

APPENDIX B

YEAR 2015 INTERSECTION LEVEL OF SERVICE CALCULATION WORKSHEETS (ICU/HCM)

YEAR 2015
ONE-WAY OPERATIONS

Dana Point Town Center - AM Buildout
1-Way + Approved Projects - Year 2015 No Project

Level Of Service Computation Report

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

Intersection #1 PCH & Blue Lantern

Cycle (sec): 100 Critical Vol./Cap.(X): 0.464
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 22 Level Of Service: A

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 Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0
Lanes: 1 0 1 1 0 1 0 1 0 1 1 0 1 0 1 1 0

Volume Module:
Base Vol: 48 9 18 40 5 9 7 816 11 34 1071 41
Growth Adj: 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06
Initial Bse: 51 10 19 42 5 10 7 861 12 36 1131 43
Added Vol: 0 0 0 5 0 0 0 76 0 4 45 2
PasserByVol: 4 1 5 0 3 5 7 49 0 10 41 0
Initial Fut: 55 11 24 47 8 15 14 986 12 50 1217 45
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: 55 11 24 47 8 15 14 986 12 50 1217 45
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 55 11 24 47 8 15 14 986 12 50 1217 45
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: 55 11 24 47 8 15 14 986 12 50 1217 45

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 1.00 1.98 0.02 1.00 1.93 0.07
Final Sat.: 1700 1700 1700 1700 1700 1700 1700 3360 40 1700 3278 122

Capacity Analysis Module:
Vol/Sat: 0.03 0.01 0.01 0.03 0.00 0.01 0.01 0.29 0.29 0.03 0.37 0.37
Crit Moves: **** **** **** ****

HCM Unsignalized Intersection Capacity Analysis
2: PCH & Ruby Lantern

Year 2015 - No Project
AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR		
Lane Configurations				↶	↷			↶			↷			
Volume (veh/h)	0	0	0	13	1305	3	13	16	0	0	14	11		
Sign Control		Free			Free			Stop			Stop			
Grade		0%			0%			0%			0%			
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Hourly flow rate (vph)	0	0	0	13	1305	3	13	16	0	0	14	11		
Pedestrians		6			6			6			6			
Lane Width (ft)		0.0			10.7			14.0			16.0			
Walking Speed (ft/s)		4.0			4.0			4.0			4.0			
Percent Blockage		0			0			1			1			
Right turn flare (veh)														
Median type		None			None									
Median storage veh														
Upstream signal (ft)		595			783									
pX, platoon unblocked	0.87							0.87	0.87		0.87	0.87	0.87	
vC, conflicting volume	1314				6				708	1346	12	1352	1344	666
vC1, stage 1 conf vol														
vC2, stage 2 conf vol														
vCu, unblocked vol	1061				6				364	1098	12	1105	1096	316
tC, single (s)	4.1				4.1				7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)														
tF (s)	2.2				2.2				3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100				99				97	91	100	100	92	98
cM capacity (veh/h)	563				1604				445	180	1054	130	181	587

Direction, Lane #	WB 1	WB 2	WB 3	NB 1	SB 1
Volume Total	13	870	438	29	25
Volume Left	13	0	0	13	0
Volume Right	0	0	3	0	11
cSH	1604	1700	1700	246	260
Volume to Capacity	0.01	0.51	0.26	0.12	0.10
Queue Length 95th (ft)	1	0	0	10	8
Control Delay (s)	7.3	0.0	0.0	21.6	20.3
Lane LOS	A			C	C
Approach Delay (s)	0.1			21.6	20.3
Approach LOS				C	C

Intersection Summary	
Average Delay	0.9
Intersection Capacity Utilization	51.1%
ICU Level of Service	A
Analysis Period (min)	15

Dana Point Town Center - AM Buildout
1-Way + Approved Projects - Year 2015 No Project

Level Of Service Computation Report

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

Intersection #3 PCH & Amber Lantern

Cycle (sec): 100 Critical Vol./Cap.(X): 0.423

Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx

Optimal Cycle: 21 Level Of Service: A

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 0
Y+R: 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0
Lanes: 0 1 0 0 0 0 0 0 0 0 0 0 1 1 1 0

Volume Module:

Base Vol: 21 18 0 0 46 33 0 0 0 108 1225 13
Growth Adj: 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06
Initial Bse: 22 19 0 0 49 35 0 0 0 114 1293 14
Added Vol: 13 3 0 0 2 1 0 0 0 14 47 0
PasserByVol: 2 0 0 0 0 0 0 0 0 0 48 0
Initial Fut: 37 22 0 0 51 36 0 0 0 128 1388 14
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: 37 22 0 0 51 36 0 0 0 128 1388 14
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 37 22 0 0 51 36 0 0 0 128 1388 14
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: 37 22 0 0 51 36 0 0 0 128 1388 14

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: 0.63 0.37 0.00 0.00 0.59 0.41 0.00 0.00 0.00 0.25 2.72 0.03
Final Sat.: 1068 632 0 0 995 705 0 0 0 427 4628 46

Capacity Analysis Module:

Vol/Sat: 0.02 0.03 0.00 0.00 0.05 0.05 0.00 0.00 0.00 0.08 0.30 0.30
Crit Moves: **** **** ****

Dana Point Town Center - AM Buildout
1-Way + Approved Projects - Year 2015 No Project

Level Of Service Computation Report

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

Intersection #4 PCH & Violet Lantern

Cycle (sec): 100 Critical Vol./Cap.(X): 0.414
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 20 Level Of Service: A

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
Y+R: 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0
Lanes: 1 0 1 0 0 0 0 1 0 1 0 0 0 0 0 0 0 1 1 1 0

Volume Module:

Base Vol: 39 20 0 0 17 28 0 0 0 77 1275 18
Growth Adj: 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06
Initial Bse: 41 21 0 0 18 30 0 0 0 81 1346 19
Added Vol: 10 2 0 0 1 1 0 0 0 53 58 2
PasserByVol: 2 0 0 0 0 0 0 0 0 0 46 0
Initial Fut: 53 23 0 0 19 31 0 0 0 134 1450 21
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: 53 23 0 0 19 31 0 0 0 134 1450 21
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 53 23 0 0 19 31 0 0 0 134 1450 21
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: 53 23 0 0 19 31 0 0 0 134 1450 21

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 0.00 0.00 1.00 1.00 0.00 0.00 0.00 0.25 2.71 0.04
Final Sat.: 1700 1700 0 0 1700 1700 0 0 0 427 4607 67

Capacity Analysis Module:

Vol/Sat: 0.03 0.01 0.00 0.00 0.01 0.02 0.00 0.00 0.00 0.08 0.31 0.31
Crit Moves: **** **** ****

Dana Point Town Center - AM Buildout
1-Way + Approved Projects - Year 2015 No Project

Level Of Service Computation Report

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

Intersection #5 PCH & Golden Lantern

Cycle (sec): 100 Critical Vol./Cap.(X): 0.626
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 31 Level Of Service: B

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Protected Permitted Permitted Permitted
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0
Lanes: 1 0 2 0 0 0 0 2 0 1 0 0 0 2 1 0

Volume Module:

Base Vol: 76 78 0 0 441 238 0 0 0 90 1236 151
Growth Adj: 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06
Initial Bse: 80 82 0 0 466 251 0 0 0 95 1305 159
Added Vol: 64 20 0 0 7 21 0 0 0 4 144 1
PasserByVol: 11 12 0 0 7 5 0 0 0 0 30 0
Initial Fut: 155 114 0 0 480 277 0 0 0 99 1479 160
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: 155 114 0 0 480 277 0 0 0 99 1479 160
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 155 114 0 0 480 277 0 0 0 99 1479 160
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: 155 114 0 0 480 277 0 0 0 99 1479 160

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 0.00 0.00 2.00 1.00 0.00 0.00 0.00 1.00 2.71 0.29
Final Sat.: 1700 3400 0 0 3400 1700 0 0 0 1700 4601 499

Capacity Analysis Module:

Vol/Sat: 0.09 0.03 0.00 0.00 0.14 0.16 0.00 0.00 0.00 0.06 0.32 0.32
Crit Moves: **** **** ****

Dana Point Town Center - AM Buildout
1-Way + Approved Projects - Year 2015 No Project

Level Of Service Computation Report

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

Intersection #6 PCH & Del Prado

Cycle (sec): 100 Critical Vol./Cap.(X): 0.600
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 29 Level Of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, Lanes.

