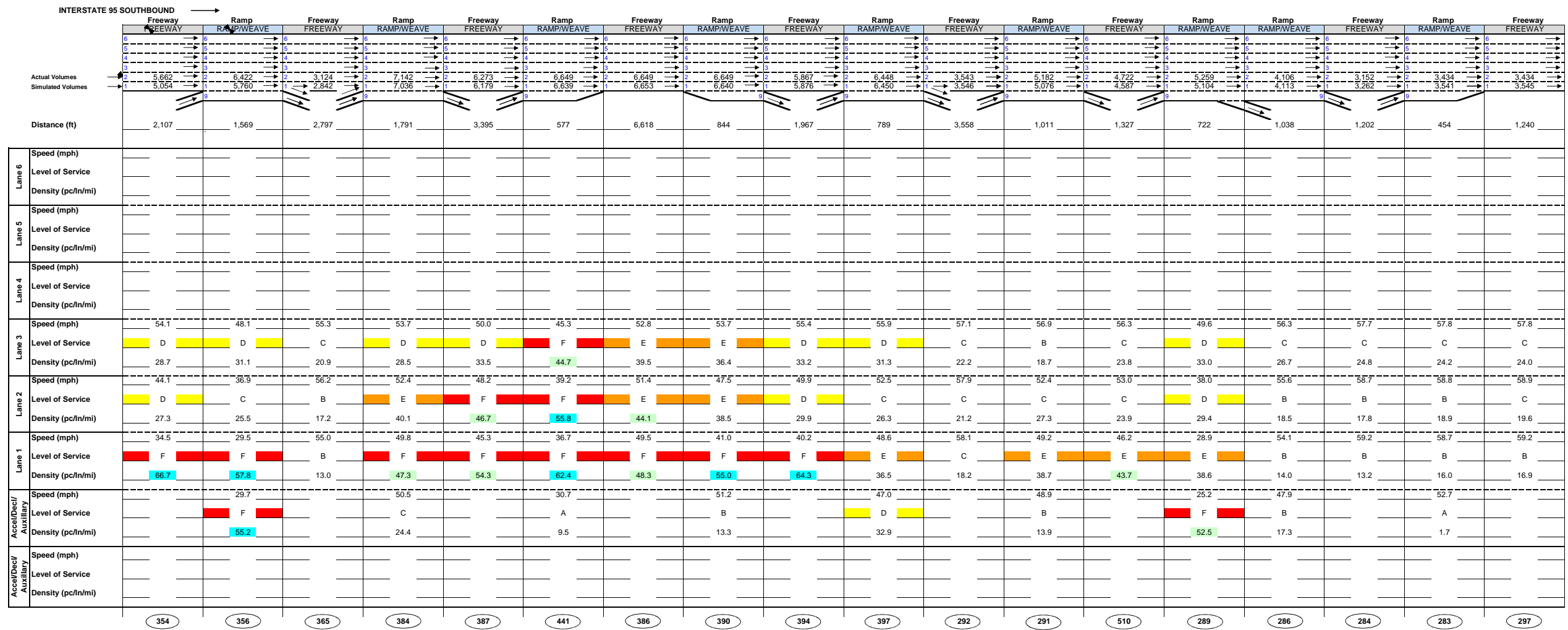
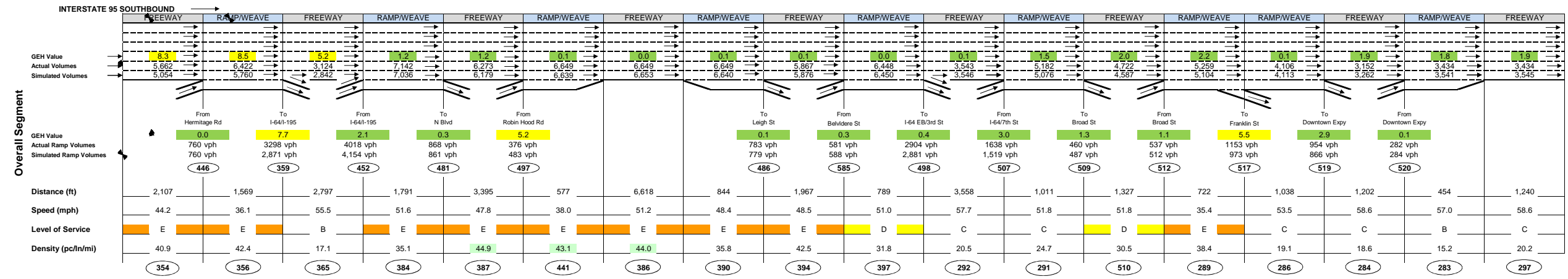
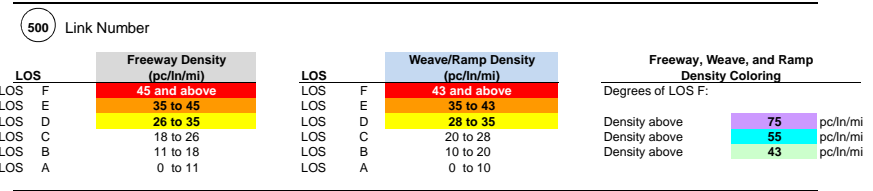


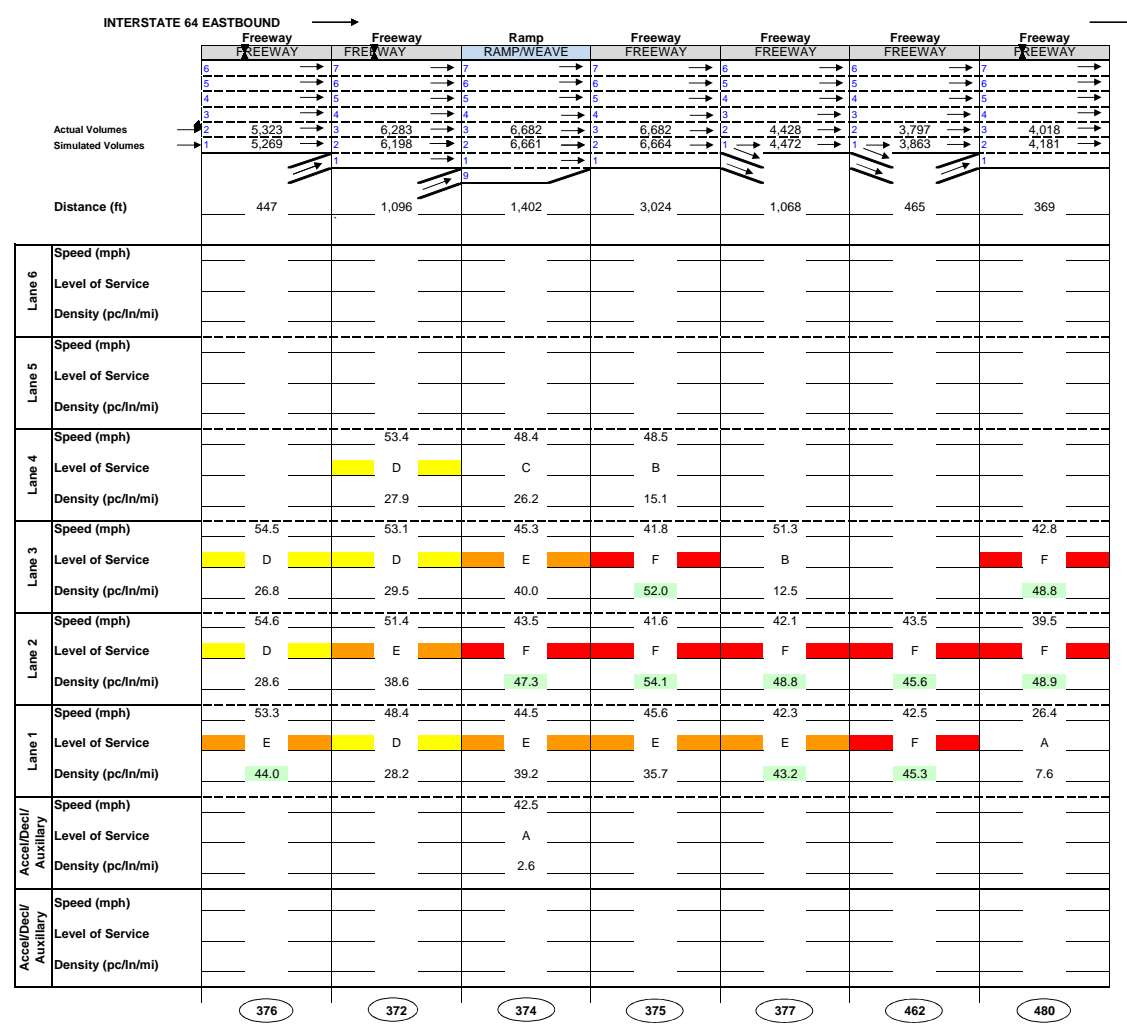
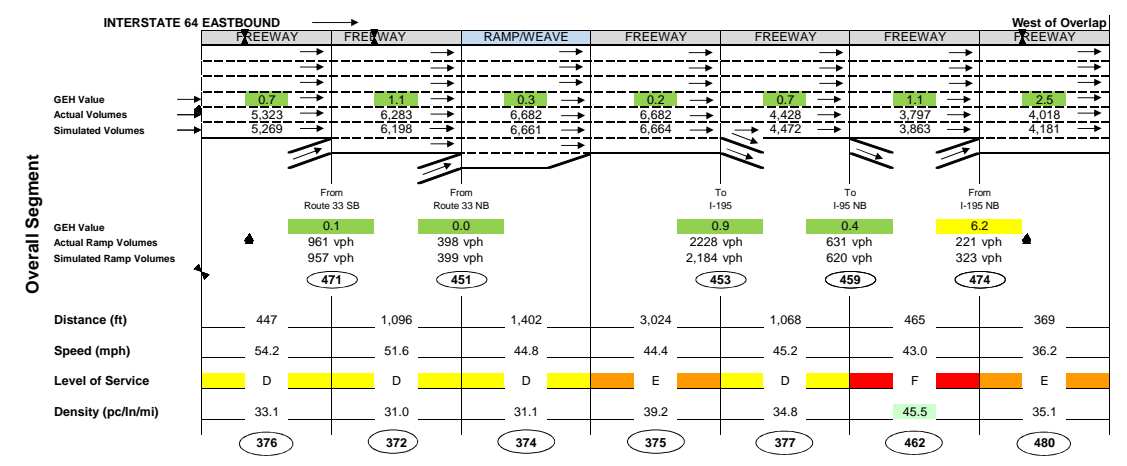
LEGEND

