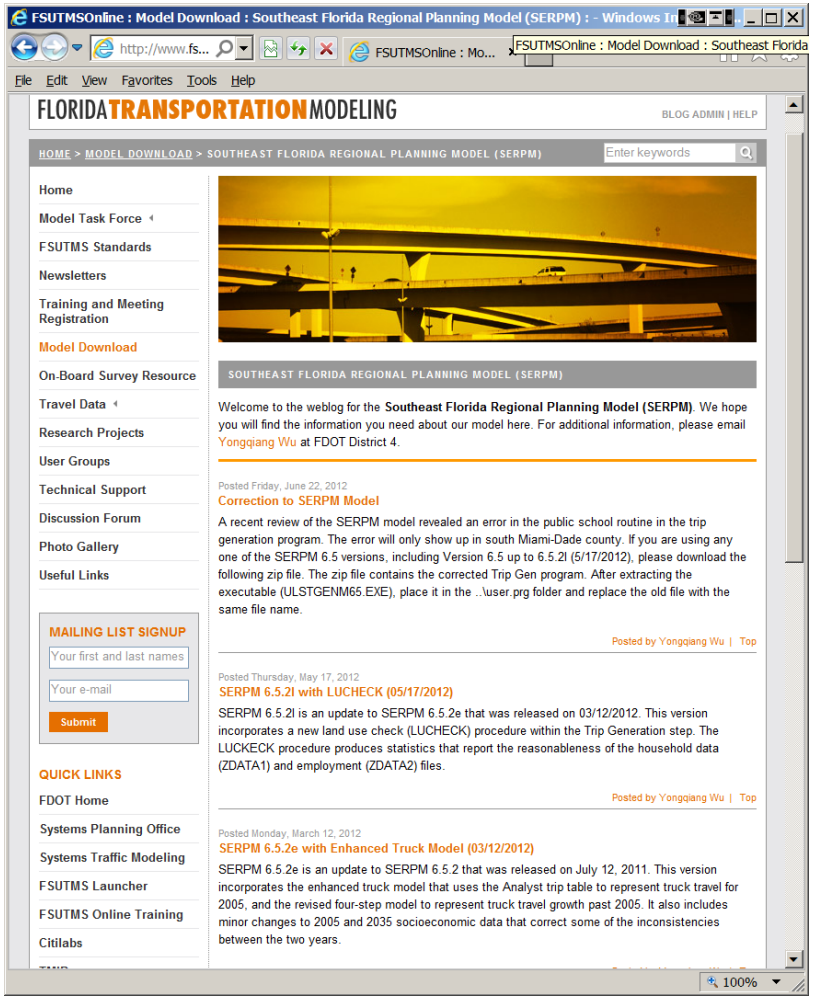
SERPM Model – A Look Back at Older Versions and An Introduction to Version 6.5.3

Gannett Fleming, Inc.
March 08, 2013

Introduction

- Many Different Versions of SERPM Model
  - Time-of-Day vs. Daily
  - Transit vs. Highway Only
  - Regional vs. Sub Area
- Continuing Revisions and New Features
  - SE Data and Network
  - Programs and Scripts
  - User Experience
  - Model Enhancements
- What Version Should be Used?



Credits

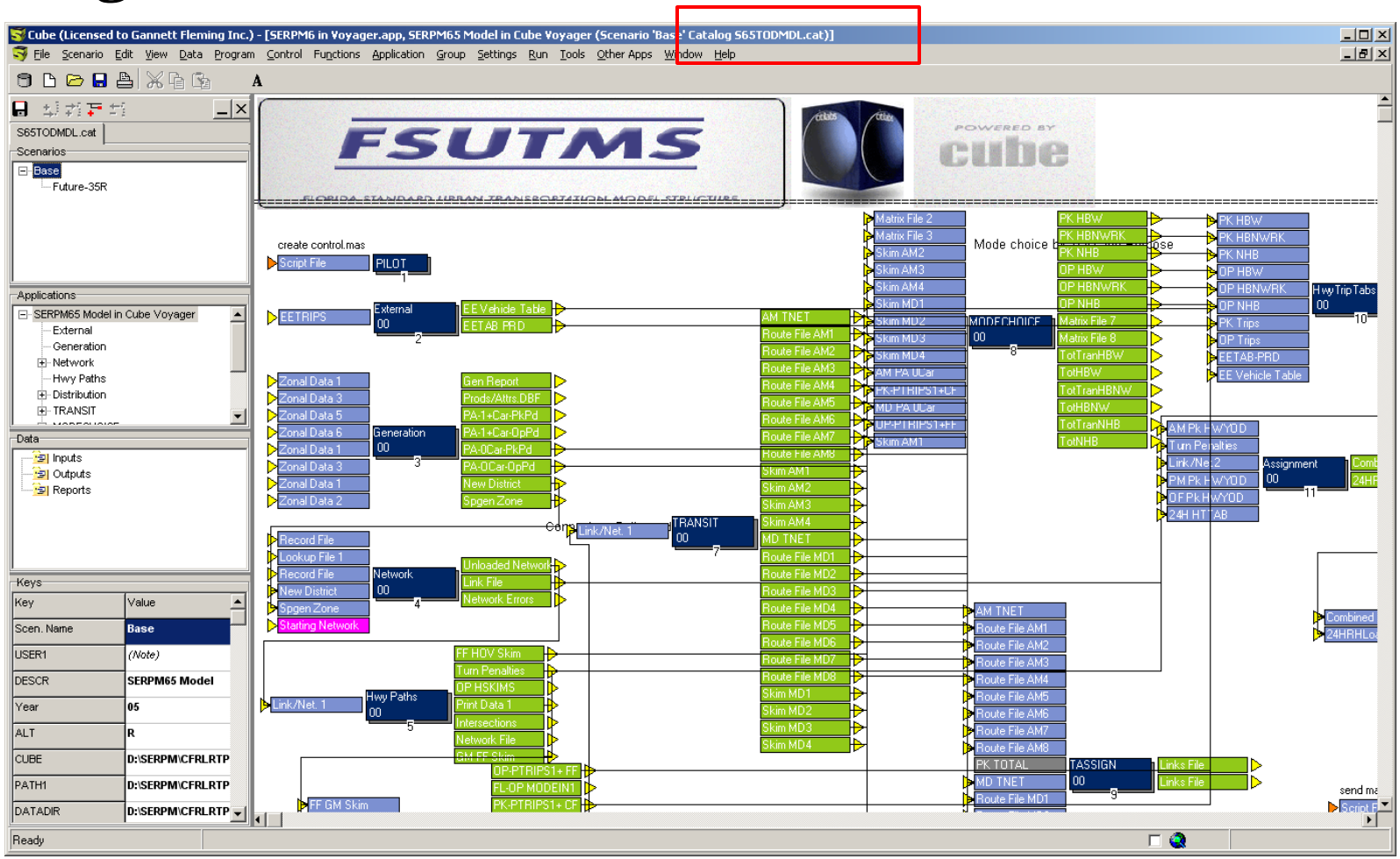
- FDOT, District 4
- The Corradino Group
- The Whitehouse Group

Original SERPM 6.5 (S65TODMDL.cat)

- Released on February 26, 2010
- Time-of-Day Model with Full Transit
- Base Year: 2005
- Future Year: 2035 Cost Feasible Network

