

**CUMULATIVE (2020) WITH  
PROJECT WITH ALTERNATIVE 4  
CONDITIONS  
(ICU METHODOLOGY)**

Cumulative (2020) + ProjectWed Apr 8, 2009 13:55:11

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Huntington Beach Traffic Impact Analysis  
Cumulative (2020) + Project AM (Alt 4)  
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Scenario Report

Scenario: Cumulative (2020) + Project AM (Alt 4)  
Command: Cumulative (2020) + Project AM (Alt 4)  
Volume: Existing AM  
Geometry: Existing  
Impact Fee: Default Impact Fee  
Trip Generation: Approved with Project AM  
Trip Distribution: Project  
Paths: Default Path  
Routes: Default Route  
Configuration: Cumulative (2020) + Project (Alt 4)

Huntington Beach Traffic Impact Analysis  
 Cumulative (2020) + Project AM (Alt 4)

Impact Analysis Report  
 Level Of Service

Intersection	Base		Future		Change in
	Del/ LOS	V/ Veh C	Del/ LOS	V/ Veh C	
# 1 Pacific Coast Hwy / Warner Ave	D	xxxxxx 0.812	D	xxxxxx 0.841	+ 0.029 V/C
# 2 Pacific Coast Hwy / Seapoint A	B	xxxxxx 0.647	B	xxxxxx 0.677	+ 0.030 V/C
# 3 Pacific Coast Hwy / Goldenwest	B	xxxxxx 0.676	C	xxxxxx 0.733	+ 0.056 V/C
# 4 Pacific Coast Hwy / 17th St	A	xxxxxx 0.574	B	xxxxxx 0.620	+ 0.046 V/C
# 5 Pacific Coast Hwy / 9th St	A	xxxxxx 0.574	B	xxxxxx 0.620	+ 0.046 V/C
# 6 Pacific Coast Hwy / 6th St	C	xxxxxx 0.715	C	xxxxxx 0.758	+ 0.042 V/C
# 7 Pacific Coast Hwy / Main St	B	xxxxxx 0.684	C	xxxxxx 0.729	+ 0.045 V/C
# 8 Pacific Coast Hwy / 1st St	C	xxxxxx 0.741	C	xxxxxx 0.772	+ 0.032 V/C
# 9 Pacific Coast Hwy / Huntington	B	xxxxxx 0.613	B	xxxxxx 0.684	+ 0.071 V/C
# 10 Pacific Coast Hwy / Beach Blvd	C	xxxxxx 0.743	C	xxxxxx 0.785	+ 0.042 V/C
# 11 Pacific Coast Hwy / Newland S	A	xxxxxx 0.560	A	xxxxxx 0.589	+ 0.028 V/C
# 12 Pacific Coast Hwy / Magnolia S	A	xxxxxx 0.585	B	xxxxxx 0.613	+ 0.028 V/C
# 13 Pacific Coast Hwy / Brookhurst	C	xxxxxx 0.704	C	xxxxxx 0.732	+ 0.028 V/C
# 14 Main St / Yorktown Ave	A	xxxxxx 0.385	A	xxxxxx 0.416	+ 0.031 V/C
# 15 Main St / 17 th St	A	xxxxxx 0.279	A	xxxxxx 0.311	+ 0.032 V/C
# 16 Main St / Adams Ave	A	xxxxxx 0.481	A	xxxxxx 0.547	+ 0.066 V/C
# 19 Main St / 6th St	A	xxxxxx 0.216	A	xxxxxx 0.342	+ 0.126 V/C
# 22 1st St / Orange Ave & Atlanta	A	xxxxxx 0.315	A	xxxxxx 0.361	+ 0.046 V/C
# 23 Beach Blvd / Atlanta Ave	A	xxxxxx 0.362	A	xxxxxx 0.428	+ 0.067 V/C
# 24 Beach Blvd / Pacific View Ave	A	xxxxxx 0.267	A	xxxxxx 0.334	+ 0.067 V/C

Huntington Beach Traffic Impact Analysis  
 Cumulative (2020) + Project AM (Alt 4)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

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Intersection #1 Pacific Coast Hwy / Warner Ave

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Cycle (sec): 120 Critical Vol./Cap.(X): 0.841

Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 69 Level Of Service: D

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Street Name:	Pacific Coast Hwy				Warner Ave					
	North Bound		South Bound		East Bound		West Bound			
Approach:	L	T	R	L	T	R	L	T	R	
Movement:										
Control:	Protected		Protected		Protected		Protected			
Rights:	Include		Include		Include		Ovl			
Min. Green:	0	0	0	0	0	0	0	0	0	
Lanes:	1	0	2	0	1	1	0	1	0	2

Volume Module:

Base Vol:	30	1160	220	410	1150	40	20	190	30	290	50	600
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	34	1307	248	462	1296	45	23	214	34	327	56	676
Added Vol:	0	81	15	0	87	0	0	0	0	17	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	34	1388	263	462	1383	45	23	214	34	344	56	676
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	34	1388	263	462	1383	45	23	214	34	344	56	676
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	34	1388	263	462	1383	45	23	214	34	344	56	676
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	34	1388	263	462	1383	45	23	214	34	344	56	676
OvlAdjVol:												214

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	2.00	1.94	0.06	1.00	0.86	0.14	2.00	1.00	2.00
Final Sat.:	1700	3400	1700	3400	3293	107	1700	1468	232	3400	1700	3400

Capacity Analysis Module:

Vol/Sat:	0.02	0.41	0.15	0.14	0.42	0.42	0.01	0.15	0.15	0.10	0.03	0.20
OvlAdjV/S:												0.06
Crit Moves:	****			****			****			****		

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Huntington Beach Traffic Impact Analysis  
 Cumulative (2020) + Project AM (Alt 4)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

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Intersection #2 Pacific Coast Hwy / Seapoint Ave

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Cycle (sec): 120 Critical Vol./Cap.(X): 0.677

Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 39 Level Of Service: B

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Street Name:	Pacific Coast Hwy				Seapoint Ave							
	North Bound		South Bound		East Bound		West Bound					
Approach:	L	T	R	L	T	R	L	T	R			
Movement:												
Control:	Protected		Protected		Protected		Protected					
Rights:	Include		Include		Include		Include					
Min. Green:	0	0	0	0	0	0	0	0	0			
Lanes:	0	0	1	1	0	1	0	2	0	0	0	1

Volume Module:

Base Vol:	0	1110	30	80	1270	0	0	0	0	80	0	250
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	0	1251	34	90	1431	0	0	0	0	90	0	282
Added Vol:	0	96	6	0	103	0	0	0	0	6	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1347	40	90	1534	0	0	0	0	96	0	282
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1347	40	90	1534	0	0	0	0	96	0	282
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1347	40	90	1534	0	0	0	0	96	0	282
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1347	40	90	1534	0	0	0	0	96	0	282

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.94	0.06	1.00	2.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	0	3302	98	1700	3400	0	0	0	0	3400	0	1700

Capacity Analysis Module:

Vol/Sat:	0.00	0.41	0.41	0.05	0.45	0.00	0.00	0.00	0.00	0.03	0.00	0.17
Crit Moves:	****			****								****

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Huntington Beach Traffic Impact Analysis  
 Cumulative (2020) + Project AM (Alt 4)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

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Intersection #3 Pacific Coast Hwy / Goldenwest St

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Cycle (sec): 120 Critical Vol./Cap.(X): 0.733

Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 45 Level Of Service: C

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Street Name:	Pacific Coast Hwy				Goldenwest St															
Approach:	North Bound		South Bound		East Bound		West Bound													
Movement:	L	T	R	L	T	R	L	T	R	L	T	R								
Control:	Protected		Protected		Protected		Protected													
Rights:	Include		Include		Include		Include													
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0								
Lanes:	1	0	2	0	1	1	0	2	0	0	0	0	0	0	0	1	0	0	0	1

Volume Module:

Base Vol:	20	970	140	140	1250	0	0	0	0	300	0	140
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	23	1093	158	158	1409	0	0	0	0	338	0	158
Added Vol:	0	102	31	0	109	0	0	0	0	41	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	23	1195	189	158	1518	0	0	0	0	379	0	158
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	23	1195	189	158	1518	0	0	0	0	379	0	158
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	23	1195	189	158	1518	0	0	0	0	379	0	158
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	23	1195	189	158	1518	0	0	0	0	379	0	158

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	1700	3400	1700	1700	3400	0	0	0	0	1700	0	1700

Capacity Analysis Module:

Vol/Sat:	0.01	0.35	0.11	0.09	0.45	0.00	0.00	0.00	0.00	0.22	0.00	0.09
Crit Moves:	****			****						****		

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Huntington Beach Traffic Impact Analysis  
 Cumulative (2020) + Project AM (Alt 4)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

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Intersection #4 Pacific Coast Hwy / 17th St

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Cycle (sec): 120 Critical Vol./Cap.(X): 0.620

Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 33 Level Of Service: B

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Street Name: Pacific Coast Hwy 17th St

Approach:	North Bound				South Bound				East Bound				West Bound							
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected				Protected				Protected				Protected							
Rights:	Include				Include				Include				Include							
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	2	0	1	1	0	2	0	0	0	0	0	0	0	1	0	0	0	1

Volume Module:

Base Vol:	0	1010	30	60	1420	0	0	0	0	0	80	0	80
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	0	1138	34	68	1600	0	0	0	0	0	90	0	90
Added Vol:	0	133	2	0	150	0	0	0	0	0	4	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1271	36	68	1750	0	0	0	0	0	94	0	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1271	36	68	1750	0	0	0	0	0	94	0	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1271	36	68	1750	0	0	0	0	0	94	0	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1271	36	68	1750	0	0	0	0	0	94	0	90

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	1.00	2.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	3400	1700	1700	3400	0	0	0	0	0	1700	0	1700

Capacity Analysis Module:

Vol/Sat:	0.00	0.37	0.02	0.04	0.51	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.05
Crit Moves:	****				****						****		

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Huntington Beach Traffic Impact Analysis  
 Cumulative (2020) + Project AM (Alt 4)

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
*****
Intersection #5 Pacific Coast Hwy / 9th St
*****
Cycle (sec):          120          Critical Vol./Cap.(X):          0.620
Loss Time (sec):      6 (Y+R=4.0 sec) Average Delay (sec/veh):      xxxxxx
Optimal Cycle:        33          Level Of Service:          B
*****
Street Name:          Pacific Coast Hwy          9th St
Approach:             North Bound          South Bound          East Bound          West Bound
Movement:             L - T - R          L - T - R          L - T - R          L - T - R
-----|-----|-----|-----|
Control:              Protected          Protected          Protected          Protected
Rights:               Include          Include          Include          Include
Min. Green:           0 0 0          0 0 0          0 0 0          0 0 0
Lanes:                0 0 2 0 1          1 0 2 0 0          0 0 0 0 0          1 0 0 0 1
-----|-----|-----|-----|
Volume Module:
Base Vol:             0 1050          10 20 1500          0 0 0 0          40 0 20
Growth Adj:           1.13 1.13 1.13 1.13 1.13 1.13 1.13 1.13 1.13 1.13 1.13 1.13
Initial Bse:          0 1183          11 23 1690          0 0 0 0          45 0 23
Added Vol:            0 135          1 0 154          0 0 0 0          2 0 0
PasserByVol:         0 0 0          0 0 0          0 0 0 0          0 0 0
Initial Fut:          0 1318          12 23 1844          0 0 0 0          47 0 23
User Adj:             1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:              1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:          0 1318          12 23 1844          0 0 0 0          47 0 23
Reduct Vol:           0 0 0          0 0 0          0 0 0 0          0 0 0
Reduced Vol:         0 1318          12 23 1844          0 0 0 0          47 0 23
PCE Adj:              1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:              1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume:         0 1318          12 23 1844          0 0 0 0          47 0 23
-----|-----|-----|-----|
Saturation Flow Module:
Sat/Lane:             1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700
Adjustment:           1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes:                0.00 2.00 1.00 1.00 2.00 0.00 0.00 0.00 0.00 1.00 0.00 1.00
Final Sat.:          0 3400          1700 1700 3400          0 0 0 0          1700 0 1700
-----|-----|-----|-----|
Capacity Analysis Module:
Vol/Sat:              0.00 0.39 0.01 0.01 0.54 0.00 0.00 0.00 0.00 0.03 0.00 0.01
Crit Moves:          ****          ****          ****
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Huntington Beach Traffic Impact Analysis  
 Cumulative (2020) + Project AM (Alt 4)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