500	Link Number			
LOS F	Freeway Density (pc/ln/mi) 45 and above	LOS E	Weave/Ramp Density (pc/ln/mi) 43 and above	Degrees of LOS F:
LOS E	35 to 45	LOS F	35 to 43	Density above 75 pc/ln/mi
LOS D	26 to 35	LOS D	28 to 35	Density above 55 pc/ln/mi
LOS C	18 to 26	LOS C	20 to 28	Density above 43 pc/ln/mi
LOS B	11 to 18	LOS B	10 to 20	
LOS A	0 to 11	LOS A	0 to 10	



LEGEND



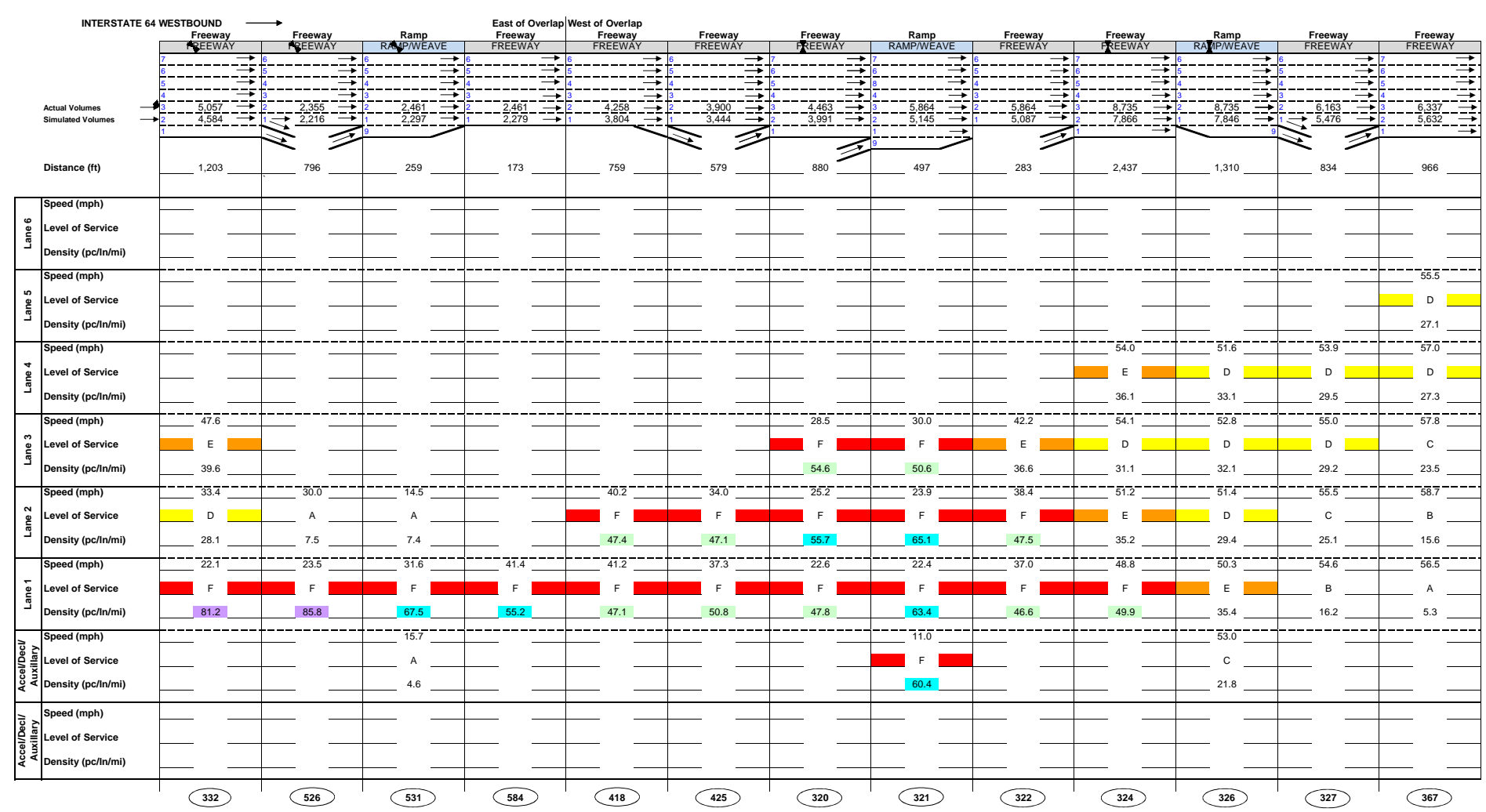
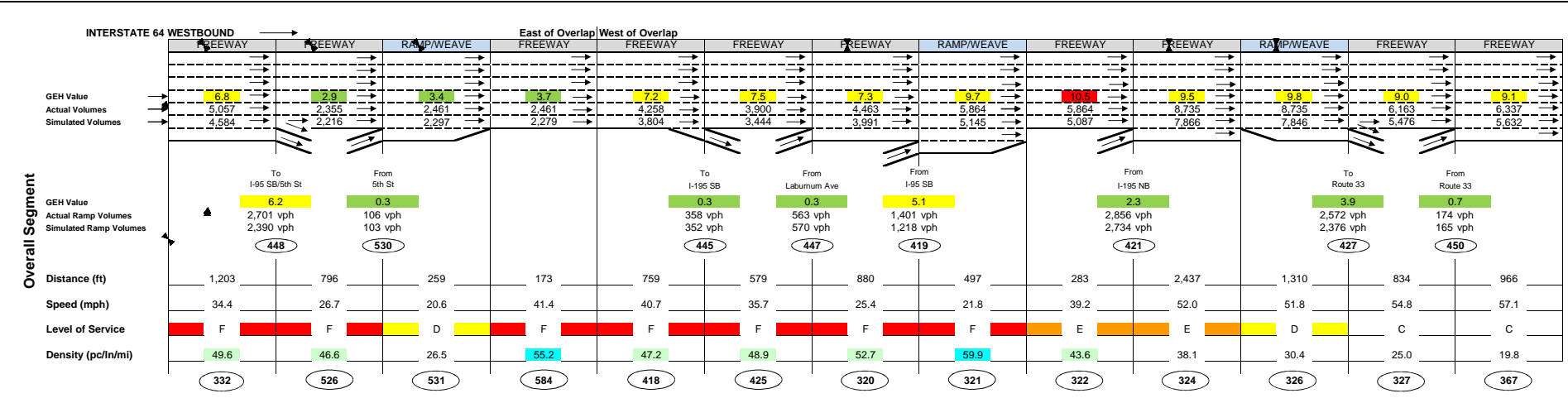