Volume Module table with 13 columns and 14 rows including Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, FinalVolume.

Saturation Flow Module table with 13 columns and 5 rows including Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module table with 13 columns and 3 rows including Vol/Sat, Crit Moves.

Dana Point Town Center - AM Buildout
1-Way + Approved Projects - Year 2015 No Project

Level Of Service Computation Report

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

Intersection #7 PCH & Crystal Lantern

Cycle (sec): 100 Critical Vol./Cap.(X): 0.600
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 90 Level Of Service: A

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 Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0
Lanes: 0 0 1! 0 0 0 1 0 0 1 1 0 1 0 2 0 1

Volume Module:

Base Vol: 4 1 6 105 2 20 16 1060 7 9 1332 62
Growth Adj: 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06
Initial Bse: 4 1 6 111 2 21 17 1119 7 10 1406 65
Added Vol: 0 0 0 0 0 0 0 91 0 0 153 0
PasserByVol: 1 0 0 0 0 2 2 28 1 0 25 0
Initial Fut: 5 1 6 111 2 23 19 1238 8 10 1584 65
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: 5 1 6 111 2 23 19 1238 8 10 1584 65
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 5 1 6 111 2 23 19 1238 8 10 1584 65
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: 5 1 6 111 2 23 19 1238 8 10 1584 65

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: 0.41 0.08 0.51 0.98 0.02 1.00 1.00 1.99 0.01 1.00 2.00 1.00
Final Sat.: 704 142 854 1668 32 1700 1700 3377 23 1700 3400 1700

Capacity Analysis Module:

Vol/Sat: 0.00 0.01 0.01 0.07 0.07 0.01 0.01 0.37 0.37 0.01 0.47 0.04
Crit Moves: **** **** **** ****

HCM Unsignalized Intersection Capacity Analysis
 9: Del Prado & Ruby Lantern

Year 2015 - No Project
 AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔↔	↗					↖			↖	
Volume (veh/h)	6	1060	2	0	0	0	0	18	5	25	6	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	6	1060	2	0	0	0	0	18	5	25	6	0
Pedestrians		6			6			9			9	
Lane Width (ft)		11.0			0.0			11.0			11.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		0			0			1			1	
Right turn flare (veh)												
Median type		None			None							
Median storage veh												
Upstream signal (ft)		609			735							
pX, platoon unblocked												
vC, conflicting volume	9			1071			1090	1090	545	571	1092	15
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	9			1071			1090	1090	545	571	1092	15
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	91	99	93	97	100
cM capacity (veh/h)	1598			642			162	210	479	366	209	1049

Direction, Lane #	EB 1	EB 2	EB 3	NB 1	SB 1
Volume Total	359	707	2	23	31
Volume Left	6	0	0	0	25
Volume Right	0	0	2	5	0
cSH	1598	1700	1700	239	320
Volume to Capacity	0.00	0.42	0.00	0.10	0.10
Queue Length 95th (ft)	0	0	0	8	8
Control Delay (s)	0.2	0.0	0.0	21.6	17.5
Lane LOS	A			C	C
Approach Delay (s)	0.1			21.6	17.5
Approach LOS				C	C

Intersection Summary		
Average Delay		1.0
Intersection Capacity Utilization	48.7%	ICU Level of Service A
Analysis Period (min)		15

Dana Point Town Center - AM Buildout
1-Way + Approved Projects - Year 2015 No Project

Level Of Service Computation Report

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

Intersection #10 Del Prado & Amber Lantern

Cycle (sec): 100 Critical Vol./Cap. (X): 0.378
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 19 Level Of Service: A

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 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 0 0 0 1 0 0 1 0 0 0 0 0 1 1 1 0 0 0 0 0 0

Volume Module:
Base Vol: 0 15 26 100 28 0 45 879 23 0 0 0
Growth Adj: 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06
Initial Bse: 0 16 27 106 30 0 48 928 24 0 0 0
Added Vol: 0 1 2 14 1 0 19 101 0 0 0 0
PasserByVol: 0 0 0 0 0 0 2 51 0 0 0 0
Initial Fut: 0 17 29 120 31 0 69 1080 24 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 17 29 120 31 0 69 1080 24 0 0 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 17 29 120 31 0 69 1080 24 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 17 29 120 31 0 69 1080 24 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: 0.00 0.36 0.64 0.80 0.20 0.00 0.18 2.76 0.06 0.00 0.00 0.00
Final Sat.: 0 618 1082 1354 346 0 298 4696 106 0 0 0

Capacity Analysis Module:
Vol/Sat: 0.00 0.03 0.03 0.07 0.09 0.00 0.04 0.23 0.23 0.00 0.00 0.00
Crit Moves: ****

Dana Point Town Center - AM Buildout
1-Way + Approved Projects - Year 2015 No Project

Level Of Service Computation Report

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

Intersection #11 Del Prado & Violet Lantern

Cycle (sec): 100 Critical Vol./Cap.(X): 0.358

Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx

Optimal Cycle: 19 Level Of Service: A

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 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 0 0 0 1 0 0 1 0 0 0 0 0 1 1 1 0 0 0 0 0 0

Volume Module:
Base Vol: 0 12 15 49 27 0 23 938 1 0 0 0
Growth Adj: 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06
Initial Bse: 0 13 16 52 29 0 24 990 1 0 0 0
Added Vol: 0 3 7 39 3 0 5 108 1 0 0 0
PasserByVol: 0 0 0 0 0 0 2 49 0 0 0 0
Initial Fut: 0 16 23 91 32 0 31 1147 2 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 16 23 91 32 0 31 1147 2 0 0 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 16 23 91 32 0 31 1147 2 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 16 23 91 32 0 31 1147 2 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: 0.00 0.41 0.59 0.74 0.26 0.00 0.08 2.91 0.01 0.00 0.00 0.00
Final Sat.: 0 692 1008 1262 438 0 135 4956 9 0 0 0

Capacity Analysis Module:
Vol/Sat: 0.00 0.02 0.02 0.05 0.07 0.00 0.02 0.23 0.23 0.00 0.00 0.00
Crit Moves: ****

Dana Point Town Center - AM Buildout
1-Way + Approved Projects - Year 2015 No Project

Level Of Service Computation Report

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

Intersection #12 Del Prado & Golden Lantern

Cycle (sec): 100 Critical Vol./Cap.(X): 0.415
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 20 Level Of Service: A

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Permitted Protected Permitted Permitted
Rights: Ignore Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0
Lanes: 0 0 2 0 1 2 0 1 0 0 1 0 3 0 1 0 0 0 0 0

Volume Module:
Base Vol: 0 200 41 341 199 0 68 765 127 0 0 0
Growth Adj: 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06
Initial Bse: 0 211 43 360 210 0 72 808 134 0 0 0
Added Vol: 0 23 1 15 2 0 62 82 12 0 0 0
PasserByVol: 0 18 0 0 7 0 5 33 11 0 0 0
Initial Fut: 0 252 44 375 219 0 139 923 157 0 0 0
User Adj: 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 252 0 375 219 0 139 923 157 0 0 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 252 0 375 219 0 139 923 157 0 0 0
PCE Adj: 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 0 252 0 375 219 0 139 923 157 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: 0.00 2.00 1.00 2.00 1.00 0.00 1.00 3.00 1.00 0.00 0.00 0.00
Final Sat.: 0 3400 1700 3400 1700 0 1700 5100 1700 0 0 0

