

16. 2035 Build-Out LOS Analysis – HCM Methodology



2010 San Juan Capistrano Master Plan - HCM Method
2035 Conditions with the Master Plan Projects
AM Peak Weekday

Level of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Rancho Viejo/Ortega Hwy

Cycle (sec): 130 Critical Vol./Cap.(X): 0.827
Loss Time (sec): 5 Average Delay (sec/veh): 34.3
Optimal Cycle: 64 Level Of Service: C

Table with columns for Street Name (Rancho Viejo Rd, Ortega Hwy), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Split Phase, Protected), Rights (Include, Ovl), and various timing parameters like Min. Green, Y+R, and Lanes.

Volume Module: 2035 Base AM. Table showing traffic volume data 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, and Final Volume across different movements.

Saturation Flow Module. Table showing saturation flow data including Sat/Lane, Adjustment, Lanes, and Final Sat. values for each movement.

Capacity Analysis Module. Table showing capacity analysis data including Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, and HCM2kAvgQ for each movement.

2010 San Juan Capistrano Master Plan - HCM Method
2035 Conditions with the Master Plan Projects
AM Peak Weekday

Level of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 I-5 SB Ramps/Ortega Hwy

Cycle (sec): 100 Critical Vol./Cap.(X): 0.846
Loss Time (sec): 5 Average Delay (sec/veh): 28.9
Optimal Cycle: 66 Level Of Service: C

Table with columns for Street Name (I-5 SB Ramps, Ortega Hwy), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Split Phase, Permitted, Protected), Rights (Include, Ovl, Include), and various traffic metrics like Min. Green, Y+R, and Lanes.

Volume Module: 2035 am base. Table showing traffic volume data for various approaches and movements, 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, and Final Volume.

Saturation Flow Module. Table showing saturation flow data for various approaches and movements, including Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module. Table showing capacity analysis data for various approaches and movements, including Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, and HCM2kAvgQ.

2010 San Juan Capistrano Master Plan - HCM Method
2035 Conditions with the Master Plan Projects
AM Peak Weekday

Level of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #6 El Cerritos-NB Ramp/Ortega Hwy

Cycle (sec): 120 Critical Vol./Cap.(X): 0.852
Loss Time (sec): 10 Average Delay (sec/veh): 47.0
Optimal Cycle: 91 Level Of Service: D

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, and Lanes. Rows include El Cerritos-I-5 NB Ramps and Ortega Highway with various movement details.

Volume Module: 2035 base am. Table showing traffic volume data 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, and Final Volume.

Saturation Flow Module. Table showing saturation flow data including Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module. Table showing capacity analysis data including Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, and HCM2kAvgQ.

2010 San Juan Capistrano Master Plan - HCM Method
2035 Conditions with the Master Plan Projects
AM Peak Weekday

Level of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #9 Del Obispo/Ortega Hwy

Cycle (sec): 120 Critical Vol./Cap.(X): 0.587
Loss Time (sec): 10 Average Delay (sec/veh): 23.6
Optimal Cycle: 50 Level Of Service: C

Street Name: Del Obispo St/Ortega Hwy East Ortega Hwy West
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: 10 10 10 10 10 10 10 10 10 10 10 10
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 1 0 1 0 2 0 1 0 0 0 1! 0 0

Volume Module:New 2035 am base

Base Vol: 84 1050 11 11 1379 481 336 11 54 11 11 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: 84 1050 11 11 1379 481 336 11 54 11 11 11
Added Vol: -27 -105 0 0 -46 35 13 0 -28 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 57 945 11 11 1333 516 349 11 26 11 11 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: 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95
PHF Volume: 60 995 12 12 1403 543 367 12 27 12 12 12
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 60 995 12 12 1403 543 367 12 27 12 12 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: 60 995 12 12 1403 543 367 12 27 12 12 12

Saturation Flow Module:

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.90 0.91 0.91 0.90 1.00 0.85 0.85 0.90 0.90 0.89 0.94 0.94
Lanes: 1.00 2.97 0.03 1.00 2.00 1.00 2.00 0.30 0.70 0.34 0.33 0.33
Final Sat.: 1710 5117 60 1710 3800 1615 3230 506 1195 584 584 584

Capacity Analysis Module:

Vol/Sat: 0.04 0.19 0.19 0.01 0.37 0.34 0.11 0.02 0.02 0.02 0.02 0.02
Crit Moves: **** **** **** ****
Green/Cycle: 0.08 0.46 0.46 0.20 0.57 0.57 0.18 0.18 0.18 0.08 0.08 0.08
Volume/Cap: 0.42 0.42 0.42 0.03 0.64 0.59 0.64 0.13 0.13 0.24 0.24 0.24
Delay/Veh: 54.3 21.9 21.9 39.0 18.0 17.4 48.4 41.8 41.8 52.3 52.3 52.3
User DelAdj: 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: 54.3 21.9 21.9 39.0 18.0 17.4 48.4 41.8 41.8 52.3 52.3 52.3
LOS by Move: D C C D B B D D D D D D
HCM2kAvgQ: 3 9 9 0 18 13 8 1 1 1 1 1

