



Table 4-9: 2048 CORSIM Analysis – NB I-95

NB I-95 AM PEAK HOUR - 2048							
Location		Performance Measure	No Build	GGI Light	GGI Ultimate	Comments	
NB I-95	GU Lanes	From OpaLocka Blvd. to MGD (22,045 feet)	Travel Time (min:sec)	4:37	4:36	4:35	Speeds in GU comparable in No Build, GGI Light and GGI Ultimate
			Avg. Speed (mph)	54	54	55	
	Express Lanes	From OpaLocka Blvd. to MGD (21,574 feet)	Travel Time (min:sec)	4:54	4:46	4:43	Speeds in EL comparable in No Build, GGI Light and GGI Ultimate
			Avg. Speed (mph)	50	52	52	
	GU Lanes	NB I-95, N of NW 2nd Ave On-Ramp	Throughput (vehs/hr.)	6251	7076	6675	GGI Light performs better than No Build. GGI Ultimate performs better than GGI Light
	EL Lanes		Throughput (vehs/hr.)	1160	1157	1839	
	GU + EL		Throughput (vehs/hr.)	7411	8233 +11.1%	8514 +3.4%	
	GU + EL		Total Throughput for 4-hour Peak Period (vehs)	25898	28964 +11.8%	29645 +2.4%	

NB I-95 PM PEAK HOUR - 2048							
Location		Performance Measure	No Build	GGI Light	GGI Ultimate	Comments	
NB I-95	GU Lanes	From OpaLocka Blvd. to MGD (22,045 feet)	Travel Time (min:sec)	7:20	5:39	7:20	GGI Light performs better than No Build. Speed lower in GGI Ultimate due to higher throughput
			Avg. Speed (mph)	34	44	34	
	Express Lanes	From OpaLocka Blvd. to MGD (21,574 feet)	Travel Time (min:sec)	5:51	4:51	4:43	GGI Light performs better than No Build. Speeds comparable in GGI Light and GGI Ultimate
			Avg. Speed (mph)	42	51	52	
	GU Lanes	NB I-95, N of NW 2nd Ave On-Ramp	Throughput (vehs/hr.)	6124	7588	7891	GGI Light performs better than No Build. GGI Ultimate performs better than GGI Light
	EL Lanes		Throughput (vehs/hr.)	1474	1485	1645	
	GU + EL		Throughput (vehs/hr.)	7598	9073 +19.4%	9536 +5.1%	
	GU + EL		Total Throughput for 4-hour Peak Period (vehs)	30484	36106 +18.4%	37792 +4.7%	

Notes: 1. Percentage change in throughput compares GGI Light to No Build and GGI Ultimate to GGI Light

Table 4-10: 2048 CORSIM Analysis – SB I-95

SB I-95 AM PEAK HOUR - 2048							
Location		Performance Measure	No Build	GGI Light	GGI Ultimate	Comments	
SB I-95	GU Lanes	From MGD to OpaLocka Blvd. (22,062 feet)	Travel Time (min:sec)	4:58	9:01	5:12	Speeds lower in GGI Light than No Build due to higher throughput Speeds lower in GGI Light than GGI Ultimate due to higher throughput
			Avg. Speed (mph)	51	28	48	
	Express Lanes	From MGD to OpaLocka Blvd. (21,814 feet)	Travel Time (min:sec)	4:51	4:54	4:46	Speeds in EL comparable in No Build, GGI Light and GGI Ultimate
			Avg. Speed (mph)	51	51	52	
	GU Lanes	SB I-95 N of 151 Street	Throughput (vehs/hr.)	7807	8670	7973	GGI Light Performs Better than No Build. Throughput in GGI Light higher than GGI Ultimate due to higher demand.
	EL Lanes		Throughput (vehs/hr.)	1139	2361	2261	
	GU + EL		Throughput (vehs/hr.)	8946	11031 +23.3%	10234 -7.2%	
	GU + EL		Total Throughput for 4-hour Peak Period (vehs)	33202	41285 +24.3%	37444 -9.3%	

