION

ADDENDUM TO USERS' GUIDE

August 22, 2011

**Prepared for NJTPA
By Stantec**

In association with:

**AECOM
Gallop Corporation**



Stantec

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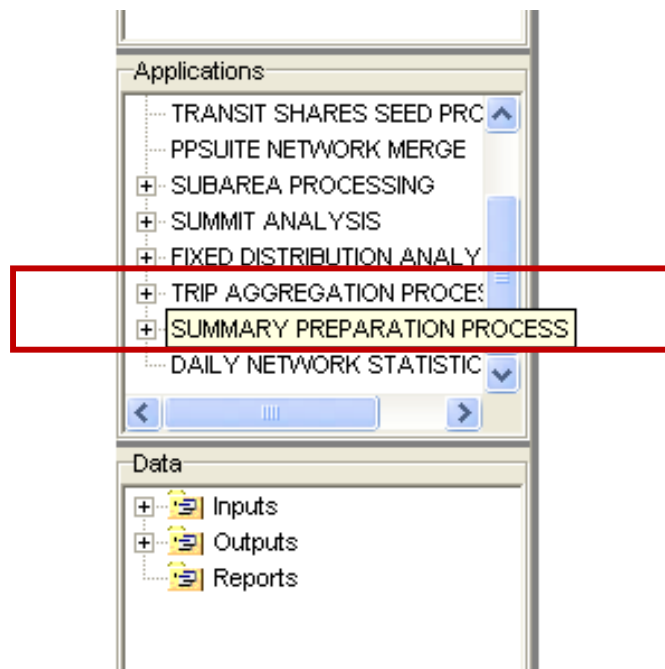
1 INTRODUCTION

As part of the NJRTME Revalidation Project, two new applications were added to the regional model. The two applications include:

1. Trip Aggregation Processor
2. Summary Preparation Processor

The trip aggregation processor compressed the trip flow by purpose and by mode (in PA format), resulted from mode choice process, at a “district level”. The “district” is a user-defined subregion, for example, county, and MCDs. The summary preparation processor provides trip length summaries for time and distance by time of day (peak and peak, and by auto occupancy (SOV and HOV) at county and MCD level. These two new applications are shown in Figure 1-1.

Figure 1-1
New Model Applications



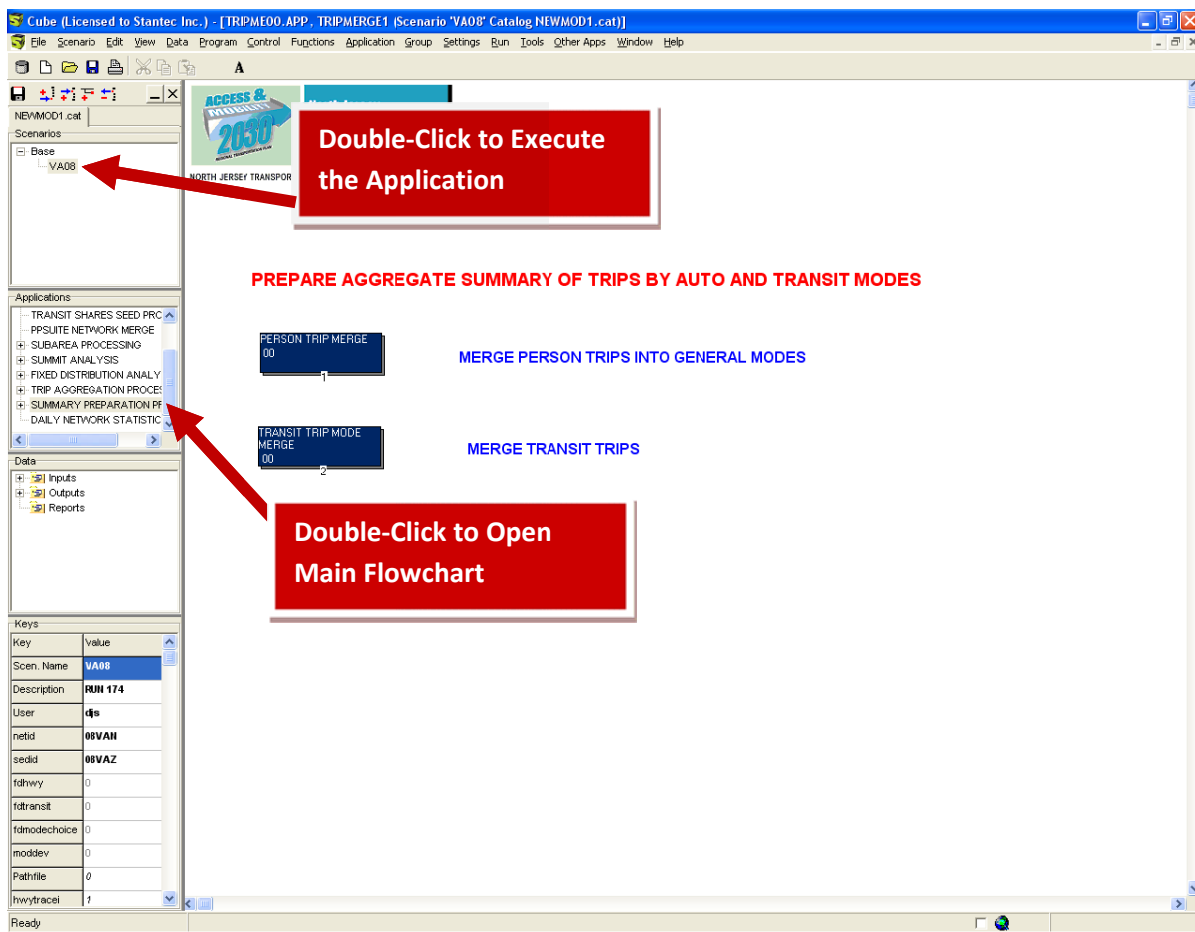
2 SUMMARY PREPARATION PROCESSOR

The summary preparation processor provides trip summary statistics, such as average trip length (in terms of time and distance), at county and MCD levels. The county level summary generates average county to county trip length statistics by time of day (peak and off-peak) and by vehicle occupancy (SOV and HOV). The MCD level summary provides average trip length statistics for all trips originating from and arriving to the MCD. The summary was also presented by time-of-day and vehicle occupancy.

The following steps show how to execute this application:

- Open the application by double-clicking the application name in the application window, and the main flowchart of this application is shown in Figure 2-1.

Figure 2-1
Summary Preparation Processor Main Flowchart



- To execute this application, double-click on the scenario name (see Figure 2-1). A scenario window will be opened as shown in Figure 2-2, click on “Run” button to execute the application.

