APPENDIX J

Representative Inputs to and Outputs from the DYNEV II System

J. REPRESENTATIVE INPUTS TO AND OUTPUTS FROM THE DYNEV II SYSTEM

This appendix presents data input to and output from the DYNEV II System. Table J-1 provides the volume and queues for the ten highest volume signalized intersections in the study area. Refer to Table K-2 and the figures in Appendix K for a map showing the geographic location of each intersection.

Table J-2 provides source (vehicle loading) and destination information for several roadway segments (links) in the analysis network. Refer to Table K-1 and the figures in Appendix K for a map showing the geographic location of each link.

Table J-3 provides network–wide statistics (average travel time, average speed and number of vehicles) for an evacuation of the entire EPZ (Region R03) for each scenario.

Table J-4 provides statistics (average speed and travel time) for the major evacuation routes – Interstate 80, Illinois State Route 23 (IL-23), Interstate 55, IL-71, IL-170, US Route 6, IL-47, and Grand Ridge Rd – for an evacuation of the entire EPZ (Region R03) under Scenario 1 conditions. With the low EPZ and Shadow Region populations, there is ample roadway capacity to adequately service all evacuating vehicles in a timely manner. The only roadway within the study area not operating at free-flow conditions after 2 hours is IL-23 South. As shown in Figures 7-3 through 7-7, IL-23 South is clear of congestion at 3 hours and 30 minutes after the ATE. After this time, free-flow conditions are reached on this route.

Table J-5 provides the number of vehicles discharged and the cumulative percent of total vehicles discharged for each link exiting the analysis network, for an evacuation of the entire EPZ (Region R03) under Scenario 1 conditions. Refer to Table K-1 and the figures in Appendix K for a map showing the geographic location of each link.

Figure J-1 through Figure J-14 plot the trip generation time versus the ETE for each of the 14 Scenarios considered. The distance between the trip generation and ETE curves is the travel time. Plots of trip generation versus ETE are indicative of the level of traffic congestion during evacuation. For low population density sites, the curves are close together, indicating short travel times and minimal traffic congestion. For higher population density sites, the curves are farther apart indicating longer travel times and the presence of traffic congestion. As seen in Figure J-1 through Figure J-14, the curves are close together due to the minimal traffic congestion within the EPZ.

Table J-1. Characteristics of the Ten Highest Volume Signalized Intersections

Node	Location	Intersection Control	Approach (Up Node)	Total Volume (Veh)	Max. Turn Queue (Veh)
353	Route 23 @ Route 18	Actuated	352	1,442	0
			360	1,472	0
			TOTAL	2,914	-
738	Route 15 @ Route 4	TCP - Actuated	113	2,220	211
			663	240	46
			TOTAL	2,460	-
444	Route 23 @ Main Street	Actuated	443	615	0
			485	1,720	0
			TOTAL	2,335	-
365	Route 23 @ Bridge Street	Actuated	364	347	0
			353	1,695	0
			TOTAL	2,042	-
72	US-6 @ Route 4	TCP - Actuated	71	550	0
			652	1,409	0
			TOTAL	1,959	-
505	Route 23 @ Interstate-80 W Ramps	Actuated	504	1,894	0
			7	0	0
			TOTAL	1,894	-
504	Route 23 @ Interstate-80 E Ramps	Actuated	503	1,892	0
			6	0	0
			TOTAL	1,892	-
503	Route 23 @ Route 20	Actuated	502	1,788	0
			514	103	0
			TOTAL	1,891	-
458	US-6 @ Route 23	Actuated	457	595	0
			480	1,242	0
			TOTAL	1,837	-
501	Route 23 @ Kain Street	Actuated	500	1,745	0
			512	18	0
			TOTAL	1,763	-

Table J-2. Sample Simulation Model Input

Link Number	Vehicles Entering Network on this Link	Directional Preference	Destination Nodes	Destination Capacity
74	664	N	8126	1,700
			8722	1,700
			8766	1,700
141	121	SW	8023	6,750
			8003	4,500
242	72	NE	8191	1,700
			8243	1,700
			8023	6,750
383	593	SE	8333	1,700
			8415	1,700
			8310	1,700
447	70	SW	8358	1,700
			8333	1,700
			8415	1,700
513	60	SW	8358	1,700
			8333	1,700
			8415	1,700
590	83	NW	8473	1,700
661	26	W	8511	1,700
			8003	4,500
			8464	1,700
747	10	SW	8358	1,700
			8333	1,700
			8415	1,700
852	70	NW	8766	1,700
			8768	1,700
			8767	1,700

Table J-3. Selected Model Outputs for the Evacuation of the Entire EPZ (Region R03)

Scenario	1	2	3	4	5	6	7
Network-Wide Average Travel Time (Min/Veh-Mi)	1.5	1.6	1.6	1.7	1.7	1.5	1.6
Network-Wide Average Speed (mph)	40.3	37.2	37.8	34.9	35.7	40.8	37.7
Total Vehicles Exiting Network	26,707	26,828	27,591	27,859	21,008	25,135	25,242
Scenario	**8**	**9**	**10**	**11**	**12**	**13**	**14**
Network-Wide Average Travel Time (Min/Veh-Mi)	1.6	1.4	1.6	1.6	1.6	1.7	1.7
Network-Wide Average Speed (mph)	37.6	42.4	38.8	38.1	36.9	35.2	36.2
Total Vehicles Exiting Network	25,246	23,777	23,889	23,868	19,243	21,721	26,701

Table J-4. Average Speed (mph) and Travel Time (min) for Major Evacuation Routes (Region R03, Scenario 1)

Major Evacuation Route	Length (miles)	Elapsed Time (hours) 1 Speed (mph)	1 Travel Time (min)	2 Speed	2 Travel Time	3 Speed	3 Travel Time	4 Speed	4 Travel Time
I-80 East	13.0	69.8	11.2	69.5	11.2	69.5	11.2	70.0	11.1
I-80 West	17.8	69.8	15.3	69.5	15.4	69.9	15.3	70.0	15.3
IL-23 North	13.9	44.1	18.9	41.3	20.2	42.2	19.8	49.3	16.9
IL-23 South	11.7	28.0	25.1	8.4	83.7	11.1	63.5	48.3	14.6
I-55 North	6.3	70.0	5.4	63.1	6.0	68.3	5.5	70.0	5.4
I-55 South	10.6	70.0	9.1	66.6	9.5	69.5	9.1	70.0	9.1
IL-71 West	9.1	46.5	11.7	46.2	11.8	46.5	11.7	47.3	11.5
IL-170 North	5.8	43.3	8.0	43.8	7.9	44.9	7.7	45.5	7.6
IL-170 South	16.1	56.9	17.0	57.8	16.7	59.1	16.3	59.1	16.3
US-6 East	15.1	46.3	19.6	45.1	20.1	49.3	18.4	51.4	17.7
US-6 West	15.2	44.4	20.5	47.1	19.3	49.1	18.6	49.8	18.3
IL-47 North	11.3	44.1	15.4	43.5	15.6	45.3	14.9	50.6	13.4
IL-47 South	8.7	57.0	9.2	56.3	9.3	59.8	8.7	59.8	8.7
Grand Ridge Rd West	17.3	51.6	20.1	51.9	20.0	53.3	19.4	53.3	19.4
Grand Ridge Rd East	12.8	49.0	15.7	53.1	14.5	56.9	13.5	56.9	13.5

Table J-5. Simulation Model Outputs at Network Exit Links for Region R03, Scenario 1

Network Exit Link	Elapsed Time (hours) 1	2	3	4
	Cumulative Vehicles Discharged by the Indicated Time			
	Cumulative Percent of Vehicles Discharged by the Indicated Time			
2	2,014	4,684	5,492	5,518
	25%	22%	21%	21%
42	1,999	4,358	5,090	5,098
	25%	20%	20%	19%
46	63	211	233	235
	1%	1%	1%	1%
63	123	477	532	536
	2%	2%	2%	2%
181	596	1,586	1,947	1,957
	7%	7%	7%	7%
251	46	137	156	157
	1%	1%	1%	1%
324	36	85	87	87
	0%	0%	0%	0%
361	291	414	439	441
	4%	2%	2%	2%
401	107	173	197	199
	1%	1%	1%	1%
428	327	945	1,449	1,707
	4%	4%	6%	6%
429	191	596	1,010	1,262
	2%	3%	4%	5%
443	237	1,202	1,396	1,413
	3%	6%	5%	5%
595	19	117	143	146
	0%	1%	1%	1%
645	226	764	872	881
	3%	4%	3%	3%
788	31	213	248	250
	0%	1%	1%	1%
799	512	1,066	1,149	1,154
	6%	5%	4%	4%
858	485	1,529	2,331	2,362
	6%	7%	9%	9%
872	50	184	203	204

Network Exit Link	Elapsed Time (hours) 1	2	3	4
	Cumulative Vehicles Discharged by the Indicated Time			
	Cumulative Percent of Vehicles Discharged by the Indicated Time			
	1%	1%	1%	1%
873	122	435	501	510
	2%	2%	2%	2%
874	73	345	391	395
	1%	2%	2%	1%
875	225	870	1,005	1,016
	3%	4%	4%	4%
879	27	113	133	134
	0%	1%	1%	1%
908	53	304	376	383
	1%	1%	1%	1%
912	17	140	166	167
	0%	1%	1%	1%
913	110	345	413	420
	1%	2%	2%	2%
914	17	63	73	75
	0%	0%	0%	0%

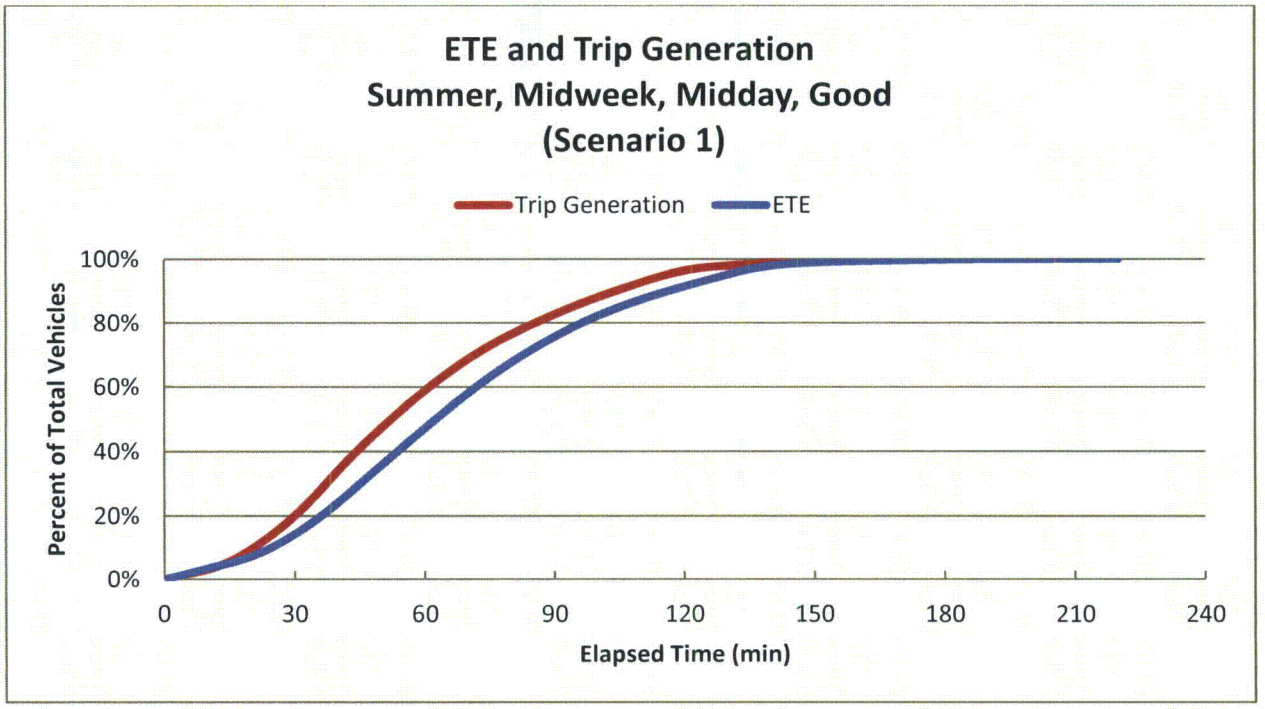

Figure J-1. ETE and Trip Generation: Summer, Midweek, Midday, Good Weather (Scenario 1)

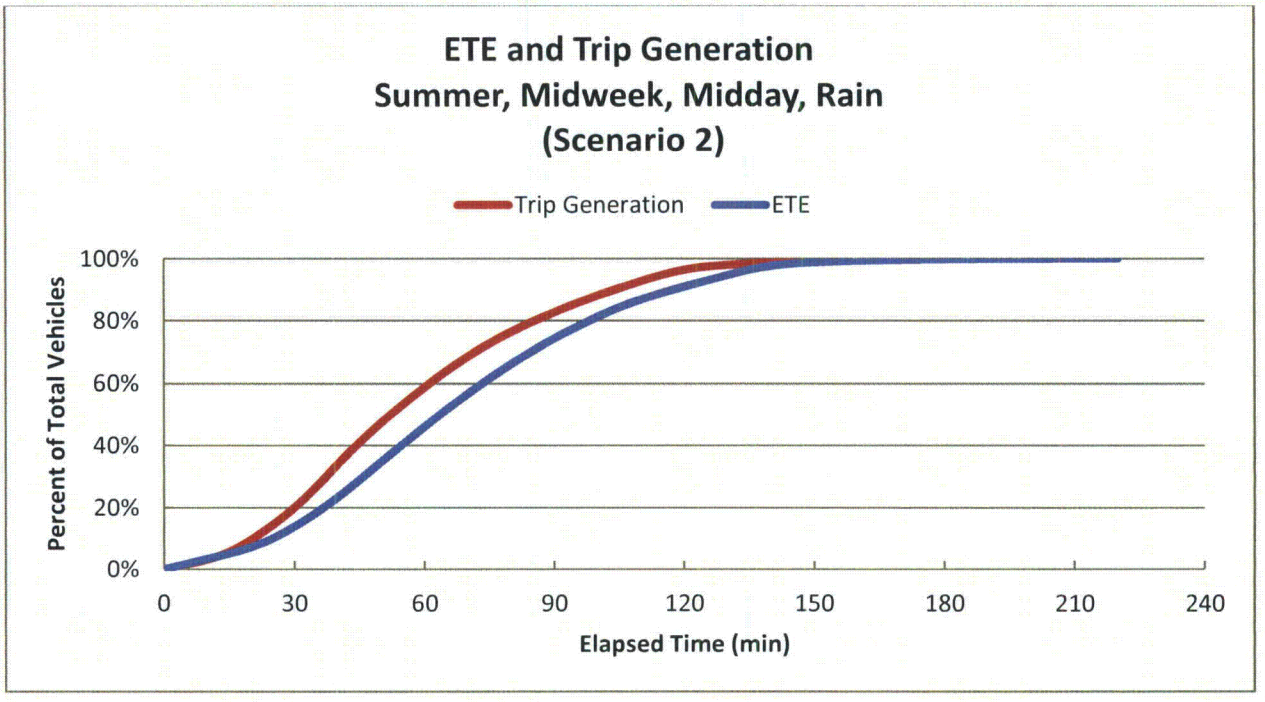

Figure J-2. ETE and Trip Generation: Summer, Midweek, Midday, Rain (Scenario 2)

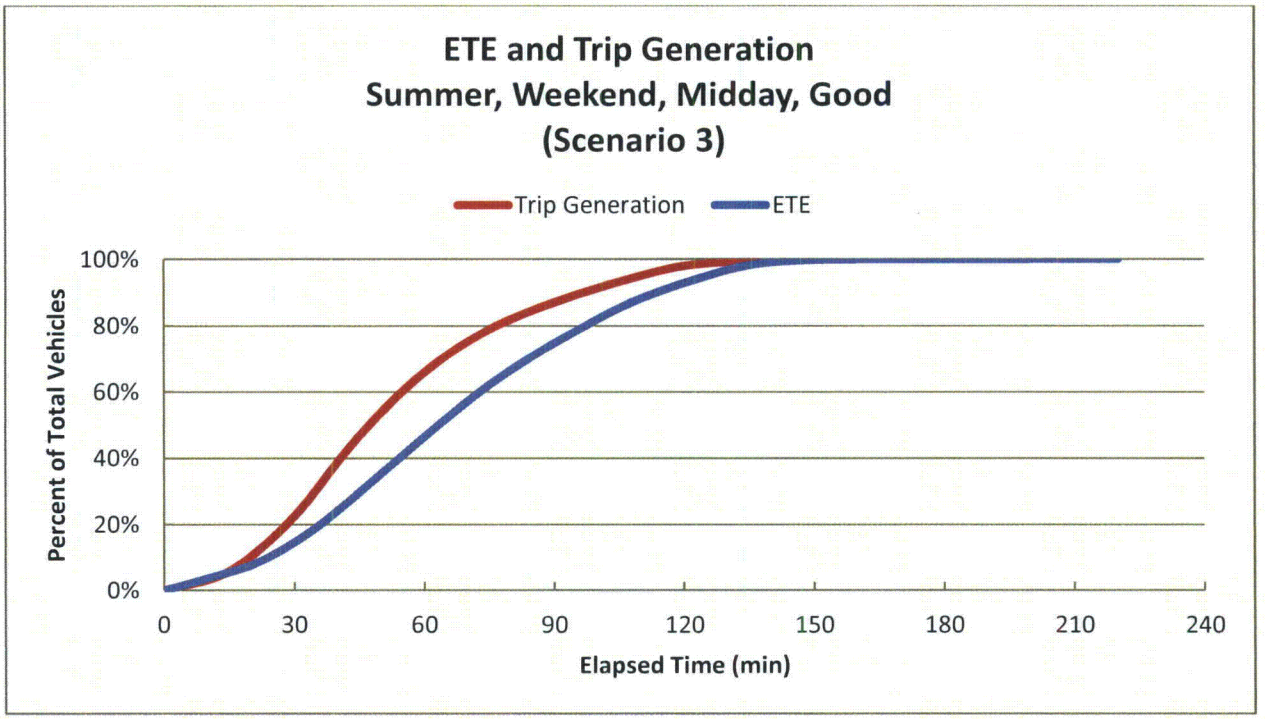

Figure J-3. ETE and Trip Generation: Summer, Weekend, Midday, Good Weather (Scenario 3)

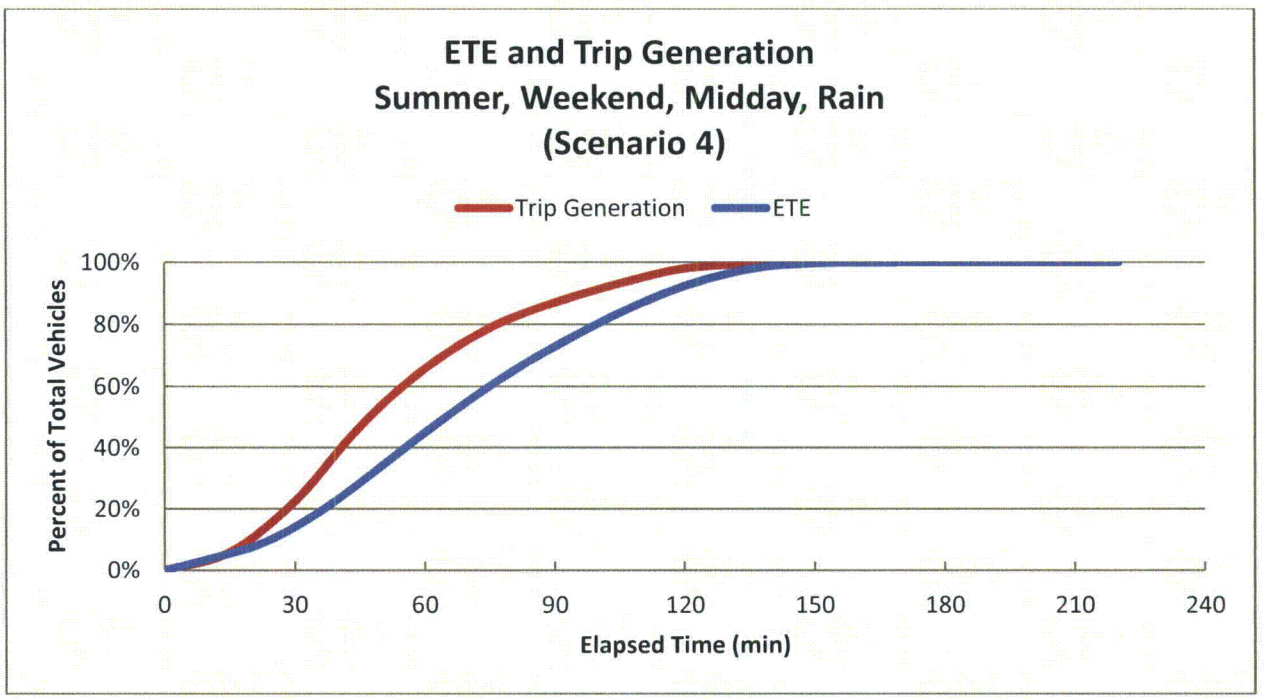

Figure J-4. ETE and Trip Generation: Summer, Weekend, Midday, Rain (Scenario 4)

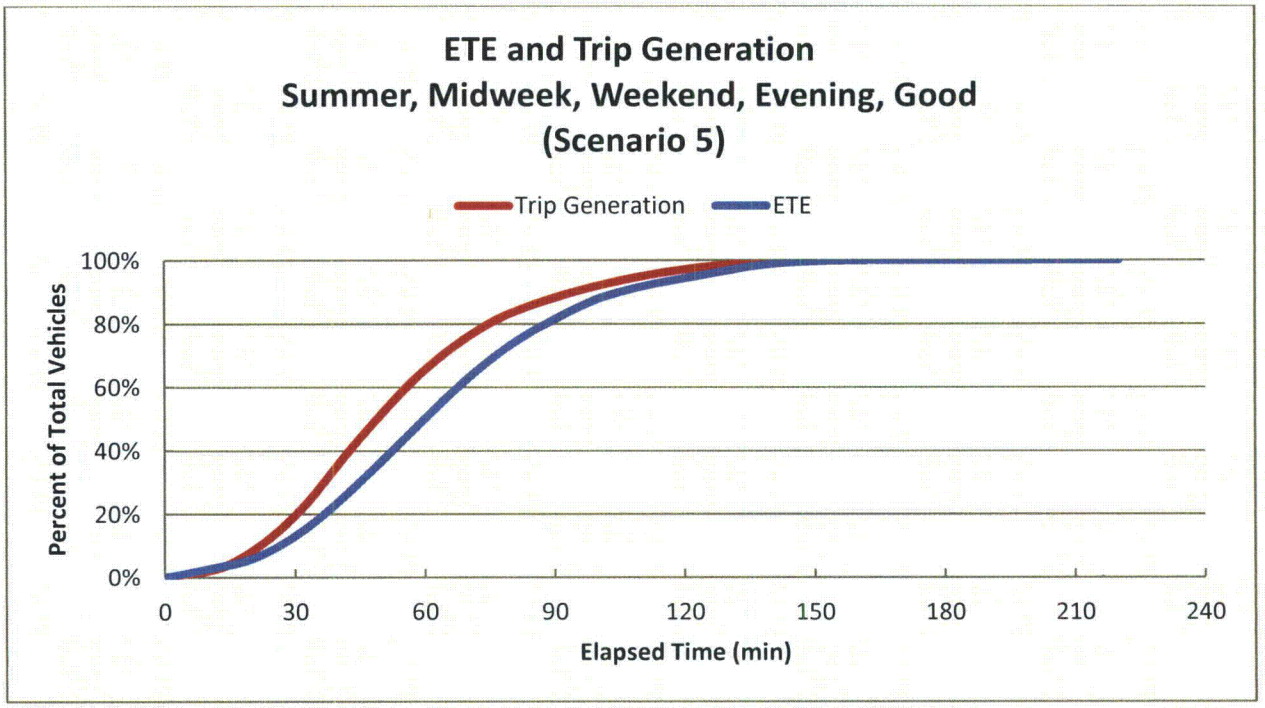

Figure J-5. ETE and Trip Generation: Summer, Midweek, Weekend, Evening, Good Weather (Scenario 5)

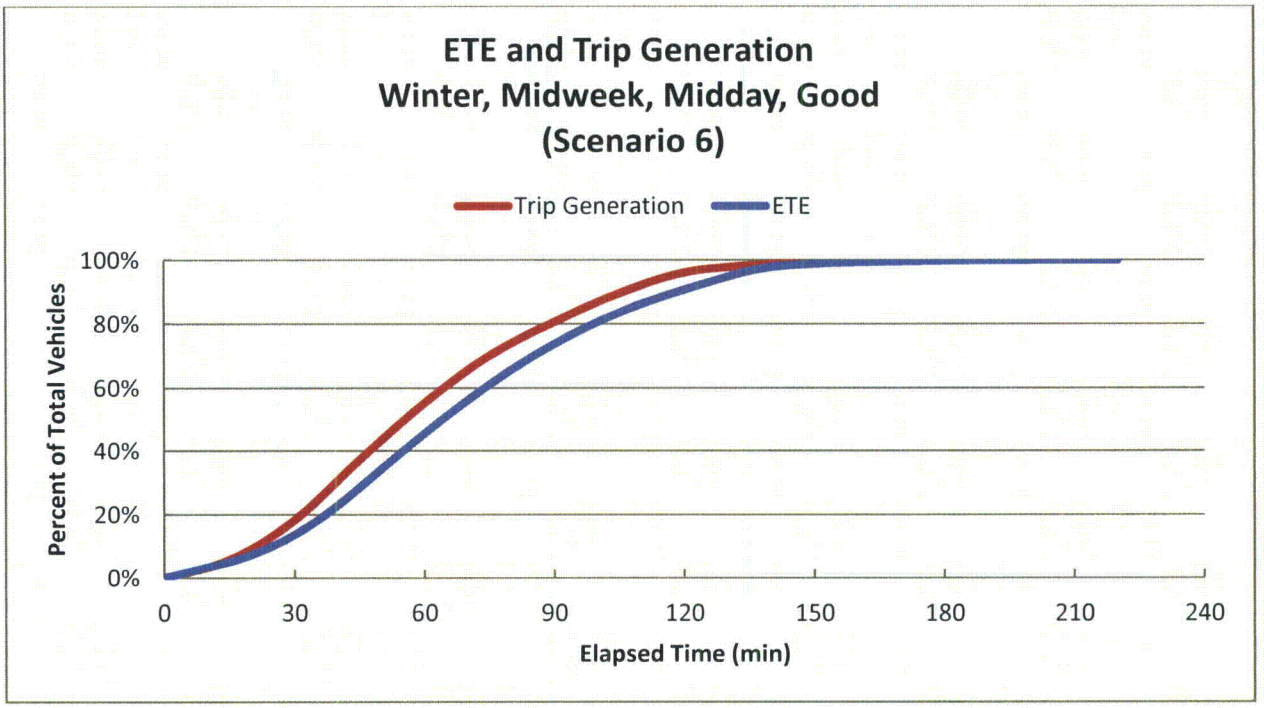

Figure J-6. ETE and Trip Generation: Winter, Midweek, Midday, Good Weather (Scenario 6)

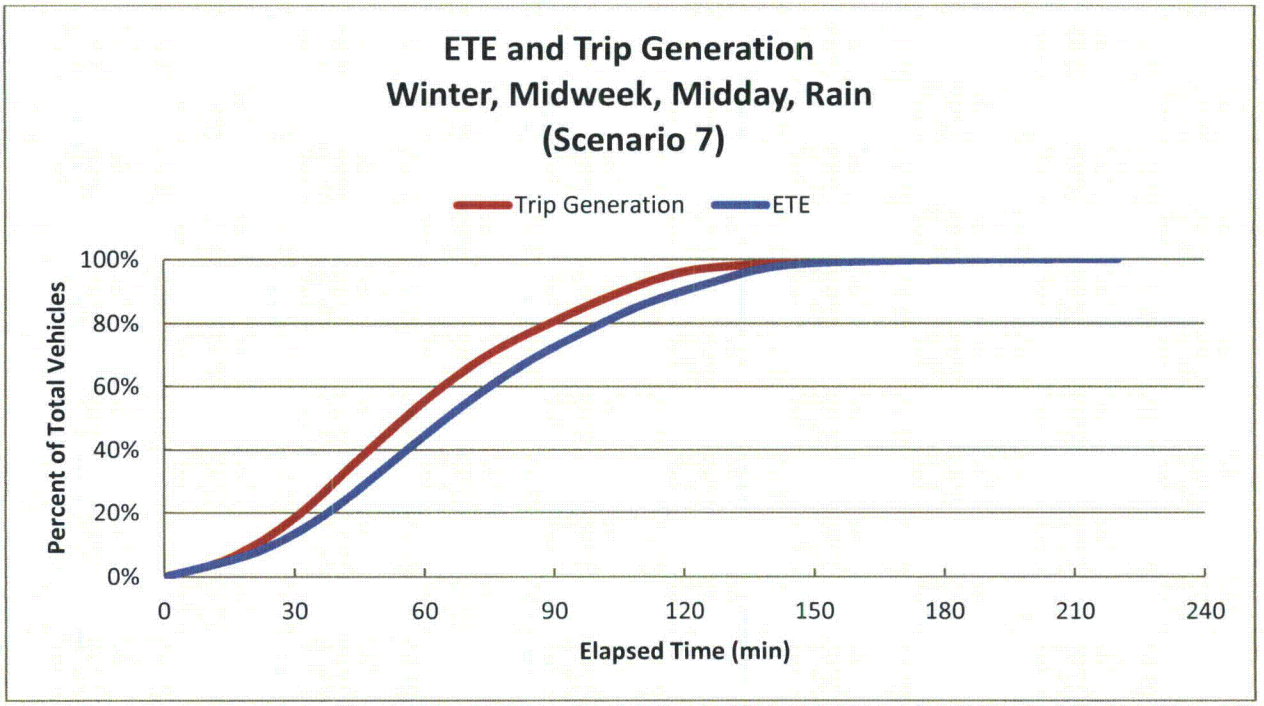

Figure J-7. ETE and Trip Generation: Winter, Midweek, Midday, Rain (Scenario 7)

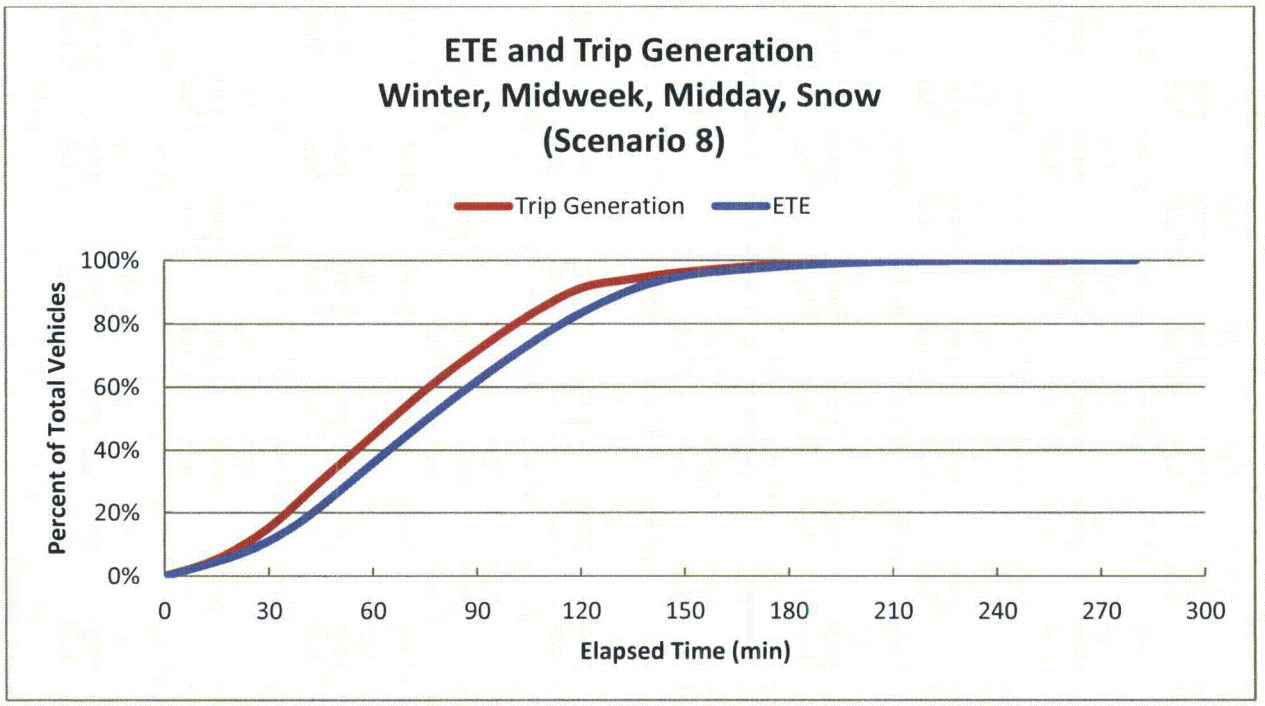

Figure J-8. ETE and Trip Generation: Winter, Midweek, Midday, Snow (Scenario 8)

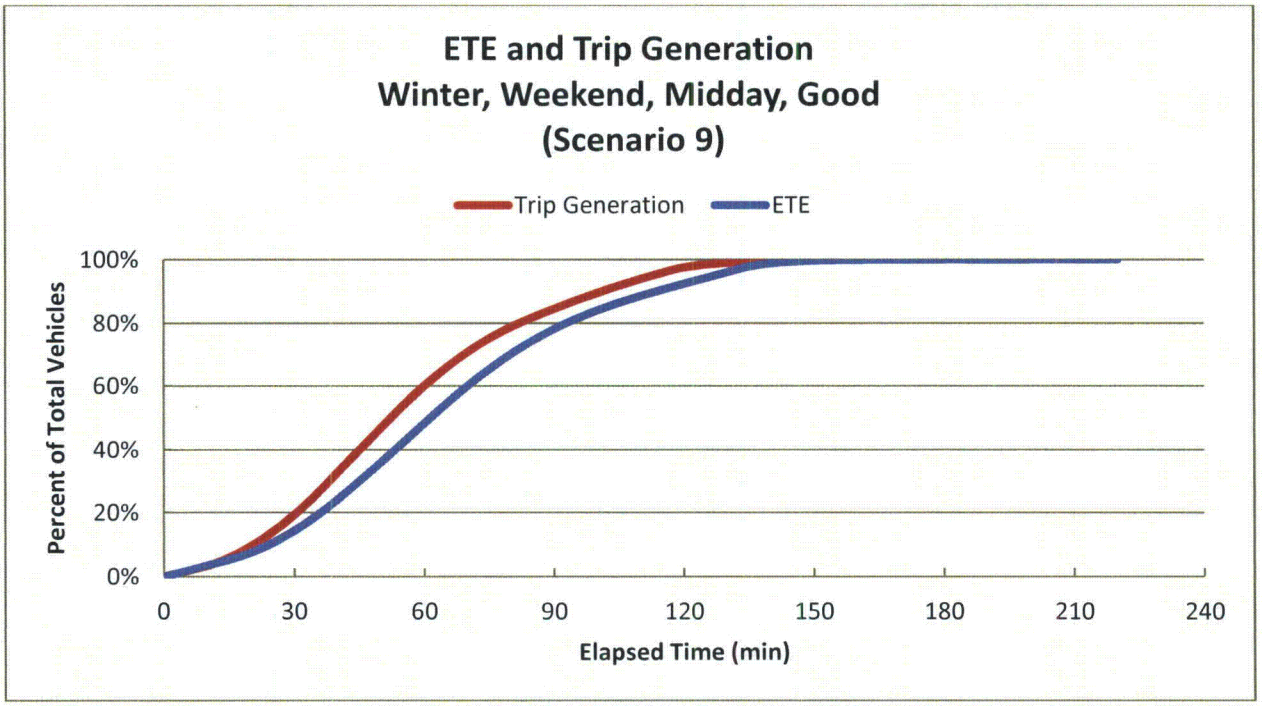

Figure J-9. ETE and Trip Generation: Winter, Weekend, Midday, Good Weather (Scenario 9)

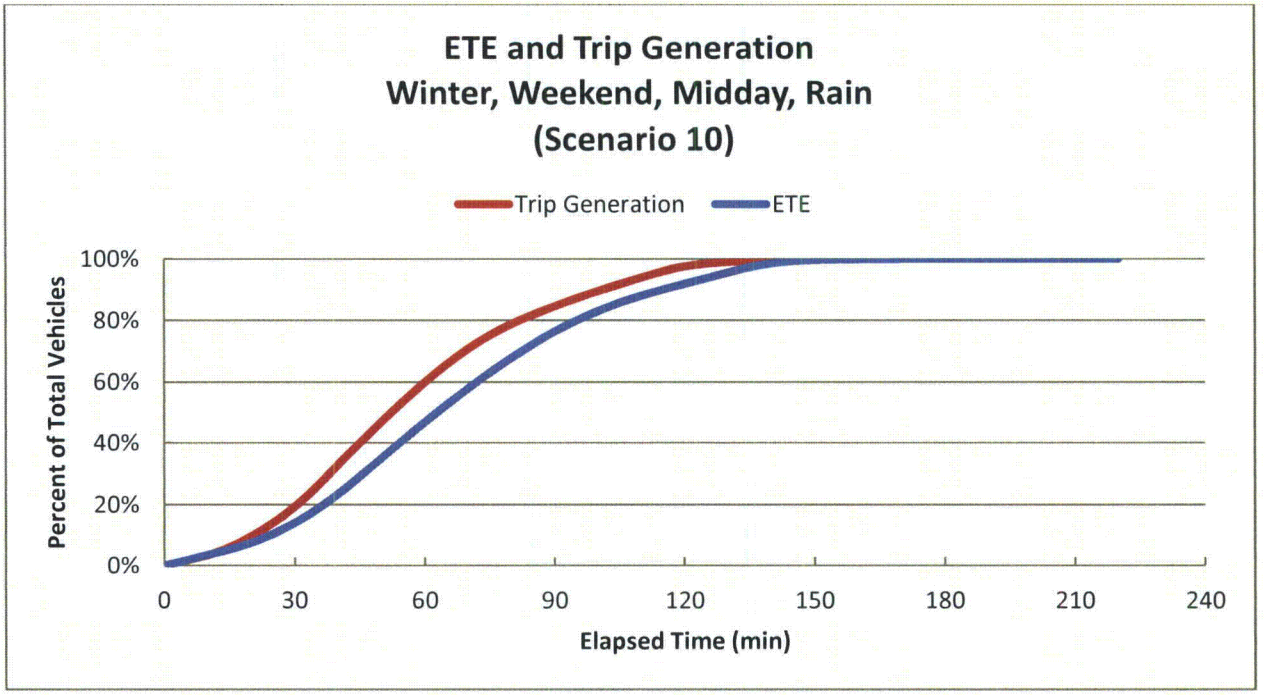

Figure J-10. ETE and Trip Generation: Winter, Weekend, Midday, Rain (Scenario 10)

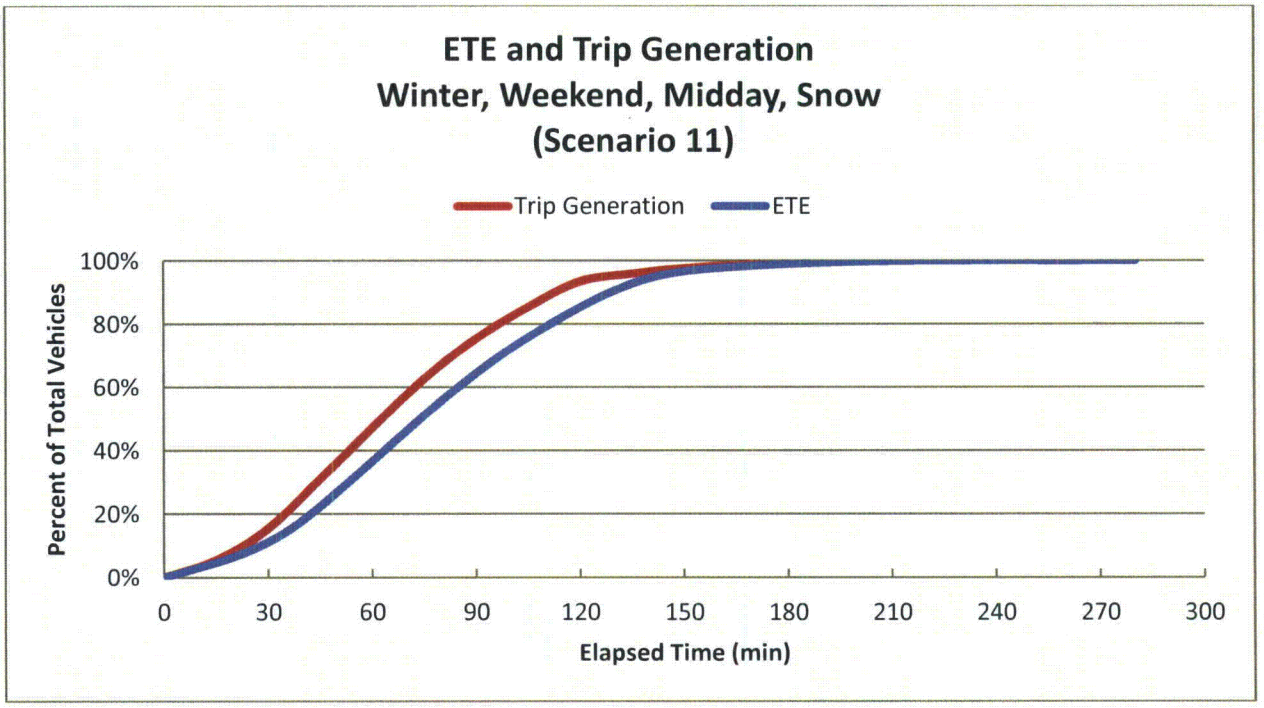

Figure J-11. ETE and Trip Generation: Winter, Weekend, Midday, Snow (Scenario 11)

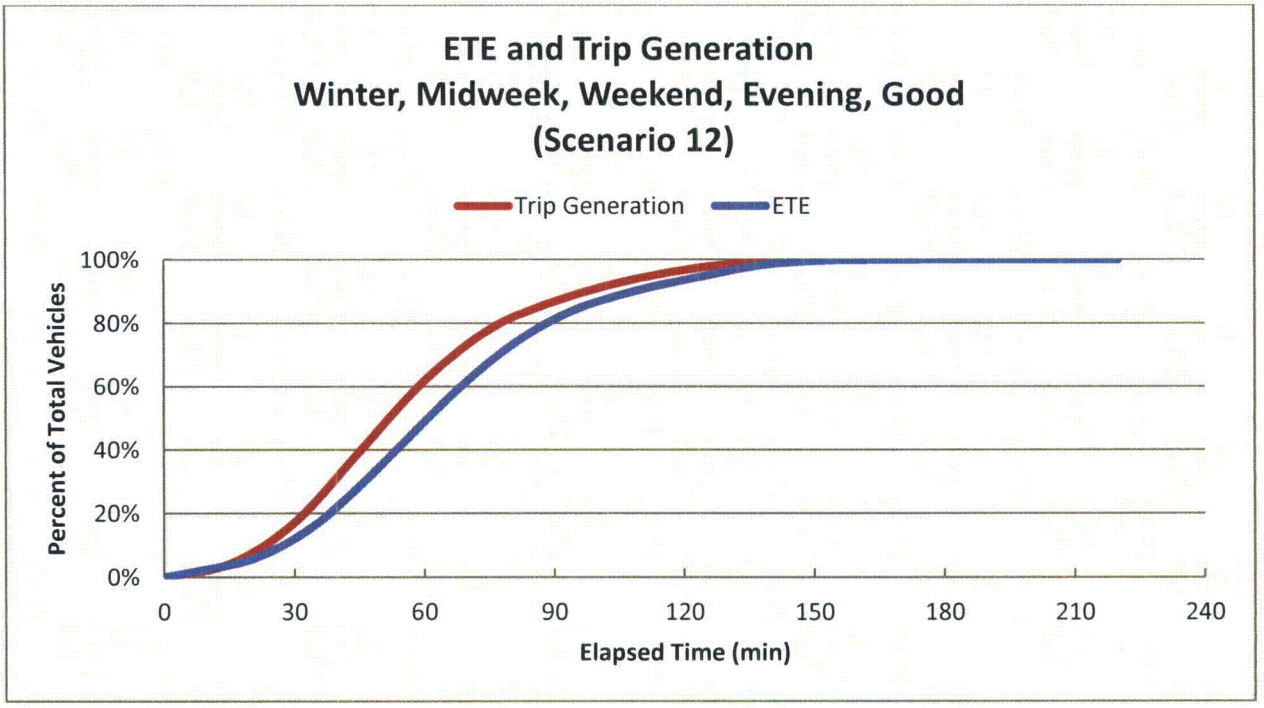

Figure J-12. ETE and Trip Generation: Winter, Midweek, Weekend, Evening, Good Weather (Scenario 12)

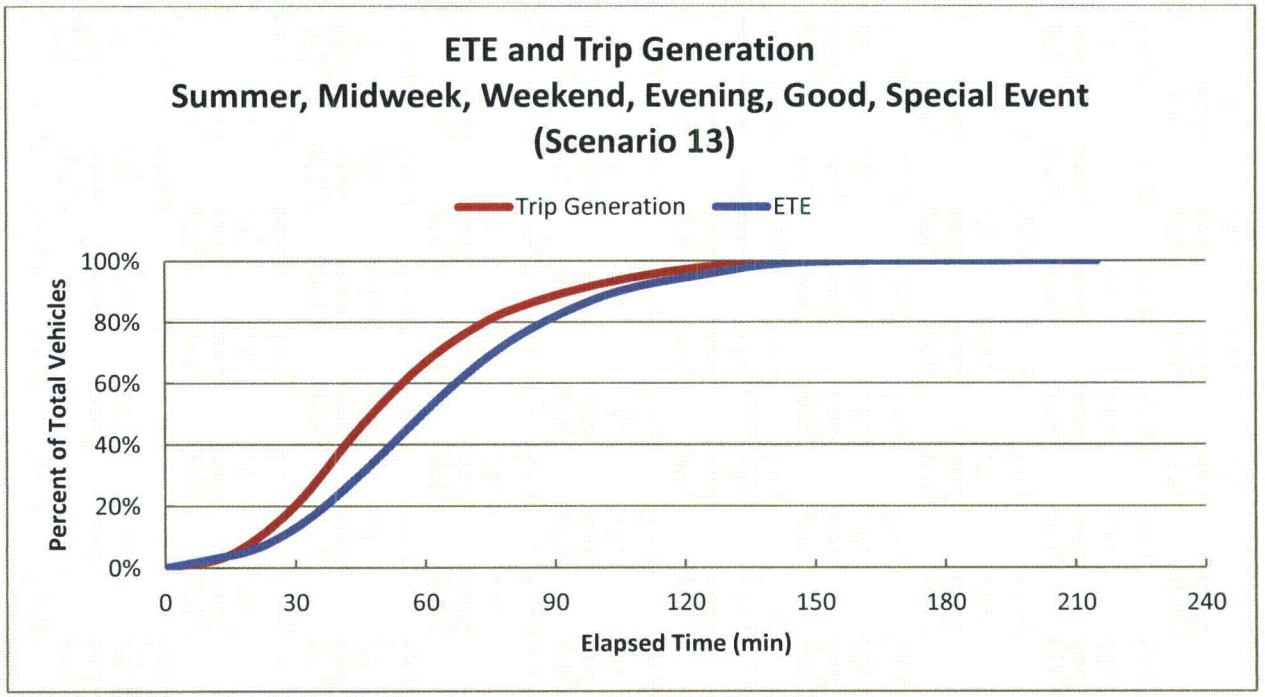

Figure J-13. ETE and Trip Generation: Summer, Midweek Weekend, Evening, Good Weather, Special Event (Scenario 13)

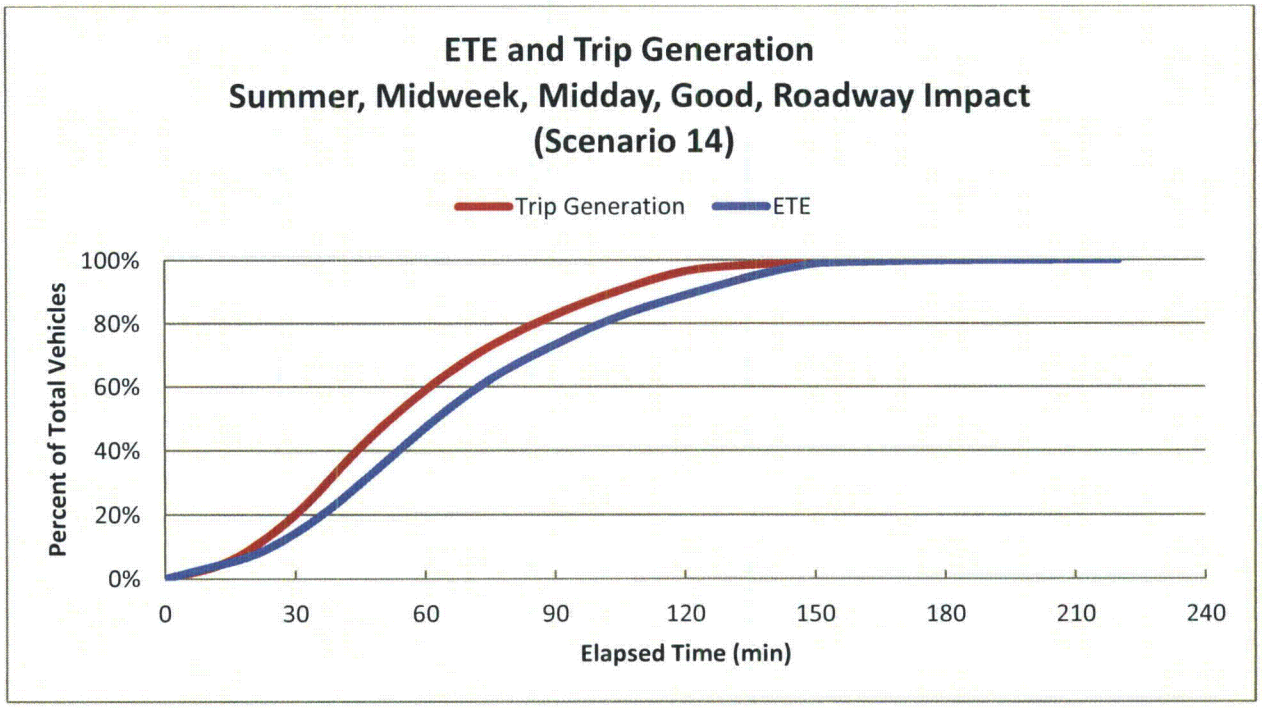

Figure J-14. ETE and Trip Generation: Summer, Midweek, Midday, Good Weather, Roadway Impact (Scenario 14)

APPENDIX K

Evacuation Roadway Network

K. EVACUATION ROADWAY NETWORK

As discussed in Section 1.3, a link-node analysis network was constructed to model the roadway network within the study area. Figure K-1 provides an overview of the link-node analysis network. The figure has been divided up into 49 more detailed figures (Figure K-2 through Figure K-1Figure K-50) which show each of the links and nodes in the network.