LEGEND

500 Link Number		Weave/Ramp Density (pc/ln/mi)		Freeway, Weave, and Ramp Density Coloring	
LOS F	45 and above	LOS F	43 and above	Degrees of LOS F:	
LOS E	35 to 45	LOS E	35 to 43	Density above	75 pc/ln/mi
LOS D	26 to 35	LOS D	28 to 35	Density above	55 pc/ln/mi
LOS C	18 to 26	LOS C	20 to 28	Density above	43 pc/ln/mi
LOS B	11 to 18	LOS B	10 to 20		
LOS A	0 to 11	LOS A	0 to 10		



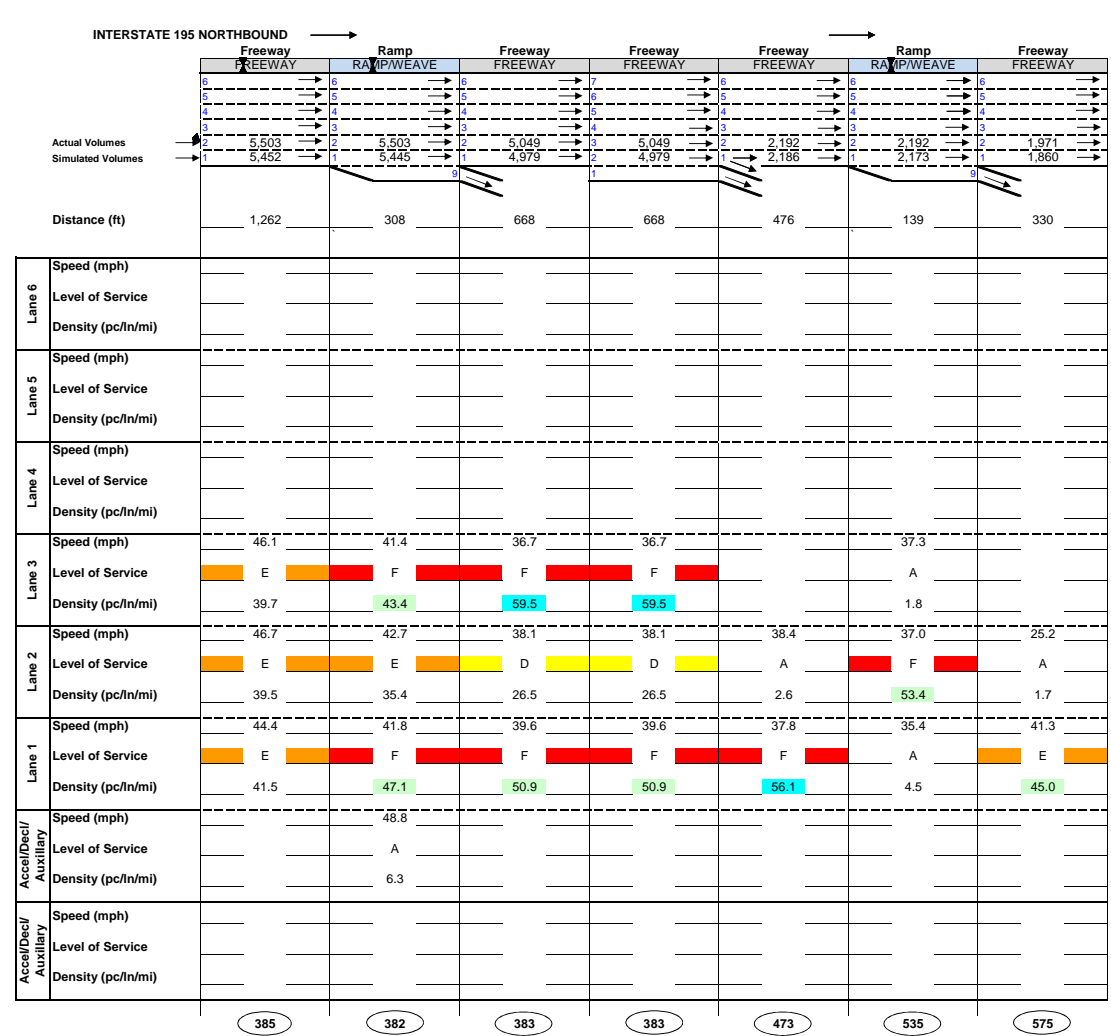
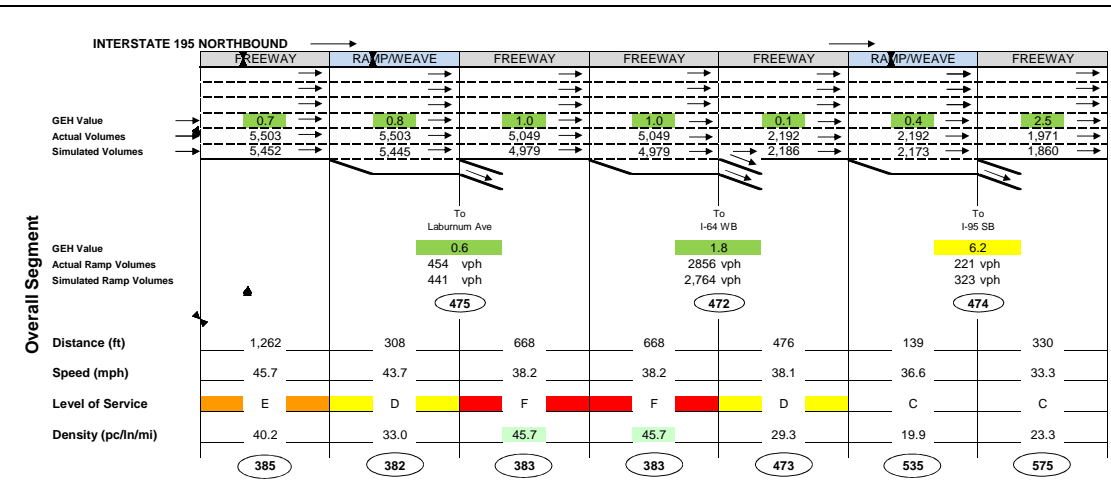
Figure 3
I-64 and I-95 Overlap Report
Eastbound I-64
AM 2022 No Build Peak Hour MOE's
7:30 - 8:30 AM