SB I-95 PM PEAK HOUR - 2048							
Location		Performance Measure	No Build	GGI Light	GGI Ultimate	Comments	
SB I-95	GU Lanes	From MGD to OpaLocka Blvd. (22,062 feet)	Travel Time (min:sec)	7:11	5:37	10:36	GGI Light Performs Better than No Build. Speed in GGI Ultimate impacted by higher demand and congestion along I-95 segment north of GGI.
			Avg. Speed (mph)	35	45	25	
	Express Lanes	From MGD to OpaLocka Blvd. (21,814 feet)	Travel Time (min:sec)	4:48	4:32	4:43	Speeds in EL comparable in No Build, GGI Light and GGI Ultimate
			Avg. Speed (mph)	52	52	52	
	GU Lanes	SB I-95 N of 151 Street	Throughput (vehs/hr.)	5867	7859	6987	GGI Light Performs Better than No Build. Throughput in GGI Light higher than GGI Ultimate due to higher demand and upstream congestion in GGI Ultimate.
	EL Lanes		Throughput (vehs/hr.)	913	1755	1998	
	GU + EL		Throughput (vehs/hr.)	6780	9614 +41.8%	8985 -6.5%	
	GU + EL		Total Throughput for 4-hour Peak Period (vehs)	27574	39034 +41.6%	36318 -7.0%	

Notes: 1. Percentage change in throughput compares GGI Light to No Build and GGI Ultimate to GGI Light



Table 4-11: 2048 CORSIM Analysis – NB I-95/Turnpike Connector

NB I-95/Turnpike Connector - AM PEAK HOUR - 2048							
Location		Performance Measure	No Build	GGI Light	GGI Ultimate	Comments	
NB I-95/Turnpike Connector	GU lanes	From I-95 to N of SR 826 Off-Ramp (5,038 feet)	Travel Time (min:sec)	1:15	1:16	1:14	Speeds comparable in No Build, GGI Light and GGI Ultimate
			Avg. Speed (mph)	46	45	46	
	Express Lanes	From I-95 to N of SR 826 Off-Ramp	Travel Time (min:sec)	-	1:21	1:19	No EL connectivity provided in No Build. Speeds comparable in GGI Light and GGI Ultimate
			Avg. Speed (mph)	-	46	47	
	GU Lanes	N of SR 826 Off-Ramp	Throughput (vehs/hr.)	1678	1016	1237	GGI Light performs better than No Build. GGI Ultimate performs better than GGI Light and No Build
	EL Lanes		Throughput (vehs/hr.)	-	804	648	
	GU + EL		Throughput (vehs/hr.)	1678	1820 +8.5%	1885 +3.6%	
	GU + EL		Total Throughput for 4-hour Peak Period (vehs)	5787	6288 +8.7%	6465 +2.8%	

NB I-95/Turnpike Connector - PM PEAK HOUR - 2048							
Location		Performance Measure	No Build	GGI Light	GGI Ultimate	Comments	
NB I-95/Turnpike Connector	GU lanes	From I-95 to N of SR 826 Off-Ramp (5,038 feet)	Travel Time (min:sec)	4:09	3:28	1:14	GGI Light comparable to No Build. GGI Ultimate performs better than GGI Light
			Avg. Speed (mph)	14	17	46	
	Express Lanes	From I-95 to N of SR 826 Off-Ramp	Travel Time (min:sec)	-	1:21	1:22	No EL connectivity provided in No Build. Speeds comparable in GGI Light and GGI Ultimate
			Avg. Speed (mph)	-	46	46	
	GU Lanes	N of SR 826 Off-Ramp	Throughput (vehs/hr.)	1782	1117	1248	GGI Light performs better than No Build. GGI Ultimate performs better than GGI Light
	EL Lanes		Throughput (vehs/hr.)	-	954	927	
	GU + EL		Throughput (vehs/hr.)	1782	2071 +16.2%	2175 +5.0%	
	GU + EL		Total Throughput for 4-hour Peak Period (vehs)	7079	8172 +15.4%	8577 +5.0%	

