

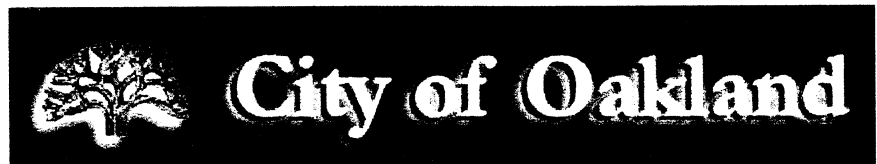
Traffic Supplement

for the

Oakland Army Base Area Redevelopment Plan

State Clearinghouse Number 2001082058

prepared by the



environmental consultant:

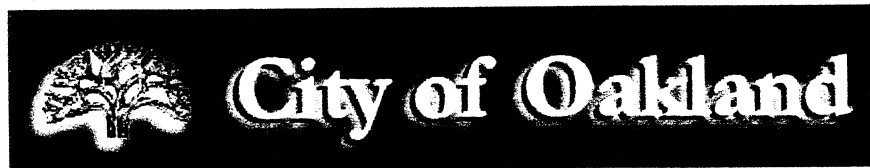
ga g. borchard & associates

APRIL 2002

Traffic Supplement
for the
Oakland Army Base Redevelopment Area Plan

April 2002

prepared by



with the assistance of

g. borchard & associates
6026 Colby Street
Oakland, California 94618
a small local WBE

in conjunction with

Dowling Associates, Inc., a small local firm

Supplemental Traffic Analysis Worksheets

- S1 Existing Conditions
- S2 Baseline Conditions
- S3 Existing and Project Conditions
- S4 Cumulative Conditions
- S5 Mitigated Conditions

S1 Existing Conditions

Oakland Army Base Area Redevelopment Plan EIR
Existing Conditions
AM Peak Hour

Oakland Army Base Area Redevelopment Plan EIR
Existing Conditions
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Impact Analysis Report
Level Of Service

Intersection	Base Del/V/ LOS Veh C	Base V/ C	Future Del/V/ LOS Veh C	Future V/ C	Change in
# 1 W Grand / Maritime	C 34.0 0.436	C 34.0 0.436	D 37.1 0.544	C 37.1 0.544	+ 3.069 D/V
# 2 W Grand / Frontage Rd	C 30.3 0.338	C 30.3 0.338	C 30.7 0.352	C 30.7 0.352	+ 0.399 D/V
# 3 W Grand / Mandela	A 9.6 0.313	A 9.6 0.313	A 9.6 0.317	A 9.6 0.317	-0.033 D/V
# 4 W Grand / Adeline	B 11.1 0.419	B 11.1 0.419	B 11.5 0.428	B 11.5 0.428	+ 0.343 D/V
# 5 W Grand / Market	A 10.0 0.377	A 10.0 0.377	A 9.9 0.384	A 9.9 0.384	-0.067 D/V
# 6 W Grand / San Pablo Av	B 11.4 0.342	B 11.4 0.342	B 11.5 0.348	B 11.5 0.348	+ 0.029 D/V
# 7 W Grand / MLK Jr	B 13.7 0.301	B 13.7 0.301	B 13.7 0.304	B 13.7 0.304	-0.093 D/V
# 8 W Grand / Northgate	C 23.8 0.505	C 23.8 0.505	C 23.9 0.511	C 23.9 0.511	+ 0.030 D/V
# 9 W Grand / Harrison	C 24.2 0.516	C 24.2 0.516	C 24.2 0.516	C 24.2 0.516	+ 0.054 D/V
# 10 7th / Maritime	C 29.7 0.381	C 29.7 0.381	C 30.4 0.428	C 30.4 0.428	+ 0.701 D/V
# 11 7th / I-880 SB Ramp	A 5.2 0.101	A 5.2 0.101	A 5.2 0.110	A 5.2 0.110	-0.029 D/V
# 12 7th / I-880 North Ramp	C 29.2 0.390	C 29.2 0.390	C 29.3 0.413	C 29.3 0.413	+ 0.111 D/V
# 13 7th / Peralta	A 8.6 0.156	A 8.6 0.156	A 8.5 0.157	A 8.5 0.157	-0.016 D/V
# 14 7th / Mandela	B 14.8 0.271	B 14.8 0.271	B 14.8 0.272	B 14.8 0.272	-0.017 D/V
# 15 7th / Union	A 9.0 0.331	A 9.0 0.331	A 9.0 0.331	A 9.0 0.331	-0.012 D/V
# 16 7th / Adeline	B 10.7 0.280	B 10.7 0.280	B 10.7 0.280	B 10.7 0.280	-0.010 D/V
# 17 7th / Market	B 15.0 0.238	B 15.0 0.238	B 15.0 0.239	B 15.0 0.239	-0.011 D/V
# 18 7th / Harrison	B 10.5 0.379	B 10.5 0.379	B 10.5 0.380	B 10.5 0.380	+ 0.012 D/V
# 19 7th / Jackson	C 32.6 1.007	C 32.6 1.007	C 33.6 1.013	C 33.6 1.013	+ 1.024 D/V
# 20 6th / Jackson	B 10.4 0.426	B 10.4 0.426	B 10.4 0.426	B 10.4 0.426	+ 0.000 D/V
# 21 5th / Union / I-880 Ramps	C 31.5 0.660	C 31.5 0.660	C 31.5 0.661	C 31.5 0.661	+ 0.031 D/V
# 22 5th / Adeline	C 30.4 0.471	C 30.4 0.471	C 30.4 0.472	C 30.4 0.472	+ 0.011 D/V
# 23 I-880 Off Ramp / Market	B 19.5 0.343	B 19.5 0.343	B 19.5 0.343	B 19.5 0.343	+ 0.000 D/V

Oakland Army Base Area Redevelopment Plan EIR
Existing Conditions
AM Peak Hour

Level Of Service Computation Report

1997 HCM Operations Method (Base Volume Alternative)
Intersection #1 W Grand / Maritim

Cycle (sec): 100 Critical Vol./Cap. (X): 0.436
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 34.0
Optimal Cycle: 77 Level Of Service: C

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Split Phase	Split Phase	Protected	Protected
Rights:	Include	Include	Include	Include
Min. Green:	15 20 20	15 15 15	15 15 15	15 15 15
Lanes:	2 0 0 1 0 1 0 0 1 0 1 1 1 0 1 1 0			

Volume Module:

Base Vol:	109 16 36 18 4 16 5 212 232 339 362 17
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:	109 16 36 18 4 16 5 212 232 339 362 17
User Adj:	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:	109 16 36 18 4 16 5 212 232 339 362 17
Reduct Vol:	0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol:	109 16 36 18 4 16 5 212 232 339 362 17
PCE Adj:	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.:	109 16 36 18 4 16 5 212 232 339 362 17

Saturation Flow Module:

Sat/Lane:	1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment:	0.77 0.75 0.75 0.79 0.73 0.73 0.79 0.73 0.73 0.79 0.79 0.79
Lanes:	2.00 0.31 0.69 1.00 0.20 0.80 1.00 1.43 1.57 1.00 1.91 0.09
Final Sat.:	2917 436 982 1504 279 1114 1504 1986 2173 1504 2852 134

Capacity Analysis Module:

Vol/Sat:	0.04 0.04 0.04 0.01 0.01 0.01 0.00 0.11 0.11 0.23 0.13 0.13
Crit Moves:	0.04 0.04 0.04 0.01 0.01 0.01 0.00 0.11 0.11 0.23 0.13 0.13
Green/Cycle:	0.20 0.20 0.20 0.15 0.15 0.15 0.27 0.17 0.17 0.36 0.27 0.27
Volume/Cap:	0.19 0.18 0.18 0.08 0.10 0.10 0.01 0.63 0.63 0.63 0.48 0.48
Delay/Veh:	33.4 33.5 33.5 36.7 36.9 36.9 27.1 40.3 40.3 28.8 31.4 31.4
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:	33.4 33.5 33.5 36.7 36.9 36.9 27.1 40.3 40.3 28.8 31.4 31.4
DesignQueue:	5 1 2 1 0 1 0 10 11 13 15 1

Oakland Army Base Area Redevelopment Plan EIR
Existing Conditions
AM Peak Hour

Level Of Service Computation Report

1997 HCM Operations Method (Base Volume Alternative)
Intersection #2 W Grand / Frontage Rd

Cycle (sec): 100 Critical Vol./Cap. (X): 0.338
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 30.3
Optimal Cycle: 77 Level Of Service: C

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Split Phase	Split Phase	Protected	Protected
Rights:	Include	Include	Include	Include
Min. Green:	15 15 15	15 15 15	15 20 20	15 15 15
Lanes:	1 0 1 1 0 1 1 0 1 0 1 0 1 0 1 0 1 1 1			

Volume Module:

Base Vol:	51 127 138 156 122 49 56 308 48 104 532 244
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:	51 127 138 156 122 49 56 308 48 104 532 244
User Adj:	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:	51 127 138 156 122 49 56 308 48 104 532 244
Reduct Vol:	0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol:	51 127 138 156 122 49 56 308 48 104 532 244
PCE Adj:	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.:	51 127 138 156 122 49 56 308 48 104 532 244

Saturation Flow Module:

Sat/Lane:	1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment:	0.95 0.88 0.88 0.91 0.91 0.91 0.95 0.93 0.93 0.95 0.91 0.91
Lanes:	1.00 1.00 1.00 1.43 1.12 0.45 1.00 1.73 0.27 1.00 2.00 1.00
Final Sat.:	1805 1664 1664 2468 1930 775 1805 3061 477 1805 3440 1720

Capacity Analysis Module:

Vol/Sat:	0.03 0.08 0.08 0.06 0.06 0.06 0.03 0.10 0.10 0.06 0.15 0.14
Crit Moves:	0.03 0.08 0.08 0.06 0.06 0.06 0.03 0.10 0.10 0.06 0.15 0.14
Green/Cycle:	0.25 0.25 0.25 0.19 0.19 0.19 0.15 0.30 0.30 0.17 0.32 0.32
Volume/Cap:	0.12 0.31 0.34 0.34 0.34 0.34 0.21 0.34 0.34 0.34 0.49 0.45
Delay/Veh:	29.4 31.1 31.3 35.5 35.5 35.5 37.7 27.6 27.6 37.2 27.8 27.3
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:	29.4 31.1 31.3 35.5 35.5 35.5 37.7 27.6 27.6 37.2 27.8 27.3
DesignQueue:	2 5 6 7 6 2 3 12 2 5 21 10

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Level Of Service Computation Report
1997 HCM Operations Method (Base Volume Alternative)

Intersection #5 W Grand / Market
Cycle (sec): 64 Critical Vol./Cap. (X): 0.377
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 10.0
Optimal Cycle: 41 Level Of Service: A

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Permitted Permitted Permitted Permitted
Rights: Include Include Include Include
Min. Green: 8 20 20 8 15 15 8 15 15
Lanes: 0 1 0 1 0 1 0 0 1 1 1 0 0 1 1 1 0

Volume Module:
Base Vol: 87 197 82 13 212 39 24 447 40 91 800 39
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: 87 197 82 13 212 39 24 447 40 91 800 39
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 87 197 82 13 212 39 24 447 40 91 800 39
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 87 197 82 13 212 39 24 447 40 91 800 39
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 87 197 82 13 212 39 24 447 40 91 800 39

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.75 0.75 0.75 0.87 0.87 0.87 0.80 0.80 0.80 0.76 0.76
Lanes: 0.47 1.08 0.45 0.10 1.61 0.29 0.14 2.63 0.23 0.29 2.58 0.13
Final Sat.: 681 1543 642 162 2648 487 214 3985 357 425 3739 182