The analysis network was calibrated using the observations made during the field survey conducted in January, 2014. Table K-1 lists the characteristics of each roadway section modeled in the ETE analysis. Each link is identified by its road name and the upstream and downstream node numbers. The geographic location of each link can be observed by referencing the grid map number provided in Table K-1. The roadway type identified in Table K-1 is generally based on the following criteria:

- Freeway: limited access highway, 2 or more lanes in each direction, high free flow speeds
- Freeway ramp: ramp on to or off of a limited access highway
- Major arterial: 3 or more lanes in each direction
- Minor arterial: 2 or more lanes in each direction
- Collector: single lane in each direction
- Local roadways: single lane in each direction, local roads with low free flow speeds

The term, "No. of Lanes" in Table K-1 identifies the number of lanes that extend throughout the length of the link. Many links have additional lanes on the immediate approach to an intersection (turn pockets); these have been recorded and entered into the input stream for the DYNEV II System.

As discussed in Section 1.3, lane width and shoulder width were not physically measured during the road survey. Rather, estimates of these measures were based on visual observations and recorded images.

Table K-2 identifies each node in the network that is controlled and the type of control (stop sign, yield sign, pre-timed signal, actuated signal, traffic control point) at that node. Uncontrolled nodes are not included in Table K-2. The location of each node can be observed by referencing the grid map number provided.