Notes: 1. Percentage change in throughput compares GGI Light to No Build and GGI Ultimate to GGI Light

Table 4-12: 2048 CORSIM Analysis – SB I-95/Turnpike Connector

SB I-95/Turnpike Connector - AM PEAK HOUR - 2048							
Location		Performance Measure	No Build	GGI Light	GGI Ultimate	Comments	
SB I-95/Turnpike Connector	GU lanes	From N of SR 826 Off-Ramp to S of NW 7 Ave. Off-Ramp (4,715 feet)	Travel Time (min:sec)	4:39	1:29	1:11	GGI Light performs better than No Build. Speeds comparable in GGI Light and GGI Ultimate
			Avg. Speed (mph)	12	36	45	
	Express Lanes	From N of SR 826 Off-Ramp to S of NW 7 Ave. Off-Ramp	Travel Time (min:sec)	-	1:36	1:36	No EL connectivity provided in No Build. Speeds comparable in GGI Light and GGI Ultimate
			Avg. Speed (mph)	-	46	46	
	GU Lanes	S of NW 7 Ave. Off-Ramp	Throughput (vehs/hr.)	2900	4140	3260	GGI Light performs better than No Build. GGI Light has higher throughput than GGI Ultimate due to higher travel demand on SB I-95
	EL Lanes		Throughput (vehs/hr.)	-	1216	1172	
	GU + EL		Throughput (vehs/hr.)	2900	5356 +84.7%	4432 -17.3%	
	GU + EL		Total Throughput for 4-hour Peak Period (vehs)	11465	20115 +75.4%	16415 -18.4%	

SB I-95/Turnpike Connector - PM PEAK HOUR - 2048							
Location		Performance Measure	No Build	GGI Light	GGI Ultimate	Comments	
SB I-95/Turnpike Connector	GU lanes	From N of SR 826 Off-Ramp to S of NW 7 Ave. Off-Ramp (4,715 feet)	Travel Time (min:sec)	6:07	3:55	1:16	GGI Light performs better than No Build. GGI Ultimate performs better than GGI Light
			Avg. Speed (mph)	9	14	42	
	Express Lanes	From N of SR 826 Off-Ramp to S of NW 7 Ave. Off-Ramp	Travel Time (min:sec)	-	1:38	1:35	No EL connectivity provided in No Build. Speeds comparable in GGI Light and GGI Ultimate
			Avg. Speed (mph)	-	47	47	
	GU Lanes	S of NW 7 Ave. Off-Ramp	Throughput (vehs/hr.)	1959	3340	2944	GGI Light performs better than No Build. GGI Light has higher throughput than GGI Ultimate due to higher demand on SB I-95
	EL Lanes		Throughput (vehs/hr.)	-	834	1001	
	GU + EL		Throughput (vehs/hr.)	1959	4174 +113.1%	3945 -5.5%	
	GU + EL		Total Throughput for 4-hour Peak Period (vehs)	8014	17026 +112.5%	16000 -6.0%	

Notes: 1. Percentage change in throughput compares GGI Light to No Build and GGI Ultimate to GGI Light



Table 4-13: 2048 CORSIM Analysis – EB SR 826

EB SR 826/Palmetto Expressway - AM PEAK HOUR - 2048							
Location		Performance Measure	No Build	GGI Light	GGI Ultimate	Comments	
EB SR 826/Palmetto Expy.	GU lanes	From W of NW 37 Ave. Off-Ramp to E of NW 167 St. Off-Ramp (18,019 feet)	Travel Time (min:sec)	22:44	4:07	9:44	GGI Light performs better than No Build. GGI Ultimate generates lower speeds due to higher throughput
			Avg. Speed (mph)	9	50	21	
	Express Lanes	From W of NW 37 Ave. Off-Ramp to E of NW 167 St. Off-Ramp	Travel Time (min:sec)	-	-	3:18	Express lanes along SR 826 only provided in GGI Ultimate
			Avg. Speed (mph)	-	-	59	
	GU Lanes	E of NW 167 St. Off-Ramp	Throughput (vehs/hr.)	1168	1475	2629	GGI Light performs better than No Build. GGI Ultimate performs better than GGI Light
	EL Lanes		Throughput (vehs/hr.)	-	-	563	
	GU + EL		Throughput (vehs/hr.)	1168	1475 +26.3%	3192 +116.4%	
	GU + EL		Total Throughput for 4-hour Peak Period (vehs)	4588	5649 +23.1%	11715 +107.4%	