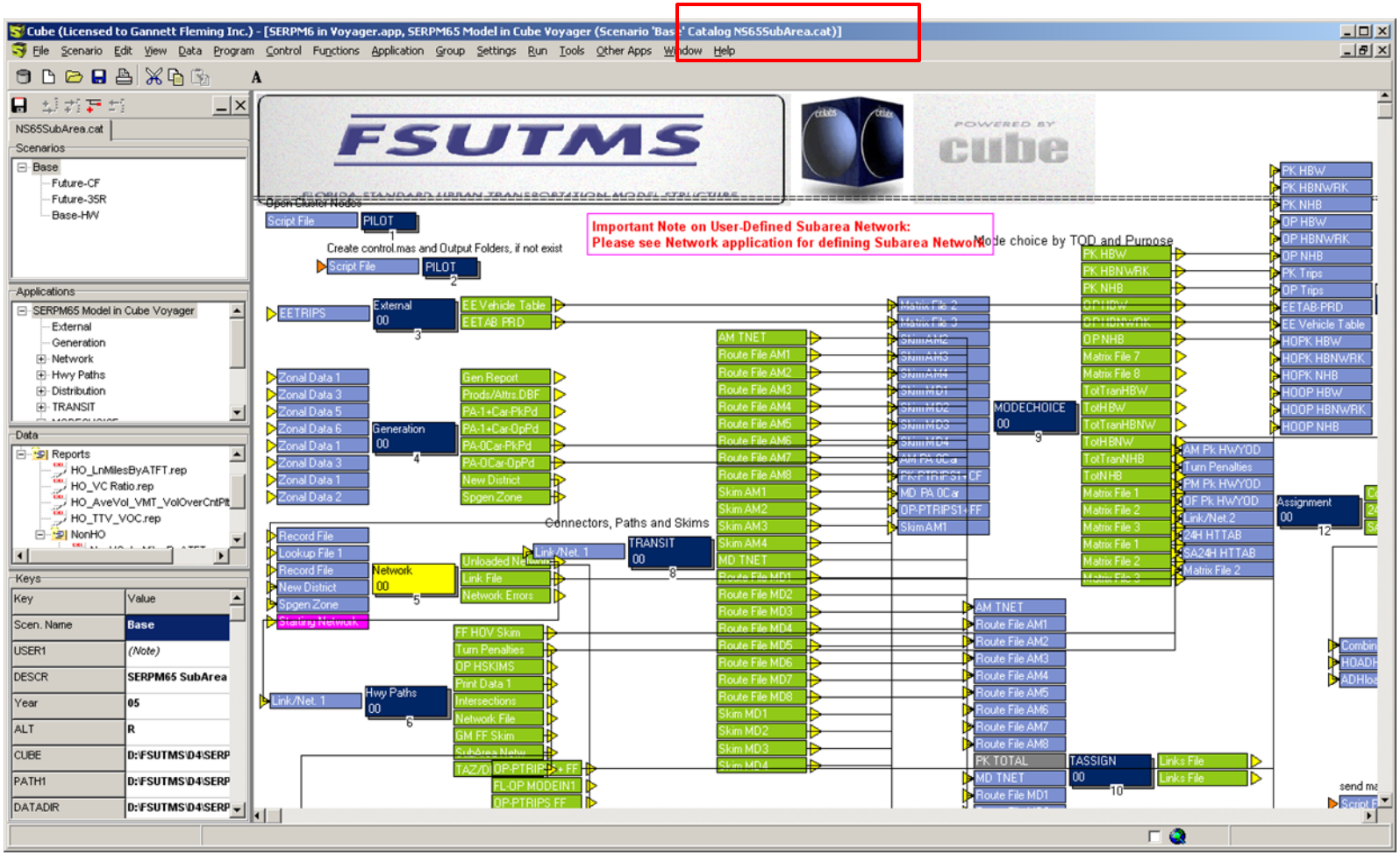
Original SERPM 6.5 (S65TODMDL.cat)

- Original Flow Chart



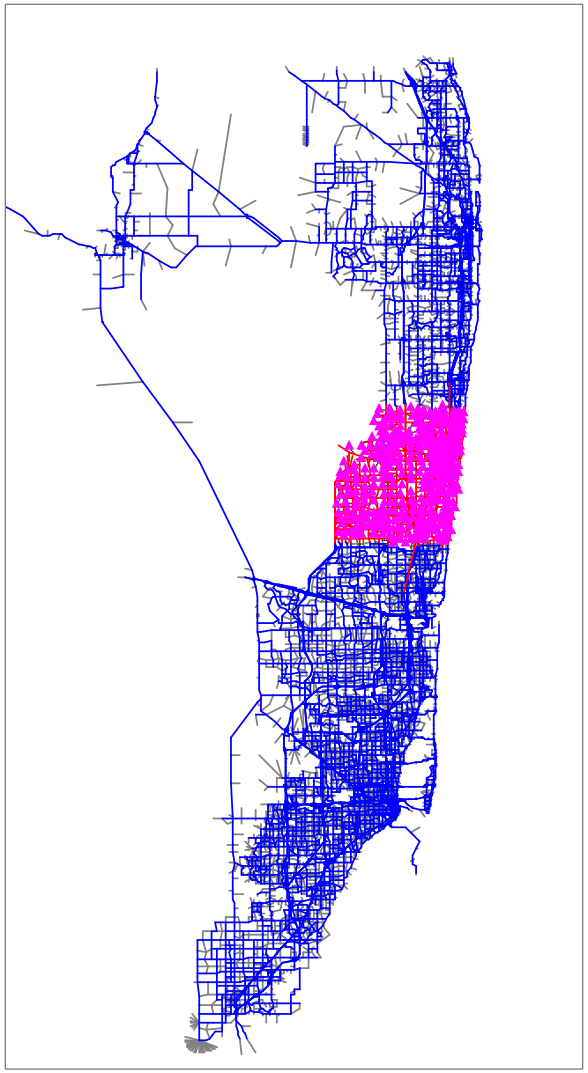
Daily Subarea Model (NS65Subarea.cat)

- Released April 15, 2010



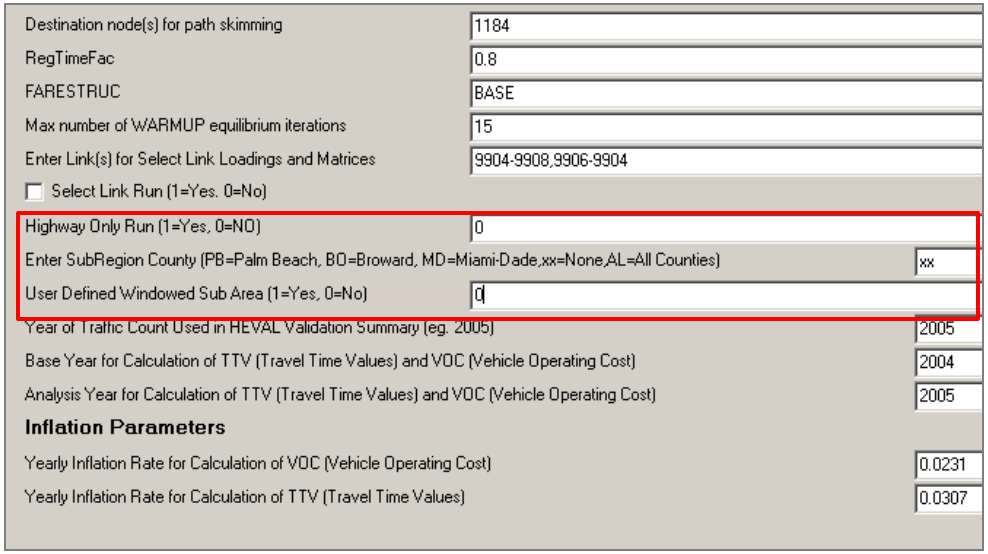
Daily Subarea Model – Define Subarea

- Staring Network Has Sub-Area Predefined
  - Links
    - DETAILNET=1
  - Nodes
    - DETAIL=1
- Needs to Clear the Predefined Attributes Before Defining a New Subarea.



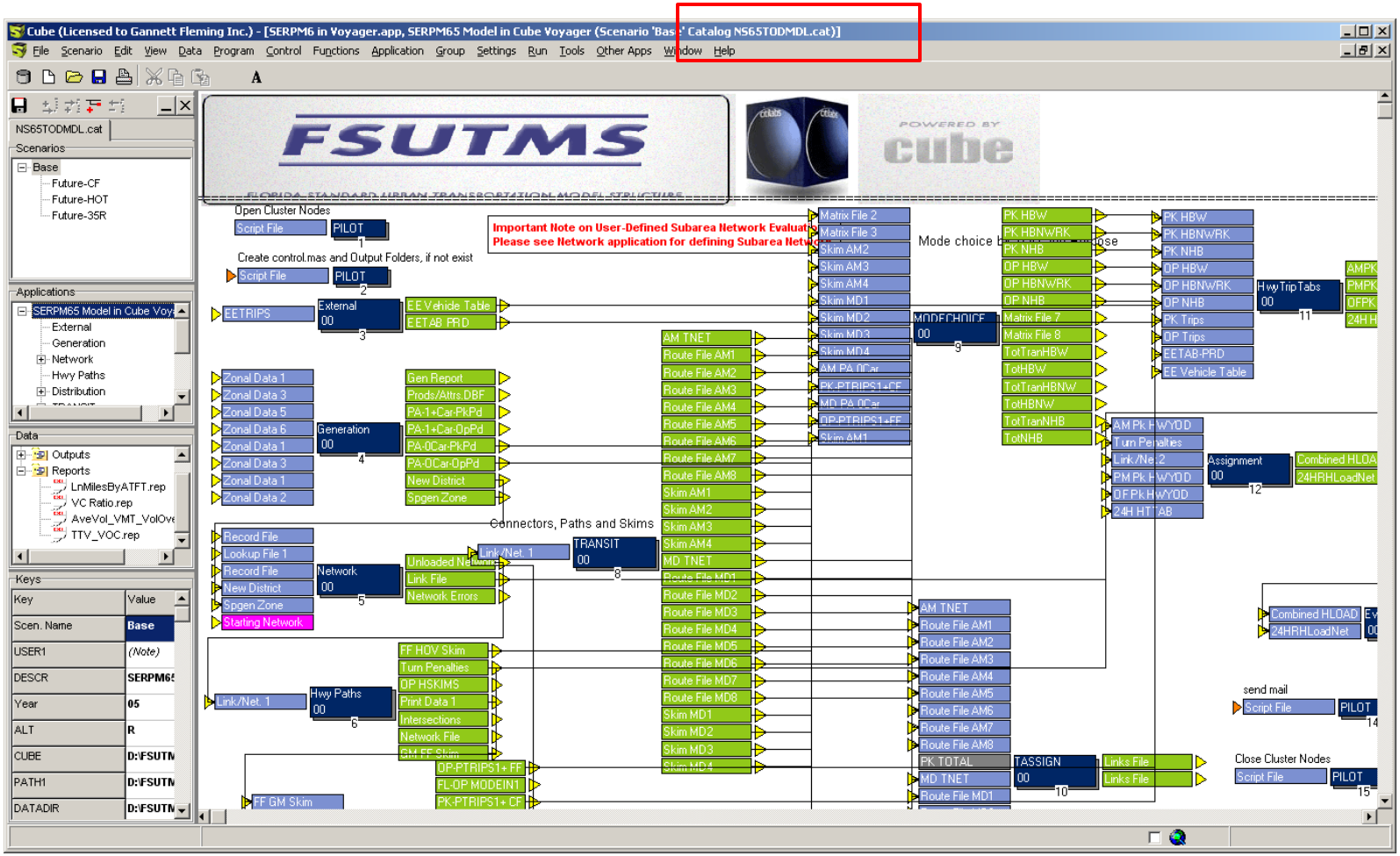
Daily Subarea Model – Key Values

- Provide three keys
  - Highway Only Run
    - 1=Yes
    - 0=No
  - Enter SubRegion County
    - PB=Palm Beach, BO=Broward
    - MD=Miami-Dade
    - xx=None,
    - AL=All Counties
  - User Defined Windowed Sub Area
    - 1=Yes
    - 0=No



TOD Subarea Model (NS65TODMDL.cat)

- Completed on December 28, 2010.