2010 San Juan Capistrano Master Plan - HCM Method
2035 Conditions with the Master Plan Projects
AM Peak Weekday

Level of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #10 El Camino Real/Ortega Hwy

Cycle (sec): 90 Critical Vol./Cap.(X): 0.930
Loss Time (sec): 5 Average Delay (sec/veh): 29.3
Optimal Cycle: 107 Level Of Service: C

Table with columns for Street Name (El Camino Real, Ortega Hwy), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control, Rights, Min. Green, Y+R, and Lanes.

Table for Volume Module: New 2035 am base, showing 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, and Final Volume.

Table for Saturation Flow Module, showing Sat/Lane, Adjustment, Lanes, and Final Sat.

Table for Capacity Analysis Module, showing Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, and HCM2kAvgQ.

2010 San Juan Capistrano Master Plan - HCM Method
2035 Conditions with the Master Plan Projects
AM Peak Weekday

Level of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #11 Camino Capistrano/Ortega Hwy

Cycle (sec): 100 Critical Vol./Cap.(X): 0.666
Loss Time (sec): 5 Average Delay (sec/veh): 24.0
Optimal Cycle: 45 Level Of Service: C

Table with columns for Street Name (Camino Capistrano, Ortega Hwy), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted, Protected, Split Phase), Rights (Ovl, Include), and various traffic volume and timing metrics.

Volume Module: New 2035 am base. Table showing 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, and Final Volume across different approaches.

Saturation Flow Module. Table showing Sat/Lane, Adjustment, Lanes, and Final Sat. for each approach.

Capacity Analysis Module. Table showing Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, and HCM2kAvgQ for each approach.

2010 San Juan Capistrano Master Plan - HCM Method
2035 Conditions with the Master Plan Projects
AM Peak Weekday

Level of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #17 Camino Capistrano/Verdugo St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.468
Loss Time (sec): 5 Average Delay (sec/veh): 9.5
Optimal Cycle: 45 Level Of Service: A

Table with columns for Street Name (Camino Capistrano, Verdugo St), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Protected, Split Phase), Rights (Include), and traffic volume metrics (Min. Green, Y+R, Lanes).

Table for Volume Module: New 2035 am base, showing various traffic volume and adjustment factors across different approaches and movements.

Table for Saturation Flow Module, showing saturation flow rates and adjustment factors for different lane configurations.

Table for Capacity Analysis Module, showing capacity analysis metrics such as Vol/Sat, Crit Moves, Green/Cycle, and Delay/Veh.

2010 San Juan Capistrano Master Plan - HCM Method
2035 Conditions with the Master Plan Projects
AM Peak Weekday

Level of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #48 Camino Capistrano/Forster Ln

Average Delay (sec/veh): 2.6 Worst Case Level Of Service: E[40.2]

Table with columns for Street Name (Camino Capistrano, Forster Lane), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control, Rights, and Lanes.

Table for Volume Module: 2035 am base, showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, and Final Volume across various movements.

Table for Critical Gap Module, showing Critical Gp and FollowUpTim for different movements.

Table for Capacity Module, showing Cnflct Vol, Potent Cap., Move Cap., and Volume/Cap for different movements.

Table for Level of Service Module, showing 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., SharedQueue, Shrd ConDel, Shared LOS, ApproachDel, and ApproachLOS.

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

2010 San Juan Capistrano Master Plan - HCM Method
2035 Conditions with the Master Plan Projects
AM Peak Weekday

Level of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #56 Plaza Dr/Del Obispo St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.401
Loss Time (sec): 6 Average Delay (sec/veh): 17.0
Optimal Cycle: 46 Level Of Service: B

Table with columns for Street Name (Plaza Dr, Del Obispo St), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Split Phase, Protected), Rights (Include), and various timing parameters like Min. Green, Y+R, and Lanes.

Table for Volume Module: New 2035 am base, showing 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, and Final Volume across different movements.

Table for Saturation Flow Module, showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for each movement.

Table for Capacity Analysis Module, showing Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, and HCM2kAvgQ values.

2010 San Juan Capistrano Master Plan - HCM Method
2035 Conditions with the Master Plan Projects
AM Peak Weekday

Level of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #58 Camino Capistrano/Del Obispo

Cycle (sec): 130 Critical Vol./Cap.(X): 0.673
Loss Time (sec): 5 Average Delay (sec/veh): 39.8
Optimal Cycle: 45 Level Of Service: D

Table with columns for Street Name (Camino Capistrano, Del Obispo St), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control, Rights, Min. Green, Y+R, and Lanes.

Table for Volume Module: New 2035 am base, showing 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, and Final Volume.