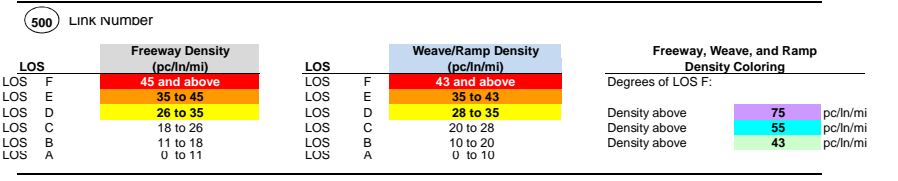
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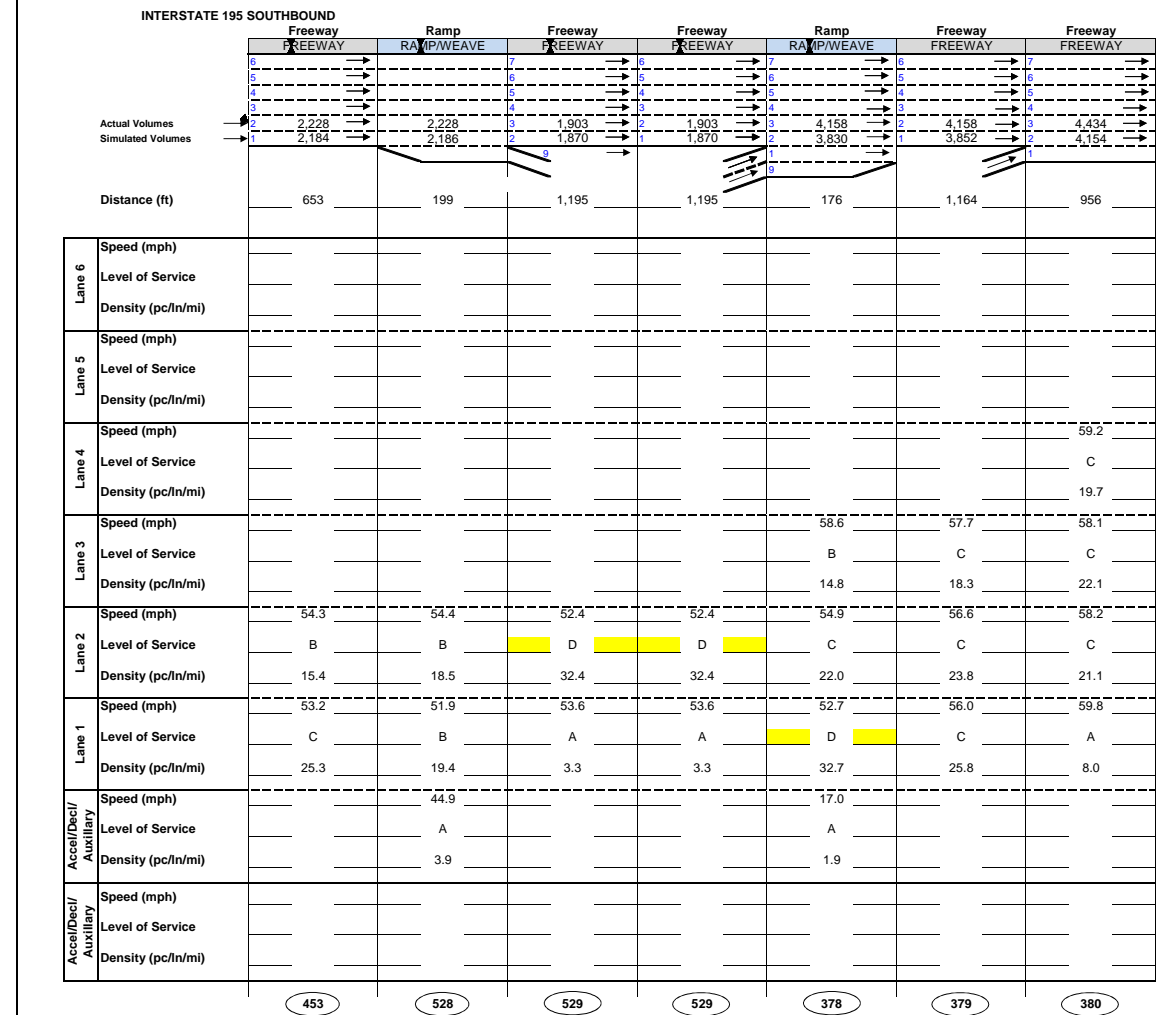
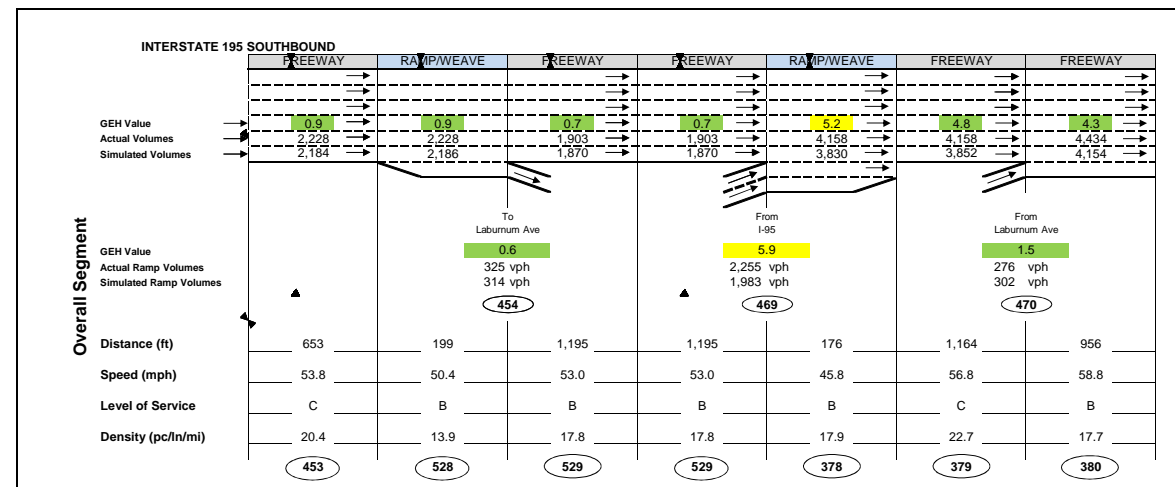
(500) Link Number

LOS	Freeway Density (pc/n/mi)	LOS	Weave/Ramp Density (pc/n/mi)	Freeway, Weave, and Ramp Density Coloring
LOS F	45 and above	LOS F	43 and above	Degrees of LOS F:
LOS E	35 to 45	LOS E	35 to 43	Density above 75 pc/n/mi
LOS D	26 to 35	LOS D	28 to 35	Density above 55 pc/n/mi
LOS C	18 to 26	LOS C	20 to 28	Density above 43 pc/n/mi
LOS B	11 to 18	LOS B	10 to 20	
LOS A	0 to 11	LOS A	0 to 10	



LEGEND





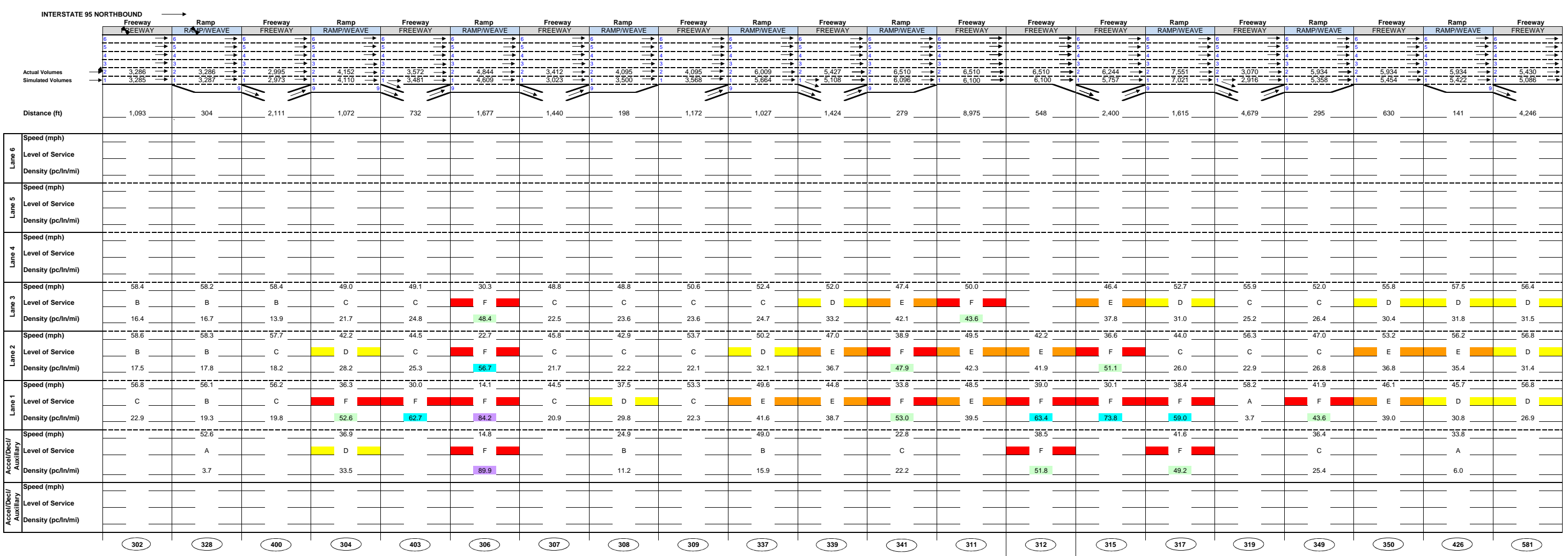
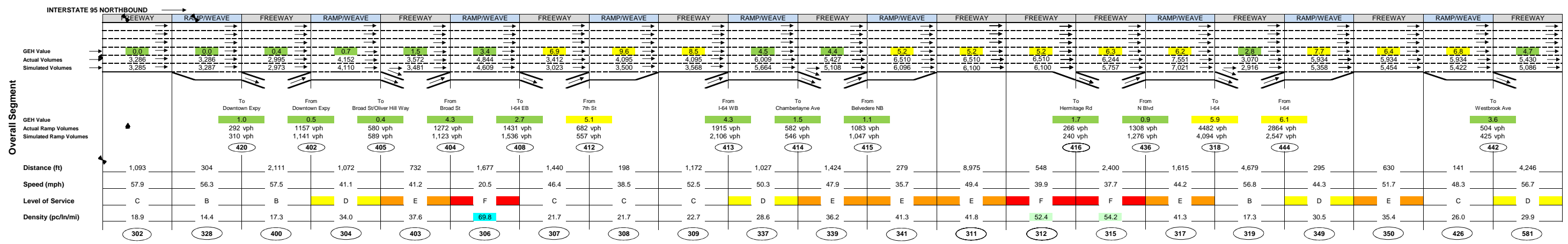
LEGEND