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Intersection #6 Pacific Coast Hwy / 6th St

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Cycle (sec): 120 Critical Vol./Cap.(X): 0.758

Loss Time (sec): 36 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 104 Level Of Service: C

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Street Name:	Pacific Coast Hwy						6th St														
Approach:	North Bound			South Bound			East Bound			West Bound											
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	
Control:	Protected			Protected			Permitted			Permitted											
Rights:	Include			Include			Include			Include											
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	2	1	0	1	0	2	1	0	0	0	1	0	0	1	0	0	1	0	

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Volume Module:

Base Vol:	20	940	20	40	1490	30	30	20	20	30	20	50
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	23	1059	23	45	1679	34	34	23	23	34	23	56
Added Vol:	0	103	50	41	116	0	0	0	0	39	0	33
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	23	1162	73	86	1795	34	34	23	23	73	23	89
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	23	1162	73	86	1795	34	34	23	23	73	23	89
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	23	1162	73	86	1795	34	34	23	23	73	23	89
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	23	1162	73	86	1795	34	34	23	23	73	23	89

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Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.82	0.18	1.00	2.94	0.06	0.43	0.29	0.28	1.00	0.20	0.80
Final Sat.:	1700	4800	300	1700	5006	94	729	486	486	1700	342	1358

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Capacity Analysis Module:

Vol/Sat:	0.01	0.24	0.24	0.05	0.36	0.36	0.02	0.05	0.05	0.04	0.07	0.07
Crit Moves:	****			****			****			****		

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Huntington Beach Traffic Impact Analysis  
 Cumulative (2020) + Project AM (Alt 4)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

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Intersection #7 Pacific Coast Hwy / Main St

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Cycle (sec): 120 Critical Vol./Cap.(X): 0.729

Loss Time (sec): 36 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 99 Level Of Service: C

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Street Name:	Pacific Coast Hwy				Main St															
Approach:	North Bound		South Bound		East Bound		West Bound													
Movement:	L	T	R	L	T	R	L	T	R	L	T	R								
Control:	Protected		Protected		Protected		Protected													
Rights:	Include		Include		Include		Include													
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0								
Lanes:	1	0	3	0	1	1	0	3	0	0	0	0	0	0	0	1	0	0	0	1

Volume Module:

Base Vol:	10	910	60	40	1500	0	0	0	0	50	0	70
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	11	1025	68	45	1690	0	0	0	0	56	0	79
Added Vol:	0	116	33	39	116	0	0	0	0	32	0	37
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	11	1141	101	84	1806	0	0	0	0	88	0	116
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	11	1141	101	84	1806	0	0	0	0	88	0	116
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	11	1141	101	84	1806	0	0	0	0	88	0	116
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	11	1141	101	84	1806	0	0	0	0	88	0	116

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	3.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	1700	5100	1700	1700	5100	0	0	0	0	1700	0	1700

Capacity Analysis Module:

Vol/Sat:	0.01	0.22	0.06	0.05	0.35	0.00	0.00	0.00	0.00	0.05	0.00	0.07
Crit Moves:	****			****						****		

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Huntington Beach Traffic Impact Analysis  
 Cumulative (2020) + Project AM (Alt 4)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

\*\*\*\*\*  
 Intersection #8 Pacific Coast Hwy / 1st St  
 \*\*\*\*\*

Cycle (sec): 120 Critical Vol./Cap.(X): 0.772  
 Loss Time (sec): 36 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxxx  
 Optimal Cycle: 107 Level Of Service: C  
 \*\*\*\*\*

Street Name:	Pacific Coast Hwy						1st St					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	2	1	0	2	1	1	0	1	1	0

Volume Module:

Base Vol:	40	800	50	40	1380	60	70	40	30	100	80	110
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	45	901	56	45	1555	68	79	45	34	113	90	124
Added Vol:	0	84	73	76	71	0	0	0	0	60	0	66
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	45	985	129	121	1626	68	79	45	34	173	90	190
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	45	985	129	121	1626	68	79	45	34	173	90	190
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	45	985	129	121	1626	68	79	45	34	173	90	190
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	45	985	129	121	1626	68	79	45	34	173	90	190

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.65	0.35	1.00	2.88	0.12	1.27	0.73	1.00	1.31	0.69	2.00
Final Sat.:	1700	4508	592	1700	4896	204	2164	1236	1700	2234	1166	3400

Capacity Analysis Module:

Vol/Sat:	0.03	0.22	0.22	0.07	0.33	0.33	0.04	0.04	0.02	0.08	0.08	0.06
Crit Moves:	****			****			****			****		

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Huntington Beach Traffic Impact Analysis  
 Cumulative (2020) + Project AM (Alt 4)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #9 Pacific Coast Hwy / Huntington St

\*\*\*\*\*

Cycle (sec): 120 Critical Vol./Cap.(X): 0.684

Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 39 Level Of Service: B

\*\*\*\*\*

Street Name: Pacific Coast Hwy Huntington St

Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R

-----|-----|-----|-----|-----|

Control: Protected Protected Permitted Permitted

Rights: Include Include Include Include

Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0

Lanes: 1 0 2 0 1 1 0 2 0 1 0 1 0 1 0 1 1 0 0 1

-----|-----|-----|-----|-----|

Volume Module:

Base Vol: 50 830 60 30 1460 10 10 20 40 30 60 20

Growth Adj: 1.13 1.13 1.13 1.13 1.13 1.13 1.13 1.13 1.13 1.13 1.13 1.13

Initial Bse: 56 935 68 34 1645 11 11 23 45 34 68 23

Added Vol: 0 156 95 0 131 0 0 0 0 75 0 0

PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0

Initial Fut: 56 1091 163 34 1776 11 11 23 45 109 68 23

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Volume: 56 1091 163 34 1776 11 11 23 45 109 68 23

Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0

Reduced Vol: 56 1091 163 34 1776 11 11 23 45 109 68 23

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

FinalVolume: 56 1091 163 34 1776 11 11 23 45 109 68 23

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Saturation Flow Module:

Sat/Lane: 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700

Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Lanes: 1.00 2.00 1.00 1.00 2.00 1.00 0.29 0.71 1.00 1.23 0.77 1.00

Final Sat.: 1700 3400 1700 1700 3400 1700 486 1214 1700 2097 1303 1700

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Capacity Analysis Module:

Vol/Sat: 0.03 0.32 0.10 0.02 0.52 0.01 0.01 0.02 0.03 0.05 0.05 0.01

Crit Moves: \*\*\*\* \*\*\*\* \*\*\*\* \*\*\*\*

\*\*\*\*\*

Huntington Beach Traffic Impact Analysis  
 Cumulative (2020) + Project AM (Alt 4)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #10 Pacific Coast Hwy / Beach Blvd

\*\*\*\*\*

Cycle (sec): 120 Critical Vol./Cap.(X): 0.785

Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 54 Level Of Service: C

\*\*\*\*\*

Street Name:	Pacific Coast Hwy				Beach Blvd										
Approach:	North Bound		South Bound		East Bound		West Bound								
Movement:	L	T	R	L	T	R	L	T	R	L	T	R			
Control:	Protected		Protected		Protected		Protected								
Rights:	Include		Include		Ignore		Ignore								
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0			
Lanes:	1	0	2	0	1	1	0	2	0	1	1	0	2	0	1

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Volume Module:

Base Vol:	20	860	220	100	1520	30	20	50	10	480	80	160
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	23	969	248	113	1713	34	23	56	11	541	90	180
Added Vol:	0	171	0	63	144	0	0	0	0	0	0	79
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	23	1140	248	176	1857	34	23	56	11	541	90	259
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	23	1140	248	176	1857	34	23	56	0	541	90	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	23	1140	248	176	1857	34	23	56	0	541	90	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	23	1140	248	176	1857	34	23	56	0	541	90	0

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Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	2.00	1.00	1.00
Final Sat.:	1700	3400	1700	1700	3400	1700	1700	3400	1700	3400	1700	1700

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Capacity Analysis Module:

Vol/Sat:	0.01	0.34	0.15	0.10	0.55	0.02	0.01	0.02	0.00	0.16	0.05	0.00
Crit Moves:	****			****			****			****		

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Huntington Beach Traffic Impact Analysis  
 Cumulative (2020) + Project AM (Alt 4)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #11 Pacific Coast Hwy / Newland St

\*\*\*\*\*

Cycle (sec): 120 Critical Vol./Cap. (X): 0.589

Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 31 Level Of Service: A

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Street Name:	Pacific Coast Hwy				Newland St										
Approach:	North Bound		South Bound		East Bound		West Bound								
Movement:	L	T	R	L	T	R	L	T	R	L	T	R			
Control:	Protected		Protected		Split Phase		Split Phase								
Rights:	Include		Include		Include		Include								
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0			
Lanes:	1	0	3	0	1	1	0	3	0	1	0	1	0	1	0

Volume Module:

Base Vol:	0	930	30	60	1800	0	10	10	0	160	0	110
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	0	1048	34	68	2028	0	11	11	0	180	0	124
Added Vol:	0	171	0	0	144	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1219	34	68	2172	0	11	11	0	180	0	124
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1219	34	68	2172	0	11	11	0	180	0	124
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1219	34	68	2172	0	11	11	0	180	0	124
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1219	34	68	2172	0	11	11	0	180	0	124

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00
Final Sat.:	1700	5100	1700	1700	5100	1700	1700	1700	0	1700	0	1700

Capacity Analysis Module:

Vol/Sat:	0.00	0.24	0.02	0.04	0.43	0.00	0.01	0.01	0.00	0.11	0.00	0.07
Crit Moves:	****			****			****			****		

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Huntington Beach Traffic Impact Analysis  
 Cumulative (2020) + Project AM (Alt 4)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #12 Pacific Coast Hwy / Magnolia St

\*\*\*\*\*

Cycle (sec): 120 Critical Vol./Cap. (X): 0.613

Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxxx

Optimal Cycle: 33 Level Of Service: B

\*\*\*\*\*

Street Name:	Pacific Coast Hwy				Magnolia St									
Approach:	North Bound		South Bound		East Bound		West Bound							
Movement:	L	T	R	L	T	R	L	T	R	L	T	R		
Control:	Protected		Protected		Split Phase		Split Phase							
Rights:	Include		Include		Include		Include							
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0		
Lanes:	1	0	3	0	1	1	0	3	0	1	1	0	0	1

Volume Module:

Base Vol:	20	840	50	80	1850	30	10	20	10	150	20	140
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	23	947	56	90	2085	34	11	23	11	169	23	158
Added Vol:	0	171	0	0	144	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	23	1118	56	90	2229	34	11	23	11	169	23	158
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	23	1118	56	90	2229	34	11	23	11	169	23	158
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	23	1118	56	90	2229	34	11	23	11	169	23	158
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	23	1118	56	90	2229	34	11	23	11	169	23	158

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	0.67	0.33	1.76	0.24	1.00
Final Sat.:	1700	5100	1700	1700	5100	1700	1700	1133	567	3000	400	1700

Capacity Analysis Module:

Vol/Sat:	0.01	0.22	0.03	0.05	0.44	0.02	0.01	0.02	0.02	0.06	0.06	0.09
Crit Moves:	****			****			****			****		

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Huntington Beach Traffic Impact Analysis  
 Cumulative (2020) + Project AM (Alt 4)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

\*\*\*\*\*  
 Intersection #13 Pacific Coast Hwy / Brookhurst St  
 \*\*\*\*\*

Cycle (sec): 120 Critical Vol./Cap.(X): 0.732  
 Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx  
 Optimal Cycle: 45 Level Of Service: C  
 \*\*\*\*\*

Street Name:	Pacific Coast Hwy				Brookhurst St											
Approach:	North Bound		South Bound		East Bound		West Bound									
Movement:	L	T	R	L	T	R	L	T	R	L	T	R				
Control:	Protected		Protected		Protected		Protected									
Rights:	Include		Include		Include		Include									
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0				
Lanes:	1	0	3	0	1	1	0	3	0	1	1	0	0	1	0	1