Figure 2-2
Merge Person Trips by Mode Component

Scenario - VAOB (Application SUMMARY PREPARATION PROCESS)

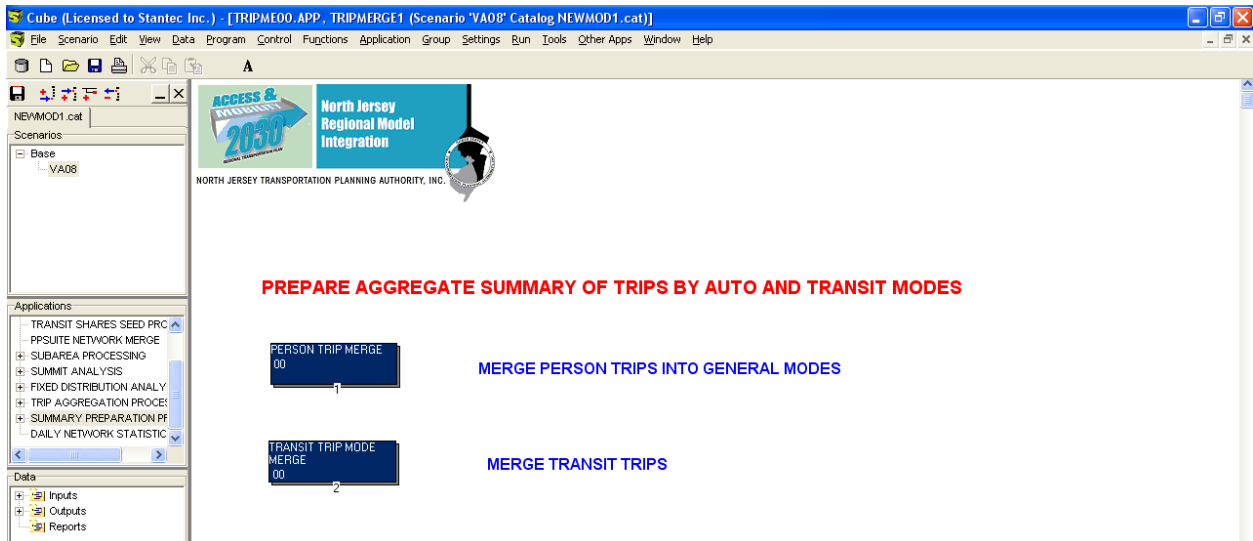
Model Run Description	RUN 174
Staff Member Creating Model Run	48
Network Year / Policy Condition (Y/YA)	08/AN
Socioeconomic Data / Policy Condition (Y/YA)	08/AN
<input type="checkbox"/> Highway Component Processing - Fixed Distribution Analysis	
<input type="checkbox"/> Transit Component Processing - Fixed Distribution Analysis	
<input type="checkbox"/> Mode Choice Component Processing - Fixed Distribution Analysis	
<input type="checkbox"/> Execution Control Flag	
<input type="checkbox"/> Create Output Path File (Universal Select Link, Large Files)	
Highway Path Trace - Origin Zone	1
Highway Path Trace - Destination Zone	10
Transit Path Trace - Origin Zone	422
Transit Path Trace - Destination Zone	570
Number of Zones in Model	2553
Value of Time (\$/HR)	14.4
Toll Scaling Factor (Sensitivity Analysis)	1
<input type="checkbox"/> Halt Execution for User Defined Fatal Messages	
<input type="checkbox"/> Abort Model Run if Duplicate Access Links Found	
Maximum Number of Model Feedback Iterations	5
Custom Program Directory	(CATALOG_DIR)\software\
Number of Districts for Selected System	42
File with District Titles	C:\NJRTMEZ\GIS\DistrictSys\DistLab42A.DBF
Zone-District Equivalency	C:\NJRTMEZ\GIS\DistrictSys\Dist42\Zone2553A.DBF

OK Cancel Run

Click to execute the application

- The main flowchart has two model components: (a) merge person trips by mode; and (b) report trips and statistics. To open each model component, click on the corresponding blue-box. *Note: F9 button can be used to go back to the main flowchart. Clicking F9 button will bring the user back to the flowchart window one-level higher than the current flowchart window.* Figure 2-3 shows the flowchart for “merge person trips by mode” model component.

Figure 2-3
Merge Person Trips by Mode Component

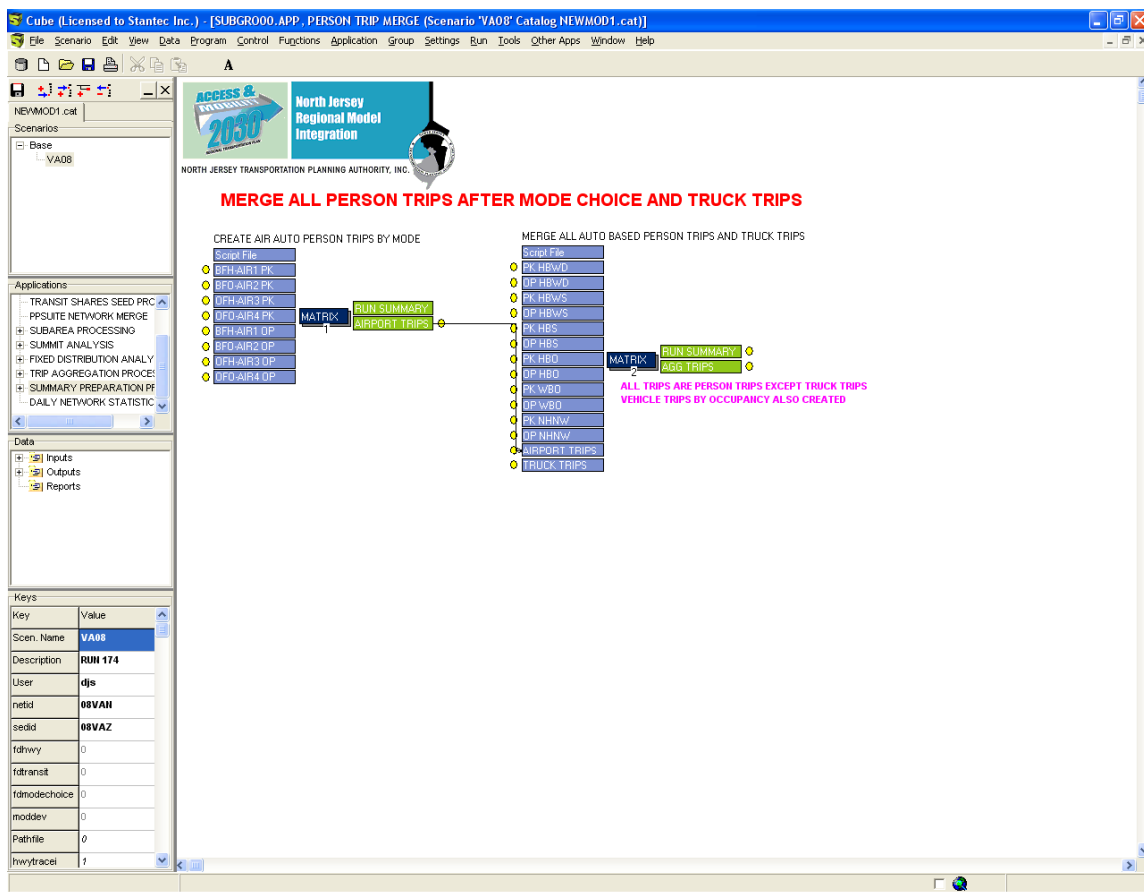


- The first model component, merge person trips by mode, consists of two modules: (a) merge person trips into General Modes; and (2) merge transit trips. The first module combines all auto-based person trips by trip purpose into a single matrix file. In addition, the matrix file also contains the summary of person trips by vehicle occupancy (SOV and HOV), truck trips, and total transit trips. The matrix file consists of ten tables:

1. HBWD – home-based work direct person trips.
2. HBWS – home-based work strategic person trips.
3. HBS – home-based shop person trips.
4. HBO – home-based other person trips.
5. WBO – work-based other person trips.
6. NHNW – non-home non-work person trips.
7. SOV – single occupancy person trips
8. HOV – high occupancy person trips
9. Truck – vehicle truck trips
10. Transit – total transit person trips

The flowchart of this module is shown in Figure 2-4.

Figure 2-4
Flowchart for Merge Person Trips into General Modes Module

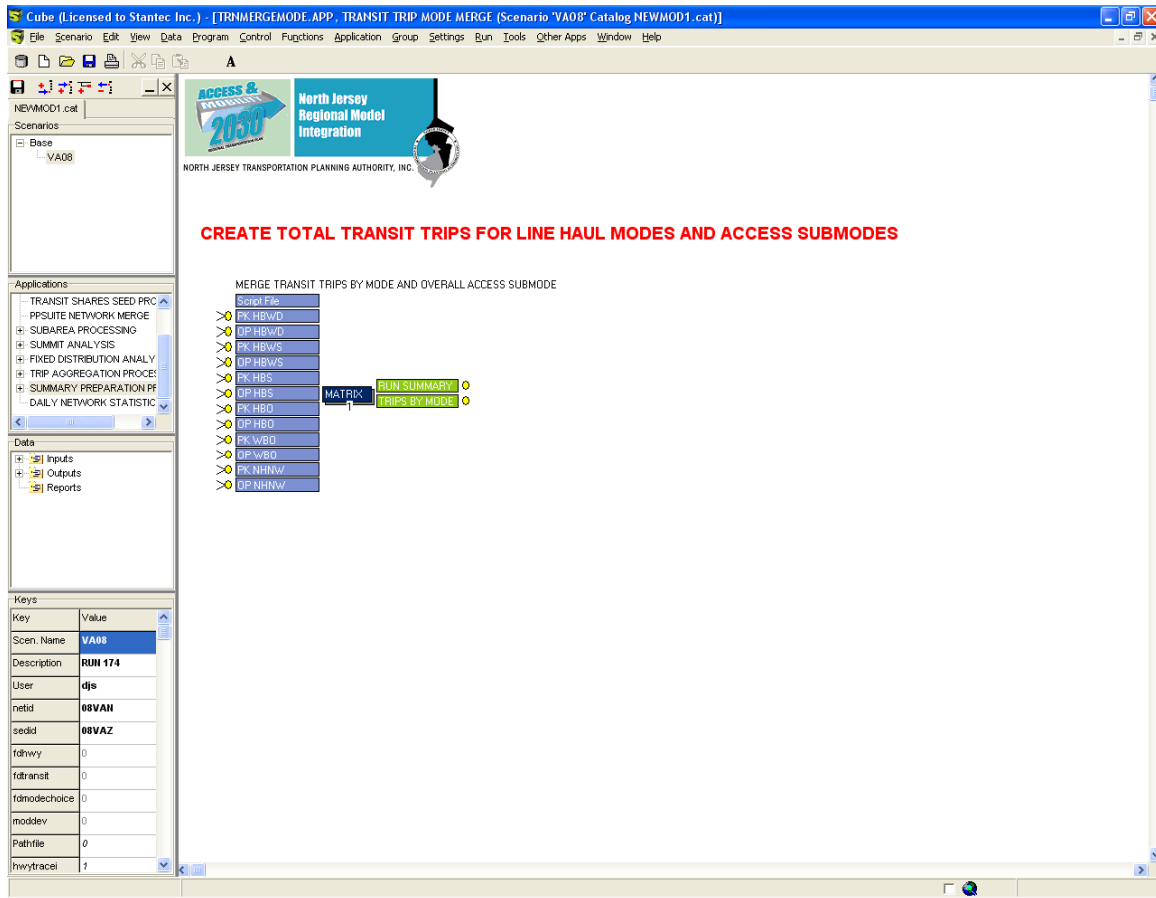


The second module summarizes the transit trips by transit mode and access-mode. The output of this module is a transit matrix file with eight tables as follows:

1. Bus – transit trips using bus as their primary mode
2. Rail – transit trips using rail as their primary mode.
3. PATH – transit trips using PATH as their primary mode.
4. LRT – transit trips using light rail as their primary mode.
5. Ferry – transit trips using ferry as their primary mode.
6. LHFerry – transit trips using long-haul ferry as their primary mode.
7. ALL_WLK – total walk-access transit trips.
8. ALL_DRV – total drive-access transit trips.

The flowchart of this module is shown in Figure 2-5.

Figure 2-5
Flowchart for Merge Transit Trips Module



- The second model component, “report trips and statistics”, provides trip length summary reports at county-level and MCD-level. Figure 1-6 shows the flowchart of this model component. In order to display the summaries, you can click on each summary box as shown in Figure 2-6. Samples for county-level and MCD-level summaries are shown in Figures 2-7 and 2-8, respectively.