Capacity Analysis Module:
Vol/Sat: 0.00 0.07 0.00 0.11 0.13 0.00 0.08 0.18 0.09 0.00 0.00 0.00
Crit Moves: ****

Dana Point Town Center - PM Buildout
1-Way + Approved Projects - Year 2015 No Project

Level Of Service Computation Report

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

Intersection #1 PCH & Blue Lantern

Cycle (sec): 100 Critical Vol./Cap.(X): 0.572
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 27 Level Of Service: A

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 Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0
Lanes: 1 0 1 1 0 1 0 1 0 1 1 0 1 0 1 1 0

Volume Module:
Base Vol: 61 25 52 35 8 4 14 1146 10 72 1024 52
Growth Adj: 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06
Initial Bse: 64 26 55 37 8 4 15 1210 11 76 1081 55
Added Vol: 0 0 0 5 0 0 0 94 0 14 125 8
PasserByVol: 13 4 15 0 3 16 10 79 0 12 93 0
Initial Fut: 77 30 70 42 11 20 25 1383 11 102 1299 63
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: 77 30 70 42 11 20 25 1383 11 102 1299 63
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 77 30 70 42 11 20 25 1383 11 102 1299 63
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: 77 30 70 42 11 20 25 1383 11 102 1299 63

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 1.00 1.98 0.02 1.00 1.91 0.09
Final Sat.: 1700 1700 1700 1700 1700 1700 1700 3374 26 1700 3243 157

Capacity Analysis Module:
Vol/Sat: 0.05 0.02 0.04 0.02 0.01 0.01 0.01 0.41 0.41 0.06 0.40 0.40
Crit Moves: ****

HCM Unsignalized Intersection Capacity Analysis
2: PCH & Ruby Lantern

Year 2015 - No Project
PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	23	1450	6	14	8	0	0	32	24
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	0	0	23	1450	6	14	8	0	0	32	24
Pedestrians		6			6			6			6	
Lane Width (ft)		0.0			10.7			14.0			16.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		0			0			1			1	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)		595			783							
pX, platoon unblocked	0.82						0.82	0.82		0.82	0.82	0.82
vC, conflicting volume	1462			6			823	1514	12	1515	1511	740
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1113			6			330	1177	12	1178	1174	228
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			99			96	95	100	100	79	96
cM capacity (veh/h)	504			1604			384	150	1054	111	151	628

Direction, Lane #	WB 1	WB 2	WB 3	NB 1	SB 1
Volume Total	23	967	489	22	56
Volume Left	23	0	0	14	0
Volume Right	0	0	6	0	24
cSH	1604	1700	1700	245	224
Volume to Capacity	0.01	0.57	0.29	0.09	0.25
Queue Length 95th (ft)	1	0	0	7	24
Control Delay (s)	7.3	0.0	0.0	21.1	26.3
Lane LOS	A			C	D
Approach Delay (s)	0.1			21.1	26.3
Approach LOS				C	D

Intersection Summary				
Average Delay			1.4	
Intersection Capacity Utilization		54.8%	ICU Level of Service	A
Analysis Period (min)		15		

Dana Point Town Center - PM Buildout
1-Way + Approved Projects - Year 2015 No Project

Level Of Service Computation Report

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

Intersection #3 PCH & Amber Lantern

Cycle (sec): 100 Critical Vol./Cap.(X): 0.450
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 22 Level Of Service: A

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 0
Y+R: 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0
Lanes: 0 1 0 0 0 0 0 0 1 0 0 0 0 0 1 1 1 0

Volume Module:
Base Vol: 37 42 0 0 52 15 0 0 0 85 1094 47
Growth Adj: 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06
Initial Bse: 39 44 0 0 55 16 0 0 0 90 1155 50
Added Vol: 38 6 0 0 5 2 0 0 0 27 145 2
PasserByVol: 4 0 0 0 0 0 0 0 0 0 96 0
Initial Fut: 81 50 0 0 60 18 0 0 0 117 1396 52
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: 81 50 0 0 60 18 0 0 0 117 1396 52
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 81 50 0 0 60 18 0 0 0 117 1396 52
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: 81 50 0 0 60 18 0 0 0 117 1396 52

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: 0.62 0.38 0.00 0.00 0.77 0.23 0.00 0.00 0.00 0.22 2.68 0.10
Final Sat.: 1049 651 0 0 1310 390 0 0 0 381 4551 168

Capacity Analysis Module:
Vol/Sat: 0.05 0.08 0.00 0.00 0.05 0.05 0.00 0.00 0.00 0.07 0.31 0.31
Crit Moves: ****

Dana Point Town Center - PM Buildout
1-Way + Approved Projects - Year 2015 No Project

Level Of Service Computation Report

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

Intersection #4 PCH & Violet Lantern

Cycle (sec): 100 Critical Vol./Cap.(X): 0.481
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 23 Level Of Service: A

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 0
Y+R: 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0
Lanes: 1 0 1 0 0 0 0 1 0 1 0 0 0 0 1 1 1 0

Volume Module:

Base Vol: 61 63 0 0 47 57 0 0 0 79 1155 67
Growth Adj: 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06
Initial Bse: 64 67 0 0 50 60 0 0 0 83 1219 71
Added Vol: 8 1 0 0 2 0 0 0 0 142 160 21
PasserByVol: 4 0 0 0 0 0 0 0 0 0 92 0
Initial Fut: 76 68 0 0 52 60 0 0 0 225 1471 92
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: 76 68 0 0 52 60 0 0 0 225 1471 92
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 76 68 0 0 52 60 0 0 0 225 1471 92
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: 76 68 0 0 52 60 0 0 0 225 1471 92

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 0.00 0.00 1.00 1.00 0.00 0.00 0.00 0.38 2.47 0.15
Final Sat.: 1700 1700 0 0 1700 1700 0 0 0 643 4196 262

Capacity Analysis Module:

Vol/Sat: 0.04 0.04 0.00 0.00 0.03 0.04 0.00 0.00 0.00 0.13 0.35 0.35
Crit Moves: **** **** ****

Dana Point Town Center - PM Buildout
1-Way + Approved Projects - Year 2015 No Project

Level Of Service Computation Report

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

Intersection #5 PCH & Golden Lantern

Cycle (sec): 100 Critical Vol./Cap.(X): 0.700

Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx

Optimal Cycle: 37 Level Of Service: B

Approach: North Bound South Bound East Bound West Bound

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

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

Control: Protected Permitted Permitted Permitted

Rights: Include Include Include Include

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

Y+R: 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0

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

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

Volume Module:

Base Vol: 253 397 0 0 422 205 0 0 0 223 977 204

Growth Adj: 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06

Initial Bse: 267 419 0 0 446 216 0 0 0 235 1031 215

Added Vol: 57 43 0 0 49 39 0 0 0 19 180 3

PasserByVol: 17 19 0 0 12 10 0 0 0 0 65 0

Initial Fut: 341 481 0 0 507 265 0 0 0 254 1276 218

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: 341 481 0 0 507 265 0 0 0 254 1276 218

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

Reduced Vol: 341 481 0 0 507 265 0 0 0 254 1276 218

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: 341 481 0 0 507 265 0 0 0 254 1276 218

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

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 0.00 0.00 2.00 1.00 0.00 0.00 0.00 1.00 2.56 0.44

Final Sat.: 1700 3400 0 0 3400 1700 0 0 0 1700 4355 745

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

Capacity Analysis Module:

Vol/Sat: 0.20 0.14 0.00 0.00 0.15 0.16 0.00 0.00 0.00 0.15 0.29 0.29

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

Dana Point Town Center - PM Buildout
1-Way + Approved Projects - Year 2015 No Project

