

Attachment F

Freeway Mainline Analysis Worksheets

HCS7 Basic Freeway Report

Project Information

Analyst	Mladen Popovic	Date	8/7/2018
Agency	Dudek	Analysis Year	2018
Jurisdiction	Anaheim	Time Period Analyzed	AM Peak Hour (7/28/2017 - 7/27/2018)
Project Description	SR-57 N, I-5 to Orangewood Avenue, Ball Road Basin EIR		

Geometric Data

Number of Lanes, In	5	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	71.9	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	71.9
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	6380	Heavy Vehicle Adjustment Factor (fhv)	0.946
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1435
Total Trucks, %	5.70	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.60
Passenger Car Equivalent (ET)	2.000		

Speed and Density

Lane Width Adjustment (flw)	-	Average Speed (S), mi/h	70.8
Right-Side Lateral Clearance Adj. (fRLC)	-	Density (D), pc/mi/ln	20.3
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFSadj), mi/h	71.9		

HCS7 Basic Freeway Report

Project Information

Analyst	Mladen Popovic	Date	8/7/2018
Agency	Dudek	Analysis Year	2018
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Project Description	SR-57 N, Orangewood Avenue to Katella Avenue, Ball Road Basin EIR		

Geometric Data

Number of Lanes, In	5	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	72.4	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	72.4
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	6506	Heavy Vehicle Adjustment Factor (fhv)	0.980
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1413
Total Trucks, %	2.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.59
Passenger Car Equivalent (ET)	2.000		

Speed and Density

Lane Width Adjustment (flw)	-	Average Speed (S), mi/h	71.3
Right-Side Lateral Clearance Adj. (fRLC)	-	Density (D), pc/mi/ln	19.8
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFSadj), mi/h	72.4		

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Project Information

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Project Description	SR-57 N, Katella Avenue to Ball Road, Ball Road Basin EIR		

Geometric Data

Number of Lanes, In	5	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	72.7	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	72.7
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	6167	Heavy Vehicle Adjustment Factor (fhv)	0.890
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1474
Total Trucks, %	12.40	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.61
Passenger Car Equivalent (ET)	2.000		

Speed and Density

Lane Width Adjustment (flw)	-	Average Speed (S), mi/h	71.0
Right-Side Lateral Clearance Adj. (fRLC)	-	Density (D), pc/mi/ln	20.8
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFSadj), mi/h	72.7		

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Project Information

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Project Description	SR-57 N, Ball Road to Lincoln Avenue, Ball Road Basin EIR		

Geometric Data

Number of Lanes, In	5	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	73.6	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	73.6
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	6246	Heavy Vehicle Adjustment Factor (fhv)	0.974
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1364
Total Trucks, %	2.70	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.57
Passenger Car Equivalent (ET)	2.000		

Speed and Density

Lane Width Adjustment (flw)	-	Average Speed (S), mi/h	72.5
Right-Side Lateral Clearance Adj. (fRLC)	-	Density (D), pc/mi/ln	18.8
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFSadj), mi/h	73.6		

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Project Description	SR-57 N, Lincoln Avenue to SR-91, Ball Road Basin EIR		

Geometric Data

Number of Lanes, In	5	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	70.0	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	70.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	7569	Heavy Vehicle Adjustment Factor (fhv)	0.952
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1692
Total Trucks, %	5.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.70
Passenger Car Equivalent (ET)	2.000		

Speed and Density

Lane Width Adjustment (flw)	-	Average Speed (S), mi/h	67.2
Right-Side Lateral Clearance Adj. (fRLC)	-	Density (D), pc/mi/ln	25.2
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFSadj), mi/h	70.0		

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Project Description	SR-57 S, I-5 to Orangewood Avenue, Ball Road Basin EIR		

Geometric Data

Number of Lanes, In	4	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	62.4	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	62.4
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	7084	Heavy Vehicle Adjustment Factor (fhv)	0.990
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1903
Total Trucks, %	1.00	Capacity (c), pc/h/ln	2324
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2324
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.82
Passenger Car Equivalent (ET)	2.000		