Capacity Analysis Module:
Vol/Sat: 0.13 0.13 0.13 0.08 0.08 0.08 0.11 0.11 0.11 0.21 0.21
Crit Moves: 0.34 0.34 0.34 0.34 0.34 0.34 0.57 0.57 0.57 0.57 0.57
Green/Cycle: 0.38 0.38 0.38 0.24 0.24 0.24 0.20 0.20 0.20 0.38 0.38
Volume/Cap: 16.3 16.3 16.3 15.3 15.3 15.3 6.8 6.8 6.8 7.7 7.7
Delay/Veh: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
User DelAdj: 16.3 16.3 16.3 15.3 15.3 15.3 6.8 6.8 6.8 7.7 7.7
AdjDel/Veh: 2 5 2 0 5 1 0 7 1 1 13 1
DesignQueue: 2 5 2 0 5 1 0 7 1 1 13 1

Oakland Army Base Area Redevelopment Plan EIR
Existing Conditions
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Level Of Service Computation Report
1997 HCM Operations Method (Base Volume Alternative)

Intersection #6 W Grand / San Pablo Av
Cycle (sec): 64 Critical Vol./Cap. (X): 0.342
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 11.4
Optimal Cycle: 41 Level Of Service: B

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Permitted Permitted Permitted Permitted
Rights: Include Include Include Include
Min. Green: 8 20 20 8 20 20 8 15 15 8 15 15
Lanes: 1 0 1 1 0 1 0 1 0 1 0 0 1 1 1 0

Volume Module:
Base Vol: 49 382 28 214 462 67 14 488 43 13 693 59
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: 49 382 28 214 462 67 14 488 43 13 693 59
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 49 382 28 214 462 67 14 488 43 13 693 59
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 49 382 28 214 462 67 14 488 43 13 693 59
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 49 382 28 214 462 67 14 488 43 13 693 59

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.39 0.94 0.94 0.47 0.93 0.93 0.83 0.83 0.83 0.84 0.84
Lanes: 1.00 1.86 0.14 1.00 1.75 0.25 0.08 2.68 0.24 0.05 2.72 0.23
Final Sat.: 749 3330 244 901 3093 449 121 4212 371 81 4322 368

Capacity Analysis Module:
Vol/Sat: 0.07 0.11 0.11 0.24 0.15 0.15 0.12 0.12 0.12 0.16 0.16
Crit Moves: 0.44 0.44 0.44 0.44 0.44 0.44 0.47 0.47 0.47 0.47 0.47
Green/Cycle: 0.15 0.26 0.26 0.54 0.34 0.34 0.25 0.25 0.25 0.34 0.34
Volume/Cap: 11.1 11.5 11.5 14.9 12.1 12.1 10.3 10.3 10.3 10.8 10.8
Delay/Veh: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
User DelAdj: 11.1 11.5 11.5 14.9 12.1 12.1 10.3 10.3 10.3 10.8 10.8
AdjDel/Veh: 1 8 1 4 10 1 0 9 1 0 14 1
DesignQueue: 1 8 1 4 10 1 0 9 1 0 14 1

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Oakland Army Base Area Redevelopment Plan EIR
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Level Of Service Computation Report
1997 HCM Operations Method (Base Volume Alternative)

Intersection #7 W Grand / MLK Jr
Cycle (sec): 100 Critical Vol./Cap. (X): 0.301
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 13.7
Optimal Cycle: 41 Level Of Service: B

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Permitted Permitted Permitted Permitted Permitted
Rights: Include Include Include Include Include
Min. Green: 8 20 20 8 20 20 8 15 15 8 15 15
Lanes: 0 1 0 1 0 0 1 0 1 1 1 0 0 1 1 1 0

Volume Module:
Base Vol: 36 85 27 135 161 52 702 35 12 529 35
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 36 85 27 135 161 52 702 35 12 529 35
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 36 85 27 135 161 52 702 35 12 529 35
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 36 85 27 135 161 52 702 35 12 529 35
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 36 85 27 135 161 52 702 35 12 529 35

Level Of Service Computation Report
1997 HCM Operations Method (Base Volume Alternative)

Intersection #8 W Grand / Northgate
Cycle (sec): 100 Critical Vol./Cap. (X): 0.505
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 23.8
Optimal Cycle: 52 Level Of Service: C

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Permitted Permitted Permitted Permitted
Rights: Include Include Include Include
Min. Green: 0 0 0 0 1 0 1 0 1 0 2 0 0 0 15 15
Lanes: 0 0 0 0 1 0 1 0 1 0 2 0 0 0 2 1 0

Volume Module:
Base Vol: 0 0 0 0 645 0 234 191 532 0 0 671 60
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 0 0 0 645 0 234 191 532 0 0 671 60
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 0 0 0 645 0 234 191 532 0 0 671 60
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 0 0 0 0 645 0 234 191 532 0 0 671 60

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.77 0.77 0.77 0.81 0.81 0.81 0.78 0.78 0.83 0.83 0.83
Lanes: 0.35 0.83 0.82 0.17 0.83 1.00 0.20 2.67 0.13 0.06 2.76 0.18
Final Sat.: 508 1200 1200 257 1283 1530 293 3959 197 99 4353 288

Capacity Analysis Module:
Vol/Sat: 0.07 0.07 0.07 0.11 0.11 0.11 0.18 0.18 0.18 0.12 0.12 0.12
Crit Moves: ****
Green/Cycle: 0.35 0.35 0.35 0.35 0.35 0.35 0.59 0.59 0.59 0.59 0.59
Volume/Cap: 0.20 0.20 0.20 0.30 0.30 0.30 0.30 0.30 0.30 0.21 0.21 0.21
Delay/Veh: 22.8 22.8 22.8 23.8 23.8 23.8 10.3 10.3 10.3 9.6 9.6 9.6
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: 22.8 22.8 22.8 23.8 23.8 23.8 10.3 10.3 10.3 9.6 9.6 9.6
DesignQueue: 1 3 3 1 5 6 1 17 1 0 12 1

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 1.00 1.00 1.00 0.93 1.00 0.93 0.95 0.95 1.00 1.00 0.90 0.90
Lanes: 0.00 0.00 0.00 1.73 0.00 1.27 1.00 2.00 0.00 0.00 2.75 0.25
Final Sat.: 0 0 0 3052 0 2229 1805 3610

Capacity Analysis Module:
Vol/Sat: 0.00 0.00 0.00 0.21 0.00 0.10 0.11 0.15 0.00 0.00 0.14 0.14
Crit Moves: ****
Green/Cycle: 0.00 0.00 0.00 0.42 0.00 0.42 0.21 0.49 0.00 0.00 0.28 0.28
Volume/Cap: 0.00 0.00 0.00 0.51 0.00 0.25 0.25 0.30 0.00 0.00 0.51 0.51
Delay/Veh: 0.0 0.0 0.0 21.7 0.0 18.9 36.1 15.2 0.0 0.0 30.3 30.3
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: 0.0 0.0 0.0 21.7 0.0 18.9 36.1 15.2 0.0 0.0 30.3 30.3
DesignQueue: 0 0 0 22 0 8 9 16 0 0 28 2

Oakland Army Base Area Redevelopment Plan EIR
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Level Of Service Computation Report

1997 HCM Operations Method (Base Volume Alternative)

Intersection #9 W Grand / Harrison

Cycle (sec): 100 Critical Vol./Cap. (X): 0.516
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 24.2
Optimal Cycle: 58 Level Of Service: C

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

Control: Permitted Permitted Protected Protected
Rights: Include Include Include Include
Min. Green: 8 21 21 8 21 21 8 20 20 8 20 20

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

Volume Module:
Base Vol: 63 717 244 8 1131 78 57 239 128 484 704 124
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: 63 717 244 8 1131 78 57 239 128 484 704 124
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 63 717 244 8 1131 78 57 239 128 484 704 124
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 63 717 244 8 1131 78 57 239 128 484 704 124
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 63 717 244 8 1131 78 57 239 128 484 704 124

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.68 0.68 0.75 0.84 0.84 0.84 0.92 0.86 0.86 0.92 0.93 0.93
Lanes: 0.24 2.76 2.00 0.02 2.79 0.19 2.00 2.00 1.00 2.00 1.70 0.30
Final Sat.: 314 3571 2842 32 4462 308 3502 3278 1639 3502 3002 529

Capacity Analysis Module:
Vol/Sat: 0.20 0.20 0.09 0.25 0.25 0.25 0.02 0.07 0.08 0.14 0.23 0.23
Crit Moves: ****
Green/Cycle: 0.46 0.46 0.46 0.46 0.46 0.46 0.08 0.20 0.20 0.25 0.37 0.37
Volume/Cap: 0.44 0.44 0.19 0.55 0.55 0.55 0.20 0.36 0.39 0.55 0.63 0.63
Delay/Veh: 18.5 18.5 16.1 19.9 19.9 19.9 43.4 34.7 35.0 33.3 26.9 26.9
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: 18.5 18.5 16.1 19.9 19.9 19.9 43.4 34.7 35.0 33.3 26.9 26.9
DesignQueue: 2 22 7 0 36 2 3 11 6 21 26 5

Oakland Army Base Area Redevelopment Plan EIR
Existing Conditions
AM Peak Hour

Level Of Service Computation Report

1997 HCM Operations Method (Base Volume Alternative)

Intersection #10 7th / Maritime

Cycle (sec): 100 Critical Vol./Cap. (X): 0.381
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 29.7
Optimal Cycle: 82 Level Of Service: C

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

Control: Protected Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 15 20 20 15 20 20 15 20 20 15 20 20

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

Volume Module:
Base Vol: 83 59 43 79 97 4 38 40 63 132 191 263
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: 83 59 43 79 97 4 38 40 63 132 191 263
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 83 59 43 79 97 4 38 40 63 132 191 263
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 83 59 43 79 97 4 38 40 63 132 191 263
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 83 59 43 79 97 4 38 40 63 132 191 263

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.73 0.68 0.68 0.73 0.73 0.73 0.73 0.64 0.64 0.73 0.73 0.65
Lanes: 1.00 1.16 0.84 1.00 1.92 0.08 1.00 2.00 1.00 1.00 2.00 1.00
Final Sat.: 1388 1505 1097 1388 2650 109 1388 2415 1207 1388 2776 1242

Capacity Analysis Module:
Vol/Sat: 0.06 0.04 0.04 0.06 0.04 0.04 0.03 0.02 0.05 0.10 0.07 0.21
Crit Moves: ****
Green/Cycle: 0.15 0.20 0.20 0.15 0.20 0.20 0.15 0.30 0.30 0.23 0.38 0.38
Volume/Cap: 0.40 0.20 0.20 0.38 0.18 0.18 0.18 0.05 0.17 0.42 0.18 0.56
Delay/Veh: 39.7 33.5 33.5 39.5 33.4 33.4 37.6 24.7 25.8 33.9 20.7 25.9
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: 39.7 33.5 33.5 39.5 33.4 33.4 37.6 24.7 25.8 33.9 20.7 25.9
DesignQueue: 4 3 2 4 4 0 2 2 2 6 7 9

Oakland Army Base Area Redevelopment Plan EIR
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Base Volume Alternative)

Intersection #17 7th / Market
Cycle (sec): 100
Loss Time (sec): 9 (Y+R = 4 sec)
Optimal Cycle: 75
Level Of Service: B

Table with columns for North Bound, South Bound, East Bound, West Bound, L, T, R. Includes rows for Approach, Movement, Control, Rights, Lanes, and Volume Module.