EB SR 826/Palmetto Expressway - PM PEAK HOUR - 2048							
Location		Performance Measure	No Build	GGI Light	GGI Ultimate	Comments	
EB SR 826/Palmetto Expy.	GU lanes	From W of NW 37 Ave. Off-Ramp to E of NW 167 St. Off-Ramp (18,019 feet)	Travel Time (min:sec)	27:38	14:34	9:13	GGI Light Performs Better than No Build. GGI Ultimate performs better than GGI Light
			Avg. Speed (mph)	7	14	22	
	Express Lanes	From W of NW 37 Ave. Off-Ramp to E of NW 167 St. Off-Ramp	Travel Time (min:sec)	-	-	3:10	Express lanes along SR 826 only provided in GGI Ultimate
			Avg. Speed (mph)	-	-	61	
	GU Lanes	E of NW 167 St. Off-Ramp	Throughput (vehs/hr.)	800	1114	1691	GGI Light performs better than No Build. GGI Ultimate performs better than GGI Light
	EL Lanes		Throughput (vehs/hr.)	-	-	357	
	GU + EL		Throughput (vehs/hr.)	800	1114 +39.3%	2048 +83.8%	
	GU + EL		Total Throughput for 4-hour Peak Period (vehs)	3334	4604 +38.1%	8501 +84.6%	

Notes: 1. Percentage change in throughput compares GGI Light to No Build and GGI Ultimate to GGI Light

Table 4-14: 2048 CORSIM Analysis – WB SR 826

WB SR 826/Palmetto Expressway - AM PEAK HOUR - 2048							
Location		Performance Measure	No Build	GGI Light	GGI Ultimate	Comments	
WB SR 826/Palmetto Expy.	GU lanes	From E of NW 167 St. On-Ramp to W of NW 137 St. On-Ramp (18,346 feet)	Travel Time (min:sec)	3:38	3:36	3:29	Speeds comparable in No Build, GGI Light and GGI Ultimate
			Avg. Speed (mph)	57	58	60	
	Express Lanes	From E of NW 167 St. On-Ramp to W of NW 137 St. On-Ramp	Travel Time (min:sec)	-	-	3:18	Express lanes along SR 826 only provided in GGI Ultimate
			Avg. Speed (mph)	-	-	61	
	GU Lanes	W of NW 27 Ave. On-Ramp	Throughput (vehs/hr.)	5396	5216	3894	Throughput higher in No Build due to new signal at intersection of NW 7th Avenue Ext. and Turnpike which meters WB traffic entering SR 826. This intersection is unsignalized in No Build.
	EL Lanes		Throughput (vehs/hr.)	-	-	1416	
	GU + EL		Throughput (vehs/hr.)	5396	5216 -3.3%	5310 +1.8%	
	GU + EL		Total Throughput for 4-hour Peak Period (vehs)	19653	18979 -3.4%	19305 +1.7%	