Figure 2-6
Flowchart for Report Trips and Statistics

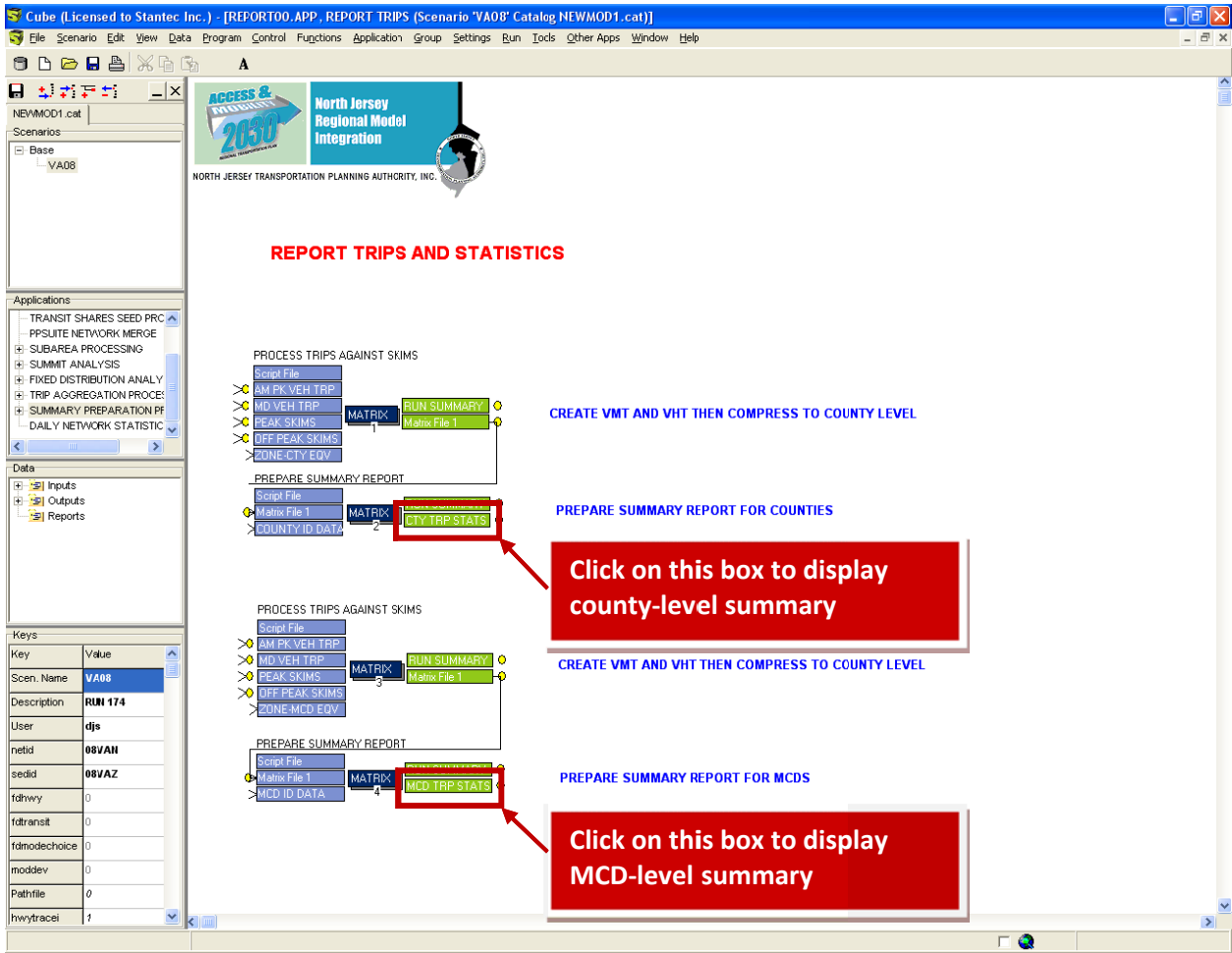


Figure 2-7
County-Level Summary

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NJTPA MODEL AVERAGE TRIP LENGTH SUMMARY OF COUNTY-COUNTY INTERCHANGES

FROM COUNTY	TO COUNTY	PEAK PERIOD				OFF PEAK			
		SOV TIME (MIN.)	SOV DIST (MI.)	HOV TIME (MIN.)	HOV DIST (MI.)	SOV TIME (MIN.)	SOV DIST (MI.)	HOV TIME (MIN.)	HOV DIST (MI.)
Atlanti NJ	Atlanti NJ	18.98	6.51	17.32	5.81	14.21	5.44	13.13	4.73
Atlanti NJ	Bergen NJ	157.53	129.62	157.56	130.83	132.56	127.04	131.95	128.33
Atlanti NJ	Burling NJ	59.43	34.37	51.33	31.38	47.70	30.04	45.30	29.13
Atlanti NJ	Essex NJ	146.63	117.51	145.22	116.94	121.35	115.00	120.09	114.66
Atlanti NJ	Hudson NJ	149.27	118.80	151.48	120.07	123.13	115.96	124.73	117.18
Atlanti NJ	Hunterd NJ	137.53	95.87	139.31	98.88	117.18	87.45	115.47	86.20
Atlanti NJ	Mercer NJ	107.12	67.27	107.43	68.33	85.67	59.18	85.15	58.90
Atlanti NJ	Middles NJ	125.68	94.80	126.59	96.76	102.55	88.02	102.59	88.63
Atlanti NJ	Monmout NJ	92.89	77.84	92.96	78.45	84.98	74.48	84.48	74.58
Atlanti NJ	Morris NJ	157.48	130.48	157.38	131.43	133.30	124.38	132.39	124.90
Atlanti NJ	Ocean NJ	50.24	41.45	45.00	37.62	45.60	35.66	44.66	35.03
Atlanti NJ	Passaic NJ	157.70	129.33	157.77	130.34	131.97	126.99	131.64	128.40
Atlanti NJ	Somerset NJ	141.81	105.97	142.96	109.77	115.38	93.86	115.73	95.32
Atlanti NJ	Sussex NJ	181.47	153.50	179.00	153.00	168.00	150.67	0	0
Atlanti NJ	Union NJ	137.99	108.88	138.29	110.03	113.32	106.25	113.16	106.71
Atlanti NJ	Warren NJ	165.36	123.42	166.53	127.38	146.58	122.10	144.00	116.33
Atlanti NJ	Bronx NY	170.09	130.92	169.27	133.11	135.17	127.42	134.21	130.32
Atlanti NJ	Duches NY	208.68	183.88	208.99	183.27	185.38	171.84	185.04	172.62
Atlanti NJ	Kings NY	158.12	122.97	158.10	123.97	128.58	120.74	128.00	122.99
Atlanti NJ	Nassau NY	191.46	145.99	191.39	147.19	153.51	145.13	154.21	146.37
Atlanti NJ	New Yor NY	179.62	126.56	179.61	127.46	134.39	123.88	134.77	125.00
Atlanti NJ	Orange NY	197.15	174.05	198.01	173.94	174.81	171.45	175.97	172.90
Atlanti NJ	Putnam NY	207.56	183.02	207.26	183.98	176.18	167.79	181.10	173.20
Atlanti NJ	Queens NY	173.98	132.72	173.49	134.21	140.98	129.58	140.66	133.21
Atlanti NJ	Richmon NY	136.05	107.80	136.52	108.80	112.92	106.86	113.23	107.49
Atlanti NJ	Rocklan NY	173.60	150.02	173.80	150.88	149.75	148.08	150.02	148.85
Atlanti NJ	Suffolk NY	230.93	190.55	230.56	191.64	201.29	183.85	200.64	185.14
Atlanti NJ	Westche NY	184.69	152.69	184.87	155.23	150.91	141.56	153.56	146.89
Atlanti NJ	Bucks PA	109.68	69.28	111.62	71.85	97.17	68.11	99.41	71.46
Atlanti NJ	Carbon PA	172.05	135.77	172.70	136.70	164.30	132.96	169.92	137.67
Atlanti NJ	Lackawa PA	210.75	180.66	214.06	183.96	208.16	180.98	209.29	181.57
Atlanti NJ	Lehigh PA	159.16	116.07	155.95	112.19	142.10	106.49	140.16	104.58
Atlanti NJ	Luzerne PA	203.10	167.04	204.75	169.27	198.01	163.86	198.42	163.83
Atlanti NJ	Monroe PA	188.02	146.21	189.15	148.00	177.30	149.47	178.26	152.75
Atlanti NJ	Northam PA	164.68	119.20	164.36	118.80	150.34	113.24	145.81	108.05
Atlanti NJ	Pike PA	205.44	162.97	205.41	165.86	192.28	174.17	188.27	174.73
Atlanti NJ	Wayne PA	227.44	180.48	228.39	183.37	218.51	185.54	221.50	190.75
Bergen NJ	Atlanti NJ	129.71	126.02	93.00	98.00	132.79	128.76	132.43	130.26
Bergen NJ	Bergen NJ	18.64	6.13	16.66	4.85	15.54	5.27	14.44	4.44
Bergen NJ	Burling NJ	90.88	93.21	86.60	81.12	93.39	88.20	91.31	83.40
Bergen NJ	Essex NJ	31.06	17.04	28.75	15.03	27.00	15.10	24.54	12.70
Bergen NJ	Hudson NJ	28.40	12.45	26.05	10.55	23.14	10.54	20.99	8.67
Bergen NJ	Hunterd NJ	70.30	63.47	69.66	63.04	73.24	62.89	72.16	62.00
Bergen NJ	Mercer NJ	84.56	69.57	86.09	70.91	72.66	62.44	71.01	61.14