Volume Module: >> Count Date: 17 Apr 2001 << AM Peak
Base Vol: 0 1066 1351
Growth Adj: 1.00 1.00 1.00
Initial Bse: 0 1066 1351
User Adj: 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00
PHF Volume: 0 1066 358
Reduced Vol: 0 1066 358
PCE Adj: 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00
Final Vol.: 0 1066 358

Saturation Flow Module:
Sat/Lane: 1900 1900 1900
Adjustment: 1.00 0.91 0.85
Lanes: 0.00 3.00 1.00
Final Sat.: 0 5187 1615

Capacity Analysis Module:
Vol/Sat: 0.00 0.21 0.22
Crit Moves: ****
Green/Cycle: 0.00 0.42 0.42
Volume/Cap: 0.00 0.49 0.53
Delay/Veh: 0.0 10.2 12.5
User DelAdj: 1.00 1.00 1.00
AdjDel/Veh: 0.0 10.2 12.5
DesignQueue: 0 16 5

Oakland Army Base Area Redevelopment Plan EIR
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Base Volume Alternative)

Intersection #18 7th / Harrison
Cycle (sec): 45
Loss Time (sec): 6 (Y+R = 4 sec)
Optimal Cycle: 45
Level Of Service: B

Table with columns for North Bound, South Bound, East Bound, West Bound, L, T, R. Includes rows for Approach, Movement, Control, Rights, Lanes, and Volume Module.

Volume Module: >> Count Date: 17 Apr 2001 << AM Peak
Base Vol: 0 1066 1351
Growth Adj: 1.00 1.00 1.00
Initial Bse: 0 1066 1351
User Adj: 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00
PHF Volume: 0 1066 358
Reduced Vol: 0 1066 358
PCE Adj: 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00
Final Vol.: 0 1066 358

Saturation Flow Module:
Sat/Lane: 1900 1900 1900
Adjustment: 1.00 0.91 0.85
Lanes: 0.00 3.00 1.00
Final Sat.: 0 5187 1615

Capacity Analysis Module:
Vol/Sat: 0.00 0.21 0.22
Crit Moves: ****
Green/Cycle: 0.00 0.42 0.42
Volume/Cap: 0.00 0.49 0.53
Delay/Veh: 0.0 10.2 12.5
User DelAdj: 1.00 1.00 1.00
AdjDel/Veh: 0.0 10.2 12.5
DesignQueue: 0 16 5

Oakland Army Base Area Redevelopment Plan EIR
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Base Volume Alternative)

Intersection #21 5th / Union / I-880 Ramps

Cycle (sec): 100 Critical Vol./Cap. (X): 0.660
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 31.5
Optimal Cycle: 72 Level Of Service: C

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Permitted Protected Split Phase Split Phase
Rights: Include Include Include Include
Min. Green: 0 20 20 0 20 20 8 20 20 8 20 20
Lanes: 0 1 0 1 1 0 0 1 0 0 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 38 163 784 0 228 33 3 102 29 493 157 25
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: 38 163 784 0 228 33 3 102 29 493 157 25
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 38 163 784 0 228 33 3 102 29 493 157 25
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 38 163 784 0 228 33 3 102 29 493 157 25
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 38 163 784 0 228 33 3 102 29 493 157 25

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.77 0.77 0.77 1.00 0.93 0.93 0.92 0.92 0.92 0.92 0.93 0.93
Lanes: 0.19 0.81 2.00 0.00 1.75 0.25 0.04 1.53 0.43 1.00 1.73 0.27
Final Sat.: 275 1180 2910 0 3094 448 78 2657 756 1805 3049 485

Capacity Analysis Module:
Vol/Sat: 0.14 0.14 0.27 0.00 0.07 0.07 0.04 0.04 0.04 0.27 0.05 0.05
Crit Moves: ****
Green/Cycle: 0.34 0.34 0.34 0.00 0.34 0.34 0.20 0.20 0.20 0.34 0.34 0.34
Volume/Cap: 0.41 0.41 0.80 0.00 0.22 0.22 0.19 0.19 0.19 0.80 0.15 0.15
Delay/Veh: 25.6 25.6 33.8 0.0 23.8 23.8 33.4 33.4 33.4 37.0 22.9 22.9
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: 25.6 25.6 33.8 0.0 23.8 23.8 33.4 33.4 33.4 37.0 22.9 22.9
DesignQueue: 1 6 31 0 9 1 0 5 1 19 6 1

Oakland Army Base Area Redevelopment Plan EIR
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Base Volume Alternative)

Intersection #22 5th / Adeline

Cycle (sec): 100 Critical Vol./Cap. (X): 0.471
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 30.4
Optimal Cycle: 80 Level Of Service: C

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Split Phase Split Phase Split Phase Split Phase
Rights: Include Include Include Include
Min. Green: 8 20 20 8 20 20 8 20 20 8 20 20
Lanes: 1 0 1 1 0 1 1 0 1 0 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 74 43 82 73 160 175 22 598 170 131 452 30
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 74 43 82 73 160 175 22 598 170 131 452 30
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 74 43 82 73 160 175 22 598 170 131 452 30
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 74 43 82 73 160 175 22 598 170 131 452 30
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 74 43 82 73 160 175 22 598 170 131 452 30

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.95 0.86 0.86 0.88 0.88 0.88 0.95 0.92 0.92 0.95 0.94 0.94
Lanes: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.56 0.44 1.00 1.88 0.12
Final Sat.: 1805 1628 1628 1674 1674 1674 1805 2718 773 1805 3355 223

Capacity Analysis Module:
Vol/Sat: 0.04 0.03 0.05 0.04 0.10 0.10 0.01 0.22 0.22 0.07 0.13 0.13
Crit Moves: ****
Green/Cycle: 0.20 0.20 0.20 0.20 0.20 0.20 0.14 0.36 0.36 0.12 0.34 0.34
Volume/Cap: 0.20 0.13 0.25 0.22 0.48 0.52 0.09 0.61 0.61 0.61 0.39 0.39
Delay/Veh: 33.7 32.9 34.0 33.5 35.8 36.4 37.8 27.1 27.1 46.9 25.2 25.2
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: 33.7 32.9 34.0 33.5 35.8 36.4 37.8 27.1 27.1 46.9 25.2 25.2
DesignQueue: 3 2 4 3 7 8 1 22 6 7 17 1

Oakland Army Base Area Redevelopment Plan EIR
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Base Volume Alternative)

Intersection #33 W MacArthur / Market
Cycle (sec): 100 Critical Vol./Cap. (X): 0.232
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 15.8
Optimal Cycle: 41 Level Of Service: B

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Permitted Permitted Permitted Permitted
Rights: Include Include Include Include
Min. Green: 8 20 20 8 20 20 8 15 15 8 15 15
Lanes: 0 1 0 1 0 0 1 0 1 1 1 0 1 0 1 1 0

Volume Module:
Base Vol: 54 211 61 101 222 23 37 198 17 74 279 42
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 54 211 61 101 222 23 37 198 17 74 279 42
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 54 211 61 101 222 23 37 198 17 74 279 42
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 54 211 61 101 222 23 37 198 17 74 279 42
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 54 211 61 101 222 23 37 198 17 74 279 42

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.78 0.78 0.78 0.72 0.72 0.72 0.78 0.78 0.78 0.59 0.93 0.93
Lanes: 0.33 1.30 0.37 0.58 1.29 0.13 0.44 2.36 0.20 1.00 1.74 0.26
Final Sat.: 491 1919 555 795 1747 181 649 3474 298 1115 3075 463

Capacity Analysis Module:
Vol/Sat: 0.11 0.11 0.11 0.13 0.13 0.13 0.06 0.06 0.06 0.07 0.09 0.09
Crit Moves: ****
Green/Cycle: 0.55 0.55 0.55 0.55 0.55 0.39 0.39 0.39 0.39 0.39 0.39
Volume/Cap: 0.20 0.20 0.20 0.23 0.23 0.23 0.15 0.15 0.15 0.17 0.23 0.23
Delay/Veh: 11.5 11.5 11.5 11.8 11.8 11.8 19.7 19.7 19.7 20.0 20.4 20.4
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: 11.5 11.5 11.5 11.8 11.8 11.8 19.7 19.7 19.7 20.0 20.4 20.4
DesignQueue: 1 5 2 3 6 1 1 7 1 3 10 1

Oakland Army Base Area Redevelopment Plan EIR
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Base Volume Alternative)

Intersection #34 Powell / I-80 Frontage Rd
Cycle (sec): 100 Critical Vol./Cap. (X): 0.545
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 21.3
Optimal Cycle: 47 Level Of Service: C

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Protected Protected
Rights: Include Include Include Ignore
Min. Green: 0 0 0 0 15 0 15 8 10 10 0 15 15
Lanes: 0 0 0 0 2 0 0 1 1 0 1 1 0 0 1 1

Volume Module:
Base Vol: 0 0 0 685 0 288 87 260 345 0 910 593
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 0 0 685 0 288 87 260 345 0 910 593
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 0 0 685 0 288 87 260 345 0 910 0
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 0 0 0 685 0 288 87 260 345 0 910 0

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 1.00 1.00 1.00 0.92 1.00 0.85 0.95 0.87 0.87 1.00 0.95 0.95
Lanes: 0.00 0.00 0.00 2.00 0.00 1.00 1.00 1.00 1.00 0.00 2.00 1.00
Final Sat.: 0 0 0 3502 0 1615 1805 1652 1652 0 3610 1805

Capacity Analysis Module:
Vol/Sat: 0.00 0.00 0.00 0.20 0.00 0.18 0.05 0.16 0.21 0.00 0.25 0.00
Crit Moves: ****
Green/Cycle: 0.00 0.00 0.00 0.36 0.00 0.36 0.09 0.55 0.55 0.00 0.46 0.00
Volume/Cap: 0.00 0.00 0.00 0.54 0.00 0.50 0.54 0.29 0.38 0.00 0.54 0.00
Delay/Veh: 0.0 0.0 0.0 26.0 0.0 25.7 47.5 12.0 12.9 0.0 19.7 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: 0.0 0.0 0.0 26.0 0.0 25.7 47.5 12.0 12.9 0.0 19.7 0.0
DesignQueue: 0 0 0 26 0 11 4 7 9 0 29 0

Oakland Army Base Area Redevelopment Plan EIR Existing Conditions AM Peak Hour

Level Of Service Computation Report 1997 HCM Operations Method (Base Volume Alternative) Intersection #35 Powell / I-80 NB Ramps

Cycle (sec): 100 Critical Vol./Cap. (X): 0.821 Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 25.2 Optimal Cycle: 74 Level Of Service: C

Table with columns for Approach (North, South, East, West Bound) and Movement (L, T, R). Rows include Control, Rights, Min. Green, Lanes, and Volume Module (Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, Final Vol).

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

Capacity Analysis Module: Table with columns for Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, DesignQueue.

Oakland Army Base Area Redevelopment Plan EIR Existing Conditions AM Peak Hour

Level Of Service Computation Report 1997 HCM Operations Method (Base Volume Alternative) Intersection #36 Powell / Christie

Cycle (sec): 100 Critical Vol./Cap. (X): 0.476 Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 29.9 Optimal Cycle: 69 Level Of Service: C

Table with columns for Approach (North, South, East, West Bound) and Movement (L, T, R). Rows include Control, Rights, Min. Green, Lanes, and Volume Module (Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, Final Vol).

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

Capacity Analysis Module: Table with columns for Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, DesignQueue.