Speed and Density

Lane Width Adjustment (flw)	-	Average Speed (S), mi/h	59.9
Right-Side Lateral Clearance Adj. (fRLC)	-	Density (D), pc/mi/ln	31.8
Total Ramp Density Adjustment	-	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFSadj), mi/h	62.4		

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Project Description	SR-57 S, Orangewood Avenue to Katella Avenue, Ball Road Basin EIR		

Geometric Data

Number of Lanes, In	4	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	64.3	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	64.3
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	6492	Heavy Vehicle Adjustment Factor (fhv)	0.981
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1760
Total Trucks, %	1.90	Capacity (c), pc/h/ln	2343
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2343
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.75
Passenger Car Equivalent (ET)	2.000		

Speed and Density

Lane Width Adjustment (flw)	-	Average Speed (S), mi/h	62.7
Right-Side Lateral Clearance Adj. (fRLC)	-	Density (D), pc/mi/ln	28.1
Total Ramp Density Adjustment	-	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFSadj), mi/h	64.3		

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Project Description	SR-57 S, Katella Avenue to Ball Road, Ball Road Basin EIR		

Geometric Data

Number of Lanes, In	4	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	72.0	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	72.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	6048	Heavy Vehicle Adjustment Factor (fhv)	0.980
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1641
Total Trucks, %	2.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.68
Passenger Car Equivalent (ET)	2.000		

Speed and Density

Lane Width Adjustment (flw)	-	Average Speed (S), mi/h	68.9
Right-Side Lateral Clearance Adj. (fRLC)	-	Density (D), pc/mi/ln	23.8
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFSadj), mi/h	72.0		

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Project Description	SR-57 S, Ball Road to Lincoln Avenue, Ball Road Basin EIR		

Geometric Data

Number of Lanes, In	4	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	65.3	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	65.3
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	5771	Heavy Vehicle Adjustment Factor (fhv)	0.971
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1581
Total Trucks, %	3.00	Capacity (c), pc/h/ln	2353
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2353
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.67
Passenger Car Equivalent (ET)	2.000		

Speed and Density

Lane Width Adjustment (flw)	-	Average Speed (S), mi/h	64.8
Right-Side Lateral Clearance Adj. (fRLC)	-	Density (D), pc/mi/ln	24.4
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFSadj), mi/h	65.3		

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Project Description	SR-57 S, Lincoln Avenue to SR-91, Ball Road Basin EIR		

Geometric Data

Number of Lanes, In	5	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	69.0	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	69.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	6279	Heavy Vehicle Adjustment Factor (fhv)	0.944
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1415
Total Trucks, %	5.90	Capacity (c), pc/h/ln	2390
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2390
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.59
Passenger Car Equivalent (ET)	2.000		

Speed and Density

Lane Width Adjustment (flw)	-	Average Speed (S), mi/h	68.6
Right-Side Lateral Clearance Adj. (fRLC)	-	Density (D), pc/mi/ln	20.6
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFSadj), mi/h	69.0		

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Project Description	SR-57 N, I-5 to Orangewood Avenue, Ball Road Basin EIR		

Geometric Data

Number of Lanes, In	5	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	70.8	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	70.8
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	6455	Heavy Vehicle Adjustment Factor (fhv)	0.954
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1440
Total Trucks, %	4.80	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.60
Passenger Car Equivalent (ET)	2.000		

Speed and Density

Lane Width Adjustment (flw)	-	Average Speed (S), mi/h	69.9
Right-Side Lateral Clearance Adj. (fRLC)	-	Density (D), pc/mi/ln	20.6
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFSadj), mi/h	70.8		

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Geometric Data

Number of Lanes, In	5	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	71.2	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	71.2
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	6524	Heavy Vehicle Adjustment Factor (fhv)	0.981
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1415
Total Trucks, %	1.90	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.59
Passenger Car Equivalent (ET)	2.000		

Speed and Density

Lane Width Adjustment (flw)	-	Average Speed (S), mi/h	70.4
Right-Side Lateral Clearance Adj. (fRLC)	-	Density (D), pc/mi/ln	20.1
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFSadj), mi/h	71.2		

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Project Description	SR-57 N, Katella Avenue to Ball Road, Ball Road Basin EIR		