Table for Saturation Flow Module, showing Sat/Lane, Adjustment, Lanes, and Final Sat.

Table for Capacity Analysis Module, showing Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, and HCM2kAvgQ.

2010 San Juan Capistrano Master Plan - HCM Method
2035 Conditions with the Master Plan Projects
AM Peak Weekday

Level of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #63 Paseo Adelanto/Del Obispo

Cycle (sec): 100 Critical Vol./Cap.(X): 0.475
Loss Time (sec): 5 Average Delay (sec/veh): 15.1
Optimal Cycle: 35 Level Of Service: B

Table with columns for Street Name (Paseo Adelanto, Del Obispo), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control, Rights, Min. Green, Y+R, and Lanes.

Table for Volume Module: 2035 am base, showing 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, and Final Volume.

Table for Saturation Flow Module, showing Sat/Lane, Adjustment, Lanes, and Final Sat.

Table for Capacity Analysis Module, showing Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, and HCM2kAvgQ.

2010 San Juan Capistrano Master Plan - HCM Method
2035 Conditions with the Master Plan Projects
AM Peak Weekday

Level of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #66 Alipaz St/Del Obispo

Cycle (sec): 100 Critical Vol./Cap.(X): 0.581
Loss Time (sec): 5 Average Delay (sec/veh): 26.3
Optimal Cycle: 45 Level Of Service: C

Table with columns for Street Name (Alipaz St, Del Obispo St), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Split Phase, Protected), Rights (Ovl, Include), and various traffic metrics like Min. Green, Y+R, and Lanes.

Volume Module:2035 am base

Table showing traffic volume data 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, and Final Volume for various movements.

Saturation Flow Module:

Table showing saturation flow data including Sat/Lane, Adjustment, Lanes, and Final Sat for different movements.

Capacity Analysis Module:

Table showing capacity analysis data including Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, and HCM2kAvgQ for various movements.

2010 San Juan Capistrano Master Plan - HCM Method
2035 Conditions with the Master Plan Projects
AM Peak Weekday

Level of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #85 Camino Capistrano/Ave Golondrina

Cycle (sec): 100 Critical Vol./Cap.(X): 0.403
Loss Time (sec): 5 Average Delay (sec/veh): 16.8
Optimal Cycle: 35 Level Of Service: B

Table with columns for Street Name (Camino Capistrano, Avenida Golondrina), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module:2035 am base

Table with 13 columns showing traffic volume metrics: 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 showing saturation flow metrics: Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module:

Table with 13 columns showing capacity analysis metrics: Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, HCM2kAvgQ.

2010 San Juan Capistrano Master Plan - HCM Method
2035 Conditions with the Master Plan Projects
AM Peak Weekday

Level Of Service Computation Report

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

Intersection #90 El Camino Real/Spring St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.635
Loss Time (sec): 0 Average Delay (sec/veh): 14.3
Optimal Cycle: 0 Level Of Service: B

Table with columns for Street Name (El Camino Real, Spring St), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Stop Sign), Rights (Include), and Lane counts.

Volume Module: 2035 am base. Table showing 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, and Final Volume across various lanes.

Saturation Flow Module. Table showing Adjustment, Lanes, and Final Sat. values for different lane configurations.

Capacity Analysis Module. Table showing Vol/Sat, Crit Moves, Delay/Veh, Delay Adj, AdjDel/Veh, LOS by Move, ApproachDel, Delay Adj, ApprAdjDel, LOS by Appr, and AllWayAvgQ.

2010 San Juan Capistrano Master Plan - HCM Method
2035 Conditions with the Master Plan Projects
AM Peak Weekday

Level Of Service Computation Report

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

Intersection #98 El Camino Real/Acjachema

Cycle (sec): 100 Critical Vol./Cap.(X): 0.505
Loss Time (sec): 0 Average Delay (sec/veh): 10.7
Optimal Cycle: 0 Level Of Service: B

Table with columns for Street Name (El Camino Real, Acjachema St), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Stop Sign), Rights (Include), and Lane counts (Min. Green, Lanes).

Volume Module:2035 am base

Table showing traffic volume data 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, and Final Volume across various approaches.

Saturation Flow Module:

Table showing saturation flow data including Adjustment, Lanes, and Final Sat. values for different approaches.

Capacity Analysis Module:

Table showing capacity analysis data including Vol/Sat, Crit Moves, Delay/Veh, Delay Adj, AdjDel/Veh, LOS by Move, ApproachDel, Delay Adj, ApprAdjDel, LOS by Appr, and AllWayAvgQ.

2010 San Juan Capistrano Master Plan - HCM Method
2035 Conditions with the Master Plan Projects
AM Peak Weekday

Level of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #99 Camino Capistrano/Acjachema St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.495
Loss Time (sec): 5 Average Delay (sec/veh): 9.8
Optimal Cycle: 45 Level Of Service: A

Table with columns for Street Name (Camino Capistrano, Acjachema St), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted, Protected, Split Phase), Rights (Include), and various traffic metrics like Min. Green, Y+R, and Lanes.