Volume Module:

Base Vol:	10	750	210	150	1880	0	10	10	10	660	10	150
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	11	845	237	169	2118	0	11	11	11	744	11	169
Added Vol:	0	171	0	0	144	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	11	1016	237	169	2262	0	11	11	11	744	11	169
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	11	1016	237	169	2262	0	11	11	11	744	11	169
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	11	1016	237	169	2262	0	11	11	11	744	11	169
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	11	1016	237	169	2262	0	11	11	11	744	11	169

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	0.50	0.50	2.00	1.00	1.00
Final Sat.:	1700	5100	1700	1700	5100	1700	1700	850	850	3400	1700	1700

Capacity Analysis Module:

Vol/Sat:	0.01	0.20	0.14	0.10	0.44	0.00	0.01	0.01	0.01	0.22	0.01	0.10
Crit Moves:	****			****			****			****		

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Huntington Beach Traffic Impact Analysis  
 Cumulative (2020) + Project AM (Alt 4)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

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Intersection #14 Main St / Yorktown Ave

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.416

Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 20 Level Of Service: A

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Street Name:	Main St						Yorktown Ave																
Approach:	North Bound			South Bound			East Bound			West Bound													
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R			
Control:	Protected						Protected						Protected										
Rights:	Include						Include						Include										
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Lanes:	1	0	2	0	1	1	2	0	2	0	1	1	1	0	2	0	1	1	1	0	2	0	1

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Volume Module:

Base Vol:	110	360	30	110	330	40	60	340	140	40	340	90
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	124	406	34	124	372	45	68	383	158	45	383	101
Added Vol:	6	59	28	0	66	0	0	0	7	36	2	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	130	465	62	124	438	45	68	383	165	81	385	101
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	130	465	62	124	438	45	68	383	165	81	385	101
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	465	62	124	438	45	68	383	165	81	385	101
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	130	465	62	124	438	45	68	383	165	81	385	101

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Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	2.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1700	3400	1700	3400	3400	1700	1700	3400	1700	1700	3400	1700

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Capacity Analysis Module:

Vol/Sat:	0.08	0.14	0.04	0.04	0.13	0.03	0.04	0.11	0.10	0.05	0.11	0.06
Crit Moves:	****			****			****			****		

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Huntington Beach Traffic Impact Analysis  
 Cumulative (2020) + Project AM (Alt 4)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #15 Main St / 17 th St

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.311

Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 18 Level Of Service: A

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Street Name:	Main St					17th St														
	North Bound		South Bound			East Bound			West Bound											
Approach:	L	T	R	L	T	R	L	T	R	L	T	R								
Movement:																				
Control:	Permitted					Permitted					Permitted									
Rights:	Include					Include					Include									
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0								
Lanes:	1	0	2	0	1	0	0	1	1	1	1	0	0	1	0	1	0	0	0	0

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Volume Module:

Base Vol:	0	290	20	0	350	160	170	10	0	0	0	0
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	0	327	23	0	394	180	192	11	0	0	0	0
Added Vol:	0	93	0	0	109	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	420	23	0	503	180	192	11	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	420	23	0	503	180	192	11	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	420	23	0	503	180	192	11	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	420	23	0	503	180	192	11	0	0	0	0

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Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	0.00	2.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
Final Sat.:	1700	3400	1700	0	3400	1700	1700	1700	0	1700	0	0

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Capacity Analysis Module:

Vol/Sat:	0.00	0.12	0.01	0.00	0.15	0.11	0.11	0.01	0.00	0.00	0.00	0.00
Crit Moves:	****			****			****					

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Huntington Beach Traffic Impact Analysis  
 Cumulative (2020) + Project AM (Alt 4)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #16 Main St / Adams Ave

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.547

Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 26 Level Of Service: A

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Street Name:	Main St						Adams Ave					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	0	1	0	0	1	0	0	1	0

Volume Module:

Base Vol:	20	300	100	50	280	30	10	230	10	60	190	30
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	23	338	113	56	316	34	11	259	11	68	214	34
Added Vol:	0	93	16	0	109	0	0	0	0	19	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	23	431	129	56	425	34	11	259	11	87	214	34
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	23	431	129	56	425	34	11	259	11	87	214	34
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	23	431	129	56	425	34	11	259	11	87	214	34
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	23	431	129	56	425	34	11	259	11	87	214	34

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	0.04	0.96	1.00	0.29	0.71	1.00
Final Sat.:	1700	1700	1700	1700	1700	1700	71	1629	1700	490	1210	1700

Capacity Analysis Module:

Vol/Sat:	0.01	0.25	0.08	0.03	0.25	0.02	0.01	0.16	0.01	0.05	0.18	0.02
Crit Moves:	****			****			****			****		

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Huntington Beach Traffic Impact Analysis  
 Cumulative (2020) + Project AM (Alt 4)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

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Intersection #19 Main St / 6th St

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Cycle (sec): 100 Critical Vol./Cap. (X): 0.342

Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 18 Level Of Service: A

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Street Name:	Main St						6th St															
Approach:	North Bound			South Bound			East Bound			West Bound												
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R		
Control:	Permitted						Permitted						Permitted									
Rights:	Include						Include						Include									
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Lanes:	1	0	0	1	0	0	1	0	0	1	0	0	1	0	1	0	1	1	0	1	0	1

Volume Module:

Base Vol:	0	80	30	10	130	30	40	40	10	50	50	10
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	0	90	34	11	146	34	45	45	11	56	56	11
Added Vol:	12	57	3	0	61	75	58	8	12	3	9	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	12	147	37	11	207	109	103	53	23	59	65	11
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	12	147	37	11	207	109	103	53	23	59	65	11
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	12	147	37	11	207	109	103	53	23	59	65	11
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	12	147	37	11	207	109	103	53	23	59	65	11

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.80	0.20	1.00	0.66	0.34	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1700	1360	340	1700	1115	585	1700	1700	1700	1700	1700	1700

Capacity Analysis Module:

Vol/Sat:	0.01	0.11	0.11	0.01	0.19	0.19	0.06	0.03	0.01	0.03	0.04	0.01
Crit Moves:	****			****			****			****		

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Huntington Beach Traffic Impact Analysis  
 Cumulative (2020) + Project AM (Alt 4)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #22 1st St / Orange Ave & Atlanta Ave

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap. (X): 0.361

Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 19 Level Of Service: A

\*\*\*\*\*

Street Name:	1st St				Orange Ave & Atlanta Ave															
Approach:	North Bound				South Bound				East Bound				West Bound							
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	L	T	R					
Control:	Permitted				Permitted				Protected				Protected							
Rights:	Include				Include				Include				Include							
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Lanes:	0	1	0	0	1	0	1	0	0	0	1	0	1	1	0	1	0	0	1	0

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Volume Module:

Base Vol:	40	0	90	10	10	0	0	130	30	220	150	0
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	45	0	101	11	11	0	0	146	34	248	169	0
Added Vol:	27	0	13	0	0	0	0	52	36	21	59	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	72	0	114	11	11	0	0	198	70	269	228	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	72	0	114	11	11	0	0	198	70	269	228	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	72	0	114	11	11	0	0	198	70	269	228	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	72	0	114	11	11	0	0	198	70	269	228	0

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Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	0.50	0.50	0.00	1.00	1.48	0.52	1.00	1.00	0.00
Final Sat.:	1700	0	1700	850	850	0	1700	2515	885	1700	1700	0

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Capacity Analysis Module:

Vol/Sat:	0.04	0.00	0.07	0.01	0.01	0.00	0.00	0.08	0.08	0.16	0.13	0.00
Crit Moves:	****			****			****			****		

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Huntington Beach Traffic Impact Analysis  
 Cumulative (2020) + Project AM (Alt 4)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

\*\*\*\*\*  
 Intersection #23 Beach Blvd / Atlanta Ave  
 \*\*\*\*\*

Cycle (sec): 120 Critical Vol./Cap.(X): 0.428  
 Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx  
 Optimal Cycle: 23 Level Of Service: A  
 \*\*\*\*\*

Street Name:	Beach Blvd						Atlanta Ave								
	North Bound			South Bound			East Bound			West Bound					
Approach:	L	T	R	L	T	R	L	T	R	L	T	R			
Control:	Permitted			Permitted			Protected			Protected					
Rights:	Include			Include			Include			Include					
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0			
Lanes:	0	1	2	1	0	1	0	2	1	0	1	0	2	0	1

Volume Module:

Base Vol:	10	320	60	170	610	110	50	140	30	60	250	170
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	11	361	68	192	687	124	56	158	34	68	282	192
Added Vol:	0	110	12	0	151	37	51	58	0	15	68	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	11	471	80	192	838	161	107	216	34	83	350	192
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	11	471	80	192	838	161	107	216	34	83	350	192
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	11	471	80	192	838	161	107	216	34	83	350	192
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	11	471	80	192	838	161	107	216	34	83	350	192

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.08	3.35	0.57	1.00	2.52	0.48	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	136	5699	964	1700	4279	821	1700	3400	1700	1700	3400	1700

Capacity Analysis Module:

Vol/Sat:	0.01	0.08	0.08	0.11	0.20	0.20	0.06	0.06	0.02	0.05	0.10	0.11
Crit Moves:	****			****			****			****		****

Huntington Beach Traffic Impact Analysis  
 Cumulative (2020) + Project AM (Alt 4)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

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Intersection #24 Beach Blvd / Pacific View Ave

\*\*\*\*\*

Cycle (sec): 120 Critical Vol./Cap. (X): 0.334

Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 20 Level Of Service: A

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Street Name:	Beach Blvd						Pacific View Ave					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	3	0	0	1	0	0	0	1	0	0

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Volume Module:

Base Vol:	30	350	0	0	680	60	50	0	30	0	0	0
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	34	394	0	0	766	68	56	0	34	0	0	0
Added Vol:	0	63	0	0	79	86	59	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	34	457	0	0	845	154	115	0	34	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	34	457	0	0	845	154	115	0	34	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	34	457	0	0	845	154	115	0	34	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	34	457	0	0	845	154	115	0	34	0	0	0

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Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	1.00	2.54	0.46	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1700	5100	0	1700	4316	784	1700	0	1700	0	0	0

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Capacity Analysis Module:

Vol/Sat:	0.02	0.09	0.00	0.00	0.20	0.20	0.07	0.00	0.02	0.00	0.00	0.00
Crit Moves:	****			****			****					

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Huntington Beach Traffic Impact Analysis  
Cumulative (2020) + Project PM (Alt 4)  
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Scenario Report

Scenario: Cumulative (2020) + Project PM (Alt 4)  
Command: Cumulative (2020) + Project PM (Alt 4)  
Volume: Existing PM  
Geometry: Existing  
Impact Fee: Default Impact Fee  
Trip Generation: Approved with Project PM  
Trip Distribution: Project  
Paths: Default Path  
Routes: Default Route  
Configuration: Cumulative (2020) + Project (Alt 4)

Huntington Beach Traffic Impact Analysis  
 Cumulative (2020) + Project PM (Alt 4)