Geometric Data

Number of Lanes, In	5	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	69.1	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	69.1
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	6124	Heavy Vehicle Adjustment Factor (fhv)	0.925
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1409
Total Trucks, %	8.10	Capacity (c), pc/h/ln	2391
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2391
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.59
Passenger Car Equivalent (ET)	2.000		

Speed and Density

Lane Width Adjustment (flw)	-	Average Speed (S), mi/h	68.7
Right-Side Lateral Clearance Adj. (fRLC)	-	Density (D), pc/mi/ln	20.5
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFSadj), mi/h	69.1		

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Geometric Data

Number of Lanes, In	5	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	67.6	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	67.6
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	5940	Heavy Vehicle Adjustment Factor (fhv)	0.985
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1283
Total Trucks, %	1.50	Capacity (c), pc/h/ln	2376
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2376
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.54
Passenger Car Equivalent (ET)	2.000		

Speed and Density

Lane Width Adjustment (flw)	-	Average Speed (S), mi/h	67.6
Right-Side Lateral Clearance Adj. (fRLC)	-	Density (D), pc/mi/ln	19.0
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFSadj), mi/h	67.6		

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Geometric Data

Number of Lanes, In	5	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	67.1	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	67.1
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	7291	Heavy Vehicle Adjustment Factor (fhv)	0.968
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1603
Total Trucks, %	3.30	Capacity (c), pc/h/ln	2371
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2371
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.68
Passenger Car Equivalent (ET)	2.000		

Speed and Density

Lane Width Adjustment (flw)	-	Average Speed (S), mi/h	66.0
Right-Side Lateral Clearance Adj. (fRLC)	-	Density (D), pc/mi/ln	24.3
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFSadj), mi/h	67.1		

HCS7 Basic Freeway Report

Project Information

Analyst	Mladen Popovic	Date	8/7/2018
Agency	Dudek	Analysis Year	2018
Jurisdiction	Anaheim	Time Period Analyzed	PM Peak Hour (7/28/2017 - 7/27/2018)
Project Description	SR-57 S, I-5 to Orangewood Avenue, Ball Road Basin EIR		

Geometric Data

Number of Lanes, In	4	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	64.3	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	64.3
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	6926	Heavy Vehicle Adjustment Factor (fhv)	0.990
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1861
Total Trucks, %	1.00	Capacity (c), pc/h/ln	2343
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2343
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.79
Passenger Car Equivalent (ET)	2.000		

Speed and Density

Lane Width Adjustment (flw)	-	Average Speed (S), mi/h	61.6
Right-Side Lateral Clearance Adj. (fRLC)	-	Density (D), pc/mi/ln	30.2
Total Ramp Density Adjustment	-	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFSadj), mi/h	64.3		

HCS7 Basic Freeway Report

Project Information

Analyst	Mladen Popovic	Date	8/7/2018
Agency	Dudek	Analysis Year	2018
Jurisdiction	Anaheim	Time Period Analyzed	PM Peak Hour (7/28/2017 - 7/27/2018)
Project Description	SR-57 S, Orangewood Avenue to Katella Avenue, Ball Road Basin EIR		

Geometric Data

Number of Lanes, In	4	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	65.2	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	65.2
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	6341	Heavy Vehicle Adjustment Factor (fhv)	0.981
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1719
Total Trucks, %	1.90	Capacity (c), pc/h/ln	2352
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2352
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.73
Passenger Car Equivalent (ET)	2.000		

Speed and Density

Lane Width Adjustment (flw)	-	Average Speed (S), mi/h	63.7
Right-Side Lateral Clearance Adj. (fRLC)	-	Density (D), pc/mi/ln	27.0
Total Ramp Density Adjustment	-	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFSadj), mi/h	65.2		

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Project Information

Analyst	Mladen Popovic	Date	8/7/2018
Agency	Dudek	Analysis Year	2018
Jurisdiction	Anaheim	Time Period Analyzed	PM Peak Hour (7/28/2017 - 7/27/2018)
Project Description	SR-57 S, Katella Avenue to Ball Road, Ball Road Basin EIR		