Level Of Service Computation Report

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

Intersection #6 PCH & Del Prado

Cycle (sec): 100 Critical Vol./Cap.(X): 0.642
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 180 Level Of Service: B

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Split Phase Split Phase Protected Permitted
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0
Lanes: 0 0 0 0 0 0 0 1! 0 0 1 0 2 0 0 0 0 0 1 1 0

Volume Module:

Base Vol: 0 0 0 17 0 2 38 1585 0 0 1420 47
Growth Adj: 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06
Initial Bse: 0 0 0 18 0 2 40 1673 0 0 1499 50
Added Vol: 0 0 0 0 0 0 6 249 0 0 187 0
PasserByVol: 0 0 0 0 0 0 4 51 0 0 61 0
Initial Fut: 0 0 0 18 0 2 50 1973 0 0 1747 50
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 0 0 18 0 2 50 1973 0 0 1747 50
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 0 0 18 0 2 50 1973 0 0 1747 50
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 0 0 18 0 2 50 1973 0 0 1747 50

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 0.00 0.00 0.89 0.00 0.11 1.00 2.00 0.00 0.00 1.94 0.06
Final Sat.: 0 0 0 1521 0 179 1700 3400 0 0 3306 94

Capacity Analysis Module:

Vol/Sat: 0.00 0.00 0.00 0.01 0.00 0.01 0.03 0.58 0.00 0.00 0.53 0.53
Crit Moves: **** *

Dana Point Town Center - PM Buildout
1-Way + Approved Projects - Year 2015 No Project

Level Of Service Computation Report

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

Intersection #7 PCH & Crystal Lantern

Cycle (sec): 100 Critical Vol./Cap.(X): 0.686
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 90 Level Of Service: B

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 Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0
Lanes: 0 0 1! 0 0 0 1 0 0 1 1 0 1 0 2 0 1

Volume Module:
Base Vol: 11 0 10 96 2 27 33 1488 7 18 1289 83
Growth Adj: 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06
Initial Bse: 12 0 11 101 2 29 35 1571 7 19 1361 88
Added Vol: 0 0 0 0 0 0 0 249 0 0 187 0
PasserByVol: 2 0 0 0 0 4 4 45 2 0 55 0
Initial Fut: 14 0 11 101 2 33 39 1865 9 19 1603 88
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 0 11 101 2 33 39 1865 9 19 1603 88
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 14 0 11 101 2 33 39 1865 9 19 1603 88
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: 14 0 11 101 2 33 39 1865 9 19 1603 88

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: 0.56 0.00 0.44 0.98 0.02 1.00 1.00 1.99 0.01 1.00 2.00 1.00
Final Sat.: 957 0 743 1665 35 1700 1700 3383 17 1700 3400 1700

Capacity Analysis Module:
Vol/Sat: 0.01 0.00 0.01 0.06 0.06 0.02 0.02 0.55 0.55 0.01 0.47 0.05
Crit Moves: **** *

HCM Unsignalized Intersection Capacity Analysis
 9: Del Prado & Ruby Lantern

Year 2015 - No Project
 PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔↕	↗					↕↗			↕↗	
Volume (veh/h)	9	1502	3	0	0	0	0	7	3	47	12	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	9	1502	3	0	0	0	0	7	3	47	12	0
Pedestrians		6			6			9			9	
Lane Width (ft)		11.0			0.0			11.0			11.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		0			0			1			1	
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)		609			735							
pX, platoon unblocked												
vC, conflicting volume	9			1514			1541	1538	766	790	1541	15
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	9			1514			1541	1538	766	790	1541	15
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			100	94	99	82	89	100
cM capacity (veh/h)	1598			434			70	112	343	259	112	1049

Direction, Lane #	EB 1	EB 2	EB 3	NB 1	SB 1
Volume Total	510	1001	3	10	59
Volume Left	9	0	0	0	47
Volume Right	0	0	3	3	0
cSH	1598	1700	1700	141	204
Volume to Capacity	0.01	0.59	0.00	0.07	0.29
Queue Length 95th (ft)	0	0	0	6	29
Control Delay (s)	0.2	0.0	0.0	32.5	29.6
Lane LOS	A			D	D
Approach Delay (s)	0.1			32.5	29.6
Approach LOS				D	D

Intersection Summary		
Average Delay		1.4
Intersection Capacity Utilization	62.3%	ICU Level of Service B
Analysis Period (min)		15

Dana Point Town Center - PM Buildout
1-Way + Approved Projects - Year 2015 No Project

Level Of Service Computation Report

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

Intersection #10 Del Prado & Amber Lantern

Cycle (sec): 100 Critical Vol./Cap.(X): 0.464
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 22 Level Of Service: A

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 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 0 0 0 1 0 0 1 0 0 0 0 1 1 1 0 0 0 0 0 0

Volume Module:

Base Vol: 0 14 33 105 42 0 60 1141 26 0 0 0
Growth Adj: 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06
Initial Bse: 0 15 35 111 44 0 63 1205 27 0 0 0
Added Vol: 0 0 1 28 2 0 34 119 1 0 0 0
PasserByVol: 0 0 0 0 0 0 4 89 0 0 0 0
Initial Fut: 0 15 36 139 46 0 101 1413 28 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 15 36 139 46 0 101 1413 28 0 0 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 15 36 139 46 0 101 1413 28 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 15 36 139 46 0 101 1413 28 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: 0.00 0.29 0.71 0.75 0.25 0.00 0.20 2.75 0.05 0.00 0.00 0.00
Final Sat.: 0 496 1204 1275 425 0 335 4671 94 0 0 0

Capacity Analysis Module:

Vol/Sat: 0.00 0.03 0.03 0.08 0.11 0.00 0.06 0.30 0.30 0.00 0.00 0.00
Crit Moves: **** **** ****

Dana Point Town Center - PM Buildout
1-Way + Approved Projects - Year 2015 No Project

Level Of Service Computation Report

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

Intersection #11 Del Prado & Violet Lantern

Cycle (sec): 100 Critical Vol./Cap.(X): 0.536
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 25 Level Of Service: A

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 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 0 0 0 1 0 0 1 0 0 0 0 1 1 1 0 0 0 0 0 0

Volume Module:

Base Vol: 0 6 5 89 29 0 24 1289 3 0 0 0
Growth Adj: 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06
Initial Bse: 0 6 5 94 31 0 25 1361 3 0 0 0
Added Vol: 0 2 4 146 13 0 9 138 4 0 0 0
PasserByVol: 0 0 0 0 0 0 4 85 0 0 0 0
Initial Fut: 0 8 9 240 44 0 38 1584 7 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 8 9 240 44 0 38 1584 7 0 0 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 8 9 240 44 0 38 1584 7 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 8 9 240 44 0 38 1584 7 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: 0.00 0.47 0.53 0.85 0.15 0.00 0.07 2.92 0.01 0.00 0.00 0.00
Final Sat.: 0 804 896 1439 261 0 120 4958 22 0 0 0

Capacity Analysis Module:

Vol/Sat: 0.00 0.01 0.01 0.14 0.17 0.00 0.02 0.32 0.32 0.00 0.00 0.00
Crit Moves: ****

Dana Point Town Center - PM Buildout
1-Way + Approved Projects - Year 2015 No Project

Level Of Service Computation Report

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

Intersection #12 Del Prado & Golden Lantern

Cycle (sec): 100 Critical Vol./Cap. (X): 0.626
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 31 Level Of Service: B

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Permitted Protected Permitted Permitted
Rights: Ignore Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0
Lanes: 0 0 2 0 1 2 0 1 0 0 1 0 3 0 1 0 0 0 0 0