Impact Analysis Report  
 Level Of Service

Intersection	Base		Future		Change in
	Del/ LOS	V/ Veh C	Del/ LOS	V/ Veh C	
# 1 Pacific Coast Hwy / Warner Ave	C	xxxxxx 0.753	C	xxxxxx 0.798	+ 0.046 V/C
# 2 Pacific Coast Hwy / Seapoint A	C	xxxxxx 0.772	D	xxxxxx 0.821	+ 0.049 V/C
# 3 Pacific Coast Hwy / Goldenwest	D	xxxxxx 0.829	D	xxxxxx 0.887	+ 0.058 V/C
# 4 Pacific Coast Hwy / 17th St	B	xxxxxx 0.676	C	xxxxxx 0.743	+ 0.067 V/C
# 5 Pacific Coast Hwy / 9th St	B	xxxxxx 0.607	B	xxxxxx 0.678	+ 0.071 V/C
# 6 Pacific Coast Hwy / 6th St	C	xxxxxx 0.777	E	xxxxxx 0.905	+ 0.128 V/C
# 7 Pacific Coast Hwy / Main St	C	xxxxxx 0.711	D	xxxxxx 0.823	+ 0.112 V/C
# 8 Pacific Coast Hwy / 1st St	C	xxxxxx 0.784	E	xxxxxx 0.927	+ 0.143 V/C
# 9 Pacific Coast Hwy / Huntington	B	xxxxxx 0.650	C	xxxxxx 0.769	+ 0.119 V/C
# 10 Pacific Coast Hwy / Beach Blvd	D	xxxxxx 0.802	E	xxxxxx 0.906	+ 0.104 V/C
# 11 Pacific Coast Hwy / Newland S	B	xxxxxx 0.698	C	xxxxxx 0.747	+ 0.049 V/C
# 12 Pacific Coast Hwy / Magnolia S	C	xxxxxx 0.730	C	xxxxxx 0.780	+ 0.049 V/C
# 13 Pacific Coast Hwy / Brookhurst	C	xxxxxx 0.756	D	xxxxxx 0.805	+ 0.049 V/C
# 14 Main St / Yorktown Ave	A	xxxxxx 0.540	B	xxxxxx 0.604	+ 0.063 V/C
# 15 Main St / 17 th St	A	xxxxxx 0.348	A	xxxxxx 0.398	+ 0.050 V/C
# 16 Main St / Adams Ave	B	xxxxxx 0.653	C	xxxxxx 0.767	+ 0.114 V/C
# 19 Main St / 6th St	A	xxxxxx 0.275	A	xxxxxx 0.478	+ 0.203 V/C
# 22 1st St / Orange Ave & Atlanta	A	xxxxxx 0.385	A	xxxxxx 0.473	+ 0.088 V/C
# 23 Beach Blvd / Atlanta Ave	A	xxxxxx 0.590	B	xxxxxx 0.661	+ 0.071 V/C
# 24 Beach Blvd / Pacific View Ave	A	xxxxxx 0.315	A	xxxxxx 0.397	+ 0.082 V/C

Huntington Beach Traffic Impact Analysis  
 Cumulative (2020) + Project PM (Alt 4)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #1 Pacific Coast Hwy / Warner Ave

\*\*\*\*\*

Cycle (sec): 120 Critical Vol./Cap. (X): 0.798

Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 57 Level Of Service: C

\*\*\*\*\*

Street Name:	Pacific Coast Hwy				Warner Ave				
	North Bound		South Bound		East Bound		West Bound		
Approach:	L	T	R	L	T	R	L	T	R
Movement:									
Control:	Protected				Protected				
Rights:	Include				Include				
Min. Green:	0	0	0	0	0	0	0	0	0
Lanes:	1	0	2	0	1	0	1	0	2

Volume Module:

Base Vol:	20	1190	320	300	1150	30	30	110	40	330	70	550
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	23	1341	361	338	1296	34	34	124	45	372	79	620
Added Vol:	0	129	27	0	128	0	0	0	0	26	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	23	1470	388	338	1424	34	34	124	45	398	79	620
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	23	1470	388	338	1424	34	34	124	45	398	79	620
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	23	1470	388	338	1424	34	34	124	45	398	79	620
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	23	1470	388	338	1424	34	34	124	45	398	79	620
OvlAdjVol:												282

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	2.00	1.95	0.05	1.00	0.73	0.27	2.00	1.00	2.00
Final Sat.:	1700	3400	1700	3400	3321	79	1700	1247	453	3400	1700	3400

Capacity Analysis Module:

Vol/Sat:	0.01	0.43	0.23	0.10	0.43	0.43	0.02	0.10	0.10	0.12	0.05	0.18
OvlAdjV/S:												0.08
Crit Moves:	****			****			****			****		

\*\*\*\*\*

Huntington Beach Traffic Impact Analysis  
 Cumulative (2020) + Project PM (Alt 4)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #2 Pacific Coast Hwy / Seapoint Ave

\*\*\*\*\*

Cycle (sec): 120 Critical Vol./Cap.(X): 0.821

Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 63 Level Of Service: D

\*\*\*\*\*

Street Name:	Pacific Coast Hwy				Seapoint Ave							
Approach:	North Bound		South Bound		East Bound		West Bound					
Movement:	L	T	R	L	T	R	L	T	R			
Control:	Protected		Protected		Protected		Protected					
Rights:	Include		Include		Include		Include					
Min. Green:	0	0	0	0	0	0	0	0	0			
Lanes:	0	0	1	1	0	1	0	2	0	0	0	1

Volume Module:

Base Vol:	0	1350	70	210	1370	0	0	0	0	40	0	170
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	0	1521	79	237	1544	0	0	0	0	45	0	192
Added Vol:	0	156	9	0	153	0	0	0	0	9	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1677	88	237	1697	0	0	0	0	54	0	192
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1677	88	237	1697	0	0	0	0	54	0	192
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1677	88	237	1697	0	0	0	0	54	0	192
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1677	88	237	1697	0	0	0	0	54	0	192

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.90	0.10	1.00	2.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	0	3231	169	1700	3400	0	0	0	0	3400	0	1700

Capacity Analysis Module:

Vol/Sat:	0.00	0.52	0.52	0.14	0.50	0.00	0.00	0.00	0.00	0.02	0.00	0.11
Crit Moves:	****			****								****

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Huntington Beach Traffic Impact Analysis  
 Cumulative (2020) + Project PM (Alt 4)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #3 Pacific Coast Hwy / Goldenwest St

\*\*\*\*\*

Cycle (sec): 120 Critical Vol./Cap.(X): 0.887

Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 89 Level Of Service: D

\*\*\*\*\*

Street Name:	Pacific Coast Hwy				Goldenwest St														
Approach:	North Bound		South Bound		East Bound		West Bound												
Movement:	L	T	R	L	T	R	L	T	R	L	T	R							
Control:	Protected		Protected		Protected		Protected												
Rights:	Include		Include		Include		Include												
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0							
Lanes:	1	0	2	0	1	1	0	2	0	0	0	0	0	0	1	0	0	0	1

Volume Module:

Base Vol:	10	1250	220	320	1060	0	0	0	0	190	0	230
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	11	1409	248	361	1194	0	0	0	0	214	0	259
Added Vol:	0	165	63	0	162	0	0	0	0	62	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	11	1574	311	361	1356	0	0	0	0	276	0	259
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	11	1574	311	361	1356	0	0	0	0	276	0	259
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	11	1574	311	361	1356	0	0	0	0	276	0	259
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	11	1574	311	361	1356	0	0	0	0	276	0	259

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	1700	3400	1700	1700	3400	0	0	0	0	1700	0	1700

Capacity Analysis Module:

Vol/Sat:	0.01	0.46	0.18	0.21	0.40	0.00	0.00	0.00	0.00	0.16	0.00	0.15
Crit Moves:	****		****		****		****		****		****	

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Huntington Beach Traffic Impact Analysis  
 Cumulative (2020) + Project PM (Alt 4)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #4 Pacific Coast Hwy / 17th St

\*\*\*\*\*

Cycle (sec): 120 Critical Vol./Cap.(X): 0.743

Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 47 Level Of Service: C

\*\*\*\*\*

Street Name:	Pacific Coast Hwy				17th St														
Approach:	North Bound		South Bound		East Bound		West Bound												
Movement:	L	T	R	L	T	R	L	T	R	L	T	R							
Control:	Protected		Protected		Protected		Protected												
Rights:	Include		Include		Include		Include												
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0							
Lanes:	0	0	2	0	1	1	0	2	0	0	0	0	0	0	1	0	0	0	1

Volume Module:

Base Vol:	0	1390	70	160	1110	0	0	0	0	50	0	90
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	0	1566	79	180	1251	0	0	0	0	56	0	101
Added Vol:	0	228	8	0	225	0	0	0	0	6	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1794	87	180	1476	0	0	0	0	62	0	101
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1794	87	180	1476	0	0	0	0	62	0	101
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1794	87	180	1476	0	0	0	0	62	0	101
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1794	87	180	1476	0	0	0	0	62	0	101

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	1.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	3400	1700	1700	3400	0	0	0	0	1700	0	1700

Capacity Analysis Module:

Vol/Sat:	0.00	0.53	0.05	0.11	0.43	0.00	0.00	0.00	0.00	0.04	0.00	0.06
Crit Moves:	****			****						****		

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Huntington Beach Traffic Impact Analysis  
 Cumulative (2020) + Project PM (Alt 4)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #5 Pacific Coast Hwy / 9th St

\*\*\*\*\*

Cycle (sec): 120 Critical Vol./Cap. (X): 0.678

Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 39 Level Of Service: B

\*\*\*\*\*

Street Name:	Pacific Coast Hwy				9th St										
Approach:	North Bound		South Bound		East Bound		West Bound								
Movement:	L	T	R	L	T	R	L	T	R	L	T	R			
Control:	Protected		Protected		Protected		Protected								
Rights:	Include		Include		Include		Include								
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0			
Lanes:	0	0	2	0	1	1	0	2	0	0	0	0	0	0	1

Volume Module:

Base Vol:	0	1540	30	20	1150	0	0	0	0	50	0	20
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	0	1735	34	23	1296	0	0	0	0	56	0	23
Added Vol:	0	237	4	0	231	0	0	0	0	3	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1972	38	23	1527	0	0	0	0	59	0	23
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1972	38	23	1527	0	0	0	0	59	0	23
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1972	38	23	1527	0	0	0	0	59	0	23
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1972	38	23	1527	0	0	0	0	59	0	23

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	1.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	3400	1700	1700	3400	0	0	0	0	1700	0	1700

Capacity Analysis Module:

Vol/Sat:	0.00	0.58	0.02	0.01	0.45	0.00	0.00	0.00	0.00	0.03	0.00	0.01
Crit Moves:	****		****		****		****					

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Huntington Beach Traffic Impact Analysis  
 Cumulative (2020) + Project PM (Alt 4)

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
*****
Intersection #6 Pacific Coast Hwy / 6th St
*****
Cycle (sec):          120          Critical Vol./Cap. (X):          0.905
Loss Time (sec):     36 (Y+R=4.0 sec) Average Delay (sec/veh):          xxxxxx
Optimal Cycle:       143          Level Of Service:          E
*****
Street Name:         Pacific Coast Hwy          6th St
Approach:            North Bound          South Bound          East Bound          West Bound
Movement:            L - T - R          L - T - R          L - T - R          L - T - R
-----|-----|-----|-----|
Control:              Protected          Protected          Permitted          Permitted
Rights:               Include          Include          Include          Include
Min. Green:           0 0 0          0 0 0          0 0 0          0 0 0
Lanes:                1 0 2 1 0          1 0 2 1 0          0 0 1! 0 0          1 0 0 1 0
-----|-----|-----|-----|
Volume Module:
Base Vol:             40 1360          50 80 1030          30 40 20 70          40 30 70
Growth Adj:           1.13 1.13 1.13 1.13 1.13 1.13 1.13 1.13 1.13 1.13 1.13 1.13
Initial Bse:          45 1532          56 90 1161          34 45 23 79          45 34 79
Added Vol:            0 183 75          61 173 0          0 0 0 0          70 0 58
PasserByVol:          0 0 0          0 0 0 0          0 0 0 0          0 0 0
Initial Fut:          45 1715          131 151 1334          34 45 23 79          115 34 137
User Adj:             1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:              1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:           45 1715          131 151 1334          34 45 23 79          115 34 137
Reduct Vol:           0 0 0          0 0 0 0          0 0 0 0          0 0 0
Reduced Vol:          45 1715          131 151 1334          34 45 23 79          115 34 137
PCE Adj:              1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:              1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume:          45 1715          131 151 1334          34 45 23 79          115 34 137
-----|-----|-----|-----|
Saturation Flow Module:
Sat/Lane:             1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700
Adjustment:           1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes:                1.00 2.79 0.21 1.00 2.93 0.07 0.31 0.15 0.54 1.00 0.20 0.80
Final Sat.:           1700 4737          363 1700 4974          126 523 262 915          1700 337 1363
-----|-----|-----|-----|
Capacity Analysis Module:
Vol/Sat:              0.03 0.36 0.36 0.09 0.27 0.27 0.03 0.09 0.09 0.07 0.10 0.10
Crit Moves:           ****          ****          ****          ****
*****
    