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Figure 2-8
MCD-Level Summary

MCD NAME	SOV				HOV				OFF PEAK				
	FROM MCD TIME (MIN.)	TO MCD DIST (MI.)	FROM MCD TIME (MIN.)	TO MCD DIST (MI.)	FROM MCD TIME (MIN.)	TO MCD DIST (MI.)	FROM MCD TIME (MIN.)	TO MCD DIST (MI.)	FROM MCD TIME (MIN.)	TO MCD DIST (MI.)	FROM MCD TIME (MIN.)	TO MCD DIST (MI.)	
Aberdeen NJ (70)	30.01	14.81	21.03	9.32	27.26	12.86	17.51	6.64	20.11	9.93	20.10	9.85	18.1
Absecon NJ (100)	27.58	12.82	21.81	11.30	25.95	11.99	22.11	12.06	18.84	8.45	16.77	8.42	17.7
Alexandria NJ (550)	33.21	18.99	22.17	11.06	26.61	14.32	17.67	7.66	25.76	13.28	26.48	13.96	23.0
Allamuchy NJ (670)	38.23	23.03	21.42	12.01	31.17	17.91	18.16	9.36	25.80	15.39	26.21	15.78	22.7
Allendale NJ (700)	23.63	11.02	22.83	10.81	20.56	8.65	18.51	7.46	20.13	9.33	20.33	9.17	17.9
Allenhurst NJ (730)	26.85	13.46	24.97	12.06	21.13	8.93	19.18	7.57	21.27	9.08	21.30	8.95	18.3
Allentown NJ (760)	29.35	16.56	27.72	16.09	25.76	13.76	24.00	13.12	25.21	13.76	25.76	14.38	23.6
Alpha NJ (1030)	27.22	17.33	17.45	9.81	20.08	11.61	14.46	7.46	20.69	11.39	20.32	11.70	17.9
Alpine NJ (1090)	31.87	14.54	22.91	10.12	29.42	12.63	21.03	8.39	22.23	10.65	22.36	10.85	20.6
Andover NJ (1330)	34.02	18.42	19.54	9.00	30.13	15.83	17.84	7.96	23.25	11.80	23.78	12.28	21.3
Andover NJ (1360)	32.09	16.55	18.13	7.61	25.50	12.28	15.12	5.74	21.89	10.19	22.36	10.72	19.0
Asbury Park NJ (1960)	21.31	10.33	20.19	9.68	21.02	10.00	16.44	6.67	18.34	8.09	18.44	8.14	16.7
Atlantic City NJ (2080)	9.38	3.79	28.15	10.91	10.63	4.89	29.54	12.54	13.66	6.76	13.07	6.34	13.6
Atlantic Highlands NJ (2110)	27.74	12.82	16.69	7.12	21.95	9.30	12.94	4.44	17.63	7.55	17.98	7.72	14.9
Avon-by-the-Sea NJ (2440)	25.45	13.70	19.82	9.15	20.14	9.32	16.02	6.15	18.49	8.27	18.70	8.42	16.0
Barnegat NJ (3050)	34.11	21.67	14.78	6.80	25.58	15.09	12.84	5.17	19.59	10.58	20.09	11.22	16.0
Barnegat Light NJ (3130)	44.45	30.37	24.31	14.34	37.85	25.04	19.77	11.02	27.30	16.19	28.09	16.89	22.4
Bass River NJ (3370)	39.63	23.65	29.60	16.18	40.50	23.90	28.41	15.58	28.72	15.98	28.46	15.82	27.8
Bay Head NJ (3520)	32.92	18.48	19.98	8.53	24.14	11.92	16.68	6.04	20.46	9.68	20.82	9.97	16.8
Bayonne NJ (3580)	18.41	7.26	24.32	11.67	15.75	5.26	19.54	8.39	18.16	7.70	17.82	7.53	15.6
Beach Haven NJ (3940)	36.08	23.46	16.15	7.75	27.75	16.91	12.13	4.71	18.96	9.61	19.75	10.29	14.5
Beachwood NJ (4180)	32.62	17.31	16.41	6.56	24.80	11.58	14.44	4.89	18.94	8.75	19.33	9.21	16.1
Bedminster NJ (4450)	27.97	15.46	31.76	18.20	24.07	12.44	25.36	13.13	25.85	14.53	25.90	14.81	22.9
Belleville NJ (4695)	21.79	7.83	21.20	8.15	19.50	5.92	18.23	5.99	17.57	6.54	17.54	6.53	15.7
Belmar NJ (4930)	23.43	12.37	19.32	8.77	19.23	8.94	15.84	5.94	17.63	7.75	17.90	7.79	15.5
Belvidere NJ (4990)	35.67	21.85	23.38	12.78	31.71	19.24	20.36	10.38	28.01	15.45	28.67	15.97	26.2
Bergenfield NJ (5170)	32.85	9.20	18.70	6.53	31.34	8.09	17.25	5.41	17.54	6.41	17.68	6.41	16.3
Berkeley NJ (5305)	31.18	16.52	16.09	6.77	23.34	10.97	14.16	5.17	18.54	8.33	18.88	8.74	15.9
Berkeley Heights NJ (5320)	27.75	12.08	26.81	13.62	27.40	11.17	21.80	10.01	21.40	10.07	21.38	9.85	19.4
Bernards NJ (5560)	28.35	15.48	28.68	15.96	24.68	12.35	20.23	9.71	23.00	12.29	23.28	12.52	19.9
Bernardsville NJ (5590)	30.20	17.07	26.97	14.82	25.61	13.44	19.91	9.61	23.20	12.34	23.36	12.62	20.2
Bethlehem NJ (5650)	35.66	21.79	28.01	15.92	35.06	21.83	25.07	14.33	28.77	16.67	29.51	17.44	28.0
Beverly NJ (5740)	23.87	11.25	15.61	5.62	21.93	10.10	14.08	4.76	19.02	7.66	19.26	7.90	17.3
Blairstown NJ (6160)	42.41	27.45	23.82	12.94	36.61	22.83	20.89	10.65	31.24	18.84	32.06	19.17	28.9
Bloomfield NJ (6260)	20.60	8.31	22.14	9.27	18.35	6.22	19.01	6.91	17.84	7.35	17.89	7.31	16.0
Bloomfielddale NJ (6340)	27.33	14.18	20.54	10.26	23.62	11.34	16.86	7.40	21.25	11.15	21.31	11.16	18.9
Bloomsbury NJ (6370)	34.76	23.04	23.88	14.30	31.30	20.91	22.35	13.23	28.01	17.69	29.03	18.85	27.0
Bogota NJ (6490)	19.32	7.22	22.04	9.15	18.41	6.09	18.78	6.59	16.87	6.50	16.83	6.16	15.5
Boonton NJ (6610)	25.94	12.69	23.90	12.42	23.74	10.95	20.19	9.45	21.01	11.02	21.03	11.26	19.2
Boonton NJ (6640)	31.03	14.75	22.19	10.80	27.74	12.44	18.43	8.25	22.53	11.29	22.76	11.70	20.6
Bordentown NJ (6670)	27.78	15.01	21.22	10.46	25.97	13.15	18.60	8.67	22.01	11.18	22.29	11.57	20.1
Bordentown NJ (6700)	28.87	16.20	23.07	11.74	27.75	14.81	19.57	9.63	22.94	12.40	23.31	12.73	21.0
Bound Brook NJ (6790)	23.10	10.26	25.15	11.65	19.70	7.86	20.06	7.84	19.04	8.46	19.33	8.61	17.1