Oakland Army Base Area Redevelopment Plan EIR Existing Conditions AM Peak Hour

Level Of Service Computation Report 1997 HCM Operations Method (Base Volume Alternative)

Intersection #37 Powell / Hollis
Cycle (sec): 100 Critical Vol./Cap. (X): 0.350
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 22.7
Optimal Cycle: 42 Level Of Service: C

Table with columns: Approach, Movement, L-T-R, North Bound, South Bound, East Bound, West Bound, Protected, Include, Rights, Min. Green, Lanes

Volume Module: Base Vol: 141 126 24 22 140 55 167 482 186 65 394 31
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: 141 126 24 22 140 55 167 482 186 65 394 31
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 141 126 24 22 140 55 167 482 186 65 394 31
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 141 126 24 22 140 55 167 482 186 65 394 31

Saturation Flow Module: Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.54 0.98 0.98 0.95 0.95 0.85 0.95 0.91 0.91 0.91 0.95 0.94 0.94
Lanes: 1.00 0.84 0.16 0.14 0.86 1.00 1.00 1.44 0.56 1.00 1.85 0.15
Final Sat.: 1022 1558 297 246 1563 1615 1805 2495 963 1805 3310 260

Capacity Analysis Module: Vol/Sat: 0.14 0.08 0.08 0.09 0.09 0.03 0.09 0.19 0.19 0.04 0.12 0.12
Crit Moves: 0.26 0.26 0.26 0.26 0.26 0.26 0.26 0.26 0.26 0.26 0.26 0.26
Green/Cycle: 0.54 0.32 0.32 0.35 0.35 0.13 0.32 0.35 0.35 0.35 0.32 0.32
Volume/Cap: 34.4 30.5 30.5 30.9 30.9 28.8 28.4 12.6 12.6 42.9 22.8 22.8
Delay/Veh: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
User DelAdj: 34.4 30.5 30.5 30.9 30.9 28.8 28.4 12.6 12.6 42.9 22.8 22.8
AdjDel/Veh: 6 5 1 1 6 2 7 13 5 3 14 1
DesignQueue: 6 5 1 1 6 2 7 13 5 3 14 1

Oakland Army Base Area Redevelopment Plan EIR Existing Conditions AM Peak Hour

Level Of Service Computation Report 1997 HCM Operations Method (Base Volume Alternative)

Intersection #38 Powell / San Pablo Av
Cycle (sec): 100 Critical Vol./Cap. (X): 0.732
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 31.8
Optimal Cycle: 64 Level Of Service: C

Table with columns: Approach, Movement, L-T-R, North Bound, South Bound, East Bound, West Bound, Protected, Include, Rights, Min. Green, Lanes

Volume Module: Base Vol: 190 871 63 61 1077 39 61 177 157 153 670 29
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: 190 871 63 61 1077 39 61 177 157 153 670 29
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 190 871 63 61 1077 39 61 177 157 153 670 29
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 190 871 63 61 1077 39 61 177 157 153 670 29

Saturation Flow Module: Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.95 0.94 0.94 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.94 0.94
Lanes: 1.00 1.87 0.13 1.00 1.93 0.07 1.00 1.06 0.94 1.00 1.92 0.08
Final Sat.: 1805 3333 241 1805 3466 126 1805 1779 1578 1805 3439 149

Capacity Analysis Module: Vol/Sat: 0.11 0.26 0.26 0.03 0.31 0.31 0.03 0.10 0.10 0.08 0.19 0.19
Crit Moves: 0.14 0.46 0.46 0.08 0.41 0.41 0.08 0.15 0.15 0.19 0.26 0.26
Green/Cycle: 0.76 0.56 0.56 0.42 0.76 0.76 0.42 0.66 0.66 0.46 0.76 0.76
Volume/Cap: 54.6 19.8 19.8 45.8 28.0 28.0 45.8 43.4 43.4 37.3 38.3 38.3
Delay/Veh: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
User DelAdj: 54.6 19.8 19.8 45.8 28.0 28.0 45.8 43.4 43.4 37.3 38.3 38.3
AdjDel/Veh: 9 28 2 3 38 1 3 9 8 7 29 1
DesignQueue: 9 28 2 3 38 1 3 9 8 7 29 1

Oakland Army Base Area Redevelopment Plan EIR
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Base Volume Alternative)

Intersection #39 Stanford / Market
Cycle (sec): 100 Critical Vol./Cap. (X): 0.494
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 28.6
Optimal Cycle: 58 Level Of Service: C

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Protected	Protected	Protected	Protected
Rights:	Include	Include	Include	Include
Min. Green:	8 15 15	8 15 15	8 15 15	8 15 15
Lanes:	1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0	1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0	1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0	1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0

Volume Module:

Base Vol:	159 385 13 46 751 13 51 247 2 64 366 16
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 1.00 1.00 1.00 1.00
Initial Bse:	159 385 13 46 751 13 51 247 2 64 366 16
User Adj:	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:	159 385 13 46 751 13 51 247 2 64 366 16
Reduct Vol:	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol:	159 385 13 46 751 13 51 247 2 64 366 16
PCE Adj:	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.:	159 385 13 46 751 13 51 247 2 64 366 16

Saturation Flow Module:

Sat/Lane:	1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment:	0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95
Lanes:	1.00 1.93 0.07 1.00 1.97 0.03 1.00 1.98 0.02 1.00 1.92 0.08 1.00 1.92 0.08 1.00
Final Sat.:	1805 3475 117 1805 3538 61 1805 3577 29 1805 3438 150

Capacity Analysis Module:

Vol/Sat:	0.09 0.11 0.11 0.03 0.21 0.21 0.03 0.07 0.07 0.04 0.11 0.11
Crit Moves:	****
Green/Cycle:	0.17 0.39 0.39 0.21 0.42 0.42 0.08 0.19 0.19 0.10 0.21 0.21
Volume/Cap:	0.51 0.29 0.29 0.12 0.51 0.51 0.35 0.37 0.37 0.35 0.51 0.51
Delay/Veh:	38.9 21.4 21.4 32.5 21.8 21.8 45.0 35.7 35.7 43.1 35.6 35.6
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:	38.9 21.4 21.4 32.5 21.8 21.8 45.0 35.7 35.7 43.1 35.6 35.6
DesignQueue:	7 14 0 2 26 0 3 11 0 3 17 1

Oakland Army Base Area Redevelopment Plan EIR
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Base Volume Alternative)

Intersection #40 Stanford / MLK Jr Wy
Cycle (sec): 100 Critical Vol./Cap. (X): 0.778
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 12.5
Optimal Cycle: 54 Level Of Service: B

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Permitted	Permitted	Protected	Protected
Rights:	Include	Include	Include	Include
Min. Green:	8 10 10	0 15 15	20 0 20	0 0 0
Lanes:	0 1 2 0 0 0 0 2 0 1 2 0 0 1 0 0 0 0 0 0	0 0 2 0 1 2 0 0 1 0 0 0 0 1 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Volume Module:

Base Vol:	243 1696 0 0 1141 207 242 0 263 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:	243 1696 0 0 1141 207 242 0 263 0 0 0
User Adj:	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:	243 1696 0 0 1141 207 242 0 263 0 0 0
Reduct Vol:	0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol:	243 1696 0 0 1141 207 242 0 263 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
Final Vol.:	243 1696 0 0 1141 207 242 0 263 0 0 0

Saturation Flow Module:

Sat/Lane:	1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment:	0.60 0.60 1.00 1.00 0.95 0.85 0.92 1.00 0.85 1.00 1.00 1.00
Lanes:	0.38 2.62 0.00 0.00 2.00 1.00 2.00 0.00 1.00 0.00 0.00 0.00
Final Sat.:	428 2985 0 0 3610 1615 3502 0 1615 0 0 0

Capacity Analysis Module:

Vol/Sat:	0.57 0.57 0.00 0.00 0.32 0.13 0.07 0.00 0.16 0.00 0.00 0.00
Crit Moves:	****
Green/Cycle:	0.73 0.73 0.00 0.00 0.73 0.73 0.21 0.00 0.21 0.00 0.00 0.00
Volume/Cap:	0.78 0.78 0.00 0.00 0.43 0.18 0.33 0.00 0.78 0.09 0.00 0.00
Delay/Veh:	10.0 10.0 0.0 0.0 5.4 4.2 33.8 0.0 48.2 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:	10.0 10.0 0.0 0.0 5.4 4.2 33.8 0.0 48.2 0.0 0.0 0.0
DesignQueue:	4 28 0 0 19 3 11 0 12 0 0 0

Oakland Army Base Area Redevelopment Plan EIR Existing Conditions AM Peak Hour

Level Of Service Computation Report 1997 HCM Operations Method (Base Volume Alternative)

Intersection #41 Ashby / 7th

Cycle (sec): 100 Critical Vol./Cap. (X): 0.721 Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 33.7 Optimal Cycle: 62 Level Of Service: C

Table with columns: Approach, Movement, North Bound, South Bound, East Bound, West Bound, L, T, R, L, T, R, L, T, R, L, T, R. Includes Control, Rights, Min. Green, Lanes, and Volume Module data.

Table with columns: Sat/Lane, Sat, Adj, Lanes, Final Sat. Includes Saturation Flow Module and Capacity Analysis Module data.

Oakland Army Base Area Redevelopment Plan EIR Existing Conditions AM Peak Hour

Level Of Service Computation Report 1997 HCM Operations Method (Base Volume Alternative)

Intersection #42 Ashby / San Pablo Av

Cycle (sec): 100 Critical Vol./Cap. (X): 0.761 Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 29.8 Optimal Cycle: 61 Level Of Service: C

Table with columns: Approach, Movement, North Bound, South Bound, East Bound, West Bound, L, T, R, L, T, R, L, T, R, L, T, R. Includes Control, Rights, Min. Green, Lanes, and Volume Module data.

Table with columns: Sat/Lane, Sat, Adj, Lanes, Final Sat. Includes Saturation Flow Module and Capacity Analysis Module data.

Oakland Army Base Area Redevelopment Plan EIR Existing Conditions AM Peak Hour

Level Of Service Computation Report

1997 HCM Operations Method (Base Volume Alternative)

Intersection #43 Marina Village / Constitution

Cycle (sec): 100 Critical Vol./Cap. (X): 0.536

Loss Time (sec): 9 (V+R = 4 sec) Average Delay (sec/veh): 20.6

Optimal Cycle: 37 Level Of Service: C

Approach: North Bound South Bound East Bound West Bound

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

Control: Protected Include Split Phase

Rights: 0 10 10 8 10 10 0 0 0 0 8 10 10

Min. Green: 0 0 1 1 0 2 0 1 1 0 0 0 0 1 0 0 0 2

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

Volume Module: >> Count Date: 17 Oct 2000 <<

Base Vol: 0 957 69 344 391 0 0 0 0 60 0 290

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 0 957 69 344 391 0 0 0 60 0 290

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Volume: 0 957 69 344 391 0 0 0 60 0 290

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

Reduced Vol: 0 957 69 344 391 0 0 0 60 0 290

PCE Adj: 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

Final Vol.: 0 957 69 344 391 0 0 0 60 0 290

Saturation Flow Module:

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

Adjustment: 1.00 0.94 0.94 0.92 0.95 0.95 1.00 1.00

Lanes: 0.00 1.87 0.13 2.00 2.00 0.00 0.00 0.00

Final Sat.: 0 3334 240 3502 3610 0 0 0 1805 0 2842

Capacity Analysis Module:

Vol/Sat: 0.00 0.29 0.29 0.10 0.11 0.00 0.00 0.00

Crit Moves: 0.00 0.29 0.29 0.10 0.11 0.00 0.00 0.00

Green/Cycle: 0.00 0.54 0.54 0.18 0.72 0.00 0.00 0.00

Volume/Cap: 0.00 0.54 0.54 0.54 0.15 0.00 0.00 0.00

Delay/Veh: 0.0 15.4 15.4 37.9 4.4 0.0 0.0 0.0

User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

AdjDel/Veh: 0.0 15.4 15.4 37.9 4.4 0.0 0.0 0.0

DesignQueue: 0 27 2 16 6 0 0 0 3 0 13

Oakland Army Base Area Redevelopment Plan EIR Existing Conditions AM Peak Hour

Level Of Service Computation Report

1997 HCM Operations Method (Base Volume Alternative)

Intersection #44 Atlantic / Webster

Cycle (sec): 120 Critical Vol./Cap. (X): 0.525

Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 31.5

Optimal Cycle: 80 Level Of Service: C

Approach: North Bound South Bound East Bound West Bound

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

Control: Protected Include Split Phase

Rights: 8 20 20 8 20 20 8 20 20 8 20 20

Min. Green: 1 0 1 1 0 1 0 2 0 1 1 1 0 1 1 0 1 0

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

Volume Module: >> Count Date: 17 Oct 2000 <<

Base Vol: 94 1045 59 44 472 515 443 93 41 40 142 27

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 94 1045 59 44 472 515 443 93 41 40 142 27