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Huntington Beach Traffic Impact Analysis  
 Cumulative (2020) + Project PM (Alt 4)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

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Intersection #7 Pacific Coast Hwy / Main St

\*\*\*\*\*

Cycle (sec): 120 Critical Vol./Cap.(X): 0.823

Loss Time (sec): 36 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 118 Level Of Service: D

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Street Name:	Pacific Coast Hwy				Main St															
	North Bound		South Bound		East Bound		West Bound													
Approach:	L	T	R	L	T	R	L	T	R	L	T	R								
Control:	Protected				Protected				Protected											
Rights:	Include				Include				Include											
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0								
Lanes:	1	0	3	0	1	1	0	3	0	0	0	0	0	0	0	1	0	0	0	1

Volume Module:

Base Vol:	40	1320	130	90	1040	0	0	0	0	90	0	90
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	45	1487	146	101	1172	0	0	0	0	101	0	101
Added Vol:	0	194	52	61	183	0	0	0	0	54	0	64
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	45	1681	198	162	1355	0	0	0	0	155	0	165
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	45	1681	198	162	1355	0	0	0	0	155	0	165
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	45	1681	198	162	1355	0	0	0	0	155	0	165
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	45	1681	198	162	1355	0	0	0	0	155	0	165

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	3.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	1700	5100	1700	1700	5100	0	0	0	0	1700	0	1700

Capacity Analysis Module:

Vol/Sat:	0.03	0.33	0.12	0.10	0.27	0.00	0.00	0.00	0.00	0.09	0.00	0.10
Crit Moves:	****			****						****		

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Huntington Beach Traffic Impact Analysis  
 Cumulative (2020) + Project PM (Alt 4)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

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Intersection #8 Pacific Coast Hwy / 1st St

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Cycle (sec): 120 Critical Vol./Cap.(X): 0.927

Loss Time (sec): 36 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxxxx

Optimal Cycle: 151 Level Of Service: E

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Street Name:	Pacific Coast Hwy				1st St										
Approach:	North Bound		South Bound		East Bound		West Bound								
Movement:	L	T	R	L	T	R	L	T	R	L	T	R			
Control:	Protected		Protected		Split Phase		Split Phase								
Rights:	Include		Include		Include		Include								
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0			
Lanes:	1	0	2	1	0	1	0	2	1	0	1	1	0	0	2

Volume Module:

Base Vol:	50	1430	70	100	1000	20	60	40	60	110	30	50
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	56	1611	79	113	1127	23	68	45	68	124	34	56
Added Vol:	0	126	110	112	124	0	0	0	0	106	0	119
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	56	1737	189	225	1251	23	68	45	68	230	34	175
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	56	1737	189	225	1251	23	68	45	68	230	34	175
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	56	1737	189	225	1251	23	68	45	68	230	34	175
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	56	1737	189	225	1251	23	68	45	68	230	34	175

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.71	0.29	1.00	2.95	0.05	1.20	0.80	1.00	1.74	0.26	2.00
Final Sat.:	1700	4600	500	1700	5010	90	2040	1360	1700	2964	436	3400

Capacity Analysis Module:

Vol/Sat:	0.03	0.38	0.38	0.13	0.25	0.25	0.03	0.03	0.04	0.08	0.08	0.05
Crit Moves:	****			****			****		****	****		

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Huntington Beach Traffic Impact Analysis  
 Cumulative (2020) + Project PM (Alt 4)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

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Intersection #9 Pacific Coast Hwy / Huntington St

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Cycle (sec): 120 Critical Vol./Cap.(X): 0.769

Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 51 Level Of Service: C

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Street Name:	Pacific Coast Hwy					Huntington St														
	North Bound		South Bound			East Bound			West Bound											
Approach:	L	T	R	L	T	R	L	T	R	L	T	R								
Control:	Protected					Protected			Permitted			Permitted								
Rights:	Include					Include			Include			Include								
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
Lanes:	1	0	2	0	1	1	0	2	0	1	0	1	0	1	0	1	1	0	0	1

Volume Module:

Base Vol:	40	1520	70	50	1060	10	40	50	80	10	30	30
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	45	1713	79	56	1194	11	45	56	90	11	34	34
Added Vol:	0	236	134	0	230	0	0	0	0	145	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	45	1949	213	56	1424	11	45	56	90	156	34	34
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	45	1949	213	56	1424	11	45	56	90	156	34	34
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	45	1949	213	56	1424	11	45	56	90	156	34	34
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	45	1949	213	56	1424	11	45	56	90	156	34	34

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.47	0.59	0.94	1.64	0.36	1.00
Final Sat.:	1700	3400	1700	1700	3400	1700	800	1000	1600	2795	605	1700

Capacity Analysis Module:

Vol/Sat:	0.03	0.57	0.13	0.03	0.42	0.01	0.03	0.06	0.06	0.06	0.06	0.02
Crit Moves:	****		****			****			****			

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Huntington Beach Traffic Impact Analysis  
 Cumulative (2020) + Project PM (Alt 4)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

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Intersection #10 Pacific Coast Hwy / Beach Blvd

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Cycle (sec): 120 Critical Vol./Cap.(X): 0.906

Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 100 Level Of Service: E

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Street Name:	Pacific Coast Hwy				Beach Blvd										
Approach:	North Bound		South Bound		East Bound		West Bound								
Movement:	L	T	R	L	T	R	L	T	R	L	T	R			
Control:	Protected		Protected		Protected		Protected								
Rights:	Include		Include		Ignore		Ignore								
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0			
Lanes:	1	0	2	0	1	1	0	2	0	1	1	0	2	0	1

Volume Module:

Base Vol:	40	1380	750	190	1010	30	20	50	30	340	50	110
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	45	1555	845	214	1138	34	23	56	34	383	56	124
Added Vol:	0	250	0	119	255	0	0	0	0	0	0	120
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	45	1805	845	333	1393	34	23	56	34	383	56	244
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	45	1805	845	333	1393	34	23	56	0	383	56	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	45	1805	845	333	1393	34	23	56	0	383	56	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	45	1805	845	333	1393	34	23	56	0	383	56	0

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	2.00	1.00	1.00
Final Sat.:	1700	3400	1700	1700	3400	1700	1700	3400	1700	3400	1700	1700

Capacity Analysis Module:

Vol/Sat:	0.03	0.53	0.50	0.20	0.41	0.02	0.01	0.02	0.00	0.11	0.03	0.00
Crit Moves:	****			****			****			****		

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Huntington Beach Traffic Impact Analysis  
 Cumulative (2020) + Project PM (Alt 4)

Level Of Service Computation Report

ICU 1 (Loss as Cycle Length %) Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #11 Pacific Coast Hwy / Newland St

\*\*\*\*\*

Cycle (sec): 120 Critical Vol./Cap. (X): 0.747

Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 48 Level Of Service: C

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Street Name:	Pacific Coast Hwy				Newland St				
	North Bound		South Bound		East Bound		West Bound		
Approach:	L	T	R	L	T	R	L	T	R
Control:	Protected		Protected		Split Phase		Split Phase		
Rights:	Include		Include		Include		Include		
Min. Green:	0	0	0	0	0	0	0	0	0
Lanes:	1	0	3	0	1	0	1	0	1

Volume Module:

Base Vol:	0	2080	270	150	1150	10	0	10	0	100	0	130
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	0	2344	304	169	1296	11	0	11	0	113	0	146
Added Vol:	0	250	0	0	255	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	2594	304	169	1551	11	0	11	0	113	0	146
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	2594	304	169	1551	11	0	11	0	113	0	146
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2594	304	169	1551	11	0	11	0	113	0	146
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	2594	304	169	1551	11	0	11	0	113	0	146

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	0.00	2.00	0.00	1.00	0.00	1.00
Final Sat.:	1700	5100	1700	1700	5100	1700	0	3400	0	1700	0	1700

Capacity Analysis Module:

Vol/Sat:	0.00	0.51	0.18	0.10	0.30	0.01	0.00	0.00	0.00	0.07	0.00	0.09
Crit Moves:	****			****			****					****

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Huntington Beach Traffic Impact Analysis  
 Cumulative (2020) + Project PM (Alt 4)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

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Intersection #12 Pacific Coast Hwy / Magnolia St

\*\*\*\*\*

Cycle (sec): 120 Critical Vol./Cap.(X): 0.780

Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 53 Level Of Service: C

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Street Name:	Pacific Coast Hwy				Magnolia St										
Approach:	North Bound		South Bound		East Bound		West Bound								
Movement:	L	T	R	L	T	R	L	T	R	L	T	R			
Control:	Protected		Protected		Split Phase		Split Phase								
Rights:	Include		Include		Include		Include								
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0			
Lanes:	1	0	3	0	1	1	0	0	1	0	1	1	0	0	1

Volume Module:

Base Vol:	30	2390	180	120	1070	30	20	30	10	70	30	70
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	34	2693	203	135	1206	34	23	34	11	79	34	79
Added Vol:	0	250	0	0	255	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	34	2943	203	135	1461	34	23	34	11	79	34	79
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	34	2943	203	135	1461	34	23	34	11	79	34	79
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	34	2943	203	135	1461	34	23	34	11	79	34	79
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	34	2943	203	135	1461	34	23	34	11	79	34	79

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	0.75	0.25	1.40	0.60	1.00
Final Sat.:	1700	5100	1700	1700	5100	1700	1700	1275	425	2380	1020	1700

Capacity Analysis Module:

Vol/Sat:	0.02	0.58	0.12	0.08	0.29	0.02	0.01	0.03	0.03	0.03	0.03	0.05
Crit Moves:	****			****			****			****		

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Huntington Beach Traffic Impact Analysis  
 Cumulative (2020) + Project PM (Alt 4)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

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Intersection #13 Pacific Coast Hwy / Brookhurst St

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Cycle (sec): 120 Critical Vol./Cap. (X): 0.805

Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 59 Level Of Service: D

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Street Name:	Pacific Coast Hwy				Brookhurst St															
Approach:	North Bound		South Bound		East Bound		West Bound													
Movement:	L	T	R	L	T	R	L	T	R	L	T	R								
Control:	Protected				Protected				Protected											
Rights:	Include				Include				Include											
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0								
Lanes:	1	0	3	0	1	1	0	3	0	1	1	0	0	1	0	2	0	1	0	1

Volume Module:

Base Vol:	20	2010	540	190	1240	10	20	40	30	270	30	140
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	23	2265	608	214	1397	11	23	45	34	304	34	158
Added Vol:	0	250	0	0	255	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	23	2515	608	214	1652	11	23	45	34	304	34	158
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	23	2515	608	214	1652	11	23	45	34	304	34	158
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	23	2515	608	214	1652	11	23	45	34	304	34	158
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	23	2515	608	214	1652	11	23	45	34	304	34	158

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	0.57	0.43	2.00	1.00	1.00
Final Sat.:	1700	5100	1700	1700	5100	1700	1700	971	729	3400	1700	1700

Capacity Analysis Module:

Vol/Sat:	0.01	0.49	0.36	0.13	0.32	0.01	0.01	0.05	0.05	0.09	0.02	0.09
Crit Moves:	****			****			****			****		

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Huntington Beach Traffic Impact Analysis  
 Cumulative (2020) + Project PM (Alt 4)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

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Intersection #14 Main St / Yorktown Ave

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Cycle (sec): 100 Critical Vol./Cap.(X): 0.604

Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 29 Level Of Service: B

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Street Name:	Main St						Yorktown Ave					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Movement:												
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	2	0	2	0	1	0	2	0	2	0

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Volume Module:

Base Vol:	190	390	50	230	460	90	70	460	150	80	500	160
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	214	439	56	259	518	101	79	518	169	90	563	180
Added Vol:	11	105	50	0	105	0	0	2	10	54	1	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	225	544	106	259	623	101	79	520	179	144	564	180
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	225	544	106	259	623	101	79	520	179	144	564	180
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	225	544	106	259	623	101	79	520	179	144	564	180
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	225	544	106	259	623	101	79	520	179	144	564	180