500	Link Number
Freeway Density (pc/ln/mi)	Weave/Ramp Density (pc/ln/mi)
LOS F: 45 and above	LOS F: 43 and above
LOS E: 35 to 45	LOS E: 35 to 43
LOS D: 26 to 35	LOS D: 28 to 35
LOS C: 18 to 26	LOS C: 20 to 28
LOS B: 11 to 18	LOS B: 10 to 20
LOS A: 0 to 11	LOS A: 0 to 10
Freeway, Weave, and Ramp Density Coloring	
Degrees of LOS F:	
Density above 75 pc/ln/mi	Density above 55 pc/ln/mi
Density above 55 pc/ln/mi	Density above 43 pc/ln/mi



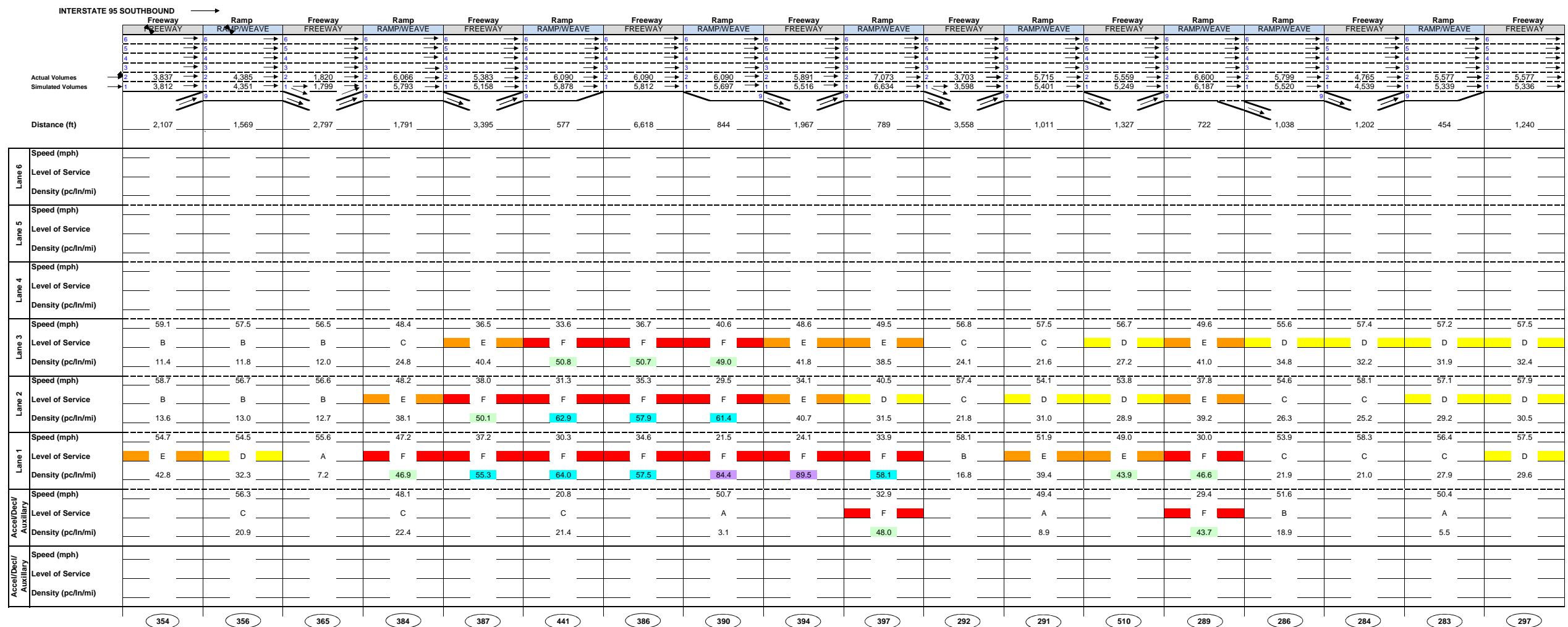
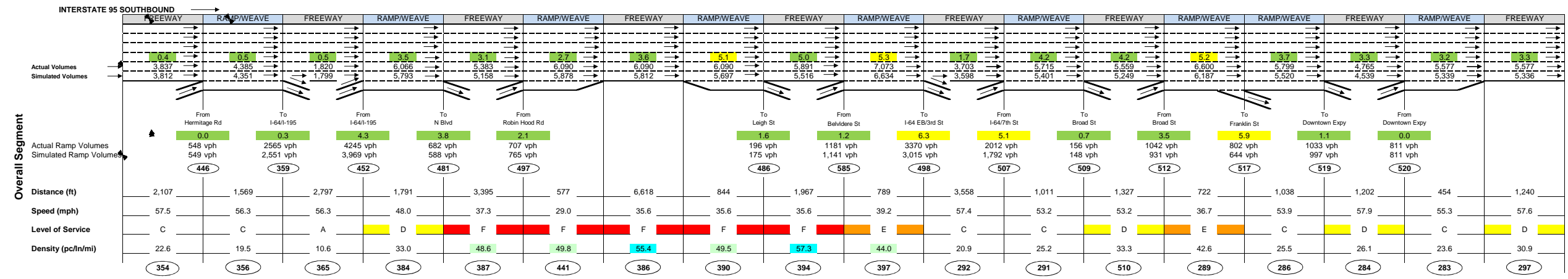
Kimley-Horn and Associates, Inc.

Figure 6
I-64 and I-95 Overlap Report
Southbound I-195
AM 2022 No Build Peak Hour MOE's
7:30 - 8:30 AM