TOD Subarea Model Major Improvements

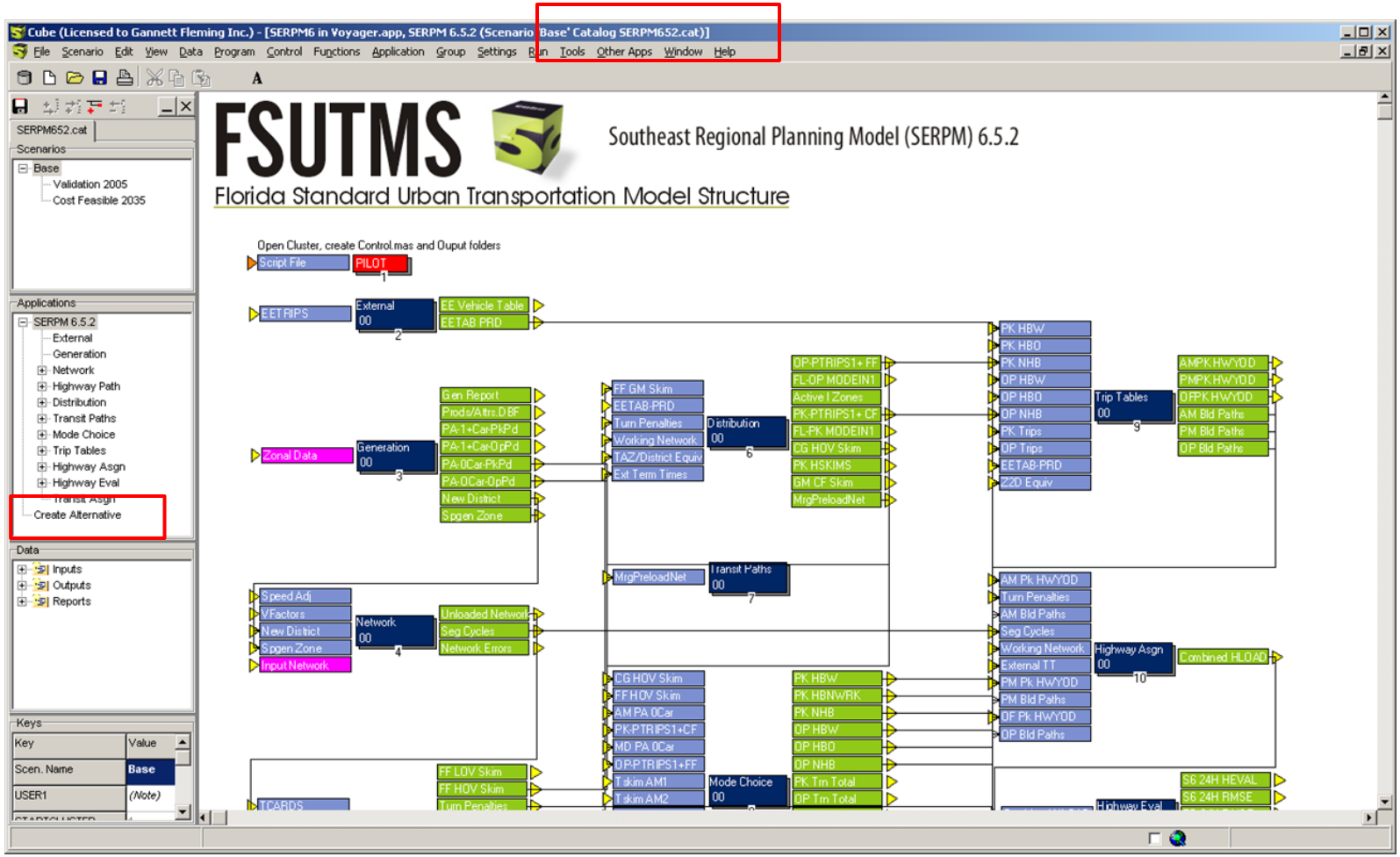
- Capacity Adjustments Using 2009 FDOT LOS Handbook
- Trip Assignments using LOS E Capacities
- Changed Assignment Scripts to Allow Reversible Lanes
- Developed a Process to Handle Open Road Tolling
- HEVAL Reporting Scripted in Cube Voyager instead of FORTRAN
  - Inclusion of a process to generate HEVAL reports for any **windowed areas**
  - Development of road **user cost reports** in HEVAL
- Time-reduction strategies
  - Trip distribution/transit skims using INTERSTEP Cluster

SERPM 6.5.2 – Usability Enhancement

- Released on April 11, 2011
- Incorporated and Integrated the SERPM Models for Three Modes:
  - Full regional full transit
  - Full regional highway only
  - Subarea selection highway only
- User Experience
  - Developed a self-installation program
  - Included a “Create Alternative” application
  - Added on-screen reporting

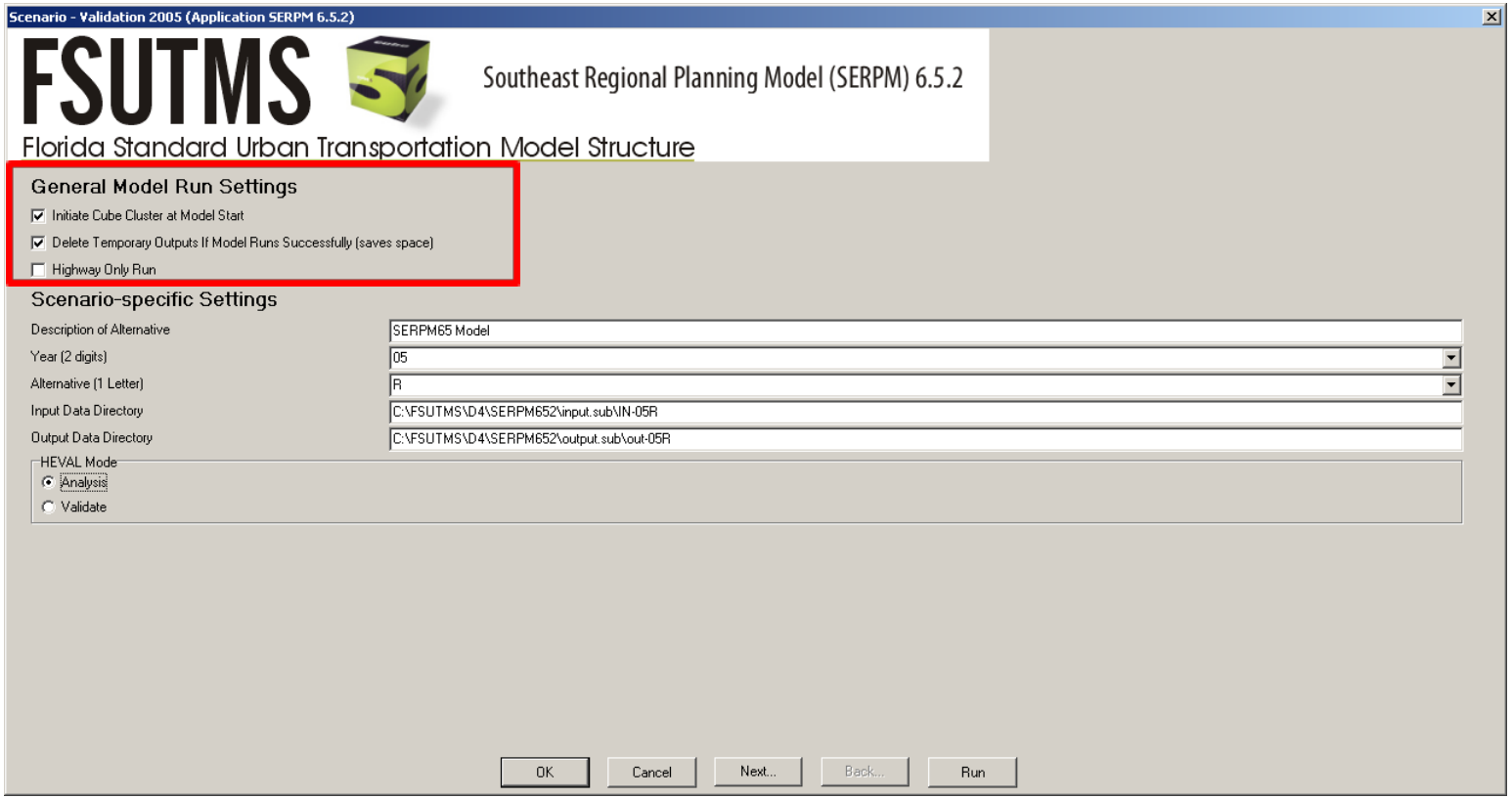
SERPM 6.5.2 – Usability Enhancement

- Released on April 11, 2011



SERPM 6.5.2 – Usability Enhancement

- Scenario Management Interface



SERPM 6.5.2 – Usability Enhancement

- Revised FORTRAN Programs
  - MLEG.EXE (identify freeway and ramp merge approach links)
    - Crashes when file path/name is longer than 255 characters
  - REWALK (re-examine walk connectors)
    - Crashes when there are too many links
  - PT2TRNB.EXE (convert PT to TRNBUILD network)
    - Ignores the rest of routes when running into one wrong key words