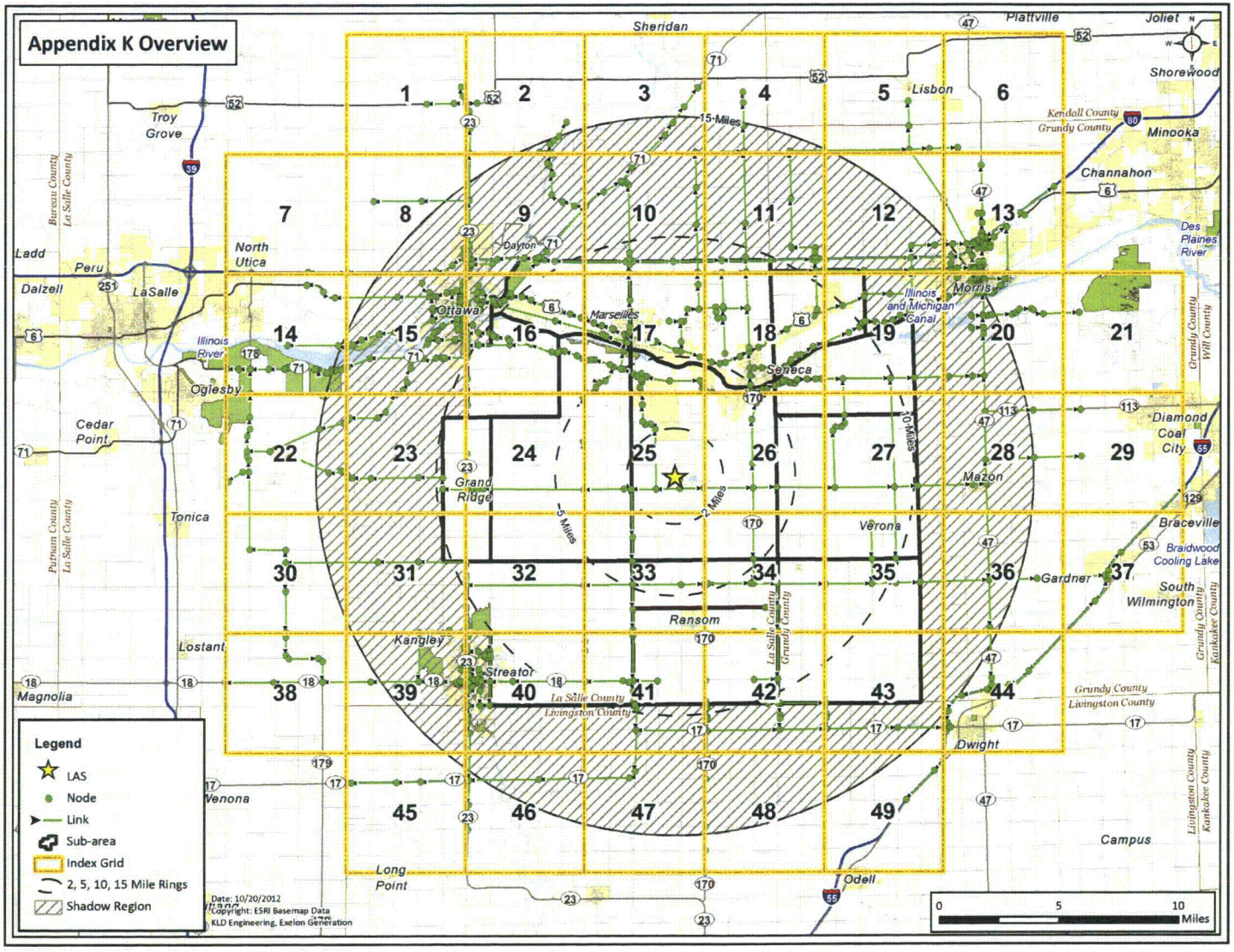

Figure K-1. LaSalle County Generating Station Link-Node Analysis Network

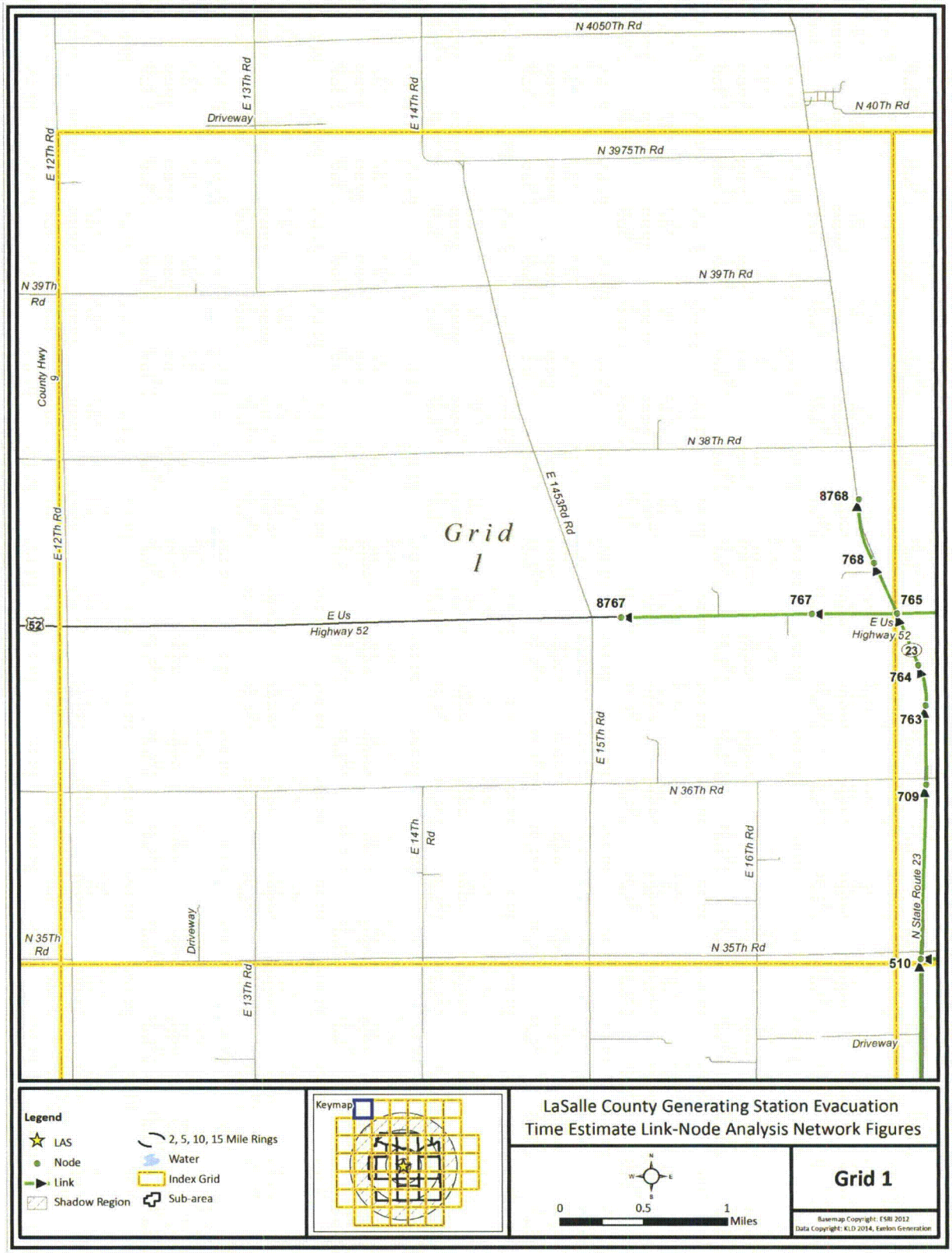

Figure K-2. Link-Node Analysis Network – Grid 1

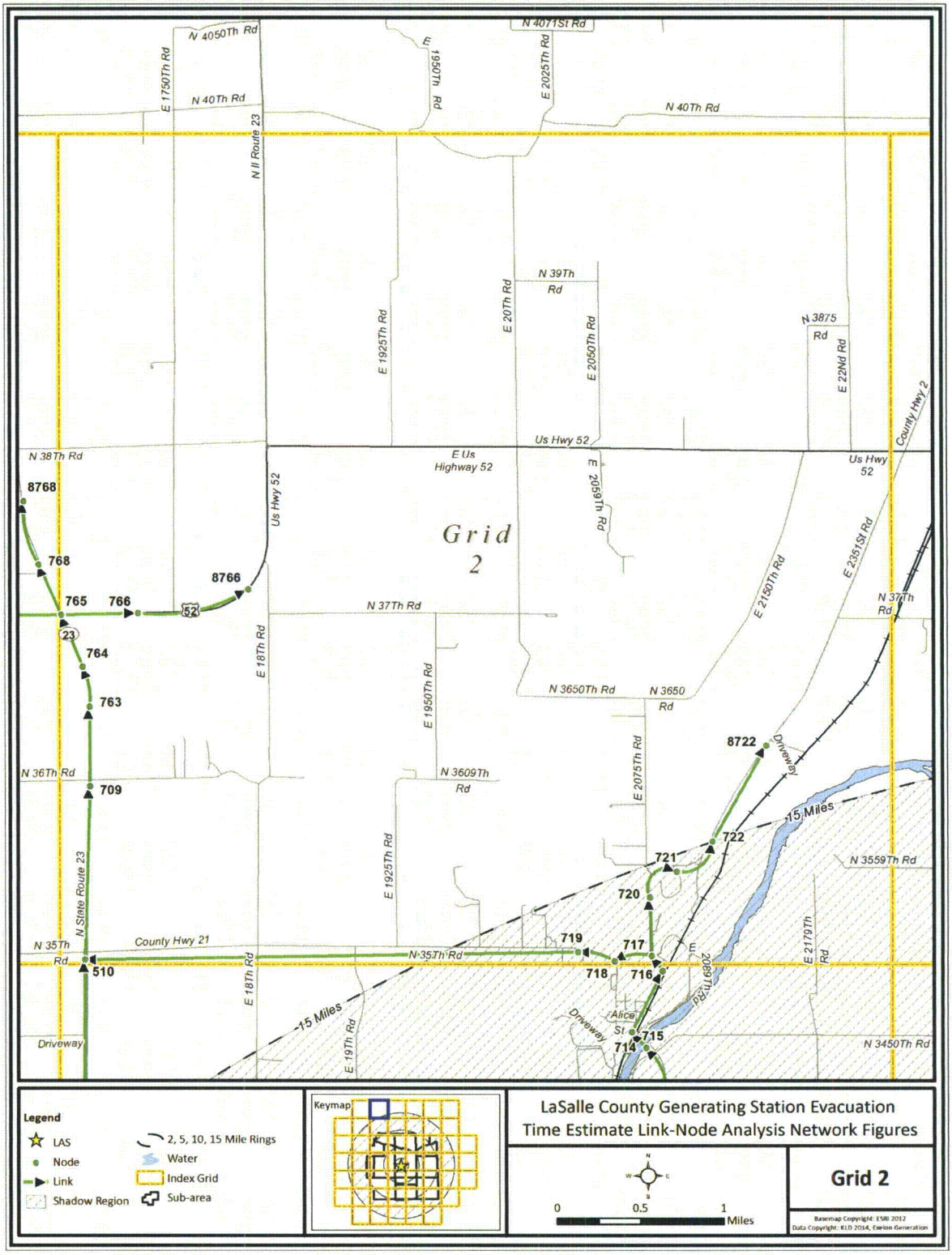

Figure K-3. Link-Node Analysis Network – Grid 2

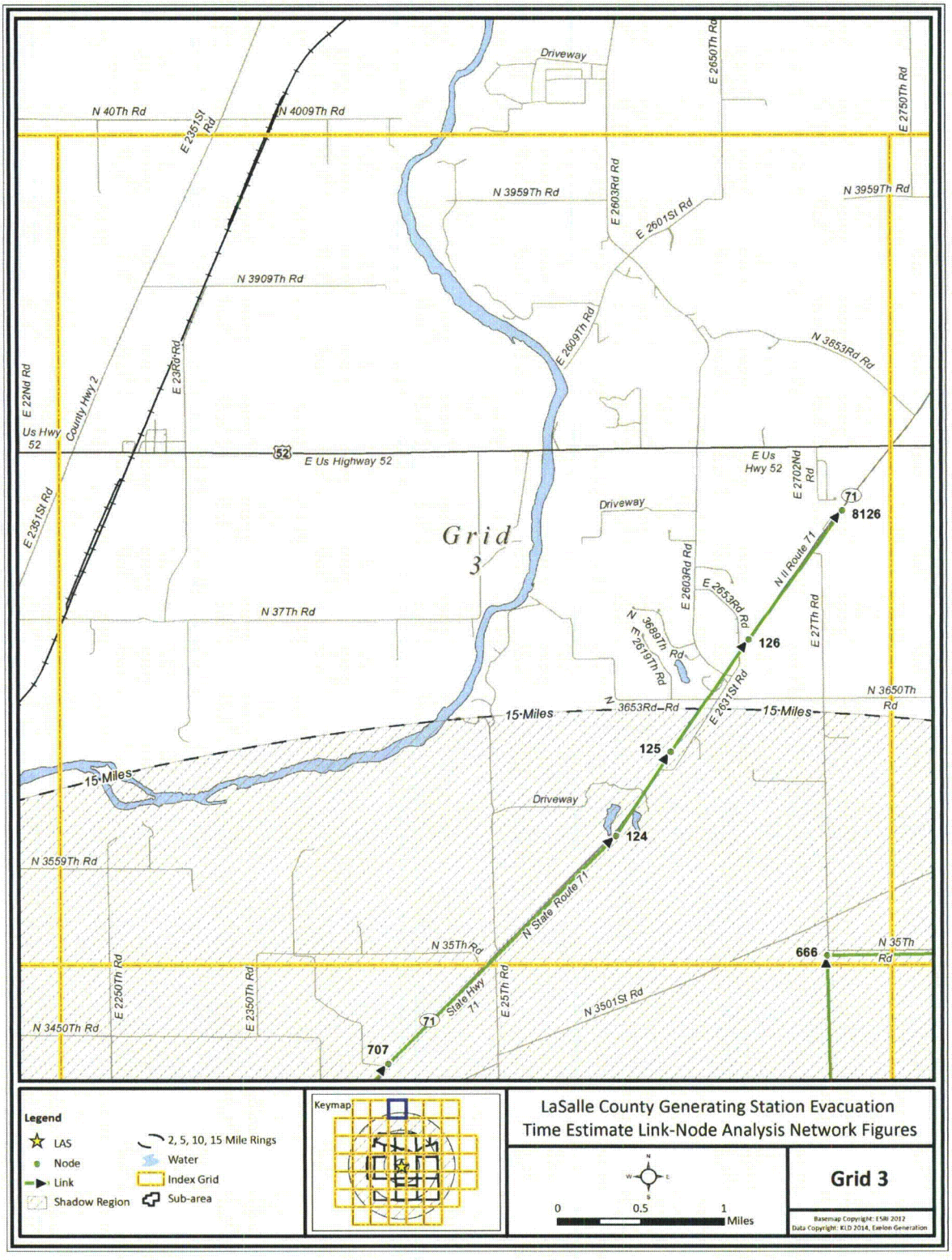

Figure K-4. Link-Node Analysis Network – Grid 3

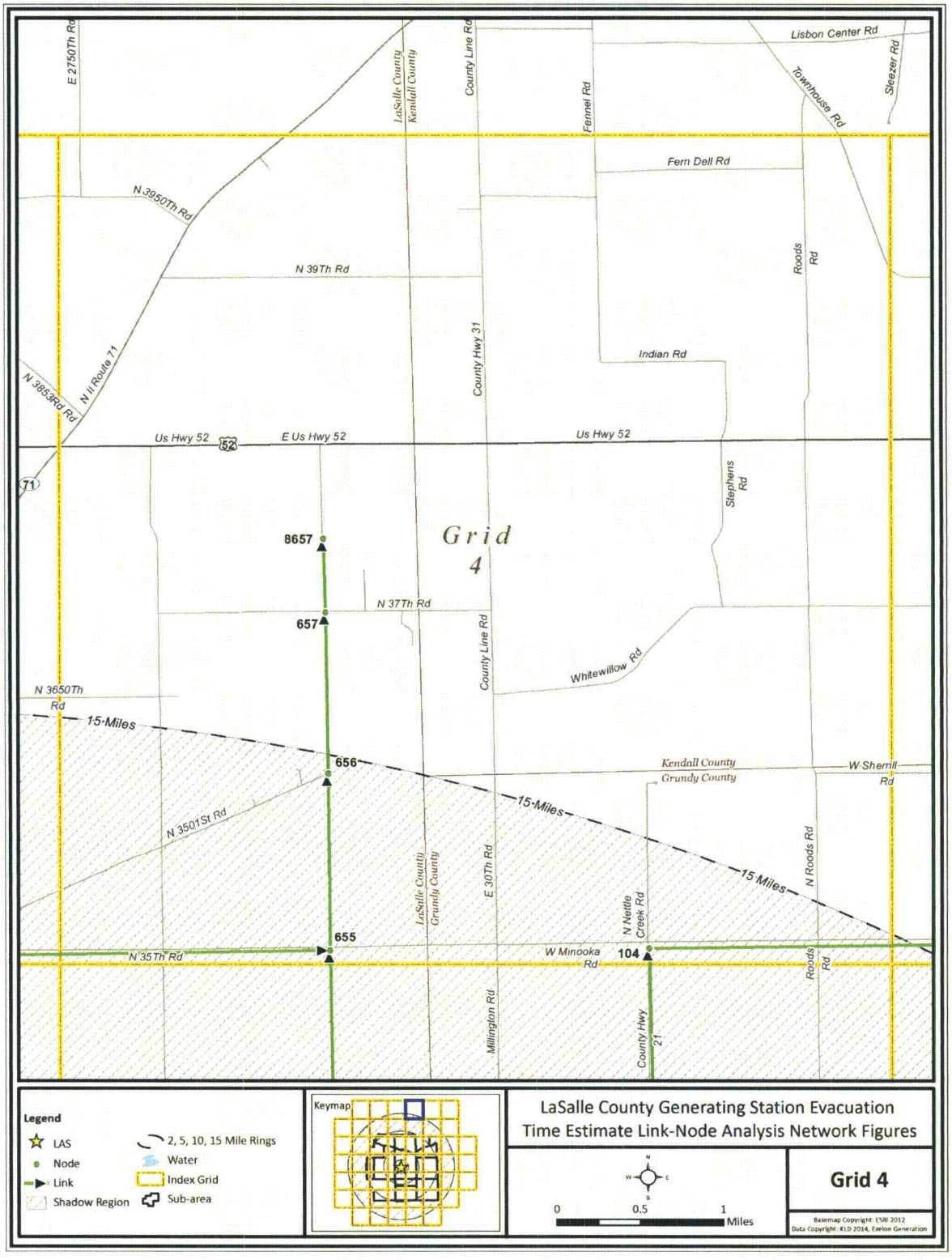

Figure K-5. Link-Node Analysis Network – Grid 4

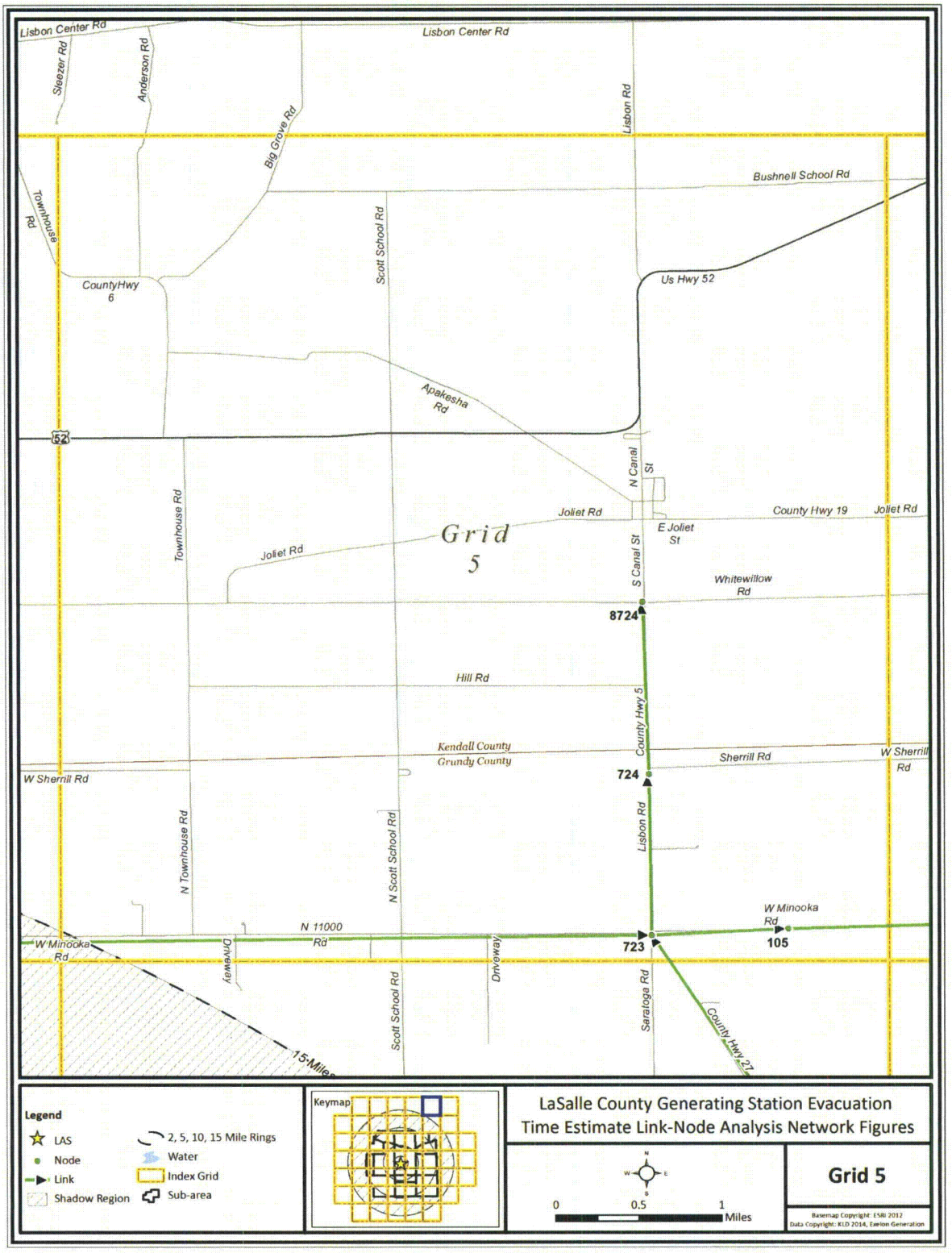

Figure K-6. Link-Node Analysis Network – Grid 5

Figure K-7. Link-Node Analysis Network – Grid 6

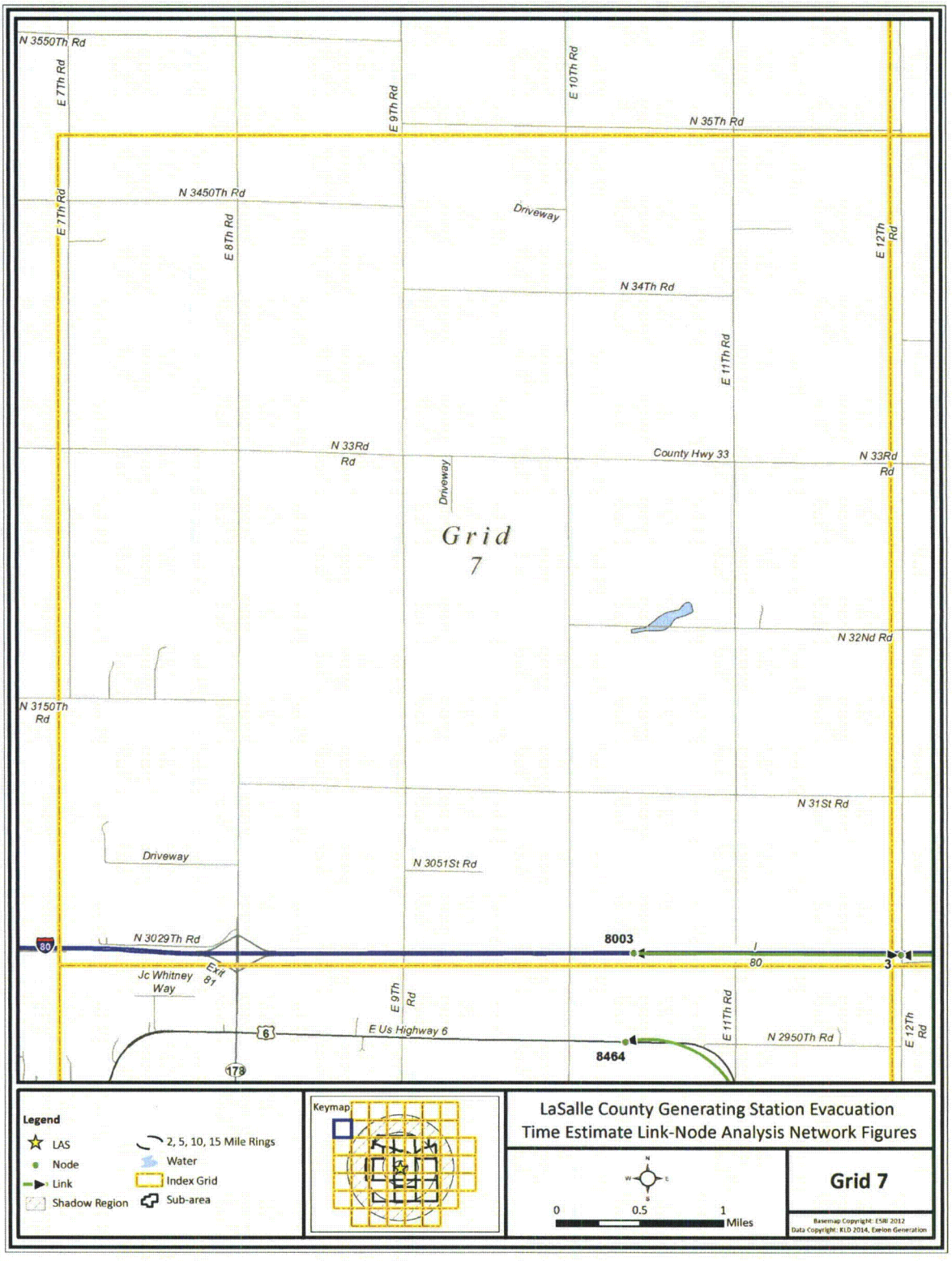

Figure K-8. Link-Node Analysis Network – Grid 7

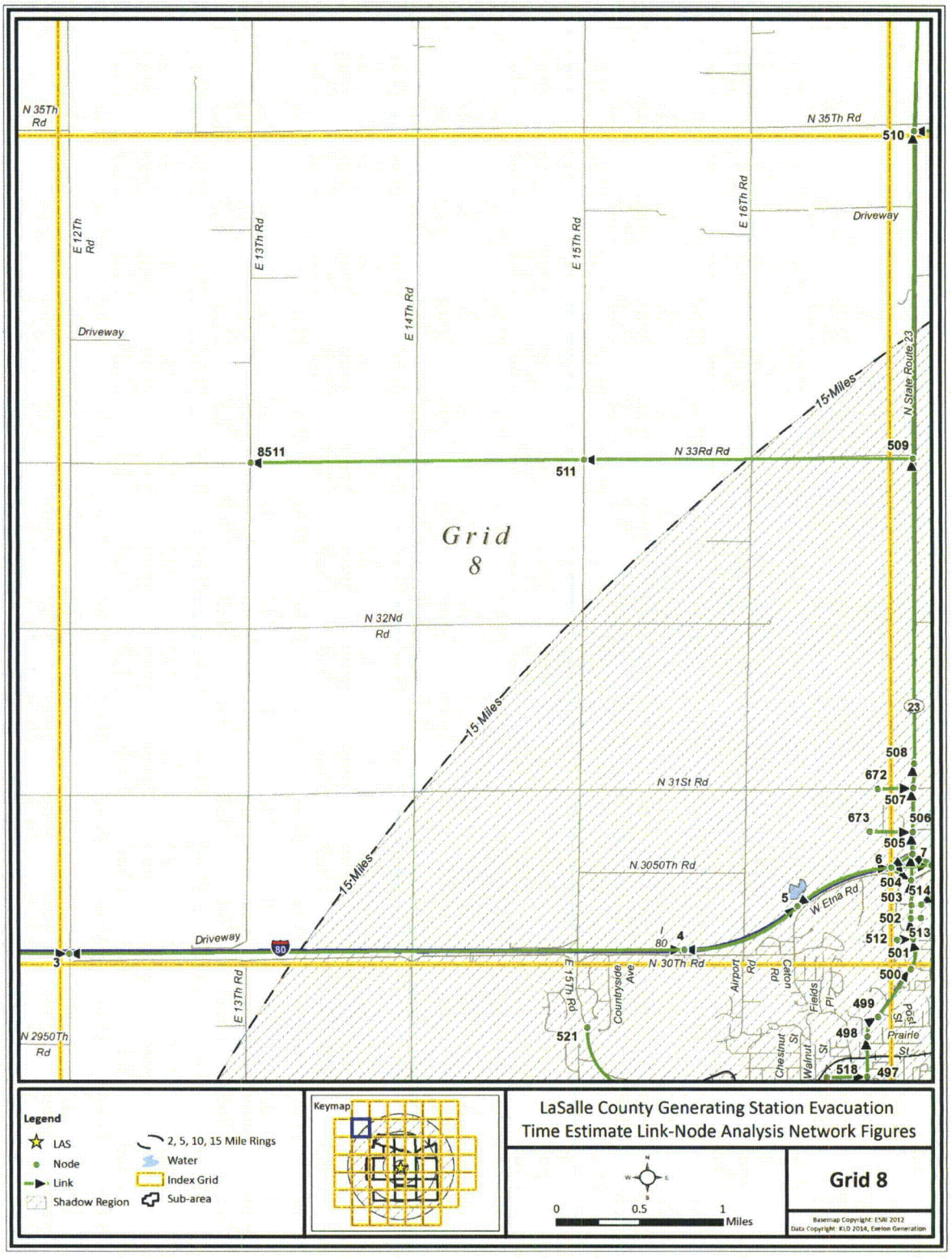

Figure K-9. Link-Node Analysis Network – Grid 8

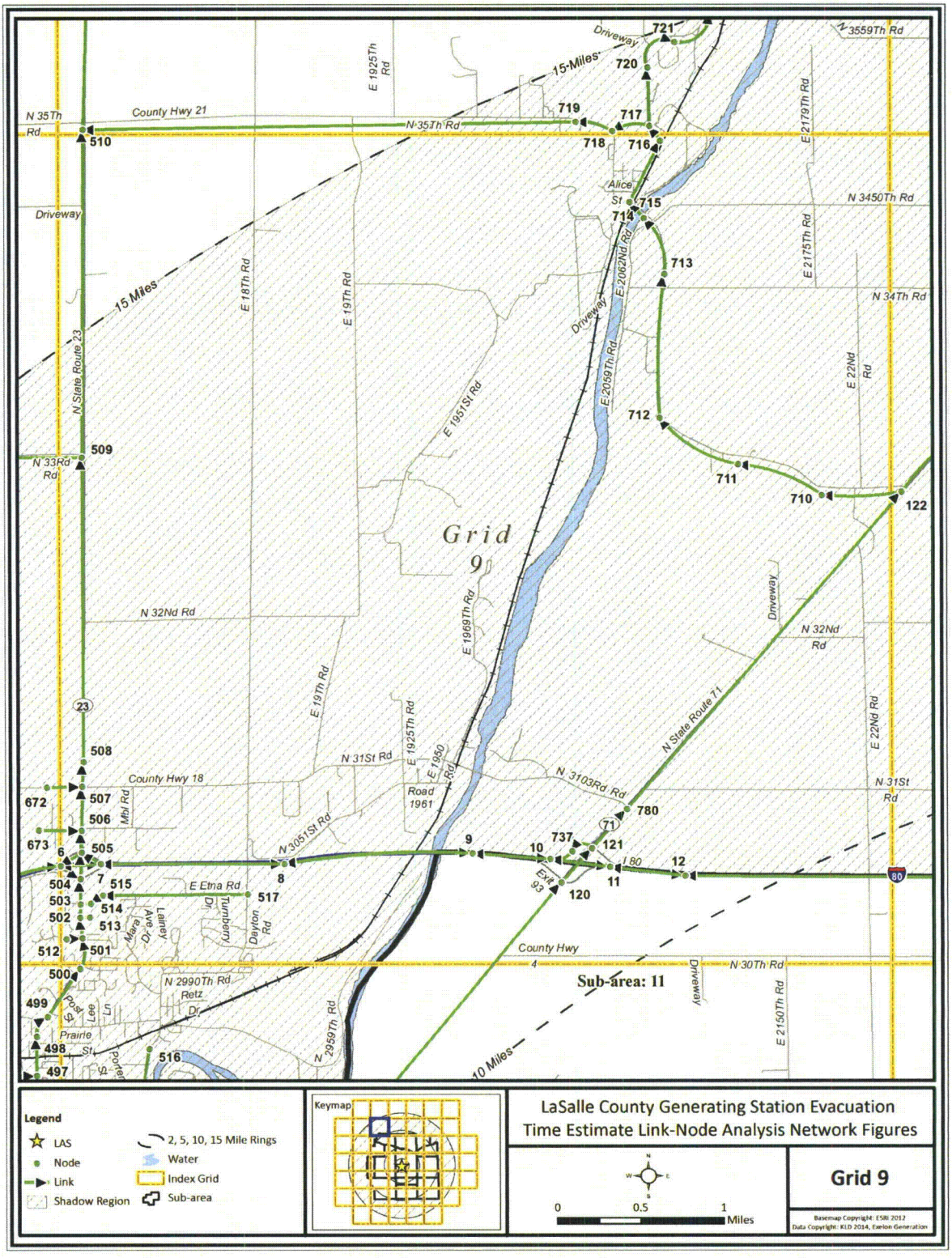

Figure K-10. Link-Node Analysis Network – Grid 9

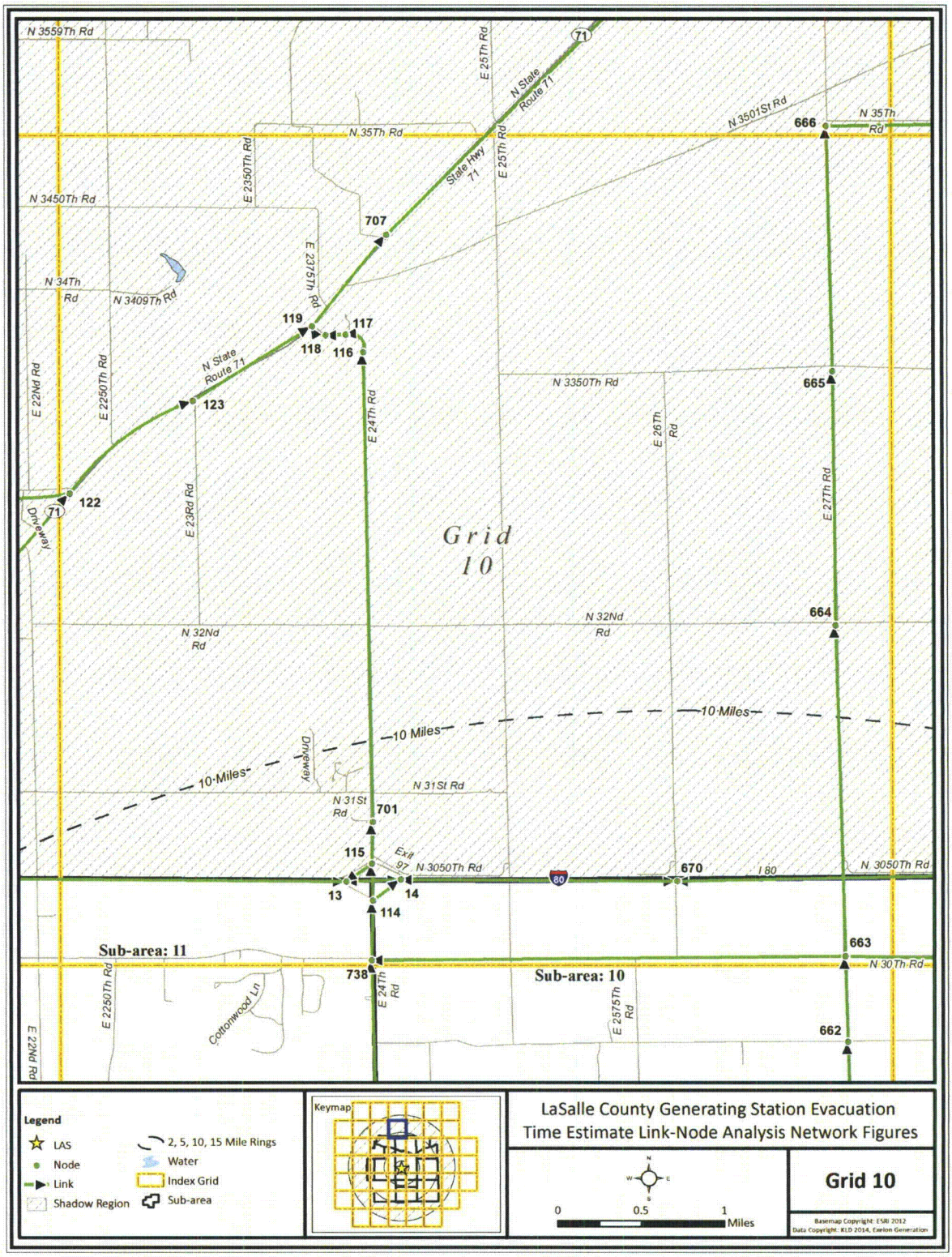

Figure K-11. Link-Node Analysis Network – Grid 10

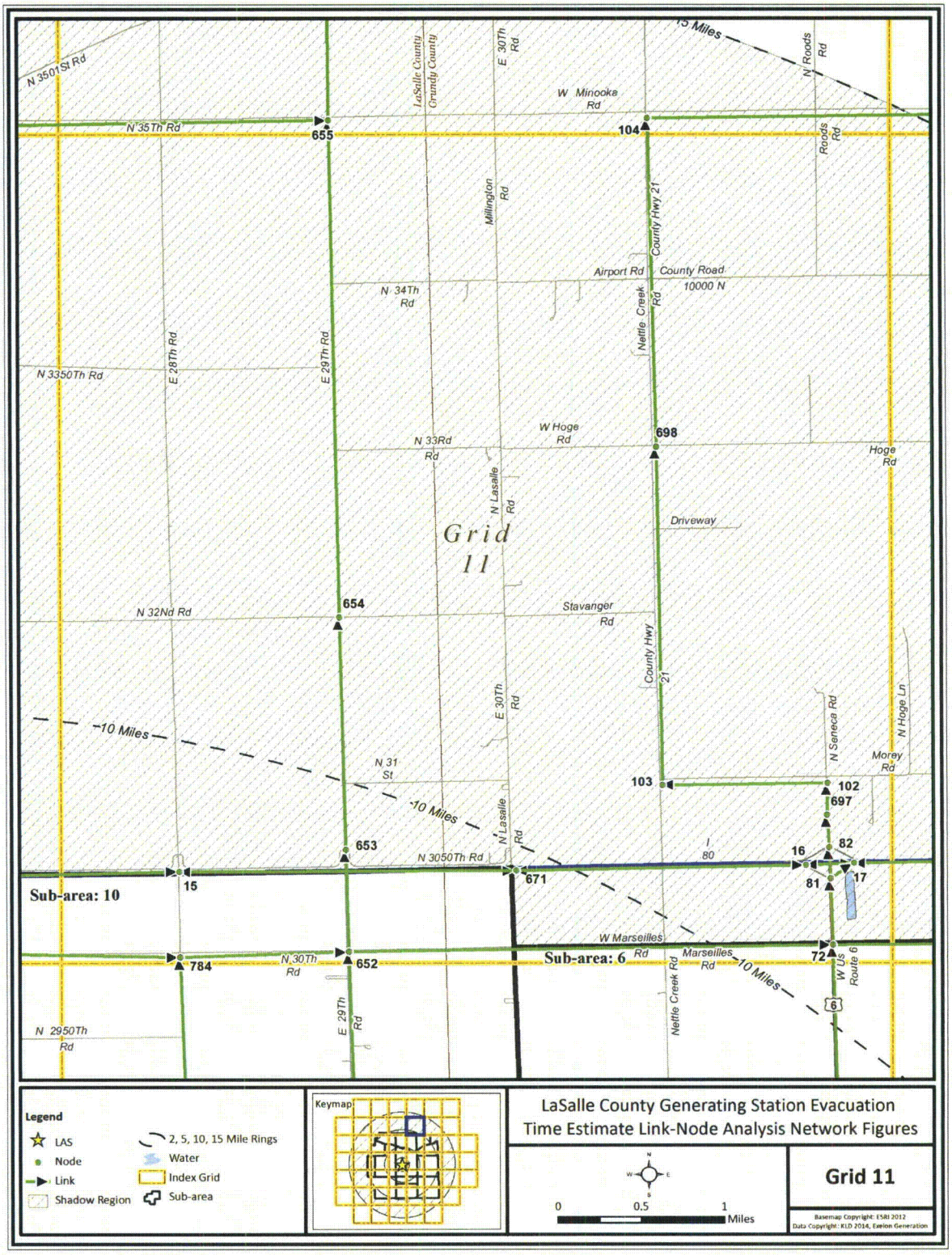

Figure K-12. Link-Node Analysis Network – Grid 11

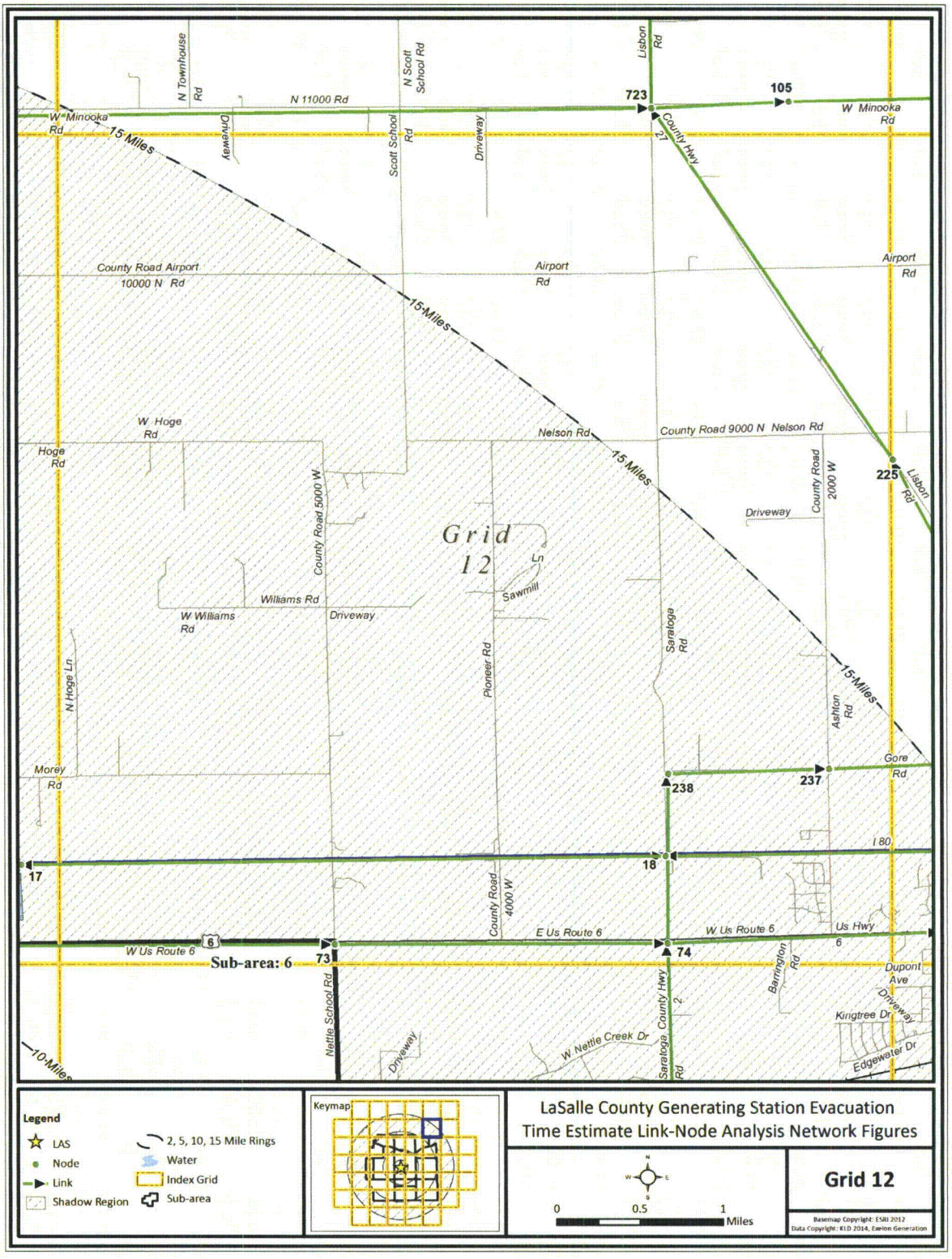

Figure K-13. Link-Node Analysis Network – Grid 12

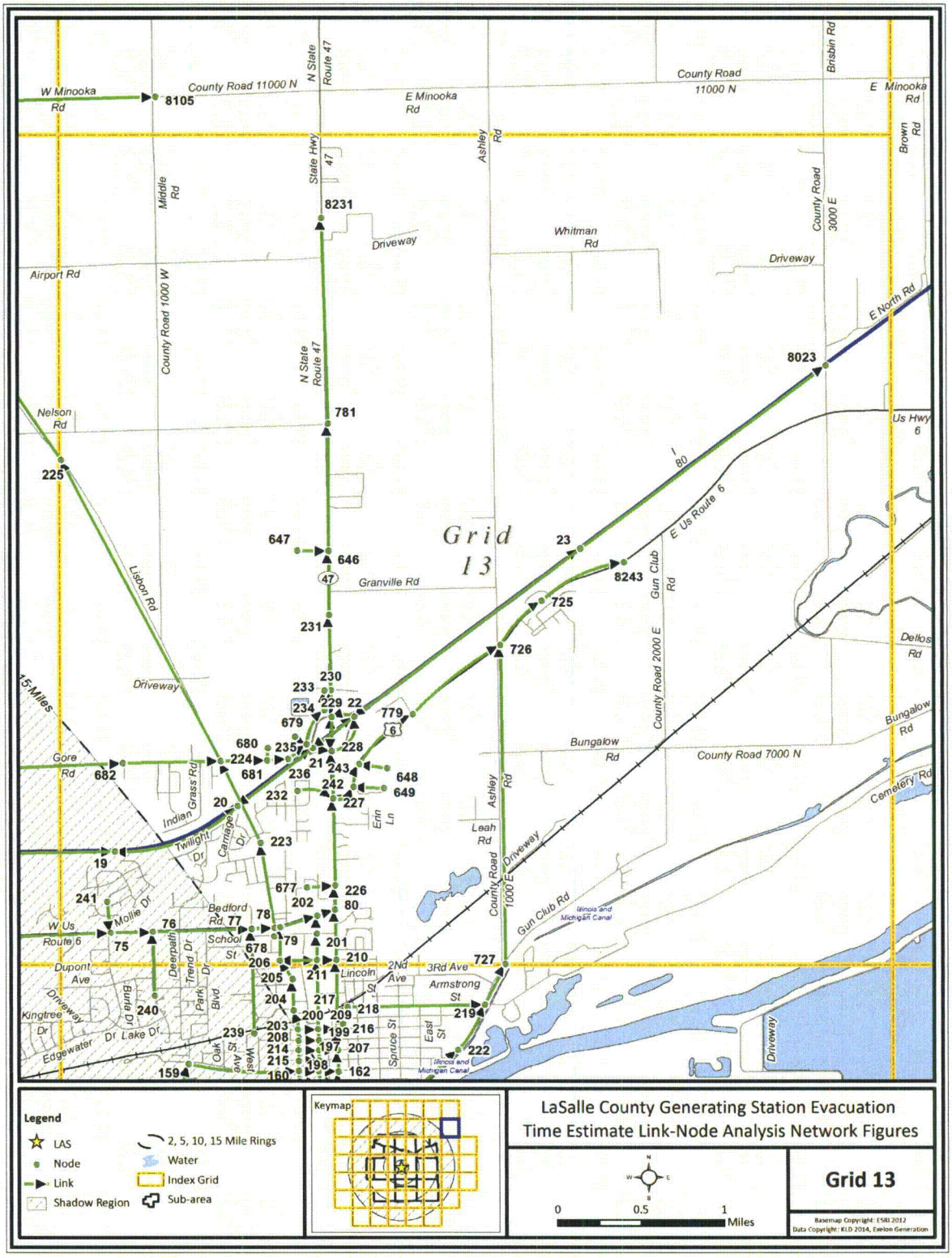

Figure K-14. Link-Node Analysis Network – Grid 13

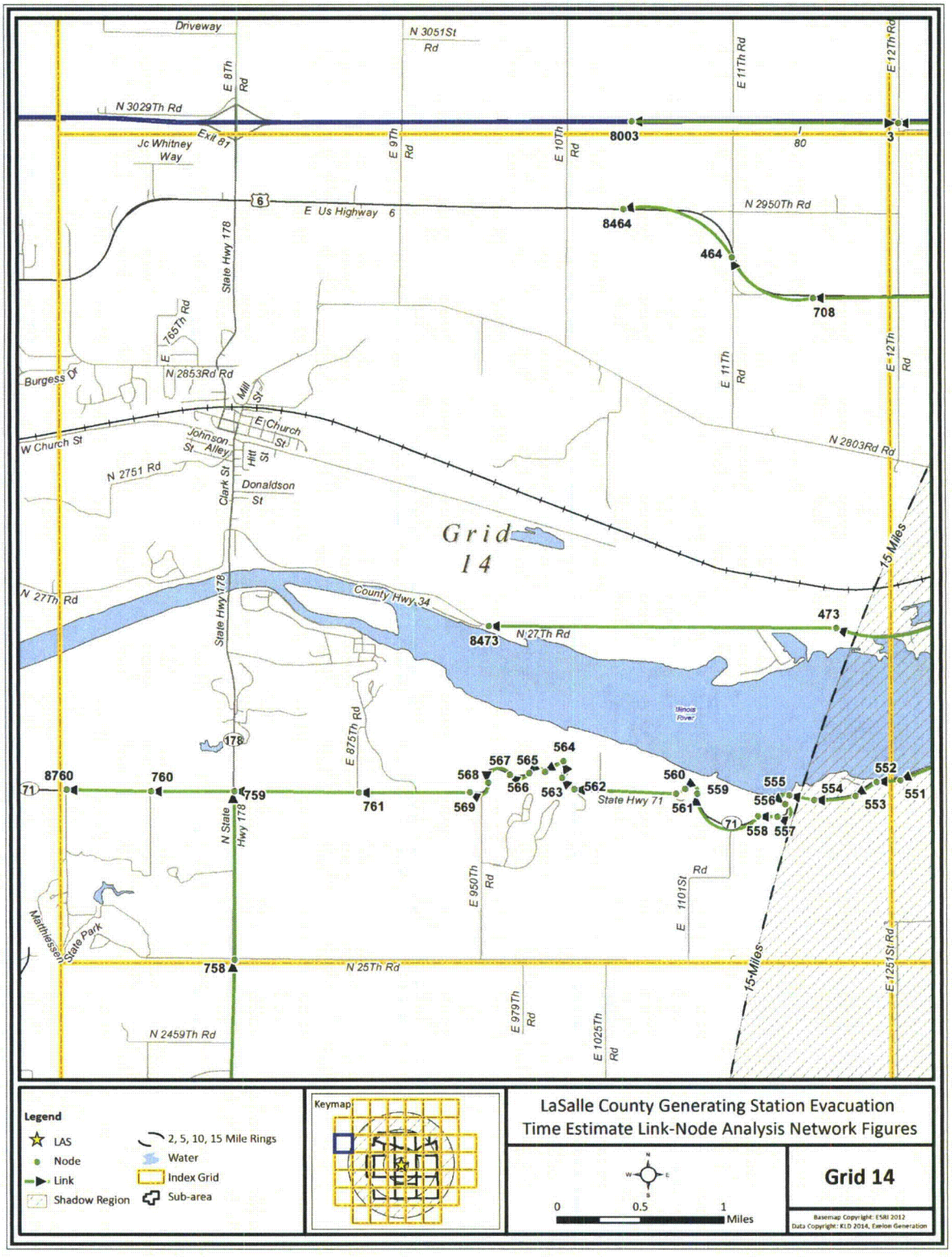

Figure K-15. Link-Node Analysis Network – Grid 14

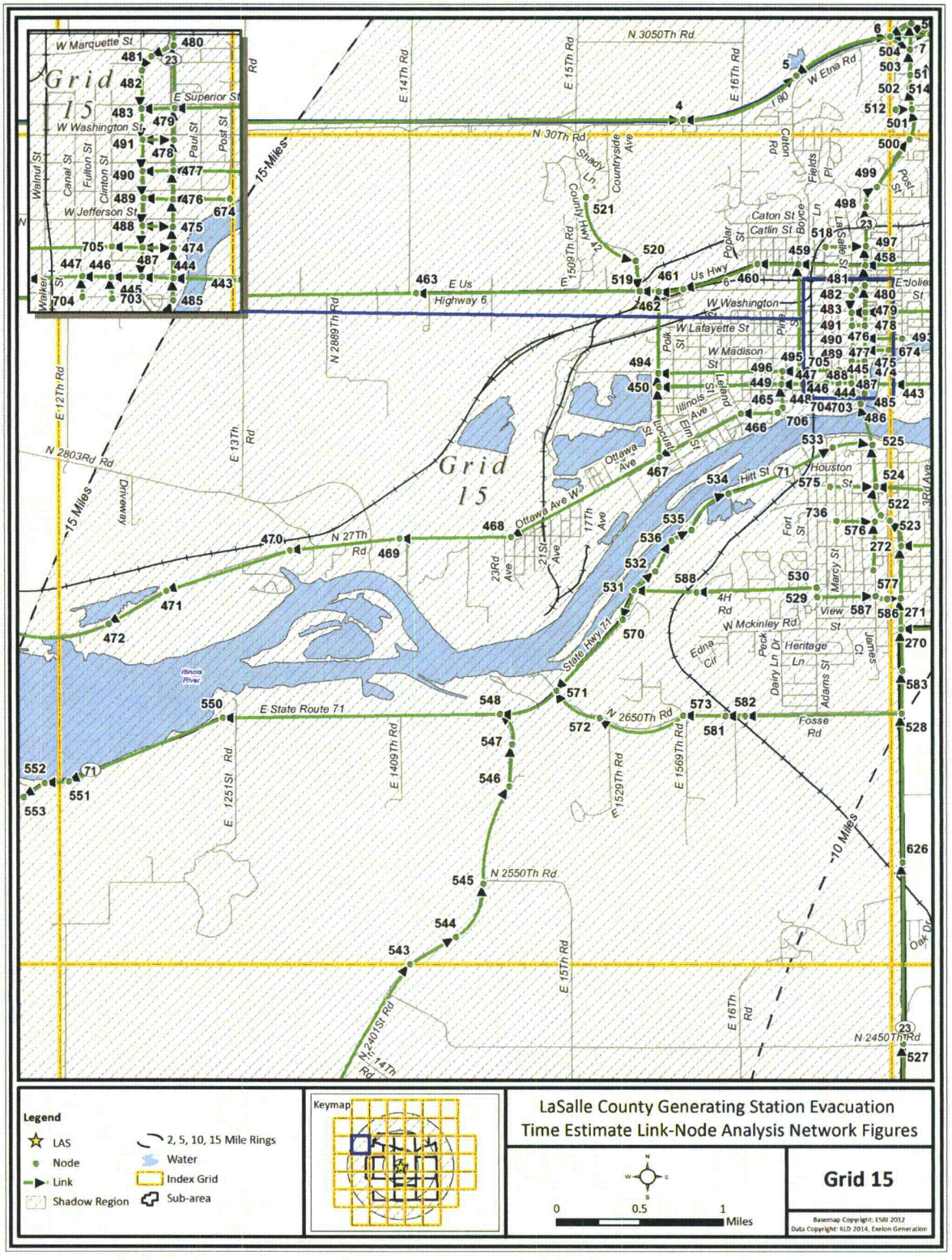

Figure K-16. Link-Node Analysis Network – Grid 15

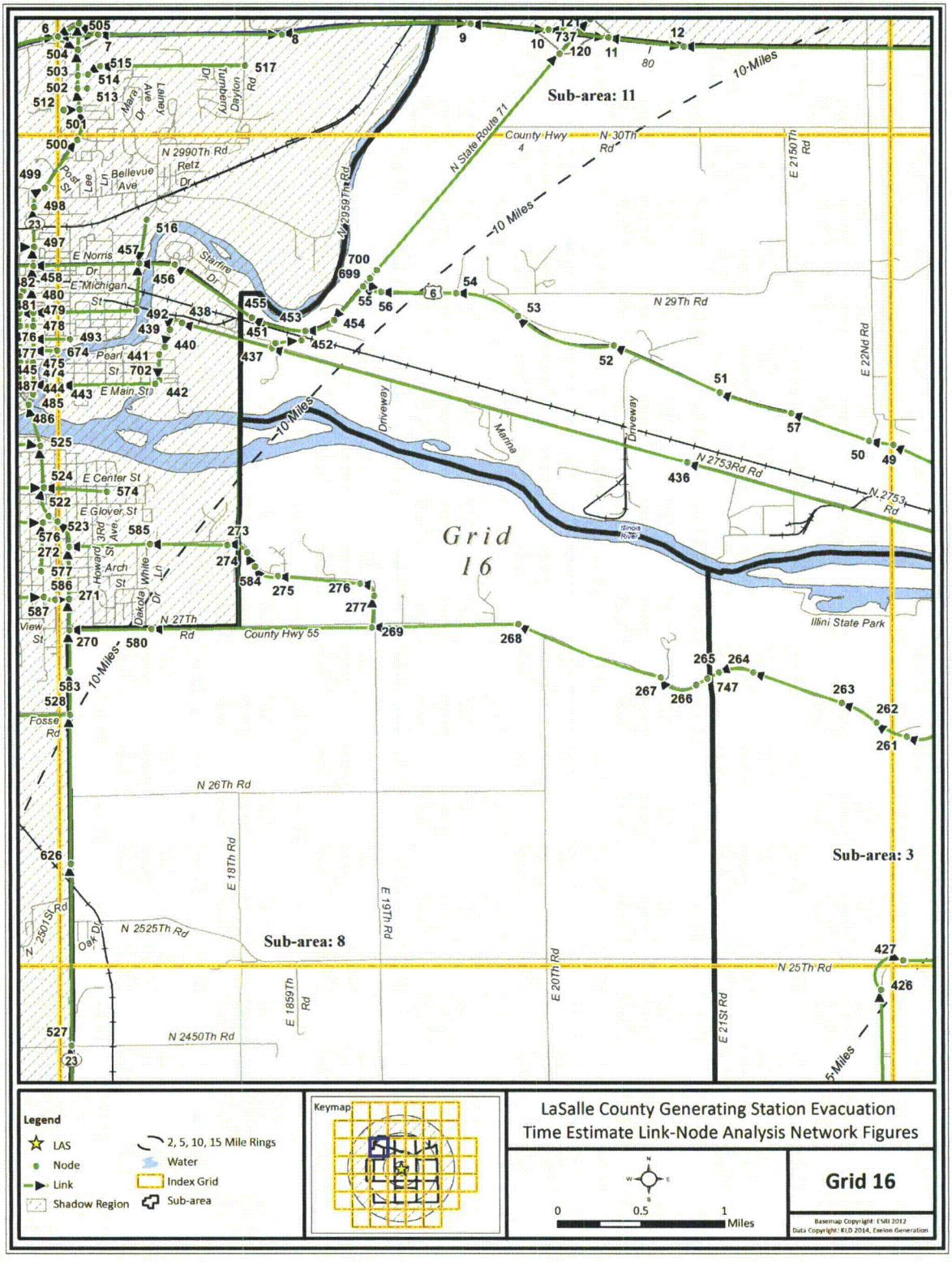

Figure K-17. Link-Node Analysis Network – Grid 16

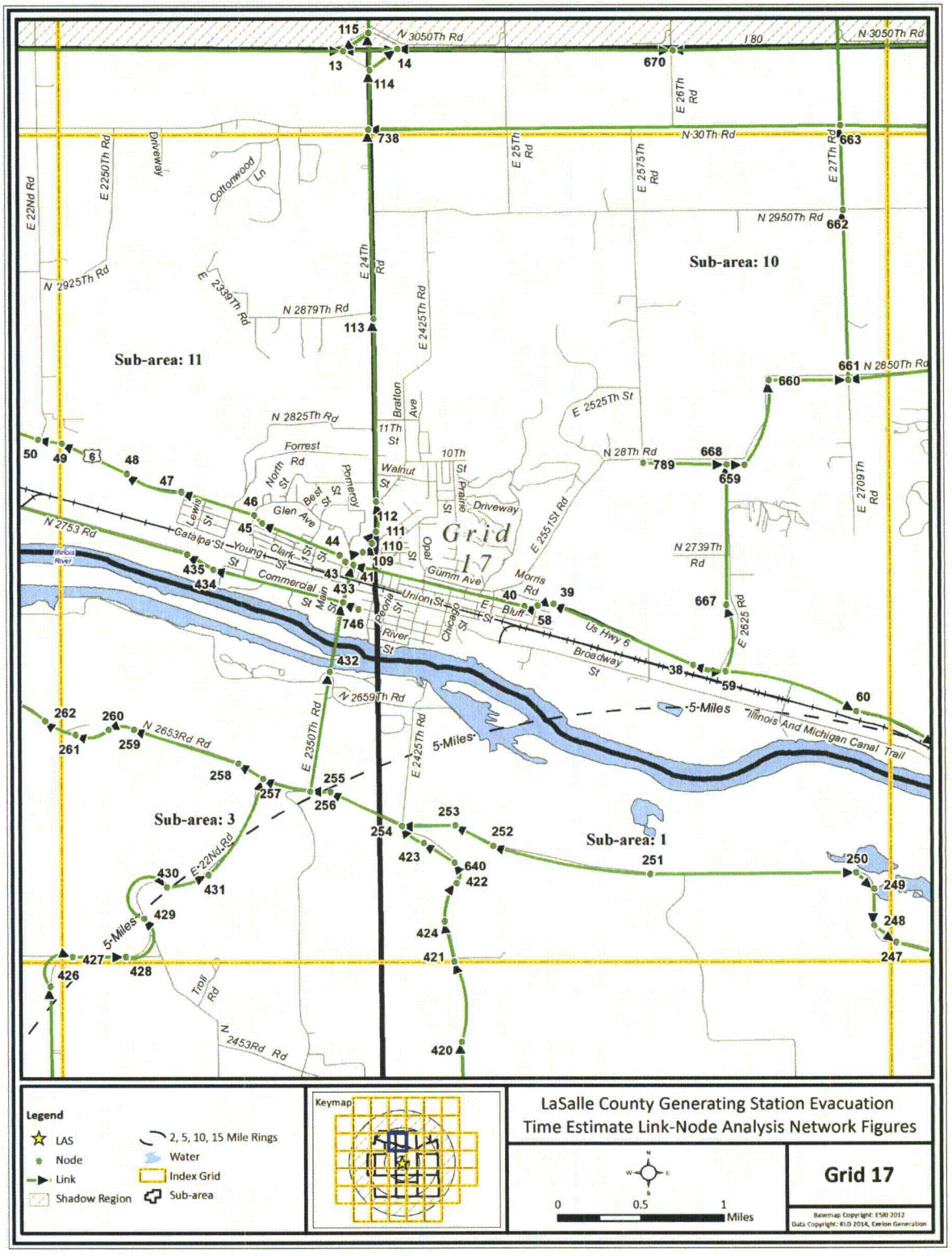

Figure K-18. Link-Node Analysis Network – Grid 17

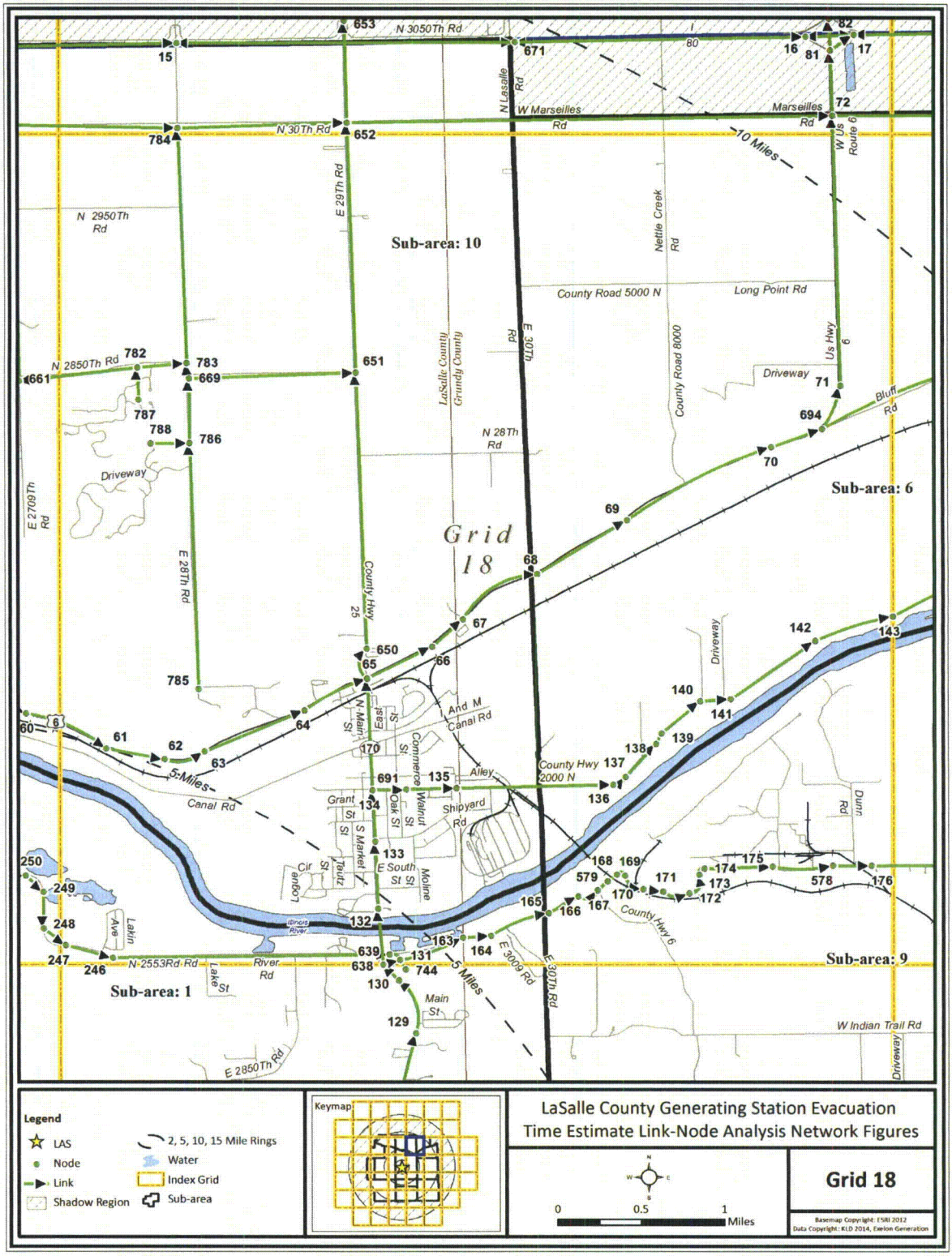

Figure K-19. Link-Node Analysis Network – Grid 18

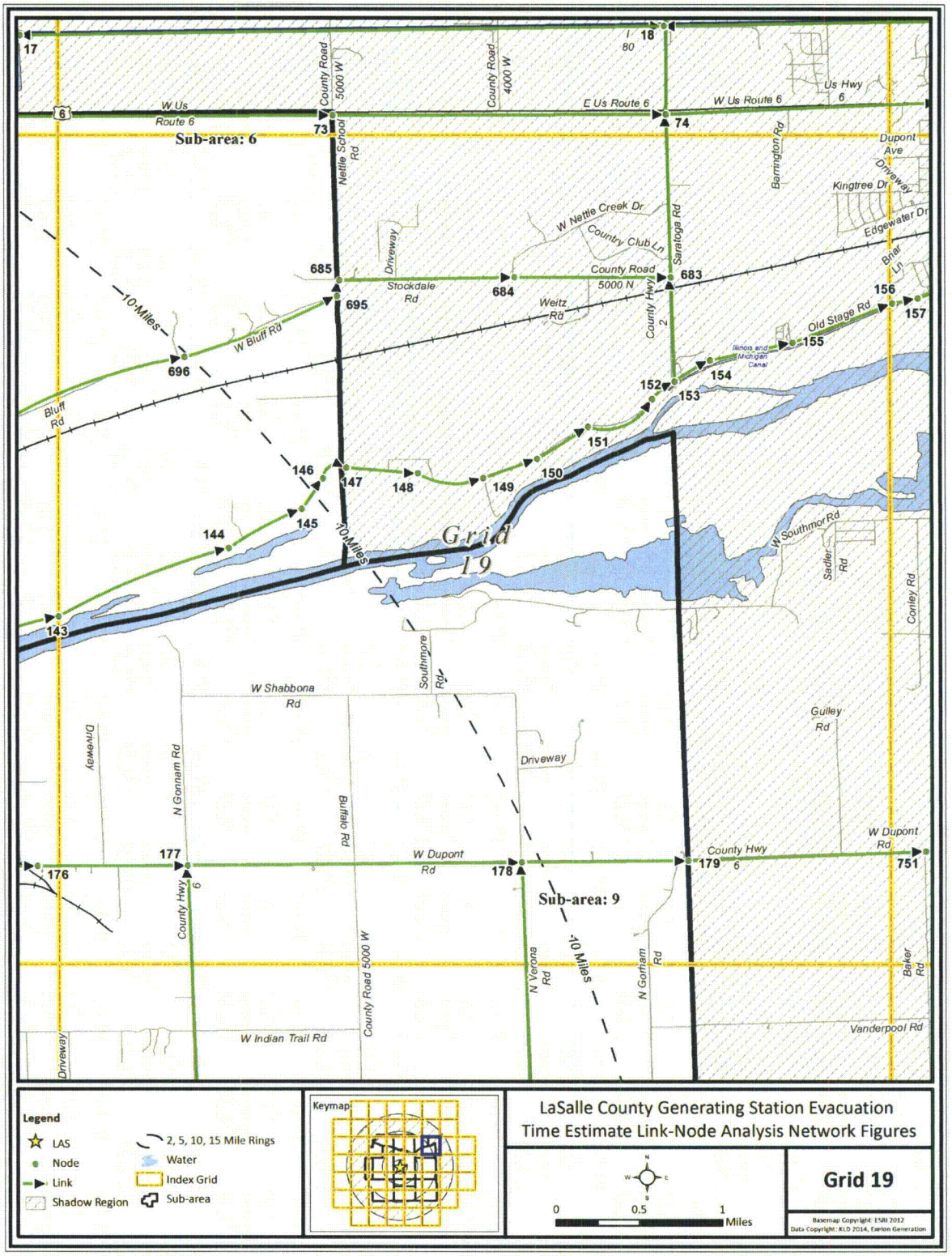

Figure K-20. Link-Node Analysis Network – Grid 19

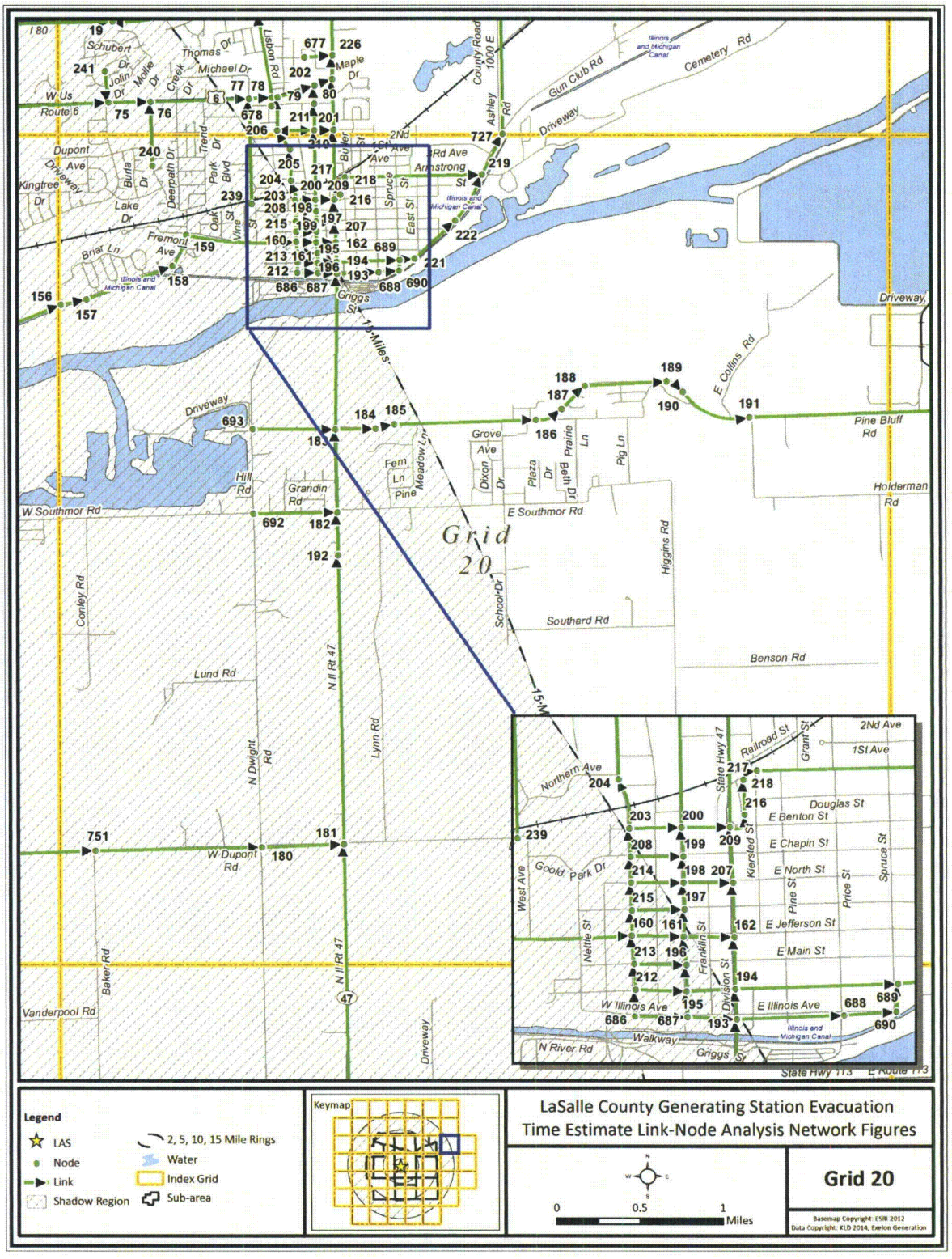

Figure K-21. Link-Node Analysis Network – Grid 20

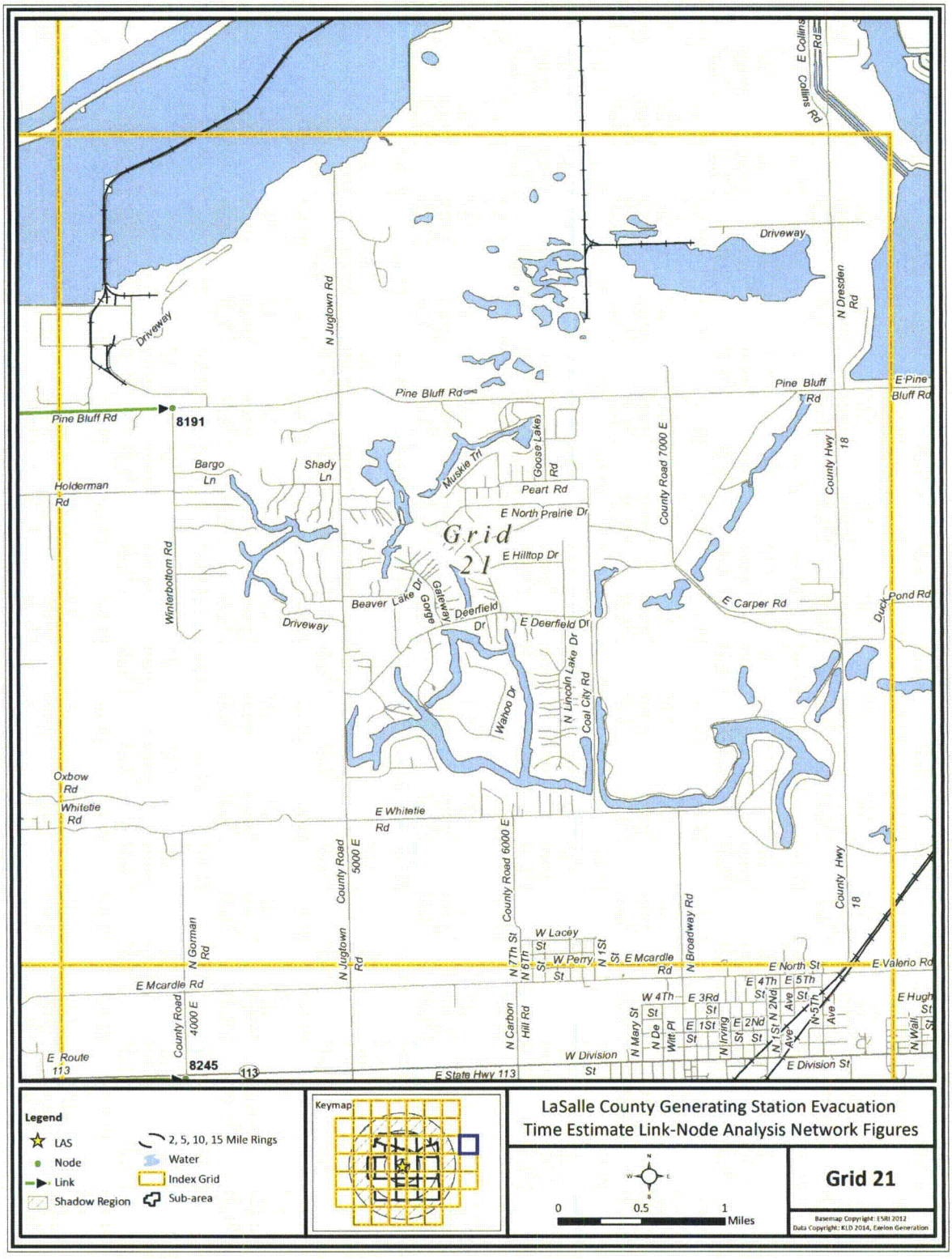

Figure K-22. Link-Node Analysis Network – Grid 21