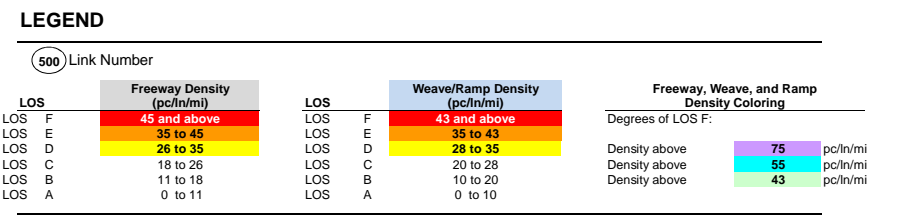
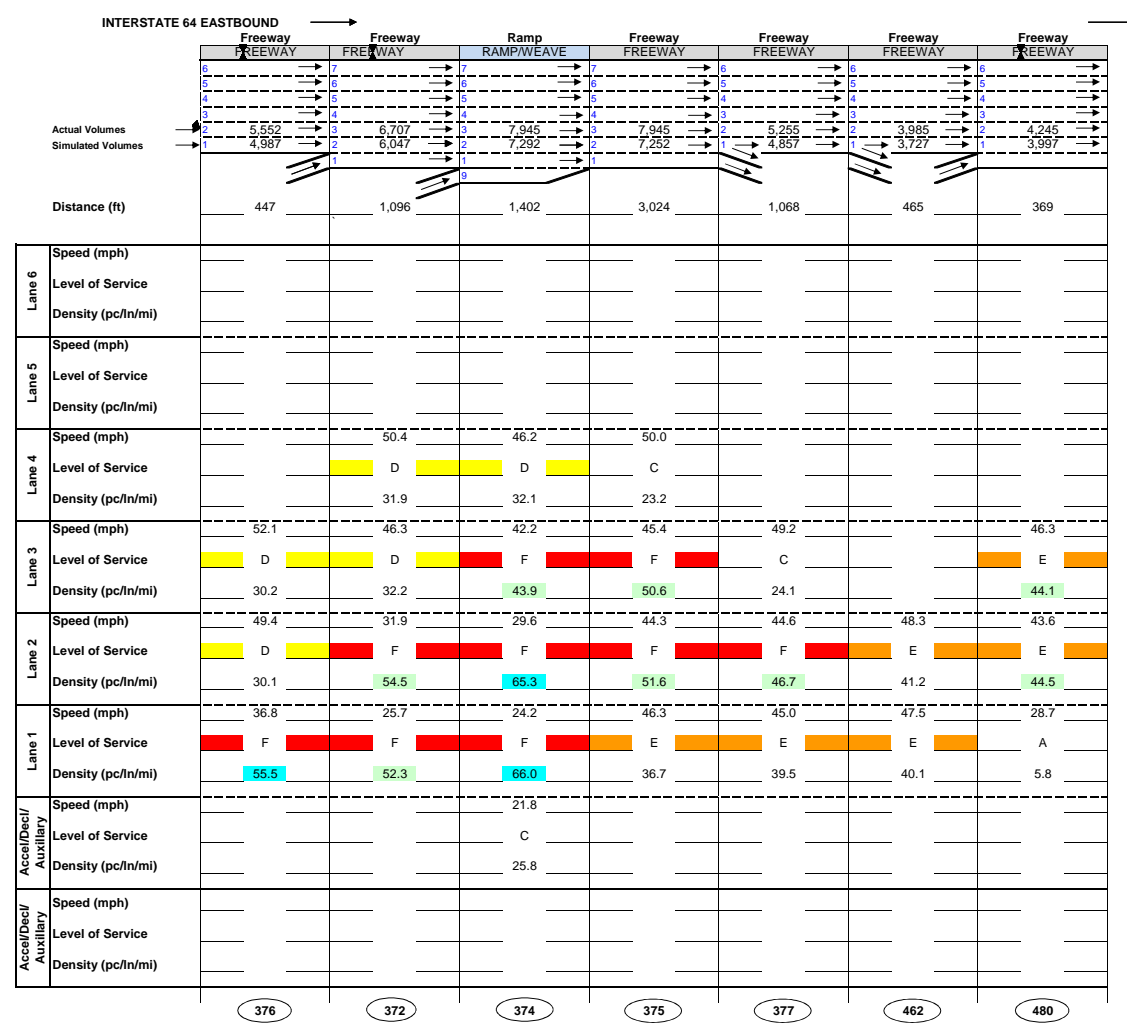
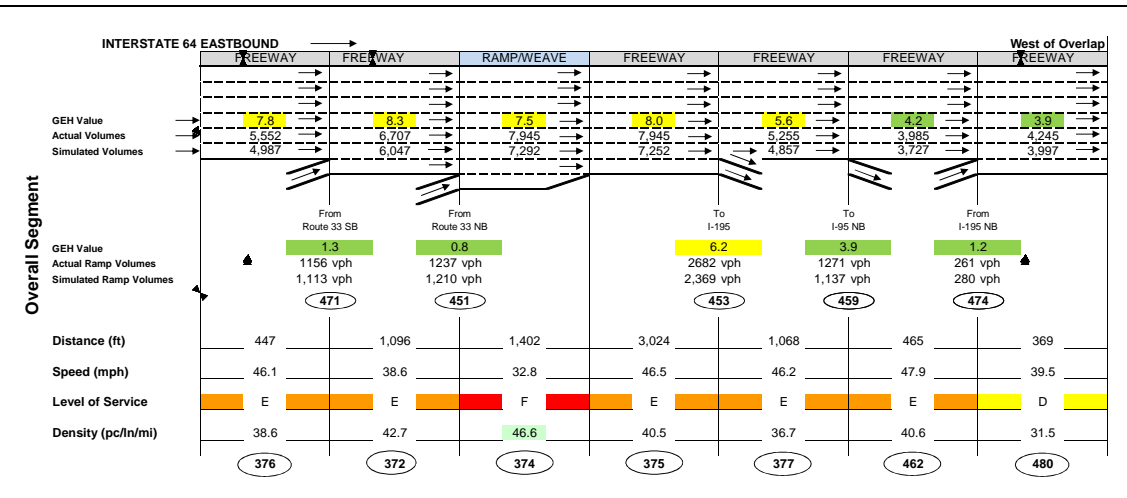
LEGEND

500	Link Number			
LOS F	Freeway Density (pc/ln/mi) 45 and above	LOS E	Weave/Ramp Density (pc/ln/mi) 43 and above	Degrees of LOS F:
LOS E	35 to 45	LOS F	35 to 43	Density above 75 pc/ln/mi
LOS D	26 to 35	LOS D	28 to 35	Density above 55 pc/ln/mi
LOS C	18 to 26	LOS C	20 to 28	Density above 43 pc/ln/mi
LOS B	11 to 18	LOS B	10 to 20	
LOS A	0 to 11	LOS A	0 to 10	



LEGEND

(500) Link Number	Freeway Density (pc/in/mi)	Weave/Ramp Density (pc/in/mi)	Freeway, Weave, and Ramp Density Coloring
LOS F	45 and above	43 and above	Degrees of LOS F:
LOS E	35 to 45	35 to 43	Density above 75 pc/in/mi
LOS D	26 to 35	28 to 35	Density above 55 pc/in/mi
LOS C	18 to 26	20 to 28	Density above 43 pc/in/mi
LOS B	11 to 18	10 to 20	
LOS A	0 to 11	0 to 10	