Geometric Data

Number of Lanes, In	4	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	70.9	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	5967	Heavy Vehicle Adjustment Factor (fhv)	0.982
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1616
Total Trucks, %	1.80	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.67
Passenger Car Equivalent (ET)	2.000		

Speed and Density

Lane Width Adjustment (flw)	-	Average Speed (S), mi/h	68.6
Right-Side Lateral Clearance Adj. (fRLC)	-	Density (D), pc/mi/ln	23.6
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFSadj), mi/h	70.9		

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Project Information

Analyst	Mladen Popovic	Date	8/7/2018
Agency	Dudek	Analysis Year	2018
Jurisdiction	Anaheim	Time Period Analyzed	PM Peak Hour (7/28/2017 - 7/27/2018)
Project Description	SR-57 S, Ball Road to Lincoln Avenue, Ball Road Basin EIR		

Geometric Data

Number of Lanes, In	4	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	66.8	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	66.8
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	5747	Heavy Vehicle Adjustment Factor (fhv)	0.976
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1566
Total Trucks, %	2.50	Capacity (c), pc/h/ln	2368
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2368
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.66
Passenger Car Equivalent (ET)	2.000		

Speed and Density

Lane Width Adjustment (flw)	-	Average Speed (S), mi/h	66.1
Right-Side Lateral Clearance Adj. (fRLC)	-	Density (D), pc/mi/ln	23.7
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFSadj), mi/h	66.8		

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Project Information

Analyst	Mladen Popovic	Date	8/7/2018
Agency	Dudek	Analysis Year	2018
Jurisdiction	Anaheim	Time Period Analyzed	PM Peak Hour (7/28/2017 - 7/27/2018)
Project Description	SR-57 S, Lincoln Avenue to SR-91, Ball Road Basin EIR		

Geometric Data

Number of Lanes, In	5	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	70.0	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	70.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	6319	Heavy Vehicle Adjustment Factor (fhv)	0.940
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1430
Total Trucks, %	6.40	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.60
Passenger Car Equivalent (ET)	2.000		

Speed and Density

Lane Width Adjustment (flw)	-	Average Speed (S), mi/h	69.4
Right-Side Lateral Clearance Adj. (fRLC)	-	Density (D), pc/mi/ln	20.6
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFSadj), mi/h	70.0		

HCS7 Basic Freeway Report

Project Information

Analyst	Mladen Popovic	Date	8/7/2018
Agency	Dudek	Analysis Year	2018
Jurisdiction	Anaheim	Time Period Analyzed	Existing plus Project AM Peak Hour
Project Description	SR-57 N, I-5 to Orangewood Avenue, Ball Road Basin EIR		

Geometric Data

Number of Lanes, In	5	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	71.9	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	71.9
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	6425	Heavy Vehicle Adjustment Factor (fhv)	0.946
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1445
Total Trucks, %	5.70	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.60
Passenger Car Equivalent (ET)	2.000		

Speed and Density

Lane Width Adjustment (flw)	-	Average Speed (S), mi/h	70.7
Right-Side Lateral Clearance Adj. (fRLC)	-	Density (D), pc/mi/ln	20.4
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFSadj), mi/h	71.9		

HCS7 Basic Freeway Report

Project Information

Analyst	Mladen Popovic	Date	8/7/2018
Agency	Dudek	Analysis Year	2018
Jurisdiction	Anaheim	Time Period Analyzed	Existing plus Project AM Peak Hour
Project Description	SR-57 N, Orangewood Avenue to Katella Avenue, Ball Road Basin EIR		

Geometric Data

Number of Lanes, In	5	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	72.4	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	72.4
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	6551	Heavy Vehicle Adjustment Factor (fhv)	0.980
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1422
Total Trucks, %	2.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.59
Passenger Car Equivalent (ET)	2.000		

Speed and Density

Lane Width Adjustment (flw)	-	Average Speed (S), mi/h	71.3
Right-Side Lateral Clearance Adj. (fRLC)	-	Density (D), pc/mi/ln	19.9
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFSadj), mi/h	72.4		