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Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	2.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1700	3400	1700	3400	3400	1700	1700	3400	1700	1700	3400	1700

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Capacity Analysis Module:

Vol/Sat:	0.13	0.16	0.06	0.08	0.18	0.06	0.05	0.15	0.11	0.08	0.17	0.11
Crit Moves:	****			****			****			****		

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Huntington Beach Traffic Impact Analysis  
 Cumulative (2020) + Project PM (Alt 4)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

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Intersection #15 Main St / 17 th St

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Cycle (sec): 100 Critical Vol./Cap. (X): 0.398

Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 20 Level Of Service: A

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Street Name: Main St 17th St

Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R

-----|-----|-----|-----|-----|

Control: Permitted Permitted Permitted Permitted

Rights: Include Include Include Include

Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0

Lanes: 1 0 2 0 1 0 0 1 1 1 1 0 0 1 0 0 1 0 0 0 0

-----|-----|-----|-----|-----|

Volume Module:

Base Vol: 10 430 10 0 520 180 180 10 0 0 0 0

Growth Adj: 1.13 1.13 1.13 1.13 1.13 1.13 1.13 1.13 1.13 1.13 1.13 1.13

Initial Bse: 11 485 11 0 586 203 203 11 0 0 0 0

Added Vol: 0 165 0 0 169 0 0 0 0 0 0 0

PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0

Initial Fut: 11 650 11 0 755 203 203 11 0 0 0 0

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Volume: 11 650 11 0 755 203 203 11 0 0 0 0

Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0

Reduced Vol: 11 650 11 0 755 203 203 11 0 0 0 0

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

FinalVolume: 11 650 11 0 755 203 203 11 0 0 0 0

-----|-----|-----|-----|-----|

Saturation Flow Module:

Sat/Lane: 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700

Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Lanes: 1.00 2.00 1.00 0.00 2.00 1.00 1.00 1.00 0.00 1.00 0.00 0.00

Final Sat.: 1700 3400 1700 0 3400 1700 1700 1700 0 1700 0 0

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Capacity Analysis Module:

Vol/Sat: 0.01 0.19 0.01 0.00 0.22 0.12 0.12 0.01 0.00 0.00 0.00 0.00

Crit Moves: \*\*\*\* \*\*\*\* \*\*\*\*

\*\*\*\*\*

Huntington Beach Traffic Impact Analysis  
 Cumulative (2020) + Project PM (Alt 4)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #16 Main St / Adams Ave

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.767

Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 46 Level Of Service: C

\*\*\*\*\*

Street Name:	Main St						Adams Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1	0	1	0	0	1	0	0	1	0

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Volume Module:

Base Vol:	10	370	90	80	420	10	0	160	10	180	280	60
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	11	417	101	90	473	11	0	180	11	203	316	68
Added Vol:	0	165	28	0	169	0	0	0	0	29	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	11	582	129	90	642	11	0	180	11	232	316	68
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	11	582	129	90	642	11	0	180	11	232	316	68
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	11	582	129	90	642	11	0	180	11	232	316	68
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	11	582	129	90	642	11	0	180	11	232	316	68

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Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.42	0.58	1.00
Final Sat.:	1700	1700	1700	1700	1700	1700	0	1700	1700	720	980	1700

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Capacity Analysis Module:

Vol/Sat:	0.01	0.34	0.08	0.05	0.38	0.01	0.00	0.11	0.01	0.14	0.32	0.04
Crit Moves:	****			****			****			****		

\*\*\*\*\*

Huntington Beach Traffic Impact Analysis  
 Cumulative (2020) + Project PM (Alt 4)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #19 Main St / 6th St

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.478

Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 23 Level Of Service: A

\*\*\*\*\*

Street Name:	Main St						6th St															
Approach:	North Bound			South Bound			East Bound			West Bound												
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R		
Control:	Permitted						Permitted						Permitted									
Rights:	Include						Include						Include									
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Lanes:	1	0	0	1	0	0	1	0	0	1	0	0	1	0	1	0	1	1	0	1	0	1

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Volume Module:

Base Vol:	10	150	20	30	160	50	50	70	10	30	70	30
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	11	169	23	34	180	56	56	79	11	34	79	34
Added Vol:	19	100	5	0	97	112	104	14	20	5	13	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	30	269	28	34	277	168	160	93	31	39	92	34
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	269	28	34	277	168	160	93	31	39	92	34
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	269	28	34	277	168	160	93	31	39	92	34
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	30	269	28	34	277	168	160	93	31	39	92	34

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Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.91	0.09	1.00	0.62	0.38	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1700	1542	158	1700	1058	642	1700	1700	1700	1700	1700	1700

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Capacity Analysis Module:

Vol/Sat:	0.02	0.17	0.17	0.02	0.26	0.26	0.09	0.05	0.02	0.02	0.05	0.02
Crit Moves:	****			****			****			****		

\*\*\*\*\*

Huntington Beach Traffic Impact Analysis  
 Cumulative (2020) + Project PM (Alt 4)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #22 1st St / Orange Ave & Atlanta Ave

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap. (X): 0.473

Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 23 Level Of Service: A

\*\*\*\*\*

Street Name:	1st St						Orange Ave & Atlanta Ave								
	North Bound			South Bound			East Bound			West Bound					
Approach:	L	T	R	L	T	R	L	T	R	L	T	R			
Control:	Permitted			Permitted			Protected			Protected					
Rights:	Include			Include			Include			Include					
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0			
Lanes:	0	1	0	0	1	1	0	0	0	0	1	0	1	1	0

Volume Module:

Base Vol:	70	10	190	10	0	0	0	200	70	170	220	10
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	79	11	214	11	0	0	0	225	79	192	248	11
Added Vol:	71	0	40	0	0	0	0	91	62	33	90	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	150	11	254	11	0	0	0	316	141	225	338	11
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	150	11	254	11	0	0	0	316	141	225	338	11
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	150	11	254	11	0	0	0	316	141	225	338	11
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	150	11	254	11	0	0	0	316	141	225	338	11

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.93	0.07	1.00	1.00	0.00	0.00	1.00	1.38	0.62	1.00	0.97	0.03
Final Sat.:	1581	119	1700	1700	0	0	1700	2352	1048	1700	1645	55

Capacity Analysis Module:

Vol/Sat:	0.09	0.09	0.15	0.01	0.00	0.00	0.00	0.13	0.13	0.13	0.21	0.21
Crit Moves:			****	****				****		****		

\*\*\*\*\*

Huntington Beach Traffic Impact Analysis  
 Cumulative (2020) + Project PM (Alt 4)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #23 Beach Blvd / Atlanta Ave

\*\*\*\*\*

Cycle (sec): 120 Critical Vol./Cap.(X): 0.661

Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 37 Level Of Service: B

\*\*\*\*\*

Street Name:	Beach Blvd						Atlanta Ave								
Approach:	North Bound			South Bound			East Bound			West Bound					
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Permitted			Permitted			Protected			Protected					
Rights:	Include			Include			Include			Include					
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0			
Lanes:	0	1	2	1	0	1	0	2	1	0	1	0	2	0	1

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Volume Module:

Base Vol:	80	840	100	270	500	70	80	280	20	50	270	210
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	90	947	113	304	563	79	90	316	23	56	304	237
Added Vol:	0	199	21	0	191	71	65	115	0	22	109	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	90	1146	134	304	754	150	155	431	23	78	413	237
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	90	1146	134	304	754	150	155	431	23	78	413	237
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	1146	134	304	754	150	155	431	23	78	413	237
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	90	1146	134	304	754	150	155	431	23	78	413	237

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Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.26	3.35	0.39	1.00	2.50	0.50	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	448	5689	664	1700	4255	845	1700	3400	1700	1700	3400	1700

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Capacity Analysis Module:

Vol/Sat:	0.05	0.20	0.20	0.18	0.18	0.18	0.09	0.13	0.01	0.05	0.12	0.14
Crit Moves:	***			***			***			***		

\*\*\*\*\*

Huntington Beach Traffic Impact Analysis  
 Cumulative (2020) + Project PM (Alt 4)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #24 Beach Blvd / Pacific View Ave

\*\*\*\*\*

Cycle (sec): 120 Critical Vol./Cap. (X): 0.397

Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx

Optimal Cycle: 22 Level Of Service: A

\*\*\*\*\*

Street Name:	Beach Blvd						Pacific View Ave					
	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	3	0	2	1	0	0	1	0	0	0

Volume Module:

Base Vol:	40	960	0	0	480	60	80	0	40	0	0	0
Growth Adj:	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Initial Bse:	45	1082	0	0	541	68	90	0	45	0	0	0
Added Vol:	0	119	0	0	120	93	100	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	45	1201	0	0	661	161	190	0	45	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	45	1201	0	0	661	161	190	0	45	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	45	1201	0	0	661	161	190	0	45	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	45	1201	0	0	661	161	190	0	45	0	0	0

Saturation Flow Module:

Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	1.00	2.41	0.59	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1700	5100	0	1700	4103	997	1700	0	1700	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.03	0.24	0.00	0.00	0.16	0.16	0.11	0.00	0.03	0.00	0.00	0.00
Crit Moves:	****			****			****					

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Cumulative(2020) + Project Mon Apr 6, 2009 11:18:02

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Huntington Beach Traffic Impact Analysis  
Cumulative(2020) + Project AM (Alt.4)  
-----

Scenario Report

Scenario: Cumulative(2020) + Project AM (Alt.4)  
Command: Cumulative(2020) + Project AM (Alt.4)  
Volume: Cumulative(2020) + Project AM (Alt.4)  
Geometry: General Plan Build-Out  
Impact Fee: Default Impact Fee  
Trip Generation: None  
Trip Distribution: None  
Paths: Default Path  
Routes: Default Route  
Configuration: Cumulative(2020) + Project (Alt.4)

Cumulative(2020) + Project Mon Apr 6, 2009 11:18:02

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Huntington Beach Traffic Impact Analysis  
 Cumulative(2020) + Project AM (Alt.4)

Impact Analysis Report  
 Level Of Service

Intersection	Base		Future		Change in
	LOS	Veh C	LOS	Veh C	
# 18 Main St / Olive Ave	A	9.6 0.351	A	9.6 0.351	+ 0.000 V/C
# 19 Main St / 6th St	A	xxxxxx 0.231	A	xxxxxx 0.231	+ 0.000 V/C
# 20 Lake St / 6th St	A	8.6 0.142	A	8.6 0.142	+ 0.000 V/C
# 21 Lake St / Orange Ave	B	12.6 0.540	B	12.6 0.540	+ 0.000 V/C

Huntington Beach Traffic Impact Analysis  
 Cumulative(2020) + Project AM (Alt.4)

Level Of Service Computation Report  
 2000 HCM 4-Way Stop Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #18 Main St / Olive Ave

\*\*\*\*\*

Cycle (sec): 0 Critical Vol./Cap.(X): 0.351  
 Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 9.6  
 Optimal Cycle: 0 Level Of Service: A

\*\*\*\*\*

Street Name:	Main St						Olive Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R

Control:	Stop Sign											
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	1	0	0	1	0	0	1	0	0	1

Volume Module:	Main St			Main St			Olive Ave			Olive Ave		
Base Vol:	25	94	41	85	118	49	36	97	25	19	88	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	25	94	41	85	118	49	36	97	25	19	88	30
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	25	94	41	85	118	49	36	97	25	19	88	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	25	94	41	85	118	49	36	97	25	19	88	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	25	94	41	85	118	49	36	97	25	19	88	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	25	94	41	85	118	49	36	97	25	19	88	30

Saturation Flow Module:	Main St			Main St			Olive Ave			Olive Ave		
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.15	0.59	0.26	0.34	0.47	0.19	0.23	0.61	0.16	0.14	0.64	0.22
Final Sat.:	110	412	180	242	336	140	153	411	106	93	430	146

Capacity Analysis Module:	Main St			Main St			Olive Ave			Olive Ave		
Vol/Sat:	0.23	0.23	0.23	0.35	0.35	0.35	0.24	0.24	0.24	0.20	0.20	0.20
Crit Moves:	****			****			****			****		
Delay/Veh:	9.1	9.1	9.1	10.2	10.2	10.2	9.4	9.4	9.4	9.1	9.1	9.1
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	9.1	9.1	9.1	10.2	10.2	10.2	9.4	9.4	9.4	9.1	9.1	9.1
LOS by Move:	A	A	A	B	B	B	A	A	A	A	A	A
ApproachDel:	9.1			10.2			9.4			9.1		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	9.1			10.2			9.4			9.1		
LOS by Appr:	A			B			A			A		
AllWayAvgQ:	0.3	0.3	0.3	0.5	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.2

Note: Queue reported is the number of cars per lane.