3 TRIP AGGREGATION PROCESSOR

Trip aggregation processor application provides trip flow summary at “district” level by travel mode. The following travel modes are provided in the summary:

- Auto Modes: SOV, HOV2, HOV3, HOV4+
- Walk-access transit modes: walk-to-rail, walk-to-PATH, walk-to-bus, walk-to-ferry, walk-to-LRT, and walk-to-long ferry.
- Drive-access transit modes: drive-to-rail, drive-to-PATH, drive-to-bus, drive-to-ferry, drive-to-LRT, and drive-to-long Ferry.

The “district” is a user-defined subregion, it can be county, MCD, or other subdivision of interest. The sample provided in this application used county as the “district” with Manhattan divided into three subregions: Upper-Manhattan, Mid-Manhattan, and Lower-Manhattan.

- There are three application keys have to be defined prior to the execution of this application including:
- Districts: the number of districts
- District-Title-File: the name of a dbf file containing district number and district name equivalency.
- Dist-Equiv-File: the name of a dbf file containing zone-to-district equivalency.

The three application keys are shown in Figure 3-1, and samples of district title file and district equivalency file is shown in Figure 3-2 and Figure 3-3, respectively.

The following steps show how to execute the application:

- Open the application by double-clicking the application name in the application window, and the main flowchart of this application is shown in Figure 3-4.
- To execute this application, double-click on the scenario name (see Figure 3-4). A scenario window will be opened as shown in Figure 3-5, click on “Run” button to execute the application.
- In order to display the summaries, click on each summary box as shown in Figure 3-6. Samples for trip flows by travel mode is shown in Figures 3-7.

Figure 3-1
Three Application Keys for Trip Aggregation Processors

The image shows a screenshot of a software dialog box titled "Keys". It contains a table with two columns: "Key" and "Value". The table lists various parameters and their values. A red rectangular box highlights the bottom three rows of the table, which are "Districts", "Dist-Title-File", and "Dist-Equiv-File".

Key	Value
hwytracej	10
trantracei	422
trantracej	570
zones	2553
vot	14.4
tollscale	1
abortflag	0
dupflag	0
maxmoditr	5
Userprograms	YCATALOG DIR
Districts	42
Dist-Title-File	DistLab42A.DBF
Dist-Equiv-File	one2553A.DBF

Figure 3-2
District Title File

DISTRICT	NAME
1	ATLANTIC, NJ
2	BERGEN, NJ
3	BURLINGTON, NJ
4	ESSEX, NJ
5	HUDSON, NJ
6	HUNTERDON, NJ
7	MERCER, NJ
8	MIDDLESEX, NJ
9	MONMOUTH, NJ
10	MORRIS, NJ
11	OCEAN, NJ
12	PASSAIC, NJ
13	SOMERSET, NJ
14	SUSSEX, NJ
15	UNION, NJ
16	WARREN, NJ
17	BRONX, NY
18	DUTCHESS, NY
19	KINGS, NY
20	NASSAU, NY
21	NY MANHATTAN(Lower)
22	NY MANHATTAN(Mid)
23	NY MANHATTAN(Upper)
24	ORANGE, NY
25	PUTNAM, NY
26	QUEENS, NY
27	RICHMOND, NY
28	ROCKLAND, NY
29	SUFFOLK, NY
30	SULLIVAN, NY
31	WESTCHESTER, NY
32	BUCKS, PA
33	CARBON, PA
34	LACKAWANNA, PA
35	LEHIGH, PA
36	LUZERNE, PA
37	MONROE, PA
38	NORTHAMPTON, PA
39	PIKE, PA
40	WAYNE, PA
41	CTFAIRFIELD, CT
42	Others in CT

Figure 3-3
A Sample of District Equivalency File

DIST	ZONE
1	1
1	2
1	3
1	4
1	5
1	6
1	7
1	8
1	9
1	10
1	11
1	12
1	13
1	14
1	15
1	16
1	17
1	18
1	19
1	20
1	21
1	22
1	23
1	24
1	25
2	26
2	27
2	28
2	29
2	30
2	31
2	32
2	33
2	34
2	35
2	36
2	37
2	38
2	39
2	40
2	41
2	42
2	43
2	44
2	45