HCS7 Basic Freeway Report

Project Information

Analyst	Mladen Popovic	Date	8/7/2018
Agency	Dudek	Analysis Year	2018
Jurisdiction	Anaheim	Time Period Analyzed	Existing plus Project AM Peak Hour
Project Description	SR-57 N, Katella Avenue to Ball Road, Ball Road Basin EIR		

Geometric Data

Number of Lanes, In	5	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	72.7	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	72.7
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	6219	Heavy Vehicle Adjustment Factor (fhv)	0.890
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1487
Total Trucks, %	12.40	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.62
Passenger Car Equivalent (ET)	2.000		

Speed and Density

Lane Width Adjustment (flw)	-	Average Speed (S), mi/h	70.9
Right-Side Lateral Clearance Adj. (fRLC)	-	Density (D), pc/mi/ln	21.0
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFSadj), mi/h	72.7		

HCS7 Basic Freeway Report

Project Information

Analyst	Mladen Popovic	Date	8/7/2018
Agency	Dudek	Analysis Year	2018
Jurisdiction	Anaheim	Time Period Analyzed	Existing plus Project AM Peak Hour
Project Description	SR-57 N, Ball Road to Lincoln Avenue, Ball Road Basin EIR		

Geometric Data

Number of Lanes, In	5	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	73.6	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	73.6
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	6248	Heavy Vehicle Adjustment Factor (fhv)	0.974
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1365
Total Trucks, %	2.70	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.57
Passenger Car Equivalent (ET)	2.000		

Speed and Density

Lane Width Adjustment (flw)	-	Average Speed (S), mi/h	72.5
Right-Side Lateral Clearance Adj. (fRLC)	-	Density (D), pc/mi/ln	18.8
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFSadj), mi/h	73.6		

HCS7 Basic Freeway Report

Project Information

Analyst	Mladen Popovic	Date	8/7/2018
Agency	Dudek	Analysis Year	2018
Jurisdiction	Anaheim	Time Period Analyzed	Existing plus Project AM Peak Hour
Project Description	SR-57 N, Lincoln Avenue to SR-91, Ball Road Basin EIR		

Geometric Data

Number of Lanes, In	5	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	70.0	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	70.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	7571	Heavy Vehicle Adjustment Factor (fhv)	0.952
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1692
Total Trucks, %	5.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.71
Passenger Car Equivalent (ET)	2.000		

Speed and Density

Lane Width Adjustment (flw)	-	Average Speed (S), mi/h	67.2
Right-Side Lateral Clearance Adj. (fRLC)	-	Density (D), pc/mi/ln	25.2
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFSadj), mi/h	70.0		

HCS7 Basic Freeway Report

Project Information

Analyst	Mladen Popovic	Date	8/7/2018
Agency	Dudek	Analysis Year	2018
Jurisdiction	Anaheim	Time Period Analyzed	Existing plus Project AM Peak Hour
Project Description	SR-57 S, I-5 to Orangewood Avenue, Ball Road Basin EIR		

Geometric Data

Number of Lanes, In	4	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	62.4	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	62.4
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	7113	Heavy Vehicle Adjustment Factor (fhv)	0.990
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1911
Total Trucks, %	1.00	Capacity (c), pc/h/ln	2324
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2324
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.82
Passenger Car Equivalent (ET)	2.000		

Speed and Density

Lane Width Adjustment (flw)	-	Average Speed (S), mi/h	59.8
Right-Side Lateral Clearance Adj. (fRLC)	-	Density (D), pc/mi/ln	32.0
Total Ramp Density Adjustment	-	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFSadj), mi/h	62.4		

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Project Information

Analyst	Mladen Popovic	Date	8/7/2018
Agency	Dudek	Analysis Year	2018
Jurisdiction	Anaheim	Time Period Analyzed	Existing plus Project AM Peak Hour
Project Description	SR-57 S, Orangewood Avenue to Katella Avenue, Ball Road Basin EIR		

Geometric Data

Number of Lanes, In	4	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	64.3	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	64.3
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	6521	Heavy Vehicle Adjustment Factor (fhv)	0.981
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1768
Total Trucks, %	1.90	Capacity (c), pc/h/ln	2343
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2343
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.75
Passenger Car Equivalent (ET)	2.000		