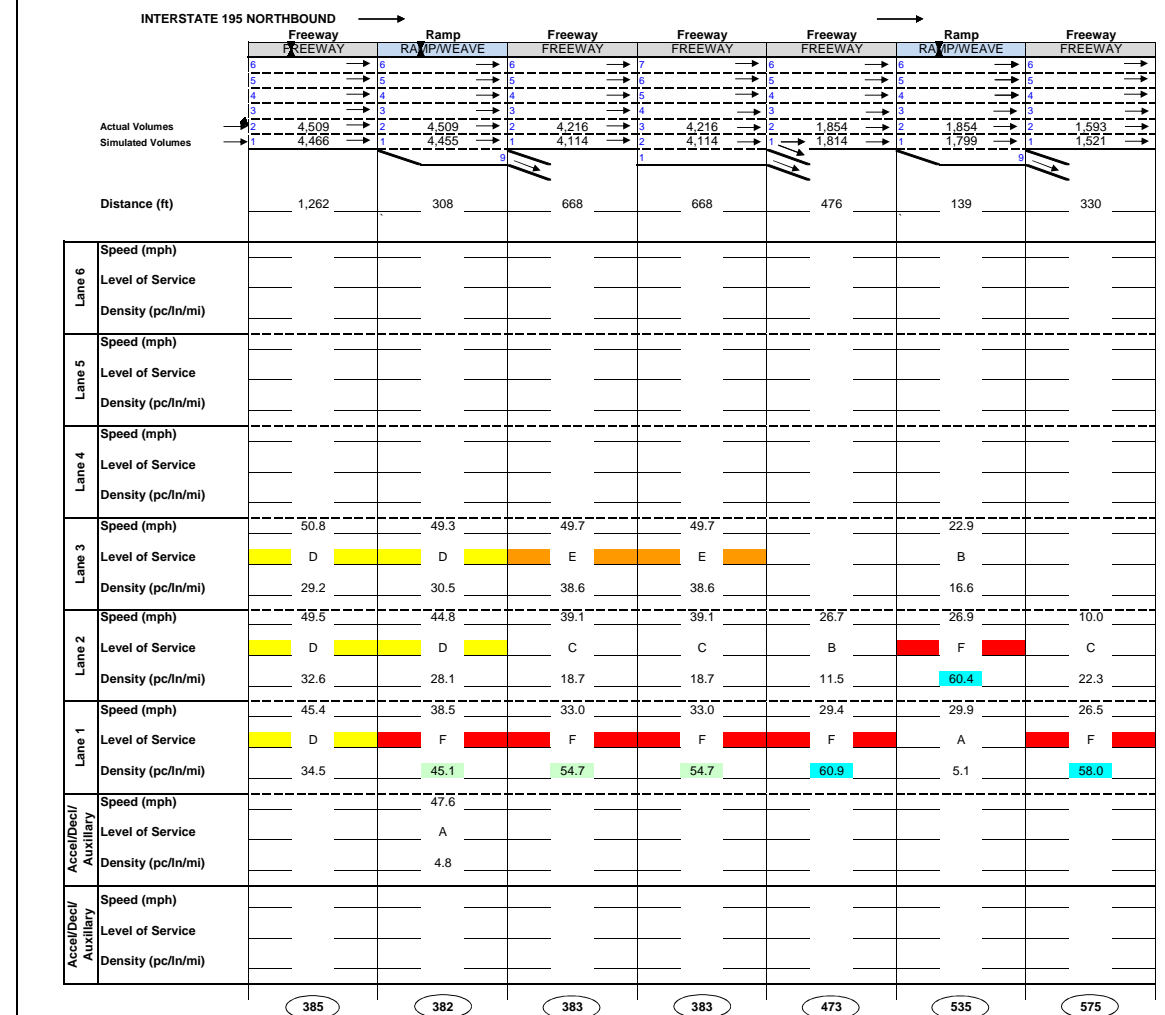
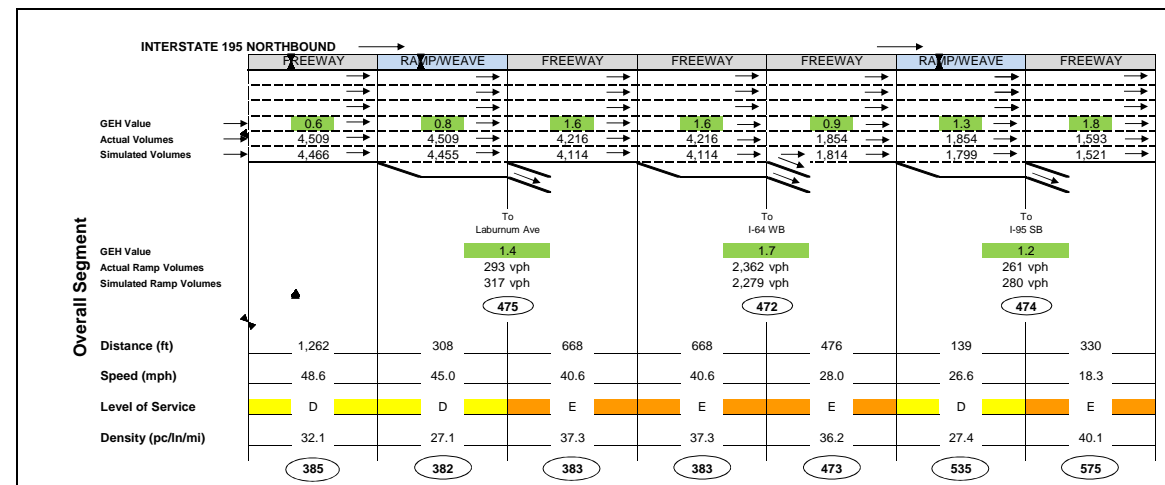
Overall Segment	INTERSTATE 64 WESTBOUND												
	Freeway	Freeway	RAMP/WEAVE	Freeway	Freeway	Freeway	Freeway	RAMP/WEAVE	Freeway	Freeway	RAMP/WEAVE	Freeway	Freeway
GEH Value	0.1	5.2	3.9	3.6	6.0	5.6	5.3	6.1	5.7	5.3	5.5	4.7	4.9
Actual Volumes	3,473	1,512	1,919	1,919	4,482	4,120	4,611	5,357	5,357	7,724	7,724	5,935	6,458
Simulated Volumes	3,467	1,723	2,093	2,082	4,089	3,766	4,256	4,993	4,947	7,266	7,251	5,579	6,070
GEH Value	4.5	0.8			2.1	0.0	0.2		1.9		2.6	1.2	
Actual Ramp Volumes	1,961 vph	407 vph			361 vph	491 vph	746 vph		2,362 vph		1,790 vph	523 vph	
Simulated Ramp Volumes	1,767 vph	390 vph			323 vph	492 vph	752 vph		2,273 vph		1,680 vph	495 vph	
Distance (ft)	1,203	796	259	173	759	#N/A	880	497	283	2,437	1,310	834	#N/A
Speed (mph)	57.1	48.5	24.7	43.8	54.9	#N/A	58.9	47.5	52.9	55.1	56.8	55.9	#N/A
Level of Service	C	C	C	F	E	#N/A	A	A	A	A	A	A	#N/A
Density (pc/In/mi)	20.5	19.7	21.1	47.7	37.2	#N/A	5.1	1.4	10.6	10.5	2.8	4.6	#N/A
	332	526	531	584	418	425	320	321	322	324	326	327	367

Overall Segment	INTERSTATE 64 WESTBOUND												
	Freeway	Freeway	RAMP/WEAVE	Freeway	Freeway	Freeway	Freeway	RAMP/WEAVE	Freeway	Freeway	RAMP/WEAVE	Freeway	Freeway
Actual Volumes	3,473	1,512	1,919	1,919	4,482	4,120	4,611	5,357	5,357	7,724	7,724	5,935	6,458
Simulated Volumes	3,467	1,723	2,093	2,082	4,089	3,766	4,256	4,993	4,947	7,266	7,251	5,579	6,070
Distance (ft)	1,203	796	259	173	759	#N/A	880	497	283	2,437	1,310	834	#N/A
Speed (mph)													55.6
Level of Service													C
Density (pc/In/mi)													25.2
Speed (mph)										55.0	53.2	54.5	57.3
Level of Service										D	C	D	D
Density (pc/In/mi)										28.7	27.4	26.6	27.7
Speed (mph)	57.3						56.7	55.7	55.4	57.6	54.9	56.1	57.9
Level of Service	C						D	D	D	D	D	D	C
Density (pc/In/mi)	24.8						30.0	28.1	26.2	28.5	30.1	28.8	25.3
Speed (mph)	59.1	53.0	17.4		54.7	55.4	57.0	53.8	53.7	56.7	54.0	56.4	58.0
Level of Service	A	A	A		E	D	D	D	D	D	D	D	C
Density (pc/In/mi)	7.2	0.6	0.8		36.6	31.0	29.1	31.5	33.7	30.5	29.5	26.4	18.7
Speed (mph)	54.7	44.0	37.0	43.8	55.1	55.2	58.9	54.8	52.9	55.1	52.8	55.9	54.6
Level of Service	D	E	F	F	E	E	B	C	D	E	D	C	A
Density (pc/In/mi)	29.7	38.7	50.6	47.7	37.9	37.2	15.2	26.7	31.9	41.9	33.4	18.3	9.7
Speed (mph)			19.5									56.8	
Level of Service			B									B	
Density (pc/In/mi)			11.8									13.8	
Speed (mph)													
Level of Service													
Density (pc/In/mi)													
	332	526	531	584	418	425	320	321	322	324	326	327	367

LEGEND

(500) Link Number

LOS	Freeway Density (pc/In/mi)	LOS	Weave/Ramp Density (pc/In/mi)	Freeway, Weave, and Ramp Density Coloring
LOS F	45 and above	LOS F	43 and above	Degrees of LOS F:
LOS E	35 to 45	LOS E	35 to 43	Density above 75 pc/In/mi
LOS D	26 to 35	LOS D	28 to 35	Density above 55 pc/In/mi
LOS C	18 to 26	LOS C	20 to 28	Density above 43 pc/In/mi
LOS B	11 to 18	LOS B	10 to 20	
LOS A	0 to 11	LOS A	0 to 10	



LEGEND

500	Link Number			
LOS F	Freeway Density (pc/ln/mi) 45 and above	LOS F	Weave/Ramp Density (pc/ln/mi) 43 and above	Density above 75 pc/ln/mi
LOS E	35 to 45	LOS E	35 to 43	Density above 55 pc/ln/mi
LOS D	26 to 35	LOS D	28 to 35	Density above 43 pc/ln/mi
LOS C	18 to 26	LOS C	20 to 28	
LOS B	11 to 18	LOS B	10 to 20	
LOS A	0 to 11	LOS A	0 to 10	



Figure 11
I-64 and I-95 Overlap Report
Northbound I-195
PM 2022 No Build Peak Hour MOE's
4:30 - 5:30 PM