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Volume: 94 1045 59 44 472 515 443 93 41 40 142 27

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

Reduced Vol: 94 1045 59 44 472 515 443 93 41 40 142 27

PCE Adj: 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

Final Vol.: 94 1045 59 44 472 515 443 93 41 40 142 27

Saturation Flow Module:

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

Adjustment: 0.95 0.94 0.94 0.95 0.95 0.85 0.85 0.91

Lanes: 1.00 1.89 0.11 1.00 2.00 1.00 2.00 1.00

Final Sat.: 1805 3390 191 1805 3610 1615 3466 1733 1615 1805 2960 563

Capacity Analysis Module:

Vol/Sat: 0.05 0.31 0.31 0.02 0.13 0.32 0.13 0.05

Crit Moves: 0.05 0.31 0.31 0.02 0.13 0.32 0.13 0.05

Green/Cycle: 0.08 0.48 0.48 0.07 0.47 0.47 0.19 0.19

Volume/Cap: 0.68 0.64 0.64 0.37 0.28 0.68 0.68 0.29

Delay/Veh: 66.9 24.4 24.4 55.5 19.6 27.4 47.8 41.9 40.8 42.8 44.0 44.0

User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

AdjDel/Veh: 66.9 24.4 24.4 55.5 19.6 27.4 47.8 41.9 40.8 42.8 44.0 44.0

DesignQueue: 6 39 2 3 17 20 25 5 2 8 2

Oakland Army Base Area Redevelopment Plan EIR
Existing Conditions
AM Peak Hour

Level Of Service Computation Report

1997 HCM Operations Method (Base Volume Alternative)

Intersection #45 Atlantic / Constitution
Cycle (sec): 100 Critical Vol./Cap. (X): 0.410
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 22.3
Optimal Cycle: 57 Level Of Service: C

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

Control:	Protected		Permitted		Permitted	
	Include	Exclude	Include	Exclude	Include	Exclude
Rights:	8	20	8	20	8	20
Min. Green:	1	0	2	0	1	1
Lanes:	1	0	2	0	1	0

Volume Module:

Base Vol:	96	769	73	179	258	48	76	113	23	30	128	180
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:	96	769	73	179	258	48	76	113	23	30	128	180
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	96	769	73	179	258	48	76	113	23	30	128	180
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	96	769	73	179	258	48	76	113	23	30	128	180
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	96	769	73	179	258	48	76	113	23	30	128	180

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.92	0.95	0.85	0.47	0.93	0.93	0.66	0.87	0.87
Lanes:	1.00	2.00	1.00	2.00	2.00	1.00	1.00	1.66	0.34	1.00	1.00	1.00
Final Sat.:	1805	3610	1615	3502	3610	1615	893	2924	595	1252	1646	1646

Capacity Analysis Module:

Vol/Sat:	0.05	0.21	0.05	0.05	0.07	0.03	0.09	0.04	0.04	0.02	0.08	0.11
Crit Moves:	0.05	0.21	0.05	0.05	0.07	0.03	0.09	0.04	0.04	0.02	0.08	0.11
Green/Cycle:	0.18	0.52	0.52	0.12	0.46	0.46	0.27	0.27	0.27	0.27	0.27	0.27
Volume/Cap:	0.29	0.41	0.09	0.41	0.16	0.06	0.32	0.15	0.15	0.09	0.29	0.41
Delay/Veh:	35.7	14.8	12.2	41.0	15.8	15.1	30.2	28.1	28.1	27.7	29.3	30.6
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:	35.7	14.8	12.2	41.0	15.8	15.1	30.2	28.1	28.1	27.7	29.3	30.6
DesignQueue:	4	22	2	9	8	1	3	5	1	1	5	8

Oakland Army Base Area Redevelopment Plan EIR
Existing Conditions
PM Peak Hour

Oakland Army Base Area Redevelopment Plan EIR
Existing Conditions
PM Peak Hour

Impact Analysis Report Level Of Service		Base		Future		Change	
Intersection	Del/ LOS Veh C	V/ C	Del/ LOS Veh C	V/ C	Del/ LOS Veh C	V/ C	in
# 1 W Grand / Maritime	29.6	0.391	32.6	0.461	+ 2.997	D/V	
# 2 W Grand / Frontage Rd	35.4	0.679	37.3	0.715	+ 1.918	D/V	
# 3 W Grand / Mandela	10.7	0.443	10.6	0.458	-0.099	D/V	
# 4 W Grand / Adeline	10.3	0.475	10.6	0.484	+ 0.330	D/V	
# 5 W Grand / Market	10.6	0.369	10.6	0.373	-0.049	D/V	
# 6 W Grand / San Pablo Av	11.6	0.356	11.6	0.359	+ 0.023	D/V	
# 7 W Grand / MLK Jr	17.0	0.388	16.9	0.394	-0.106	D/V	
# 8 W Grand / Northgate	21.8	0.613	21.8	0.615	+ 0.017	D/V	
# 9 W Grand / Harrison	23.2	0.618	23.3	0.621	+ 0.104	D/V	
# 10 7th / Maritime	33.3	0.421	33.6	0.474	+ 0.343	D/V	
# 11 7th / I-880 SB Ramp	7.8	0.202	7.5	0.228	-0.263	D/V	
# 12 7th / I-880 North Ramp	30.5	0.440	30.6	0.443	+ 0.109	D/V	
# 13 7th / Petalita	8.7	0.170	8.7	0.170	-0.023	D/V	
# 14 7th / Mandela	16.7	0.224	16.7	0.224	-0.031	D/V	
# 15 7th / Union	11.9	0.282	11.9	0.283	-0.017	D/V	
# 16 7th / Adeline	9.5	0.266	9.5	0.266	-0.007	D/V	
# 17 7th / Market	20.8	0.249	20.8	0.249	-0.005	D/V	
# 18 7th / Harrison	10.8	0.498	10.8	0.499	+ 0.006	D/V	
# 19 7th / Jackson	21.1	0.920	21.3	0.923	+ 0.238	D/V	
# 20 6th / Jackson	11.7	0.573	11.7	0.573	+ 0.000	D/V	
# 21 5th / Union / I-880 Ramps	27.1	0.307	27.2	0.307	+ 0.036	D/V	
# 22 5th / Adeline	29.1	0.417	29.1	0.420	+ 0.021	D/V	
# 23 I-880 Off Ramp / Market	22.8	0.190	22.8	0.190	+ 0.000	D/V	

Oakland Army Base Area Redevelopment Plan EIR
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Base Volume Alternative)
Intersection #1 W Grand / Maritime
Cycle (sec): 100 Critical Vol./Cap. (X): 0.391
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 29.6
Optimal Cycle: 77 Level Of Service: C

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Split Phase Include	Split Phase Include	Protected	Protected
Rights:	15 20 20	15 15 15	15 15 15	15 15 15
Min. Green:	2 0 0 1 0	1 0 0 1 0	1 0 1 1 1	1 0 1 1 0
Lanes:				

Volume Module:

Base Vol:	340	7	178	17	0	7	9	509	66	46	562	9
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:	340	7	178	17	0	7	9	509	66	46	562	9
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	340	7	178	17	0	7	9	509	66	46	562	9
Reduced Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	340	7	178	17	0	7	9	509	66	46	562	9
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	340	7	178	17	0	7	9	509	66	46	562	9

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.77	0.71	0.71	0.79	0.78	0.78	0.78	0.79	0.79	0.79	0.79	0.79
Lanes:	2.00	0.04	0.96	1.00	0.00	1.00	1.00	2.00	1.00	1.00	1.97	0.03
Final Sat.:	2917	51	1304	1504	0	1345	1504	2956	1478	1504	2954	47

Capacity Analysis Module:

Vol/Sat:	0.12	0.14	0.14	0.01	0.00	0.01	0.01	0.17	0.04	0.03	0.19	0.19
Crit Moves:	0.24	0.24	0.24	0.15	0.00	0.15	0.34	0.34	0.34	0.15	0.34	0.34
Green/Cycle:	0.48	0.56	0.56	0.08	0.00	0.03	0.04	0.51	0.13	0.20	0.56	0.56
Volume/Cap:	33.0	35.5	35.5	36.7	0.0	36.4	26.9	23.0	37.7	27.8	27.8	27.8
Delay/Veh:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
User DelAdj:	33.0	35.5	35.5	36.7	0.0	36.4	26.9	23.0	37.7	27.8	27.8	27.8
AdjDel/Veh:	15	0	8	1	0	0	0	19	2	2	22	0
DesignQueue:												

Oakland Army Base Area Redevelopment Plan EIR
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Base Volume Alternative)
Intersection #2 W Grand / Frontage Rd
Cycle (sec): 100 Critical Vol./Cap. (X): 0.679
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 35.4
Optimal Cycle: 77 Level Of Service: D

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Split Phase Include	Split Phase Include	Protected	Protected
Rights:	15 15 15	15 15 15	15 20 20	15 15 15
Min. Green:	1 0 1 1 0	1 1 0 1 0	1 0 1 1 0	1 0 1 1 1
Lanes:				

Volume Module:

Base Vol:	28	157	172	84	62	5	381	309	61	95	914	298
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:	28	157	172	84	62	5	381	309	61	95	914	298
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	28	157	172	84	62	5	381	309	61	95	914	298
Reduced Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	28	157	172	84	62	5	381	309	61	95	914	298
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	28	157	172	84	62	5	381	309	61	95	914	298

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.88	0.88	0.92	0.92	0.92	0.95	0.93	0.93	0.95	0.91	0.91
Lanes:	1.00	1.00	1.00	1.67	1.23	0.10	1.00	1.67	0.33	1.00	2.00	1.00
Final Sat.:	1805	1664	1664	2916	2153	174	1805	2939	580	1805	3476	1738

Capacity Analysis Module:

Vol/Sat:	0.02	0.09	0.10	0.03	0.03	0.03	0.21	0.11	0.11	0.05	0.26	0.17
Crit Moves:	0.15	0.15	0.15	0.15	0.15	0.15	0.26	0.33	0.33	0.25	0.32	0.32
Green/Cycle:	0.10	0.63	0.69	0.19	0.19	0.19	0.82	0.32	0.32	0.21	0.82	0.53
Volume/Cap:	36.9	42.3	44.5	37.3	37.3	37.3	45.7	25.1	25.1	30.0	34.9	28.0
Delay/Veh:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
User DelAdj:	36.9	42.3	44.5	37.3	37.3	37.3	45.7	25.1	25.1	30.0	34.9	28.0
AdjDel/Veh:	1	8	8	4	3	0	17	12	2	4	37	12
DesignQueue:												

Oakland Army Base Area Redevelopment Plan EIR
Existing Conditions
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Level Of Service Computation Report
1997 HCM Operations Method (Base Volume Alternative)

Intersection #3 W Grand / Mandela

Cycle (sec): 64 Critical Vol./Cap. (X): 0.443
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 10.7
Optimal Cycle: 36 Level Of Service: B

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

Control: Permitted Permitted Permitted Permitted
Rights: Include Include Include Include
Min. Green: 8 20 20 8 20 20 8 10 10 8 10 10
Lanes: 0 1 0 0 1 0 1 0 1 0 1 0 1 0 1 0

Volume Module:

Base Vol: 107 144 127 35 132 105 127 332 57 220 604 25
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: 107 144 127 35 132 105 127 332 57 220 604 25
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 107 144 127 35 132 105 127 332 57 220 604 25
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 107 144 127 35 132 105 127 332 57 220 604 25
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 107 144 127 35 132 105 127 332 57 220 604 25

Saturation Flow Module:

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.77 0.77 0.85 0.80 0.80 0.80 0.36 0.93 0.93 0.51 0.94 0.94
Lanes: 0.43 0.57 1.00 0.26 0.97 0.77 1.00 1.71 0.29 1.00 1.92 0.08
Final Sat.: 620 834 1615 393 1484 1180 680 3013 517 961 3446 143

Capacity Analysis Module:

Vol/Sat: 0.17 0.17 0.08 0.09 0.09 0.09 0.19 0.11 0.11 0.23 0.18 0.18
Crit Moves: ****
Green/Cycle: 0.39 0.39 0.39 0.39 0.39 0.39 0.52 0.52 0.52 0.52 0.52
Volume/Cap: 0.44 0.44 0.20 0.23 0.23 0.23 0.36 0.21 0.21 0.44 0.34 0.34
Delay/Veh: 15.0 15.0 13.1 13.2 13.2 13.2 9.8 8.5 8.5 10.3 9.2 9.2
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 15.0 15.0 13.1 13.2 13.2 13.2 9.8 8.5 8.5 10.3 9.2 9.2
DesignQueue: 2 3 3 1 3 2 2 6 1 4 11 0

Oakland Army Base Area Redevelopment Plan EIR
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Level Of Service Computation Report
1997 HCM Operations Method (Base Volume Alternative)

Intersection #4 W Grand / Adeline

Cycle (sec): 64 Critical Vol./Cap. (X): 0.475
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 10.3
Optimal Cycle: 41 Level Of Service: B

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

Control: Permitted Permitted Permitted Permitted
Rights: Include Include Include Include
Min. Green: 8 20 20 8 20 20 8 15 15 8 15 15
Lanes: 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0

Volume Module:

Base Vol: 65 660 72 119 711 67 31 310 101 63 253 62
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: 65 660 72 119 711 67 31 310 101 63 253 62
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 65 660 72 119 711 67 31 310 101 63 253 62
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 65 660 72 119 711 67 31 310 101 63 253 62
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 65 660 72 119 711 67 31 310 101 63 253 62

Saturation Flow Module:

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.78 0.78 0.78 0.71 0.71 0.71 0.79 0.79 0.79 0.73 0.73 0.73
Lanes: 0.16 1.66 0.18 0.27 1.58 0.15 0.21 2.10 0.69 0.50 2.01 0.49
Final Sat.: 241 2446 267 359 2142 202 315 3145 1025 692 2779 681

Capacity Analysis Module:

Vol/Sat: 0.27 0.27 0.27 0.33 0.33 0.33 0.10 0.10 0.10 0.09 0.09 0.09
Crit Moves: ****
Green/Cycle: 0.67 0.67 0.67 0.67 0.67 0.67 0.23 0.23 0.23 0.23 0.23
Volume/Cap: 0.40 0.40 0.40 0.49 0.49 0.49 0.42 0.42 0.42 0.39 0.39 0.39
Delay/Veh: 4.9 4.9 4.9 5.4 5.4 5.4 21.1 21.1 21.1 20.9 20.9 20.9
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 4.9 4.9 4.9 5.4 5.4 5.4 21.1 21.1 21.1 20.9 20.9 20.9
DesignQueue: 1 8 1 1 9 1 1 9 3 2 7 2

Oakland Army Base Area Redevelopment Plan EIR
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Level Of Service Computation Report
1997 HCM Operations Method (Base Volume Alternative)

Intersection #5 W Grand / Market
 Cycle (sec): 64 Critical Vol./Cap. (X): 0.369
 Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 10.6
 Optimal Cycle: 41 Level Of Service: B

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Permitted	Permitted	Permitted	Permitted
Rights:	Include	Include	Include	Include
Min. Green:	8 20 20	8 20 20	8 15 15	8 15 15
Lanes:	0 1 0 1 0 0	0 1 0 1 0 0	0 1 1 0 0 1	0 1 1 0

Volume Module:

Base Vol:	105 228	82 45 155 34	56 624 65	87 636 54
Growth Adj:	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00
Initial Bse:	105 228	82 45 155 34	56 624 65	87 636 54
User Adj:	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00
PHF Adj:	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00
PHF Volume:	105 228	82 45 155 34	56 624 65	87 636 54
Reduced Vol:	0 0	0 0	0 0	0 0
Reduced Vol:	105 228	82 45 155 34	56 624 65	87 636 54
PCE Adj:	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
Final Vol.:	105 228	82 45 155 34	56 624 65	87 636 54

Saturation Flow Module:

Sat/Lane:	1900 1900	1900 1900	1900 1900	1900 1900
Adjustment:	0.75 0.75	0.78 0.78	0.76 0.76	0.72 0.72
Lanes:	0.51 1.10	0.38 1.33	0.23 2.51	0.26 0.34
Final Sat.:	724 1572	565 1971	432 325 3623	377 461 3367

Capacity Analysis Module:

Vol/Sat:	0.15 0.15	0.15 0.08	0.08 0.17	0.17 0.19
Crit Moves:	0.39 0.39	0.39 0.39	0.51 0.51	0.51 0.51
Green/Cycle:	0.37 0.37	0.20 0.20	0.34 0.34	0.37 0.37
Volume/Cap:	14.0 14.0	12.9 12.9	9.3 9.3	9.5 9.5
Delay/Veh:	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00
User DelAdj:	14.0 14.0	12.9 12.9	9.3 9.3	9.5 9.5
AdjDel/Veh:	2 5	2 1	3 1	1 2
DesignQueue:	2 5	2 1	3 1	1 2

Oakland Army Base Area Redevelopment Plan EIR
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Level Of Service Computation Report
1997 HCM Operations Method (Base Volume Alternative)

Intersection #6 W Grand / San Pablo Av
 Cycle (sec): 64 Critical Vol./Cap. (X): 0.356
 Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 11.6
 Optimal Cycle: 41 Level Of Service: B

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Permitted	Permitted	Permitted	Permitted
Rights:	Include	Include	Include	Include
Min. Green:	8 20 20	8 20 20	8 15 15	8 15 15
Lanes:	1 0 1 1 0 1	1 0 1 1 0 0	0 1 1 0 0 1	0 1 1 0

Volume Module:

Base Vol:	99 537	30 152 398	144 38 652	34 25 668
Growth Adj:	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00
Initial Bse:	99 537	30 152 398	144 38 652	34 25 668
User Adj:	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00
PHF Adj:	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00
PHF Volume:	99 537	30 152 398	144 38 652	34 25 668
Reduced Vol:	0 0	0 0	0 0	0 0
Reduced Vol:	99 537	30 152 398	144 38 652	34 25 668
PCE Adj:	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
Final Vol.:	99 537	30 152 398	144 38 652	34 25 668

Saturation Flow Module:

Sat/Lane:	1900 1900	1900 1900	1900 1900	1900 1900
Adjustment:	0.39 0.94	0.94 0.37	0.91 0.91	0.79 0.79
Lanes:	1.00 1.89	0.11 1.00	1.47 0.53	0.16 2.70
Final Sat.:	737 3392	189 711 2545	921 237 4073	212 152 4062

Capacity Analysis Module:

Vol/Sat:	0.13 0.16	0.16 0.21	0.16 0.16	0.16 0.16
Crit Moves:	0.44 0.44	0.44 0.44	0.44 0.44	0.46 0.46
Green/Cycle:	0.30 0.36	0.36 0.48	0.35 0.35	0.35 0.36
Volume/Cap:	11.9 11.9	11.9 13.7	11.8 11.1	11.1 11.2
Delay/Veh:	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00
User DelAdj:	11.9 11.9	11.9 13.7	11.8 11.1	11.1 11.2
AdjDel/Veh:	2 11	1 3	8 3	1 13
DesignQueue:	2 11	1 3	8 3	1 13

Oakland Army Base Area Redevelopment Plan EIR Existing Conditions PM Peak Hour

Level Of Service Computation Report

1997 HCM Operations Method (Base Volume Alternative)

Intersection #7 W Grand / MLK Jr

Cycle (sec): 100 Critical Vol./Cap. (X): 0.388
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 17.0
Optimal Cycle: 41 Level Of Service: B

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

Control: Permitted Permitted Permitted Permitted
Rights: Include Include Include Include
Min. Green: 8 20 20 8 20 20 8 15 15 8 15 15

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

Volume Module:
Base Vol: 37 197 280 37 88 113 69 674 12 23 691 10
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

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.80 0.80 0.80 0.74 0.74 0.74 0.74 0.74 0.74 0.74 0.82 0.82 0.82

Capacity Analysis Module:
Vol/Sat: 0.15 0.15 0.18 0.08 0.08 0.08 0.18 0.18 0.18 0.18 0.16 0.16 0.16
Crit Moves: ****
Green/Cycle: 0.48 0.48 0.48 0.48 0.48 0.46 0.46 0.46 0.46 0.46 0.46 0.46 0.46

Oakland Army Base Area Redevelopment Plan EIR Existing Conditions PM Peak Hour

Level Of Service Computation Report

1997 HCM Operations Method (Base Volume Alternative)

Intersection #8 W Grand / Northgate

Cycle (sec): 100 Critical Vol./Cap. (X): 0.613
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 21.8
Optimal Cycle: 52 Level Of Service: C

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

Control: Split Phase Split Phase Protected Permitted
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 8 20 20 8 10 0 0 15 15

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

Volume Module:
Base Vol: 0 0 0 0 0 159 0 98 456 915 0 0 713 431
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 1.00

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 1.00 1.00 1.00 1.00 1.00 0.91 1.00 0.91 0.95 0.95 1.00 1.00 0.86

Capacity Analysis Module:
Vol/Sat: 0.00 0.00 0.00 0.06 0.00 0.04 0.25 0.25 0.00 0.00 0.22 0.26
Crit Moves: ****
Green/Cycle: 0.00 0.00 0.00 0.20 0.00 0.20 0.35 0.71 0.00 0.00 0.36 0.36

Oakland Army Base Area Redevelopment Plan EIR Existing Conditions PM Peak Hour

Level Of Service Computation Report 1997 HCM Operations Method (Base Volume Alternative) Intersection #9 W Grand / Harrison

Cycle (sec): 100 Critical Vol./Cap. (X): 0.618 Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 23.2 Optimal Cycle: 58 Level Of Service: C

Table with 12 columns: Approach, Movement, North Bound, South Bound, East Bound, West Bound, L, T, R, L, T, R, Protected, Include, Rights, Min. Green, Lanes

Table with 12 columns: Volume Module, Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, Final Vol

Table with 12 columns: Saturation Flow Module, Sat/Lane, Adjustment, Lanes, Final Sat

Table with 12 columns: Capacity Analysis Module, Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, DesignQueue

Oakland Army Base Area Redevelopment Plan EIR Existing Conditions PM Peak Hour

Level Of Service Computation Report 1997 HCM Operations Method (Base Volume Alternative) Intersection #10 7th / Maritime

Cycle (sec): 100 Critical Vol./Cap. (X): 0.421 Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 33.3 Optimal Cycle: 82 Level Of Service: C

Table with 12 columns: Approach, Movement, North Bound, South Bound, East Bound, West Bound, L, T, R, L, T, R, Protected, Include, Rights, Min. Green, Lanes

Table with 12 columns: Volume Module, Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, Final Vol

Table with 12 columns: Saturation Flow Module, Sat/Lane, Adjustment, Lanes, Final Sat

Table with 12 columns: Capacity Analysis Module, Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, DesignQueue

Oakland Army Base Area Redevelopment Plan EIR Existing Conditions PM Peak Hour

Level Of Service Computation Report 1997 HCM Operations Method (Base Volume Alternative)

Intersection #11 7th / I-880 SB Ramp
Cycle (sec): 100 Critical Vol./Cap. (X): 0.202
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 7.8
Optimal Cycle: 41 Level Of Service: A

Table with columns: Approach, Movement, North Bound, South Bound, East Bound, West Bound, L, T, R, Protected, Include, Protected, Include

Control: Rights: Min. Green: Lanes: Volume Module: Base Vol: Growth Adj: Initial Bse: User Adj: PHF Adj: PHF Volume: Reduct Vol: Reduced Vol: PCE Adj: MLF Adj: Final Vol:

Saturation Flow Module: Sat/Lane: Adjustment: Lanes: Final Sat: Capacity Analysis Module: Vol/Sat: Crit Moves: Green/Cycle: Volume/Cap: Delay/Veh: User DelAdj: AdjDel/Veh: DesignQueue:

Oakland Army Base Area Redevelopment Plan EIR Existing Conditions PM Peak Hour

Level Of Service Computation Report 1997 HCM Operations Method (Base Volume Alternative)

Intersection #12 7th / I-880 North Ramp
Cycle (sec): 100 Critical Vol./Cap. (X): 0.440
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 30.5
Optimal Cycle: 77 Level Of Service: C

Table with columns: Approach, Movement, North Bound, South Bound, East Bound, West Bound, L, T, R, Protected, Include, Protected, Include

Control: Rights: Min. Green: Lanes: Volume Module: Base Vol: Growth Adj: Initial Bse: User Adj: PHF Adj: PHF Volume: Reduct Vol: Reduced Vol: PCE Adj: MLF Adj: Final Vol:

Saturation Flow Module: Sat/Lane: Adjustment: Lanes: Final Sat: Capacity Analysis Module: Vol/Sat: Crit Moves: Green/Cycle: Volume/Cap: Delay/Veh: User DelAdj: AdjDel/Veh: DesignQueue:

Oakland Army Base Area Redevelopment Plan EIR Existing Conditions PM Peak Hour

Level Of Service Computation Report 1997 HCM Operations Method (Base Volume Alternative) Intersection #23 I-880 Off Ramp / Market

Cycle (sec): 100 Critical Vol./Cap. (X): 0.190 Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 22.8 Optimal Cycle: 64 Level Of Service: C

Approach: North Bound South Bound East Bound West Bound Movement: L-T-R L-T-R L-T-R L-T-R Control: Protected Protected Permitted Permitted Rights: Include Include Include Include Min. Green: 15 20 0 0 20 20 0 0 0 0 15 20 20 Lanes: 1 0 2 0 0 0 2 1 0 0 0 0 1 0 1

Volume Module: Base Vol: 56 607 0 0 103 54 0 0 0 30 117 178 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: 56 607 0 0 103 54 0 0 0 30 117 178 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 PHF Volume: 56 607 0 0 103 54 0 0 0 30 117 178

Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 Final Vol.: 56 607 0 0 103 54 0 0 0 30 117 178 Saturation Flow Module: Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 Adjustment: 0.95 0.95 1.00 1.00 0.86 0.86 1.00 1.00 1.00 0.81 0.81 0.85 Lanes: 1.00 2.00 0.00 0.00 2.00 1.00 0.00 0.00 0.00 0.41 1.59 1.00 Final Sat.: 1805 3610 0 0 3278 1639 0 0 0 626 2442 1615

Capacity Analysis Module: Vol/Sat: 0.03 0.17 0.00 0.00 0.03 0.03 0.00 0.00 0.00 0.05 0.05 0.11 Crit Moves: **** Green/Cycle: 0.16 0.36 0.00 0.00 0.20 0.20 0.00 0.00 0.00 0.55 0.55 0.55 Volume/Cap: 0.20 0.47 0.00 0.00 0.16 0.16 0.00 0.00 0.00 0.09 0.09 0.20 Delay/Veh: 37.1 25.2 0.0 0.0 33.1 33.2 0.0 0.0 0.0 10.5 10.5 11.3 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: 37.1 25.2 0.0 0.0 33.1 33.2 0.0 0.0 0.0 10.5 10.5 11.3 DesignQueue: 3 23 0 0 5 2 0 0 0 1 3 5

Oakland Army Base Area Redevelopment Plan EIR Existing Conditions PM Peak Hour

Level Of Service Computation Report 1997 HCM Operations Method (Base Volume Alternative) Intersection #24 5th / Broadway

Cycle (sec): 75 Critical Vol./Cap. (X): 0.852 Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 29.3 Optimal Cycle: 74 Level Of Service: C

Approach: North Bound South Bound East Bound West Bound Movement: L-T-R L-T-R L-T-R L-T-R Control: Protected Protected Permitted Permitted Rights: Include Include Include Include Min. Green: 0 15 15 8 15 15 15 15 15 15 15 15 Lanes: 0 0 2 0 1 1 0 2 0 0 1 1 0 1 0 0 0 0

Volume Module: Base Vol: 0 299 321 567 400 0 782 363 58 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: 0 299 321 567 400 0 782 363 58 0 0 0 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 PHF Volume: 0 299 321 567 400 0 782 363 58 0 0 0

Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 Final Vol.: 0 299 321 567 400 0 782 363 58 0 0 0 Saturation Flow Module: Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 Adjustment: 1.00 0.95 0.85 0.95 0.95 1.00 0.81 0.81 0.85 1.00 1.00 1.00 Lanes: 0.00 2.00 1.00 1.00 2.00 0.00 2.00 1.00 1.00 0.00 0.00 0.00 Final Sat.: 0 3610 1615 1805 3610 0 3069 1534 1615 0 0 0

Capacity Analysis Module: Vol/Sat: 0.00 0.08 0.20 0.31 0.11 0.00 0.25 0.24 0.04 0.00 0.00 0.00 Crit Moves: **** Green/Cycle: 0.00 0.23 0.23 0.36 0.59 0.00 0.29 0.29 0.29 0.00 0.00 0.00 Volume/Cap: 0.00 0.36 0.87 0.87 0.19 0.00 0.87 0.81 0.12 0.00 0.00 0.00 Delay/Veh: 0.0 24.7 47.7 34.8 7.2 0.0 31.9 28.2 19.6 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: 0.0 24.7 47.7 34.8 7.2 0.0 31.9 28.2 19.6 0.0 0.0 0.0 DesignQueue: 0 10 11 16 7 0 24 11 2 0 0 0

Oakland Army Base Area Redevelopment Plan EIR Existing Conditions PM Peak Hour

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

Intersection #25 3rd / Adeline
Cycle (sec): 100
Loss Time (sec): 12 (Y+R = 4 sec)
Optimal Cycle: 0
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Lanes: 0 1 0 1 0 0 1 0 1 0 0 1 0 0 1 0 1 0

Volume Module:
Base Vol: 10 268 120 99 100 20 47 15 0 43 17 184
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: 10 268 120 99 100 20 47 15 0 43 17 184
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 Volume: 10 268 120 99 100 20 47 15 0 43 17 184
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Final Vol.: 10 268 120 99 100 20 47 15 0 43 17 184
Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.05 1.35 0.60 0.90 0.92 0.18 1.00 1.00 0.00 0.35 0.65 1.00

Final Sat.: 27 742 349 440 478 96 439 467 0 174 320 564
Capacity Analysis Module:
Vol/Sat: 0.37 0.36 0.34 0.22 0.21 0.21 0.11 0.03 xxxxx 0.25 0.05 0.33
Crit Moves: ****

Delay/Veh: 12.8 12.5 11.8 11.8 11.0 10.9 11.3 10.1 0.0 11.9 11.9 11.6
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 12.8 12.5 11.8 11.8 11.0 10.9 11.3 10.1 0.0 11.9 11.9 11.6
LOS by Move: B B B B B B B B B B B B
ApproachDel: 12.3 11.4 11.0 11.7
Delay Adj: 1.00 1.00 1.00 1.00
ApprAdjDel: 12.3 11.4 11.0 11.7
LOS by Appr: B B B B

Oakland Army Base Area Redevelopment Plan EIR Existing Conditions PM Peak Hour

Level Of Service Computation Report 1997 HCM Unsignalized Method (Base Volume Alternative)

Intersection #26 3rd / Market
Average Delay (sec/veh): 13.3
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Lanes: 1 0 0 1 0 1 0 1 0 0 1 0 0 1 0 0 1 0 1 0

Volume Module:
Base Vol: 28 48 16 45 27 36 35 237 11 2 142 47
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: 28 48 16 45 27 36 35 237 11 2 142 47
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 Volume: 28 48 16 45 27 36 35 237 11 2 142 47
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Final Vol.: 28 48 16 45 27 36 35 237 11 2 142 47
Critical Gap Module:
Critical Gap: 7.1 6.5 6.2 7.1 6.5 6.2 4.1 xxxxx xxxxx 4.1 xxxxx xxxxx
FollowUpOptim: 3.5 4.0 3.3 3.5 4.0 3.3 2.2 xxxxx xxxxx 2.2 xxxxx xxxxx

Capacity Module:
Conflict Vol: 514 506 242 514 488 166 189 xxxxx xxxxx 248 xxxxx xxxxx
Potent Cap.: 475 472 801 474 483 884 1397 xxxxx xxxxx 1330 xxxxx xxxxx
Move Cap.: 426 459 801 419 470 884 1397 xxxxx xxxxx 1330 xxxxx xxxxx

Level Of Service Module:
Stopped Del: 14.0 xxxxx xxxxx 14.6 12.9 xxxxx 7.6 xxxxx xxxxx 7.7 xxxxx xxxxx
LOS by Move: B B B B B B A A A A
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT

Shared Cap.: xxxxx xxxxx 514 xxxxx xxxxx 713 xxxxx xxxxx xxxxx xxxxx xxxxx
Shrd StpDel: xxxxx xxxxx 13.0 xxxxx xxxxx 10.4 xxxxx xxxxx xxxxx xxxxx xxxxx
Shared LOS: B B B B B B B B B B B B
ApproachDel: 13.3 12.5 xxxxxx
ApproachLOS: B B

Oakland Army Base Area Redevelopment Plan EIR
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Base Volume Alternative)

Intersection #31 27th / SR 24-580 On Ramp
Critical Vol./Cap. (X): 0.782
Level Of Service: C

Cycle (sec): 100
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 20.4
Optimal Cycle: 64
Level Of Service: C

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

Control: Permitted Include Permitted Include Permitted Include Permitted Include
Rights: 8 20 20 0 0 0 0 8 10 0 0 10 10
Min. Green: 0 1 1 0 0 0 0 0 1 2 0 0 0 0 3 0 1
Lanes: 0 1 1 0 0 0 0 0 1 1 2 0 0 0 0 3 0 1

Volume Module:
Base Vol: 11 884 46 0 0 0 408 464 0 0 214 852
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: 11 884 46 0 0 0 408 464 0 0 214 852
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 11 884 46 0 0 0 408 464 0 0 214 852
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol: 11 884 46 0 0 0 408 464 0 0 214 852

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.90 0.90 0.15 0.00 0.00 0.00 0.30 0.30 1.00 1.00 0.91 0.85
Lanes: 0.03 2.82 0.15 0.00 0.00 0.00 1.87 2.13 0.00 0.00 3.00 1.00
Final Sat: 60 4805 250 0 0 0 1052 1196 0 0 5187 1615

Capacity Analysis Module:
Vol/Sat: 0.18 0.18 0.18 0.00 0.00 0.00 0.39 0.39 0.00 0.00 0.04 0.53
Crit Moves: ****
Green/Cycle: 0.24 0.24 0.24 0.00 0.00 0.00 0.67 0.67 0.00 0.00 0.67 0.67
Volume/Cap: 0.78 0.78 0.78 0.00 0.00 0.00 0.57 0.57 0.00 0.00 0.06 0.78
Delay/Veh: 39.2 39.2 39.2 0.0 0.0 0.0 9.2 9.2 0.0 0.0 5.5 14.9
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: 39.2 39.2 39.2 0.0 0.0 0.0 9.2 9.2 0.0 0.0 5.5 14.9
DesignQueue: 0 39 2 0 0 0 8 9 0 0 4 17

Oakland Army Base Area Redevelopment Plan EIR
Existing Conditions
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Level Of Service Computation Report
1997 HCM Operations Method (Base Volume Alternative)

Intersection #32 San Pablo Av / Adeline
Critical Vol./Cap. (X): 0.794
Level Of Service: B

Cycle (sec): 120
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 19.8
Optimal Cycle: 70
Level Of Service: B