Volume Module:2035 am base

Table showing traffic volume data for various scenarios 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, and Final Volume.

Saturation Flow Module:

Table showing saturation flow data including Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module:

Table showing capacity analysis data including Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, and HCM2kAvgQ.

2010 San Juan Capistrano Master Plan - HCM Method
2035 Conditions with the Master Plan Projects
Weekday PM Peak

Level of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Rancho Viejo/Ortega Hwy

Cycle (sec): 130 Critical Vol./Cap.(X): 0.938
Loss Time (sec): 5 Average Delay (sec/veh): 47.3
Optimal Cycle: 130 Level Of Service: D

Table with columns for Street Name (Rancho Viejo Rd, Ortega Hwy), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Split Phase, Protected), Rights (Include, Ovl), and various traffic metrics like Min. Green, Y+R, and Lanes.

Volume Module: 2035 pm base. Table showing traffic volume data 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, and Final Volume across different movements.

Saturation Flow Module. Table showing saturation flow data including Sat/Lane, Adjustment, Lanes, and Final Sat. values.

Capacity Analysis Module. Table showing capacity analysis data including Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, and HCM2kAvgQ.

2010 San Juan Capistrano Master Plan - HCM Method
2035 Conditions with the Master Plan Projects
Weekday PM Peak

Level of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 I-5 SB Ramps/Ortega Hwy

Cycle (sec): 100 Critical Vol./Cap.(X): 0.977
Loss Time (sec): 5 Average Delay (sec/veh): 40.0
Optimal Cycle: 130 Level Of Service: D

Table with columns for Street Name (I-5 SB Ramps, Ortega Hwy), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Split Phase, Permitted, Protected), Rights (Include, Ovl), and various traffic metrics like Min. Green, Y+R, and Lanes.

Volume Module: 2035 pm base. Table showing traffic volume data 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, and Final Volume.

Saturation Flow Module. Table showing saturation flow data including Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module. Table showing capacity analysis data including Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, and HCM2kAvgQ.

2010 San Juan Capistrano Master Plan - HCM Method
2035 Conditions with the Master Plan Projects
Weekday PM Peak

Level of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #6 El Cerritos-NB Ramp/Ortega Hwy

Cycle (sec): 120 Critical Vol./Cap.(X): 0.772
Loss Time (sec): 10 Average Delay (sec/veh): 38.4
Optimal Cycle: 68 Level Of Service: D

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, and Lanes. Rows include El Cerritos-I-5 NB Ramps and Ortega Highway with various movement details.

Volume Module: 2035 pm base. Table showing traffic volume data 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, and Final Volume.

Saturation Flow Module. Table showing Sat/Lane, Adjustment, Lanes, and Final Sat values for different movements.

Capacity Analysis Module. Table showing Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, and HCM2kAvgQ values.

2010 San Juan Capistrano Master Plan - HCM Method
2035 Conditions with the Master Plan Projects
Weekday PM Peak

Level of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #9 Del Obispo/Ortega Hwy

Cycle (sec): 120 Critical Vol./Cap.(X): 0.666
Loss Time (sec): 10 Average Delay (sec/veh): 29.3
Optimal Cycle: 51 Level Of Service: C

Street Name: Del Obispo St/Ortega Hwy East Ortega Hwy West
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: 10 10 10 10 10 10 10 10 10 10 10 10
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 1 0 1 0 2 0 1 0 0 0 1! 0 0

Volume Module:New 2035 pm base
Base Vol: 65 1029 11 11 1444 380 470 11 75 11 11 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: 65 1029 11 11 1444 380 470 11 75 11 11 11
Added Vol: -20 -92 0 0 -76 44 96 0 -21 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 45 937 11 11 1368 424 566 11 54 11 11 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: 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95
PHF Volume: 47 986 12 12 1440 446 596 12 57 12 12 12
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 47 986 12 12 1440 446 596 12 57 12 12 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: 47 986 12 12 1440 446 596 12 57 12 12 12

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.90 0.91 0.91 0.90 1.00 0.85 0.85 0.88 0.88 0.89 0.94 0.94
Lanes: 1.00 2.97 0.03 1.00 2.00 1.00 2.00 0.17 0.83 0.34 0.33 0.33
Final Sat.: 1710 5117 60 1710 3800 1615 3230 281 1381 584 584 584