Speed and Density

Lane Width Adjustment (flw)	-	Average Speed (S), mi/h	62.6
Right-Side Lateral Clearance Adj. (fRLC)	-	Density (D), pc/mi/ln	28.2
Total Ramp Density Adjustment	-	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFSadj), mi/h	64.3		

HCS7 Basic Freeway Report

Project Information

Analyst	Mladen Popovic	Date	8/7/2018
Agency	Dudek	Analysis Year	2018
Jurisdiction	Anaheim	Time Period Analyzed	Existing plus Project AM Peak Hour
Project Description	SR-57 S, Katella Avenue to Ball Road, Ball Road Basin EIR		

Geometric Data

Number of Lanes, In	4	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	72.0	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	72.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	6073	Heavy Vehicle Adjustment Factor (fhv)	0.980
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1648
Total Trucks, %	2.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.69
Passenger Car Equivalent (ET)	2.000		

Speed and Density

Lane Width Adjustment (flw)	-	Average Speed (S), mi/h	68.8
Right-Side Lateral Clearance Adj. (fRLC)	-	Density (D), pc/mi/ln	24.0
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFSadj), mi/h	72.0		

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Project Information

Analyst	Mladen Popovic	Date	8/7/2018
Agency	Dudek	Analysis Year	2018
Jurisdiction	Anaheim	Time Period Analyzed	Existing plus Project AM Peak Hour
Project Description	SR-57 S, Ball Road to Lincoln Avenue, Ball Road Basin EIR		

Geometric Data

Number of Lanes, In	4	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	65.3	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	65.3
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	5788	Heavy Vehicle Adjustment Factor (fHV)	0.971
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1585
Total Trucks, %	3.00	Capacity (c), pc/h/ln	2353
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2353
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.67
Passenger Car Equivalent (ET)	2.000		

Speed and Density

Lane Width Adjustment (fLW)	-	Average Speed (S), mi/h	64.8
Right-Side Lateral Clearance Adj. (fRLC)	-	Density (D), pc/mi/ln	24.5
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFSadj), mi/h	65.3		

HCS7 Basic Freeway Report

Project Information

Analyst	Mladen Popovic	Date	8/7/2018
Agency	Dudek	Analysis Year	2018
Jurisdiction	Anaheim	Time Period Analyzed	Existing plus Project AM Peak Hour
Project Description	SR-57 S, Lincoln Avenue to SR-91, Ball Road Basin EIR		

Geometric Data

Number of Lanes, In	5	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	69.0	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	69.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	6296	Heavy Vehicle Adjustment Factor (fHV)	0.944
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1419
Total Trucks, %	5.90	Capacity (c), pc/h/ln	2390
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2390
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.59
Passenger Car Equivalent (ET)	2.000		

Speed and Density

Lane Width Adjustment (fLW)	-	Average Speed (S), mi/h	68.6
Right-Side Lateral Clearance Adj. (fRLC)	-	Density (D), pc/mi/ln	20.7
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFSadj), mi/h	69.0		

HCS7 Basic Freeway Report

Project Information

Analyst	Mladen Popovic	Date	8/7/2018
Agency	Dudek	Analysis Year	2018
Jurisdiction	Anaheim	Time Period Analyzed	Existing plus Project PM Peak Hour
Project Description	SR-57 N, I-5 to Orangewood Avenue, Ball Road Basin EIR		

Geometric Data

Number of Lanes, In	5	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	70.8	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	70.8
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	6505	Heavy Vehicle Adjustment Factor (fHV)	0.954
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1451
Total Trucks, %	4.80	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.60
Passenger Car Equivalent (ET)	2.000		

Speed and Density

Lane Width Adjustment (fLW)	-	Average Speed (S), mi/h	69.9
Right-Side Lateral Clearance Adj. (fRLC)	-	Density (D), pc/mi/ln	20.8
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFSadj), mi/h	70.8		

HCS7 Basic Freeway Report

Project Information

Analyst	Mladen Popovic	Date	8/7/2018
Agency	Dudek	Analysis Year	2018
Jurisdiction	Anaheim	Time Period Analyzed	Existing plus Project PM Peak Hour
Project Description	SR-57 N, Orangewood Avenue to Katella Avenue, Ball Road Basin EIR		