Cumulative(2020) + Project Mon Apr 6, 2009 11:18:02

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Huntington Beach Traffic Impact Analysis  
 Cumulative(2020) + Project AM (Alt.4)

Level Of Service Computation Report

ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #19 Main St / 6th St

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.231  
 Loss Time (sec): 5 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx  
 Optimal Cycle: 16 Level Of Service: A

\*\*\*\*\*

Street Name:	Main St						6th St					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R

Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	0	1	0	0	1	0	1	1	0	1

Volume Module:	Main St			Main St			6th St			6th St		
Base Vol:	0	201	37	11	263	0	0	0	0	59	0	11
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	201	37	11	263	0	0	0	0	59	0	11
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	201	37	11	263	0	0	0	0	59	0	11
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	201	37	11	263	0	0	0	0	59	0	11
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	201	37	11	263	0	0	0	0	59	0	11
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	201	37	11	263	0	0	0	0	59	0	11

Saturation Flow Module:	Main St			Main St			6th St			6th St		
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.84	0.16	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1700	1436	264	1700	1700	0	1700	1700	1700	1700	1700	1700

Capacity Analysis Module:	Main St			Main St			6th St			6th St		
Vol/Sat:	0.00	0.14	0.14	0.01	0.15	0.00	0.00	0.00	0.00	0.03	0.00	0.01
Crit Moves:	****			****						****		

\*\*\*\*\*

Huntington Beach Traffic Impact Analysis  
 Cumulative(2020) + Project AM (Alt.4)

Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #20 Lake St / 6th St

\*\*\*\*\*

Cycle (sec): 0 Critical Vol./Cap.(X): 0.142  
 Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 8.6  
 Optimal Cycle: 0 Level Of Service: A

\*\*\*\*\*

Street Name: Lake St 6th St  
 Approach: North Bound South Bound East Bound West Bound  
 Movement: L - T - R L - T - R L - T - R L - T - R

Control: Stop Sign Stop Sign Stop Sign Stop Sign  
 Rights: Include Include Include Include  
 Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0  
 Lanes: 1 0 0 1 0 1 0 1 0 0 1 0 1 0 0 0 1

Volume Module:  
 Base Vol: 2 91 0 45 79 66 54 34 2 0 79 11  
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
 Initial Bse: 2 91 0 45 79 66 54 34 2 0 79 11  
 Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0  
 PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0  
 Initial Fut: 2 91 0 45 79 66 54 34 2 0 79 11  
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
 PHF Volume: 2 91 0 45 79 66 54 34 2 0 79 11  
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0  
 Reduced Vol: 2 91 0 45 79 66 54 34 2 0 79 11  
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
 FinalVolume: 2 91 0 45 79 66 54 34 2 0 79 11

Saturation Flow Module:  
 Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
 Lanes: 1.00 1.00 0.00 1.00 1.00 1.00 0.61 0.39 1.00 0.00 1.00 1.00  
 Final Sat.: 612 671 0 609 666 765 379 239 744 0 650 744

Capacity Analysis Module:  
 Vol/Sat: 0.00 0.14 xxxx 0.07 0.12 0.09 0.14 0.14 0.00 xxxx 0.12 0.01  
 Crit Moves: \*\*\*\* \*\*\*\*  
 Delay/Veh: 8.4 8.6 0.0 8.9 8.6 7.6 9.2 9.2 7.3 0.0 8.7 7.4  
 Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
 AdjDel/Veh: 8.4 8.6 0.0 8.9 8.6 7.6 9.2 9.2 7.3 0.0 8.7 7.4  
 LOS by Move: A A \* A A A A A A \* A A  
 ApproachDel: 8.6 8.3 9.1 8.5  
 Delay Adj: 1.00 1.00 1.00  
 ApprAdjDel: 8.6 8.3 9.1 8.5  
 LOS by Appr: A A A A  
 AllWayAvgQ: 0.0 0.1 0.1 0.1 0.1 0.1 0.2 0.2 0.0 0.1 0.1 0.0

\*\*\*\*\*

Note: Queue reported is the number of cars per lane.

Huntington Beach Traffic Impact Analysis  
 Cumulative(2020) + Project AM (Alt.4)

Level Of Service Computation Report  
 2000 HCM 4-Way Stop Method (Future Volume Alternative)

```

*****
Intersection #21 Lake St / Orange Ave
*****
Cycle (sec):          0          Critical Vol./Cap. (X):          0.540
Loss Time (sec):      0 (Y+R=4.0 sec) Average Delay (sec/veh):          12.6
Optimal Cycle:        0          Level Of Service:          B
*****
Street Name:          Lake St          Orange Ave
Approach:             North Bound      South Bound      East Bound      West Bound
Movement:             L - T - R      L - T - R      L - T - R      L - T - R
-----|-----|-----|-----|
Control:              Stop Sign      Stop Sign      Stop Sign      Stop Sign
Rights:               Include        Include        Include        Include
Min. Green:           0 0 0 0        0 0 0 0        0 0 0 0        0 0 0 0
Lanes:                0 0 1! 0 0      0 0 1! 0 0      0 0 1! 0 0      0 0 1! 0 0
-----|-----|-----|-----|
Volume Module:
Base Vol:             31 47 19 61 94 51 49 267 44 43 249 42
Growth Adj:           1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:          31 47 19 61 94 51 49 267 44 43 249 42
Added Vol:            0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol:         0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut:          31 47 19 61 94 51 49 267 44 43 249 42
User Adj:             1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:              1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:           31 47 19 61 94 51 49 267 44 43 249 42
Reduct Vol:           0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol:          31 47 19 61 94 51 49 267 44 43 249 42
PCE Adj:              1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:              1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume:          31 47 19 61 94 51 49 267 44 43 249 42
-----|-----|-----|-----|
Saturation Flow Module:
Adjustment:           1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes:                0.32 0.48 0.20 0.29 0.46 0.25 0.14 0.74 0.12 0.13 0.74 0.13
Final Sat.:           169 256 103 171 264 143 91 494 81 85 492 83
-----|-----|-----|-----|
Capacity Analysis Module:
Vol/Sat:              0.18 0.18 0.18 0.36 0.36 0.36 0.54 0.54 0.54 0.51 0.51 0.51
Crit Moves:          ****          ****          ****
Delay/Veh:            10.1 10.1 10.1 11.4 11.4 11.4 13.7 13.7 13.7 13.0 13.0 13.0
Delay Adj:            1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:           10.1 10.1 10.1 11.4 11.4 11.4 13.7 13.7 13.7 13.0 13.0 13.0
LOS by Move:          B B B B B B B B B B B B
ApproachDel:          10.1          11.4          13.7          13.0
Delay Adj:            1.00          1.00          1.00          1.00
ApprAdjDel:           10.1          11.4          13.7          13.0
LOS by Appr:          B B B B B
AllWayAvgQ:           0.2 0.2 0.2 0.4 0.4 0.4 1.0 1.0 1.0 0.9 0.9 0.9
*****
    
```

Note: Queue reported is the number of cars per lane.



Cumulative(2020) + Project Mon Apr 6, 2009 09:39:27

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-----  
Scenario Report  
Scenario: Cumulative(2020) + Project PM (Alt.4)  
  
Command: Cumulative(2020) + Project PM (Alt.4)  
Volume: Cumulative(2020) + Project PM (Alt.4)  
Geometry: General Plan Build-Out  
Impact Fee: Default Impact Fee  
Trip Generation: None  
Trip Distribution: None  
Paths: Default Path  
Routes: Default Route  
Configuration: Cumulative(2020) + Project (Alt.4)