		FREEWAY	RAMP/WEAVE	FREEWAY	FREEWAY	RAMP/WEAVE	FREEWAY	FREEWAY
Overall Segment	GEH Value	6.2	6.2	8.9	8.9	7.9	7.7	6.7
	Actual Volumes	2,682	2,682	2,402	2,402	4,583	4,583	4,879
	Simulated Volumes	2,369	2,371	1,985	1,985	4,063	4,076	4,423
		To Laburnum Ave			From I-64 EB		From Laburnum Ave	
	GEH Value		5.3		1.5		3.0	
	Actual Ramp Volumes		280 vph		2,180 vph		297 vph	
	Simulated Ramp Volumes		375 vph		2,111 vph		351 vph	
	Distance (ft)	653	199	1,195	1,195	176	1,164	956
	Speed (mph)	51.5	46.9	42.9	42.9	42.4	54.9	58.5
	Level of Service	C	B	C	C	C	C	C
	Density (pc/n/mi)	23.1	16.6	23.2	23.2	21.1	24.8	19.0
		453	528	529	529	378	379	380

		Freeway	Ramp	Freeway	Freeway	Ramp	Freeway	Freeway
Overall Segment	Actual Volumes	2,682	2,682	2,402	2,402	4,583	4,583	4,879
	Simulated Volumes	2,369	2,371	1,985	1,985	4,063	4,076	4,423
	Distance (ft)	653	199	1,195	1,195	176	1,164	956
Lane 6	Speed (mph)							
Lane 6	Level of Service							
Lane 6	Density (pc/n/mi)							
Lane 5	Speed (mph)							
Lane 5	Level of Service							
Lane 5	Density (pc/n/mi)							
Lane 4	Speed (mph)							58.6
Lane 4	Level of Service							C
Lane 4	Density (pc/n/mi)							21.3
Lane 3	Speed (mph)					55.6	55.1	57.7
Lane 3	Level of Service					B	C	C
Lane 3	Density (pc/n/mi)					18.1	21.7	23.5
Lane 2	Speed (mph)	51.9	48.6	44.2	44.2	50.3	54.9	58.1
Lane 2	Level of Service	C	C	E	E	C	C	C
Lane 2	Density (pc/n/mi)	18.6	23.3	39.6	39.6	25.1	25.7	22.0
Lane 1	Speed (mph)	51.1	48.5	41.6	41.6	47.7	54.8	59.6
Lane 1	Level of Service	D	C	A	A	E	D	A
Lane 1	Density (pc/n/mi)	27.7	21.7	6.9	6.9	36.6	26.9	9.2
Accel/Decel/Auxiliary	Speed (mph)		43.7			16.2		
Accel/Decel/Auxiliary	Level of Service		A			A		
Accel/Decel/Auxiliary	Density (pc/n/mi)		4.8			4.6		
		453	528	529	529	378	379	380

LEGEND

500 Link Number					
LOS	Freeway Density (pc/n/mi)	LOS	Weave/Ramp Density (pc/n/mi)	Freeway, Weave, and Ramp Density Coloring	
LOS F	45 and above	LOS F	43 and above	Degrees of LOS F:	
LOS E	35 to 45	LOS E	35 to 43	Density above	75 pc/n/mi
LOS D	26 to 35	LOS D	28 to 35	Density above	55 pc/n/mi
LOS C	18 to 26	LOS C	20 to 28	Density above	43 pc/n/mi
LOS B	11 to 18	LOS B	10 to 20		
LOS A	0 to 11	LOS A	0 to 10		



Kimley-Horn and Associates, Inc.

Figure 12
I-64 and I-95 Overlap Report
Southbound I-195
PM 2022 No Build Peak Hour MOE's
4:30 - 5:30 PM

I-95/I-64 Overlap Study
 2022 No-Build Peak Hour Intersection Analyses Results

Table 1: Overall Intersection Results (730-830 AM)

North/South Street	East/West Street	Sig	Delay (sec)	LOS	Stopped Delay (sec)	Avg # of Stops	# Vehicles
Laburnum	I-64 EB offramp		7.7	A	0.3	0.6	674
Laburnum	I-195 NB offramp		1.5	A	0.0	0.1	1087
Laburnum	I-64 WB onramp		1.2	A	0.1	0.0	1829
N Boulevard	I-95 ramps	X	7.4	A	2.1	0.2	2222
Hermitage	Robin Hood	X	22.8	C	14.5	0.8	1795
Robin Hood	I-95 SB onramp		1.3	A	0.0	0.0	726
Leigh	Gilmer	X	23.5	C	16.7	0.5	1286
Chamberlayne	I-95 NB offramp		1.8	A	0.0	0.0	1246
3rd St	Jackson St	X	16.0	B	8.7	0.5	1396
4th St	Jackson St	X	7.6	A	4.7	0.4	786
5th St	Jackson St	X	19.3	B	13.5	0.6	1454
Broad St	College	X	7.7	A	4.6	0.4	2641
Broad St	14th St	X	8.4	A	3.7	0.3	3277
15th St	Franklin/Bank St	X	18.3	B	8.9	0.7	1263
15th St	Main St	X	18.3	B	11.6	0.6	1933
14th St	Main St	X	13.0	B	8.5	0.4	2572
14th St	Franklin St	X	15.5	B	9.5	0.6	1727
Broad St	17th St	X	22.6	C	8.9	0.5	2713
Broad St	18th St	X	22.6	C	14.7	0.7	2063
Jackson St	7th St	X	12.4	B	7.9	0.5	1050
Jackson St	8th St	X	15.3	B	10.6	0.6	855
7th St	Duval St	X	10.8	B	6.0	0.6	944
Belvedere	Leigh	X	27.5	C	19.6	0.7	3048
N Boulevard	Robin Hood	X	24.7	C	17.5	0.7	2699
Hermitage	I-95 NB offramp	X	5.7	A	0.3	0.2	745

Table 2: Intersection Results by Movement (730-830 AM)

Table with 18 columns: Name, Movement, Delay (sec), LOS, Average Queue (ft), Max Queue (ft), Simulated Volume, Actual Volume, GEH, Approach, Delay (sec), LOS, Average Queue (ft), # Vehicles. Rows are grouped by intersection name and movement type.

I-95/I-64 Overlap Study
2022 No-Build Peak Hour Intersection Analyses Results

Table 1: Overall Intersection Results (430-530 PM)

North/South Street	East/West Street	Sig	Delay (sec)	LOS	Stopped Delay (sec)	Avg # of Stops	# Vehicles
Laburnum	I-64 EB offramp		10.3	B	0.4	0.7	771
Laburnum	I-195 NB offramp		1.0	A	0.0	0.0	1065
Laburnum	I-64 WB onramp		0.9	A	0.0	0.0	1979
N Boulevard	I-95 ramps	X	16.0	B	5.8	0.4	2598
Hermitage	Robin Hood	X	26.2	C	17.7	0.8	1927
Robin Hood	I-95 SB onramp		3.0	A	0.4	0.1	1060
Leigh	Gilmer	X	38.4	D	28.8	0.8	1186
Chamberlayne	I-95 NB offramp		0.7	A	0.0	0.0	1525
3rd St	Jackson St	X	13.9	B	10.0	0.5	671
4th St	Jackson St	X	18.1	B	12.5	0.7	752
5th St	Jackson St	X	14.6	B	10.9	0.5	904
Broad St	College	X	38.1	D	26.1	1.0	2171
Broad St	14th St	X	36.2	D	17.5	1.2	2853
15th St	Franklin/Bank St	X	14.2	B	8.3	0.4	919
15th St	Main St	X	21.4	C	15.3	0.7	1810
14th St	Main St	X	16.9	B	12.1	0.5	2265
14th St	Franklin St	X	16.8	B	11.2	0.6	1338
Broad St	17th St	X	25.0	C	13.2	0.8	2129
Broad St	18th St	X	19.9	B	13.5	0.6	2063
Jackson St	7th St	X	26.9	C	16.9	0.8	2188
Jackson St	8th St	X	13.0	B	7.6	0.6	792
7th St	Duval St	X	25.6	C	15.4	0.8	2369
Belvedere	Leigh	X	49.1	D	32.2	1.1	3751
N Boulevard	Robin Hood	X	25.6	C	17.6	0.7	2944
Hermitage	I-95 NB offramp	X	2.1	A	0.2	0.1	552