SERPM 6.5.2 – Usability Enhancement

- Included Network Updates per the Direction of Miami-Dade MPO
- Enhanced Trip Distribution
  - All Purposes will converge at the same time
- Enhanced Trip Assignment
  - Will not build path if there is no trips between an i-j pair, and therefore reduced computer run time.

SERPM 6.5.2e – Enhanced Truck Model

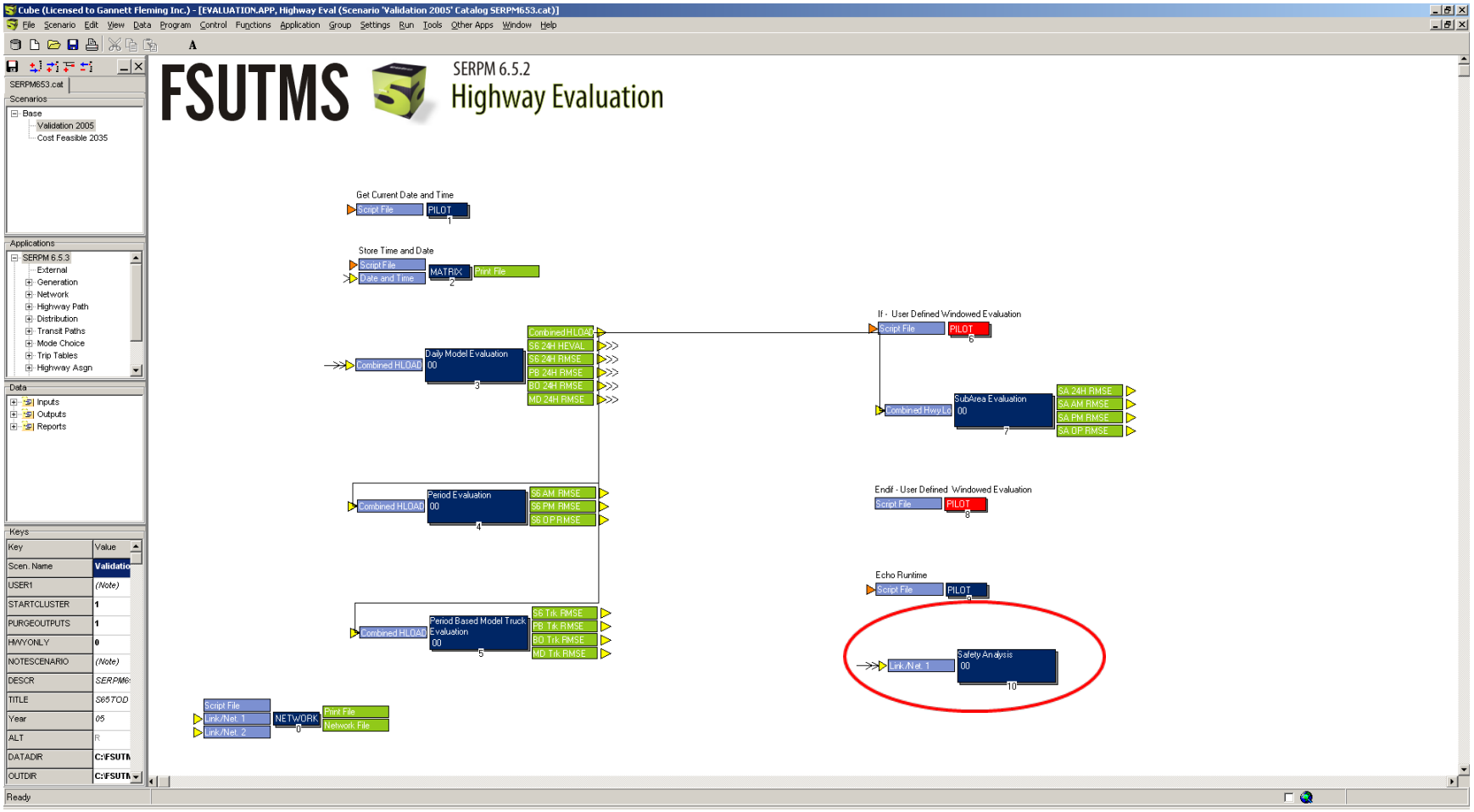
- Released on March 12, 2012
- Major Changes
  - Uses Cube Analyst truck trip table for base year
  - Revised the four-step truck trip model
    - Special Generators
    - Truck trip rates
    - Truck friction factors
- Minor Changes
  - Both 2005 and 2035 SE Data to ensure consistency

SERPM 6.5.2l – with LUCHECK

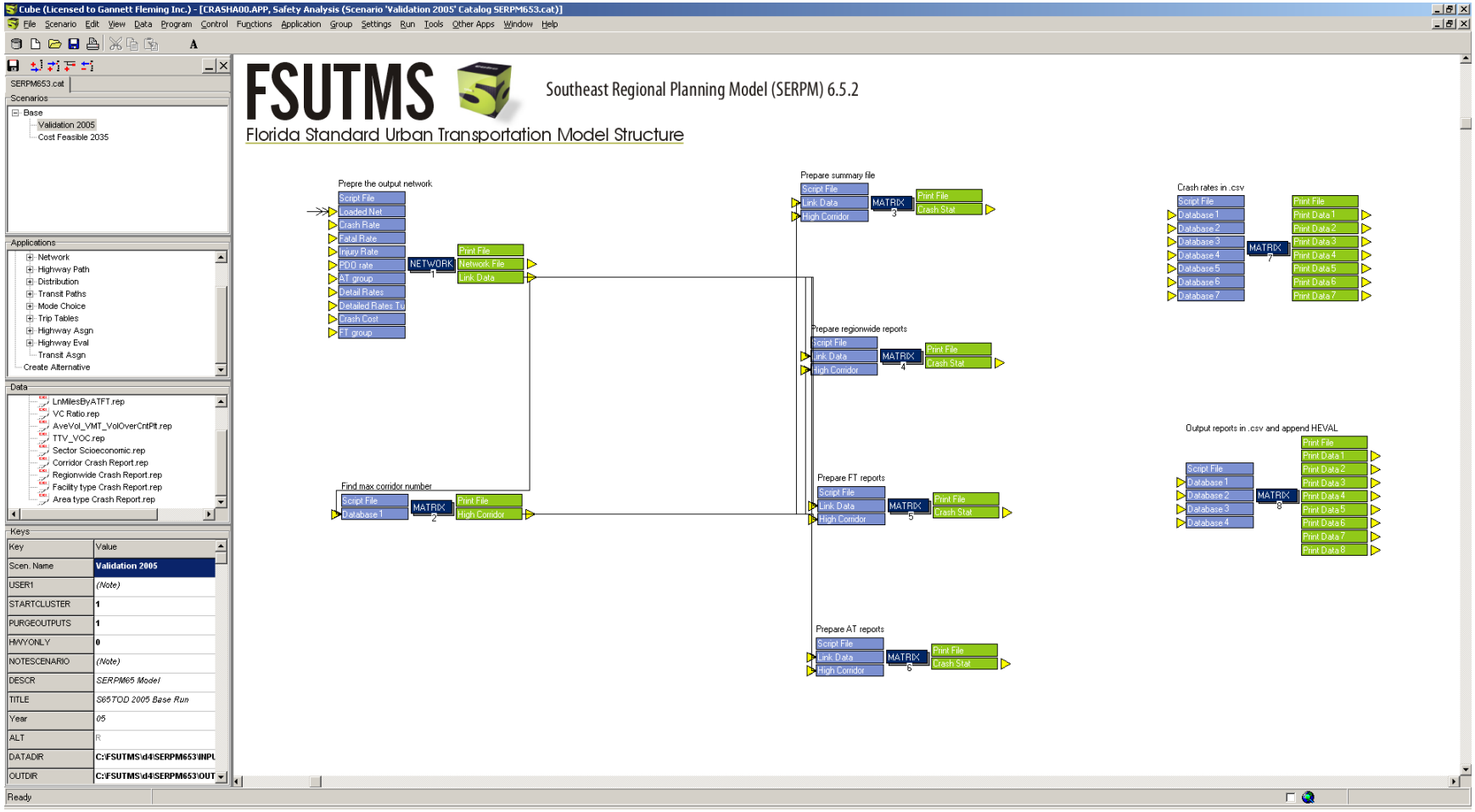
- Released on May 17, 2012
- Major Changes
  - Incorporates a new land use check (LUCHECK) procedure within trip generation
  - Check the reasonableness of household data and employment data
- Minor Changes
  - Trip generation program (ULSTGENM65.EXE)
    - Error in Public School routine affecting only south Miami-Dade County