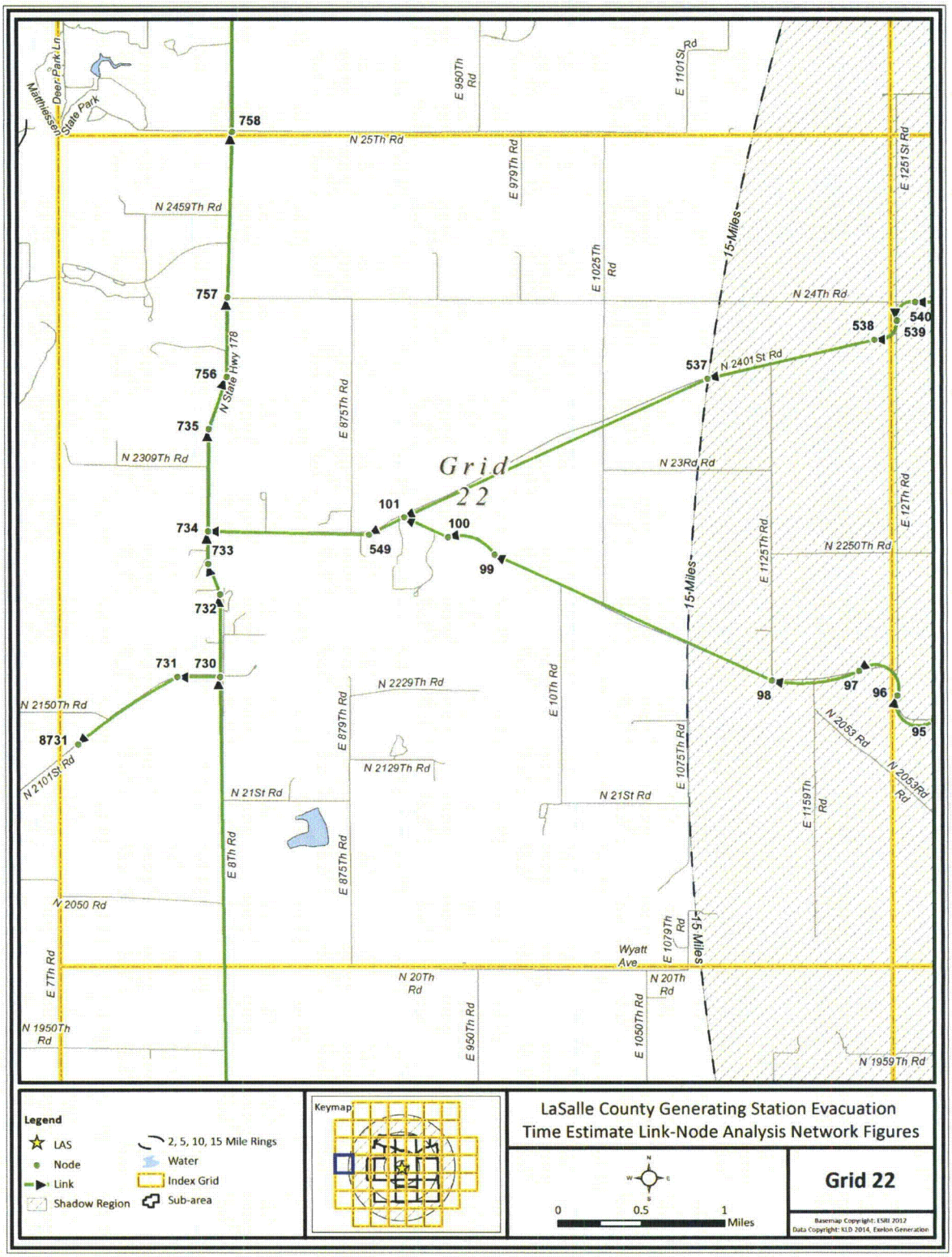

Figure K-23. Link-Node Analysis Network – Grid 22

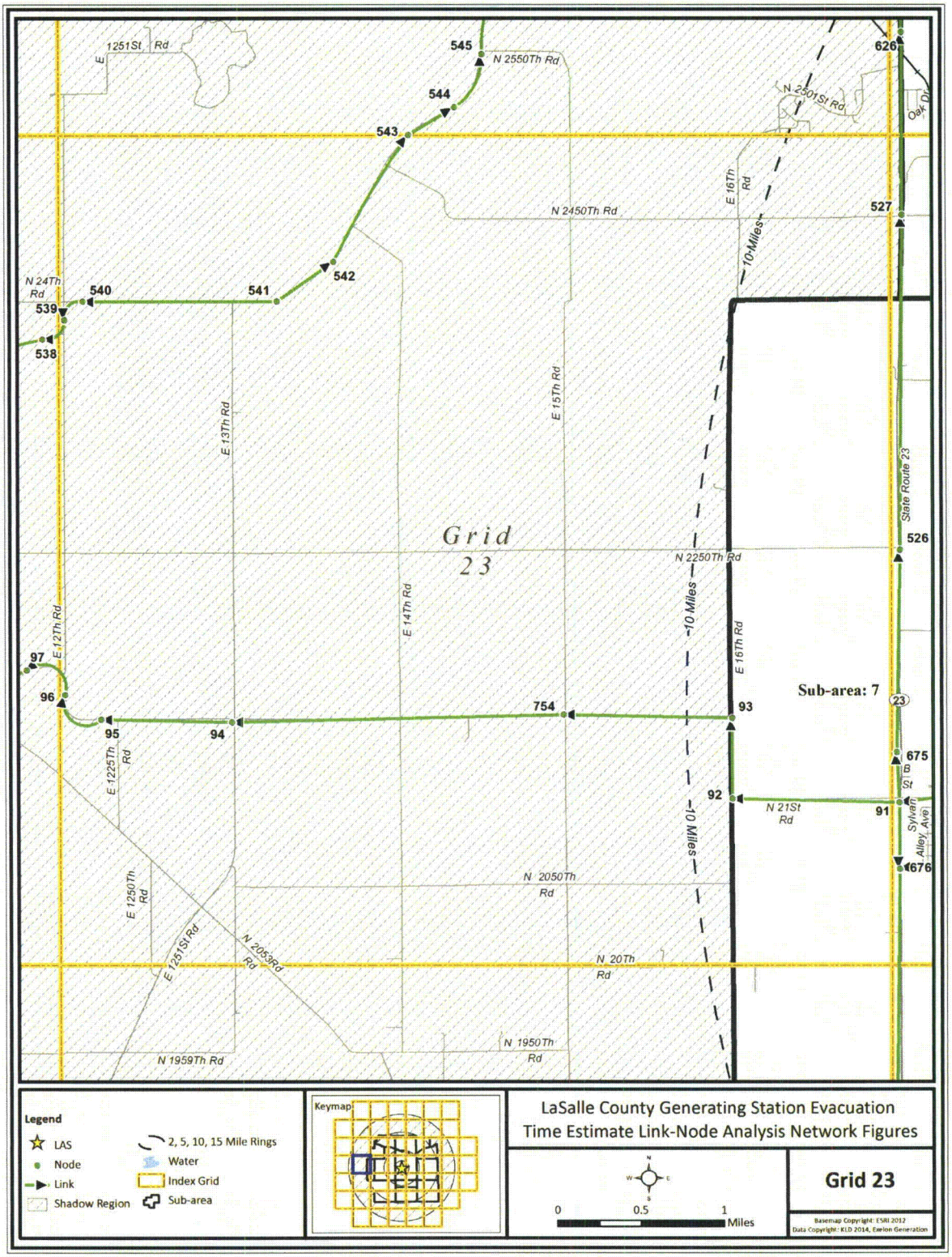

Figure K-24. Link-Node Analysis Network – Grid 23

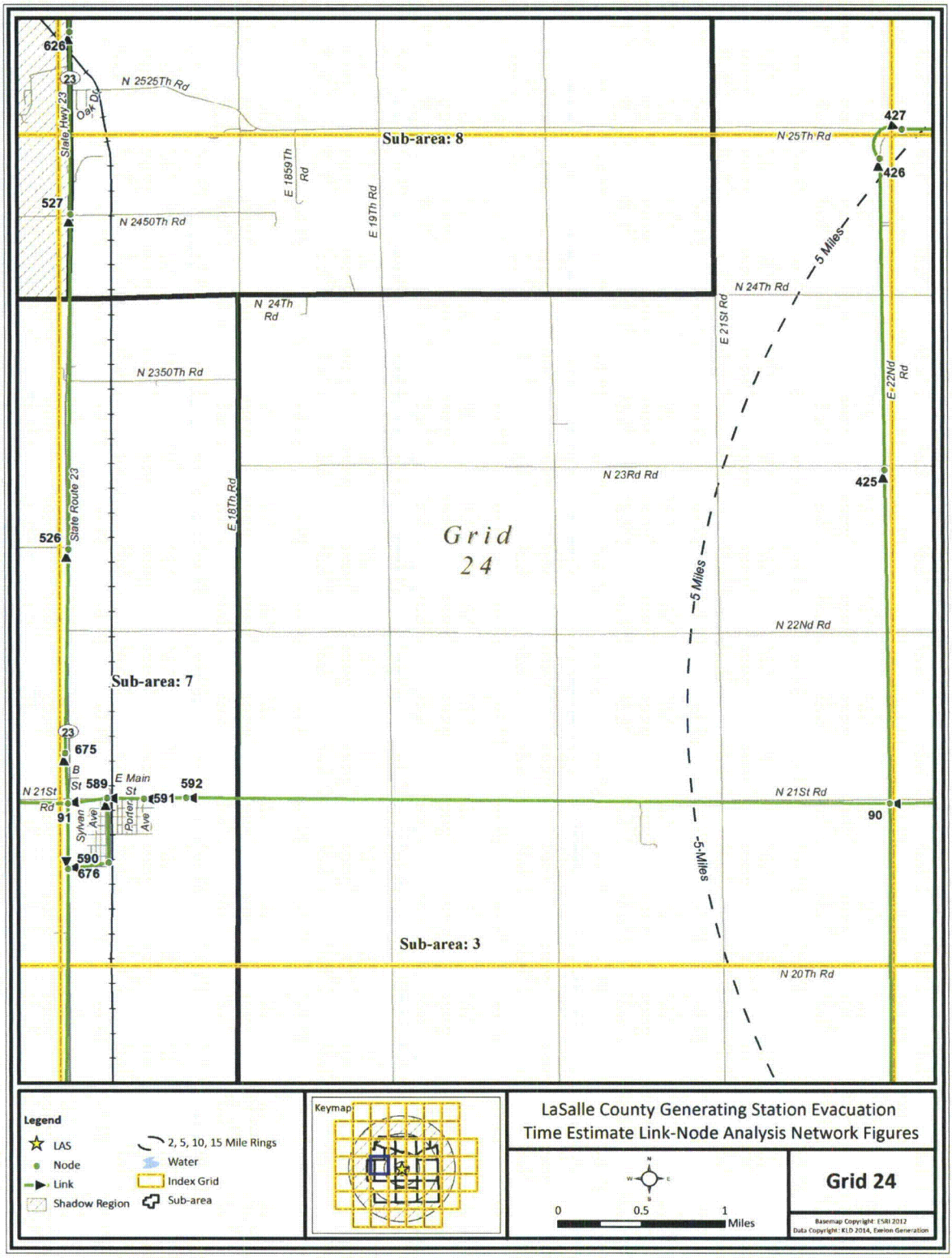

Figure K-25. Link-Node Analysis Network – Grid 24

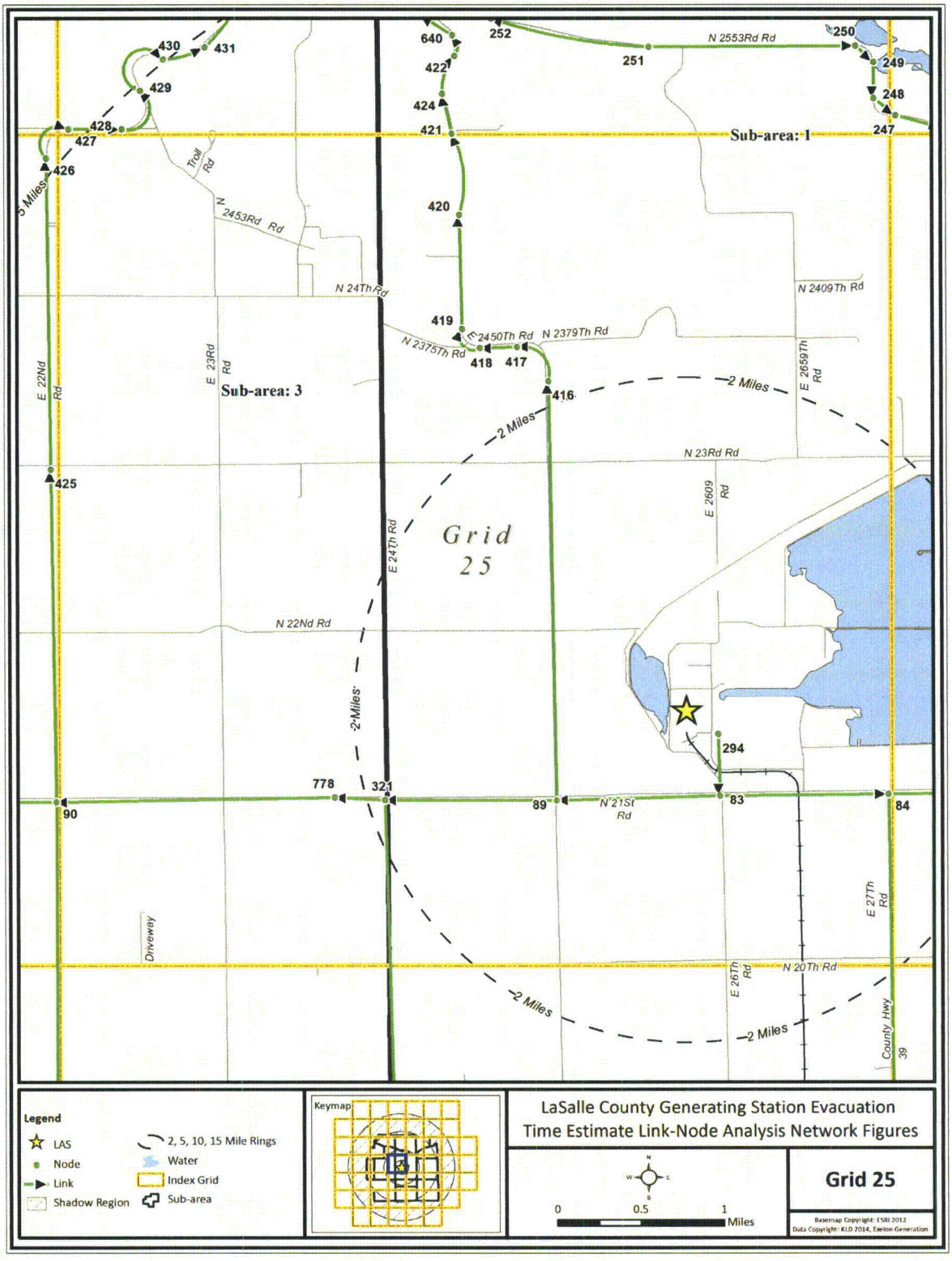

Figure K-26. Link-Node Analysis Network – Grid 25

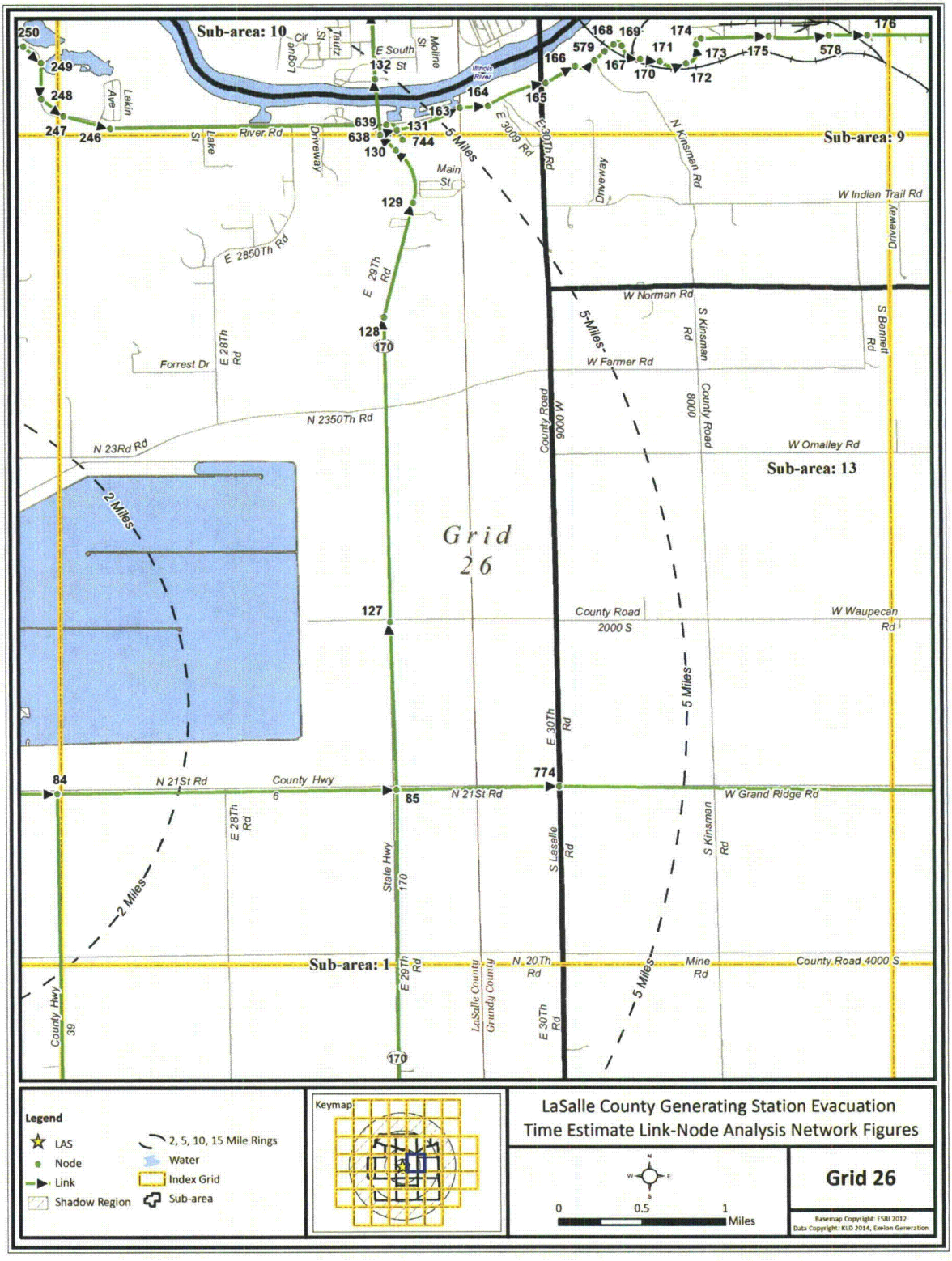

Figure K-27. Link-Node Analysis Network – Grid 26

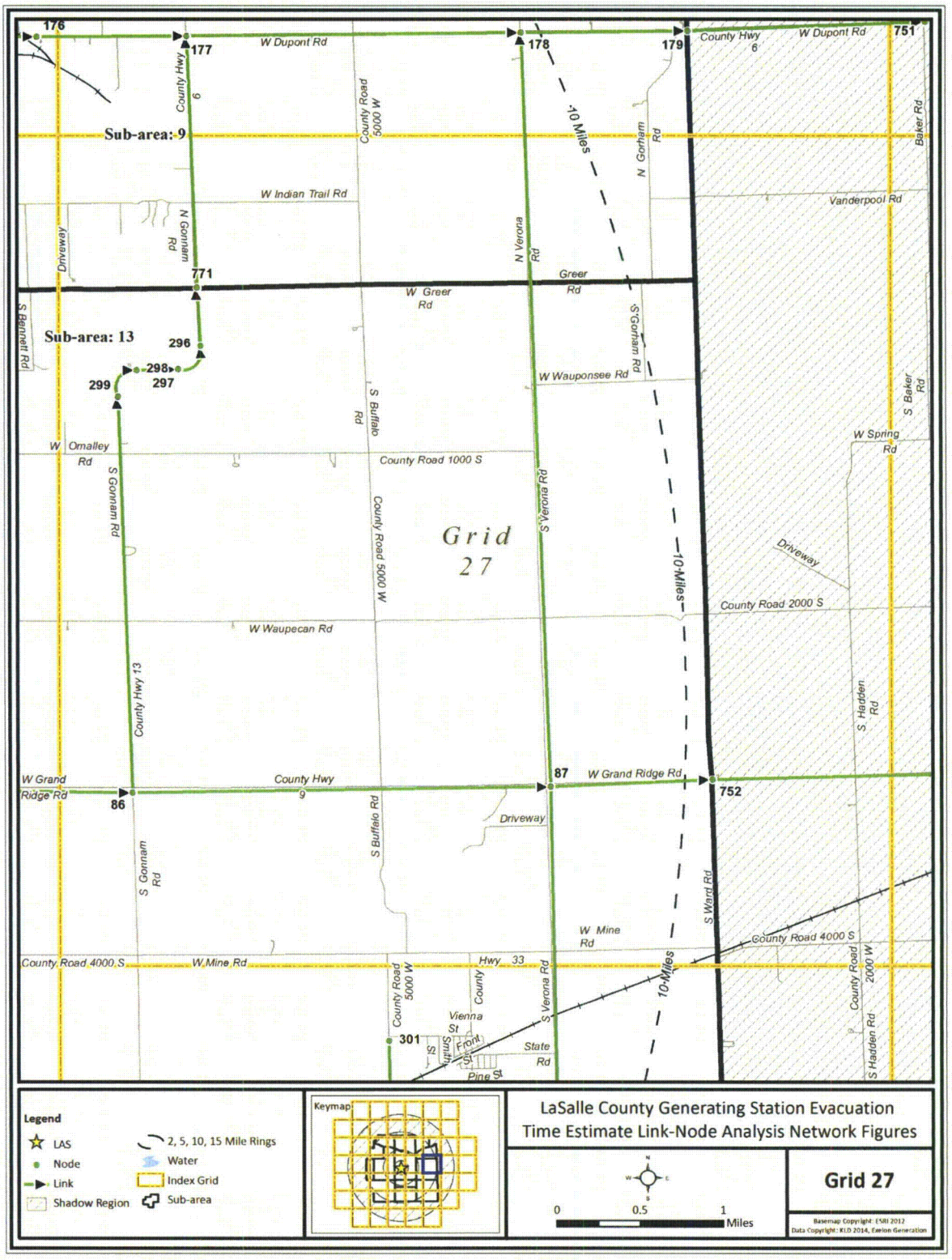

Figure K-28. Link-Node Analysis Network – Grid 27

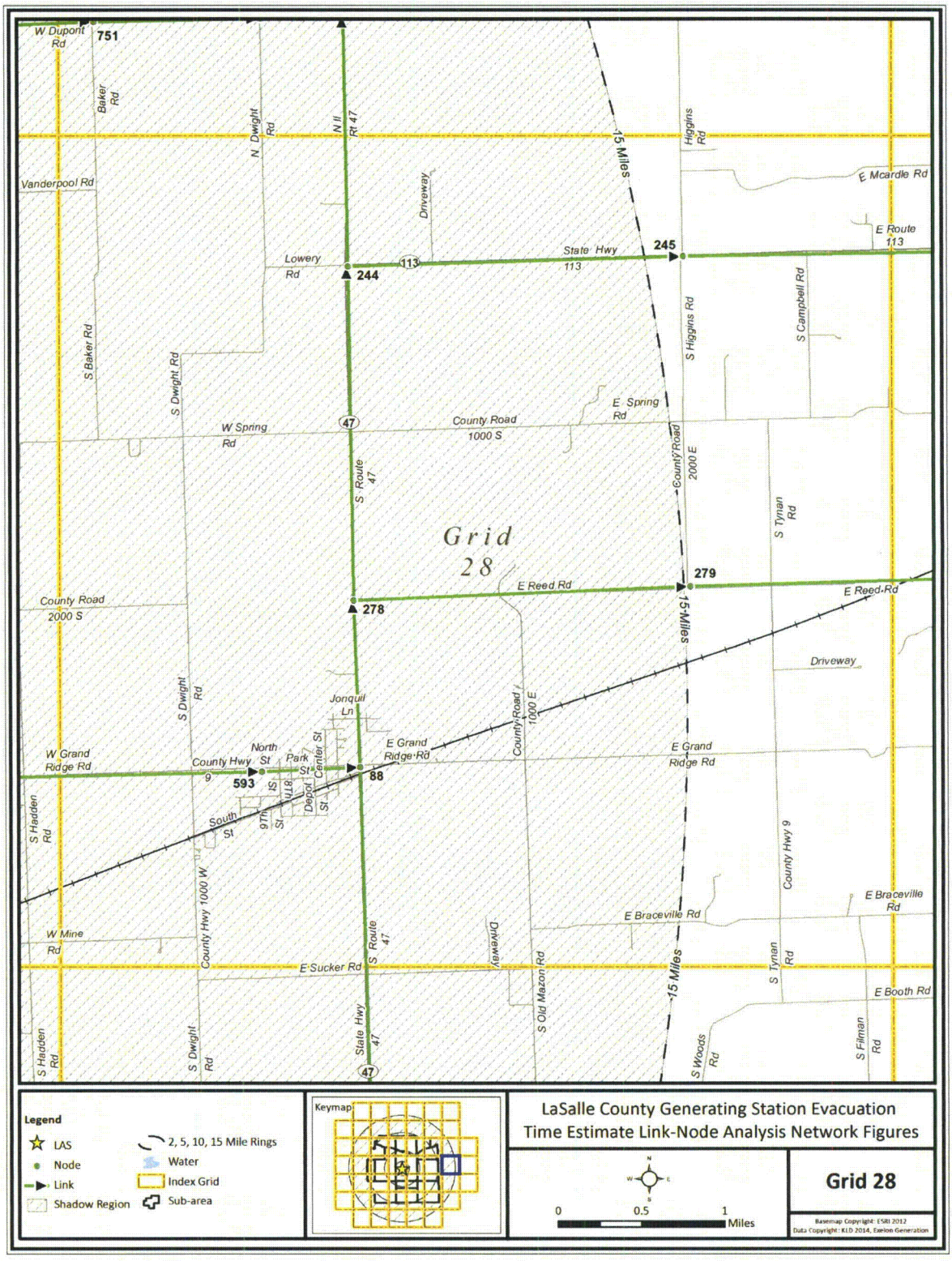

Figure K-29. Link-Node Analysis Network – Grid 28

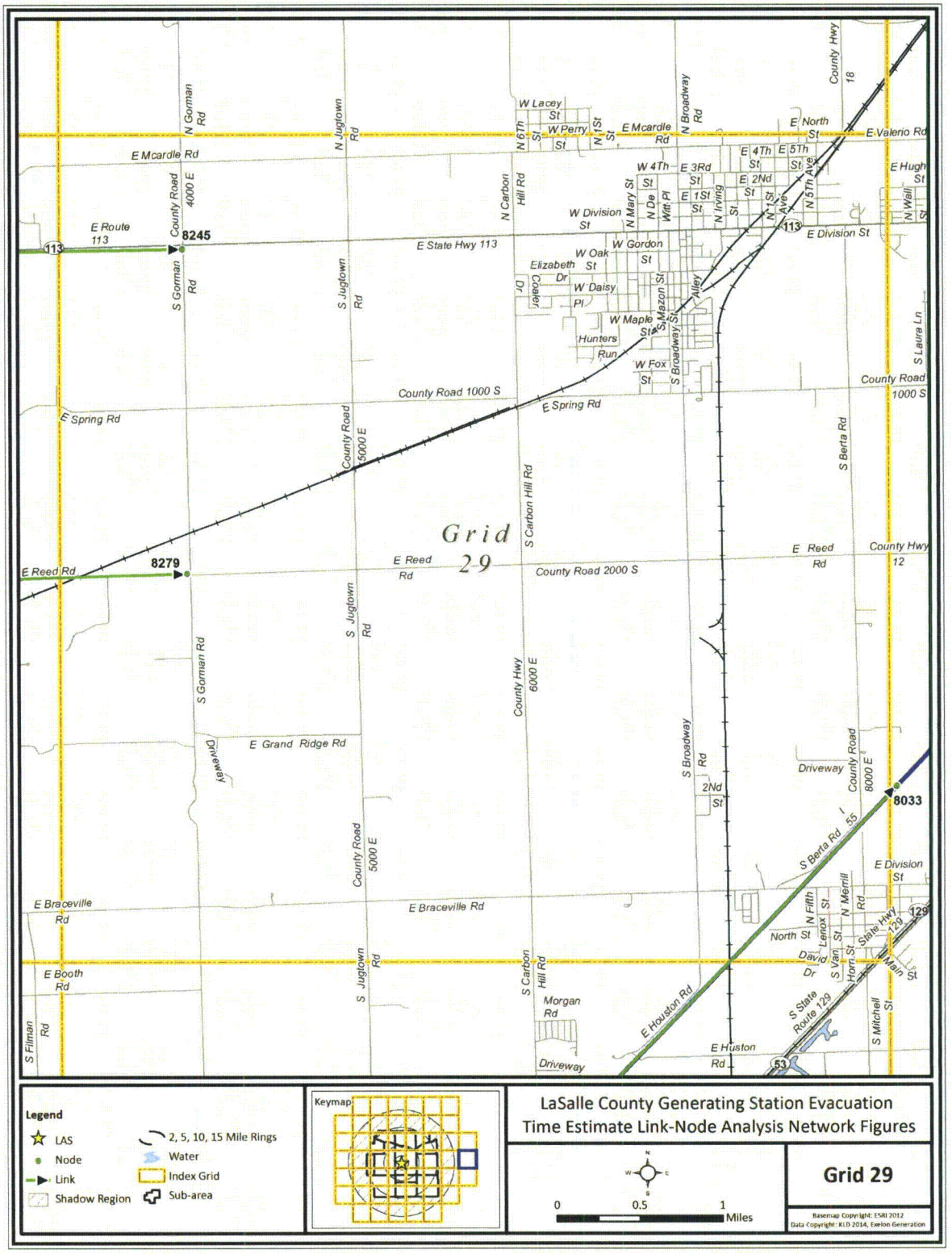

Figure K-30. Link-Node Analysis Network – Grid 29

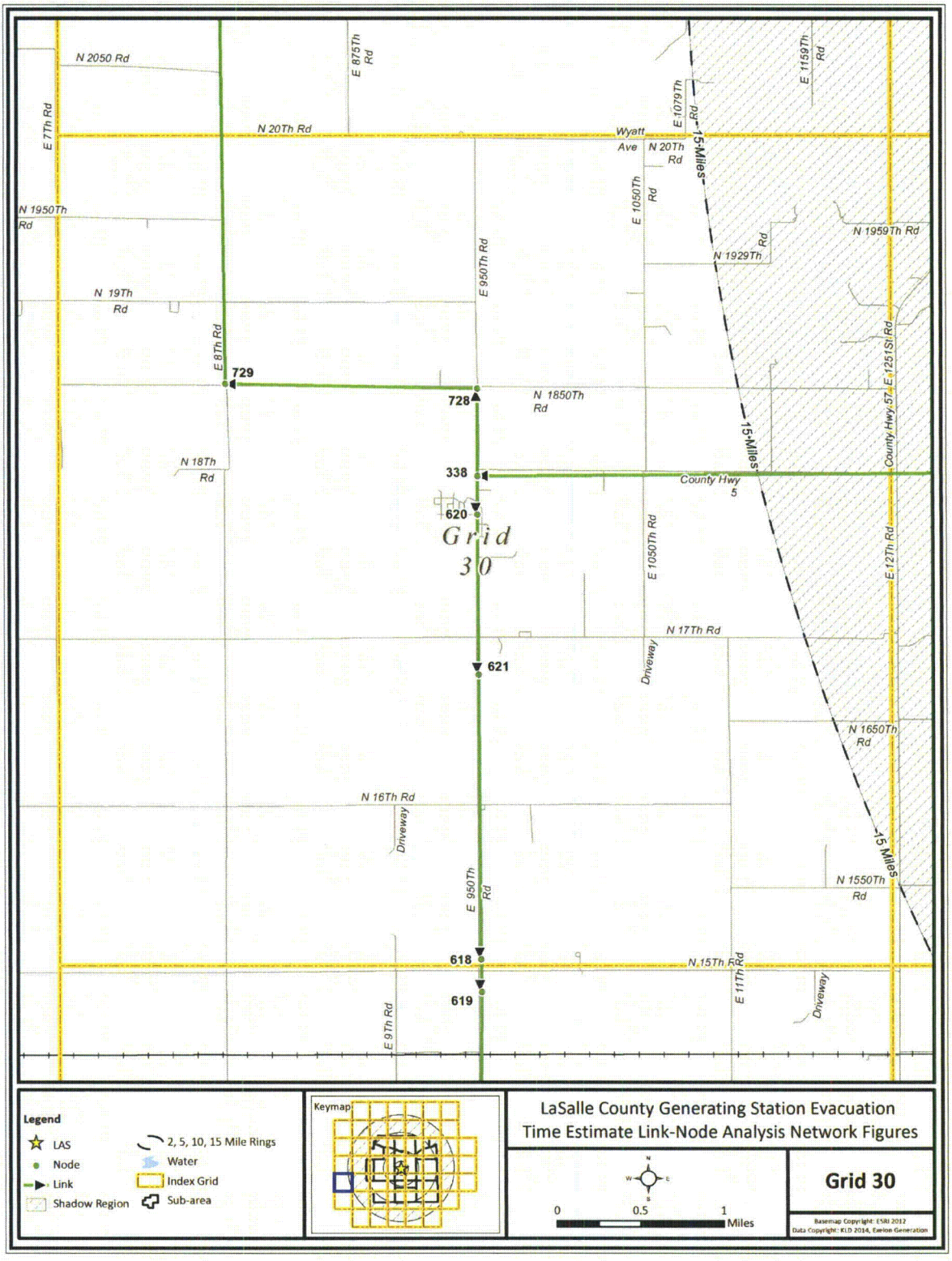

Figure K-31. Link-Node Analysis Network – Grid 30

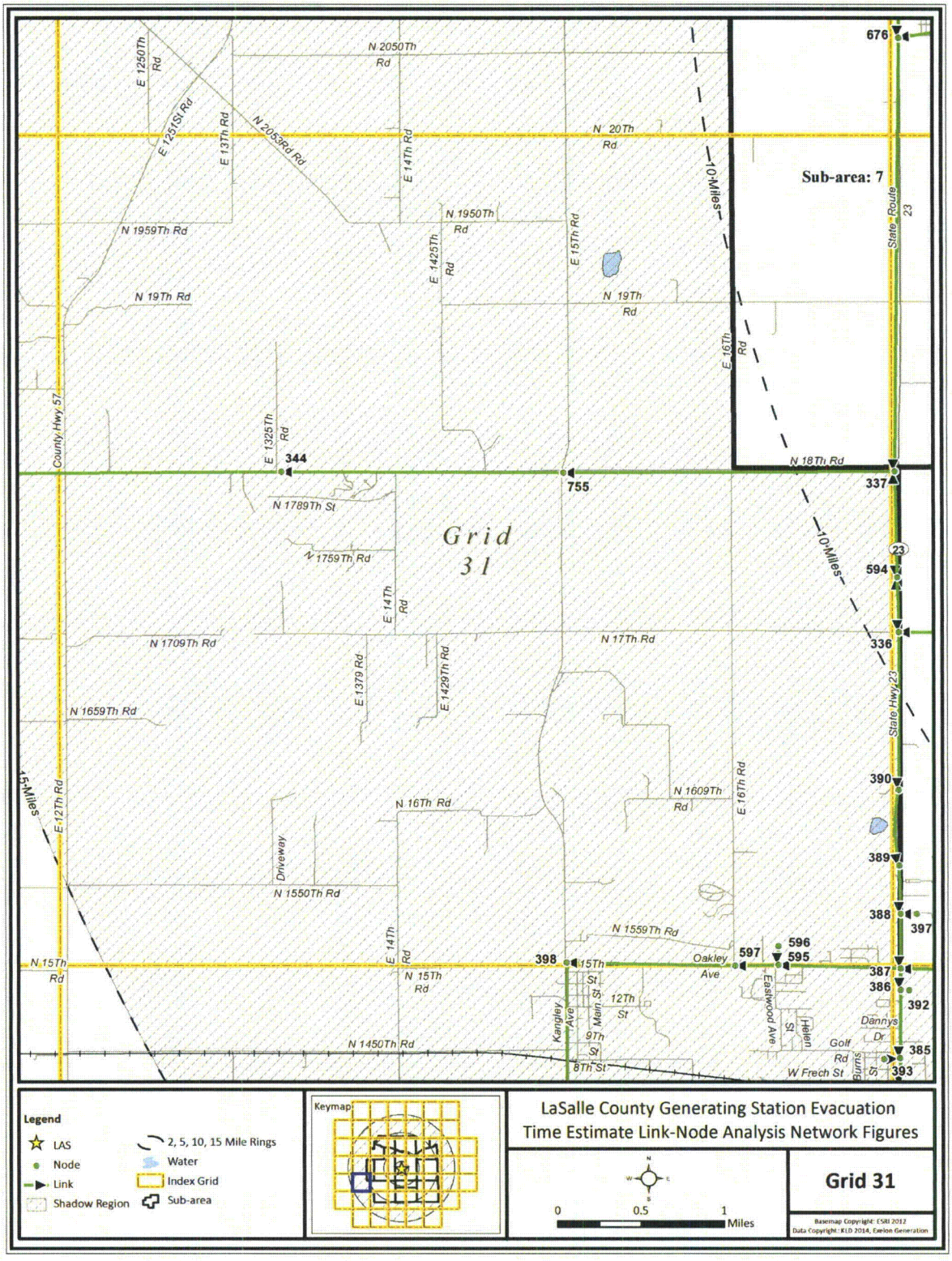

Figure K-32. Link-Node Analysis Network – Grid 31

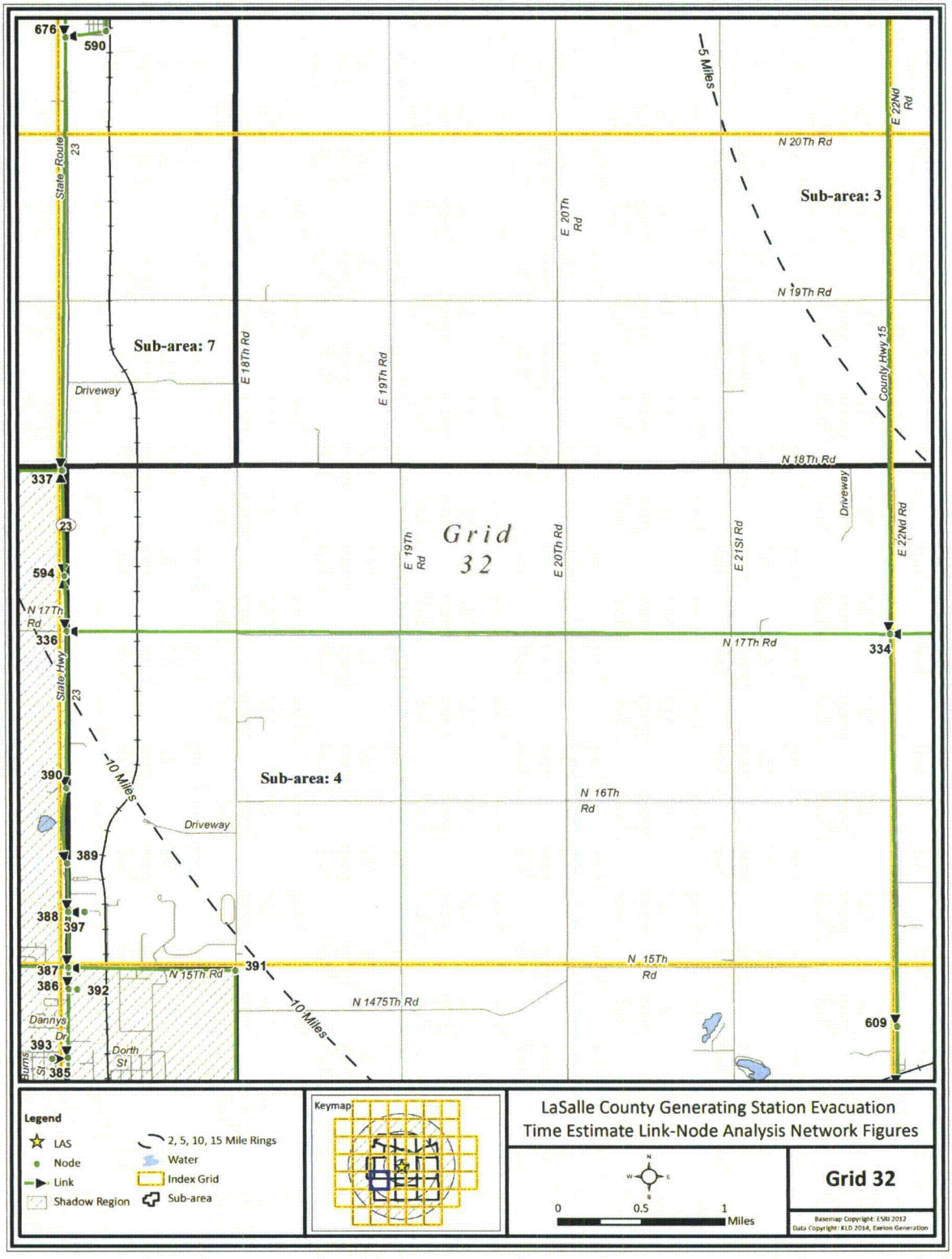

Figure K-33. Link-Node Analysis Network – Grid 32

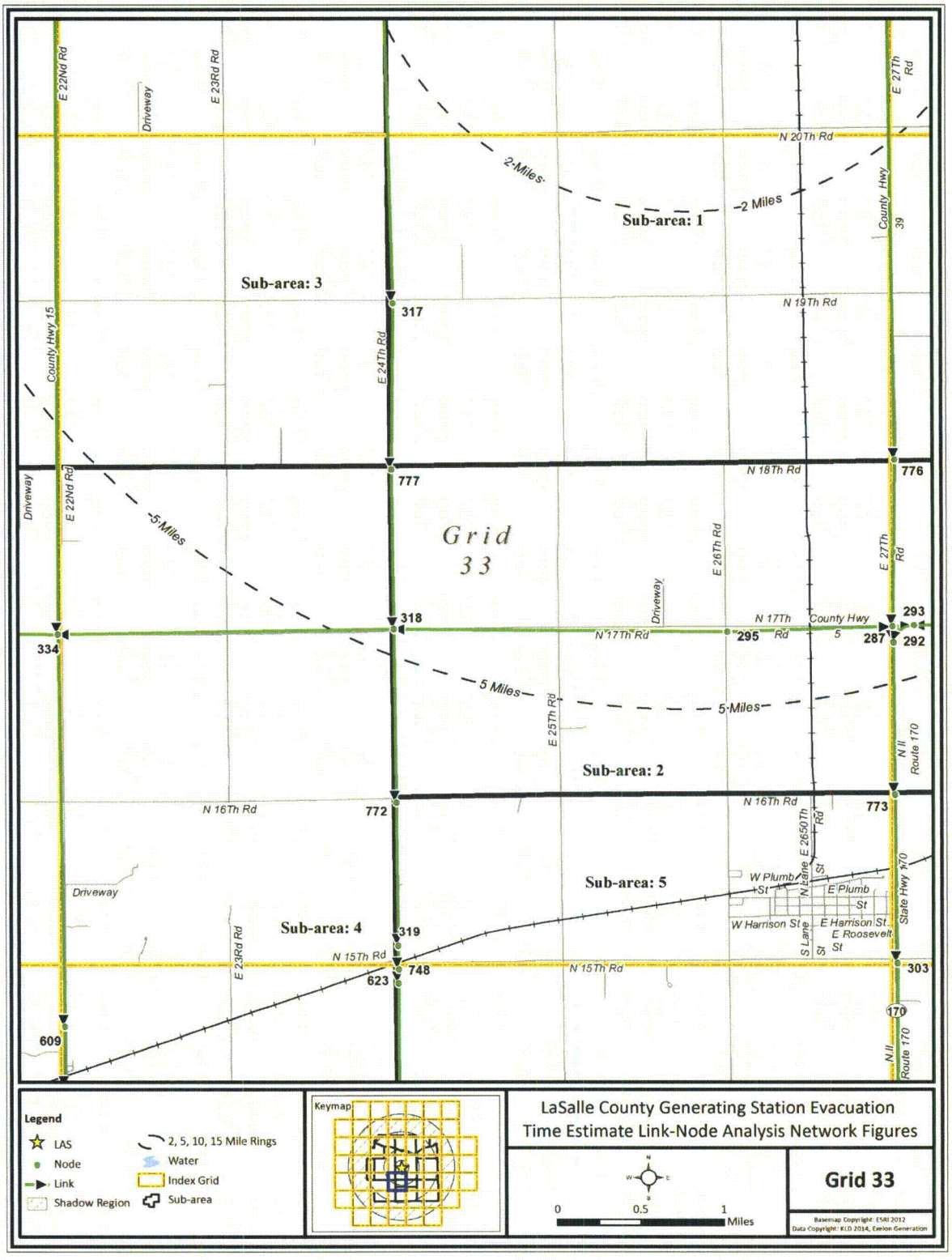

Figure K-34. Link-Node Analysis Network – Grid 33

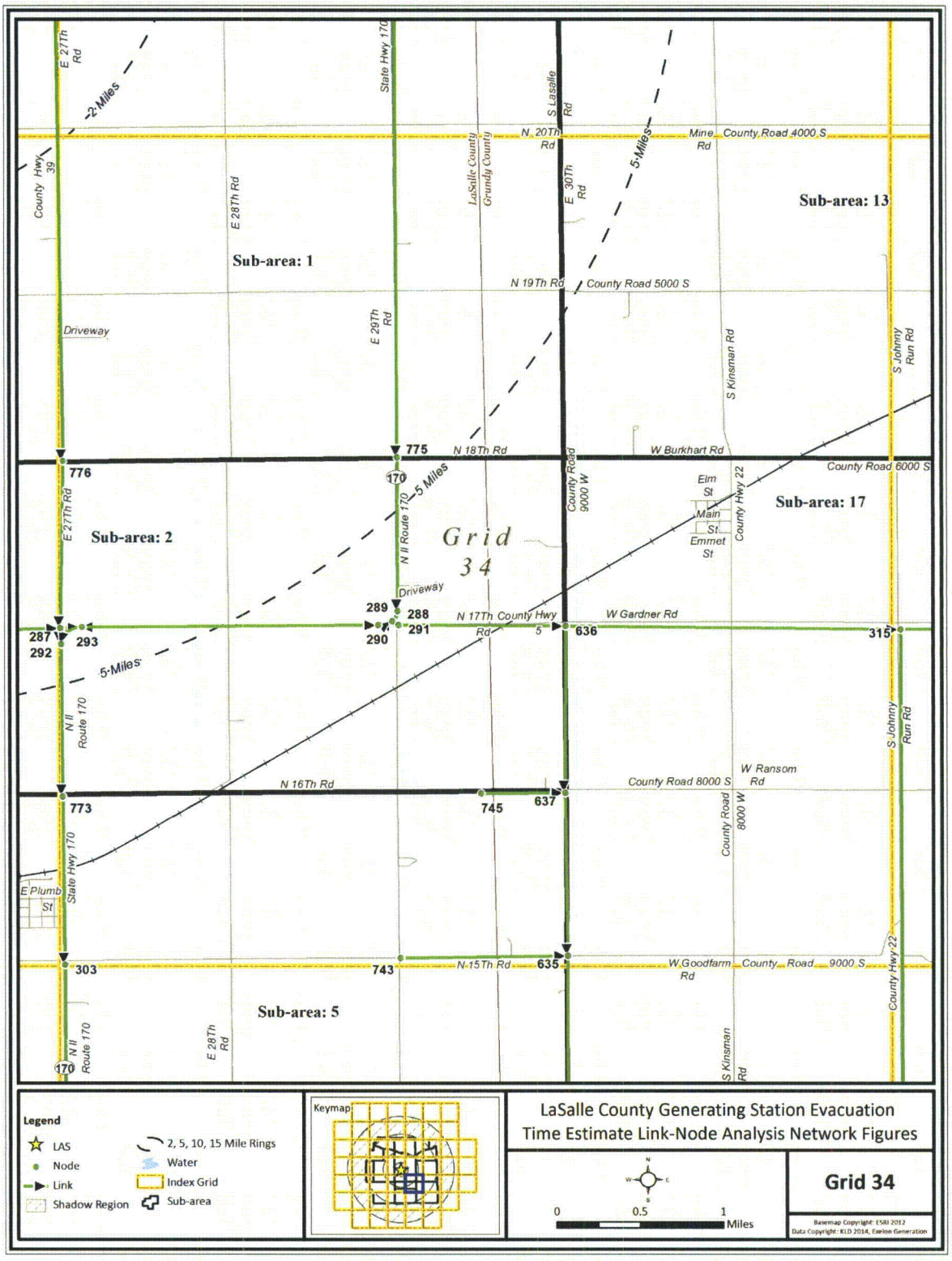

Figure K-35. Link-Node Analysis Network – Grid 34

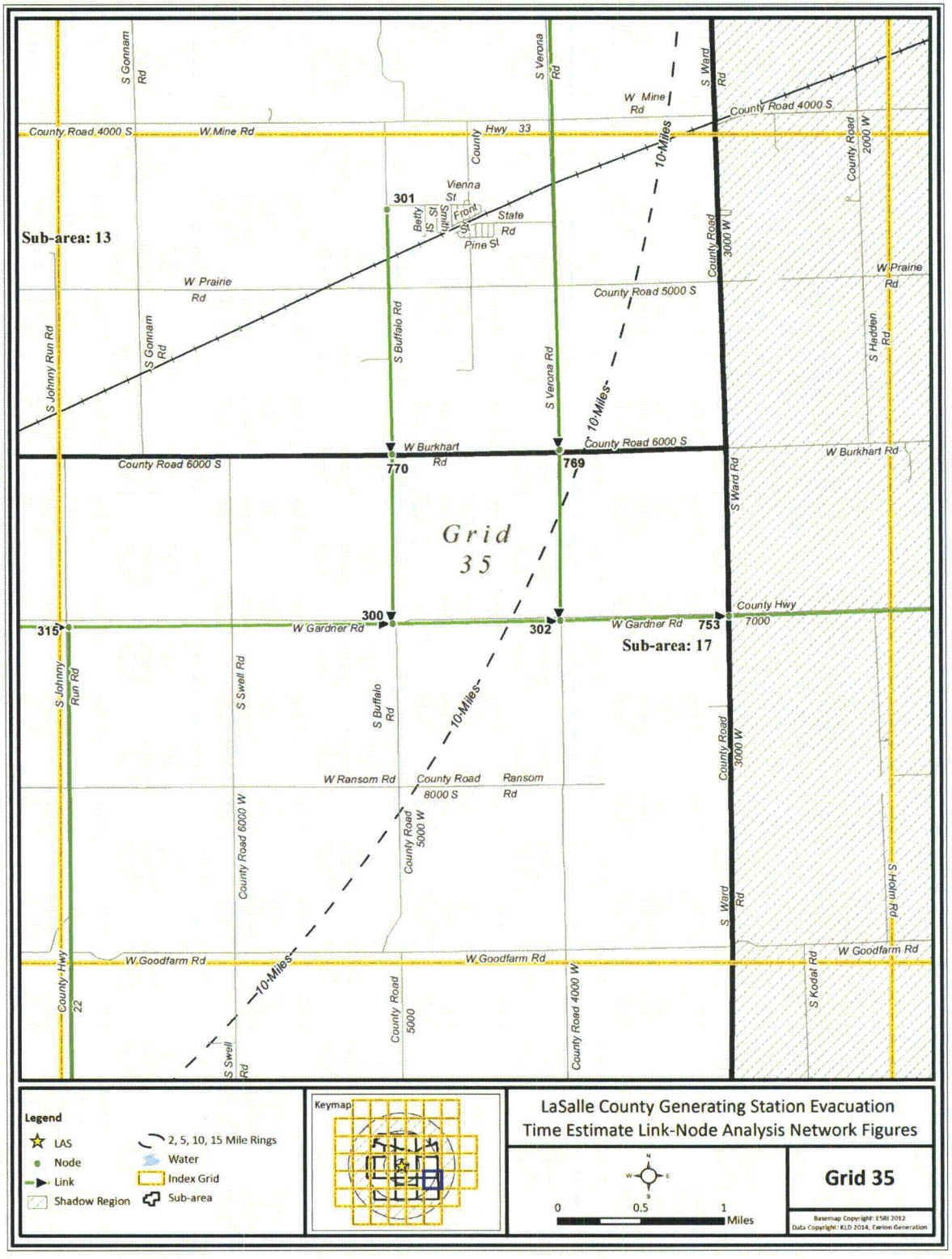

Figure K-36. Link-Node Analysis Network – Grid 35

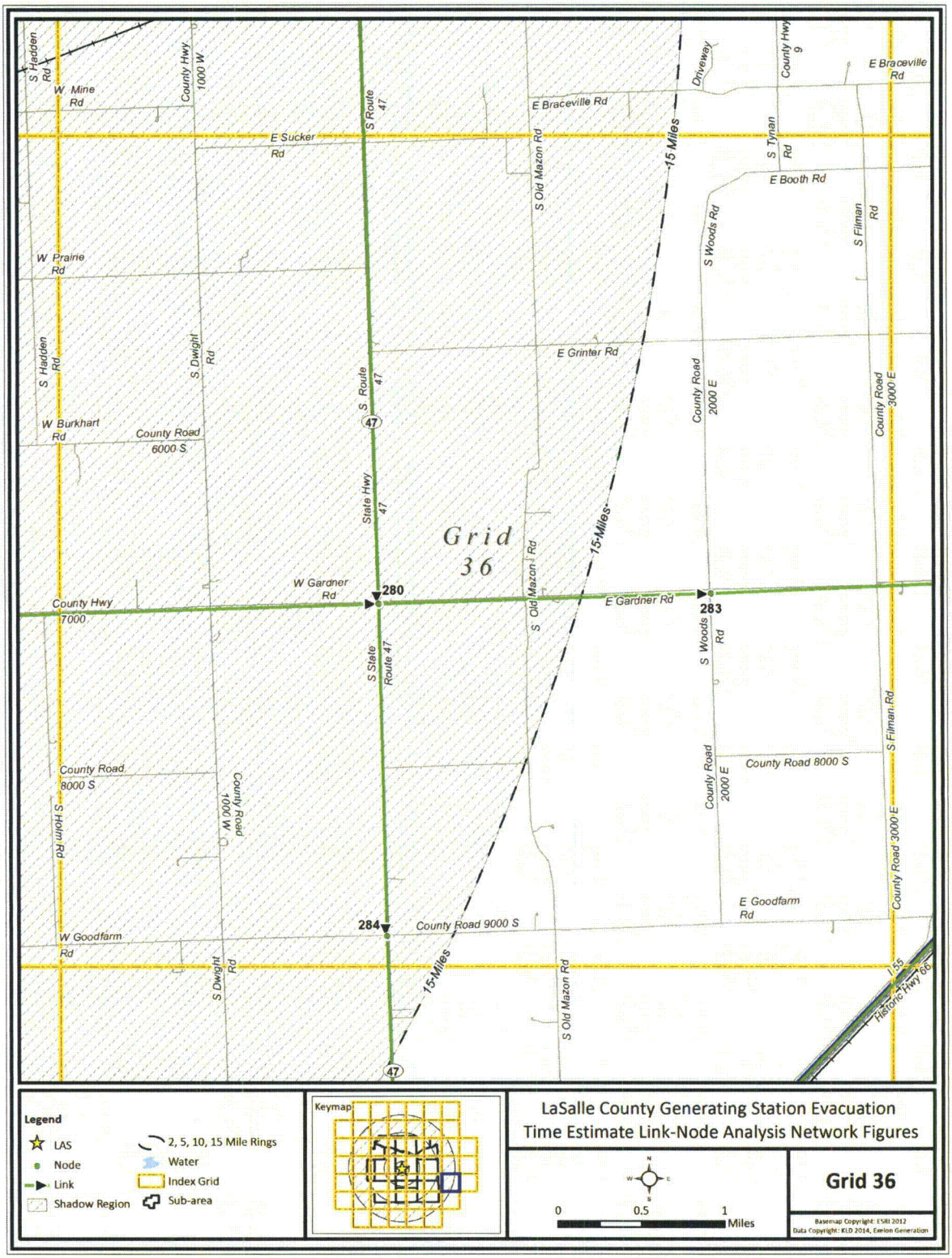

Figure K-37. Link-Node Analysis Network – Grid 36

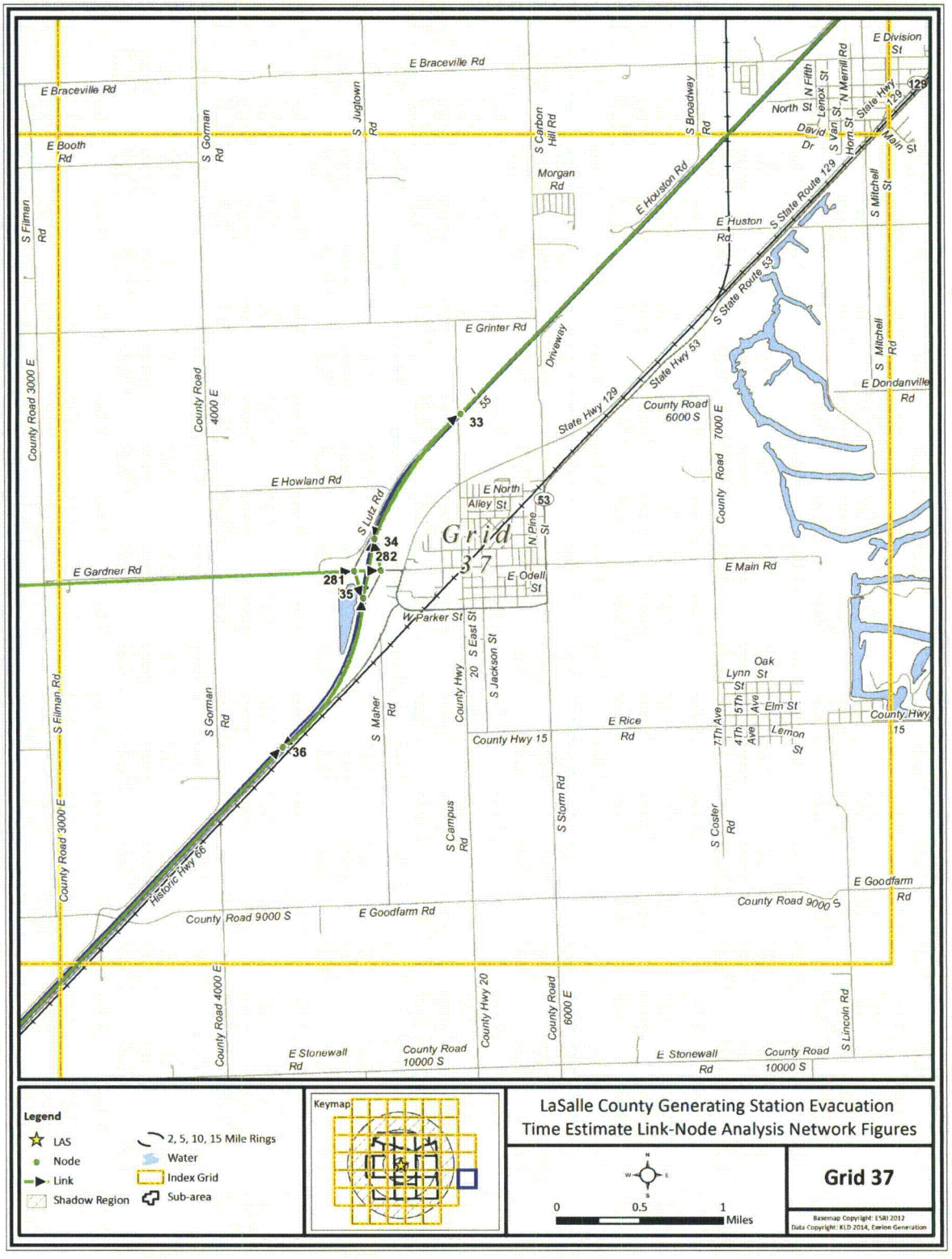

Figure K-38. Link-Node Analysis Network – Grid 37

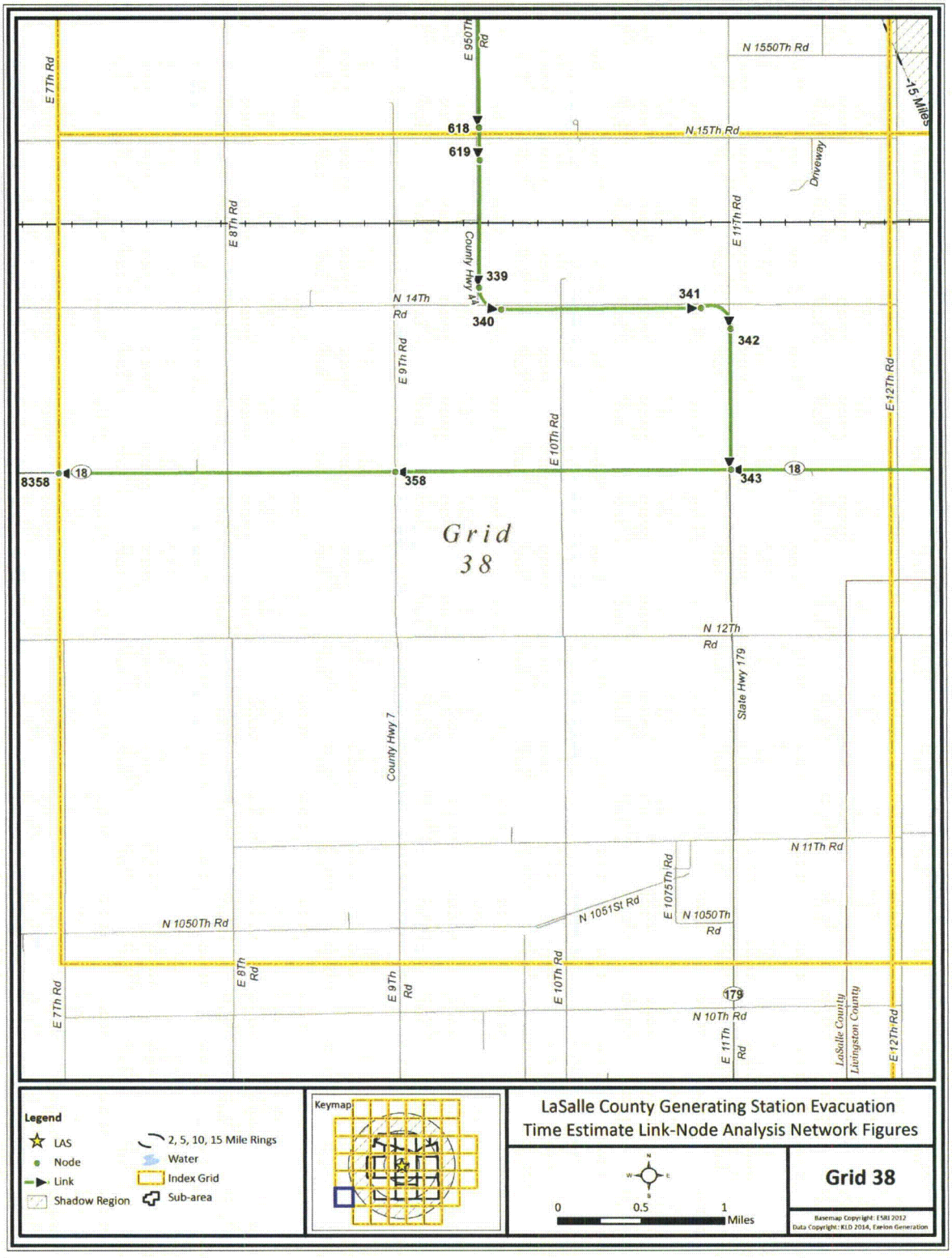

Figure K-39. Link-Node Analysis Network – Grid 38

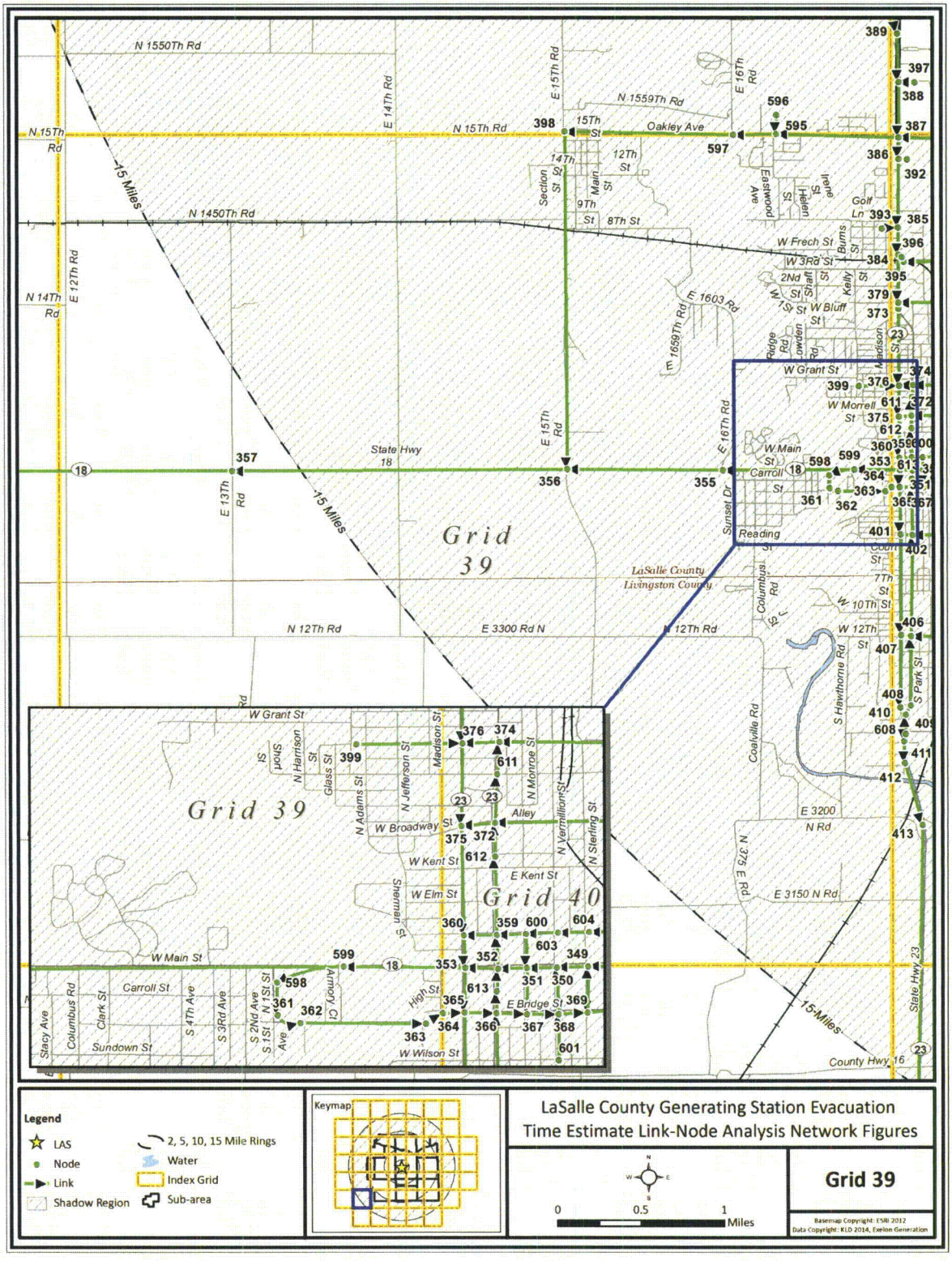

Figure K-40. Link-Node Analysis Network – Grid 39

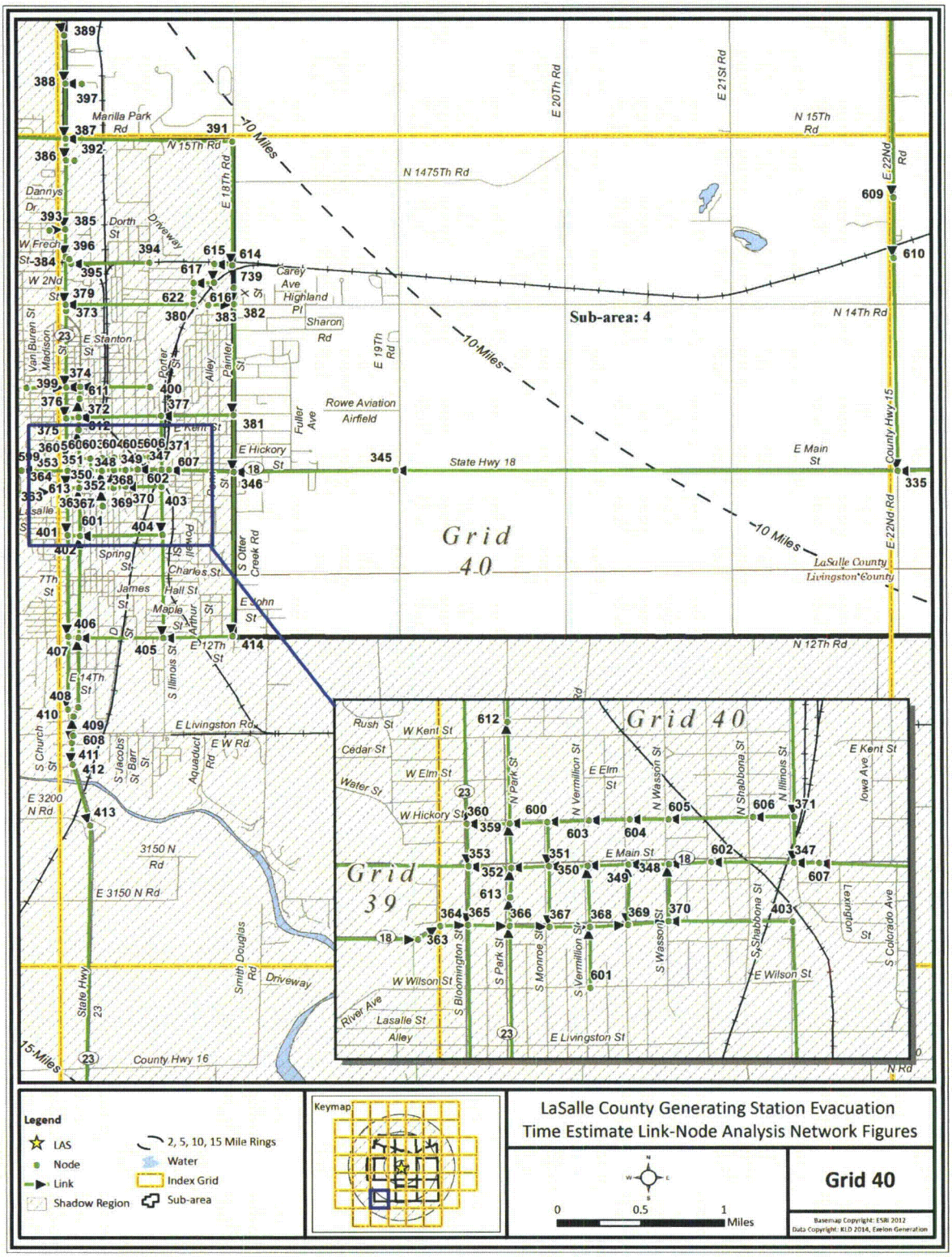

Figure K-41. Link-Node Analysis Network – Grid 40

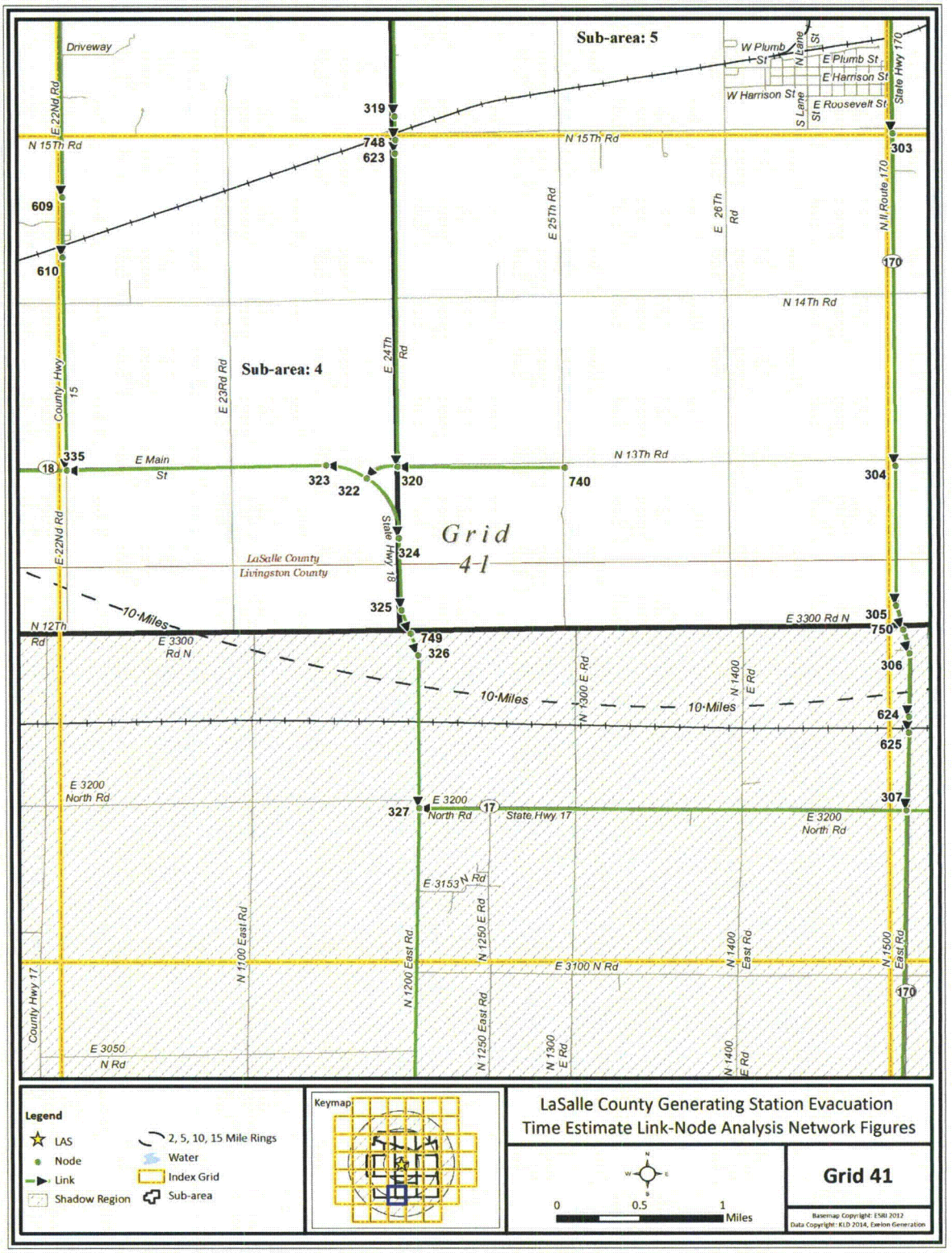

Figure K-42. Link-Node Analysis Network – Grid 41

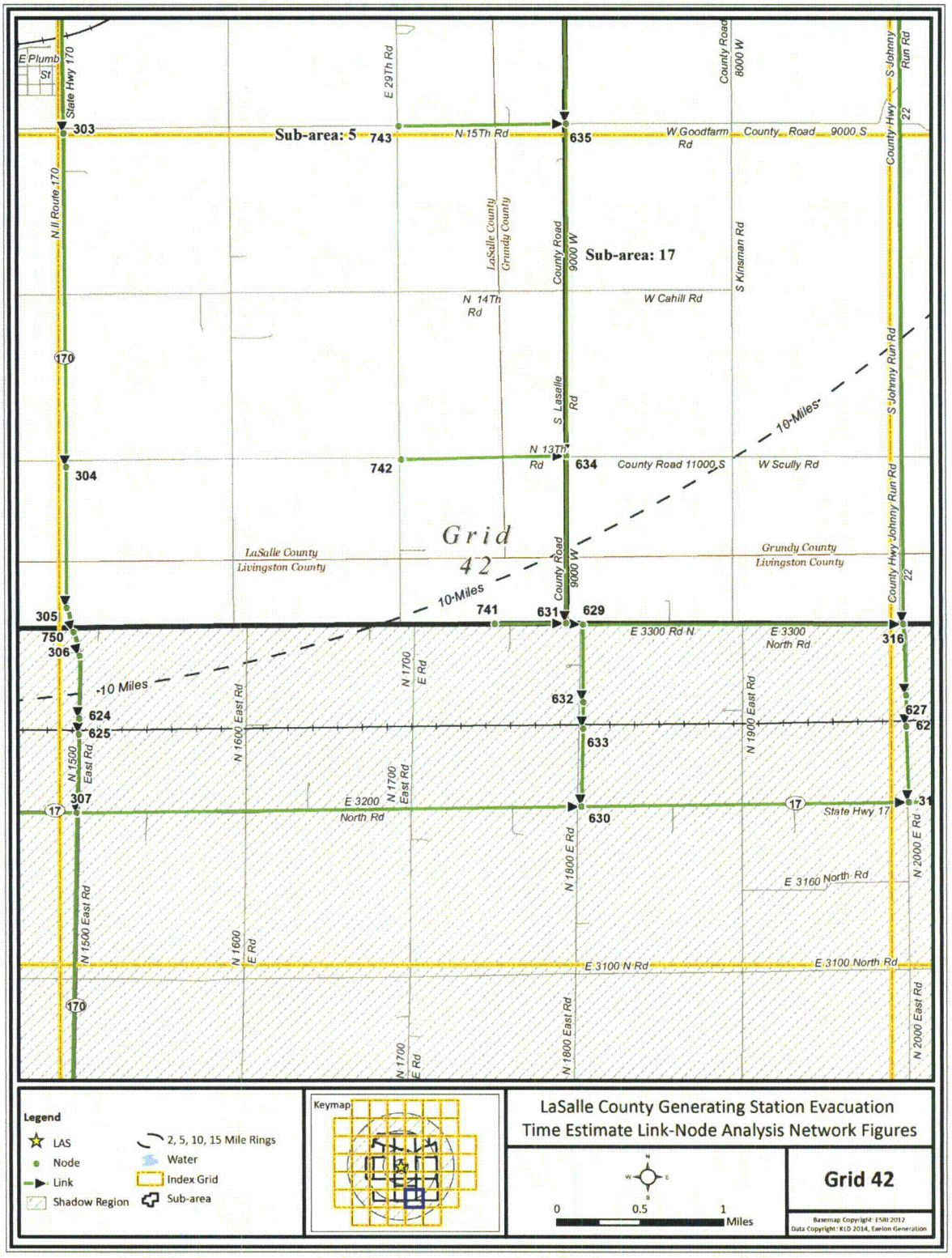

Figure K-43. Link-Node Analysis Network – Grid 42

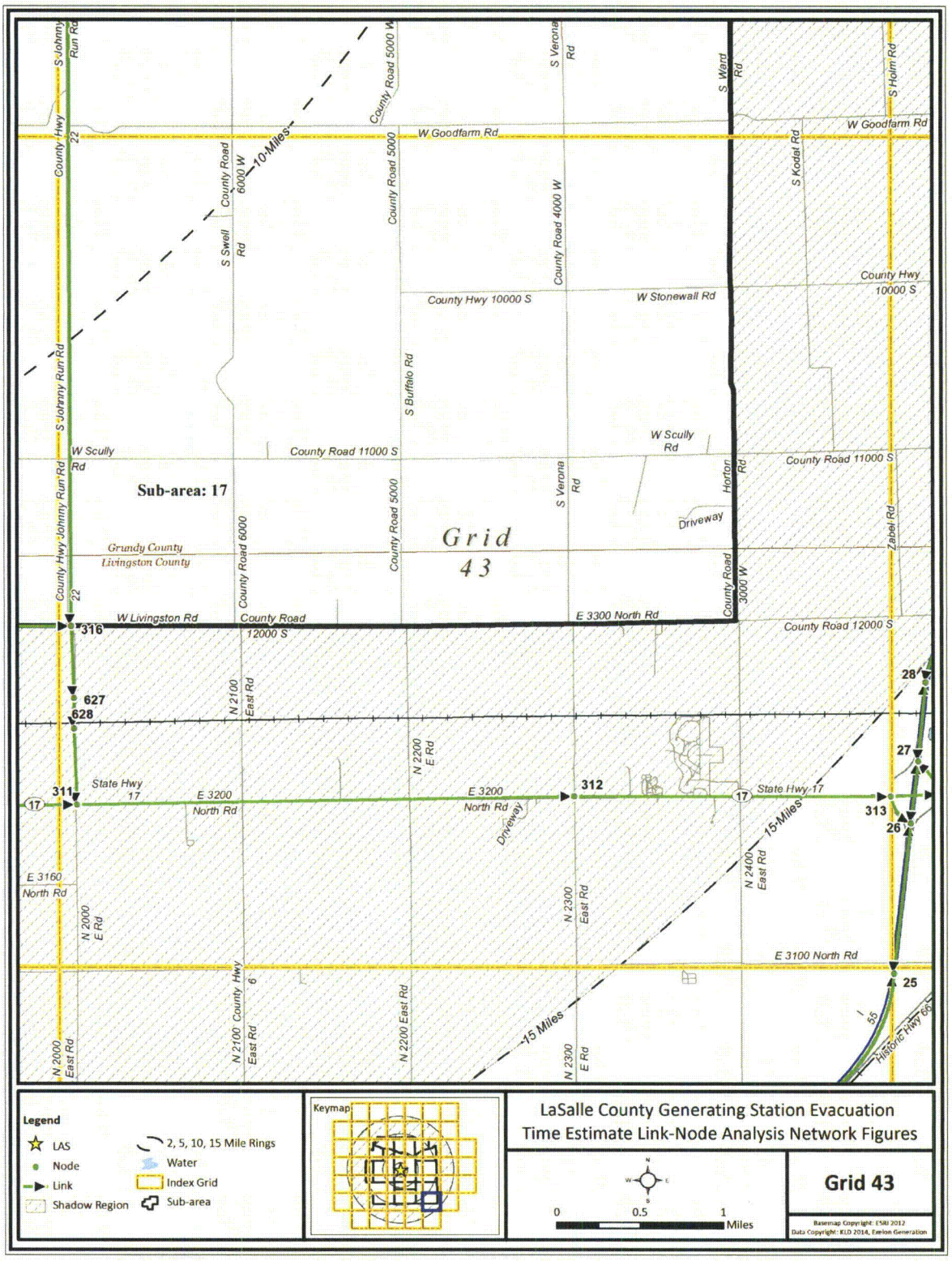