Volume Module:
Base Vol: 0 466 26 379 231 0 150 1121 103 0 0 0
Growth Adj: 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06
Initial Bse: 0 492 27 400 244 0 158 1183 109 0 0 0
Added Vol: 0 29 1 50 13 0 70 204 27 0 0 0
PasserByVol: 0 27 0 0 12 0 10 55 20 0 0 0
Initial Fut: 0 548 28 450 269 0 238 1442 156 0 0 0
User Adj: 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 548 0 450 269 0 238 1442 156 0 0 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 548 0 450 269 0 238 1442 156 0 0 0
PCE Adj: 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume: 0 548 0 450 269 0 238 1442 156 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: 0.00 2.00 1.00 2.00 1.00 0.00 1.00 3.00 1.00 0.00 0.00 0.00
Final Sat.: 0 3400 1700 3400 1700 0 1700 5100 1700 0 0 0

Capacity Analysis Module:
Vol/Sat: 0.00 0.16 0.00 0.13 0.16 0.00 0.14 0.28 0.09 0.00 0.00 0.00
Crit Moves: ****

YEAR 2015
TWO-WAY OPERATIONS

Dana Point Town Center - AM Buildout
2-Way + Approved Projects - Year 2015

Level Of Service Computation Report

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

Intersection #1 PCH & Blue Lantern

Cycle (sec): 100 Critical Vol./Cap.(X): 0.462
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 22 Level Of Service: A

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			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1	0	1	0	1	0	1	1	0	1

Volume Module:

Base Vol:	48	9	18	40	5	9	7	816	11	34	1071	41
Growth Adj:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Initial Bse:	51	10	19	42	5	10	7	861	12	36	1131	43
Added Vol:	2	0	0	3	0	0	0	75	1	0	44	1
Approved Pr:	4	1	5	0	3	5	7	49	0	10	41	0
Initial Fut:	57	11	24	45	8	15	14	985	13	46	1216	44
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	11	24	45	8	15	14	985	13	46	1216	44
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	57	11	24	45	8	15	14	985	13	46	1216	44
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	11	24	45	8	15	14	985	13	46	1216	44

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	1.00	1.97	0.03	1.00	1.93	0.07
Final Sat.:	1700	1700	1700	1700	1700	1700	1700	3357	43	1700	3280	120

Capacity Analysis Module:

Vol/Sat:	0.03	0.01	0.01	0.03	0.00	0.01	0.01	0.29	0.29	0.03	0.37	0.37
Crit Moves:	****			****			****			****		

Dana Point Town Center - AM Buildout
2-Way + Approved Projects - Year 2015

Level Of Service Computation Report

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

Intersection #2 PCH & Ruby Lantern

Cycle (sec): 100 Critical Vol./Cap.(X): 0.420
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 21 Level Of Service: A

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			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	0	1	0	0	1	0	1	1	0	1

Volume Module:	North Bound			South Bound			East Bound			West Bound		
Base Vol:	5	5	10	7	6	10	8	642	1	10	1027	3
Growth Adj:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Initial Bse:	5	5	11	7	6	11	8	678	1	11	1084	3
Added Vol:	1	0	6	0	0	0	0	68	0	3	32	0
Approved Pr:	11	0	0	0	0	0	0	38	0	0	39	0
Initial Fut:	17	5	17	7	6	11	8	784	1	14	1155	3
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:	17	5	17	7	6	11	8	784	1	14	1155	3
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	17	5	17	7	6	11	8	784	1	14	1155	3
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:	17	5	17	7	6	11	8	784	1	14	1155	3

Saturation Flow Module:	North Bound			South Bound			East Bound			West Bound		
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	0.24	0.76	0.30	0.26	0.44	1.00	1.99	0.01	1.00	1.99	0.01
Final Sat.:	1700	411	1289	517	443	739	1700	3395	5	1700	3391	9

Capacity Analysis Module:	North Bound			South Bound			East Bound			West Bound		
Vol/Sat:	0.01	0.01	0.01	0.00	0.01	0.01	0.00	0.23	0.23	0.01	0.34	0.34
Crit Moves:	****			****			****			****		

Dana Point Town Center - AM Buildout
2-Way + Approved Projects - Year 2015

Level Of Service Computation Report

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

Intersection #3 PCH & Amber Lantern

Cycle (sec): 100 Critical Vol./Cap.(X): 0.505
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 24 Level Of Service: A

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 Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 0 0 1 0 0 0 0 1 1 0 1 0 1 0

Volume Module:

Base Vol: 117 5 20 35 20 25 17 659 17 81 1019 10
Growth Adj: 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06
Initial Bse: 124 5 21 37 21 26 18 696 18 86 1076 11
Added Vol: 11 2 11 7 2 2 3 84 15 17 36 1
Approved Pr: -94 0 0 0 0 0 0 38 0 0 133 0
Initial Fut: 41 7 32 44 23 28 21 818 33 103 1245 12
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: 41 7 32 44 23 28 21 818 33 103 1245 12
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 41 7 32 44 23 28 21 818 33 103 1245 12
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: 41 7 32 44 23 28 21 818 33 103 1245 12

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: 0.51 0.09 0.40 0.46 0.24 0.30 1.00 1.92 0.08 1.00 1.98 0.02
Final Sat.: 862 155 683 783 412 506 1700 3268 132 1700 3369 31

Capacity Analysis Module:

Vol/Sat: 0.02 0.05 0.05 0.03 0.06 0.06 0.01 0.25 0.25 0.06 0.37 0.37
Crit Moves: **** **** **** ****

Dana Point Town Center - AM Buildout
2-Way + Approved Projects - Year 2015

Level Of Service Computation Report

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

Intersection #4 PCH & Violet Lantern

Cycle (sec): 100 Critical Vol./Cap.(X): 0.531
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 25 Level Of Service: A

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
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	1! 0 0	0	0	1! 0 0	0	1	0 1 0	0	1	0 1 0

Volume Module:

Base Vol:	136	7	11	13	11	21	17	704	1	58	956	14
Growth Adj:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Initial Bse:	144	7	12	14	12	22	18	743	1	61	1009	15
Added Vol:	6	2	30	2	1	0	0	98	5	22	52	0
Approved Pr:	-127	0	0	0	0	0	0	38	0	0	260	0
Initial Fut:	23	9	42	16	13	22	18	879	6	83	1321	15
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	9	42	16	13	22	18	879	6	83	1321	15
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	23	9	42	16	13	22	18	879	6	83	1321	15
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	9	42	16	13	22	18	879	6	83	1321	15

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:	0.31	0.13	0.56	0.31	0.25	0.44	0.04	1.95	0.01	0.12	1.86	0.02
Final Sat.:	522	217	961	529	425	746	68	3310	23	199	3165	35

Capacity Analysis Module:

Vol/Sat:	0.01	0.04	0.04	0.01	0.03	0.03	0.01	0.27	0.27	0.05	0.42	0.42
Crit Moves:	****			****			****			****		

Dana Point Town Center - AM Buildout
2-Way + Approved Projects - Year 2015

Level Of Service Computation Report

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

Intersection #5 PCH & Golden Lantern

Cycle (sec):	100	Critical Vol./Cap.(X):	0.672
Loss Time (sec):	5	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	34	Level Of Service:	B

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
Y+R:	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0
Lanes:	1 0 1 1 0	2 0 1 0 1	1 0 1 1 0	1 0 1 1 0

Volume Module:

Base Vol:	26 65 31	331 170 179	51 574 95	68 927 113
Growth Adj:	1.06 1.06 1.06	1.06 1.06 1.06	1.06 1.06 1.06	1.06 1.06 1.06
Initial Bse:	27 69 33	349 179 189	54 606 100	72 979 119
Added Vol:	19 6 3	5 6 12	15 50 7	1 103 0
Approved Pr:	8 8 0	0 8 4	4 26 8	0 248 0
Initial Fut:	54 83 36	354 193 205	73 682 115	73 1330 119
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:	54 83 36	354 193 205	73 682 115	73 1330 119
Reduct Vol:	0 0 0	0 0 0	0 0 0	0 0 0
Reduced Vol:	54 83 36	354 193 205	73 682 115	73 1330 119
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:	54 83 36	354 193 205	73 682 115	73 1330 119

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 1.40 0.60	2.00 1.00 1.00	1.00 1.71 0.29	1.00 1.84 0.16
Final Sat.:	1700 2374 1026	3400 1700 1700	1700 2908 492	1700 3120 280

Capacity Analysis Module:

Vol/Sat:	0.03 0.03 0.03	0.10 0.11 0.12	0.04 0.23 0.23	0.04 0.43 0.43
Crit Moves:	****	****	****	****

Dana Point Town Center - AM Buildout
2-Way + Approved Projects - Year 2015

Level Of Service Computation Report

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

Intersection #6 PCH & Del Prado

Cycle (sec): 100 Critical Vol./Cap.(X): 0.525
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 25 Level Of Service: A

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module table with 13 columns and 15 rows including Base Vol, Growth Adj, Initial Bse, Added Vol, etc.