Geometric Data

Number of Lanes, In	5	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	71.2	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	71.2
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	6574	Heavy Vehicle Adjustment Factor (fhv)	0.981
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1426
Total Trucks, %	1.90	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.59
Passenger Car Equivalent (ET)	2.000		

Speed and Density

Lane Width Adjustment (flw)	-	Average Speed (S), mi/h	70.3
Right-Side Lateral Clearance Adj. (fRLC)	-	Density (D), pc/mi/ln	20.3
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFSadj), mi/h	71.2		

HCS7 Basic Freeway Report

Project Information

Analyst	Mladen Popovic	Date	8/7/2018
Agency	Dudek	Analysis Year	2018
Jurisdiction	Anaheim	Time Period Analyzed	Existing plus Project PM Peak Hour
Project Description	SR-57 N, Katella Avenue to Ball Road, Ball Road Basin EIR		

Geometric Data

Number of Lanes, In	5	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	69.1	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	69.1
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	6197	Heavy Vehicle Adjustment Factor (fhv)	0.925
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1425
Total Trucks, %	8.10	Capacity (c), pc/h/ln	2391
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2391
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.60
Passenger Car Equivalent (ET)	2.000		

Speed and Density

Lane Width Adjustment (flw)	-	Average Speed (S), mi/h	68.7
Right-Side Lateral Clearance Adj. (fRLC)	-	Density (D), pc/mi/ln	20.7
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFSadj), mi/h	69.1		

HCS7 Basic Freeway Report

Project Information

Analyst	Mladen Popovic	Date	8/7/2018
Agency	Dudek	Analysis Year	2018
Jurisdiction	Anaheim	Time Period Analyzed	Existing plus Project PM Peak Hour
Project Description	SR-57 N, Ball Road to Lincoln Avenue, Ball Road Basin EIR		

Geometric Data

Number of Lanes, In	5	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	67.6	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	67.6
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	5949	Heavy Vehicle Adjustment Factor (fHV)	0.985
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1285
Total Trucks, %	1.50	Capacity (c), pc/h/ln	2376
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2376
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.54
Passenger Car Equivalent (ET)	2.000		

Speed and Density

Lane Width Adjustment (fLW)	-	Average Speed (S), mi/h	67.6
Right-Side Lateral Clearance Adj. (fRLC)	-	Density (D), pc/mi/ln	19.0
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS _{adj}), mi/h	67.6		

HCS7 Basic Freeway Report

Project Information

Analyst	Mladen Popovic	Date	8/7/2018
Agency	Dudek	Analysis Year	2018
Jurisdiction	Anaheim	Time Period Analyzed	Existing plus Project PM Peak Hour
Project Description	SR-57 N, Lincoln Avenue to SR-91, Ball Road Basin EIR		

Geometric Data

Number of Lanes, In	5	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	67.1	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	67.1
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	7300	Heavy Vehicle Adjustment Factor (fHV)	0.968
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1605
Total Trucks, %	3.30	Capacity (c), pc/h/ln	2371
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2371
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.68
Passenger Car Equivalent (ET)	2.000		

Speed and Density

Lane Width Adjustment (fLW)	-	Average Speed (S), mi/h	66.0
Right-Side Lateral Clearance Adj. (fRLC)	-	Density (D), pc/mi/ln	24.3
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFSadj), mi/h	67.1		

HCS7 Basic Freeway Report

Project Information

Analyst	Mladen Popovic	Date	8/7/2018
Agency	Dudek	Analysis Year	2018
Jurisdiction	Anaheim	Time Period Analyzed	Existing plus Project PM Peak Hour
Project Description	SR-57 S, I-5 to Orangewood Avenue, Ball Road Basin EIR		

Geometric Data

Number of Lanes, In	4	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	64.3	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	64.3
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	6954	Heavy Vehicle Adjustment Factor (fhv)	0.990
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1868
Total Trucks, %	1.00	Capacity (c), pc/h/ln	2343
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2343
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.80
Passenger Car Equivalent (ET)	2.000		