Figure K-44. Link-Node Analysis Network – Grid 43

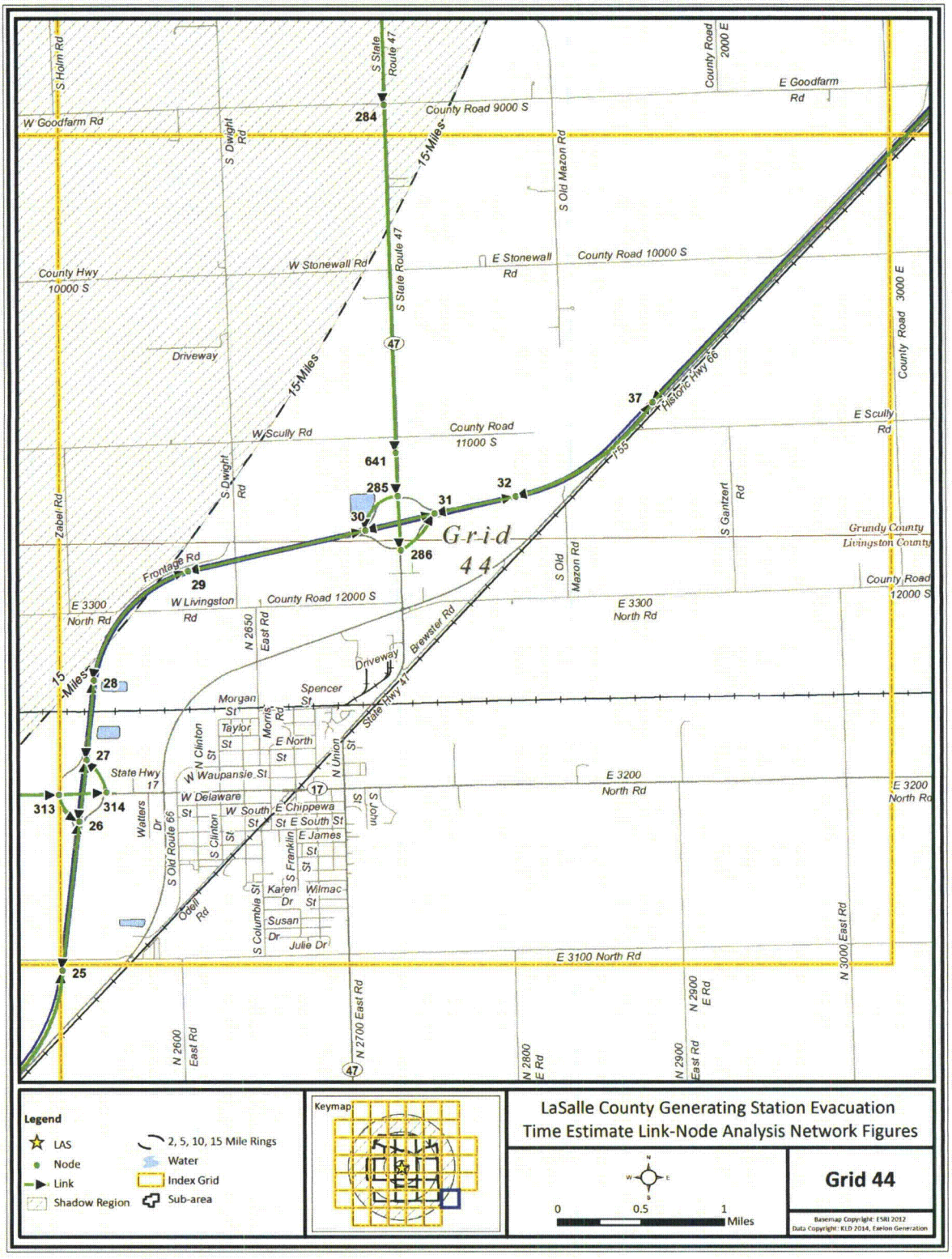

Figure K-45. Link-Node Analysis Network – Grid 44

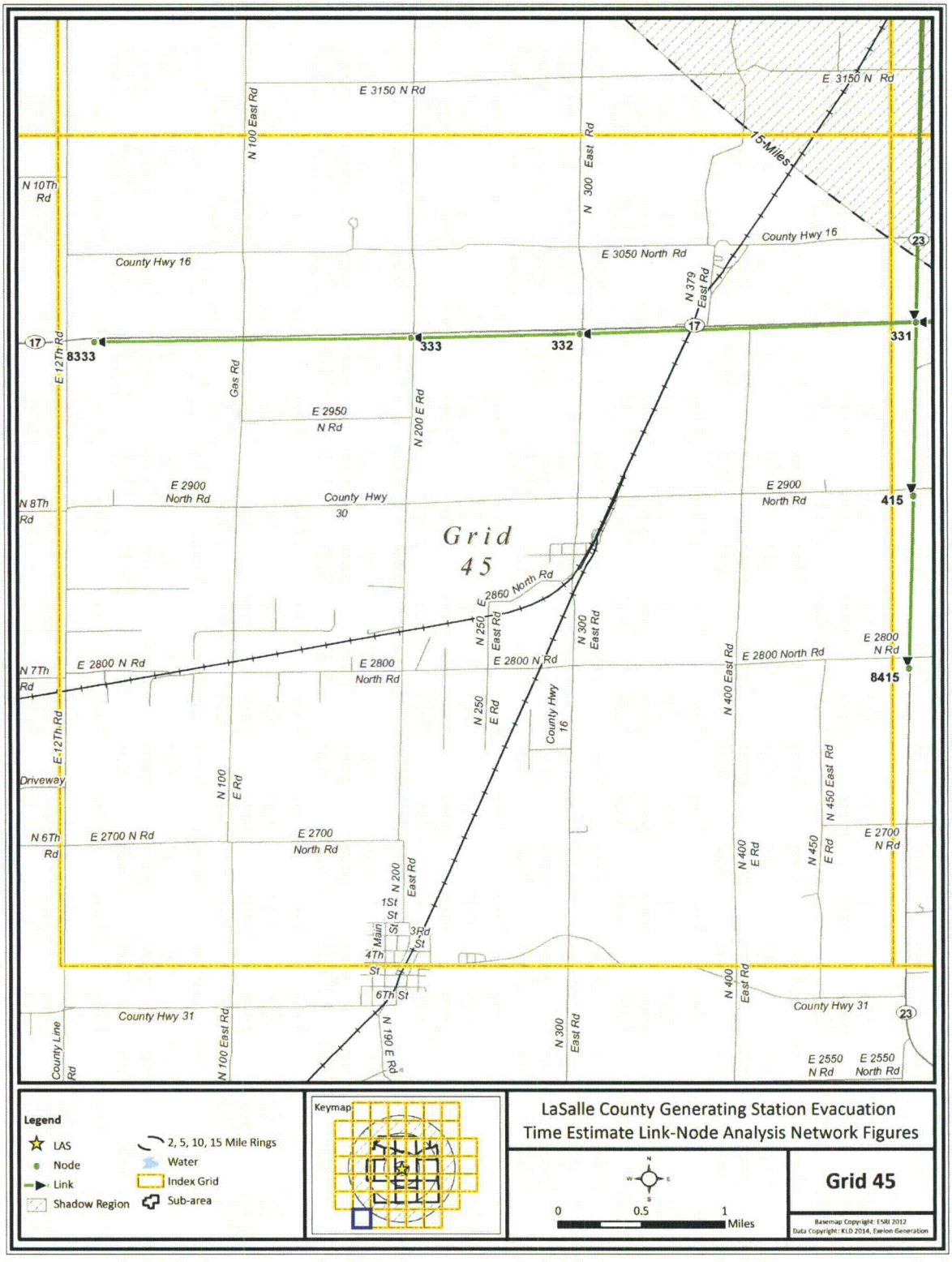

Figure K-46. Link-Node Analysis Network – Grid 45

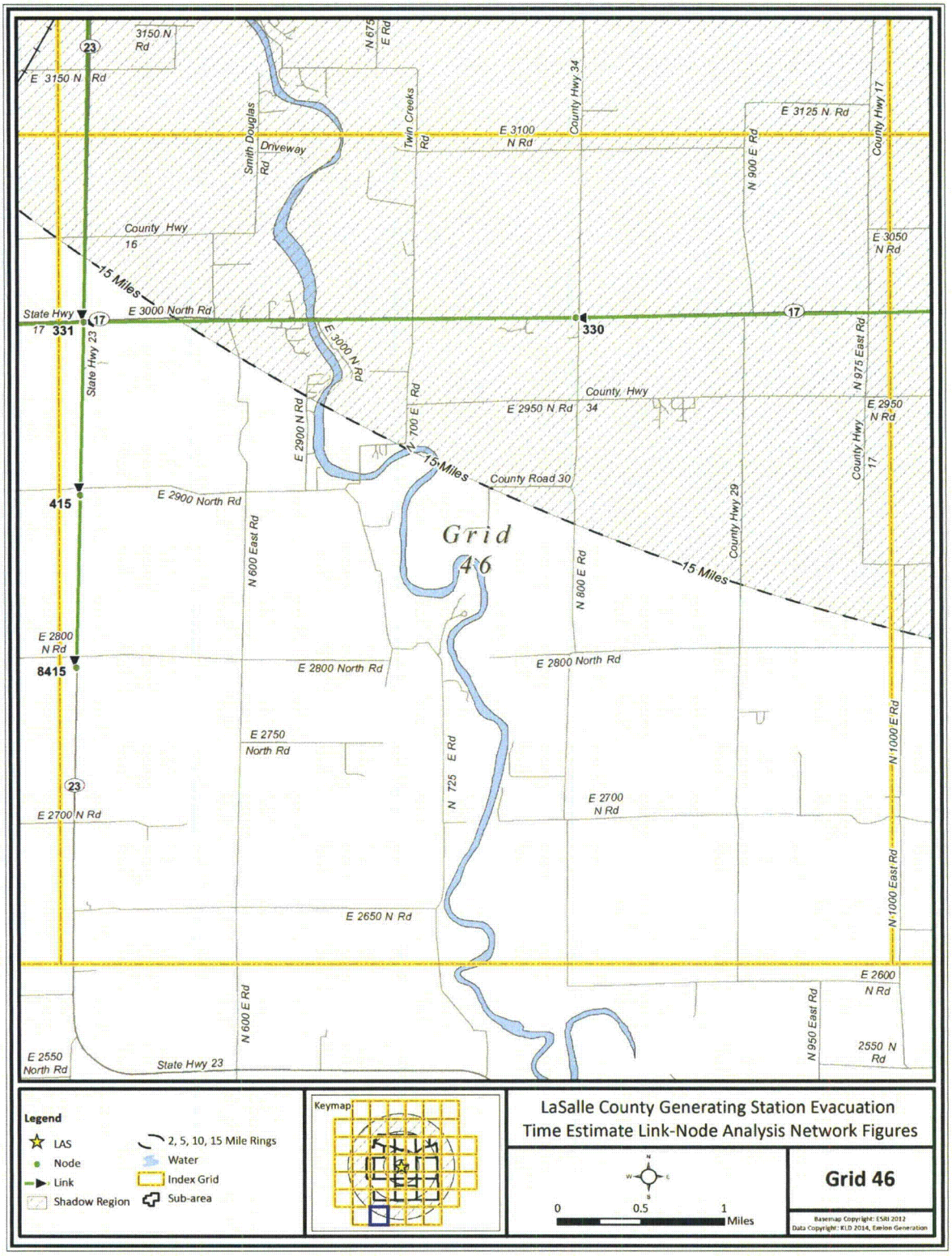

Figure K-47. Link-Node Analysis Network – Grid 46

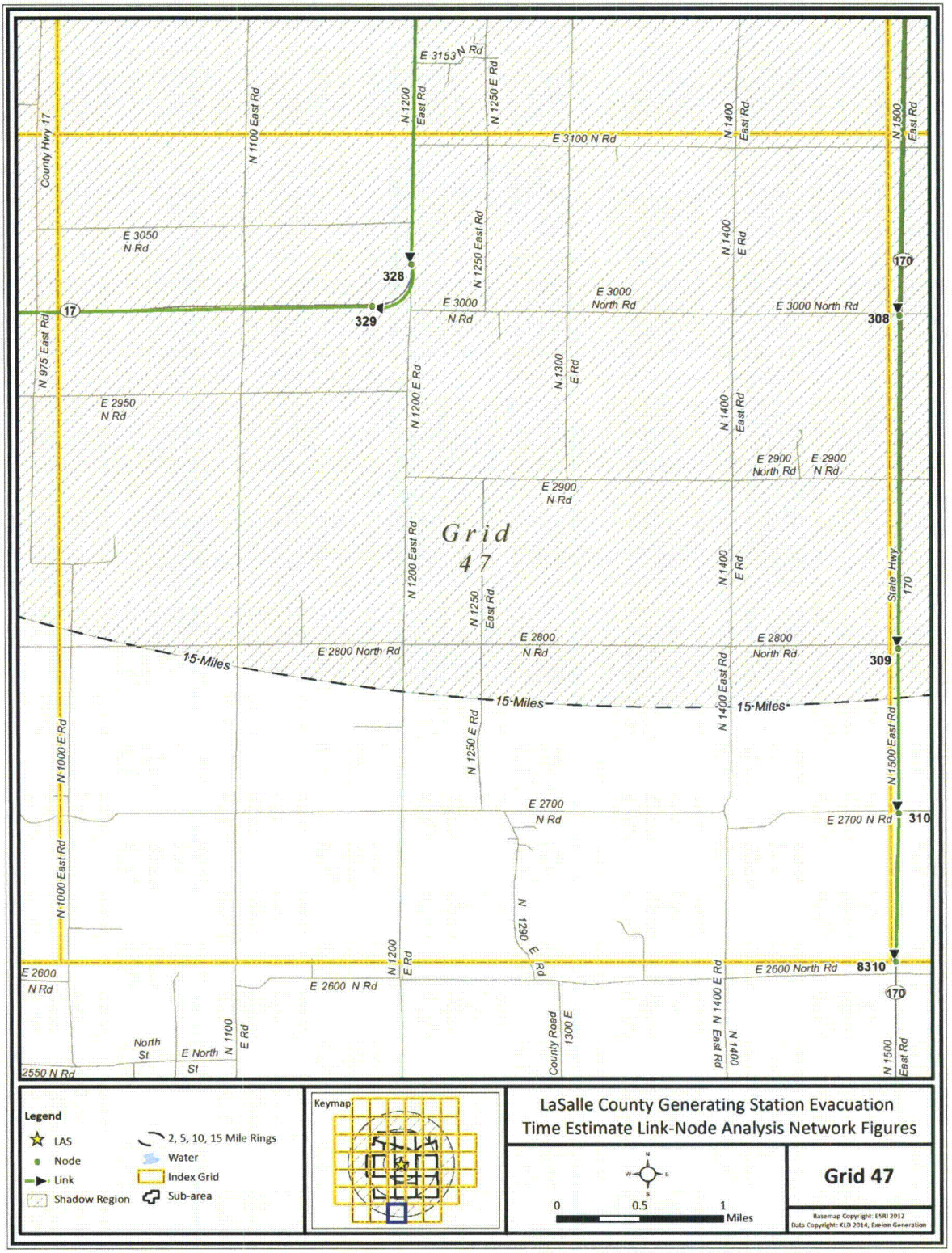

Figure K-48. Link-Node Analysis Network – Grid 47

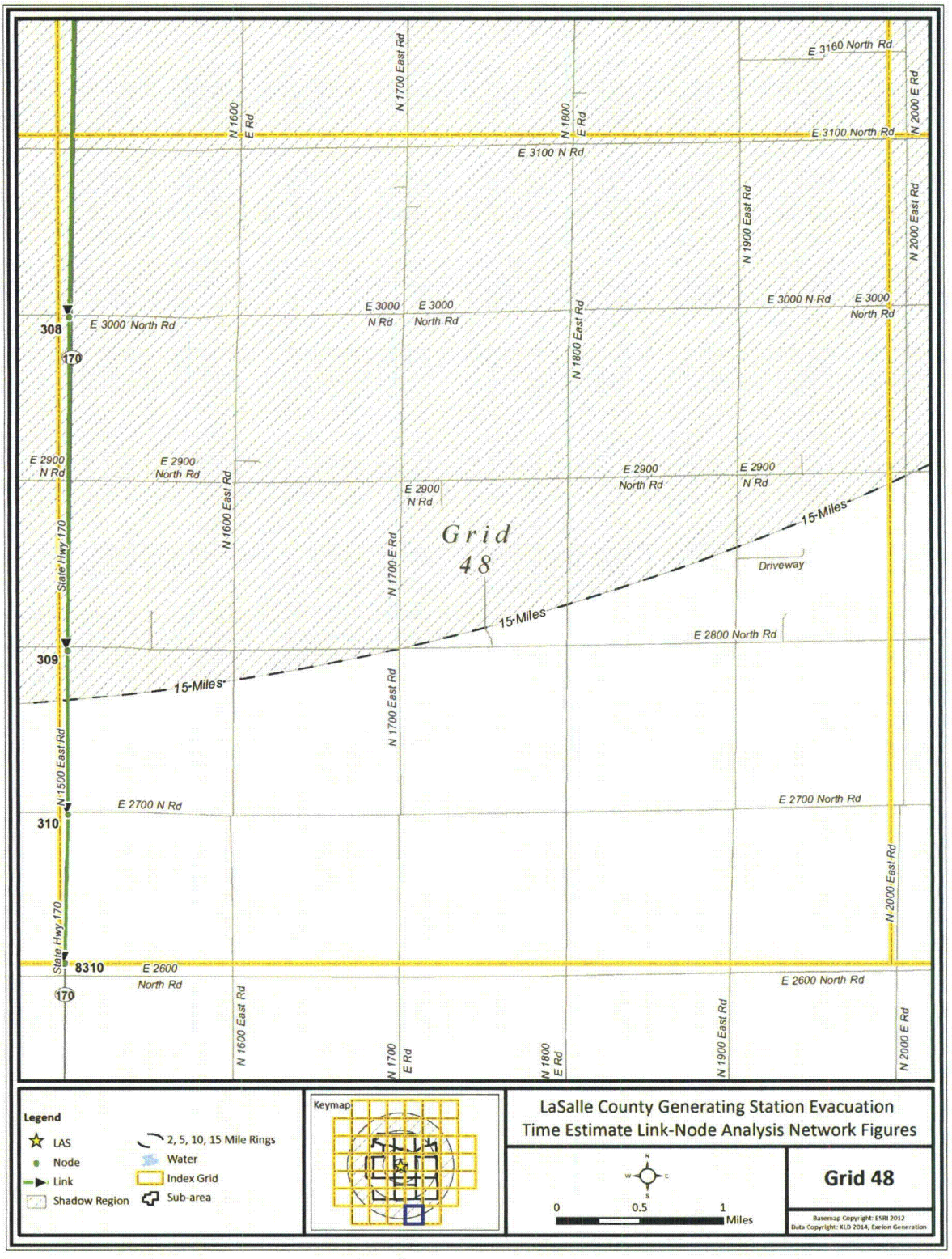

Figure K-49. Link-Node Analysis Network – Grid 48

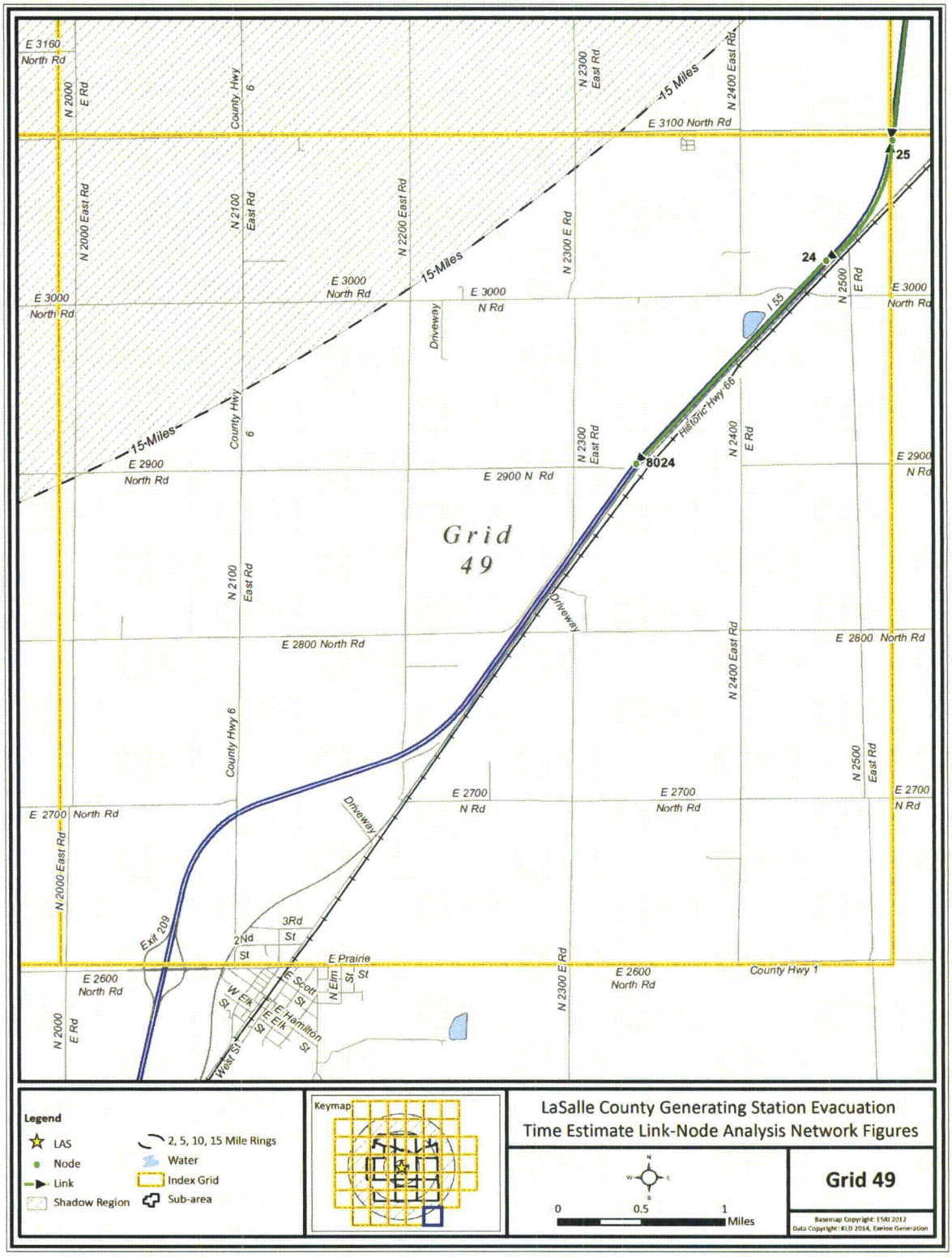

Figure K-50. Link-Node Analysis Network – Grid 49

Table K-1. Evacuation Roadway Network Characteristics

Link #	Up-Stream Node	Down-Stream Node	Roadway Name	Roadway Type	Length (ft.)	No. of Lanes	Lane Width (ft.)	Shoulder Width (ft.)	Saturation Flow Rate (pcphpl)	Free Flow Speed (mph)	Grid Number
1	3	4	INTERSTATE 80	FREEWAY	19557	2	12	10	2250	70	8
2	4	3	INTERSTATE 80	FREEWAY	19557	2	12	10	2250	70	8
3	4	5	INTERSTATE 80	FREEWAY	3952	2	12	10	2250	70	8
4	5	4	INTERSTATE 80	FREEWAY	3945	2	12	10	2250	70	8
5	5	6	INTERSTATE 80	FREEWAY	3278	2	12	10	2250	70	8
6	6	5	INTERSTATE 80	FREEWAY	3269	2	12	10	2250	70	8
7	6	7	INTERSTATE 80	FREEWAY	1273	2	12	10	2250	70	9
8	6	504	INTERSTATE 80 OFF-RAMP TO ROUTE 23	FREEWAY RAMP	751	1	16	4	1750	45	9
9	7	6	INTERSTATE 80	FREEWAY	1273	2	12	10	2250	70	9
10	7	8	INTERSTATE 80	FREEWAY	5826	2	12	10	2250	70	9
11	7	505	INTERSTATE 80 OFF-RAMP TO ROUTE 23	FREEWAY RAMP	704	1	16	4	1750	45	9
12	8	7	INTERSTATE 80	FREEWAY	5826	2	12	10	2250	70	9
13	8	9	INTERSTATE 80	FREEWAY	6001	2	12	10	2250	70	9
14	9	8	INTERSTATE 80	FREEWAY	5999	2	12	10	2250	70	9
15	9	10	INTERSTATE 80	FREEWAY	2486	2	12	10	2250	70	9
16	10	9	INTERSTATE 80	FREEWAY	2486	2	12	10	2250	70	9
17	10	11	INTERSTATE 80	FREEWAY	1908	2	12	10	2250	70	9
18	11	10	INTERSTATE 80	FREEWAY	1908	2	12	10	2250	70	9
19	11	12	INTERSTATE 80	FREEWAY	2400	2	12	10	2250	70	9
20	12	11	INTERSTATE 80	FREEWAY	2400	2	12	10	2250	70	9
21	12	13	INTERSTATE 80	FREEWAY	15621	2	12	10	2250	70	10