Capacity Analysis Module:
Vol/Sat: 0.03 0.19 0.19 0.01 0.38 0.28 0.18 0.04 0.04 0.02 0.02 0.02
Crit Moves: **** **** **** ****
Green/Cycle: 0.08 0.41 0.41 0.18 0.50 0.50 0.25 0.25 0.25 0.08 0.08 0.08
Volume/Cap: 0.33 0.47 0.47 0.04 0.75 0.55 0.75 0.17 0.17 0.24 0.24 0.24
Delay/Veh: 53.2 26.0 26.0 40.9 25.4 21.2 45.9 35.8 35.8 52.3 52.3 52.3
User DelAdj: 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: 53.2 26.0 26.0 40.9 25.4 21.2 45.9 35.8 35.8 52.3 52.3 52.3
LOS by Move: D C C D C C D D D D D D
HCM2kAvgQ: 2 10 10 0 22 11 13 2 2 1 1 1

2010 San Juan Capistrano Master Plan - HCM Method
2035 Conditions with the Master Plan Projects
Weekday PM Peak

Level of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #10 El Camino Real/Ortega Hwy

Cycle (sec): 90 Critical Vol./Cap.(X): 0.744
Loss Time (sec): 5 Average Delay (sec/veh): 19.2
Optimal Cycle: 44 Level Of Service: B

Table with columns for Street Name (El Camino Real, Ortega Hwy), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control, Rights, Min. Green, Y+R, and Lanes.

Table for Volume Module: New 2035 pm base, showing 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, and Final Volume.

Table for Saturation Flow Module, showing Sat/Lane, Adjustment, Lanes, and Final Sat.

Table for Capacity Analysis Module, showing Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, and HCM2kAvgQ.

2010 San Juan Capistrano Master Plan - HCM Method
2035 Conditions with the Master Plan Projects
Weekday PM Peak

Level of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #11 Camino Capistrano/Ortega Hwy

Cycle (sec): 100 Critical Vol./Cap.(X): 0.589
Loss Time (sec): 5 Average Delay (sec/veh): 18.2
Optimal Cycle: 45 Level Of Service: B

Table with columns for Street Name (Camino Capistrano, Ortega Hwy), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted, Protected, Split Phase), Rights (Ovl, Include), and various traffic metrics like Min. Green, Y+R, Lanes.

Volume Module: New 2035 pm base. Table showing traffic volume metrics such as 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, and Final Volume.

Saturation Flow Module. Table showing saturation flow metrics like Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module. Table showing capacity analysis metrics such as Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, and HCM2kAvgQ.

2010 San Juan Capistrano Master Plan - HCM Method
2035 Conditions with the Master Plan Projects
Weekday PM Peak

Level of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #17 Camino Capistrano/Verdugo St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.404
Loss Time (sec): 5 Average Delay (sec/veh): 16.1
Optimal Cycle: 45 Level Of Service: B

Table with columns for Street Name (Camino Capistrano, Verdugo St), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Protected, Split Phase), Rights (Include), and various traffic metrics like Min. Green, Y+R, and Lanes.

Table for Volume Module: New 2035 pm base, showing 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, and Final Volume across different movements.

Table for Saturation Flow Module, showing Sat/Lane, Adjustment, Lanes, and Final Sat. for each movement.

Table for Capacity Analysis Module, showing Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, and HCM2kAvgQ for each movement.

2010 San Juan Capistrano Master Plan - HCM Method
2035 Conditions with the Master Plan Projects
Weekday PM Peak

Level of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #48 Camino Capistrano/Forster Ln

Average Delay (sec/veh): 7.9 Worst Case Level Of Service: F[90.0]

Table with columns for Street Name (Camino Capistrano, Forster Lane), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control, Rights, and Lanes.

Table for Volume Module: 2035 pm base, showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, and Final Volume.

Table for Critical Gap Module, showing Critical Gp and FollowUpTim values.

Table for Capacity Module, showing Cnflct Vol, Potent Cap., Move Cap., and Volume/Cap.

Table for Level of Service Module, showing 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., SharedQueue, Shrd ConDel, Shared LOS, ApproachDel, and ApproachLOS.

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

2010 San Juan Capistrano Master Plan - HCM Method
2035 Conditions with the Master Plan Projects
Weekday PM Peak

Level of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #56 Plaza Dr/Del Obispo St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.539
Loss Time (sec): 6 Average Delay (sec/veh): 21.2
Optimal Cycle: 46 Level Of Service: C

Table with columns for Street Name (Plaza Dr, Del Obispo St), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Split Phase, Protected), Rights (Include), and various timing parameters like Min. Green, Y+R, and Lanes.

Table for Volume Module: New 2035 pm base, showing 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, and Final Volume across different movements.

Table for Saturation Flow Module, showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for each movement.

Table for Capacity Analysis Module, showing Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, and HCM2kAvgQ values.

2010 San Juan Capistrano Master Plan - HCM Method
2035 Conditions with the Master Plan Projects
Weekday PM Peak

Level of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #58 Camino Capistrano/Del Obispo

Cycle (sec): 130 Critical Vol./Cap.(X): 0.986
Loss Time (sec): 5 Average Delay (sec/veh): 61.2
Optimal Cycle: 130 Level Of Service: E

Table with columns for Street Name (Camino Capistrano, Del Obispo St), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control, Rights, Min. Green, Y+R, and Lanes.