Saturation Flow Module table with 13 columns and 5 rows including Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with 13 columns and 4 rows including Vol/Sat, OvlAdjV/S, and Crit Moves.

Dana Point Town Center - AM Buildout
2-Way + Approved Projects - Year 2015

Level Of Service Computation Report

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

Intersection #7 PCH & Crystal Lantern

Cycle (sec): 100 Critical Vol./Cap.(X): 0.599
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 90 Level Of Service: A

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 Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 0 0 1 0 0 0 1 0 1 1 0 1 0 2 0 1

Volume Module:
Base Vol: 4 1 6 105 2 20 16 1060 7 9 1332 62
Growth Adj: 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06
Initial Bse: 4 1 6 111 2 21 17 1119 7 10 1406 65
Added Vol: 0 0 0 0 0 0 0 91 0 0 152 0
Approved Pr: 1 0 0 0 0 2 2 28 1 0 25 0
Initial Fut: 5 1 6 111 2 23 19 1238 8 10 1583 65
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: 5 1 6 111 2 23 19 1238 8 10 1583 65
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 5 1 6 111 2 23 19 1238 8 10 1583 65
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: 5 1 6 111 2 23 19 1238 8 10 1583 65

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: 0.41 0.08 0.51 0.98 0.02 1.00 1.00 1.99 0.01 1.00 2.00 1.00
Final Sat.: 704 142 854 1668 32 1700 1700 3377 23 1700 3400 1700

Capacity Analysis Module:
Vol/Sat: 0.00 0.01 0.01 0.07 0.07 0.01 0.01 0.37 0.37 0.01 0.47 0.04
Crit Moves: **** * 0.01 0.01 0.37 0.37 0.01 0.47 0.04 ****

HCM Unsignalized Intersection Capacity Analysis
 9: Del Prado & Ruby Lantern

Year 2015 - With Project
 AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	3	251	2	11	120	17	3	19	6	23	8	5
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	3	251	2	11	120	17	3	19	6	23	8	5

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	256	148	28	36
Volume Left (vph)	3	11	3	23
Volume Right (vph)	2	17	6	5
Hadj (s)	0.10	0.04	-0.07	0.08
Departure Headway (s)	4.3	4.4	4.8	4.9
Degree Utilization, x	0.31	0.18	0.04	0.05
Capacity (veh/h)	817	794	687	666
Control Delay (s)	9.2	8.3	8.0	8.2
Approach Delay (s)	9.2	8.3	8.0	8.2
Approach LOS	A	A	A	A

Intersection Summary			
Delay		8.8	
HCM Level of Service		A	
Intersection Capacity Utilization		29.9%	ICU Level of Service A
Analysis Period (min)		15	

HCM Unsignalized Intersection Capacity Analysis
 10: Del Prado & Amber Lantern

Year 2015 - With Project
 AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	36	254	6	29	132	21	5	35	10	79	19	11
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	36	254	6	29	132	21	5	35	10	79	19	11

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	296	182	50	109
Volume Left (vph)	36	29	5	79
Volume Right (vph)	6	21	10	11
Hadj (s)	0.10	0.05	-0.07	0.12
Departure Headway (s)	4.7	4.7	5.2	5.2
Degree Utilization, x	0.38	0.24	0.07	0.16
Capacity (veh/h)	737	720	624	623
Control Delay (s)	10.5	9.2	8.6	9.2
Approach Delay (s)	10.5	9.2	8.6	9.2
Approach LOS	B	A	A	A

Intersection Summary			
Delay		9.8	
HCM Level of Service		A	
Intersection Capacity Utilization	39.1%		ICU Level of Service A
Analysis Period (min)		15	

HCM Unsignalized Intersection Capacity Analysis
 11: Del Prado & Violet Lantern

Year 2015 - With Project
 AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	9	277	2	22	159	11	7	24	12	47	14	8
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	9	277	2	22	159	11	7	24	12	47	14	8

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	288	192	43	69
Volume Left (vph)	9	22	7	47
Volume Right (vph)	2	11	12	8
Hadj (s)	0.10	0.08	-0.10	0.10
Departure Headway (s)	4.5	4.6	5.0	5.2
Degree Utilization, x	0.36	0.25	0.06	0.10
Capacity (veh/h)	773	747	642	626
Control Delay (s)	10.1	9.1	8.3	8.8
Approach Delay (s)	10.1	9.1	8.3	8.8
Approach LOS	B	A	A	A

Intersection Summary			
Delay		9.5	
HCM Level of Service		A	
Intersection Capacity Utilization		37.0%	ICU Level of Service A
Analysis Period (min)		15	

Dana Point Town Center - AM Buildout
2-Way + Approved Projects - Year 2015

Level Of Service Computation Report

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

Intersection #12 Del Prado & Golden Lantern

Cycle (sec): 100 Critical Vol./Cap.(X): 0.378
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 19 Level Of Service: A

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
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 1 1 0 1 0 1 1 0 1 0 0 1 0 1 0 1 0 1

Volume Module:

Base Vol: 50 181 10 10 272 60 17 191 32 23 309 38
Growth Adj: 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06
Initial Bse: 53 191 11 11 287 63 18 202 34 24 326 40
Added Vol: 4 20 0 7 9 4 5 33 6 0 39 4
Approved Pr: 3 15 0 0 15 1 1 7 3 0 -218 0
Initial Fut: 60 226 11 18 311 68 24 242 43 24 147 44
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: 60 226 11 18 311 68 24 242 43 24 147 44
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 60 226 11 18 311 68 24 242 43 24 147 44
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: 60 226 11 18 311 68 24 242 43 24 147 44

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 1.91 0.09 1.00 1.64 0.36 1.00 0.85 0.15 1.00 1.00 1.00
Final Sat.: 1700 3248 152 1700 2788 612 1700 1444 256 1700 1700 1700

Capacity Analysis Module:

Vol/Sat: 0.04 0.07 0.07 0.01 0.11 0.11 0.01 0.17 0.17 0.01 0.09 0.03
Crit Moves: **** **** **** ****

Dana Point Town Center - AM Buildout
2-Way + Approved Projects - Year 2015

Level Of Service Computation Report

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

Intersection #13 Del Prado at PCH

Cycle (sec): 100 Critical Vol./Cap.(X): 0.488
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 23 Level Of Service: A

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Split Phase Split Phase Permitted Permitted
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 0 0 1 0 0 0 0 0 0 0 1 1 0 0 0 2 0 0