SERPM 6.5.3 – Safety Analysis

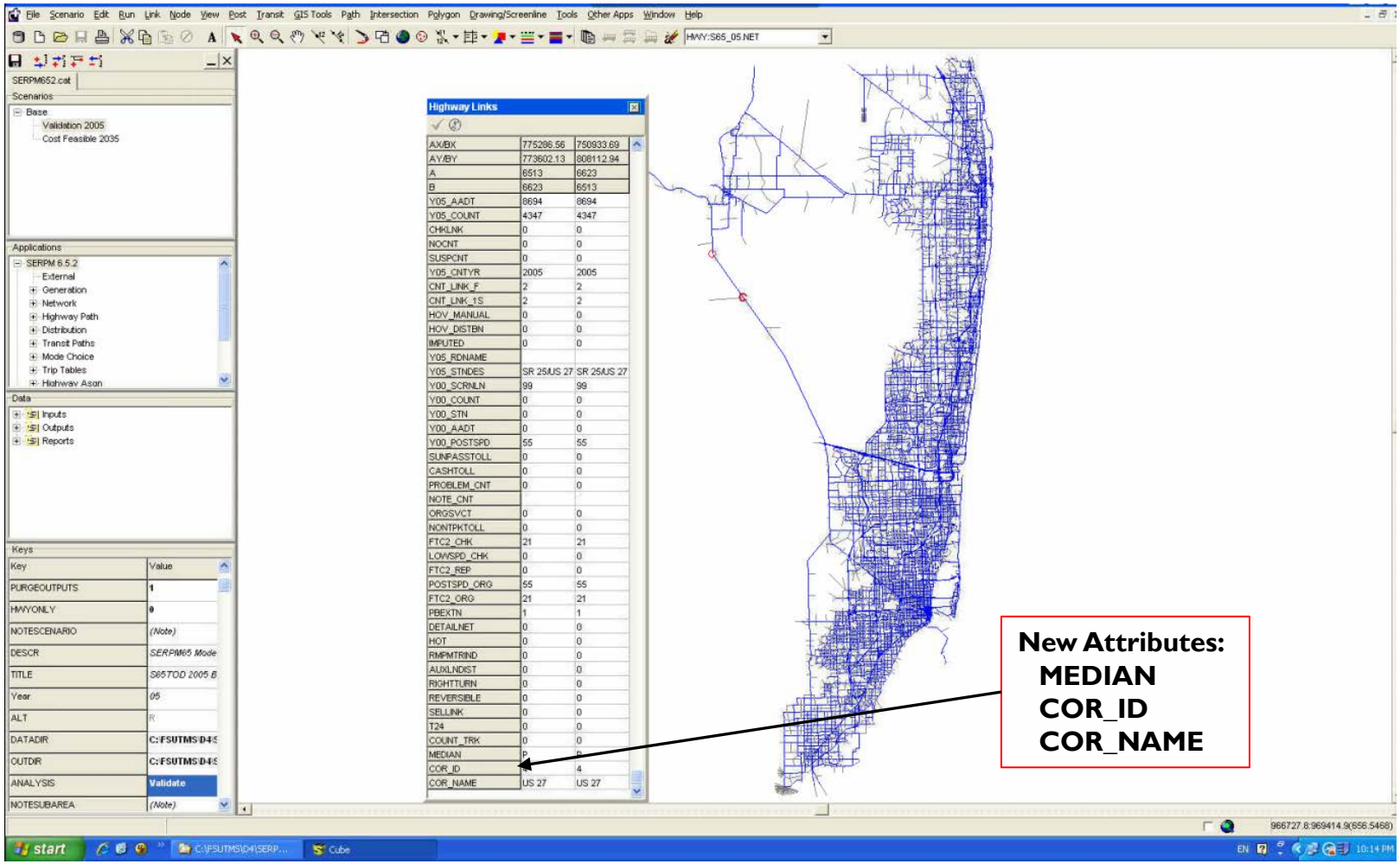
- Include a Safety Analysis Step



SERPM 6.5.3 – Safety Analysis



Needed Changes – Network Attributes



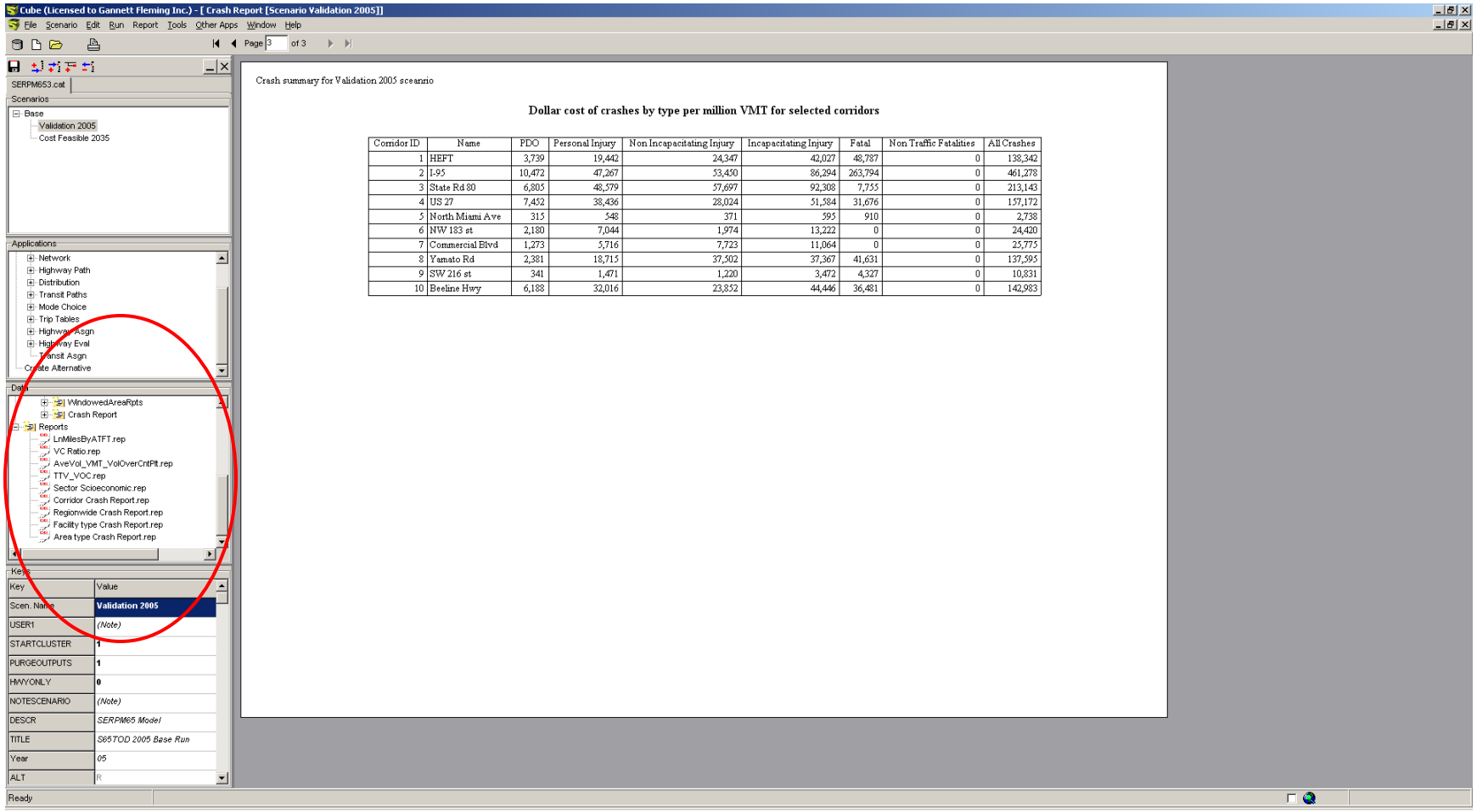
Accident Rates by County by Facility

CODE	BR	IR	MR	PB	SL	MD	BR_TPK	IR_TPK	MR_TPK	PB_TPK	SL_TPK	MD_TPK	TPK	ST	DESC
1	0.71	0.69	0.54	0.79	0.54	1.53	0	0	0	0	0	0	0	0.69	INTERSTATE URBAN
2	0.28	0.54	0.43	0	0	0	0	0	0	0	0	0	0	0.38	INTERSTATE RURAL
3	0	0	0	0	0	1.77	0.63	0	0.42	0.72	0.51	0.63	0.32	0.6	TOLL ROAD URBAN
4	0	0	0	0	0	0	0	0.47	0.52	0	0.54	0.53	0.21	0.36	TOLL ROAD RURAL
5	0	0	0	0	0	1.84	0	0	0	0	0	0	0	1.14	URBAN OTHER LIMITED ACCESS
6	0	0	0	0	0	0.12	0	0	0	0	0	0	0	9.39	RURAL OTHER LIMITED ACCESS
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	RAMP URBAN
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	RAMP RURAL
10	0.78	0	0.32	7.54	2.65	3.51	0	0	0	0	0	0	0	5.82	URBAN 2-3LN 2WY DIVD RASD
11	2.4	3.88	1.97	3.21	6.48	6.86	0	0	0	0	0	0	0	4.06	URBAN 2-3LN 2WY DIVD PAVD
12	0.94	0.29	0.83	1.78	3.02	6.49	0	0	0	0	0	0	0	2.94	URBAN 2-3LN 2WY UNDIVD
13	0.44	0	0.6	4.33	0.12	0.66	0	0	0	0	0	0	0	2.75	SUBURBAN 2-3LN 2WY DIVD RASD
14	1.59	0.57	1.07	1.37	0.79	2.11	0	0	0	0	0	0	0	2.12	SUBURBAN 2-3LN 2WY DIVD PAVD
15	0.93	0.08	0.25	0.71	0.44	1.04	0	0	0	0	0	0	0	0.92	SUBURBAN 2-3LN 2WY UNDIVD
16	0	0	0.51	2.66	0.3	0.93	0	0	0	0	0	0	0	2.07	RURAL 2-3LN 2WY DIVD RASD
17	0	0.13	1.07	0.49	1.28	3.51	0	0	0	0	0	0	0	1.85	RURAL 2-3LN 2WY DIVD PAVD
18	10.27	0.17	0.32	0.38	0.35	0.72	0	0	0	0	0	0	0	0.59	RURAL 2-3LN 2WY UNDIVD