Figure 3-4
Trip Aggregation Processor Flowcharts

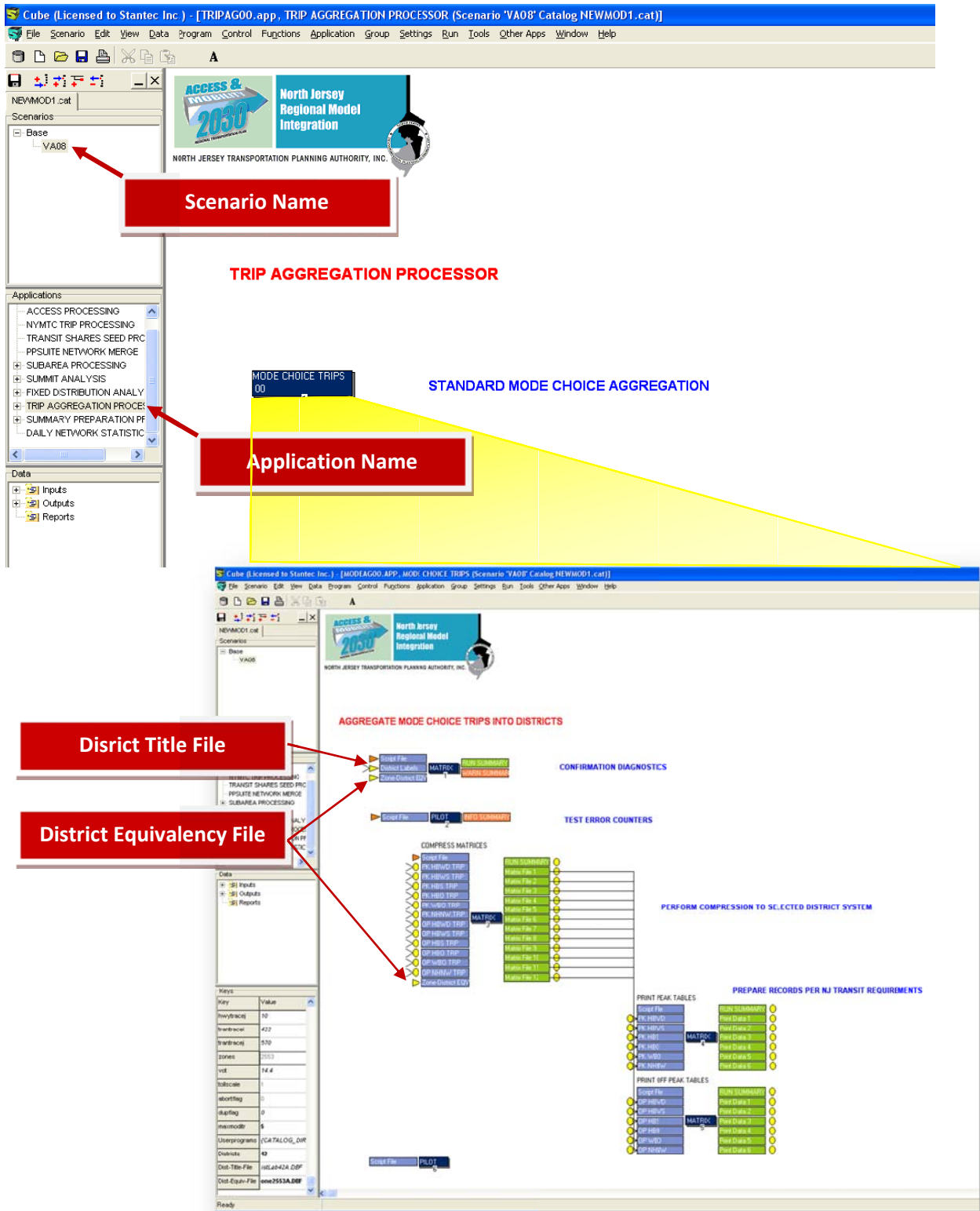


Figure 3-5
Trip Aggregation Processor Scenario Window

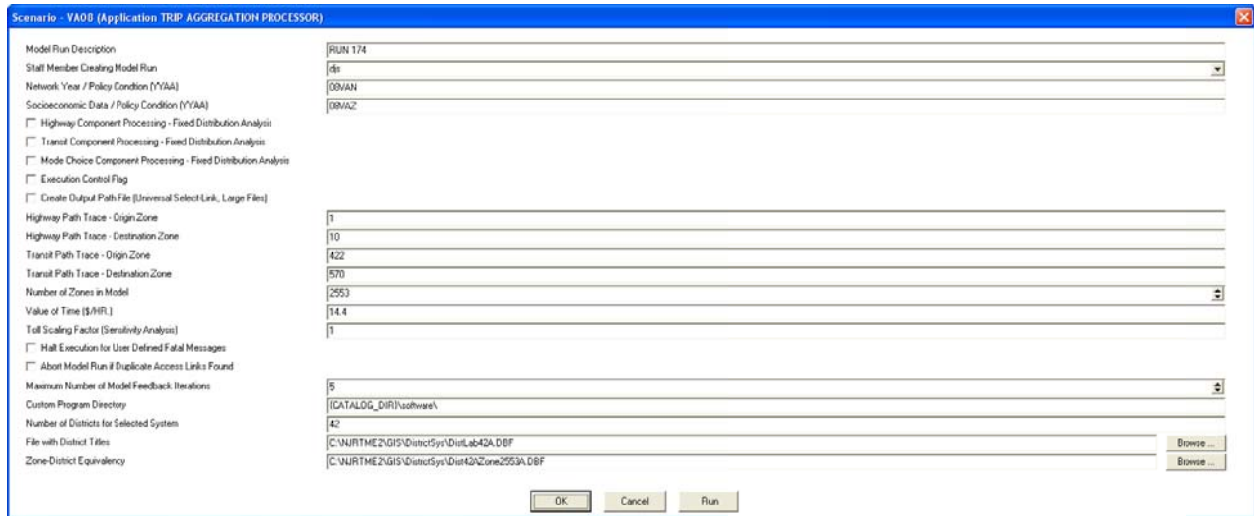


Figure 3-6
Summary Boxes

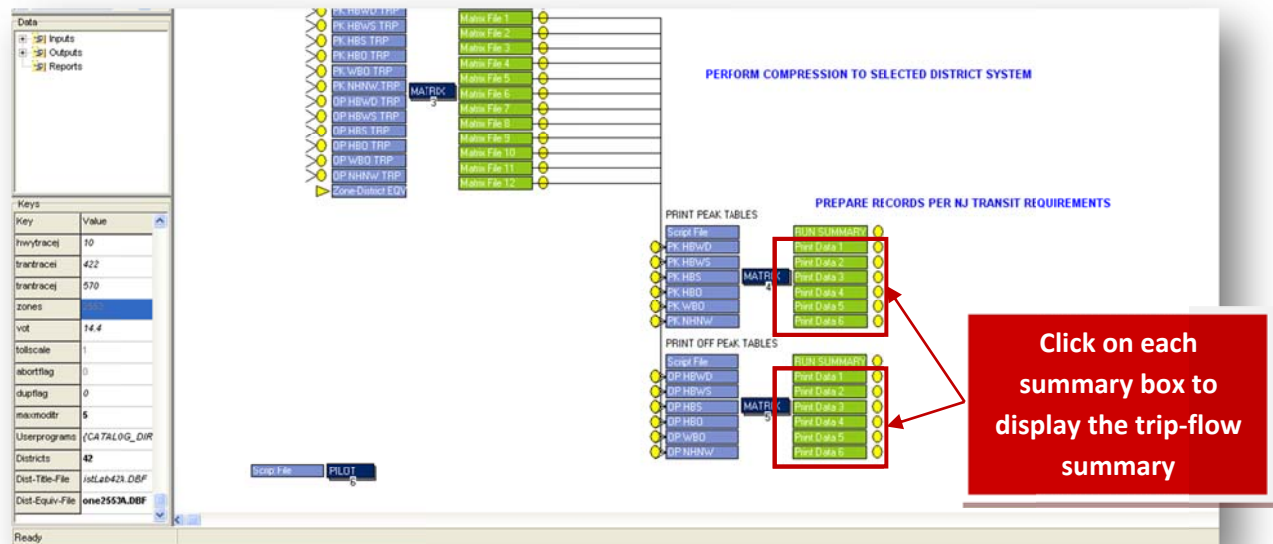


Figure 3-7
A Sample of District-to-District Traffic Flow by Travel Mode

FROM	TO	SOV	NOV2	NOV 3+	NOV 4	M_RAIL	M_PATH	M_BUS	M_FERRY	M_LRT	M_L_FERRY	D_RAIL	D_PATH	D_BUS	D_FERRY	D_LRT	D_L_FERRY
1	1116872	1799	8240	433	1116	0314	871	411	0	0	1.093	0	0	0	0	0	0
1	2	80	790	21	549	4	361	4	199	0	0	0	0	0	0	0	0
1	3	1165	037	103	530	15	151	12	316	0	0	0	0	0	0	0	0
1	4	139	222	54	040	10	769	10	719	0.000	0	0	0	0	0	0	0
1	5	124	659	44	041	0	134	26	232	0	0.000	0	0	0	0	0	0
1	6	46	864	7	138	1	258	1	123	0	0	0	0	0	0	0	0
1	7	1267	846	172	747	28	729	24	784	0.000	0	0	0	0	0	0	0
1	8	1489	274	235	171	46	065	41	461	0.001	0	0	0	0	0	0	0
1	9	2361	203	287	497	48	023	41	691	0	0	0	0	0	0	0	0
1	10	83	196	19	976	4	020	3	817	0.000	0	0	0	0	0	0	0
1	11	2959	789	292	301	44	335	36	609	0	0	0	0	0	0	0	0
1	12	56	384	11	654	2	467	2	224	0	0	0	0	0	0	0	0
1	13	229	379	39	506	7	231	6	577	0	0	0	0	0	0	0	0
1	14	1	042	0	267	0	056	0	054	0	0	0	0	0	0	0	0
1	15	302	596	59	160	11	177	10	293	0.000	0	0	0	0	0	0	0
1	16	4	822	1	004	0	197	0	185	0	0	0	0	0	0	0	0
1	17	21	118	15	603	9	055	9	305	0	0.025	0	0	0	0	0	0
1	18	7	070	5	978	3	361	3	816	0	0	0	0	0	0	0	0
1	19	146	888	110	345	63	644	69	820	0	0.130	0	0	0	0	0	0
1	20	36	069	34	101	21	393	24	404	0	0	0	0	0	0	0	0
1	21	130	008	195	966	83	984	158	295	0	0	0	0	0	0	0	0
1	22	316	223	450	491	107	613	347	454	0	1.304	0	0	0	0	0	0
1	23	80	456	100	431	38	980	69	050	0	0.111	0	0	0	0	0	0
1	24	20	970	6	757	1	429	1	458	0	0	0	0	0	0	0	0
1	25	2	313	2	379	1	541	1	781	0	0	0	0	0	0	0	0
1	26	42	650	34	662	20	527	22	811	0	0.066	0	0	0	0	0	0
1	27	594	243	376	654	38	600	48	230	0	0	0	0	0	0	0	0
1	28	93	417	24	706	5	600	5	557	0	0	0	0	0	0	0	0
1	29	2	090	3	158	2	323	2	862	0	0	0	0	0	0	0	0
1	30	2	743	1	083	0	243	0	257	0	0	0	0	0	0	0	0