Speed and Density

Lane Width Adjustment (flw)	-	Average Speed (S), mi/h	61.5
Right-Side Lateral Clearance Adj. (fRLC)	-	Density (D), pc/mi/ln	30.4
Total Ramp Density Adjustment	-	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFSadj), mi/h	64.3		

HCS7 Basic Freeway Report

Project Information

Analyst	Mladen Popovic	Date	8/7/2018
Agency	Dudek	Analysis Year	2018
Jurisdiction	Anaheim	Time Period Analyzed	Existing plus Project PM Peak Hour
Project Description	SR-57 S, Orangewood Avenue to Katella Avenue, Ball Road Basin EIR		

Geometric Data

Number of Lanes, In	4	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	65.2	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	65.2
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	6369	Heavy Vehicle Adjustment Factor (fhv)	0.981
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1727
Total Trucks, %	1.90	Capacity (c), pc/h/ln	2352
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2352
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.73
Passenger Car Equivalent (ET)	2.000		

Speed and Density

Lane Width Adjustment (flw)	-	Average Speed (S), mi/h	63.6
Right-Side Lateral Clearance Adj. (fRLC)	-	Density (D), pc/mi/ln	27.2
Total Ramp Density Adjustment	-	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFSadj), mi/h	65.2		

HCS7 Basic Freeway Report

Project Information

Analyst	Mladen Popovic	Date	8/7/2018
Agency	Dudek	Analysis Year	2018
Jurisdiction	Anaheim	Time Period Analyzed	Existing plus Project PM Peak Hour
Project Description	SR-57 S, Katella Avenue to Ball Road, Ball Road Basin EIR		

Geometric Data

Number of Lanes, In	4	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	70.9	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	70.9
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	6012	Heavy Vehicle Adjustment Factor (fhv)	0.982
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1628
Total Trucks, %	1.80	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.68
Passenger Car Equivalent (ET)	2.000		

Speed and Density

Lane Width Adjustment (flw)	-	Average Speed (S), mi/h	68.4
Right-Side Lateral Clearance Adj. (fRLC)	-	Density (D), pc/mi/ln	23.8
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFSadj), mi/h	70.9		

HCS7 Basic Freeway Report

Project Information

Analyst	Mladen Popovic	Date	8/7/2018
Agency	Dudek	Analysis Year	2018
Jurisdiction	Anaheim	Time Period Analyzed	Existing plus Project PM Peak Hour
Project Description	SR-57 S, Ball Road to Lincoln Avenue, Ball Road Basin EIR		

Geometric Data

Number of Lanes, In	4	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	66.8	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	66.8
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	5761	Heavy Vehicle Adjustment Factor (fhv)	0.976
Peak Hour Factor	0.94	Flow Rate (Vp), pc/h/ln	1570
Total Trucks, %	2.50	Capacity (c), pc/h/ln	2368
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2368
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.66
Passenger Car Equivalent (ET)	2.000		

Speed and Density

Lane Width Adjustment (flw)	-	Average Speed (S), mi/h	66.0
Right-Side Lateral Clearance Adj. (fRLC)	-	Density (D), pc/mi/ln	23.8
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFSadj), mi/h	66.8		

HCS7 Basic Freeway Report

Project Information

Analyst	Mladen Popovic	Date	8/7/2018
Agency	Dudek	Analysis Year	2018
Jurisdiction	Anaheim	Time Period Analyzed	Existing plus Project PM Peak Hour
Project Description	SR-57 S, Lincoln Avenue to SR-91, Ball Road Basin EIR		

Geometric Data

Number of Lanes, In	5	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	70.0	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	70.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

Demand Volume veh/h	6333	Heavy Vehicle Adjustment Factor (fhv)	0.940
Peak Hour Factor	0.94	Flow Rate (V_p), pc/h/ln	1433
Total Trucks, %	6.40	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.60
Passenger Car Equivalent (ET)	2.000		

Speed and Density

Lane Width Adjustment (flw)	-	Average Speed (S), mi/h	69.4
Right-Side Lateral Clearance Adj. (fRLC)	-	Density (D), pc/mi/ln	20.6
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFSadj), mi/h	70.0		