20	4.17	1.85	1.47	2.22	0.81	4.14	0	0	0	0	0	0	0	2.45	URBAN 4-5LN 2WY DIVD RASD
21	4.91	2.47	1.89	2.27	2.51	7.11	0	0	0	0	0	0	0	3.82	URBAN 4-5LN 2WY DIVD PAVD
22	2.56	0	0	2.99	0	10.04	0	0	0	0	0	0	0	4.88	URBAN 4-5LN 2WY UNDIVD
23	1.3	0.79	0.7	1.02	0.47	2.55	0	0	0	0	0	0	0	1.36	SUBURBAN 4-5LN 2WY DIVD RASD
24	4	2.61	0	1.89	1.24	4.47	0	0	0	0	0	0	0	1.96	SUBURBAN 4-5LN 2WY DIVD PAVD
25	0.06	0	0	0.05	1.67	1.86	0	0	0	0	0	0	0	1.28	SUBURBAN 4-5LN 2WY UNDIVD
26	0.37	0.26	0.56	0.54	0.2	0.84	0	0	0	0	0	0	0	0.57	RURAL 4-5LN 2WY DIVD RASD
27	0	0	0	0.45	0	0	0	0	0	0	0	0	0	0.61	RURAL 4-5LN 2WY DIVD PAVD
28	0	0	0	0	0	1.87	0	0	0	0	0	0	0	0.45	RURAL 4-5LN 2WY UNDIVD
30	3.53	1.64	1.38	2.09	1.43	5.32	0	0	0	0	0	0	0	3.18	URBAN 6+LN 2WY DIVD RASD
31	4.33	0	0	2.43	0	6.67	0	0	0	0	0	0	0	3.33	URBAN 6+LN 2WY DIVD PAVD
32	0	0	0	0	0	46.63	0	0	0	0	0	0	0	26.4	URBAN 6+LN 2WY UNDIVD
33	2.2	1.8	0.91	1.22	0.5	2.91	3.4	0	0	0	0	0	0	2.08	SUBURBAN 6+LN 2WY DIVD RASD
34	2.77	0	0	0	0	0	0	0	0	0	0	0	0	1.76	SUBURBAN 6+LN 2WY DIVD PAVD
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0.35	SUBURBAN 6+LN 2WY UNDIVD
36	0	0	0	0.3	0	0	0	0	0	0	0	0	0	0.74	RURAL 6+LN 2WY DIVD RASD
37	0	0	0	0.49	0	0	0	0	0	0	0	0	0	0.49	RURAL 6+LN 2WY DIVD PAVD
38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	RURAL 6+LN 2WY UNDIVD
40	4.89	4.9	0	4.35	7.75	8.67	0	0	0	0	0	0	0	6.96	URBAN ONE WAY
41	3.04	1.31	0	7.1	0.45	2.98	0	0	0	0	0	0.14	0	2.14	SUBURBAN ONE WAY
42	0	0	0	6.54	0	0	0	0	0	0	0	0	0	13.5	RURAL ONE WAY