1	31	47	238	40	384	24	972	27	288	0	0.004	0	0	0	0	0	0
1	32	569	487	73	408	12	144	10	493	0	0	0	0	0	0	0	0
1	33	7	555	1	631	0	320	0	301	0	0	0	0	0	0	0	0
1	34	4	636	1	424	0	314	0	314	0	0	0	0	0	0	0	0
1	35	113	366	21	421	4	022	3	702	0	0	0	0	0	0	0	0
1	36	16	994	4	701	1	003	0	984	0	0	0	0	0	0	0	0
1	37	56	309	14	081	2	910	2	811	0	0	0	0	0	0	0	0
1	38	53	748	10	206	1	820	1	748	0	0	0	0	0	0	0	0
1	39	5	967	1	777	0	393	0	390	0	0	0	0	0	0	0	0
1	40	9	603	3	239	0	730	0	750	0	0	0	0	0	0	0	0
1	41	16	201	7	240	1	832	1	844	0	0	0	0	0	0	0	0
1	42	39	076	15	788	3	094	4	094	0	0	0	0	0	0	0	0
2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	2	2219640	327	15683	136	2126	519	1663	020	1098	264	0	0.777	5339	594	0	0.087
2	3	0	396	0	055	0	012	0	011	0	0	0	0	0	0	0	0
2	4	14701	138	2145	628	306	033	260	048	333	220	43	787	145	876	0	1.936
2	5	21553	042	2405	724	316	497	707	807	878	616	218	388	697	154	0	253.004
2	6	96	004	10	806	1	707	1	441	0	0	0	0	0	0	0	0
2	7	141	154	20	556	3	508	3	073	4	141	0	0	0.006	0	0	1.551
2	8	3074	682	347	027	54	629	45	935	44	076	0	0.014	0	0.540	0	0
2	9	261	742	32	219	5	244	4	494	0	0.035	0	0	0.010	0	0	0
2	10	6376	472	588	200	86	276	69	971	11	354	0	0.048	0	0.879	0	0.000
2	11	1	248	0	357	0	062	0	055	0	0	0	0	0	0	0	0
2	12	20478	748	152	475	207	360	162	176	96	043	0	0.075	471	239	0	0.001
2	13	1235	078	126	278	19	325	16	059	0	0.407	0	0.009	0	0.049	0	0
2	14	82	914	7	955	1	192	0	980	0	0.000	0	0	0.000	0	0	0
2	15	4772	995	477	069	71	786	58	952	41	012	3	140	16	385	0	0.046
2	16	57	449	6	222	0	970	0	813	0	0	0	0	0	0	0	0
2	17	1240	474	275	042	105	660	94	577	220	885	0	754	185	0	7.343	0
2	18	571	033	134	145	52	481	47	401	0	0	0	0	0	0	0	0
2	19	352	316	115	435	50	606	48	408	215	822	44	734	489	602	20	325
2	20	294	972	98	658	43	467	41	667	0	0	0	0	0	0	0	0
2	21	2477	124	1189	681	341	659	529	817	2656	066	250	914	4897	380	0	15.096
2	22	4305	625	2056	755	588	072	905	490	3102	390	33	456	12447	691	0	2.982
2	23	4107	822	1393	455	357	132	523	467	478	363	1	978	2847	610	0	0.435