WB SR 826/Palmetto Expressway - PM PEAK HOUR - 2048							
Location		Performance Measure	No Build	GGI Light	GGI Ultimate	Comments	
WB SR 826/Palmetto Expy.	GU lanes	From E of NW 167 St. On-Ramp to W of NW 137 St. On-Ramp (18,346 feet)	Travel Time (min:sec)	3:49	4:56	3:39	Speeds lower in GGI Light than No Build due to higher throughput Speeds higher in GGI Ultimate than GGI Light
			Avg. Speed (mph)	55	42	57	
	Express Lanes	From E of NW 167 St. On-Ramp to W of NW 137 St. On-Ramp	Travel Time (min:sec)	-	-	3:20	Express lanes along SR 826 only provided in GGI Ultimate
			Avg. Speed (mph)	-	-	60	
	GU Lanes	W of NW 27 Ave. On-Ramp	Throughput (vehs/hr.)	5784	6043	5004	GGI Light performs better than No Build. GGI Ultimate performs better than GGI Light New upstream signal at NW 7th Avenue Ext./Turnpike intersection meters WB traffic in GGI Light and GGI Ultimate
	EL Lanes		Throughput (vehs/hr.)	-	-	1839	
	GU + EL		Throughput (vehs/hr.)	5784	6043 +4.5%	6843 +13.2%	
	GU + EL		Total Throughput for 4-hour Peak Period (vehs)	23224	24120 +3.9%	27186 +12.7%	

Notes: 1. Percentage change in throughput compares GGI Light to No Build and GGI Ultimate to GGI Light



Table 4-15: 2048 CORSIM Analysis – EB SR 826 to NB I-95

EB SR 826 to NB I-95 AM PEAK HOUR - 2048						
Location		Performance Measure	No Build	GGI Light	GGI Ultimate	Comments
GU lanes	From EB SR 826 to NB I-95 (12,800 feet - No Build) (4,600 feet - GGI Light/Ultimate)	Travel Time (min:sec)	5:59	1:15	1:12	GGI Light Performs Better than No Build. GGI Light comparable to GGI Ultimate
		Avg. Speed (mph)	18	41	44	

EB SR 826 to NB I-95 PM PEAK HOUR - 2048						
Location		Performance Measure	No Build	GGI Light	GGI Ultimate	Comments
GU lanes	From EB SR 826 to NB I-95 (12,800 feet - No Build) (4,600 feet - GGI Light/Ultimate)	Travel Time (min:sec)	8:59	1:13	1:21	GGI Light Performs Better than No Build. GGI Light comparable to GGI Ultimate
		Avg. Speed (mph)	12	42	39	

Table 4-16: 2048 CORSIM Analysis – Networkwide Performance

Networkwide Performance - 2048 AM peak				
Performance Measure	No Build	GGI Light	GGI Ultimate	Comments
Total Delay (hours)	14,540	11,120 -23.5%	8,969 -19.3%	GGI Light Performs Better than No Build. GGI Ultimate Performs Better than GGI Light.
Total Vehicle-Miles Traveled	502,527	565,727 12.6%	601,124 6.3%	GGI Light Performs Better than No Build. GGI Ultimate Performs Better than GGI Light.
Average Speed (mph)	21	26 23.8%	30 15.4%	GGI Light Performs Better than No Build. GGI Ultimate Performs Better than GGI Light.
Unmet Demand (vehs)	26,667	10,297 -61.4%	6,378 -38.1%	GGI Light Performs Better than No Build. GGI Ultimate Performs Better than GGI Light.

Networkwide Performance - 2048 PM peak				
Performance Measure	No Build	GGI Light	GGI Ultimate	Comments
Total Delay (hours)	23,207	19,811 -14.6%	16,760 -15.4%	GGI Light Performs Better than No Build. GGI Ultimate Performs Better than GGI Light.
Total Vehicle-Miles Traveled	523,469	623,437 19.1%	676,508 8.5%	GGI Light Performs Better than No Build. GGI Ultimate Performs Better than GGI Light.
Average Speed (mph)	16	20 25.0%	23 15.0%	GGI Light Performs Better than No Build. GGI Ultimate Performs Better than GGI Light.
Unmet Demand (vehs)	50,484	24,372 -51.7%	20,122 -17.4%	GGI Light Performs Better than No Build. GGI Ultimate Performs Better than GGI Light.

Notes:

1. Unmet Demand = Accumulated total Demand Volume minus Simulated Volume at network entry points along NB I-95, SB I-95, EB SR 826, and SB Turnpike.
- .2. Percentage change compares GGI Light to No Build and GGI Ultimate to GGI Light