Detailed Accident Rates

NO	PDO_BR	PI_BR	NII_BR	I_BR	F_BR	NTF_BR	PDO_IR	PI_IR	NII_IR	I_IR	F_IR	NTF_IR	PDO_MR	PI_MR	NII_MR	I_MR	F_MR	NTF_MR	PDO_PB	PI_PB	NII_PB	I_PB	F_PB	NTF_PB	PDO_SL	PI_SL	NII_SL	I_SL	F_SL	NTF_SL	PDO_ST	PI_ST	NII_ST	I_ST	F_ST	NTF_ST	PDO_MD	PI_MD	NII_MD	I_MD	F_MD	NTF_MD
1	0.36	0.18	0.12	0.04	0.01	0	0.31	0.27	0.07	0.03	0.01	0	0.34	0.07	0.08	0.05	0	0	0.43	0.18	0.13	0.04	0.01	0	0.28	0.12	0.08	0.04	0.01	0	0.38	0.16	0.1	0.05	0.01	0	0.8	0.48	0.17	0.06	0.01	0
2	0.11	0.05	0.07	0.03	0.02	0	0.23	0.14	0.09	0.06	0.02	0	0.24	0.07	0.07	0.04	0.01	0	0	0	0	0	0	0	0	0	0	0	0	0	0.18	0.07	0.07	0.04	0.01	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.31	0.15	0.1	0.04	0	0	1.04	0.51	0.16	0.05	0.01	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.17	0.08	0.08	0.03	0.01	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.6	0.33	0.15	0.05	0.01	0	1.07	0.53	0.18	0.06	0.01	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5.11	2.67	1.16	0.43	0.02	0	0.12	0	0	0	0	0
7	22.53	10.35	6.24	2.03	0.41	0.01	32.21	26.73	8.57	2.74	0	0	14.65	5.32	3.58	2.5	0	0	31.44	14.83	9.85	2.57	0.35	0.03	12.18	6.66	3.68	1.55	0.18	0	39.15	18.35	10.01	3.35	0.45	0.03	12.09	5.85	1.79	0.55	0.06	0.01
8	6.54	3.59	2.25	0.94	0.16	0	0	0	0	0	0	0	0	0	0	0	0	0	15.66	8.85	5.96	1.5	0.15	0	8.76	4.38	2.92	1.46	0	0	24.55	11.94	7.5	2.71	0.34	0.01	5.67	2.52	1.02	0.29	0.04	0
10	0.33	0.18	0.21	0.06	0	0	0	0	0	0	0	0	0.16	0	0.16	0	0	0	2.06	1.48	3.43	0.46	0.11	0	1.49	0.66	0.22	0.17	0.11	0	3.3	1.28	0.92	0.28	0.04	0	2.64	0.66	0.1	0.1	0	0
11	1.17	0.67	0.46	0.1	0.01	0	2.33	0.78	0.68	0.1	0	0	0.77	0.74	0.32	0.14	0	0	1.5	0.87	0.69	0.15	0.01	0	4.03	1.93	0.53	0	0	0	2.31	0.91	0.64	0.18	0.02	0	4.87	1.16	0.52	0.3	0.02	0
12	0.61	0.19	0.14	0	0	0	0.29	0	0	0	0	0	0.35	0.15	0.2	0.09	0.04	0	0.75	0.49	0.4	0.14	0.01	0	1.46	0.99	0.47	0.1	0	0	1.72	0.58	0.48	0.14	0.02	0	4.49	0.74	0.99	0.24	0.02	0
13	0.33	0.11	0	0	0	0	0	0	0	0	0	0	0.6	0	0	0	0	0	1.61	1.36	1.07	0.29	0	0	0.04	0.04	0.04	0	0	0	1.37	0.65	0.46	0.22	0.04	0	0.28	0.24	0.05	0.09	0	0
14	0.95	0.34	0.24	0.05	0	0	0.22	0.17	0.1	0.07	0.01	0	0.41	0.33	0.23	0.09	0.01	0	0.58	0.34	0.37	0.07	0.01	0	0.32	0.19	0.17	0.1	0.02	0	1.01	0.51	0.38	0.19	0.02	0	1.11	0.55	0.32	0.13	0.01	0
15	0.53	0.19	0.16	0.05	0.01	0	0.03	0.02	0.03	0.01	0	0	0.11	0.05	0.08	0.02	0	0	0.23	0.19	0.2	0.08	0.02	0	0.15	0.1	0.11	0.07	0.01	0	0.41	0.21	0.18	0.1	0.02	0	0.63	0.23	0.13	0.04	0.01	0
16	0	0	0	0	0	0	0	0	0	0	0	0	0.31	0	0.2	0	0	0	1.16	0.5	0.5	0.5	0	0	0	0	0	0	0.3	0	0.94	0.47	0.4	0.23	0.04	0	0.46	0.21	0.16	0.09	0.02	0
17	0	0	0	0	0	0	0	0	0.13	0	0	0	0.52	0.19	0.19	0.11	0.05	0	0.24	0.16	0.08	0	0	0	0.28	0.17	0.5	0.22	0.06	0.06	0.77	0.43	0.36	0.25	0.04	0	1.78	0.84	0.62	0.25	0.02	0
18	9.48	0.79	0	0	0	0	0.07	0.04	0.05	0.01	0.01	0	0.12	0.04	0.08	0.05	0.02	0	0.12	0.09	0.1	0.06	0.01	0	0.09	0.05	0.11	0.07	0.03	0	0.23	0.12	0.13	0.09	0.03	0	0.33	0.17	0.15	0.06	0.01	0
20	2.31	1.02	0.6	0.2	0.03	0	0.82	0.45	0.44	0.12	0.02	0	0.66	0.44	0.28	0.08	0.02	0	0.94	0.61	0.51	0.13	0.02	0	0.39	0.23	0.1	0.09	0	0	1.27	0.6	0.42	0.14	0.02	0	2.79	0.9	0.31	0.12	0.02	0
21	2.61	1.22	0.8	0.23	0.04	0	1.21	0.58	0.56	0.11	0.01	0	0.91	0.48	0.3	0.16	0.04	0	0.94	0.66	0.53	0.12	0.02	0	1.23	0.85	0.28	0.11	0.03	0	2.19	0.86	0.56	0.19	0.02	0	5.17	1.22	0.54	0.16	0.02	0
22	1.45	0.61	0.34	0.14	0.02	0	0	0	0	0	0	0	0	0	0	0	0	0	1.33	0.77	0.67	0.19	0.03	0	0	0	0	0	0	0	2.92	1.05	0.68	0.21	0.02	0	7.36	1.62	0.82	0.2	0.02	0.01
23	0.68	0.33	0.19	0.08	0.02	0	0.27	0.21	0.23	0.07	0.01	0	0.27	0.22	0.14	0.05	0.02	0	0.38	0.29	0.26	0.07	0.02	0	0.19	0.12	0.08	0.06	0.02	0	0.63	0.33	0.26	0.12	0.02	0	1.46	0.66	0.3	0.11	0.02	0
24	2.23	0.9	0.65	0.18	0.04	0	0.96	0.77	0.65	0.19	0.02	0.01	0	0	0	0	0	0	0.69	0.58	0.51	0.11	0	0	0.46	0.37	0.23	0.13	0.04	0	0.95	0.5	0.36	0.13	0.02	0	2.93	0.8	0.51	0.16	0.06	0
25	0.06	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.03	0	0	0.03	0	0	1.2	0	0.24	0.24	0	0	0.53	0.35	0.26	0.12	0.01	0	0.97	0.53	0.27	0.09	0	0
26	0.15	0.08	0.09	0.03	0.02	0	0.06	0.11	0.04	0.02	0.02	0	0.35	0.07	0.14	0	0	0	0.18	0.13	0.12	0.06	0.04	0	0.14	0.03	0	0.03	0	0	0.23	0.12	0.12	0.08	0.02	0	0.48	0.22	0.1	0.05	0	0
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.14	0.12	0.12	0.03	0.03	0	0	0	0	0	0	0	0.23	0.16	0.14	0.07	0.02	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.18	0.1	0.12	0.04	0	0	0.56	0.94	0.37	0	0	0
30	1.85	0.92	0.52	0.22	0.02	0	0.71	0.48	0.32	0.11	0.02	0	0.62	0.44	0.25	0.05	0.01	0	0.83	0.67	0.45	0.12	0.02	0	0.57	0.45	0.28	0.11	0.01	0	1.7	0.8	0.49	0.17	0.02	0	3.58	1.13	0.45	0.15	0.02	0
31	2.57	1.01	0.65	0.09	0.01	0	0	0	0	0	0	0	0	0	0	0	0	0	0.74	0.98	0.43	0.24	0.05	0	0	0	0	0	0	0	1.72	0.79	0.59	0.2	0.03	0	4.31	1.51	0.59	0.2	0.06	0
32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19.25	4.22	2.2	0.37	0.37	0	33.16	6.22	4.15	2.07	1.04	0
33	1.08	0.63	0.34	0.13	0.01	0	0.61	0.63	0.41	0.14	0.02	0	0.32	0.31	0.18	0.08	0.02	0	0.44	0.39	0.28	0.1	0.01	0	0.06	0.38	0	0.06	0	0	1.04	0.54	0.34	0.15	0.02	0	1.96	0.51	0.32	0.11	0.01	0
34	1.47	0.61	0.56	0.12	0.02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.85	0.45	0.33	0.11	0.02	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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
36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0.06	0.03	0.01	0	0	0	0	0	0	0	0.27	0.15	0.18	0.1	0.03	0	0	0	0	0	0	0
37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.18	0.03	0.15	0.06	0.06	0	0	0	0	0	0	0	0.18	0.03	0.15	0.06	0.06	0	0	0	0	0	0	0
38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40	3.01	0.97	0.67	0.2	0.03	0	2.46	0.99	1.09	0.31	0.05	0	0	0	0	0	0	0	2.05	1.18	0.9	0.2	0.02	0	7.75	0	0	0	0	0	4.48	1.36	0.85	0.24	0.03	0	6.79	1.21	0.5	0.16	0.02	0
41	1.98	0.67	0.32	0.07	0.01	0	0.68	0.26	0.37	0	0	0	0	0	0	0	0	0	3.66	2.37	1.08	0	0	0	0	0.45	0	0	0	0	1.27	0.46	0.29	0.11	0.01	0	1.76	0.77	0.36	0.09	0	0
42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.18	0	4.36	0	0	0	0	0	0	0	0	0	8	2.75	1.64	0.95	0.16	0	0	0	0	0	0	0
77	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Reporting Features – Various Reports



Crash summary for Validation 2005 sceanrio

Dollar cost of crashes by type per million VMT for selected corridors

Corridor ID	Name	PDO	Personal Injury	Non Incapacitating Injury	Incapacitating Injury	Fatal	Non Traffic Fatalities	All Crashes
1	HEFT	3,739	19,442	24,347	42,027	48,787	0	138,342
2	I-95	10,472	47,267	53,450	86,294	263,794	0	461,278
3	State Rd 80	6,805	48,579	57,697	92,308	7,755	0	213,143
4	US 27	7,452	38,436	28,024	51,584	31,676	0	157,172
5	North Miami Ave	315	548	371	595	910	0	2,738
6	NW 183 st	2,180	7,044	1,974	13,222	0	0	24,420
7	Commercial Blvd	1,273	5,716	7,723	11,064	0	0	25,775
8	Yamato Rd	2,381	18,715	37,502	37,367	41,631	0	137,595
9	SW 216 st	341	1,471	1,220	3,472	4,327	0	10,831
10	Beeline Hwy	6,188	32,016	23,852	44,446	36,481	0	142,983

Revised HEVAL File with Safety Report

Cube (Licensed to Gannett Fleming Inc.) - [HEVAL-24H-OverallSmry-MD.PRN (C:\FSUTMS\d4\SERPM653\OUTPUT\out-05R)]

File Scenario Edit Run Search Insert Tools Other Apps Window Help

SERPM653.cat

Scenarios
- Base
  - Validation 2005
  - Cost Feasible 2035

Applications
- Network
- Highway Path
- Distribution
- Transit Paths
- Mode Choice
- Trip Tables
- Highway Asgn
- Highway Eval
- Transit Asgn
- Create Alternative

Data
- LnMilesByATFT.rep
- VC Ratio.rep
- AveVol_VMT_VolOverCntPlt.rep
- TTV_VOC.rep
- Sector Scioeconomic.rep
- Corridor Crash Report.rep
- Regionwide Crash Report.rep
- Facility type Crash Report.rep
- Area type Crash Report.rep