Link #	Up-Stream Node	Down-Stream Node	Roadway Name	Roadway Type	Length (ft.)	No. of Lanes	Lane Width (ft.)	Shoulder Width (ft.)	Saturation Flow Rate (pcphpl)	Free Flow Speed (mph)	Grid Number
22	13	12	INTERSTATE 80	FREEWAY	15621	2	12	10	2250	70	10
23	13	14	INTERSTATE 80	FREEWAY	1737	2	12	10	2250	70	10
24	14	13	INTERSTATE 80	FREEWAY	1737	2	12	10	2250	70	10
25	14	670	INTERSTATE 80	FREEWAY	8767	2	12	10	2250	70	10
26	15	670	INTERSTATE 80	FREEWAY	10578	2	12	10	2250	70	10
27	15	671	INTERSTATE 80	FREEWAY	10718	2	12	10	2250	70	11
28	16	17	INTERSTATE 80	FREEWAY	1536	2	12	10	2250	70	11
29	16	671	INTERSTATE 80	FREEWAY	9196	2	12	10	2250	70	11
30	17	16	INTERSTATE 80	FREEWAY	1536	2	12	10	2250	70	11
31	17	18	INTERSTATE 80	FREEWAY	20456	2	12	10	2250	70	12
32	18	17	INTERSTATE 80	FREEWAY	20456	2	12	10	2250	70	12
33	18	19	INTERSTATE 80	FREEWAY	8886	2	12	10	2250	70	12
34	19	18	INTERSTATE 80	FREEWAY	8886	2	12	10	2250	70	12
35	19	20	INTERSTATE 80	FREEWAY	4252	2	12	10	2250	70	13
36	20	19	INTERSTATE 80	FREEWAY	4258	2	12	10	2250	70	13
37	20	21	INTERSTATE 80	FREEWAY	3011	2	12	10	2250	70	13
38	21	20	INTERSTATE 80	FREEWAY	3011	2	12	10	2250	70	13
39	21	22	INTERSTATE 80	FREEWAY	1655	2	12	10	2250	70	13
40	21	228	INTERSTATE 80 OFF-RAMP TO ROUTE 47	FREEWAY RAMP	602	1	12	6	1750	45	13
41	22	21	INTERSTATE 80	FREEWAY	1655	2	12	10	2250	70	13
42	22	23	INTERSTATE 80	FREEWAY	8969	3	12	10	2250	70	13
43	22	229	INTERSTATE 80 OFF-RAMP TO ROUTE 47	FREEWAY RAMP	737	1	12	6	1750	45	13
44	23	22	INTERSTATE 80	FREEWAY	8969	2	12	10	2250	70	13

Link #	Up-Stream Node	Down-Stream Node	Roadway Name	Roadway Type	Length (ft.)	No. of Lanes	Lane Width (ft.)	Shoulder Width (ft.)	Saturation Flow Rate (pcphpl)	Free Flow Speed (mph)	Grid Number
45	24	25	INTERSTATE 55	FREEWAY	4508	2	12	10	2250	70	49
46	25	24	INTERSTATE 55	FREEWAY	4500	2	12	10	2250	70	49
47	25	26	INTERSTATE 55	FREEWAY	4788	2	12	10	2250	70	44
48	26	25	INTERSTATE 55	FREEWAY	4788	2	12	10	2250	70	44
49	26	27	INTERSTATE 55	FREEWAY	1986	2	12	10	2250	70	44
50	27	26	INTERSTATE 55	FREEWAY	1986	2	12	10	2250	70	44
51	27	28	INTERSTATE 55	FREEWAY	2526	2	12	10	2250	70	44
52	28	27	INTERSTATE 55	FREEWAY	2526	2	12	10	2250	70	44
53	28	29	INTERSTATE 55	FREEWAY	4793	2	12	10	2250	70	44
54	29	28	INTERSTATE 55	FREEWAY	4789	2	12	10	2250	70	44
55	29	30	INTERSTATE 55	FREEWAY	5788	2	12	10	2250	70	44
56	30	29	INTERSTATE 55	FREEWAY	5788	2	12	10	2250	70	44
57	30	31	INTERSTATE 55	FREEWAY	2273	2	12	10	2250	70	44
58	31	30	INTERSTATE 55	FREEWAY	2273	2	12	10	2250	70	44
59	31	32	INTERSTATE 55	FREEWAY	2640	2	12	10	2250	70	44
60	32	31	INTERSTATE 55	FREEWAY	2640	2	12	10	2250	70	44
61	32	37	INTERSTATE 55	FREEWAY	5403	2	12	10	2250	70	44
62	33	34	INTERSTATE 55	FREEWAY	4872	2	12	10	2250	70	37
63	34	33	INTERSTATE 55	FREEWAY	4859	2	12	10	2250	70	37
64	34	35	INTERSTATE 55	FREEWAY	1913	2	12	10	2250	70	37
65	35	34	INTERSTATE 55	FREEWAY	1637	2	12	10	2250	70	37
66	35	36	INTERSTATE 55	FREEWAY	5570	2	12	10	2250	70	37
67	36	35	INTERSTATE 55	FREEWAY	5583	2	12	10	2250	70	37
68	36	37	INTERSTATE 55	FREEWAY	21200	2	12	10	2250	70	44
69	37	32	INTERSTATE 55	FREEWAY	5393	2	12	10	2250	70	44

Link #	Up-Stream Node	Down-Stream Node	Roadway Name	Roadway Type	Length (ft.)	No. of Lanes	Lane Width (ft.)	Shoulder Width (ft.)	Saturation Flow Rate (pcphpl)	Free Flow Speed (mph)	Grid Number
70	37	36	INTERSTATE 55	FREEWAY	21109	2	12	10	2250	70	44
71	38	39	US 6	COLLECTOR	4843	1	12	1	1700	50	17
72	38	59	US 6	COLLECTOR	1059	1	12	1	1700	50	17
73	39	58	US 6	COLLECTOR	516	1	12	1	1700	40	17
74	40	41	US 6	COLLECTOR	5607	1	14	0	1700	40	17
75	41	43	ROUTE 6	COLLECTOR	276	1	14	0	1700	40	17
76	41	109	ROUTE 15	COLLECTOR	593	1	12	2	1575	35	17
77	43	44	US 6	COLLECTOR	278	1	14	0	1700	40	17
78	44	45	US 6	COLLECTOR	2655	1	14	0	1700	40	17
79	45	46	US 6	COLLECTOR	373	1	14	0	1700	40	17
80	46	47	US 6	COLLECTOR	2423	1	14	0	1700	50	17
81	47	48	US 6	COLLECTOR	1862	1	12	4	1700	60	17
82	48	49	US 6	COLLECTOR	2284	1	12	4	1700	60	17
83	49	50	US 6	COLLECTOR	771	1	12	4	1700	60	16
84	50	57	US 6	COLLECTOR	2614	1	12	4	1700	60	16
85	51	52	US 6	COLLECTOR	3676	1	12	4	1700	60	16
86	52	53	US 6	COLLECTOR	3288	1	12	4	1700	60	16
87	53	54	US 6	COLLECTOR	2118	1	12	4	1700	60	16
88	54	56	US 6	COLLECTOR	2389	1	12	4	1700	60	16
89	55	454	US 6	MINOR ARTERIAL	1409	2	12	2	1900	50	16
90	55	699	ROUTE 71	MINOR ARTERIAL	346	2	12	6	1900	50	16
91	56	55	US 6	COLLECTOR	607	1	12	2	1750	45	16
92	56	699	ROUTE 71	COLLECTOR	571	1	12	0	1700	45	16
93	57	51	US 6	COLLECTOR	2359	1	12	4	1700	60	16
94	58	40	US 6	COLLECTOR	453	1	12	1	1700	40	17

Link #	Up-Stream Node	Down-Stream Node	Roadway Name	Roadway Type	Length (ft.)	No. of Lanes	Lane Width (ft.)	Shoulder Width (ft.)	Saturation Flow Rate (pcphpl)	Free Flow Speed (mph)	Grid Number
95	59	38	US 6	COLLECTOR	1046	1	12	4	1700	50	17
96	59	60	US 6	COLLECTOR	4388	1	12	1	1700	50	17
97	59	667	E 2625TH RD	LOCAL ROADWAY	2166	1	10	0	1700	40	17
98	60	61	US 6	COLLECTOR	2805	1	12	1	1700	50	18
99	61	62	US 6	COLLECTOR	1873	1	12	1	1700	50	18
100	62	63	US 6	COLLECTOR	1330	1	12	1	1700	50	18
101	63	64	US 6	COLLECTOR	3434	1	12	1	1700	60	18
102	64	65	US 6	COLLECTOR	2242	1	12	1	1750	40	18
103	65	66	US 6	COLLECTOR	2299	1	12	3	1700	40	18
104	65	650	ROUTE 25	COLLECTOR	1081	1	12	1	1700	40	18
105	66	67	US 6	COLLECTOR	1308	1	12	3	1700	55	18
106	67	68	US 6	COLLECTOR	2876	1	12	3	1700	60	18
107	68	69	US 6	COLLECTOR	3319	1	12	3	1700	60	18
108	69	70	US 6	COLLECTOR	5152	1	12	3	1700	60	18
109	70	694	US 6	COLLECTOR	1711	1	12	4	1700	50	18
110	71	72	US 6	COLLECTOR	8578	1	12	2	1750	60	18
111	72	73	US 6	COLLECTOR	10595	1	12	6	1700	50	12
112	72	81	SENECA RD	COLLECTOR	2089	1	12	4	1700	50	11
113	73	74	US 6	COLLECTOR	10591	1	12	4	1700	50	12
114	74	75	US 6	COLLECTOR	8694	1	12	6	1700	55	12
115	74	238	SARATOGA RD	COLLECTOR	5406	1	11	0	1700	45	12
116	75	76	US 6	COLLECTOR	1347	1	12	4	1750	50	13
117	76	77	US 6	COLLECTOR	3121	1	12	2	1750	45	13
118	77	78	US 6	COLLECTOR	743	1	12	1	1750	35	13
119	78	79	US 6	COLLECTOR	165	1	12	1	1750	35	13

Link #	Up-Stream Node	Down-Stream Node	Roadway Name	Roadway Type	Length (ft.)	No. of Lanes	Lane Width (ft.)	Shoulder Width (ft.)	Saturation Flow Rate (pcphpl)	Free Flow Speed (mph)	Grid Number
120	78	223	LISBON ST	COLLECTOR	2713	1	12	4	1350	35	13
121	79	202	US 6	COLLECTOR	1237	1	12	1	1350	35	13
122	80	226	ROUTE 47	MINOR ARTERIAL	762	2	12	0	1750	45	13
123	81	17	INTERSTATE 80 ON-RAMP FROM ROUTE 6	FREEWAY RAMP	901	1	14	6	1700	45	11
124	81	82	SENECA RD	COLLECTOR	1004	1	12	6	1700	50	11
125	82	697	SENECA RD	COLLECTOR	1029	1	12	6	1700	50	11
126	83	84	ROUTE 6	COLLECTOR	5335	1	12	1	1700	55	25
127	83	89	ROUTE 6	COLLECTOR	5177	1	12	1	1700	55	25
128	84	85	ROUTE 6	COLLECTOR	10775	1	12	2	1700	55	26
129	84	776	ROUTE 39	COLLECTOR	15763	1	12	1	1700	60	34
130	85	127	ROUTE 170	COLLECTOR	5347	1	12	2	1700	55	26
131	85	774	ROUTE 6	COLLECTOR	5184	1	12	2	1700	60	26
132	85	775	ROUTE 170	COLLECTOR	15753	1	12	2	1700	60	34
133	86	87	ROUTE 9	COLLECTOR	13284	1	12	2	1700	60	27
134	86	299	GONNAM RD	COLLECTOR	12607	1	12	1	1700	60	27
135	87	178	VERONA RD	COLLECTOR	23994	1	12	1	1700	50	27
136	87	752	ROUTE 9	COLLECTOR	5141	1	12	2	1700	60	27
137	87	769	VERONA RD	COLLECTOR	15735	1	12	1	1700	55	35
138	88	278	ROUTE 47	COLLECTOR	5309	1	12	2	1700	45	28
139	88	280	ROUTE 47	COLLECTOR	21219	1	12	1	1700	60	36
140	89	321	ROUTE 6	COLLECTOR	5459	1	12	1	1700	55	25
141	89	416	ROUTE 30	COLLECTOR	13326	1	12	2	1700	50	25
142	90	334	ROUTE 15	COLLECTOR	21070	1	12	1	1700	60	32
143	90	425	ROUTE 15	COLLECTOR	10568	1	12	1	1700	60	24

Link #	Up-Stream Node	Down-Stream Node	Roadway Name	Roadway Type	Length (ft.)	No. of Lanes	Lane Width (ft.)	Shoulder Width (ft.)	Saturation Flow Rate (pcphpl)	Free Flow Speed (mph)	Grid Number
144	90	592	ROUTE 6	COLLECTOR	22307	1	12	1	1700	55	24
145	91	92	ROUTE 6	COLLECTOR	5309	1	12	0	1700	55	23
146	91	675	ROUTE 23	COLLECTOR	1597	1	12	1	1700	45	24
147	91	676	ROUTE 23	COLLECTOR	2102	1	12	4	1700	45	24
148	92	93	ROUTE 6	COLLECTOR	2543	1	12	0	1700	55	23
149	93	754	ROUTE 6	COLLECTOR	5335	1	12	0	1700	60	23
150	94	95	ROUTE 6	COLLECTOR	4145	1	12	0	1700	55	23
151	95	96	ROUTE 6	COLLECTOR	1873	1	12	0	1700	40	23
152	96	97	ROUTE 6	COLLECTOR	1876	1	12	0	1700	40	22
153	97	98	ROUTE 6	COLLECTOR	2811	1	12	0	1700	50	22
154	98	99	ROUTE 6	COLLECTOR	9651	1	12	0	1700	55	22
155	99	100	ROUTE 6	COLLECTOR	1667	1	12	0	1700	45	22
156	100	101	ROUTE 6	COLLECTOR	1532	1	12	0	1700	45	22
157	101	549	ROUTE 8	COLLECTOR	1242	1	12	1	1700	45	22
158	102	103	MOREY RD	LOCAL ROADWAY	5236	1	9	0	1700	50	11
159	103	698	ROUTE 21	LOCAL ROADWAY	10773	1	10	0	1700	50	11
160	104	723	W MINOOKA RD	LOCAL ROADWAY	26540	1	10	0	1700	50	5
161	109	110	ROUTE 15	COLLECTOR	467	1	12	2	1350	30	17
162	110	111	ROUTE 15	COLLECTOR	426	1	12	2	1575	35	17
163	111	112	ROUTE 15	COLLECTOR	976	1	12	2	1575	35	17
164	112	113	ROUTE 15	COLLECTOR	5862	1	12	0	1700	45	17
165	113	738	ROUTE 15	COLLECTOR	6018	1	12	1	1750	60	17
166	114	14	INTERSTATE 80 ON-RAMP FROM ROUTE 15	FREEWAY RAMP	1111	1	12	6	1700	45	10
167	114	115	ROUTE 15	COLLECTOR	1178	1	12	8	1700	50	10

Link #	Up-Stream Node	Down-Stream Node	Roadway Name	Roadway Type	Length (ft.)	No. of Lanes	Lane Width (ft.)	Shoulder Width (ft.)	Saturation Flow Rate (pcphpl)	Free Flow Speed (mph)	Grid Number
168	115	13	INTERSTATE 80 ON-RAMP FROM ROUTE 15	FREEWAY RAMP	1000	1	12	6	1700	45	10
169	115	701	ROUTE 15	COLLECTOR	1323	1	12	8	1700	55	10
170	116	117	ROUTE 15	COLLECTOR	951	1	10	0	1700	40	10
171	117	118	ROUTE 15	COLLECTOR	642	1	10	0	1700	45	10
172	118	119	ROUTE 15	COLLECTOR	548	1	10	0	1700	45	10
173	119	707	ROUTE 71	COLLECTOR	3740	1	12	3	1700	45	10
174	120	121	ROUTE 71	COLLECTOR	1463	1	12	4	1700	50	9
175	121	737	INTERSTATE 80 ON-RAMP FROM ROUTE 71	FREEWAY RAMP	731	1	12	8	1700	45	9
176	121	780	ROUTE 71	COLLECTOR	1687	1	12	3	1700	60	9
177	122	123	ROUTE 71	COLLECTOR	4974	1	12	3	1700	60	10
178	122	710	ROUTE 21	COLLECTOR	2528	1	12	4	1700	45	9
179	123	119	ROUTE 71	COLLECTOR	4465	1	12	3	1700	60	10
180	124	125	ROUTE 71	COLLECTOR	3189	1	12	3	1700	60	3
181	125	126	ROUTE 71	COLLECTOR	4368	1	12	3	1700	60	3
182	127	128	ROUTE 170	COLLECTOR	9693	1	12	2	1700	55	26
183	128	129	ROUTE 170	COLLECTOR	3784	1	12	2	1700	50	26
184	129	130	ROUTE 170	COLLECTOR	1840	1	12	2	1700	50	26
185	130	638	ROUTE 170	COLLECTOR	700	1	12	2	1750	40	26
186	131	163	ROUTE 36	COLLECTOR	2132	1	12	2	1700	45	18
187	131	638	ROUTE 36	COLLECTOR	556	1	12	2	1750	45	18
188	132	133	ROUTE 170	COLLECTOR	2135	1	12	1	1575	35	18
189	133	134	ROUTE 170	COLLECTOR	1650	1	12	1	1575	35	18
190	134	65	ROUTE 170	COLLECTOR	3550	1	12	1	1750	30	18

Link #	Up-Stream Node	Down-Stream Node	Roadway Name	Roadway Type	Length (ft.)	No. of Lanes	Lane Width (ft.)	Shoulder Width (ft.)	Saturation Flow Rate (pcphpl)	Free Flow Speed (mph)	Grid Number
191	134	691	OLD STAGE RD	COLLECTOR	1061	1	12	1	1350	30	18
192	135	136	OLD STAGE RD	COLLECTOR	4975	1	12	1	1575	35	18
193	136	137	OLD STAGE RD	COLLECTOR	469	1	12	1	1700	45	18
194	137	138	OLD STAGE RD	COLLECTOR	1437	1	12	1	1700	45	18
195	138	139	OLD STAGE RD	COLLECTOR	380	1	12	1	1700	45	18
196	139	140	OLD STAGE RD	COLLECTOR	1601	1	12	1	1700	45	18
197	140	141	OLD STAGE RD	COLLECTOR	961	1	12	1	1700	45	18
198	141	142	OLD STAGE RD	COLLECTOR	3242	1	12	1	1700	45	18
199	142	143	OLD STAGE RD	COLLECTOR	2590	1	12	1	1700	45	18
200	143	144	OLD STAGE RD	COLLECTOR	5830	1	12	1	1700	45	19
201	144	145	OLD STAGE RD	COLLECTOR	2638	1	12	1	1700	45	19
202	145	146	OLD STAGE RD	COLLECTOR	1180	1	12	1	1700	45	19
203	146	147	OLD STAGE RD	COLLECTOR	1014	1	12	1	1700	40	19
204	147	148	OLD STAGE RD	COLLECTOR	2279	1	12	1	1700	45	19
205	148	149	OLD STAGE RD	COLLECTOR	2144	1	12	1	1700	45	19
206	149	150	OLD STAGE RD	COLLECTOR	1825	1	12	1	1700	45	19
207	150	151	OLD STAGE RD	COLLECTOR	1912	1	12	1	1700	45	19
208	151	152	OLD STAGE RD	COLLECTOR	2377	1	12	1	1700	45	19
209	152	153	OLD STAGE RD	COLLECTOR	905	1	12	1	1700	45	19
210	153	154	CR-2	COLLECTOR	1312	1	12	1	1700	45	19
211	153	683	CR-2	COLLECTOR	3315	1	12	2	1700	50	19
212	154	155	CR-2	COLLECTOR	2681	1	12	1	1700	45	19
213	155	156	CR-2	COLLECTOR	3399	1	12	1	1700	45	19
214	156	157	CR-2	COLLECTOR	824	1	12	1	1700	45	20
215	157	158	CR-2	COLLECTOR	2919	1	12	1	1575	35	20

Link #	Up-Stream Node	Down-Stream Node	Roadway Name	Roadway Type	Length (ft.)	No. of Lanes	Lane Width (ft.)	Shoulder Width (ft.)	Saturation Flow Rate (pcphpl)	Free Flow Speed (mph)	Grid Number
216	158	159	CR-2	COLLECTOR	1105	1	12	4	1575	35	20
217	159	160	CR-2	COLLECTOR	3514	1	12	5	1575	35	20
218	160	161	CR-2	COLLECTOR	645	1	12	1	1750	30	20
219	160	215	FULTON ST	COLLECTOR	311	1	12	1	1575	30	20
220	161	162	CR-2	COLLECTOR	626	1	12	1	1750	30	20
221	161	197	LIBERTY ST	COLLECTOR	340	1	12	1	1750	30	20
222	162	207	ROUTE 47	MINOR ARTERIAL	671	2	12	1	1750	35	20
223	163	164	ROUTE 36	COLLECTOR	895	1	12	1	1700	45	18
224	164	165	ROUTE 36	COLLECTOR	1986	1	12	1	1700	45	18
225	165	166	ROUTE 36	COLLECTOR	1080	1	12	1	1700	45	18
226	166	167	ROUTE 36	COLLECTOR	702	1	12	1	1700	45	18
227	167	579	ROUTE 36	COLLECTOR	424	1	12	1	1700	45	18
228	168	169	ROUTE 36	COLLECTOR	410	1	10	1	1125	25	18
229	169	170	ROUTE 36	COLLECTOR	760	1	10	0	1350	30	18
230	170	171	ROUTE 36	COLLECTOR	632	1	10	0	1575	35	18
231	171	172	ROUTE 36	COLLECTOR	870	1	10	0	1575	35	18
232	172	173	ROUTE 36	COLLECTOR	769	1	10	0	1350	30	18
233	173	174	ROUTE 36	COLLECTOR	394	1	10	0	1125	25	18
234	174	175	ROUTE 36	COLLECTOR	2160	1	10	2	1700	45	18
235	175	578	ROUTE 36	COLLECTOR	1918	1	10	2	1700	40	18
236	176	177	ROUTE 36	COLLECTOR	4766	1	12	0	1700	45	19
237	177	178	ROUTE 6	COLLECTOR	10615	1	12	0	1700	45	19
238	178	179	ROUTE 6	COLLECTOR	5284	1	12	1	1700	50	19
239	179	751	ROUTE 6	COLLECTOR	7543	1	12	1	1700	50	19
240	180	181	ROUTE 6	COLLECTOR	2614	1	12	1	1700	50	20

Link #	Up-Stream Node	Down-Stream Node	Roadway Name	Roadway Type	Length (ft.)	No. of Lanes	Lane Width (ft.)	Shoulder Width (ft.)	Saturation Flow Rate (pcphpl)	Free Flow Speed (mph)	Grid Number
241	181	192	ROUTE 47	COLLECTOR	9211	1	12	2	1700	60	20
242	182	183	ROUTE 47	MINOR ARTERIAL	2658	2	12	2	1750	45	20
243	183	184	ROUTE 19	COLLECTOR	1287	2	12	2	1900	60	20
244	183	193	ROUTE 47	MINOR ARTERIAL	4945	2	12	4	1750	45	20
245	184	185	ROUTE 19	COLLECTOR	610	1	12	2	1700	60	20
246	185	186	ROUTE 19	COLLECTOR	4500	1	12	3	1700	55	20
247	186	187	ROUTE 19	COLLECTOR	912	1	12	3	1700	50	20
248	187	188	ROUTE 19	COLLECTOR	1050	1	12	3	1700	50	20
249	188	189	ROUTE 19	COLLECTOR	2595	1	12	3	1700	50	20
250	189	190	ROUTE 19	COLLECTOR	628	1	12	3	1700	50	20
251	190	191	ROUTE 19	COLLECTOR	2377	1	12	2	1700	55	20
252	192	182	ROUTE 47	MINOR ARTERIAL	1356	2	12	4	1750	45	20
253	193	194	ROUTE 47	MINOR ARTERIAL	381	2	12	1	1750	35	20
254	193	688	W ILLINOIS AVE	COLLECTOR	1333	1	12	1	1350	30	20
255	194	162	ROUTE 47	MINOR ARTERIAL	638	2	12	1	1750	35	20
256	194	689	E WASHINGTON ST	COLLECTOR	2017	1	12	1	1575	35	20
257	195	194	E WASHINGTON ST	COLLECTOR	606	1	12	1	1750	30	20
258	195	196	LIBERTY ST	COLLECTOR	324	1	12	1	1750	30	20
259	196	161	LIBERTY ST	COLLECTOR	349	1	12	1	1750	30	20
260	197	198	LIBERTY ST	COLLECTOR	328	1	12	1	1750	30	20
261	198	199	LIBERTY ST	COLLECTOR	324	1	12	1	1750	30	20
262	198	207	NORTH ST	COLLECTOR	612	1	12	1	1750	30	20
263	199	200	LIBERTY ST	COLLECTOR	358	1	12	1	1750	30	20
264	200	209	BENTON ST	COLLECTOR	599	1	12	1	1750	30	20
265	200	211	LIBERTY ST	COLLECTOR	2199	1	12	1	1350	30	20

Link #	Up-Stream Node	Down-Stream Node	Roadway Name	Roadway Type	Length (ft.)	No. of Lanes	Lane Width (ft.)	Shoulder Width (ft.)	Saturation Flow Rate (pcphpl)	Free Flow Speed (mph)	Grid Number
266	201	202	LIBERTY ST	COLLECTOR	580	1	12	1	1350	30	13
267	202	80	US 6	COLLECTOR	597	1	12	1	1750	35	13
268	203	200	BENTON ST	COLLECTOR	647	1	12	1	1750	30	20
269	203	204	LISBON ST	COLLECTOR	634	1	12	1	1350	30	20
270	204	205	LISBON ST	COLLECTOR	994	1	12	1	1350	30	20
271	205	206	LISBON ST	COLLECTOR	714	1	12	1	1350	30	20
272	206	79	LISBON ST	COLLECTOR	1074	1	12	1	1750	35	13
273	206	211	HIGH ST	COLLECTOR	1183	1	12	1	1350	30	13
274	207	209	ROUTE 47	MINOR ARTERIAL	689	2	12	1	1750	35	20
275	208	199	CHAPIN ST	COLLECTOR	655	1	12	1	1750	30	20
276	208	203	FULTON ST	COLLECTOR	351	1	12	1	1575	30	20
277	209	210	ROUTE 47	MINOR ARTERIAL	2198	2	12	1	1750	35	20
278	209	216	ARMSTRONG ST	COLLECTOR	271	1	12	0	1575	35	20
279	210	80	ROUTE 47	MINOR ARTERIAL	1619	2	12	0	1750	35	13
280	211	201	LIBERTY ST	COLLECTOR	845	1	12	1	1350	30	13
281	211	206	HIGH ST	COLLECTOR	1183	1	12	1	1350	30	13
282	211	210	HIGH ST	COLLECTOR	609	1	12	1	1750	30	13
283	212	195	W WASHINGTON ST	COLLECTOR	633	1	12	1	1750	30	20
284	212	213	FULTON ST	COLLECTOR	314	1	12	1	1575	30	20
285	213	160	FULTON ST	COLLECTOR	354	1	12	1	1575	30	20
286	213	196	MAIN ST	COLLECTOR	651	1	12	1	1750	30	20
287	214	198	NORTH ST	COLLECTOR	648	1	12	1	1750	30	20
288	214	208	FULTON ST	COLLECTOR	320	1	12	1	1575	30	20
289	215	197	JACKSON ST	COLLECTOR	652	1	12	1	1750	30	20
290	215	214	FULTON ST	COLLECTOR	339	1	12	1	1575	30	20

Link #	Up-Stream Node	Down-Stream Node	Roadway Name	Roadway Type	Length (ft.)	No. of Lanes	Lane Width (ft.)	Shoulder Width (ft.)	Saturation Flow Rate (pcphpl)	Free Flow Speed (mph)	Grid Number
291	216	217	ARMSTRONG ST	COLLECTOR	442	1	12	0	1575	35	20
292	217	218	ARMSTRONG ST	COLLECTOR	211	1	12	0	1575	35	20
293	218	219	ARMSTRONG ST	COLLECTOR	4362	1	12	0	1700	40	20
294	219	727	ASHLEY RD	COLLECTOR	1444	1	12	0	1700	40	20
295	221	222	E WASHINGTON ST	COLLECTOR	1787	1	12	1	1700	40	20
296	222	219	E WASHINGTON ST	COLLECTOR	1690	1	12	0	1700	40	20
297	223	224	LISBON ST	COLLECTOR	2889	1	12	4	1750	35	13
298	224	225	LISBON ST	COLLECTOR	10819	1	12	4	1700	50	13
299	224	681	GORE RD	COLLECTOR	1475	1	12	1	1575	35	13
300	225	723	LISBON ST	COLLECTOR	13535	1	12	4	1700	50	12
301	226	227	ROUTE 47	MINOR ARTERIAL	2756	2	12	1	1750	50	13
302	227	228	ROUTE 47	MINOR ARTERIAL	1493	2	12	1	1750	50	13
303	227	242	ROUTE 6	COLLECTOR	813	1	12	2	1750	45	13
304	228	22	INTERSTATE 80 ON-RAMP FROM ROUTE 47	FREEWAY RAMP	1445	2	12	6	1900	45	13
305	228	229	ROUTE 47	MINOR ARTERIAL	1091	2	12	1	1750	50	13
306	229	228	ROUTE 47	MINOR ARTERIAL	1091	2	12	1	1750	45	13
307	229	230	ROUTE 47	MINOR ARTERIAL	860	2	12	1	1750	50	13
308	230	229	ROUTE 47	MINOR ARTERIAL	859	2	12	1	1750	50	13
309	230	231	ROUTE 47	MINOR ARTERIAL	2398	2	12	1	1900	55	13
310	231	646	ROUTE 47	COLLECTOR	2032	1	12	2	1750	55	13
311	232	227	GREEN ACRES DR	COLLECTOR	1204	1	12	1	1750	25	13
312	233	230	GORE RD	COLLECTOR	206	1	12	1	1750	30	13
313	234	233	GORE RD	COLLECTOR	639	1	12	1	1575	35	13
314	235	234	GORE RD	COLLECTOR	1268	1	12	1	1575	35	13

Link #	Up-Stream Node	Down-Stream Node	Roadway Name	Roadway Type	Length (ft.)	No. of Lanes	Lane Width (ft.)	Shoulder Width (ft.)	Saturation Flow Rate (pcphpl)	Free Flow Speed (mph)	Grid Number
315	236	235	GORE RD	COLLECTOR	746	1	12	1	1750	30	13
316	237	682	GORE RD	COLLECTOR	3989	1	11	0	1575	35	13
317	238	237	GORE RD	COLLECTOR	5095	1	11	0	1575	35	12
318	239	77	UNION ST	COLLECTOR	3338	1	12	2	1750	30	20
319	240	76	LAKEWOOD DR	COLLECTOR	2038	1	12	1	1750	30	13
320	241	75	EDGEWATER DR	COLLECTOR	1000	1	12	0	1350	30	13
321	242	243	ROUTE 6	COLLECTOR	739	1	12	2	1750	45	13
322	243	779	ROUTE 6	COLLECTOR	2349	1	12	2	1700	45	13
323	244	181	ROUTE 47	COLLECTOR	7963	1	12	2	1700	60	28
324	244	245	ROUTE 113	COLLECTOR	10647	1	12	2	1700	55	28
325	246	639	N 2553RD RD	COLLECTOR	8765	1	12	2	1700	50	18
326	247	246	N 2553RD RD	COLLECTOR	1542	1	12	2	1700	45	18
327	248	247	N 2553RD RD	COLLECTOR	889	1	12	2	1700	45	17
328	249	248	N 2553RD RD	COLLECTOR	1147	1	12	2	1700	45	17
329	250	249	N 2553RD RD	COLLECTOR	769	1	12	2	1700	45	17
330	251	250	N 2553RD RD	COLLECTOR	6559	1	12	2	1700	50	17
331	251	252	N 2553RD RD	COLLECTOR	5084	1	12	2	1700	50	17
332	252	253	N 2553RD RD	COLLECTOR	1369	1	12	2	1700	50	17
333	253	254	N 2553RD RD	COLLECTOR	1709	1	12	2	1750	50	17
334	254	255	ROUTE 30	COLLECTOR	2529	1	12	1	1700	50	17
335	255	256	ROUTE 55	COLLECTOR	643	1	12	2	1700	45	17
336	256	257	ROUTE 55	COLLECTOR	1566	1	12	1	1700	45	17
337	256	432	ROUTE 15	COLLECTOR	3890	1	12	1	1700	55	17
338	257	258	ROUTE 55	COLLECTOR	931	1	12	1	1700	45	17
339	258	259	ROUTE 55	COLLECTOR	3492	1	12	0	1700	50	17

Link #	Up-Stream Node	Down-Stream Node	Roadway Name	Roadway Type	Length (ft.)	No. of Lanes	Lane Width (ft.)	Shoulder Width (ft.)	Saturation Flow Rate (pcphpl)	Free Flow Speed (mph)	Grid Number
340	259	260	ROUTE 55	COLLECTOR	837	1	12	0	1700	45	17
341	260	261	ROUTE 55	COLLECTOR	1107	1	12	0	1700	45	17
342	261	262	ROUTE 55	COLLECTOR	1071	1	12	0	1700	45	16
343	262	263	ROUTE 55	COLLECTOR	1260	1	12	0	1700	45	16
344	263	264	ROUTE 55	COLLECTOR	2964	1	12	0	1700	50	16
345	264	265	ROUTE 55	COLLECTOR	1114	1	12	0	1700	45	16
346	265	747	ROUTE 55	COLLECTOR	419	1	12	0	1700	45	16
347	266	267	ROUTE 55	COLLECTOR	1291	1	12	0	1700	45	16
348	267	268	ROUTE 55	COLLECTOR	4821	1	12	0	1700	45	16
349	268	269	ROUTE 55	COLLECTOR	4650	1	12	0	1700	45	16
350	269	277	N 2703RD RD	COLLECTOR	1019	1	12	0	1700	40	16
351	269	580	ROUTE 55	COLLECTOR	6990	1	12	2	1700	45	16
352	270	271	1ST AVE	MINOR ARTERIAL	987	2	12	0	1900	45	16
353	271	272	STATE ST	MINOR ARTERIAL	1664	2	12	0	1900	45	16
354	272	523	STATE ST	MINOR ARTERIAL	933	2	12	0	1900	40	16
355	273	585	N 2703RD RD	COLLECTOR	2450	1	12	0	1700	45	16
356	274	273	N 2703RD RD	COLLECTOR	696	1	12	0	1575	35	16
357	275	584	N 2703RD RD	COLLECTOR	847	1	12	0	1575	35	16
358	276	275	N 2703RD RD	COLLECTOR	2617	1	12	0	1700	45	16
359	277	276	N 2703RD RD	COLLECTOR	639	1	12	0	1575	35	16
360	278	244	ROUTE 47	COLLECTOR	10615	1	12	2	1700	60	28
361	278	279	REED RD	LOCAL ROADWAY	10705	1	10	1	1700	45	28
362	280	283	GARDNER RD	COLLECTOR	10560	1	12	1	1700	60	36
363	280	284	ROUTE 47	COLLECTOR	10559	1	12	1	1700	60	36

Link #	Up-Stream Node	Down-Stream Node	Roadway Name	Roadway Type	Length (ft.)	No. of Lanes	Lane Width (ft.)	Shoulder Width (ft.)	Saturation Flow Rate (pcphpl)	Free Flow Speed (mph)	Grid Number
364	281	35	INTERSTATE 55 ON-RAMP FROM GARDNER RD	FREEWAY RAMP	909	1	12	8	1700	45	37
365	281	282	GARDNER RD	COLLECTOR	851	1	12	4	1700	50	37
366	282	34	INTERSTATE 55 ON-RAMP FROM GARDNER RD	FREEWAY RAMP	1016	1	12	8	1700	45	37
367	283	281	GARDNER RD	COLLECTOR	15117	1	12	1	1700	60	37
368	284	641	ROUTE 47	COLLECTOR	11076	1	12	2	1700	60	44
369	285	30	INTERSTATE 55 ON-RAMP FROM ROUTE 47	FREEWAY RAMP	1619	1	12	8	1700	45	44
370	285	286	ROUTE 47	COLLECTOR	1732	1	12	8	1700	55	44
371	286	31	INTERSTATE 55 ON-RAMP FROM ROUTE 47	FREEWAY RAMP	1615	1	12	8	1700	45	44
372	287	292	ROUTE 39	COLLECTOR	503	1	12	1	1700	50	34
373	287	293	ROUTE 170	COLLECTOR	679	1	12	1	1575	35	34
374	288	289	ROUTE 170	COLLECTOR	384	1	12	1	1575	35	34
375	289	290	ROUTE 170	COLLECTOR	473	1	12	1	1575	35	34
376	289	291	GARDNER RD	COLLECTOR	262	1	12	1	1125	25	34
377	290	289	ROUTE 170	COLLECTOR	473	1	12	1	1575	35	34
378	290	293	ROUTE 170	COLLECTOR	9399	1	12	1	1700	60	34
379	291	636	N 17TH RD	COLLECTOR	5306	1	12	0	1700	60	34
380	292	773	ROUTE 170	COLLECTOR	4826	1	12	1	1700	60	34
381	293	290	ROUTE 170	COLLECTOR	9399	1	12	1	1700	60	34
382	293	292	ROUTE 170	COLLECTOR	903	1	12	1	1700	40	34
383	294	83	LAS ENTRANCE	COLLECTOR	1959	1	12	2	1350	30	25
384	295	287	ROUTE 5	COLLECTOR	5243	1	12	1	1700	60	33
385	295	318	ROUTE 5	COLLECTOR	10600	1	12	1	1750	60	33

Link #	Up-Stream Node	Down-Stream Node	Roadway Name	Roadway Type	Length (ft.)	No. of Lanes	Lane Width (ft.)	Shoulder Width (ft.)	Saturation Flow Rate (pcphpl)	Free Flow Speed (mph)	Grid Number
386	296	771	GONNAM RD	COLLECTOR	1873	1	12	1	1700	60	27
387	297	296	GONNAM RD	COLLECTOR	1204	1	12	1	1700	45	27
388	298	297	GONNAM RD	COLLECTOR	1319	1	12	1	1700	50	27
389	299	298	GONNAM RD	COLLECTOR	1260	1	12	1	1700	45	27
390	300	302	GARDNER RD	COLLECTOR	5340	1	12	0	1700	60	35
391	301	770	BUFFALO RD	COLLECTOR	7804	1	12	0	1700	45	35
392	302	753	GARDNER RD	COLLECTOR	5360	1	12	0	1700	55	35
393	303	304	ROUTE 170	COLLECTOR	10626	1	12	1	1700	60	42
394	304	305	ROUTE 170	COLLECTOR	4473	1	12	1	1700	60	42
395	305	750	ROUTE 170	COLLECTOR	798	1	12	1	1700	60	42
396	306	624	ROUTE 170	COLLECTOR	2025	1	12	1	1700	60	42
397	307	308	ROUTE 170	COLLECTOR	10623	1	12	1	1700	60	48
398	307	327	ROUTE 17	COLLECTOR	15519	1	12	1	1700	60	41
399	307	630	ROUTE 17	COLLECTOR	16042	1	12	1	1700	60	42
400	308	309	ROUTE 170	COLLECTOR	10624	1	12	1	1700	60	48
401	309	310	ROUTE 170	COLLECTOR	5233	1	12	1	1700	60	48
402	311	312	ROUTE 17	COLLECTOR	15786	1	12	1	1700	60	43
403	312	313	ROUTE 17	COLLECTOR	10027	1	12	1	1700	60	43
404	313	26	INTERSTATE 55 ON-RAMP FROM ROUTE 17	FREEWAY RAMP	1100	1	12	4	1700	45	44
405	313	314	ROUTE 17	COLLECTOR	1513	1	12	1	1700	55	44
406	314	27	INTERSTATE 55 ON-RAMP FROM ROUTE 17	FREEWAY RAMP	1222	1	12	4	1700	45	44
407	315	300	GARDNER RD	COLLECTOR	10287	1	12	0	1700	60	35
408	315	316	JOHNNY RUN RD	COLLECTOR	26271	1	12	0	1750	60	43

Link #	Up-Stream Node	Down-Stream Node	Roadway Name	Roadway Type	Length (ft.)	No. of Lanes	Lane Width (ft.)	Shoulder Width (ft.)	Saturation Flow Rate (pcphpl)	Free Flow Speed (mph)	Grid Number
409	316	627	JOHNNY RUN RD	COLLECTOR	2292	1	12	0	1700	50	43
410	317	777	E 24TH ST	COLLECTOR	5268	1	10	0	1750	45	33
411	318	334	ROUTE 5	COLLECTOR	10658	1	12	1	1700	60	33
412	318	772	E 24TH ST	COLLECTOR	5495	1	9	1	1700	50	33
413	319	748	E 24TH ST	COLLECTOR	749	1	9	1	1350	30	33
414	320	322	E 24TH ST	COLLECTOR	1092	1	12	4	1700	40	41
415	321	317	E 24TH ST	COLLECTOR	10612	1	10	0	1700	45	33
416	321	778	ROUTE 6	COLLECTOR	1604	1	12	1	1700	55	25
417	322	323	ROUTE 18	COLLECTOR	1377	1	12	1	1700	50	41
418	322	324	ROUTE 18	COLLECTOR	2257	1	12	1	1700	55	41
419	323	335	ROUTE 18	COLLECTOR	8253	1	12	1	1700	60	41
420	324	325	ROUTE 18	COLLECTOR	2317	1	12	1	1700	60	41
421	325	749	ROUTE 18	COLLECTOR	803	1	12	1	1700	60	41
422	326	327	ROUTE 18	COLLECTOR	4872	1	12	2	1700	60	41
423	327	328	ROUTE 17	COLLECTOR	9090	1	12	2	1700	60	41
424	328	329	ROUTE 17	COLLECTOR	2190	1	12	2	1700	45	47
425	329	330	ROUTE 17	COLLECTOR	19965	1	12	2	1700	60	46
426	330	331	ROUTE 17	COLLECTOR	15638	1	12	2	1700	60	46
427	331	332	ROUTE 17	COLLECTOR	10655	1	12	2	1700	60	45
428	331	415	ROUTE 23	COLLECTOR	5504	1	12	6	1700	60	46
429	332	333	ROUTE 17	COLLECTOR	5365	1	12	2	1700	60	45
430	334	336	ROUTE 5	COLLECTOR	26126	1	12	1	1750	60	32
431	334	609	ROUTE 15	COLLECTOR	12465	1	12	1	1700	60	33
432	335	345	ROUTE 18	COLLECTOR	15953	1	12	1	1700	60	40
433	336	390	ROUTE 23	MINOR ARTERIAL	5008	2	12	8	1900	60	32

Link #	Up-Stream Node	Down-Stream Node	Roadway Name	Roadway Type	Length (ft.)	No. of Lanes	Lane Width (ft.)	Shoulder Width (ft.)	Saturation Flow Rate (pcphpl)	Free Flow Speed (mph)	Grid Number
434	336	594	ROUTE 23	MINOR ARTERIAL	1737	2	12	8	1900	60	32
435	337	594	ROUTE 23	COLLECTOR	3359	1	12	4	1700	55	32
436	337	755	LEONORE RD	COLLECTOR	10492	1	12	4	1700	55	31
437	338	620	ROUTE 5	COLLECTOR	1221	1	12	1	1575	35	30
438	338	728	ROUTE 5	COLLECTOR	2759	1	12	4	1700	40	30
439	339	340	ROUTE 5	COLLECTOR	1061	1	12	1	1700	50	38
440	340	341	ROUTE 5	COLLECTOR	6344	1	12	1	1700	55	38
441	341	342	ROUTE 5	COLLECTOR	1390	1	12	1	1700	40	38
442	342	343	ROUTE 5	COLLECTOR	4527	1	12	1	1700	55	38
443	343	358	ROUTE 18	COLLECTOR	10675	1	12	3	1700	55	38
444	344	338	LEONORE RD	COLLECTOR	20153	1	12	4	1700	55	30
445	345	346	ROUTE 18	COLLECTOR	5143	1	12	1	1700	45	40
446	346	414	OTTER CREEK ST	COLLECTOR	5183	1	12	0	1350	30	40
447	346	607	ROUTE 18	COLLECTOR	2059	1	12	0	1700	40	40
448	347	602	ROUTE 18	COLLECTOR	760	1	12	0	1350	30	40
449	348	349	ROUTE 18	MINOR ARTERIAL	370	2	12	0	1750	30	40
450	349	350	ROUTE 18	MINOR ARTERIAL	376	2	12	0	1750	30	40
451	349	369	STERLING ST	COLLECTOR	554	1	12	0	1350	30	40
452	350	351	ROUTE 18	MINOR ARTERIAL	357	2	12	0	1750	30	40
453	351	352	ROUTE 18	MINOR ARTERIAL	344	2	12	0	1750	30	40
454	351	367	S MONROE ST	MINOR ARTERIAL	554	2	12	0	1900	30	40
455	352	353	ROUTE 18	MINOR ARTERIAL	393	3	12	0	1750	30	40
456	352	359	ROUTE 23	COLLECTOR	408	1	12	0	1750	30	40
457	353	365	ROUTE 23	MINOR ARTERIAL	538	2	12	0	1750	30	40
458	353	599	ROUTE 18	MINOR ARTERIAL	1449	2	12	1	1900	40	39