-----  
 -----  
 Impact Analysis Report  
 Level Of Service

Intersection	Base			Future			Change in
	LOS	Del/ Veh	V/ C	LOS	Del/ Veh	V/ C	
# 18 Main St / Olive Ave	B	13.0	0.470	B	13.0	0.470	+ 0.000 V/C
# 19 Main St / 6th St	A	xxxxx	0.318	A	xxxxx	0.318	+ 0.000 V/C
# 20 Lake St / 6th St	B	12.3	0.498	B	12.3	0.498	+ 0.000 V/C
# 21 Lake St / Orange Ave	E	37.8	0.980	E	37.8	0.980	+ 0.000 V/C

```

-----
Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)
*****
Intersection #18 Main St / Olive Ave
*****
Cycle (sec):          0          Critical Vol./Cap.(X):          0.470
Loss Time (sec):     0 (Y+R=4.0 sec) Average Delay (sec/veh):          13.0
Optimal Cycle:       0          Level Of Service:          B
*****
Street Name:          Main St          Olive Ave
Approach:             North Bound      South Bound      East Bound      West Bound
Movement:             L - T - R      L - T - R      L - T - R      L - T - R
-----|-----|-----|-----|
Control:              Stop Sign      Stop Sign      Stop Sign      Stop Sign
Rights:               Include        Include        Include        Include
Min. Green:           0  0  0        0  0  0        0  0  0        0  0  0
Lanes:                0  0  1! 0  0    0  0  1! 0  0    0  0  1! 0  0    0  0  1! 0  0
-----|-----|-----|-----|
Volume Module:
Base Vol:             57 168  46    56 144  75    62 153  56    35 157  55
Growth Adj:           1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:          57 168  46    56 144  75    62 153  56    35 157  55
Added Vol:            0  0  0        0  0  0        0  0  0        0  0  0
PasserByVol:         0  0  0        0  0  0        0  0  0        0  0  0
Initial Fut:          57 168  46    56 144  75    62 153  56    35 157  55
User Adj:             1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:              1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:           57 168  46    56 144  75    62 153  56    35 157  55
Reduct Vol:           0  0  0        0  0  0        0  0  0        0  0  0
Reduced Vol:          57 168  46    56 144  75    62 153  56    35 157  55
PCE Adj:              1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:              1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Volume:         57 168  46    56 144  75    62 153  56    35 157  55
-----|-----|-----|-----|
Saturation Flow Module:
Adjustment:           1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:                0.21 0.62  0.17  0.20 0.53  0.27  0.23 0.56  0.21  0.14 0.64  0.22
Final Sat.:          122 359  98    119 306  159    132 326  119    81 363  127
-----|-----|-----|-----|
Capacity Analysis Module:
Vol/Sat:              0.47 0.47  0.47  0.47 0.47  0.47  0.47 0.47  0.47  0.43 0.43  0.43
Crit Moves:           ****          ****          ****          ****
Delay/Veh:            13.1 13.1  13.1  13.0 13.0  13.0  13.1 13.1  13.1  12.6 12.6  12.6
Delay Adj:            1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:          13.1 13.1  13.1  13.0 13.0  13.0  13.1 13.1  13.1  12.6 12.6  12.6
LOS by Move:          B  B      B      B  B      B      B  B      B      B  B      B
ApproachDel:          13.1          13.0          13.1          12.6
Delay Adj:            1.00          1.00          1.00          1.00
ApprAdjDel:          13.1          13.0          13.1          12.6
LOS by Appr:          B          B          B          B
AllWayAvgQ:           0.7 0.7  0.7  0.7 0.7  0.7  0.7 0.7  0.7  0.6 0.6  0.6
*****
Note: Queue reported is the number of cars per lane.
*****

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-----
Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
*****
Intersection #19 Main St / 6th St
*****
Cycle (sec):          100          Critical Vol./Cap.(X):          0.318
Loss Time (sec):      5 (Y+R=4.0 sec) Average Delay (sec/veh):          xxxxxx
Optimal Cycle:        18          Level Of Service:          A
*****
Street Name:          Main St          6th St
Approach:             North Bound      South Bound      East Bound      West Bound
Movement:             L - T - R      L - T - R      L - T - R      L - T - R
-----|-----|-----|-----|
Control:              Permitted      Permitted      Permitted      Permitted
Rights:               Include        Include        Include        Include
Min. Green:           0  0  0        0  0  0        0  0  0        0  0  0
Lanes:                1  0  0  1  0    1  0  0  1  0    1  0  1  0  1    1  0  1  0  1
-----|-----|-----|-----|
Volume Module:
Base Vol:             0  354  28      34  364  0        0  0  0  0        39  0  34
Growth Adj:           1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:          0  354  28      34  364  0        0  0  0  0        39  0  34
Added Vol:            0  0  0        0  0  0        0  0  0  0        0  0  0
PasserByVol:         0  0  0        0  0  0        0  0  0  0        0  0  0
Initial Fut:          0  354  28      34  364  0        0  0  0  0        39  0  34
User Adj:             1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:              1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:           0  354  28      34  364  0        0  0  0  0        39  0  34
Reduct Vol:           0  0  0        0  0  0        0  0  0  0        0  0  0
Reduced Vol:          0  354  28      34  364  0        0  0  0  0        39  0  34
PCE Adj:              1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:              1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:         0  354  28      34  364  0        0  0  0  0        39  0  34
-----|-----|-----|-----|
Saturation Flow Module:
Sat/Lane:             1700 1700  1700  1700 1700  1700  1700 1700  1700  1700 1700  1700
Adjustment:           1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:                1.00 0.93  0.07  1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Sat.:           1700 1575  125  1700 1700  0        1700 1700  1700  1700 1700  1700
-----|-----|-----|-----|
Capacity Analysis Module:
Vol/Sat:              0.00 0.22  0.22  0.02 0.21  0.00  0.00 0.00  0.00  0.02 0.00  0.02
Crit Moves:          ****          ****          ****
*****
    
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-----
Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)
*****
Intersection #20 Lake St / 6th St
*****
Cycle (sec):          0          Critical Vol./Cap. (X):          0.498
Loss Time (sec):      0 (Y+R=4.0 sec) Average Delay (sec/veh):          12.3
Optimal Cycle:        0          Level Of Service:          B
*****
Street Name:          Lake St          6th St
Approach:             North Bound      South Bound      East Bound      West Bound
Movement:             L - T - R      L - T - R      L - T - R      L - T - R
-----|-----|-----|-----|
Control:              Stop Sign      Stop Sign      Stop Sign      Stop Sign
Rights:               Include        Include        Include        Include
Min. Green:           0  0  0        0  0  0        0  0  0        0  0  0
Lanes:                1  0  0  1  0    1  0  1  0  1    0  1  0  0  1    0  1  0  0  1
-----|-----|-----|-----|
Volume Module:
Base Vol:             14  278  23    34  258  71    72  68  15    11  79  23
Growth Adj:           1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:          14  278  23    34  258  71    72  68  15    11  79  23
Added Vol:            0  0  0        0  0  0        0  0  0        0  0  0
PasserByVol:          0  0  0        0  0  0        0  0  0        0  0  0
Initial Fut:          14  278  23    34  258  71    72  68  15    11  79  23
User Adj:             1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:              1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:           14  278  23    34  258  71    72  68  15    11  79  23
Reduct Vol:           0  0  0        0  0  0        0  0  0        0  0  0
Reduced Vol:          14  278  23    34  258  71    72  68  15    11  79  23
PCE Adj:              1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:              1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Volume:         14  278  23    34  258  71    72  68  15    11  79  23
-----|-----|-----|-----|
Saturation Flow Module:
Adjustment:           1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:                1.00 0.92  0.08  1.00 1.00  1.00  0.51 0.49  1.00  0.12 0.88  1.00
Final Sat.:           547  558  46    520  566  630    258  244  575    62  442  561
-----|-----|-----|-----|
Capacity Analysis Module:
Vol/Sat:              0.03 0.50  0.50  0.07 0.46  0.11  0.28 0.28  0.03  0.18 0.18  0.04
Crit Moves:          ****          ****          ****          ****
Delay/Veh:            9.2 13.7  13.7  9.8 13.7  8.8  11.8 11.8  8.6  10.6 10.6  8.8
Delay Adj:            1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:           9.2 13.7  13.7  9.8 13.7  8.8  11.8 11.8  8.6  10.6 10.6  8.8
LOS by Move:         A  B  B      A  B  A      B  B  A      B  B  A
ApproachDel:          13.5          12.4          11.5          10.2
Delay Adj:            1.00          1.00          1.00          1.00
ApprAdjDel:           13.5          12.4          11.5          10.2
LOS by Appr:         B          B          B          B
AllWayAvgQ:           0.0 0.9  0.9  0.1 0.8  0.1  0.3 0.3  0.0  0.2 0.2  0.0
*****
Note: Queue reported is the number of cars per lane.
*****

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Cumulative(2020) + Project Mon Apr 6, 2009 09:39:28

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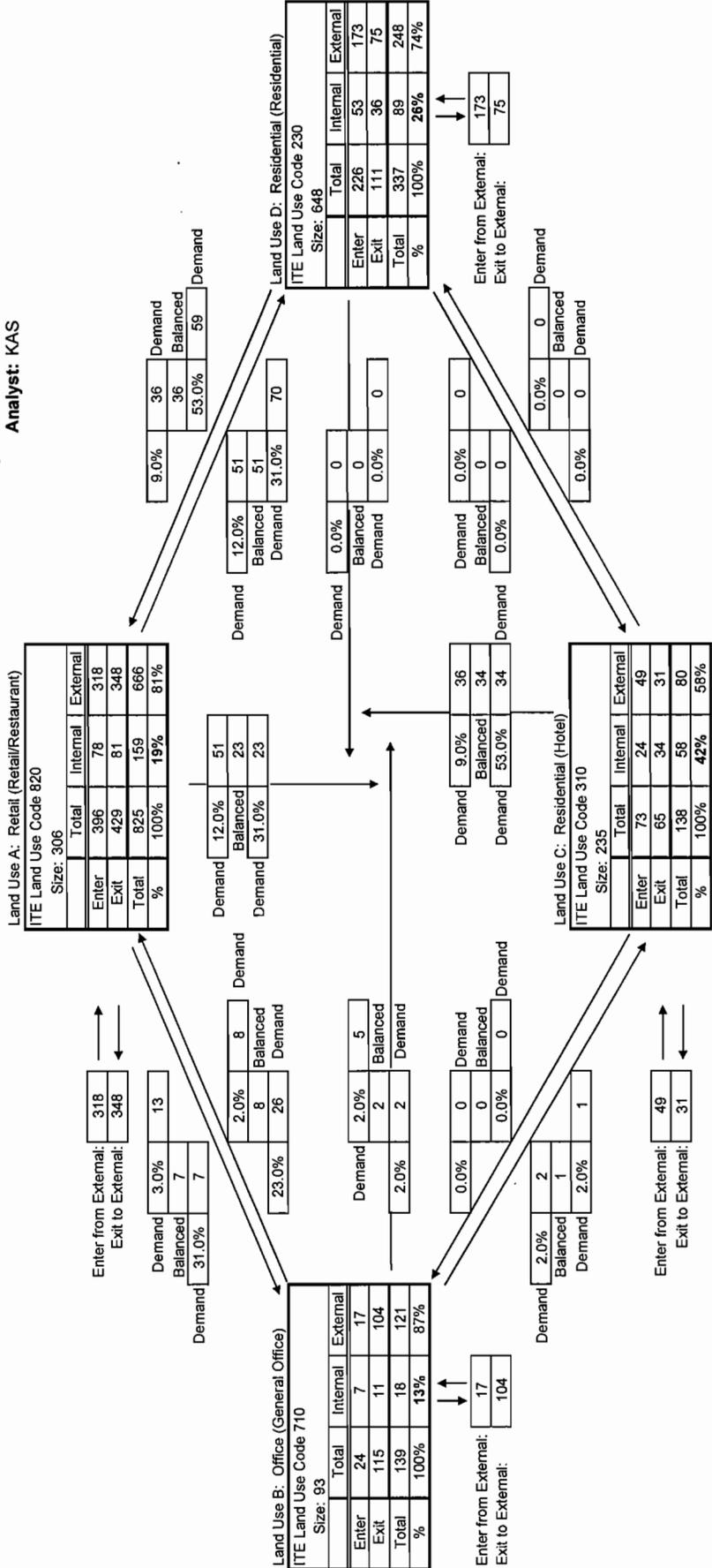
-----
Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)
*****
Intersection #21 Lake St / Orange Ave
*****
Cycle (sec):          0          Critical Vol./Cap.(X):          0.980
Loss Time (sec):      0 (Y+R=4.0 sec) Average Delay (sec/veh):          37.8
Optimal Cycle:        0          Level Of Service:          E
*****
Street Name:          Lake St          Orange Ave
Approach:             North Bound      South Bound      East Bound      West Bound
Movement:             L - T - R      L - T - R      L - T - R      L - T - R
-----|-----|-----|-----|
Control:              Stop Sign      Stop Sign      Stop Sign      Stop Sign
Rights:               Include        Include        Include        Include
Min. Green:           0  0  0        0  0  0        0  0  0        0  0  0
Lanes:                0  0  1!  0  0    0  0  1!  0  0    0  0  1!  0  0    0  0  1!  0  0
-----|-----|-----|-----|
Volume Module:
Base Vol:             57 118 25 104 107 85 86 271 67 37 374 123
Growth Adj:           1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:          57 118 25 104 107 85 86 271 67 37 374 123
Added Vol:            0  0  0  0  0  0  0  0  0  0  0  0
PasserByVol:          0  0  0  0  0  0  0  0  0  0  0  0
Initial Fut:          57 118 25 104 107 85 86 271 67 37 374 123
User Adj:             1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:              1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:           57 118 25 104 107 85 86 271 67 37 374 123
Reduct Vol:           0  0  0  0  0  0  0  0  0  0  0  0
Reduced Vol:          57 118 25 104 107 85 86 271 67 37 374 123
PCE Adj:              1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:              1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume:          57 118 25 104 107 85 86 271 67 37 374 123
-----|-----|-----|-----|
Saturation Flow Module:
Adjustment:           1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes:                0.28 0.59 0.13 0.35 0.36 0.29 0.20 0.64 0.16 0.07 0.70 0.23
Final Sat.:           121 250 53 163 168 133 104 326 81 38 381 125
-----|-----|-----|-----|
Capacity Analysis Module:
Vol/Sat:              0.47 0.47 0.47 0.64 0.64 0.64 0.83 0.83 0.83 0.98 0.98 0.98
Crit Moves:          ****          ****          ****          ****
Delay/Veh:            16.7 16.7 16.7 21.2 21.2 21.2 33.1 33.1 33.1 58.7 58.7 58.7
Delay Adj:            1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:           16.7 16.7 16.7 21.2 21.2 21.2 33.1 33.1 33.1 58.7 58.7 58.7
LOS by Move:          C  C  C  C  C  C  D  D  D  F  F  F
ApproachDel:          16.7          21.2          33.1          58.7
Delay Adj:            1.00          1.00          1.00          1.00
ApprAdjDel:           16.7          21.2          33.1          58.7
LOS by Appr:          C          C          D          F
AllWayAvgQ:           0.7 0.7 0.7 1.4 1.4 1.4 3.3 3.3 3.3 7.4 7.4 7.4
*****
Note: Queue reported is the number of cars per lane.
*****
    
```

**APPENDIX C**

**INTERNAL CAPTURE  
WORKSHEETS**

**ITE MULTI-USE PROJECT INTERNAL CAPTURE WORKSHEET**  
 (Source: Chapter 7, ITE Trip Generation Handbook, June 2004)

**Project Number:**  
**Project Name:** Huntington Beach Downtown Specific Plan  
**Scenario:** PM Peak  
**Analysis Period:** PM Peak  
**Analyst:** KAS



**NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT**

Category	Land Use				Total
	A	B	C	D	
Enter	318	17	49	173	557
Exit	348	104	31	75	558
Total	666	121	80	248	1,115
Single Use Trip Gen Estimate	825	139	138	337	1,439

Overall Internal Capture = 0.22516