Keys

Key	Value
Scen. Name	Validation 2005
USER1	(Note)
STARTCLUSTER	1
PURGEOUTPUTS	1
HWYONLY	0
NOTESCENARIO	(Note)
DESCR	SERPM65 Model
TITLE	S65TOD 2005 Base Run
Year	05
ALT	R
DATADIR	C:\FSUTMS\d4\SERPM653\INPU
OUTDIR	C:\FSUTMS\d4\SERPM653\OUT

```
 Total Vehicle Operating Cost (VOC, in 2005$):       21,626,428
 TTV Per Vehicle Hour, in 2005$:                         10.145
 VOC Per Vehicle Mile, in 2005$:                          0.503

 Important Notes/Assumptions on TTV and VOC:
 ===========================================
 (Inflation) Base Year:     2004
 (Inflation) Analysis Year: 2005
 TTV Inflation Rate:          3.07%
 VOC Inflation Rate:          2.31%

□Page No.   2
*****************************************************************************************************************
*                                                                                                               *
*                                          Screenline Statistics                                                *
*                                     [Note: Centroid Connectors Excluded]                                      *
*                                                                                                               *
*****************************************************************************************************************

          COUNT STATISTICS                                          CAPACITY STATISTICS
-------------------------------------------  ---------------------------------------------------------------------
(Totals calculated only for links with counts)                  LOS E                LOS D                 LOS C
-------------------------------------------                  ---------------------  ---------------------  ---------------------
Screen No   Volume       Count   Volume/Count   Volume     Capacity   Volume/Cap  Capacity   Volume/Cap  Capacity   Volume/Cap
-------------------------------------------  ---------------------------------------------------------------------
    28     152,813     147,500       1.04      152,813     261,074      0.59      240,510      0.64      185,176      0.83
    42     713,818     776,582       0.92    1,039,041   1,817,554      0.57    1,662,944      0.62    1,411,582      0.74
    43     884,334     886,058       1.00    1,096,064   1,744,056      0.63    1,580,949      0.69    1,304,999      0.84
    44     966,502   1,133,904       0.85    1,161,957   1,685,038      0.69    1,552,485      0.75    1,261,135      0.92
    45     953,444     859,740       1.11    1,029,851   1,416,484      0.73    1,285,291      0.80    1,058,841      0.97

    46     858,704     857,742       1.00    1,208,965   1,838,974      0.66    1,669,244      0.72    1,361,953      0.89
    47     970,646     920,300       1.05    1,386,358   1,921,911      0.72    1,725,281      0.80    1,417,932      0.98
    48     511,569     516,290       0.99      576,896     832,296      0.69      761,106      0.76      612,392      0.94
    49     489,726     511,332       0.96      604,370   1,071,298      0.56      969,151      0.62      801,243      0.75
    50     907,364     853,692       1.06    1,449,615   2,552,803      0.57    2,320,133      0.62    1,866,654      0.78

    51     287,615     301,008       0.96      350,394     521,766      0.67      475,462      0.74      406,314      0.86
    52     393,339     330,398       1.19      755,504   1,495,318      0.51    1,338,612      0.56    1,116,594      0.68
    53     213,150     217,146       0.98      266,752     500,030      0.53      456,414      0.58      388,385      0.69
    71      36,139      36,598       0.99       36,139      47,806      0.76       38,136      0.95       16,336      2.21
    99  26,267,336  27,391,578       0.96  167,567,520 270,163,200      0.62  245,320,889      0.68  201,882,679      0.83
□Page No.   3
*****************************************************************************************************************
*                                                                                                               *
*                                     Safety Analysis Summary Satistics                                         *
*                                                                                                               *
*                                                                                                               *
*****************************************************************************************************************

Property Damage Only:                          99.88
Personal Injury Accidents:                     23.17
Non-Incapacitating Injury Accidents:           13.55
Incapacitating Injury Accidents:                5.15
Fatal Accidents:                                0.36
Non Traffic Fatality Accidents:                    0
Total Accidents:                              142.30
Total Accidents Costs (in dollars):        8,534,441
```

Ready

Report in HTML Format

Cube Report C:\FSUTMS\d4\SERPM653\Reports\Regionwide Crash Report.rep - Windows Internet Explorer

C:\FSUTMS\D4\test.html

File Edit View Favorites Tools Help

Cube Report C:\FSUTMS\d4\SERPM653\Reports\Regi...

Page Tools

Crash summary for Validation 2005 sceanrio

Average number of crashes per million VMT by type and county

Name	AADT	VMT	All Crashes	PDO	Injury	Fatal
Palm Beach	98,164,706	28,603,409	87.11	33.68	52.97	0.57
Broward	116,611,044	36,196,656	39.44	24.85	14.52	0.16
Miami Dade	165,791,954	41,589,232	142.30	99.89	41.96	0.39
Regionwide	380,567,704	106,389,296	289.21	168.46	119.65	1.22

Detailed breakdown of average number of crashes per million VMT by county

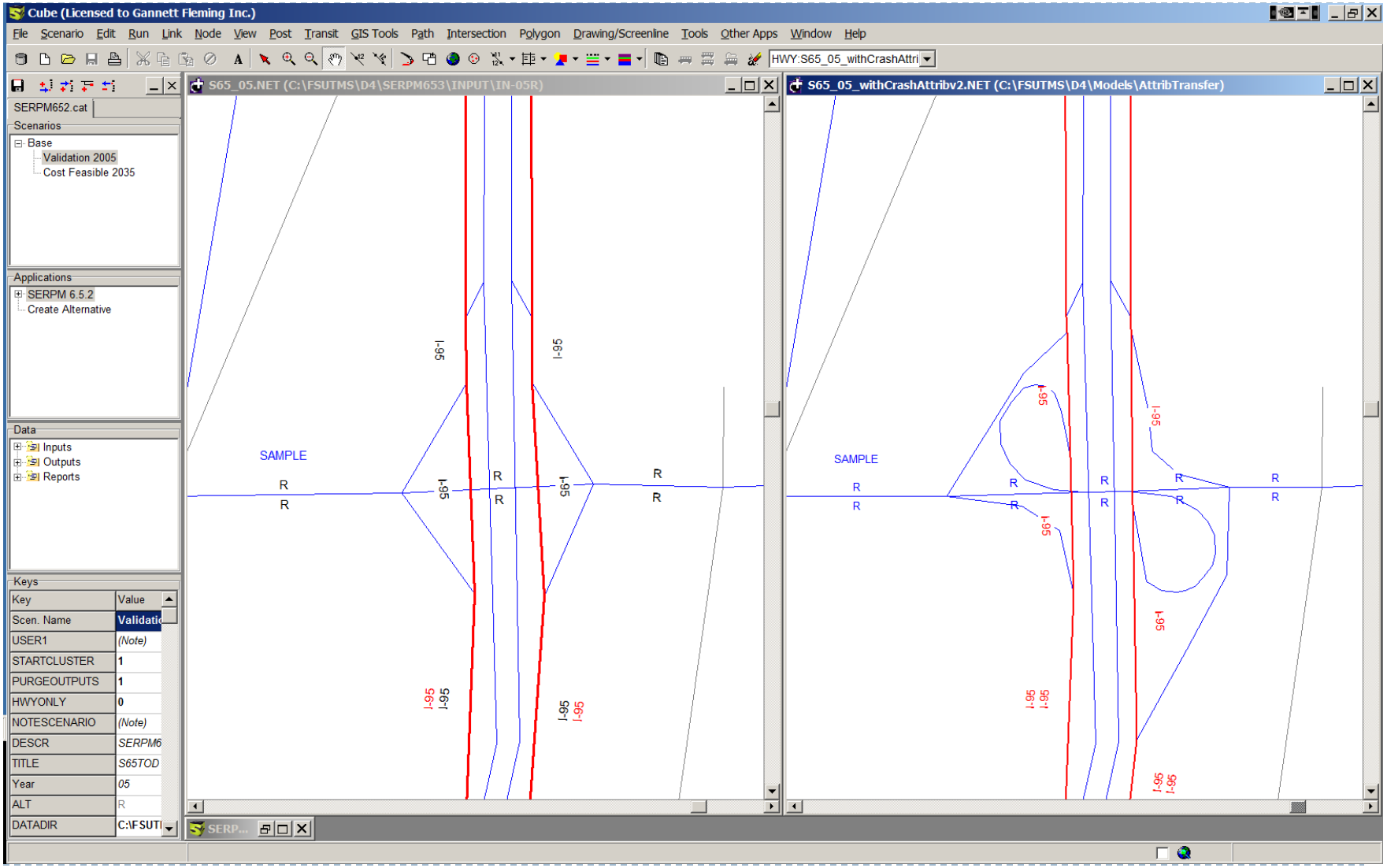
Name	AADT	VMT	PDO	Personal Injury	Non Incapacitating Injury	Incapacitating Injury	Fatal	Non Traffic Fatalities
Palm Beach	98,164,706	28,603,409	33.67	23.81	23.45	5.74	0.56	0.00
Broward	116,611,044	36,196,656	24.85	8.22	4.99	1.29	0.16	0.00
Miami Dade	165,791,954	41,589,232	99.88	23.17	13.55	5.15	0.36	0.00
Regionwide	380,567,704	106,389,296	168.45	59.78	46.35	13.43	1.19	0.00

Dollar cost of crashes by type per million VMT by county

Name	PDO	Personal Injury	Non Incapacitating Injury	Incapacitating Injury	Fatal	Non Traffic Fatalities	All Crashes
Palm Beach	218,878	1,512,215	2,439,799	2,996,109	3,603,844	0	10,770,846
Broward	161,543	521,820	518,758	675,060	1,019,566	0	2,896,747
Miami Dade	649,247	1,471,389	1,409,666	2,686,396	2,317,743	0	8,534,441
Regionwide	1,094,953	3,796,927	4,822,656	7,005,917	7,570,183	0	24,290,636

My Computer 100%

Changes in Network – I-95@Sample



SERPM 6.5.3 Release

- A Few More Changes
  - Revise HEVAL to include accident reports
  - Branding (pictures and logos)
  - Revise documentation
- End of March 2013

Summary

- SERPM 6.5x Will Continue to Evolve.
- Changes are Built on Earlier Versions.
- Always Use the Most Recent Version!