Table for Volume Module: New 2035 pm base, showing 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, and Final Volume.

Table for Saturation Flow Module, showing Sat/Lane, Adjustment, Lanes, and Final Sat.

Table for Capacity Analysis Module, showing Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, and HCM2kAvgQ.

2010 San Juan Capistrano Master Plan - HCM Method
2035 Conditions with the Master Plan Projects
Weekday PM Peak

Level of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #63 Paseo Adelanto/Del Obispo

Cycle (sec): 100 Critical Vol./Cap.(X): 0.477
Loss Time (sec): 5 Average Delay (sec/veh): 17.7
Optimal Cycle: 35 Level Of Service: B

Table with columns for Street Name (Paseo Adelanto, Del Obispo), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: 2035 pm base

Table with 13 columns showing traffic volume metrics: 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, Final Volume.

Saturation Flow Module:

Table with 13 columns showing saturation flow metrics: Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module:

Table with 13 columns showing capacity analysis metrics: Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, HCM2kAvgQ.

2010 San Juan Capistrano Master Plan - HCM Method
2035 Conditions with the Master Plan Projects
Weekday PM Peak

Level of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #66 Alipaz St/Del Obispo

Cycle (sec): 100 Critical Vol./Cap.(X): 0.517
Loss Time (sec): 5 Average Delay (sec/veh): 30.6
Optimal Cycle: 45 Level Of Service: C

Table with columns for Street Name (Alipaz St, Del Obispo St), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Split Phase, Protected), Rights (Ovl, Include), and various timing parameters like Min. Green, Y+R, and Lanes.

Volume Module: 2035 pm base. Table showing traffic volume data 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, and Final Volume for each movement.

Saturation Flow Module. Table showing Sat/Lane, Adjustment, Lanes, and Final Sat. values for each movement.

Capacity Analysis Module. Table showing Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, and HCM2kAvgQ for each movement.

2010 San Juan Capistrano Master Plan - HCM Method
2035 Conditions with the Master Plan Projects
Weekday PM Peak

Level of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #85 Camino Capistrano/Ave Golondrina

Cycle (sec): 100 Critical Vol./Cap.(X): 0.532
Loss Time (sec): 5 Average Delay (sec/veh): 17.5
Optimal Cycle: 35 Level Of Service: B

Table with columns for Street Name (Camino Capistrano, Avenida Golondrina), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module: 2035 pm base. Table with columns for 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, and Final Volume.

Saturation Flow Module. Table with columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module. Table with columns for Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, and HCM2kAvgQ.

2010 San Juan Capistrano Master Plan - HCM Method
2035 Conditions with the Master Plan Projects
Weekday PM Peak

Level Of Service Computation Report

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

Intersection #90 El Camino Real/Spring St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.454
Loss Time (sec): 0 Average Delay (sec/veh): 10.1
Optimal Cycle: 0 Level Of Service: B

Table with columns for Street Name (El Camino Real, Spring St), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Stop Sign), Rights (Include), and Min. Green (10, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10). Lanes: 0 0 0 1 0, 0 1 0 0 0, 0 0 1! 0 0, 0 0 1! 0 0.

Volume Module:2035 pm base

Table with 13 columns for traffic volume metrics: 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 for saturation flow metrics: Adjustment, Lanes, Final Sat.

Capacity Analysis Module:

Table with 13 columns for capacity analysis metrics: Vol/Sat, Crit Moves, Delay/Veh, Delay Adj, AdjDel/Veh, LOS by Move, ApproachDel, Delay Adj, ApprAdjDel, LOS by Appr, AllWayAvgQ.

2010 San Juan Capistrano Master Plan - HCM Method
2035 Conditions with the Master Plan Projects
Weekday PM Peak

Level Of Service Computation Report

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

Intersection #98 El Camino Real/Acjachema

Cycle (sec): 100 Critical Vol./Cap.(X): 0.319
Loss Time (sec): 0 Average Delay (sec/veh): 8.6
Optimal Cycle: 0 Level Of Service: A

Table with columns for Street Name (El Camino Real, Acjachema St), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Stop Sign), Rights (Include), and Min. Green (10, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10). Lanes are listed as 0 0 1! 0 0 for each approach.

Volume Module:2035 base pm

Table showing traffic volume data: 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. Values are provided for each of the 12 movements.

Saturation Flow Module:

Table showing saturation flow data: Adjustment (1.00), Lanes (0.14, 0.68, 0.18, 0.05, 0.81, 0.14, 0.26, 0.15, 0.59, 0.60, 0.14, 0.26), Final Sat. (122, 574, 149, 40, 658, 113, 193, 116, 437, 419, 100, 180).