Link #	Up-Stream Node	Down-Stream Node	Roadway Name	Roadway Type	Length (ft.)	No. of Lanes	Lane Width (ft.)	Shoulder Width (ft.)	Saturation Flow Rate (pcphpl)	Free Flow Speed (mph)	Grid Number
459	355	356	ROUTE 18	COLLECTOR	4930	1	12	3	1700	50	39
460	356	357	ROUTE 18	COLLECTOR	10644	1	12	3	1700	55	39
461	357	343	ROUTE 18	COLLECTOR	10541	1	12	3	1700	55	39
462	359	360	HICKORY ST	COLLECTOR	394	1	12	0	1750	30	40
463	359	612	ROUTE 23	MINOR ARTERIAL	937	2	12	0	1900	30	40
464	360	353	ROUTE 23	MINOR ARTERIAL	388	2	12	0	1750	30	40
465	361	362	BRIDGE ST	MINOR ARTERIAL	300	2	12	2	1900	30	39
466	362	363	BRIDGE ST	MINOR ARTERIAL	1494	2	12	2	1900	40	39
467	363	364	BRIDGE ST	MINOR ARTERIAL	239	2	12	1	1900	25	39
468	364	365	BRIDGE ST	COLLECTOR	258	1	12	1	1750	30	40
469	365	366	BRIDGE ST	MINOR ARTERIAL	383	3	12	0	1750	30	40
470	365	401	BLOOMINGTON ST	MINOR ARTERIAL	1496	2	12	0	1900	30	40
471	366	367	BRIDGE ST	MINOR ARTERIAL	365	2	12	0	1900	30	40
472	366	613	PARK ST	MINOR ARTERIAL	263	2	12	0	1900	30	40
473	367	368	BRIDGE ST	MINOR ARTERIAL	373	2	12	0	1750	30	40
474	368	350	VERMILLION ST	MINOR ARTERIAL	559	2	12	0	1750	30	40
475	368	369	BRIDGE ST	MINOR ARTERIAL	348	2	12	0	1900	30	40
476	369	349	STERLING ST	COLLECTOR	554	1	12	0	1750	30	40
477	369	370	BRIDGE ST	COLLECTOR	375	1	12	0	1350	30	40
478	370	348	S WASSON ST	MINOR ARTERIAL	521	2	12	0	1750	30	40
479	371	347	N ILLINOIS ST	COLLECTOR	420	1	12	0	1350	30	40
480	371	606	HICKORY ST	COLLECTOR	379	1	12	0	1125	25	40
481	372	375	BROADWAY ST	COLLECTOR	404	1	12	0	1350	30	40
482	372	611	ROUTE 23	MINOR ARTERIAL	578	2	12	0	1900	30	40
483	373	376	ROUTE 23	MINOR ARTERIAL	2454	2	12	1	1900	30	40

Link #	Up-Stream Node	Down-Stream Node	Roadway Name	Roadway Type	Length (ft.)	No. of Lanes	Lane Width (ft.)	Shoulder Width (ft.)	Saturation Flow Rate (pcphpl)	Free Flow Speed (mph)	Grid Number
484	374	376	MORRELL ST	COLLECTOR	440	1	12	1	1350	30	40
485	375	360	ROUTE 23	MINOR ARTERIAL	1300	2	12	0	1750	30	40
486	376	375	ROUTE 23	MINOR ARTERIAL	981	2	12	0	1900	30	40
487	377	371	N ILLINOIS ST	COLLECTOR	1316	1	12	0	1350	30	40
488	377	372	BROADWAY ST	COLLECTOR	2605	1	12	0	1350	30	40
489	379	373	ROUTE 23	MINOR ARTERIAL	193	2	12	4	1900	30	40
490	380	379	1ST ST	COLLECTOR	4046	1	12	0	1350	30	40
491	381	346	OTTER CREEK ST	COLLECTOR	1834	1	12	1	1575	35	40
492	381	377	BROADWAY ST	COLLECTOR	2304	1	12	0	1350	30	40
493	382	381	OTTER CREEK ST	COLLECTOR	3539	1	12	1	1575	35	40
494	383	382	1ST ST	COLLECTOR	821	1	12	0	1750	30	40
495	384	379	ROUTE 23	MINOR ARTERIAL	1520	2	12	1	1900	40	40
496	385	384	ROUTE 23	MINOR ARTERIAL	882	2	12	1	1750	40	40
497	386	385	ROUTE 23	MINOR ARTERIAL	2180	2	12	1	1750	40	40
498	387	386	ROUTE 23	MINOR ARTERIAL	681	2	12	1	1750	40	40
499	387	595	OAKLEY AVE	COLLECTOR	3865	1	12	0	1575	35	39
500	388	387	ROUTE 23	MINOR ARTERIAL	1753	2	12	1	1750	40	32
501	389	388	ROUTE 23	MINOR ARTERIAL	1537	2	12	1	1900	50	32
502	390	389	ROUTE 23	MINOR ARTERIAL	2412	2	12	8	1900	55	32
503	391	387	OAKLEY AVE	COLLECTOR	5286	1	12	1	1750	40	40
504	391	614	OTTER CREEK ST	COLLECTOR	3915	1	10	0	1700	45	40
505	392	386	MALL ENTRANCE	COLLECTOR	267	1	12	1	1750	25	40
506	393	385	NORTHPOINT DR	COLLECTOR	499	1	12	1	1750	30	39
507	394	395	4TH ST	COLLECTOR	2470	1	12	1	1350	30	40
508	395	396	4TH ST	COLLECTOR	186	1	12	1	1350	30	40

Link #	Up-Stream Node	Down-Stream Node	Roadway Name	Roadway Type	Length (ft.)	No. of Lanes	Lane Width (ft.)	Shoulder Width (ft.)	Saturation Flow Rate (pcphpl)	Free Flow Speed (mph)	Grid Number
509	396	384	4TH ST	COLLECTOR	141	1	12	1	1750	30	40
510	397	388	MALL ENTRANCE	COLLECTOR	516	1	10	1	1750	30	32
511	398	356	E 15TH RD	COLLECTOR	10749	1	12	1	1700	40	39
512	399	376	MORRELL ST	COLLECTOR	1271	1	12	1	1350	30	39
513	400	374	MORRELL ST	COLLECTOR	2213	1	12	1	1350	30	40
514	401	407	ROUTE 23	MINOR ARTERIAL	3216	2	12	0	1900	40	40
515	402	366	PARK ST	MINOR ARTERIAL	1505	2	12	0	1750	30	40
516	402	401	LUNDY ST	COLLECTOR	384	1	12	0	1350	30	40
517	403	370	BRIDGE ST	COLLECTOR	1138	1	12	0	1350	30	40
518	403	404	ILLINOIS ST	COLLECTOR	1510	1	12	0	1350	30	40
519	404	402	LUNDY ST	COLLECTOR	2618	1	12	0	1350	30	40
520	404	405	ILLINOIS ST	COLLECTOR	3278	1	12	0	1350	30	40
521	405	406	ROUTE 14	COLLECTOR	2689	1	12	0	1350	30	40
522	406	402	ROUTE 23	MINOR ARTERIAL	3233	2	12	0	1900	40	40
523	406	407	ROUTE 14	COLLECTOR	324	1	12	0	1350	30	40
524	407	410	ROUTE 23	MINOR ARTERIAL	2322	2	12	0	1900	40	40
525	408	406	ROUTE 23	MINOR ARTERIAL	2216	2	12	0	1900	40	40
526	409	408	ROUTE 23	MINOR ARTERIAL	336	2	12	0	1900	40	40
527	410	411	ROUTE 23	COLLECTOR	1077	1	12	0	1700	45	40
528	411	412	ROUTE 23	COLLECTOR	694	1	12	1	1700	45	40
529	412	413	ROUTE 23	COLLECTOR	2025	1	12	6	1700	60	40
530	413	331	ROUTE 23	COLLECTOR	10417	1	12	6	1700	60	46
531	414	405	ROUTE 14	COLLECTOR	2193	1	12	0	1350	30	40
532	416	417	ROUTE 30	COLLECTOR	1715	1	12	2	1700	40	25
533	417	418	ROUTE 30	COLLECTOR	1182	1	12	2	1700	45	25

Link #	Up-Stream Node	Down-Stream Node	Roadway Name	Roadway Type	Length (ft.)	No. of Lanes	Lane Width (ft.)	Shoulder Width (ft.)	Saturation Flow Rate (pcphpl)	Free Flow Speed (mph)	Grid Number
534	418	419	ROUTE 30	COLLECTOR	1156	1	12	2	1700	40	25
535	419	420	ROUTE 30	COLLECTOR	3638	1	12	2	1700	55	25
536	420	421	ROUTE 30	COLLECTOR	2614	1	12	2	1700	55	25
537	421	424	ROUTE 30	COLLECTOR	1310	1	12	2	1700	55	17
538	422	640	ROUTE 30	COLLECTOR	713	1	12	2	1575	35	17
539	423	254	ROUTE 30	COLLECTOR	891	1	12	2	1750	35	17
540	424	422	ROUTE 30	COLLECTOR	1286	1	12	2	1700	40	17
541	425	426	ROUTE 15	COLLECTOR	9904	1	12	2	1700	60	24
542	426	427	ROUTE 15	COLLECTOR	1783	1	12	2	1700	45	16
543	427	428	ROUTE 15	COLLECTOR	1699	1	12	2	1700	50	17
544	428	429	ROUTE 15	COLLECTOR	1831	1	12	2	1700	40	17
545	429	430	ROUTE 15	COLLECTOR	2614	1	12	2	1700	40	17
546	430	431	ROUTE 15	COLLECTOR	1381	1	12	2	1700	45	17
547	431	257	ROUTE 15	COLLECTOR	3573	1	12	2	1700	45	17
548	432	433	ROUTE 15	COLLECTOR	2244	1	12	0	1750	40	17
549	433	41	ROUTE 15	COLLECTOR	1244	1	12	1	1125	25	17
550	433	434	ROUTE 51	COLLECTOR	4262	1	14	0	1575	35	17
551	434	435	ROUTE 51	COLLECTOR	965	1	14	0	1700	40	17
552	435	436	ROUTE 51	COLLECTOR	10905	1	12	0	1700	60	16
553	436	437	ROUTE 51	COLLECTOR	13650	1	12	0	1750	60	16
554	437	438	ROUTE 51	COLLECTOR	2961	1	12	0	1700	55	16
555	437	451	2871ST RD	COLLECTOR	240	1	12	4	1125	25	16
556	438	439	ROUTE 51	COLLECTOR	604	1	12	2	1125	25	16
557	439	440	GREEN ST	COLLECTOR	581	1	12	2	1700	40	16
558	440	441	GREEN ST	COLLECTOR	296	1	12	2	1700	40	16

Link #	Up-Stream Node	Down-Stream Node	Roadway Name	Roadway Type	Length (ft.)	No. of Lanes	Lane Width (ft.)	Shoulder Width (ft.)	Saturation Flow Rate (pcphpl)	Free Flow Speed (mph)	Grid Number
559	441	442	GREEN ST	COLLECTOR	814	1	12	0	1575	35	16
560	442	702	E MAIN ST	COLLECTOR	243	1	12	0	900	20	16
561	443	444	MAIN ST	COLLECTOR	904	1	14	0	1750	35	15
562	444	445	MAIN ST	COLLECTOR	427	1	12	0	1750	35	15
563	444	474	ROUTE 23	MAJOR ARTERIAL	414	3	12	0	1750	30	15
564	445	446	MAIN ST	COLLECTOR	414	1	12	0	1750	30	15
565	446	447	MAIN ST	COLLECTOR	390	1	12	0	1350	30	15
566	447	448	MAIN ST	COLLECTOR	748	1	12	0	1350	30	15
567	448	449	MAIN ST	COLLECTOR	676	1	12	0	1350	30	15
568	449	450	MAIN ST	COLLECTOR	3889	1	12	0	1350	30	15
569	449	496	CLAY ST	COLLECTOR	404	1	12	0	1350	30	15
570	450	494	BOYCE MEMORIAL DR	COLLECTOR	432	1	12	0	1700	40	15
571	451	437	2871ST RD	COLLECTOR	237	1	12	3	1750	50	16
572	451	452	2871ST RD	COLLECTOR	825	1	12	0	1575	35	16
573	452	453	2871ST RD	COLLECTOR	344	1	12	0	1350	30	16
574	453	455	US 6	MINOR ARTERIAL	1756	2	12	1	1900	45	16
575	454	453	US 6	MINOR ARTERIAL	985	2	12	1	1900	45	16
576	455	456	US 6	MINOR ARTERIAL	2959	2	12	1	1900	40	16
577	456	457	US 6	MINOR ARTERIAL	1126	2	12	4	1750	45	16
578	457	458	US 6	MINOR ARTERIAL	3357	2	12	0	1750	40	16
579	458	459	US 6	MINOR ARTERIAL	2120	2	12	0	1750	40	15
580	458	497	ROUTE 23	MINOR ARTERIAL	616	2	12	1	1750	40	15
581	459	460	US 6	MINOR ARTERIAL	1308	2	12	0	1900	35	15
582	460	461	US 6	MINOR ARTERIAL	2493	2	12	2	1900	45	15
583	461	462	US 6	COLLECTOR	787	1	12	2	1700	45	15

Link #	Up-Stream Node	Down-Stream Node	Roadway Name	Roadway Type	Length (ft.)	No. of Lanes	Lane Width (ft.)	Shoulder Width (ft.)	Saturation Flow Rate (pcphpl)	Free Flow Speed (mph)	Grid Number
584	462	519	US 6	COLLECTOR	599	1	12	2	1700	45	15
585	463	708	US 6	COLLECTOR	13766	1	12	2	1700	60	15
586	465	449	CLAY ST	COLLECTOR	738	1	12	0	1350	30	15
587	465	706	ROUTE 34	COLLECTOR	262	1	12	0	675	15	15
588	466	467	ROUTE 34	COLLECTOR	2944	1	12	0	1350	30	15
589	467	450	BOYCE MEMORIAL DR	COLLECTOR	2219	1	12	0	1700	40	15
590	467	468	ROUTE 34	COLLECTOR	5349	1	12	0	1700	40	15
591	468	469	ROUTE 34	COLLECTOR	3552	1	12	1	1700	45	15
592	469	470	ROUTE 34	COLLECTOR	3513	1	12	1	1700	50	15
593	470	471	ROUTE 34	COLLECTOR	4137	1	12	1	1700	55	15
594	471	472	ROUTE 34	COLLECTOR	2104	1	12	1	1700	55	15
595	472	473	ROUTE 34	COLLECTOR	3391	1	12	1	1700	50	14
596	474	475	ROUTE 23	MAJOR ARTERIAL	287	3	12	0	1750	30	15
597	474	487	MADISON ST	COLLECTOR	417	1	12	0	1750	30	15
598	475	476	ROUTE 23	MAJOR ARTERIAL	376	3	12	0	1750	30	15
599	475	488	JEFFERSON ST	COLLECTOR	408	1	12	0	1750	30	15
600	476	477	ROUTE 23	MAJOR ARTERIAL	381	3	12	0	1750	30	15
601	476	489	JACKSON ST	COLLECTOR	394	1	12	0	1750	30	15
602	477	478	ROUTE 23	MAJOR ARTERIAL	412	3	12	0	1750	30	15
603	477	490	LAFAYETTE ST	COLLECTOR	412	1	12	0	1750	30	15
604	478	479	ROUTE 23	MAJOR ARTERIAL	426	3	12	0	1750	30	15
605	478	491	WASHINGTON ST	COLLECTOR	417	1	12	0	1750	30	15
606	479	480	ROUTE 23	MAJOR ARTERIAL	842	3	12	0	1900	30	15
607	479	483	SUPERIOR ST	COLLECTOR	443	1	12	0	1750	30	15
608	480	458	ROUTE 23	MINOR ARTERIAL	648	2	12	0	1750	30	15

Link #	Up-Stream Node	Down-Stream Node	Roadway Name	Roadway Type	Length (ft.)	No. of Lanes	Lane Width (ft.)	Shoulder Width (ft.)	Saturation Flow Rate (pcphpl)	Free Flow Speed (mph)	Grid Number
609	480	481	ROUTE 23	MINOR ARTERIAL	333	2	12	0	1900	25	15
610	481	482	ROUTE 23	MINOR ARTERIAL	226	2	12	0	1900	30	15
611	482	483	ROUTE 23	MAJOR ARTERIAL	519	3	12	0	1750	30	15
612	483	491	ROUTE 23	MAJOR ARTERIAL	417	3	12	0	1750	30	15
613	485	444	ROUTE 23	MAJOR ARTERIAL	298	3	12	0	1750	30	15
614	486	485	ROUTE 23	MINOR ARTERIAL	349	2	12	0	1900	30	15
615	487	445	ROUTE 23	COLLECTOR	403	1	12	0	1750	30	15
616	487	474	MADISON ST	COLLECTOR	417	1	12	0	1750	30	15
617	487	705	MADISON ST	COLLECTOR	411	1	12	0	1350	30	15
618	488	475	JEFFERSON ST	COLLECTOR	408	1	12	0	1750	30	15
619	488	487	ROUTE 23	MAJOR ARTERIAL	291	3	12	0	1750	30	15
620	489	488	ROUTE 23	MAJOR ARTERIAL	376	3	12	0	1750	30	15
621	490	489	ROUTE 23	MAJOR ARTERIAL	359	3	12	0	1750	30	15
622	491	478	WASHINGTON ST	COLLECTOR	417	1	12	0	1750	30	15
623	491	490	ROUTE 23	MAJOR ARTERIAL	421	3	12	0	1750	30	15
624	492	457	CHAMPLAIN ST	COLLECTOR	1502	1	12	0	1750	30	16
625	492	479	SUPERIOR ST	COLLECTOR	3256	1	12	0	1750	30	16
626	493	477	LAFAYETTE ST	COLLECTOR	1172	1	12	0	1750	30	15
627	494	462	BOYCE MEMORIAL DR	COLLECTOR	2619	1	12	0	1700	40	15
628	495	459	CHESTNUT ST	COLLECTOR	3410	1	12	0	1750	30	15
629	495	496	MADISON ST	COLLECTOR	532	1	12	0	1350	30	15
630	496	494	MADISON ST	COLLECTOR	3944	1	12	0	1350	30	15
631	497	498	ROUTE 23	MINOR ARTERIAL	1264	2	12	1	1900	35	15
632	498	499	ROUTE 23	MINOR ARTERIAL	765	2	12	1	1900	40	15
633	499	500	ROUTE 23	MINOR ARTERIAL	1832	2	12	1	1900	50	16

Link #	Up-Stream Node	Down-Stream Node	Roadway Name	Roadway Type	Length (ft.)	No. of Lanes	Lane Width (ft.)	Shoulder Width (ft.)	Saturation Flow Rate (pcphpl)	Free Flow Speed (mph)	Grid Number
634	500	501	ROUTE 23	MINOR ARTERIAL	988	2	12	1	1750	45	9
635	501	502	ROUTE 23	MINOR ARTERIAL	667	2	12	4	1750	35	9
636	502	503	ROUTE 23	MINOR ARTERIAL	418	2	12	4	1750	35	9
637	503	504	ROUTE 23	MINOR ARTERIAL	802	2	12	4	1750	45	9
638	504	505	ROUTE 23	MINOR ARTERIAL	834	2	12	4	1750	45	9
639	505	6	INTERSTATE 80 ON-RAMP FROM ROUTE 23	FREEWAY RAMP	791	1	12	8	1700	45	9
640	505	506	ROUTE 23	MINOR ARTERIAL	708	2	12	4	1750	45	9
641	506	507	ROUTE 23	MINOR ARTERIAL	1408	2	12	4	1750	45	9
642	507	508	ROUTE 23	MINOR ARTERIAL	776	2	12	4	1900	45	9
643	508	509	ROUTE 23	COLLECTOR	9697	1	12	2	1700	60	9
644	509	510	ROUTE 23	COLLECTOR	10431	1	12	2	1700	60	9
645	509	511	ROUTE 33	COLLECTOR	10447	1	12	1	1700	60	8
646	510	709	ROUTE 23	COLLECTOR	5501	1	12	2	1700	60	2
647	512	501	KAIN ST	COLLECTOR	516	1	12	0	1750	30	9
648	513	502	MALLL ENTRANCE	COLLECTOR	308	1	12	0	1125	25	9
649	514	503	ROUTE 20	COLLECTOR	323	1	12	0	1750	45	9
650	515	514	ROUTE 20	COLLECTOR	463	1	12	0	1700	45	9
651	516	457	CHAMPLAIN ST	COLLECTOR	1428	1	12	0	1750	30	16
652	517	515	ROUTE 20	COLLECTOR	4590	1	12	0	1700	45	9
653	518	497	DELEON ST	COLLECTOR	1281	1	12	0	1750	30	15
654	519	463	US 6	COLLECTOR	7118	1	12	2	1700	50	15
655	520	519	ROUTE 42	COLLECTOR	977	1	12	1	1575	35	15
656	521	520	ROUTE 42	COLLECTOR	2774	1	12	1	1700	40	15
657	522	524	STATE ST	MINOR ARTERIAL	958	2	12	0	1750	35	15

Link #	Up-Stream Node	Down-Stream Node	Roadway Name	Roadway Type	Length (ft.)	No. of Lanes	Lane Width (ft.)	Shoulder Width (ft.)	Saturation Flow Rate (pcphpl)	Free Flow Speed (mph)	Grid Number
658	523	522	STATE ST	MINOR ARTERIAL	329	2	12	0	1750	40	15
659	524	525	STATE ST	MINOR ARTERIAL	1314	2	12	2	1750	35	15
660	525	486	ROUTE 23	MINOR ARTERIAL	1363	2	12	0	1900	35	15
661	526	527	ROUTE 23	COLLECTOR	10660	1	12	1	1700	60	24
662	527	626	ROUTE 23	COLLECTOR	5785	1	12	1	1700	45	16
663	528	582	2650TH RD	COLLECTOR	4965	1	12	1	1700	55	15
664	528	583	ROUTE 23	COLLECTOR	1373	1	12	2	1700	45	16
665	529	530	ADAMS ST	COLLECTOR	304	1	12	0	1125	25	15
666	529	587	ERICKSON ST	COLLECTOR	1858	1	12	0	1350	30	15
667	530	588	4 H RD	COLLECTOR	3805	1	12	0	1350	30	15
668	531	532	ROUTE 71	COLLECTOR	902	1	12	1	1700	45	15
669	531	570	ROUTE 71	COLLECTOR	1012	1	12	1	1700	45	15
670	532	536	ROUTE 71	COLLECTOR	1101	1	12	1	1700	45	15
671	533	525	ROUTE 71	COLLECTOR	1277	1	12	1	1750	45	15
672	534	533	ROUTE 71	COLLECTOR	3619	1	12	1	1700	45	15
673	535	534	ROUTE 71	COLLECTOR	1718	1	12	1	1700	40	15
674	536	535	ROUTE 71	COLLECTOR	718	1	12	1	1700	40	15
675	537	101	ROUTE 8	COLLECTOR	10608	1	12	1	1700	55	22
676	538	537	ROUTE 8	COLLECTOR	5435	1	12	0	1700	55	22
677	539	538	ROUTE 8	COLLECTOR	1048	1	12	2	1575	35	22
678	540	539	ROUTE 8	COLLECTOR	941	1	12	2	1575	35	23
679	541	540	ROUTE 8	COLLECTOR	6160	1	12	2	1700	55	23
680	541	542	ROUTE 8	COLLECTOR	2203	1	12	2	1700	55	23
681	542	543	ROUTE 8	COLLECTOR	4690	1	12	2	1700	55	23
682	543	544	ROUTE 8	COLLECTOR	1712	1	12	2	1700	45	15

Link #	Up-Stream Node	Down-Stream Node	Roadway Name	Roadway Type	Length (ft.)	No. of Lanes	Lane Width (ft.)	Shoulder Width (ft.)	Saturation Flow Rate (pcphpl)	Free Flow Speed (mph)	Grid Number
683	544	545	ROUTE 8	COLLECTOR	1970	1	12	2	1700	40	15
684	545	546	ROUTE 8	COLLECTOR	3224	1	12	1	1700	55	15
685	546	547	ROUTE 8	COLLECTOR	1330	1	12	1	1700	55	15
686	547	548	ROUTE 8	COLLECTOR	1120	1	12	0	1700	50	15
687	548	550	ROUTE 71	COLLECTOR	8817	1	12	2	1700	60	15
688	549	734	ROUTE 8	COLLECTOR	5106	1	12	1	1700	55	22
689	550	551	ROUTE 71	COLLECTOR	5282	1	12	2	1700	60	15
690	551	552	ROUTE 71	COLLECTOR	763	1	12	2	1700	60	14
691	552	553	ROUTE 71	COLLECTOR	803	1	12	2	1700	60	14
692	553	554	ROUTE 71	COLLECTOR	1321	1	12	2	1700	60	14
693	554	555	ROUTE 71	COLLECTOR	801	1	12	2	1700	45	14
694	555	556	ROUTE 71	COLLECTOR	544	1	12	2	1125	25	14
695	556	557	ROUTE 71	COLLECTOR	975	1	12	2	1125	25	14
696	557	558	ROUTE 71	COLLECTOR	618	1	12	2	1700	40	14
697	558	559	ROUTE 71	COLLECTOR	2704	1	12	2	1700	50	14
698	559	560	ROUTE 71	COLLECTOR	555	1	12	1	900	20	14
699	560	561	ROUTE 71	COLLECTOR	334	1	12	1	1125	25	14
700	561	562	ROUTE 71	COLLECTOR	3227	1	12	2	1700	55	14
701	562	563	ROUTE 71	COLLECTOR	538	1	12	1	1700	40	14
702	563	564	ROUTE 71	COLLECTOR	583	1	12	1	900	20	14
703	564	565	ROUTE 71	COLLECTOR	672	1	12	1	1125	25	14
704	565	566	ROUTE 71	COLLECTOR	566	1	12	1	1125	25	14
705	566	567	ROUTE 71	COLLECTOR	685	1	12	2	1350	30	14
706	567	568	ROUTE 71	COLLECTOR	1014	1	12	2	1125	25	14
707	568	569	ROUTE 71	COLLECTOR	864	1	12	2	1125	25	14

Link #	Up-Stream Node	Down-Stream Node	Roadway Name	Roadway Type	Length (ft.)	No. of Lanes	Lane Width (ft.)	Shoulder Width (ft.)	Saturation Flow Rate (pcphpl)	Free Flow Speed (mph)	Grid Number
708	569	761	ROUTE 71	COLLECTOR	3537	1	12	2	1700	55	14
709	570	571	ROUTE 71	COLLECTOR	3088	1	12	1	1700	60	15
710	571	548	ROUTE 71	COLLECTOR	2017	1	12	1	1700	60	15
711	572	571	2650TH RD	COLLECTOR	1699	1	12	1	1575	35	15
712	573	572	2650TH RD	COLLECTOR	2857	1	12	1	1700	55	15
713	574	524	CENTER ST	COLLECTOR	1992	1	12	0	1750	30	16
714	575	524	CENTER ST	COLLECTOR	1452	1	12	0	1750	30	15
715	576	522	STATE ST	LOCAL ROADWAY	279	1	12	0	1750	30	15
716	577	576	STATE ST	LOCAL ROADWAY	1542	1	12	0	1350	30	15
717	578	176	ROUTE 36	COLLECTOR	1224	1	10	2	1575	35	18
718	579	168	ROUTE 36	COLLECTOR	362	1	10	1	900	20	18
719	580	270	ROUTE 55	COLLECTOR	2601	1	12	3	1750	35	16
720	581	573	2650TH RD	COLLECTOR	1339	1	12	1	1700	55	15
721	582	581	2650TH RD	COLLECTOR	629	1	12	1	1575	35	15
722	583	270	RT 23	MINOR ARTERIAL	1325	2	12	2	1750	45	16
723	584	274	N 2703RD RD	COLLECTOR	516	1	12	0	1700	40	16
724	585	272	N 2703RD RD	COLLECTOR	2560	1	12	0	1700	40	16
725	586	271	ERICKSON ST	COLLECTOR	436	1	10	0	1125	25	16
726	587	586	ERICKSON ST	COLLECTOR	377	1	10	0	1125	25	15
727	588	531	4 H RD	COLLECTOR	1967	1	12	0	1575	35	15
728	589	91	ROUTE 6	COLLECTOR	1236	1	12	1	1350	30	24
729	590	589	BURLINGTON AVE	COLLECTOR	2070	1	10	0	1125	25	24
730	590	676	BURLINGTON AVE	COLLECTOR	1296	1	10	0	1125	25	24
731	591	589	ROUTE 6	COLLECTOR	1166	1	12	1	1350	30	24
732	592	591	ROUTE 6	COLLECTOR	1343	1	12	1	1700	40	24

Link #	Up-Stream Node	Down-Stream Node	Roadway Name	Roadway Type	Length (ft.)	No. of Lanes	Lane Width (ft.)	Shoulder Width (ft.)	Saturation Flow Rate (pcphpl)	Free Flow Speed (mph)	Grid Number
733	593	88	ROUTE 9	COLLECTOR	3126	1	12	2	1575	35	28
734	594	336	ROUTE 23	MINOR ARTERIAL	1737	2	12	4	1750	60	32
735	594	337	ROUTE 23	COLLECTOR	3359	1	12	4	1700	55	32
736	595	597	OAKLEY AVE	COLLECTOR	1379	1	12	0	1575	35	31
737	596	595	EASTWOOD AVE	COLLECTOR	600	1	12	0	1350	30	31
738	597	398	OAKLEY AVE	COLLECTOR	5343	1	12	0	1700	50	31
739	598	361	N 1ST ST	MINOR ARTERIAL	393	2	12	1	1900	30	39
740	599	355	ROUTE 18	COLLECTOR	4163	1	12	1	1700	40	39
741	599	598	ROUTE 18	COLLECTOR	822	1	12	1	1700	40	39
742	600	351	N MONROE ST	MINOR ARTERIAL	403	2	12	0	1750	30	40
743	600	359	HICKORY ST	COLLECTOR	347	1	12	0	1750	25	40
744	601	368	VERMILION ST	COLLECTOR	557	1	12	0	1750	30	40
745	602	348	ROUTE 18	MINOR ARTERIAL	388	2	12	0	1750	30	40
746	603	600	HICKORY ST	COLLECTOR	381	1	12	0	1125	25	40
747	604	603	HICKORY ST	COLLECTOR	375	1	12	0	1125	25	40
748	605	604	HICKORY ST	COLLECTOR	355	1	12	0	1125	25	40
749	606	605	HICKORY ST	COLLECTOR	775	1	12	0	1125	25	40
750	607	347	ROUTE 18	COLLECTOR	230	1	12	0	1125	25	40
751	608	409	ROUTE 23	COLLECTOR	612	1	12	0	1700	45	40
752	609	610	ROUTE 15	COLLECTOR	1932	1	12	1	1350	30	41
753	610	335	ROUTE 15	COLLECTOR	6806	1	12	1	1700	55	41
754	611	374	ROUTE 23	COLLECTOR	383	1	12	0	1350	30	40
755	612	372	ROUTE 23	COLLECTOR	396	1	12	0	1350	30	40
756	613	352	PARK ST	COLLECTOR	267	1	12	0	1750	30	40
757	614	615	E 4TH ST	COLLECTOR	574	1	12	0	1125	25	40

Link #	Up-Stream Node	Down-Stream Node	Roadway Name	Roadway Type	Length (ft.)	No. of Lanes	Lane Width (ft.)	Shoulder Width (ft.)	Saturation Flow Rate (pcphpl)	Free Flow Speed (mph)	Grid Number
758	615	616	UNION ST	COLLECTOR	590	1	12	0	1125	25	40
759	616	617	DIVISION ST	COLLECTOR	653	1	12	0	1125	25	40
760	617	622	MILDRED AVE	COLLECTOR	298	1	12	0	1350	30	40
761	618	619	ROUTE 5	COLLECTOR	1037	1	12	1	1575	35	38
762	619	339	ROUTE 5	COLLECTOR	4049	1	12	1	1700	55	38
763	620	621	ROUTE 5	COLLECTOR	5121	1	12	1	1700	40	30
764	621	618	ROUTE 5	COLLECTOR	9031	1	12	1	1700	55	30
765	622	380	1ST ST	COLLECTOR	368	1	12	1	1350	30	40
766	623	320	E 24TH ST	COLLECTOR	10005	1	9	1	1750	50	41
767	624	625	ROUTE 170	COLLECTOR	490	1	12	1	1700	40	42
768	625	307	ROUTE 170	COLLECTOR	2493	1	12	1	1700	60	42
769	626	528	ROUTE 23	COLLECTOR	4714	1	12	1	1700	60	16
770	627	628	JOHNNY RUN RD	COLLECTOR	981	1	12	0	1125	25	43
771	628	311	JOHNNY RUN RD	COLLECTOR	2408	1	12	0	1700	50	43
772	629	316	LIVINGSTON RD	LOCAL ROADWAY	10154	1	10	0	1750	40	42
773	629	632	N 1800 E RD	LOCAL ROADWAY	2491	1	9	0	1700	40	42
774	630	311	ROUTE 17	COLLECTOR	10382	1	12	1	1700	60	42
775	631	629	LIVINGSTON RD	LOCAL ROADWAY	544	1	10	0	1700	40	42
776	632	633	N 1800 E RD	LOCAL ROADWAY	831	1	9	0	900	20	42
777	633	630	N 1800 E RD	LOCAL ROADWAY	2473	1	9	0	1700	50	42
778	634	631	LASALLE RD	LOCAL ROADWAY	5316	1	10	0	1750	45	42
779	635	634	LASALLE RD	LOCAL ROADWAY	10568	1	10	0	1750	45	42
780	636	315	GARDNER RD	COLLECTOR	10614	1	12	0	1700	60	34
781	636	637	LASALLE RD	LOCAL ROADWAY	5271	1	10	0	1750	45	34
782	637	635	LASALLE RD	LOCAL ROADWAY	5200	1	10	0	1750	45	34

Link #	Up-Stream Node	Down-Stream Node	Roadway Name	Roadway Type	Length (ft.)	No. of Lanes	Lane Width (ft.)	Shoulder Width (ft.)	Saturation Flow Rate (pcphpl)	Free Flow Speed (mph)	Grid Number
783	638	131	ROUTE 36	COLLECTOR	556	1	12	2	1750	45	18
784	638	132	ROUTE 170	COLLECTOR	1787	1	12	2	1700	45	18
785	639	131	N 2553RD RD	COLLECTOR	413	1	12	2	1750	35	18
786	640	423	ROUTE 30	COLLECTOR	989	1	12	2	1700	40	17
787	641	285	ROUTE 47	MINOR ARTERIAL	1384	2	12	8	1900	60	44
788	646	781	ROUTE 47	COLLECTOR	4036	1	12	2	1700	55	13
789	647	646	PROLOGIS PKWY	COLLECTOR	992	1	12	1	1750	30	13
790	648	243	SHOPPING CENTER	LOCAL ROADWAY	896	1	12	1	1750	25	13
791	649	242	SHOPPING CENTER	LOCAL ROADWAY	964	1	12	1	1750	25	13
792	650	651	ROUTE 25	COLLECTOR	8783	1	12	1	1700	50	18
793	651	652	ROUTE 25	COLLECTOR	7952	1	12	1	1700	50	18
794	652	72	ROUTE 4	COLLECTOR	15392	1	12	4	1750	50	11
795	652	653	ROUTE 25	COLLECTOR	3243	1	12	1	1700	50	11
796	653	654	ROUTE 25	COLLECTOR	7411	1	12	1	1700	50	11
797	654	655	ROUTE 25	COLLECTOR	15841	1	12	1	1700	45	11
798	655	656	ROUTE 25	COLLECTOR	5629	1	12	1	1700	60	4
799	656	657	ROUTE 25	COLLECTOR	5117	1	12	1	1700	60	4
800	659	660	E 2625TH RD	LOCAL ROADWAY	2891	1	10	0	1575	35	17
801	660	661	E 2625TH RD	LOCAL ROADWAY	2538	1	10	0	1575	35	17
802	661	662	E 27TH RD	COLLECTOR	5449	1	10	0	1700	50	17
803	662	663	E 27TH RD	COLLECTOR	2687	1	10	0	1700	50	17
804	663	664	E 27TH RD	COLLECTOR	10525	1	10	0	1700	50	10
805	663	738	ROUTE 4	COLLECTOR	15032	1	12	4	1750	50	10
806	663	784	ROUTE 4	COLLECTOR	5262	1	12	4	1700	50	11
807	664	665	E 27TH RD	COLLECTOR	8093	1	10	0	1700	50	10

Link #	Up-Stream Node	Down-Stream Node	Roadway Name	Roadway Type	Length (ft.)	No. of Lanes	Lane Width (ft.)	Shoulder Width (ft.)	Saturation Flow Rate (pcphpl)	Free Flow Speed (mph)	Grid Number
808	665	666	E 27TH RD	COLLECTOR	7800	1	10	0	1700	50	10
809	666	655	E 35TH RD	COLLECTOR	10625	1	10	0	1700	45	4
810	667	668	E 2625TH RD	LOCAL ROADWAY	4443	1	10	0	1575	35	17
811	668	659	N 28TH RD	COLLECTOR	580	1	10	0	1575	35	17
812	669	651	N 2850TH RD	COLLECTOR	5291	1	12	1	1700	50	18
813	669	783	E 28TH RD	LOCAL ROADWAY	494	1	12	4	1700	40	18
814	670	14	INTERSTATE 80	FREEWAY	8766	2	12	10	2250	70	10
815	670	15	INTERSTATE 80	FREEWAY	10576	2	12	10	2250	70	10
816	671	15	INTERSTATE 80	FREEWAY	10717	2	12	10	2250	70	11
817	671	16	INTERSTATE 80	FREEWAY	9196	2	12	10	2250	70	11
818	672	507	N 31ST RD	COLLECTOR	1129	1	12	0	1750	45	9
819	673	506	W STEVENSON RD	COLLECTOR	1369	1	12	0	1750	40	9
820	674	476	E JACKSON ST	COLLECTOR	762	1	12	0	1750	30	15
821	675	526	ROUTE 23	COLLECTOR	6444	1	12	1	1700	60	24
822	676	337	ROUTE 23	COLLECTOR	13781	1	12	4	1700	60	32
823	677	226	GEORGE ST	COLLECTOR	907	1	12	0	1750	30	13
824	678	78	DRIVEWAY	LOCAL ROADWAY	283	1	12	1	1750	30	13
825	679	235	MENARDS SHOP CTR	LOCAL ROADWAY	439	1	12	0	1750	25	13
826	680	681	MENARDS SHOP CTR	LOCAL ROADWAY	382	1	12	0	1125	25	13
827	681	236	GORE RD	COLLECTOR	676	1	12	1	1350	30	13
828	682	224	GORE RD	COLLECTOR	3094	1	12	1	1750	35	13
829	683	74	CR-2	COLLECTOR	5215	1	12	2	1700	50	19
830	684	683	STOCKDALE RD	LOCAL ROADWAY	4964	1	11	0	1700	45	19
831	685	684	STOCKDALE RD	LOCAL ROADWAY	5565	1	11	0	1700	45	19
832	686	212	FULTON ST	COLLECTOR	332	1	12	1	1575	30	20

Link #	Up-Stream Node	Down-Stream Node	Roadway Name	Roadway Type	Length (ft.)	No. of Lanes	Lane Width (ft.)	Shoulder Width (ft.)	Saturation Flow Rate (pcphpl)	Free Flow Speed (mph)	Grid Number
833	686	687	E ILLINOIS AVE	COLLECTOR	652	1	12	1	1350	30	20
834	687	193	E ILLINOIS AVE	COLLECTOR	609	1	12	1	1750	30	20
835	687	195	LIBERTY ST	COLLECTOR	321	1	12	1	1750	30	20
836	688	690	W ILLINOIS AVE	COLLECTOR	648	1	12	1	1350	30	20
837	689	221	E WASHINGTON ST	COLLECTOR	466	1	12	1	1575	35	20
838	690	689	W ILLINOIS AVE	COLLECTOR	346	1	12	1	1575	35	20
839	691	135	OLD STAGE RD	COLLECTOR	1614	1	12	1	1575	35	18
840	692	182	W SOUTHMOR RD	COLLECTOR	2671	1	12	1	1750	30	20
841	693	183	ROUTE 19	COLLECTOR	2632	1	12	1	1750	30	20
842	694	71	US 6	COLLECTOR	1500	1	12	4	1700	50	18
843	694	696	W BLUFF RD	LOCAL ROADWAY	6657	1	11	0	1700	50	19
844	695	685	NETTLE SCHOOL RD	LOCAL ROADWAY	515	1	12	1	1700	45	19
845	696	695	W BLUFF RD	LOCAL ROADWAY	5221	1	11	0	1700	50	19
846	697	102	SENECA RD	LOCAL ROADWAY	1023	1	9	0	1700	40	11
847	698	104	ROUTE 21	LOCAL ROADWAY	10482	1	10	0	1700	50	11
848	699	55	ROUTE 71	MINOR ARTERIAL	346	2	12	6	1750	50	16
849	699	700	ROUTE 71	MINOR ARTERIAL	329	2	12	6	1900	50	16
850	700	120	ROUTE 71	COLLECTOR	9020	1	12	2	1700	55	16
851	701	116	ROUTE 15	COLLECTOR	14936	1	10	0	1700	55	10
852	702	443	E MAIN ST	COLLECTOR	2969	1	12	0	1350	30	16
853	703	446	CLINTON ST	COLLECTOR	292	1	12	0	1750	30	15
854	704	447	CANAL ST	COLLECTOR	281	1	12	0	1350	30	15
855	705	495	MADISON ST	COLLECTOR	1261	1	12	0	1350	30	15
856	706	466	ROUTE 34	COLLECTOR	1109	1	12	0	1350	30	15
857	707	124	ROUTE 71	COLLECTOR	10255	1	12	3	1700	60	3

Link #	Up-Stream Node	Down-Stream Node	Roadway Name	Roadway Type	Length (ft.)	No. of Lanes	Lane Width (ft.)	Shoulder Width (ft.)	Saturation Flow Rate (pcphpl)	Free Flow Speed (mph)	Grid Number
858	708	464	US 6	COLLECTOR	3101	1	12	2	1700	55	14
859	709	763	ROUTE 23	COLLECTOR	2542	1	12	2	1700	60	2
860	710	711	ROUTE 21	COLLECTOR	2867	1	12	4	1700	45	9
861	711	712	ROUTE 21	COLLECTOR	2931	1	12	4	1700	45	9
862	712	713	ROUTE 21	COLLECTOR	4572	1	12	4	1700	45	9
863	713	714	ROUTE 21	COLLECTOR	1982	1	12	4	1700	45	9
864	714	715	ROUTE 21	COLLECTOR	680	1	12	4	1575	35	9
865	715	716	ROUTE 11	COLLECTOR	2172	1	12	4	1575	35	9
866	716	717	ROUTE 11	COLLECTOR	584	1	12	4	1575	35	2
867	717	718	ROUTE 2	COLLECTOR	1215	1	12	4	1700	45	2
868	717	720	ROUTE 2	COLLECTOR	1861	1	12	4	1700	45	2
869	718	719	ROUTE 21	COLLECTOR	1213	1	12	4	1700	50	2
870	719	510	ROUTE 21	COLLECTOR	15652	1	12	4	1700	50	2
871	720	721	ROUTE 2	COLLECTOR	1592	1	12	4	1700	40	2
872	721	722	ROUTE 2	COLLECTOR	1647	1	12	4	1700	40	2
873	723	105	W MINOOKA RD	LOCAL ROADWAY	4357	1	10	0	1700	50	5
874	723	724	LISBON ST	COLLECTOR	5155	1	12	4	1700	50	5
875	726	725	ROUTE 6	COLLECTOR	1959	1	12	2	1700	60	13
876	727	726	ASHLEY RD	COLLECTOR	10140	1	12	0	1700	45	13
877	728	729	ROUTE 44	COLLECTOR	8008	1	12	4	1700	50	30
878	729	730	ROUTE 44	COLLECTOR	17118	1	12	4	1700	50	22
879	730	731	ROUTE 14	COLLECTOR	1351	1	12	4	1700	50	22
880	730	732	ROUTE 178	COLLECTOR	2614	1	12	4	1700	50	22
881	732	733	ROUTE 178	COLLECTOR	1046	1	12	4	1700	40	22
882	733	734	ROUTE 178	COLLECTOR	1034	1	12	4	1700	40	22

Link #	Up-Stream Node	Down-Stream Node	Roadway Name	Roadway Type	Length (ft.)	No. of Lanes	Lane Width (ft.)	Shoulder Width (ft.)	Saturation Flow Rate (pcphpl)	Free Flow Speed (mph)	Grid Number
883	734	735	ROUTE 178	COLLECTOR	3244	1	12	1	1700	55	22
884	735	756	ROUTE 178	COLLECTOR	1748	1	12	1	1700	55	22
885	736	576	MOORE ST	LOCAL ROADWAY	1221	1	12	4	1350	30	15
886	737	10	INTERSTATE 80 ON-RAMP FROM ROUTE 71	FREEWAY RAMP	775	1	12	8	1700	45	9
887	738	114	ROUTE 15	COLLECTOR	1905	1	12	1	1700	60	10
888	739	382	OTTER CREEK ST	COLLECTOR	526	1	12	1	1750	35	40
889	740	320	CR-40	COLLECTOR	5344	1	10	0	1750	55	41
890	741	631	N 12TH RD	COLLECTOR	2259	1	9	0	1750	45	42
891	742	634	N 13TH ST	COLLECTOR	5252	1	9	0	1750	45	42
892	743	635	N 15TH RD	COLLECTOR	5313	1	11	0	1750	50	34
893	744	131	N 2553RD RD	COLLECTOR	351	1	12	2	1750	35	26
894	745	637	N 16TH RD	COLLECTOR	2683	1	8	0	1750	45	34
895	746	433	BROADWAY ST	COLLECTOR	535	1	14	0	1750	35	17
896	747	266	ROUTE 55	COLLECTOR	410	1	12	0	1700	45	16
897	748	623	E 24TH ST	COLLECTOR	441	1	9	1	1350	30	41
898	749	326	ROUTE 18	COLLECTOR	721	1	12	1	1700	60	41
899	750	306	ROUTE 170	COLLECTOR	775	1	12	1	1700	60	42
900	751	180	ROUTE 6	COLLECTOR	5294	1	12	1	1700	50	20
901	752	593	ROUTE 9	COLLECTOR	12063	1	12	2	1700	60	28
902	753	280	GARDNER RD	COLLECTOR	15247	1	12	0	1700	55	36
903	754	94	ROUTE 6	COLLECTOR	10543	1	12	0	1700	60	23
904	755	344	LEONORE RD	COLLECTOR	8964	1	12	4	1700	55	31
905	756	757	ROUTE 178	COLLECTOR	2548	1	12	1	1700	60	22
906	757	758	ROUTE 178	COLLECTOR	5247	1	12	1	1700	60	22

Link #	Up-Stream Node	Down-Stream Node	Roadway Name	Roadway Type	Length (ft.)	No. of Lanes	Lane Width (ft.)	Shoulder Width (ft.)	Saturation Flow Rate (pcphpl)	Free Flow Speed (mph)	Grid Number
907	758	759	ROUTE 178	COLLECTOR	5375	1	12	1	1700	60	14
908	759	760	ROUTE 71	COLLECTOR	2635	1	12	2	1700	55	14
909	761	759	ROUTE 71	COLLECTOR	3969	1	12	2	1700	55	14
910	763	764	ROUTE 23	COLLECTOR	1306	1	12	2	1700	60	2
911	764	765	ROUTE 23	COLLECTOR	1782	1	12	2	1700	60	2
912	765	766	US-RT 52	COLLECTOR	2427	1	12	3	1700	60	2
913	765	767	US-RT 52	COLLECTOR	2683	1	12	3	1700	60	1
914	765	768	CR-1	COLLECTOR	1741	1	12	1	1700	55	1
915	769	302	VERONA RD	COLLECTOR	5456	1	12	1	1700	55	35
916	770	300	BUFFALO RD	COLLECTOR	5403	1	12	0	1700	45	35
917	771	177	GONNAM RD	COLLECTOR	7989	1	12	1	1700	60	27
918	772	319	E 24TH ST	COLLECTOR	4569	1	9	1	1700	50	33
919	773	303	ROUTE 170	COLLECTOR	5380	1	12	1	1700	60	34
920	774	86	ROUTE 6	COLLECTOR	12865	1	12	2	1700	60	26
921	775	288	ROUTE 170	COLLECTOR	4897	1	12	2	1700	60	34
922	776	287	ROUTE 39	COLLECTOR	5322	1	12	1	1700	60	34
923	777	318	E 24TH ST	COLLECTOR	5096	1	10	0	1750	45	33
924	778	90	ROUTE 6	COLLECTOR	8818	1	12	1	1700	55	25
925	779	726	ROUTE 6	COLLECTOR	3569	1	12	2	1700	60	13
926	780	122	ROUTE 71	COLLECTOR	13332	1	12	3	1700	60	9
927	782	661	E 2850TH RD	LOCAL ROADWAY	3769	1	12	4	1700	40	18
928	782	783	E 2850TH RD	LOCAL ROADWAY	1561	1	12	4	1700	40	18
929	783	784	E 28TH RD	LOCAL ROADWAY	7471	1	12	4	1700	40	18
930	784	652	ROUTE 4	COLLECTOR	5360	1	12	4	1700	50	11
931	785	786	E 28TH RD	LOCAL ROADWAY	7819	1	12	4	1700	40	18