Volume Module:
Base Vol: 104 0 5 0 0 0 0 0 656 218 0 1146 0
Growth Adj: 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06
Initial Bse: 110 0 5 0 0 0 0 0 693 230 0 1210 0
Added Vol: 14 0 0 0 0 0 0 0 68 10 0 31 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 124 0 5 0 0 0 0 0 761 240 0 1241 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 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: 124 0 5 0 0 0 0 0 761 240 0 1241 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 124 0 5 0 0 0 0 0 761 240 0 1241 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 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: 124 0 5 0 0 0 0 0 761 240 0 1241 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 0.00 1.00 0.00 0.00 0.00 0.00 0.00 1.52 0.48 0.00 2.00 0.00
Final Sat.: 1700 0 1700 0 0 0 0 0 2584 816 0 3400 0

Capacity Analysis Module:
Vol/Sat: 0.07 0.00 0.00 0.00 0.00 0.00 0.00 0.29 0.29 0.00 0.36 0.00
Crit Moves: ****

Dana Point Town Center - PM Buildout
2-Way + Approved Projects - Year 2015

Level Of Service Computation Report

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

Intersection #1 PCH & Blue Lantern

Cycle (sec): 100 Critical Vol./Cap.(X): 0.566
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 27 Level Of Service: A

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			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1	0	1	1	1	0	1	1	0	1

Volume Module:

Base Vol:	61	25	52	35	8	4	14	1146	10	72	1024	52
Growth Adj:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Initial Bse:	64	26	55	37	8	4	15	1210	11	76	1081	55
Added Vol:	4	0	0	4	0	0	0	90	4	0	121	5
Approved Pr:	13	4	15	0	3	16	10	79	0	12	93	0
Initial Fut:	81	30	70	41	11	20	25	1379	15	88	1295	60
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:	81	30	70	41	11	20	25	1379	15	88	1295	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	81	30	70	41	11	20	25	1379	15	88	1295	60
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:	81	30	70	41	11	20	25	1379	15	88	1295	60

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	1.00	1.98	0.02	1.00	1.91	0.09
Final Sat.:	1700	1700	1700	1700	1700	1700	1700	3364	36	1700	3250	150

Capacity Analysis Module:

Vol/Sat:	0.05	0.02	0.04	0.02	0.01	0.01	0.01	0.41	0.41	0.05	0.40	0.40
Crit Moves:	****				****			****		****		

Dana Point Town Center - PM Buildout
2-Way + Approved Projects - Year 2015

Level Of Service Computation Report

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

Intersection #2 PCH & Ruby Lantern

Cycle (sec): 100 Critical Vol./Cap.(X): 0.484
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 23 Level Of Service: A

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 Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 0 1 0 0 0 1 1 0 1 0 1 1 0

Volume Module:
Base Vol: 5 2 6 16 13 22 9 914 2 7 1054 5
Growth Adj: 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06
Initial Bse: 5 2 6 17 14 23 10 965 2 7 1113 5
Added Vol: 0 0 11 0 0 0 0 64 0 13 100 0
Approved Pr: 22 0 0 0 0 0 0 67 0 0 78 0
Initial Fut: 27 2 17 17 14 23 10 1096 2 20 1291 5
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: 27 2 17 17 14 23 10 1096 2 20 1291 5
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 27 2 17 17 14 23 10 1096 2 20 1291 5
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: 27 2 17 17 14 23 10 1096 2 20 1291 5

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 0.11 0.89 0.31 0.25 0.44 1.00 1.99 0.01 1.00 1.99 0.01
Final Sat.: 1700 185 1515 533 433 733 1700 3393 7 1700 3386 14

Capacity Analysis Module:
Vol/Sat: 0.02 0.01 0.01 0.01 0.03 0.03 0.01 0.32 0.32 0.01 0.38 0.38
Crit Moves: ****

Dana Point Town Center - PM Buildout
2-Way + Approved Projects - Year 2015

Level Of Service Computation Report

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

Intersection #3 PCH & Amber Lantern

Cycle (sec): 100 Critical Vol./Cap.(X): 0.567
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 27 Level Of Service: A

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 Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 0 0 1! 0 0 0 0 1! 0 0 1 0 1 1 0 1 0 1 1 0

Volume Module:

Base Vol: 134 9 25 39 17 11 45 856 20 64 921 35
Growth Adj: 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06
Initial Bse: 141 10 26 41 18 12 48 904 21 68 972 37
Added Vol: 29 5 26 3 4 4 4 84 26 34 114 7
Approved Pr: -116 0 0 0 0 0 0 67 0 0 194 0
Initial Fut: 54 15 52 44 22 16 52 1055 47 102 1280 44
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: 54 15 52 44 22 16 52 1055 47 102 1280 44
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 54 15 52 44 22 16 52 1055 47 102 1280 44
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: 54 15 52 44 22 16 52 1055 47 102 1280 44

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: 0.45 0.12 0.43 0.54 0.27 0.19 1.00 1.91 0.09 1.00 1.93 0.07
Final Sat.: 763 203 734 919 456 325 1700 3255 145 1700 3287 113

Capacity Analysis Module:

Vol/Sat: 0.03 0.07 0.07 0.03 0.05 0.05 0.03 0.32 0.32 0.06 0.39 0.39
Crit Moves: **** **** **** ****

Dana Point Town Center - PM Buildout
2-Way + Approved Projects - Year 2015

Level Of Service Computation Report

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

Intersection #4 PCH & Violet Lantern

Cycle (sec): 100 Critical Vol./Cap.(X): 0.641
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 32 Level Of Service: B

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
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 0 0 1! 0 0 0 0 1! 0 0 0 0 1 0 1 0 0 1 0 1 0

Volume Module:

Base Vol: 160 62 4 35 26 43 18 967 2 59 866 50
Growth Adj: 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06
Initial Bse: 169 65 4 37 27 45 19 1021 2 62 914 53
Added Vol: 14 3 50 1 3 0 0 129 9 60 138 2
Approved Pr: -133 0 0 0 0 0 0 67 0 -5 327 0
Initial Fut: 50 68 54 38 30 45 19 1217 11 117 1379 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: 50 68 54 38 30 45 19 1217 11 117 1379 55
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 50 68 54 38 30 45 19 1217 11 117 1379 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
FinalVolume: 50 68 54 38 30 45 19 1217 11 117 1379 55

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: 0.29 0.40 0.31 0.33 0.27 0.40 0.03 1.95 0.02 0.15 1.78 0.07
Final Sat.: 492 674 534 567 455 678 52 3318 30 257 3023 120

Capacity Analysis Module:

Vol/Sat: 0.03 0.10 0.10 0.02 0.07 0.07 0.01 0.37 0.37 0.07 0.46 0.46
Crit Moves: **** **** **** ****

Dana Point Town Center - PM Buildout
2-Way + Approved Projects - Year 2015

Level Of Service Computation Report

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

Intersection #5 PCH & Golden Lantern

Cycle (sec): 100 Critical Vol./Cap.(X): 0.738
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 42 Level Of Service: C

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
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1	1	0	1	1	0	1	1	0	1

Volume Module:

Base Vol:	137	336	20	317	157	154	113	841	77	167	733	153
Growth Adj:	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
Initial Bse:	145	355	21	335	166	163	119	888	81	176	774	162
Added Vol:	18	11	2	29	22	26	44	136	16	5	119	2
Approved Pr:	-3	2	0	-40	4	-2	-13	25	5	-30	276	-10
Initial Fut:	160	368	23	324	192	187	150	1049	102	151	1169	154
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:	160	368	23	324	192	187	150	1049	102	151	1169	154
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	160	368	23	324	192	187	150	1049	102	151	1169	154
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:	160	368	23	324	192	187	150	1049	102	151	1169	154

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	1.88	0.12	2.00	1.00	1.00	1.00	1.82	0.18	1.00	1.77	0.23
Final Sat.:	1700	3199	201	3400	1700	1700	1700	3098	302	1700	3005	395

Capacity Analysis Module:

Vol/Sat:	0.09	0.11	0.11	0.10	0.11	0.11	0.09	0.34	0.34	0.09	0.39	0.39
Crit Moves:	****			****			****			****		

Dana Point Town Center - PM Buildout
2-Way + Approved Projects - Year 2015

Level Of Service Computation Report

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

Intersection #6 PCH & Del Prado

Cycle (sec): 100 Critical Vol./Cap.(X): 0.651
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 33 Level Of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Approach, Movement, Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module:

Table with 12 columns representing different volume categories and 13 rows of data including Base Vol, Growth Adj, Initial Bse, Added Vol, etc.