Capacity Analysis Module:

Table showing capacity analysis data: Vol/Sat (0.32, 0.32, 0.32, 0.16, 0.16, 0.16, 0.08, 0.08, 0.08, 0.05, 0.05, 0.05), Crit Moves (****), Delay/Veh (9.1, 9.1, 9.1, 8.1, 8.1, 8.1, 7.8, 7.8, 7.8, 8.0, 8.0, 8.0), Delay Adj (1.00), AdjDel/Veh (9.1), LOS by Move (A), ApproachDel (9.1), Delay Adj (1.00), ApprAdjDel (9.1), LOS by Appr (A), AllWayAvgQ (0.4, 0.4, 0.4, 0.2, 0.2, 0.2, 0.1, 0.1, 0.1, 0.0, 0.0, 0.0).

2010 San Juan Capistrano Master Plan - HCM Method
2035 Conditions with the Master Plan Projects
Weekday PM Peak

Level of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #99 Camino Capistrano/Acjachema St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.433
Loss Time (sec): 5 Average Delay (sec/veh): 6.7
Optimal Cycle: 45 Level Of Service: A

Table with columns for Street Name (Camino Capistrano, Acjachema St), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted, Protected, Split Phase), Rights (Include), and various traffic metrics like Min. Green, Y+R, and Lanes.

Volume Module:2035 pm base

Table showing traffic volume data for various scenarios 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, and Final Volume.

Saturation Flow Module:

Table showing saturation flow data including Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module:

Table showing capacity analysis data including Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, and HCM2kAvgQ.

2010 San Juan Capistrano Master Plan - HCM Method
2035 Conditions with the Master Plan Projects
Weekend Saturday Peak

Level of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 I-5 SB Ramps/Ortega Hwy

Cycle (sec): 100 Critical Vol./Cap.(X): 0.925
Loss Time (sec): 5 Average Delay (sec/veh): 33.1
Optimal Cycle: 107 Level Of Service: C

Table with columns for Street Name (I-5 SB Ramps, Ortega Hwy), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Split Phase, Permitted, Protected), Rights (Include, Ovl), and various traffic metrics like Min. Green, Y+R, and Lanes.

Volume Module: 2035 sat base. Table showing traffic volume data 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, and Final Volume.

Saturation Flow Module. Table showing Sat/Lane, Adjustment, Lanes, and Final Sat values for each approach.

Capacity Analysis Module. Table showing Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, and HCM2kAvgQ values.

2010 San Juan Capistrano Master Plan - HCM Method
2035 Conditions with the Master Plan Projects
Weekend Saturday Peak

Level of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #6 El Cerritos-NB Ramp/Ortega Hwy

Cycle (sec): 120 Critical Vol./Cap.(X): 0.775
Loss Time (sec): 10 Average Delay (sec/veh): 36.5
Optimal Cycle: 69 Level Of Service: D

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, and Lanes. Rows include El Cerritos-I-5 NB Ramps and Ortega Highway with various movement details.

Volume Module:2035 Saturday Base

Table showing traffic volume data for Saturday Base, 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, and FinalVolume.

Saturation Flow Module:

Table showing saturation flow data including Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module:

Table showing capacity analysis data including Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, and HCM2kAvgQ.

2010 San Juan Capistrano Master Plan - HCM Method
2035 Conditions with the Master Plan Projects
Weekend Saturday Peak

Level of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #9 Del Obispo/Ortega Hwy

Cycle (sec): 120 Critical Vol./Cap.(X): 0.621
Loss Time (sec): 10 Average Delay (sec/veh): 22.1
Optimal Cycle: 50 Level Of Service: C

Table with columns for Street Name, Approach, Movement, Control, Rights, Min. Green, Y+R, Lanes. Rows include Del Obispo St/Ortega Hwy East and Ortega Hwy West with various traffic signal settings.

Volume Module: New 2035 sat base. Table showing traffic volume adjustments and final volumes for different approaches and movements.

Saturation Flow Module. Table showing saturation flow rates and adjustments for different lane configurations.

Capacity Analysis Module. Table showing capacity analysis metrics such as Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, and HCM2kAvgQ.

2010 San Juan Capistrano Master Plan - HCM Method
2035 Conditions with the Master Plan Projects
Weekend Saturday Peak

Level of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #10 El Camino Real/Ortega Hwy

Cycle (sec): 90 Critical Vol./Cap.(X): 0.708
Loss Time (sec): 5 Average Delay (sec/veh): 17.1
Optimal Cycle: 39 Level Of Service: B

Table with columns for Street Name (El Camino Real, Ortega Hwy), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module:New 2035 sat base

Table with 13 columns showing traffic volume metrics: 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 showing saturation flow metrics: Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module:

Table with 13 columns showing capacity analysis metrics: Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, HCM2kAvgQ.