Link #	Up-Stream Node	Down-Stream Node	Roadway Name	Roadway Type	Length (ft.)	No. of Lanes	Lane Width (ft.)	Shoulder Width (ft.)	Saturation Flow Rate (pcphpl)	Free Flow Speed (mph)	Grid Number
932	786	669	E 28TH RD	LOCAL ROADWAY	2046	1	12	4	1700	40	18
933	787	782	WOODSMOKE RANCH ENTRANCE	LOCAL ROADWAY	1016	1	12	0	1575	35	18
934	788	786	WOODSMOKE RANCH ENTRANCE	LOCAL ROADWAY	1232	1	12	0	1575	35	18
935	789	668	N 28TH RD	LOCAL ROADWAY	2640	1	12	4	1700	40	17
936	8003	3	INTERSTATE 80	FREEWAY	8461	2	12	10	2250	70	7
EXIT LINK	3	8003	INTERSTATE 80	FREEWAY	8461	2	12	10	2250	70	7
EXIT LINK	23	8023	INTERSTATE 80	FREEWAY	9721	2	12	10	2250	70	13
EXIT LINK	24	8024	INTERSTATE 55	FREEWAY	8846	2	12	10	2250	70	49
EXIT LINK	33	8033	INTERSTATE 55	FREEWAY	20065	2	12	10	2250	70	37
EXIT LINK	105	8105	W MINOOKA RD	LOCAL ROADWAY	6300	1	10	0	1700	50	5
EXIT LINK	126	8126	ROUTE 71	COLLECTOR	5073	1	12	3	1700	60	3
EXIT LINK	191	8191	ROUTE 19	COLLECTOR	8048	1	12	2	1700	60	20
EXIT LINK	245	8245	ROUTE 113	COLLECTOR	10531	1	12	2	1700	55	28
EXIT LINK	279	8279	REED RD	LOCAL ROADWAY	10447	1	10	1	1700	45	28
EXIT LINK	310	8310	ROUTE 170	COLLECTOR	4743	1	12	1	1700	60	48
EXIT LINK	358	8358	ROUTE 18	COLLECTOR	10671	1	12	3	1700	55	38

Link #	Up-Stream Node	Down-Stream Node	Roadway Name	Roadway Type	Length (ft.)	No. of Lanes	Lane Width (ft.)	Shoulder Width (ft.)	Saturation Flow Rate (pcphpl)	Free Flow Speed (mph)	Grid Number
EXIT LINK	333	8333	ROUTE 17	COLLECTOR	10024	1	12	2	1700	60	45
EXIT LINK	760	8760	ROUTE 71	COLLECTOR	2683	1	12	2	1700	55	14
EXIT LINK	766	8766	US-RT 52	COLLECTOR	3625	1	12	3	1700	60	2
EXIT LINK	767	8767	US-RT 52	COLLECTOR	6023	1	12	3	1700	60	1
EXIT LINK	768	8768	CR-1	COLLECTOR	2103	1	12	1	1700	55	1
EXIT LINK	415	8415	ROUTE 23	COLLECTOR	5503	1	12	6	1700	60	46
EXIT LINK	464	8464	US 6	COLLECTOR	4005	1	12	2	1700	55	14
EXIT LINK	473	8473	ROUTE 34	COLLECTOR	11020	1	12	1	1700	55	14
EXIT LINK	511	8511	ROUTE 33	COLLECTOR	10608	1	12	1	1700	60	8
EXIT LINK	657	8657	ROUTE 25	COLLECTOR	2358	1	12	1	1700	60	4
EXIT LINK	722	8722	ROUTE 2	COLLECTOR	3498	1	12	4	1700	45	2
EXIT LINK	724	8724	LISBON ST	COLLECTOR	5491	1	12	4	1700	50	5
EXIT LINK	725	8243	ROUTE 6	COLLECTOR	2929	1	12	2	1700	55	13
EXIT LINK	731	8731	ROUTE 14	COLLECTOR	3823	1	12	4	1700	45	22

Link #	Up-Stream Node	Down-Stream Node	Roadway Name	Roadway Type	Length (ft.)	No. of Lanes	Lane Width (ft.)	Shoulder Width (ft.)	Saturation Flow Rate (pcphpl)	Free Flow Speed (mph)	Grid Number
EXIT LINK	781	8231	ROUTE 47	COLLECTOR	6567	1	12	2	1700	55	13

Table K-2. Nodes in the Link-Node Analysis Network which are Controlled

Node	X Coordinate (ft)	Y Coordinate (ft)	Control Type	Grid Map Number
41	881377	1698788	Stop	17
55	855306	1707678	TCP - Actuated	16
65	908179	1695215	TCP - Actuated	18
67	911227	1697088	TCP - Uncontrolled	18
72	922962	1713095	TCP - Actuated	11
73	933557	1713142	TCP - Uncontrolled	12
74	944148	1713177	Stop	12
75	952834	1713547	Stop	13
76	954180	1713574	Actuated	13
77	957300	1713671	Actuated	13
78	958042	1713712	Actuated	13
79	958207	1713726	Actuated	13
80	959952	1714290	Actuated	13
83	892994	1665095	Stop	25
85	909102	1665262	Stop	26
88	960752	1666046	Stop	28
90	871938	1664887	Stop	24
91	845887	1664891	Stop	24
92	840580	1665020	TCP - Uncontrolled	23
93	840580	1667563	Stop	23
101	803777	1673971	Stop	22
102	922799	1718236	Stop	11
103	917563	1718179	Stop	11
104	917138	1739429	Stop	4
114	881957	1714580	TCP - Uncontrolled	10
119	880071	1732851	Stop	10
120	861559	1715088	TCP - Uncontrolled	9
131	909202	1686258	TCP - Actuated	18
132	908509	1687888	TCP - Uncontrolled	18
147	933975	1701933	TCP - Uncontrolled	19
159	955294	1709350	Stop	20
160	958789	1709135	Stop	20
161	959433	1709119	Actuated	20
162	960059	1709114	Actuated	20
177	928924	1689274	Stop	19
178	939538	1689381	Stop	19
179	944822	1689436	TCP - Uncontrolled	19

Node	X Coordinate (ft)	Y Coordinate (ft)	Control Type	Grid Map Number
181	960264	1689928	Stop	20
182	960074	1700494	Actuated	20
183	960027	1703152	Actuated	20
193	960089	1708096	Actuated	20
194	960074	1708477	Actuated	20
195	959469	1708448	Actuated	20
196	959469	1708772	Actuated	20
197	959444	1709458	Actuated	20
198	959435	1709786	Actuated	20
199	959435	1710110	Actuated	20
200	959413	1710467	Actuated	20
202	959390	1714090	Stop	13
206	958197	1712652	Stop	13
207	960046	1709785	Actuated	20
209	960012	1710473	Actuated	20
210	959988	1712671	Actuated	13
211	959379	1712666	Stop	13
212	958836	1708468	Stop	20
217	960179	1711067	Stop	20
219	964706	1711260	Stop	20
224	956334	1718986	Actuated	13
226	959964	1715052	Actuated	13
227	959906	1717807	Actuated	13
228	959864	1719300	Actuated	13
229	959864	1720391	Actuated	13
230	959836	1721250	Actuated	13
235	959066	1719512	Actuated	13
242	960552	1718177	Actuated	13
243	960738	1718884	Actuated	13
254	882884	1690425	TCP - Actuated	17
256	879966	1691552	Stop	17
257	878457	1691954	Stop	17
270	845971	1696784	TCP - Actuated	16
271	845959	1697771	Stop	16
272	845974	1699435	Stop	16
280	961351	1644836	Stop	36
287	898485	1644067	Stop	34
292	898508	1643564	Stop	34

Node	X Coordinate (ft)	Y Coordinate (ft)	Control Type	Grid Map Number
293	899164	1644099	Stop	34
300	935415	1644121	Stop	35
302	940754	1644216	Stop	35
307	898977	1611736	Stop	42
311	925399	1612078	Stop	43
316	925234	1617756	TCP - Actuated	43
317	882645	1654345	TCP - Uncontrolled	33
318	882645	1643980	TCP - Actuated	33
320	882808	1622723	TCP - Actuated	41
321	882360	1664953	TCP - Uncontrolled	25
322	881832	1622349	Stop	41
327	883458	1611827	Stop	41
331	846423	1600951	Stop	46
334	871989	1643817	Stop	32
335	872286	1622616	Stop	41
336	845864	1643915	TCP - Actuated	32
337	845738	1649009	TCP - Uncontrolled	32
338	806130	1648885	Stop	30
343	814190	1622607	Stop	38
346	851190	1622596	Stop	40
347	848903	1622676	Stop	40
348	847755	1622664	Actuated	40
349	847385	1622660	Actuated	40
350	847010	1622647	Actuated	40
351	846653	1622643	Actuated	40
352	846309	1622628	Actuated	40
353	845916	1622644	Actuated	40
356	835374	1622661	Stop	39
359	846294	1623036	Actuated	40
360	845900	1623032	Actuated	40
365	845909	1622107	Actuated	40
366	846292	1622098	Actuated	40
367	846657	1622089	Stop	40
368	847030	1622089	Actuated	40
369	847377	1622107	Stop	40
370	847751	1622143	Stop	40
372	846280	1624369	Stop	40
374	846333	1625328	Stop	40

Node	X Coordinate (ft)	Y Coordinate (ft)	Control Type	Grid Map Number
375	845878	1624331	Stop	40
376	845893	1625312	Stop	40
379	845882	1627959	Stop	40
381	851189	1624429	Stop	40
382	851218	1627968	TCP - Actuated	40
384	845879	1629479	Actuated	40
385	845867	1630361	Actuated	40
386	845897	1632541	Actuated	40
387	845889	1633221	TCP - Actuated	40
388	845889	1634974	Actuated	32
398	835304	1633410	Stop	31
401	845924	1620611	Stop	40
402	846308	1620593	Stop	40
404	848925	1620629	Stop	40
405	848943	1617351	Stop	40
406	846254	1617360	Stop	40
407	845933	1617395	Stop	40
414	851135	1617413	Stop	40
433	881041	1697590	TCP - Actuated	17
437	852420	1705720	TCP - Actuated	16
444	844847	1704568	Actuated	15
445	844421	1704588	Actuated	15
446	844007	1704584	Actuated	15
447	843617	1704596	Stop	15
448	842871	1704553	Stop	15
449	842195	1704553	Stop	15
450	838307	1704462	Stop	15
453	853473	1706275	Stop	16
457	848220	1708424	Actuated	16
458	844864	1708353	Actuated	15
459	842745	1708384	Actuated	15
462	838304	1707511	Stop	15
467	838320	1702243	Stop	15
474	844848	1704982	Actuated	15
475	844839	1705269	Actuated	15
476	844843	1705645	Actuated	15
477	844848	1706026	Actuated	15
478	844852	1706438	Actuated	15

Node	X Coordinate (ft)	Y Coordinate (ft)	Control Type	Grid Map Number
479	844866	1706863	Actuated	15
483	844422	1706854	Actuated	15
487	844431	1704991	Actuated	15
488	844431	1705283	Actuated	15
489	844449	1705659	Actuated	15
490	844435	1706017	Actuated	15
491	844435	1706438	Actuated	15
494	838284	1704893	Stop	15
496	842227	1704956	Stop	15
497	844880	1708969	Actuated	15
501	846346	1713328	Actuated	9
502	846273	1713990	Actuated	9
503	846288	1714408	Actuated	9
504	846287	1715210	Actuated	9
505	846326	1716044	Actuated	9
506	846336	1716751	Actuated	9
507	846354	1718159	Actuated	9
510	846436	1739062	Stop	2
511	835930	1728590	Stop	8
519	837705	1707522	Stop	15
522	845328	1700420	Actuated	15
524	845181	1701326	Actuated	15
525	845071	1702636	Actuated	15
527	846012	1683587	TCP - Uncontrolled	24
531	837513	1698020	Stop	15
548	833240	1694067	Stop	15
571	835038	1694818	Stop	15
576	845142	1700212	Stop	15
580	848572	1696817	TCP - Uncontrolled	16
586	845524	1697754	Stop	15
587	845165	1697844	Stop	15
589	847124	1665062	Stop	24
591	848290	1665036	Stop	24
595	842025	1633330	Stop	31
598	843673	1622466	Stop	39
603	847022	1623063	Stop	40
604	847397	1623072	Stop	40
605	847752	1623072	Stop	40

Node	X Coordinate (ft)	Y Coordinate (ft)	Control Type	Grid Map Number
606	848526	1623094	Stop	40
617	849933	1628642	Stop	40
620	806122	1647664	Stop	30
630	915018	1611939	Stop	42
631	914538	1617775	TCP - Actuated	42
634	914560	1623090	TCP - Actuated	42
635	914571	1633658	TCP - Actuated	34
636	914515	1644129	TCP - Uncontrolled	34
637	914500	1638858	TCP - Actuated	34
638	908666	1686108	TCP - Actuated	26
646	959777	1725680	Actuated	13
651	907835	1704927	Stop	18
652	907572	1712875	Stop	11
653	907480	1716116	TCP - Uncontrolled	11
655	907013	1739363	Stop	4
661	897173	1704665	Stop	17
662	897023	1710112	Stop	17
663	896950	1712798	Stop	10
664	896650	1723319	Stop	10
665	896577	1731411	Stop	10
668	893273	1701945	Stop	17
676	845892	1662789	Stop	24
681	957809	1719008	Stop	13
683	944293	1707964	Stop	19
685	933765	1707868	TCP - Uncontrolled	19
689	962090	1708538	Stop	20
691	909400	1691685	Stop	18
695	933686	1707359	Stop	19
699	855530	1707942	Yield	16
705	844020	1705001	Stop	15
718	863248	1739007	Stop	2
723	943676	1739745	Stop	5
726	965223	1722682	Stop	13
727	965367	1712543	Yield	13
728	806130	1651644	Stop	30
729	798123	1651795	Stop	30
734	797556	1673533	Stop	22
738	881919	1712674	TCP - Actuated	10

Node	X Coordinate (ft)	Y Coordinate (ft)	Control Type	Grid Map Number
747	866202	1695233	TCP - Uncontrolled	16
748	882773	1633168	TCP - Uncontrolled	41
749	883214	1617382	TCP - Uncontrolled	41
750	898896	1617493	TCP - Uncontrolled	42
752	945570	1665633	TCP - Uncontrolled	27
753	946112	1644360	TCP - Uncontrolled	35
759	798361	1691596	Stop	14
765	845709	1750026	Stop	2
769	940747	1649672	TCP - Uncontrolled	35
770	935414	1649525	TCP - Uncontrolled	35
772	882708	1638486	TCP - Uncontrolled	33
773	898552	1638738	TCP - Uncontrolled	34
774	914284	1665376	TCP - Uncontrolled	26
775	909164	1649509	TCP - Uncontrolled	34
776	898565	1649390	TCP - Uncontrolled	34
777	882586	1649077	TCP - Uncontrolled	33
782	900918	1705087	Stop	18
783	902473	1705233	Stop	18
784	902211	1712700	Stop	11
786	902566	1702699	Stop	18

[1]Coordinates are in the North American Datum of 1983 Illinois East State Plane Zone

APPENDIX L

Sub-area Boundaries

L. SUB-AREA BOUNDARIES

Sub-area 1 — County: LaSalle

Defined as the area within the following boundary: Brookfield Township boundary

Sub-area 2 — County: LaSalle

Defined as the area within the following boundary: Bounded by the Allen Township boundary to the west, north, and east. Bounded by N 16th Rd to the south.

Sub-area 3 — County: LaSalle

Defined as the area within the following boundary: Contains parts of Grand Rapids and Fall River Townships. Bounded by Grand Rapids Township boundary to the west and south. Bounded by Grand Ridge and Farm River Township boundaries to the east. Bounded by the northern boundary of Grand Rapids Township, E 21st Road, and the northern boundary of Farm River Township to the north.

Sub-area 4 — County: LaSalle

Defined as the area within the following boundary: Contains part of Otter Creek and Bruce Townships. Bounded by Otter Creek Township to the south and east. Bounded to the north by the Otter Creek Township boundary and Bruce Township boundary from E 18th Rd to IL-23. Bounded to the west by the Otter Creek Township Boundary from N 12th Rd to N 15th Rd, west on N 15th Rd to IL-23, and north on IL-23 to the Bruce Township boundary.

Sub-area 5 — County: LaSalle

Defined as the area within the following boundary: Bounded by the Allen Township boundary on the west, south, and east. Bounded by N 16th Rd to the north.

Sub-area 6 — County: Grundy

Defined as the area within the following boundary: Contains part of Erienna Township. Bounded by the Erienna Township boundary on the west, the Erienna township boundary on the north from Grundy/LaSalle County line to Nettle School Road. Bounded on the east by Nettle School Road, and bounded by the Illinois River on the south.

Sub-area 7 County: LaSalle

Defined as the area within the following boundary: Contains part of Farm Ridge Township. Bounded by Farm Ridge Township boundary to the east, to the north and the south from E 18th Rd to E 16th Rd. Bounded by E 16th Road to the west.

Sub-area 8 County: LaSalle

Defined as the area within the following boundary: Contains parts of South Ottawa and Fall River Townships. Bounded by the Fall River and South Ottawa Township boundaries to the south. Bounded by IL-23 to the west. Bounded by N 27th Rd, E 1809th Rd and the Illinois River to the north. Bounded by E 21st Road to the east.

Sub-area 9 County: Grundy

Defined as the area within the following boundary: Norman Township boundary.

Sub-area 10 County: LaSalle

Defined as the area within the following boundary: Contains parts of Manlius and Miller Townships. Manlius and Miller Township boundaries to the east and west. Manlius Township boundary to the south. Bounded by Interstate-80 to the north.

Sub-area 11 County: LaSalle

Defined as the area within the following boundary: Contains part of Rutland Township. Bounded by Rutland Township boundary on the west, south, and east. Bounded by Interstate-80 to the north.

Sub-area 13 County: Grundy

Defined as the area within the following boundary: Vienna Township boundary.

Sub-area 17 County: Grundy

Defined as the area within the following boundary: Highland Township boundary.

APPENDIX M

Evacuation Sensitivity Studies

M. EVACUATION SENSITIVITY STUDIES

This appendix presents the results of a series of sensitivity analyses. These analyses are designed to identify the sensitivity of the ETE to changes in some base evacuation conditions.

M.1 Effect of Changes in Trip Generation Times

A sensitivity study was performed to determine whether changes in the estimated trip generation time have an effect on the ETE for the entire EPZ. Specifically, if the tail of the mobilization distribution were truncated (i.e., if those who responded most slowly to the Advisory to Evacuate, could be persuaded to respond much more rapidly), or if the tail were elongated (i.e., spreading out the departure of evacuees to limit the demand during peak times) how would the ETE be affected? The case considered was Scenario 1, Region 3; a summer, midweek, midday, with good weather evacuation of the entire EPZ. Table M-1 presents the results of this study.

Table M-1. Evacuation Time Estimates for Trip Generation Sensitivity Study

Trip Generation Period	Evacuation Time Estimate for Entire EPZ	
	90th Percentile	100th Percentile
2 Hours 30 Minutes	1:55	2:45
3 Hours 30 Minutes (Base)	1:55	3:40
4 Hours 30 Minutes	2:35	4:35

As discussed in Section 7.3, ETE are dictated by trip generation. If evacuees mobilize in one less hour, the 90th percentile remains unchanged; however, the 100th percentile is reduced by 55 minutes – a significant change. If evacuees mobilize one hour slower, the 90th percentile increases by 40 minutes – a significant change. The 100th percentile increases by 55 minutes – also a significant change. In summary, the 100th percentile ETE parallel the trip generation time because of the limited traffic congestion in the EPZ.

M.2 Effect of Changes in the Number of People in the Shadow Region Who Relocate

A sensitivity study was conducted to determine the effect on ETE of changes in the percentage of people who decide to relocate from the Shadow Region. The case considered was Scenario 1, Region 3; a summer, midweek, midday, with good weather evacuation of the entire EPZ. The movement of people in the Shadow Region has the potential to impede vehicles evacuating from an Evacuation Region within the EPZ. Refer to Sections 3.2 and 7.1 for additional information on population within the Shadow Region.

Table M-2 presents the evacuation time estimates for each of the cases considered. The results show that reducing the shadow evacuation to 0% has no effect at the 90th or 100th percentiles. Tripling the shadow percentage also has no effect at the 90th or 100th percentiles. Full evacuation (100%) of the Shadow Region also has no effect on the 100th percentile, and increases the 90th percentile by 5 minutes – a nominal change.

The Shadow Region for LAS is sparsely populated. As shown in Figures 7-3 through 7-7, congestion in the Shadow Region does not propagate into the EPZ after the first hour and 30 minutes of the evacuation such that EPZ evacuees would be delayed. Therefore, any additional shadow residents that decide to voluntarily evacuate are easily accommodated by the excess capacity available in the study area such that ETE are not impacted.

Table M-2. Evacuation Time Estimates for Shadow Sensitivity Study

Percent Shadow Evacuation	Evacuating Shadow Vehicles	Evacuation Time Estimate for Entire EPZ	
		90th Percentile	100th Percentile
0	0	1:55	3:40
20 (Base)	6,189	1:55	3:40
60	18,567	1:55	3:40
100	30,945	2:00	3:40

M.3 Effect of Changes in EPZ Resident Population

A sensitivity study was conducted to determine the effect on ETE of changes in the resident population within the study area (EPZ plus Shadow Region). As population in the study area changes over time, the time required to evacuate the public may increase, decrease, or remain the same. Since the ETE is related to the demand to capacity ratio present within the study area, changes in population will cause the demand side of the equation to change and could impact ETE.

As per the NRC's response to the Emergency Planning Frequently Asked Question (EPFAQ) 2013-001, the ETE population sensitivity study must be conducted to determine what percentage increase in permanent resident population causes an increase in the 90th percentile ETE of 25 percent or 30 minutes, whichever is less. The sensitivity study must use the scenario with the longest 90th percentile ETE (excluding the roadway impact scenario and the special event scenario if it is a 1 day per year special event).

Thus, the sensitivity study was conducted using the following parameters:

1. The percent change in population within the study area was increased by up to 124%. Changes in population were applied to permanent residents only (as per federal guidance), in both the EPZ area and in the Shadow Region.
2. The transportation infrastructure remained fixed; the presence of new roads or highway capacity improvements was not considered.
3. The study was performed for the 2-Mile Region (R01), 5-Mile Region (R02), and the entire EPZ (R03).
4. The scenario (excluding roadway impact and special event) with the highest 90th percentile ETE values was selected as the case to be considered in this sensitivity study (Scenario 8 – winter, midweek, midday, with snow).

Table M-3 presents the results of the sensitivity study. Section IV of Appendix E to 10 CFR Part 50, and NUREG/CR-7002, Section 5.4, require licensees to provide an updated ETE analysis to the NRC when a population increase within the EPZ causes ETE values (for the 2-Mile Region, 5-Mile Region or entire EPZ) to increase by 25 percent or 30 minutes, whichever is less. Note that the base ETE for the 2-Mile Region (Region 1) at the 90th percentile is 1:50. Therefore, a 28 minute increase (25% of 1:50) in ETE will be the criterion for updating. All other base ETE values are at least 2 hours; 25 percent of these base ETE is always greater than 30 minutes. Therefore, 30 minutes is the lesser and is the criterion for updating.

Those percent population changes which result in 90th percentile ETE changes greater than 30 minutes are highlighted in red in Table M-3 – a 124% increase or greater in the EPZ population. Exelon will have to estimate the EPZ population on an annual basis. If the EPZ population increases by 124% or more, an updated ETE analysis will be needed.

Table M-3. ETE Variation with Population Change

Resident Population + 20% Shadow Population	Base	Population Change		
		50%	100%	124%
	27,901	41,852	55,802	62,498
ETE for 90th Percentile				
Region	Base	Population Change		
		50%	100%	124%
2-MILE	1:50	1:55	2:00	2:05
5-MILE	2:00	2:05	2:10	2:10
FULL EPZ	2:15	2:20	2:30	**2:45**
ETE for 100th Percentile				
Region	Base	Population Change		
		50%	100%	124%
2-MILE	4:30	4:30	4:30	4:30
5-MILE	4:35	4:35	4:35	4:35
FULL EPZ	4:40	4:40	4:40	4:40

M.4 Enhancements in Evacuation Time

This appendix documents sensitivity studies on critical variables that could impact ETE.

- Reducing or prolonging the trip generation time significantly impacts the 100th percentile ETE since trip generation dictates ETE for this low population site (Section M.1). Thus, public outreach encouraging evacuees to mobilize more quickly will decrease ETE.
- Shadow evacuation has no impact on ETE (Section M.2). Nonetheless, public outreach to inform those people within the EPZ (and potentially beyond the EPZ) that if they are not advised to evacuate, they should not.
- Population growth results in more evacuating vehicles which could significantly increase ETE (Section M.3). Public outreach to inform those people within the EPZ to evacuate as a family in a single vehicle would reduce the number of evacuating vehicles and could reduce ETE or offset the impact of population growth.

APPENDIX N

ETE Criteria Checklist

N. ETE CRITERIA CHECKLIST

Table N-1. ETE Review Criteria Checklist

NRC Review Criteria	Criterion Addressed in ETE Analysis	Comments
1.0 Introduction		
a. The emergency planning zone (EPZ) and surrounding area should be described.	Yes	Section 1.2
b. A map should be included that identifies primary features of the site, including major roadways, significant topographical features, boundaries of counties, and population centers within the EPZ.	Yes	Figure 1-1
c. A comparison of the current and previous ETE should be provided and includes similar information as identified in Table 1-1, "ETE Comparison," of NUREG/CR-7002.	Yes	Table 1-3
1.1 Approach		
a. A discussion of the approach and level of detail obtained during the field survey of the roadway network should be provided.	Yes	Section 1.3
b. Sources of demographic data for schools, special facilities, large employers, and special events should be identified.	Yes	Section 2.1 Section 3
c. Discussion should be presented on use of traffic control plans in the analysis.	Yes	Section 1.3, Section 2.3, Section 9, Appendix G
d. Traffic simulation models used for the analyses should be identified by name and version.	Yes	Section 1.3, Table 1-3, Appendix B, Appendix C

NRC Review Criteria	Criterion Addressed in ETE Analysis	Comments
e. Methods used to address data uncertainties should be described.	Yes	Section 3 – avoid double counting Section 5, Appendix F – 5% sampling error at 95% confidence interval for telephone survey
1.2 Assumptions		
a. The planning basis for the ETE includes the assumption that the evacuation should be ordered promptly and no early protective actions have been implemented.	Yes	Section 2.3 – Assumption 1 Section 5.1
b. Assumptions consistent with Table 1-2, "General Assumptions," of NUREG/CR-7002 should be provided and include the basis to support their use.	Yes	Sections 2.2, 2.3
1.3 Scenario Development		
a. The ten scenarios in Table 1-3, Evacuation Scenarios, should be developed for the ETE analysis, or a reason should be provided for use of other scenarios.	Yes	Tables 2-1, 6-2
1.3.1 Staged Evacuation		
a. A discussion should be provided on the approach used in development of a staged evacuation.	Yes	Sections 5.4.2, 7.2
1.4 Evacuation Planning Areas		
a. A map of EPZ with emergency response planning areas (ERPAs) should be included.	Yes	Figure 3-1, Figure 6-1
b. A table should be provided identifying the ERPAs considered for each ETE calculation by downwind direction in each sector.	Yes	Tables 6-1, 7-5, H-1

NRC Review Criteria	Criterion Addressed in ETE Analysis	Comments
c. A table similar to Table 1-4, "Evacuation Areas for a Staged Evacuation Keyhole," of NUREG/CR-7002 should be provided and includes the complete evacuation of the 2, 5, and 10 mile areas and for the 2 mile area/5 mile keyhole evacuations.	Yes	Tables 6-1, 7-5, H-1
2.0 Demand Estimation		
a. Demand estimation should be developed for the four population groups, including permanent residents of the EPZ, transients, special facilities, and schools.	Yes	Permanent residents, employees, transients – Section 3, Appendix E Special facilities, schools – Section 8, Appendix E
2.1 Permanent Residents and Transient Population		
a. The US Census should be the source of the population values, or another credible source should be provided.	Yes	Section 3.1
b. Population values should be adjusted as necessary for growth to reflect population estimates to the year of the ETE.	Yes	2010 used as the base year for analysis. No growth of population necessary.
c. A sector diagram should be included, similar to Figure 2-1, "Population by Sector," of NUREG/CR-7002, showing the population distribution for permanent residents.	Yes	Figure 3-2
2.1.1 Permanent Residents with Vehicles		
a. The persons per vehicle value should be between 1 and 2 or justification should be provided for other values.	Yes	1.83 persons per vehicle – Table 1-3
b. Major employers should be listed.	Yes	Appendix E – Table E-4

NRC Review Criteria	Criterion Addressed in ETE Analysis	Comments
2.1.2 Transient Population		
a. A list of facilities which attract transient populations should be included, and peak and average attendance for these facilities should be listed. The source of information used to develop attendance values should be provided.	Yes	Sections 3.3, 3.4, Appendix E
b. The average population during the season should be used, itemized and totaled for each scenario.	Yes	Tables 3-4, 3-5, and Appendix E itemize the transient population and employee estimates. These estimates are multiplied by the scenario specific percentages provided in Table 6-3 to estimate transient population by scenario – see page 6-1.
c. The percent of permanent residents assumed to be at facilities should be estimated.	Yes	Sections 3.3, 3.4
d. The number of people per vehicle should be provided. Numbers may vary by scenario, and if so, discussion on why values vary should be provided.	Yes	Sections 2.1, 3.3, 3.4
e. A sector diagram should be included, similar to Figure 2-1 of NUREG/CR-7002, showing the population distribution for the transient population.	Yes	Figure 3-6 – transients Figure 3-8 – employees
2.2 Transit Dependent Permanent Residents		
a. The methodology used to determine the number of transit dependent residents should be discussed.	Yes	Section 8.1, Table 8-1
b. Transportation resources needed to evacuate this group should be quantified.	Yes	Section 8.1, Tables 8-5, 8-10
c. The county/local evacuation plans for transit dependent residents should be used in the analysis.	Yes	Sections 8.1, 8.4

NRC Review Criteria	Criterion Addressed in ETE Analysis	Comments
d. The methodology used to determine the number of people with disabilities and those with access and functional needs who may need assistance and do not reside in special facilities should be provided. Data from local/county registration programs should be used in the estimate, but should not be the only set of data.	Yes	Section 8.5
e. Capacities should be provided for all types of transportation resources. Bus seating capacity of 50% should be used or justification should be provided for higher values.	Yes	Section 2.3 – Assumption 10 Sections 3.5, 8.1, 8.2, 8.3
f. An estimate of this population should be provided and information should be provided that the existing registration programs were used in developing the estimate.	Yes	Table 8-1 – transit dependents Section 8.5 – special needs
g. A summary table of the total number of buses, ambulances, or other transport needed to support evacuation should be provided and the quantification of resources should be detailed enough to assure double counting has not occurred.	Yes	Section 8.4 – page 8-8 Table 8-5
2.3 Special Facility Residents		
a. A list of special facilities, including the type of facility, location, and average population should be provided. Special facility staff should be included in the total special facility population.	Yes	Appendix E, Tables E-1 through E-3 – list facilities, type, location, and population
b. A discussion should be provided on how special facility data was obtained.	Yes	Sections 8.2, 8.3

NRC Review Criteria	Criterion Addressed in ETE Analysis	Comments
c. The number of wheelchair and bed-bound individuals should be provided.	Yes	Section 8.3, Tables 8-4, E-3
d. An estimate of the number and capacity of vehicles needed to support the evacuation of the facility should be provided.	Yes	Section 8.3 Tables 8-4, 8-5
e. The logistics for mobilizing specially trained staff (e.g., medical support or security support for prisons, jails, and other correctional facilities) should be discussed when appropriate.	Yes	Section 8.4 – Medical facilities
2.4 Schools		
a. A list of schools including name, location, student population, and transportation resources required to support the evacuation, should be provided. The source of this information should be provided.	Yes	Table 8-2 Section 8.2
b. Transportation resources for elementary and middle schools should be based on 100% of the school capacity.	Yes	Table 8-2, Section 8.2
c. The estimate of high school students who will use their personal vehicle to evacuate should be provided and a basis for the values used should be discussed.	Yes	Section 8.2
d. The need for return trips should be identified if necessary.	Yes	There are sufficient resources to evacuate schools in a single wave. However, Section 8.4 – page 8-8 and Figure 8-1 discuss the potential for a multiple wave evacuation

NRC Review Criteria	Criterion Addressed in ETE Analysis	Comments
2.5.1 Special Events		
a. A complete list of special events should be provided and includes information on the population, estimated duration, and season of the event.	Yes	Section 3.7 – only one event suggested by Exelon and offsite agencies
b. The special event that encompasses the peak transient population should be analyzed in the ETE.	Yes	Section 3.7
c. The percent of permanent residents attending the event should be estimated.	Yes	Section 3.7
2.5.2 Shadow Evacuation		
a. A shadow evacuation of 20 percent should be included for areas outside the evacuation area extending to 15 miles from the NPP.	Yes	Section 2.2 – Assumption 5 Figure 2-1 Section 3.2
b. Population estimates for the shadow evacuation in the 10 to 15 mile area beyond the EPZ are provided by sector.	Yes	Section 3.2 Figure 3-4 Table 3-3
c. The loading of the shadow evacuation onto the roadway network should be consistent with the trip generation time generated for the permanent resident population.	Yes	Section 5 – Table 5-9
2.5.3 Background and Pass Through Traffic		
a. The volume of background traffic and pass through traffic is based on the average daytime traffic. Values may be reduced for nighttime scenarios.	Yes	Sections 3.6, 6 Table 3-6, 6-3, and 6-4

NRC Review Criteria	Criterion Addressed in ETE Analysis	Comments
b. Pass through traffic is assumed to have stopped entering the EPZ about two hours after the initial notification.	Yes	Section 2.3 – Assumption 5 Section 3.6 Table 6-3 – External Through Traffic footnote
2.6 Summary of Demand Estimation		
a. A summary table should be provided that identifies the total populations and total vehicles used in analysis for permanent residents, transients, transit dependent residents, special facilities, schools, shadow population, and pass-through demand used in each scenario.	Yes	Tables 3-7, 3-8
3.0 Roadway Capacity		
a. The method(s) used to assess roadway capacity should be discussed.	Yes	Section 4
3.1 Roadway Characteristics		
a. A field survey of key routes within the EPZ has been conducted.	Yes	Section 1.3, Appendix D
b. Information should be provided describing the extent of the survey, and types of information gathered and used in the analysis.	Yes	Section 1.3, Appendix D
c. A table similar to that in Appendix A, "Roadway Characteristics," of NUREG/CR-7002 should be provided.	Yes	Appendix K, Table K-1
d. Calculations for a representative roadway segment should be provided.	Yes	Section 4

NRC Review Criteria	Criterion Addressed in ETE Analysis	Comments
e. A legible map of the roadway system that identifies node numbers and segments used to develop the ETE should be provided and should be similar to Figure 3-1, "Roadway Network Identifying Nodes and Segments," of NUREG/CR-7002.	Yes	Appendix K, Figures K-1 through K-50 present the entire link-node analysis network at a scale suitable to identify all links and nodes
3.2 Capacity Analysis		
a. The approach used to calculate the roadway capacity for the transportation network should be described in detail and identifies factors that should be expressly used in the modeling.	Yes	Section 4
b. The capacity analysis identifies where field information should be used in the ETE calculation.	Yes	Section 1.3, Section 4
3.3 Intersection Control		
a. A list of intersections should be provided that includes the total number of intersections modeled that are unsignalized, signalized, or manned by response personnel.	Yes	Appendix K, Table K-2
b. Characteristics for the 10 highest volume intersections within the EPZ are provided including the location, signal cycle length, and turn lane queue capacity.	Yes	Table J-1
c. Discussion should be provided on how signal cycle time is used in the calculations.	Yes	Section 4.1, Appendix C
3.4 Adverse Weather		
a. The adverse weather condition should be identified and the effects of adverse weather on mobilization time should be considered.	Yes	Table 2-1, Section 2.3 – Assumption 9 Mobilization time – Table 2-2

NRC Review Criteria	Criterion Addressed in ETE Analysis	Comments
b. The speed and capacity reduction factors identified in Table 3-1, "Weather Capacity Factors," of NUREG/CR-7002 should be used or a basis should be provided for other values.	Yes	Table 2-2 – based on HCM 2010. The factors provided in Table 3-1 of NUREG/CR-7002 are from HCM 2000
c. The study identifies assumptions for snow removal on streets and driveways, when applicable.	Yes	Section 5.3 – page 5-9 Appendix F – Section F.2.3 – pages F-8 and F-9
4.0 Development of Evacuation Times		
4.1 Trip Generation Time		
a. The process used to develop trip generation times should be identified.	Yes	Section 5
b. When telephone surveys are used, the scope of the survey, area of survey, number of participants, and statistical relevance should be provided.	Yes	Appendix F
c. Data obtained from telephone surveys should be summarized.	Yes	Appendix F
d. The trip generation time for each population group should be developed from site specific information.	Yes	Section 5, Appendix F

NRC Review Criteria	Criterion Addressed in ETE Analysis	Comments
4.1.1 Permanent Residents and Transient Population		
a. Permanent residents are assumed to evacuate from their homes but are not assumed to be at home at all times. Trip generation time includes the assumption that a percentage of residents will need to return home prior to evacuating.	Yes	Section 5 discusses trip generation for households with and without returning commuters. Table 6-3 presents the percentage of households with returning commuters and the percentage of households either without returning commuters or with no commuters. Appendix F presents the percent households who will await the return of commuters. Section 2.3, Assumption 3
b. Discussion should be provided on the time and method used to notify transients. The trip generation time discusses any difficulties notifying persons in hard to reach areas such as on lakes or in campgrounds.	Yes	Section 5.4.3
c. The trip generation time accounts for transients potentially returning to hotels prior to evacuating.	Yes	Section 5.4.3, Figure 5-1
d. Effect of public transportation resources used during special events where a large number of transients should be expected should be considered.	Yes	Section 3.7
e. The trip generation time for the transient population should be integrated and loaded onto the transportation network with the general public.	Yes	Section 5, Table 5-9

NRC Review Criteria	Criterion Addressed in ETE Analysis	Comments
4.1.2 Transit Dependent Residents		
a. If available, existing plans and bus routes should be used in the ETE analysis. If new plans should be developed with the ETE, they have been agreed upon by the responsible authorities.	Yes	Section 8.4 – page 8-6. Designed bus routes to service population centers in the EPZ – see Figure 8-2, Table 8-10
b. Discussion should be included on the means of evacuating ambulatory and non-ambulatory residents.	Yes	Sections 8.4, 8.5
c. The number, location, and availability of buses, and other resources needed to support the demand estimation should be provided.	Yes	Section 8.4, Table 8-5
d. Logistical details, such as the time to obtain buses, brief drivers, and initiate the bus route should be provided.	Yes	Section 8.4, Figure 8-1
e. Discussion should identify the time estimated for transit dependent residents to prepare and travel to a bus pickup point, and describes the expected means of travel to the pickup point.	Yes	Section 8.4
f. The number of bus stops and time needed to load passengers should be discussed.	Yes	Section 8.4, Tables 8-11 through 8-13
g. A map of bus routes should be included.	Yes	Figure 8-2
h. The trip generation time for non-ambulatory persons includes the time to mobilize ambulances or special vehicles, time to drive to the home of residents, loading time, and time to drive out of the EPZ should be provided.	Yes	Section 8.5

NRC Review Criteria	Criterion Addressed in ETE Analysis	Comments
i. Information should be provided to supports analysis of return trips, if necessary.	Yes	Sections 8.4, 8.5 Figure 8-1 Tables 8-11 through 8-13
4.1.3 Special Facilities		
a. Information on evacuation logistics and mobilization times should be provided.	Yes	Section 8.4 Tables 8-7 through 8-9, and Tables 8-14 through 8-16
b. Discussion should be provided on the inbound and outbound speeds.	Yes	Section 8.4
c. The number of wheelchair and bed-bound individuals should be provided, and the logistics of evacuating these residents should be discussed.	Yes	Section 8.4 Tables 8-4, 8-14 through 8-16
d. Time for loading of residents should be provided	Yes	Section 8.4
e. Information should be provided that indicates whether the evacuation can be completed in a single trip or if additional trips should be needed.	Yes	Section 8.4
f. If return trips should be needed, the destination of vehicles should be provided.	Yes	Section 8.4
g. Discussion should be provided on whether special facility residents are expected to pass through the reception center prior to being evacuated to their final destination.	Yes	Section 8.4
h. Supporting information should be provided to quantify the time elements for the return trips.	Yes	Section 8.4 Tables 8-7 through 8-9

NRC Review Criteria	Criterion Addressed in ETE Analysis	Comments
4.1.4 Schools		
a. Information on evacuation logistics and mobilization time should be provided.	Yes	Section 8.4
b. Discussion should be provided on the inbound and outbound speeds.	Yes	School bus routes are presented in Table 8-6. School bus speeds are presented in Tables 8-7 (good weather), 8-8 (rain) and 8-9 (snow). Section 8.4 discusses inbound and outbound speeds
c. Time for loading of students should be provided.	Yes	Tables 8-7 through 8-9. Discussion in Section 8.4
d. Information should be provided that indicates whether the evacuation can be completed in a single trip or if additional trips are needed.	Yes	Section 8.4 – page 8-5 Table 8-5
e. If return trips are needed, the destination of school buses should be provided.	Yes	Return trips are not needed. Sufficient resources to evacuate in single wave – page 8-5

NRC Review Criteria	Criterion Addressed in ETE Analysis	Comments
f. If used, reception centers should be identified. Discussion should be provided on whether students are expected to pass through the reception center prior to being evacuated to their final destination.	Yes	Table 8-3. Students are evacuated to relocation centers where they will be picked up by parents or guardians.
g. Supporting information should be provided to quantify the time elements for the return trips.	Yes	Return trips are not needed. Tables 8-7 through 8-9 provide time needed to arrive at relocation center, which could be used to compute a second wave evacuation if necessary
4.2 ETE Modeling		
a. General information about the model should be provided and demonstrates its use in ETE studies.	Yes	DYNEV II (Ver. 4.0.18.0). Section 1.3, Table 1-3, Appendix B, Appendix C.
b. If a traffic simulation model is not used to conduct the ETE calculation, sufficient detail should be provided to validate the analytical approach used. All criteria elements should have been met, as appropriate.	No	Not applicable as a traffic simulation model was used.
4.2.1 Traffic Simulation Model Input		
a. Traffic simulation model assumptions and a representative set of model inputs should be provided.	Yes	Appendices B and C describe the simulation model assumptions and algorithms Table J-2 – model inputs

NRC Review Criteria	Criterion Addressed in ETE Analysis	Comments
b. A glossary of terms should be provided for the key performance measures and parameters used in the analysis.	Yes	Appendix A Tables C-1, C-2
4.2.2 Traffic Simulation Model Output		
a. A discussion regarding whether the traffic simulation model used must be in equilibration prior to calculating the ETE should be provided.	Yes	Appendix B
b. The minimum following model outputs should be provided to support review: 1. Total volume and percent by hour at each EPZ exit node. 2. Network wide average travel time. 3. Longest queue length for the 10 intersections with the highest traffic volume. 4. Total vehicles exiting the network. 5. A plot that provides both the mobilization curve and evacuation curve identifying the cumulative percentage of evacuees who have mobilized and exited the EPZ. 6. Average speed for each major evacuation route that exits the EPZ.	Yes	1. Table J-5. 2. Table J-3. 3. Table J-1. 4. Table J-3. 5. Figures J-1 through J-14 (one plot for each scenario considered). 6. Table J-4. Network wide average speed also provided in Table J-3.
c. Color coded roadway maps should be provided for various times (i.e., at 2, 4, 6 hrs., etc.) during a full EPZ evacuation scenario, identifying areas where long queues exist including level of service (LOS) "E" and LOS "F" conditions, if they occur.	Yes	Figures 7-3 through 7-7

NRC Review Criteria	Criterion Addressed in ETE Analysis	Comments
4.3 Evacuation Time Estimates for the General Public		
a. The ETE should include the time to evacuate 90% and 100% of the total permanent resident and transient population	Yes	Tables 7-1, 7-2
b. The ETE for 100% of the general public should include all members of the general public. Any reductions or truncated data should be explained.	Yes	Section 5.4 – truncating survey data to eliminate statistical outliers Table 7-2 – 100th percentile ETE for general public
c. Tables should be provided for the 90 and 100 percent ETEs similar to Table 4-3, "ETEs for Staged Evacuation Keyhole," of NUREG/CR-7002.	Yes	Tables 7-3, 7-4
d. ETEs should be provided for the 100 percent evacuation of special facilities, transit dependent, and school populations.	Yes	Section 8.4 Tables 8-7 through 8-9 Tables 8-11 through 8-16
5.0 Other Considerations		
5.1 Development of Traffic Control Plans		
a. Information that responsible authorities have approved the traffic control plan used in the analysis should be provided.	Yes	Section 9, Appendix G
b. A discussion of adjustments or additions to the traffic control plan that affect the ETE should be provided.	Yes	Section 9, Appendix G
5.2 Enhancements in Evacuation Time		
a. The results of assessments for improvement of evacuation time should be provided.	Yes	Appendix M, Section M.4

NRC Review Criteria	Criterion Addressed in ETE Analysis	Comments
b. A statement or discussion regarding presentation of enhancements to local authorities should be provided.	Yes	The local authorities were engaged in the ETE development and informed of the study results. In particular, sensitivity study information was provided to show potential impacts of selected ETE variables.
5.3 State and Local Review		
a. A list of agencies contacted and the extent of interaction with these agencies should be discussed.	Yes	Table 1-1
b. Information should be provided on any unresolved issues that may affect the ETE.	Yes	There are no outstanding issues.
5.4 Reviews and Updates		
a. A discussion of when an updated ETE analysis is required to be performed and submitted to the NRC.	Yes	Appendix M, Section M.3
5.5 Reception Centers and Congregate Care Center		
a. A map of congregate care centers and reception centers should be provided.	Yes	Figure 10-1
b. If return trips are required, assumptions used to estimate return times for buses should be provided.	Yes	Section 8.4 discusses a multi-wave evacuation procedure. Figure 8-1
c. It should be clearly stated if it is assumed that passengers are left at the reception center and are taken by separate buses to the congregate care center.	Yes	Reception centers are also congregate care centers – see Section 10