Saturation Flow Module:

Table with 12 columns and 4 rows of data including Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module:

Table with 12 columns and 3 rows of data including Vol/Sat, OvlAdjV/S, and Crit Moves.

Dana Point Town Center - PM Buildout
2-Way + Approved Projects - Year 2015

Level Of Service Computation Report

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

Intersection #7 PCH & Crystal Lantern

Cycle (sec): 100 Critical Vol./Cap.(X): 0.687
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 90 Level Of Service: B

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 Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 0 0 1! 0 0 0 1 0 0 1 1 0 1 0 2 0 1

Volume Module:

Base Vol: 11 0 10 96 2 27 33 1488 7 18 1289 83
Growth Adj: 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06
Initial Bse: 12 0 11 101 2 29 35 1571 7 19 1361 88
Added Vol: 0 0 0 0 0 0 0 250 0 0 187 0
Approved Pr: 2 0 0 0 0 0 4 4 45 2 0 55 0
Initial Fut: 14 0 11 101 2 33 39 1866 9 19 1603 88
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 0 11 101 2 33 39 1866 9 19 1603 88
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 14 0 11 101 2 33 39 1866 9 19 1603 88
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: 14 0 11 101 2 33 39 1866 9 19 1603 88

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: 0.56 0.00 0.44 0.98 0.02 1.00 1.00 1.99 0.01 1.00 2.00 1.00
Final Sat.: 957 0 743 1665 35 1700 1700 3383 17 1700 3400 1700

Capacity Analysis Module:

Vol/Sat: 0.01 0.00 0.01 0.06 0.06 0.02 0.02 0.55 0.55 0.01 0.47 0.05
Crit Moves: **** *

HCM Unsignalized Intersection Capacity Analysis
 9: Del Prado & Ruby Lantern

Year 2015 - With Project
 PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	3	356	5	16	95	28	3	16	7	37	19	5
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	3	356	5	16	95	28	3	16	7	37	19	5

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	364	139	26	61
Volume Left (vph)	3	16	3	37
Volume Right (vph)	5	28	7	5
Hadj (s)	0.09	-0.02	-0.10	0.11
Departure Headway (s)	4.4	4.5	5.0	5.2
Degree Utilization, x	0.44	0.17	0.04	0.09
Capacity (veh/h)	806	762	638	625
Control Delay (s)	10.8	8.5	8.2	8.7
Approach Delay (s)	10.8	8.5	8.2	8.7
Approach LOS	B	A	A	A

Intersection Summary			
Delay		9.9	
HCM Level of Service		A	
Intersection Capacity Utilization		36.9%	ICU Level of Service
Analysis Period (min)		15	A

HCM Unsignalized Intersection Capacity Analysis
 10: Del Prado & Amber Lantern

Year 2015 - With Project
 PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	28	348	9	27	119	12	6	40	12	86	45	13
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	28	348	9	27	119	12	6	40	12	86	45	13

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	385	158	58	144
Volume Left (vph)	28	27	6	86
Volume Right (vph)	9	12	12	13
Hadj (s)	0.10	0.07	-0.07	0.10
Departure Headway (s)	4.8	5.0	5.4	5.4
Degree Utilization, x	0.51	0.22	0.09	0.22
Capacity (veh/h)	722	668	575	599
Control Delay (s)	12.7	9.5	8.9	9.9
Approach Delay (s)	12.7	9.5	8.9	9.9
Approach LOS	B	A	A	A

Intersection Summary			
Delay		11.2	
HCM Level of Service		B	
Intersection Capacity Utilization	44.3%		ICU Level of Service A
Analysis Period (min)		15	

HCM Unsignalized Intersection Capacity Analysis
 11: Del Prado & Violet Lantern

Year 2015 - With Project
 PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	14	391	9	28	132	13	9	22	5	99	26	16
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	14	391	9	28	132	13	9	22	5	99	26	16

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	414	173	36	141
Volume Left (vph)	14	28	9	99
Volume Right (vph)	9	13	5	16
Hadj (s)	0.09	0.07	0.00	0.11
Departure Headway (s)	4.7	5.0	5.6	5.5
Degree Utilization, x	0.55	0.24	0.06	0.22
Capacity (veh/h)	733	679	553	591
Control Delay (s)	13.3	9.6	8.9	10.0
Approach Delay (s)	13.3	9.6	8.9	10.0
Approach LOS	B	A	A	B

Intersection Summary

Delay		11.6		
HCM Level of Service		B		
Intersection Capacity Utilization		44.4%	ICU Level of Service	A
Analysis Period (min)		15		

Dana Point Town Center - PM Buildout
2-Way + Approved Projects - Year 2015

Level Of Service Computation Report

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

Intersection #12 Del Prado & Golden Lantern

Cycle (sec): 100 Critical Vol./Cap.(X): 0.527
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 25 Level Of Service: A

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
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 1 1 0 1 0 1 1 0 1 0 1 0 1 0 1 0 1

Volume Module:

Base Vol: 117 369 7 63 253 51 38 280 26 56 244 51
Growth Adj: 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06
Initial Bse: 124 390 7 67 267 54 40 296 27 59 258 54
Added Vol: 10 19 0 8 29 9 10 73 10 0 59 8
Approved Pr: 4 23 0 0 27 2 3 10 5 0 -241 0
Initial Fut: 138 432 7 75 323 65 53 379 42 59 76 62
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: 138 432 7 75 323 65 53 379 42 59 76 62
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 138 432 7 75 323 65 53 379 42 59 76 62
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: 138 432 7 75 323 65 53 379 42 59 76 62

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 1.97 0.03 1.00 1.67 0.33 1.00 0.90 0.10 1.00 1.00 1.00
Final Sat.: 1700 3343 57 1700 2832 568 1700 1529 171 1700 1700 1700

Capacity Analysis Module:

Vol/Sat: 0.08 0.13 0.13 0.04 0.11 0.11 0.03 0.25 0.25 0.03 0.04 0.04
Crit Moves: **** **** **** ****

Dana Point Town Center - PM Buildout
2-Way + Approved Projects - Year 2015

Level Of Service Computation Report

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

Intersection #13 Del Prado at PCH

Cycle (sec): 100 Critical Vol./Cap.(X): 0.518
Loss Time (sec): 5 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 24 Level Of Service: A

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Split Phase Split Phase Permitted Permitted
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 0 0 1 0 0 0 0 0 0 0 1 1 0 0

Volume Module:
Base Vol: 67 0 5 0 0 0 0 943 290 0 1148 0
Growth Adj: 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06 1.06
Initial Bse: 71 0 5 0 0 0 0 996 306 0 1212 0
Added Vol: 27 0 0 0 0 0 0 62 31 1 99 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 -1 0 0
Initial Fut: 98 0 5 0 0 0 0 1058 337 0 1311 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: 98 0 5 0 0 0 0 1058 337 0 1311 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 98 0 5 0 0 0 0 1058 337 0 1311 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: 98 0 5 0 0 0 0 1058 337 0 1311 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 0.00 1.00 0.00 0.00 0.00 0.00 1.52 0.48 0.00 2.00 0.00
Final Sat.: 1700 0 1700 0 0 0 0 2578 822 0 3400 0

Capacity Analysis Module:
Vol/Sat: 0.06 0.00 0.00 0.00 0.00 0.00 0.00 0.41 0.41 0.00 0.39 0.00
Crit Moves: **** **** ****