2010 San Juan Capistrano Master Plan - HCM Method
2035 Conditions with the Master Plan Projects
Weekend Saturday Peak

Level of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #11 Camino Capistrano/Ortega Hwy

Cycle (sec): 100 Critical Vol./Cap.(X): 0.453
Loss Time (sec): 5 Average Delay (sec/veh): 18.3
Optimal Cycle: 45 Level Of Service: B

Table with columns for Street Name (Camino Capistrano, Ortega Hwy), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Permitted, Protected, Split Phase), Rights (Ovl, Include), and various traffic volume and timing metrics.

Volume Module: New 2035 sat base. Table showing traffic volume adjustments and final volumes for various approaches and movements.

Saturation Flow Module. Table showing saturation flow rates and adjustments for different lane configurations.

Capacity Analysis Module. Table showing capacity analysis metrics such as Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, and HCM2kAvgQ.

2010 San Juan Capistrano Master Plan - HCM Method
2035 Conditions with the Master Plan Projects
Weekend Saturday Peak

Level of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #17 Camino Capistrano/Verdugo St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.493
Loss Time (sec): 5 Average Delay (sec/veh): 15.6
Optimal Cycle: 45 Level Of Service: B

Street Name: Camino Capistrano Verdugo 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: 10 10 10 10 10 10 10 10 10 10 10 10

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 0 1 0 1 0 0 0 0 0

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

Volume Module:New 2035 sat base

Base Vol: 67 445 0 0 469 86 87 0 65 0 0 0

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: 67 445 0 0 469 86 87 0 65 0 0 0

Added Vol: 7 -20 0 0 -19 22 18 0 2 0 0 0

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

Initial Fut: 74 425 0 0 450 108 105 0 67 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: 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95

PHF Volume: 78 447 0 0 474 114 111 0 71 0 0 0

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

Reduced Vol: 78 447 0 0 474 114 111 0 71 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: 78 447 0 0 474 114 111 0 71 0 0 0

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

Saturation Flow Module:

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900

Adjustment: 0.86 0.90 1.00 1.00 0.88 0.88 0.86 1.00 0.77 1.00 1.00 1.00

Lanes: 1.00 1.00 0.00 0.00 0.81 0.19 1.00 0.00 1.00 0.00 0.00 0.00

Final Sat.: 1625 1710 0 0 1343 322 1625 0 1454 0 0 0

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

Capacity Analysis Module:

Vol/Sat: 0.05 0.26 0.00 0.00 0.35 0.35 0.07 0.00 0.05 0.00 0.00 0.00

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

Green/Cycle: 0.10 0.59 0.00 0.00 0.71 0.71 0.14 0.00 0.14 0.00 0.00 0.00

Volume/Cap: 0.48 0.45 0.00 0.00 0.49 0.49 0.49 0.00 0.35 0.00 0.00 0.00

Delay/Veh: 44.8 11.8 0.0 0.0 6.7 6.7 41.6 0.0 40.2 0.0 0.0 0.0

User DelAdj: 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: 44.8 11.8 0.0 0.0 6.7 6.7 41.6 0.0 40.2 0.0 0.0 0.0

LOS by Move: D B A A A A D A D A A A

HCM2kAvgQ: 3 8 0 0 8 8 4 0 2 0 0 0

2010 San Juan Capistrano Master Plan - HCM Method
2035 Conditions with the Master Plan Projects
Weekend Saturday Peak

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #48 Camino Capistrano/Forster Ln

Average Delay (sec/veh): 3.5 Worst Case Level Of Service: F[50.3]

Table with columns for Street Name (Camino Capistrano, Forster Lane), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Uncontrolled, Stop Sign), Rights (Include), and Lanes (0, 1).

Table for Volume Module:2035 sat base, showing Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, and FinalVolume across various movements.

Table for Critical Gap Module, showing Critical Gp and FollowUpTim for different movements.

Table for Capacity Module, showing Cnflct Vol, Potent Cap., Move Cap., and Volume/Cap for different movements.

Table for Level Of Service Module, showing 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., SharedQueue, Shrd ConDel, Shared LOS, ApproachDel, and ApproachLOS.

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

2010 San Juan Capistrano Master Plan - HCM Method
2035 Conditions with the Master Plan Projects
Weekend Saturday Peak

Level of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #58 Camino Capistrano/Del Obispo

Cycle (sec): 130 Critical Vol./Cap.(X): 0.782
Loss Time (sec): 5 Average Delay (sec/veh): 44.8
Optimal Cycle: 52 Level Of Service: D

Table with columns for Street Name (Camino Capistrano, Del Obispo St), Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control, Rights, Min. Green, Y+R, and Lanes.

Volume Module:New 2035 base sat

Table with 13 columns showing traffic volume data: 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 showing saturation flow data: Sat/Lane, Adjustment, Lanes, Final Sat.

Capacity Analysis Module:

Table with 13 columns showing capacity analysis data: Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, HCM2kAvgQ.