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

Control: Permitted Include Permitted Include Permitted Include Permitted Include
Rights: 0 15 15 8 15 15 8 10 10 10 8 15 15
Min. Green: 0 0 1 1 0 0 1 0 1 0 0 1 0 1 0 1 0 1 0
Lanes: 0 0 1 1 0 0 1 0 1 0 0 1 0 0 0 1 0 1 0

Volume Module:
Base Vol: 0 302 1077 8 989 173 99 9 0 21 162 9
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 302 1077 8 989 173 99 9 0 21 162 9
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 302 1077 8 989 173 99 9 0 21 162 9
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 0 302 1077 8 989 173 99 9 0 21 162 9
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol: 0 302 1077 8 989 173 99 9 0 21 162 9

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 1.00 0.84 0.84 0.87 0.87 0.87 0.91 0.91 1.00 0.94 0.94 0.94
Lanes: 0.00 1.00 1.00 0.01 1.69 0.30 1.00 1.00 0.00 0.22 1.69 0.09
Final Sat: 0 1594 1594 23 2808 491 1726 1726 0 390 3009 167

Capacity Analysis Module:
Vol/Sat: 0.00 0.19 0.68 0.35 0.35 0.35 0.06 0.01 0.00 0.05 0.05 0.05
Crit Moves: ****
Green/Cycle: 0.00 0.72 0.72 0.72 0.72 0.72 0.08 0.08 0.00 0.13 0.13 0.13
Volume/Cap: 0.00 0.26 0.94 0.49 0.49 0.49 0.69 0.06 0.00 0.43 0.43 0.43
Delay/Veh: 0.0 6.0 27.3 7.6 7.6 7.6 65.7 50.7 0.0 49.2 49.2 49.2
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: 0.0 6.0 27.3 7.6 7.6 7.6 65.7 50.7 0.0 49.2 49.2 49.2
DesignQueue: 0 6 24 0 20 4 6 1 0 1 10 1

Oakland Army Base Area Redevelopment Plan EIR Existing Conditions PM Peak Hour

Level Of Service Computation Report 1997 HCM Operations Method (Base Volume Alternative)

***** Intersection #33 W MacArthur / Market ***** Critical Vol./Cap. (X): 0.403 Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 17.3 Optimal Cycle: 41 Level Of Service: B

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

Control: Permitted Include Permitted Include Permitted Include Permitted Include Rights: 8 20 20 8 20 20 8 15 15 8 15 15 Min. Green: 0 1 0 1 0 0 1 0 1 0 1 1 0 1 0 1 0 1 0 Lanes: 0 1 0 1 0 0 1 0 1 0 1 1 0 1 0 1 0 1 0

Volume Module: Base Vol: 16 318 85 190 236 36 63 606 22 112 333 150 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: 16 318 85 190 236 36 63 606 22 112 333 150 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 PHF Volume: 16 318 85 190 236 36 63 606 22 112 333 150

Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 Final Vol.: 16 318 85 190 236 36 63 606 22 112 333 150

Saturation Flow Module: Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 Adjustment: 0.86 0.86 0.86 0.60 0.60 0.77 0.77 0.77 0.77 0.33 0.91 0.91 Lanes: 0.08 1.52 0.40 0.82 1.02 0.16 0.27 2.63 0.10 1.00 1.38 0.62 Final Sat.: 125 2482 663 943 1172 179 399 3838 139 631 2372 1068

Capacity Analysis Module: Vol/Sat: 0.13 0.13 0.13 0.20 0.20 0.20 0.16 0.16 0.16 0.18 0.14 0.14 Crit Moves: ***** Green/Cycle: 0.50 0.50 0.50 0.50 0.50 0.44 0.44 0.44 0.44 0.44 0.44 0.44 Volume/Cap: 0.26 0.26 0.26 0.40 0.40 0.36 0.36 0.36 0.40 0.32 0.32 0.32 Delay/Veh: 14.4 14.4 14.4 15.9 15.9 18.7 18.7 18.7 20.0 18.3 18.3 18.3 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: 14.4 14.4 14.4 15.9 15.9 18.7 18.7 18.7 20.0 18.3 18.3 18.3 DesignQueue: 0 9 2 5 7 1 2 19 1 4 11 5 *****

Oakland Army Base Area Redevelopment Plan EIR Existing Conditions PM Peak Hour

Level Of Service Computation Report 1997 HCM Operations Method (Base Volume Alternative)

***** Intersection #34 Powell / I-80 Frontage Rd ***** Critical Vol./Cap. (X): 0.580 Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 22.4 Optimal Cycle: 47 Level Of Service: C

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

Control: Permitted Include Permitted Include Permitted Include Permitted Include Rights: 0 0 0 0 15 0 15 8 10 10 0 15 15 Min. Green: 0 0 0 0 2 0 0 0 1 1 0 1 1 0 1 1 1 1 1 Lanes: 0 0 0 0 0 2 0 0 0 1 1 0 1 1 0 0 0 1 1

Volume Module: Base Vol: 0 0 553 0 271 242 408 592 0 613 1589 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 Initial Bse: 0 0 553 0 271 242 408 592 0 613 1589 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 PHF Volume: 0 0 553 0 271 242 408 592 0 613 0

Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 Final Vol.: 0 0 553 0 271 242 408 592 0 613 0

Saturation Flow Module: Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 Adjustment: 1.00 1.00 1.00 0.92 1.00 0.85 0.95 0.87 0.87 1.00 0.95 0.95 Lanes: 0.00 0.00 0.00 2.00 0.00 1.00 1.00 1.00 1.00 0.00 2.00 1.00 Final Sat.: 0 0 0 3502 0 1615 1805 1644 1644 0 3610 1805

Capacity Analysis Module: Vol/Sat: 0.00 0.00 0.00 0.16 0.00 0.17 0.13 0.25 0.36 0.00 0.17 0.00 Crit Moves: ***** Green/Cycle: 0.00 0.00 0.00 0.29 0.00 0.29 0.27 0.62 0.62 0.00 0.35 0.00 Volume/Cap: 0.00 0.00 0.00 0.55 0.00 0.58 0.49 0.40 0.58 0.00 0.49 0.00 Delay/Veh: 0.0 0.0 0.0 30.6 0.0 32.2 31.2 9.7 11.7 0.0 26.0 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: 0.0 0.0 0.0 30.6 0.0 32.2 31.2 9.7 11.7 0.0 26.0 0.0 DesignQueue: 0 0 0 23 0 11 10 9 14 0 23 0 *****

Oakland Army Base Area Redevelopment Plan EIR
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Level of Service Computation Report
1997 HCM Operations Method (Base Volume Alternative)

Intersection #35 Powell / I-80 NB Ramps

Cycle (sec): 100 Critical Vol./Cap. (X): 1.017
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 43.9
Optimal Cycle: 180 Level Of Service: D

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Protected Protected Protected
Rights: Include Include Include Include Include
Min. Green: 8 10 10 0 0 0 8 10 0 0 10 10
Lanes: 1 0 1 0 0 0 0 1 0 3 0 0 0 0 3 0 1

Volume Module:

Base Vol: 563 150 817 0 0 170 778 0 1604 475
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 563 150 817 0 0 170 778 0 1604 475
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 563 150 817 0 0 170 778 0 1604 475
Reduct Vol: 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 563 150 817 0 0 170 778 0 1604 475
PCE Adj: 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
Final Vol.: 563 150 817 0 0 170 778 0 1604 475

Saturation Flow Module:

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.85 0.85 0.85 1.00 1.00 0.95 0.91 1.00 1.00 0.91 0.85
Lanes: 1.33 0.18 1.49 0.00 0.00 0.00 3.00 0.00 0.00 3.00 1.00
Final Sat.: 2147 287 2390 0 0 1805 5187 0 0 5187 1615

Capacity Analysis Module:

Vol/Sat: 0.26 0.52 0.34 0.00 0.00 0.00 0.09 0.15 0.00 0.31 0.29
Crit Moves: ****
Green/Cycle: 0.51 0.51 0.51 0.00 0.00 0.00 0.09 0.40 0.00 0.30 0.30
Volume/Cap: 0.51 1.02 0.67 0.00 0.00 0.00 1.02 0.38 0.00 0.00 1.02 0.97
Delay/Veh: 16.2 52.0 18.7 0.0 0.0 0.0 119.6 21.5 0.0 0.0 61.9 66.6
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 16.2 52.0 18.7 0.0 0.0 0.0 119.6 21.5 0.0 0.0 61.9 66.6
DesignQueue: 16 5 24 0 0 0 9 27 0 0 67 20

Oakland Army Base Area Redevelopment Plan EIR
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Level of Service Computation Report
1997 HCM Operations Method (Base Volume Alternative)

Intersection #36 Powell / Christie

Cycle (sec): 100 Critical Vol./Cap. (X): 0.633
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 30.5
Optimal Cycle: 69 Level Of Service: C

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 8 10 10 8 24 24 8 15 15 8 10 10
Lanes: 1 1 0 0 1 0 1 0 0 2 2 0 1 1 1 1 0 2 1 0

Volume Module:

Base Vol: 402 42 147 127 67 613 383 667 570 150 998 125
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: 402 42 147 127 67 613 383 667 570 150 998 125
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 402 42 147 127 67 613 383 667 570 150 998 125
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 402 42 147 127 67 613 383 667 570 150 998 125
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 402 42 147 127 67 613 383 667 570 150 998 125

Saturation Flow Module:

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.96 0.96 0.85 0.97 0.97 0.75 0.92 0.88 0.88 0.95 0.89 0.89
Lanes: 1.81 0.19 1.00 0.65 0.35 2.00 2.00 1.62 1.38 1.00 2.67 0.33
Final Sat.: 3293 344 1615 1204 635 2842 3502 2718 2323 1805 4531 568

Capacity Analysis Module:

Vol/Sat: 0.12 0.12 0.09 0.11 0.11 0.22 0.11 0.25 0.25 0.08 0.22 0.22
Crit Moves: ****
Green/Cycle: 0.19 0.19 0.19 0.34 0.34 0.34 0.17 0.39 0.39 0.13 0.35 0.35
Volume/Cap: 0.63 0.63 0.47 0.31 0.31 0.63 0.63 0.63 0.63 0.63 0.63 0.63
Delay/Veh: 39.0 39.0 37.0 24.6 24.6 29.1 40.6 25.4 25.4 46.5 28.0 28.0
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: 39.0 39.0 37.0 24.6 24.6 29.1 40.6 25.4 25.4 46.5 28.0 28.0
DesignQueue: 19 2 7 5 3 23 18 24 21 7 38 5

Oakland Army Base Area Redevelopment Plan EIR
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Oakland Army Base Area Redevelopment Plan EIR
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Level Of Service Computation Report
1997 HCM Operations Method (Base Volume Alternative)

Level Of Service Computation Report
1997 HCM Operations Method (Base Volume Alternative)

Intersection #37 Powell / Hollis
Cycle (sec): 100
Loss Time (sec): 9 (Y+R = 4 sec)
Optimal Cycle: 62
Critical Vol./Cap. (X): 0.768
Average Delay (sec/veh): 31.1
Level Of Service: C

Intersection #37 Powell / Hollis
Cycle (sec): 100
Loss Time (sec): 9 (Y+R = 4 sec)
Optimal Cycle: 62
Critical Vol./Cap. (X): 0.768
Average Delay (sec/veh): 31.1
Level Of Service: C

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Permitted Include Protected Protected
Rights: 8 15 15 8 15 15 8 10 10 8 10 10
Min. Green: 1 0 0 1 0 0 1 1 0 1 0 1 0 1 0 1 0
Lanes: 1 0 0 1 0 0 1 0 1 0 1 0 1 0 1 0 1 0

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Permitted Include Protected Protected
Rights: 8 15 15 8 15 15 8 10 10 8 10 10
Min. Green: 1 0 0 1 0 0 1 1 0 1 0 1 0 1 0 1 0
Lanes: 1 0 0 1 0 0 1 1 0 1 0 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 423 412 47 77 252 231 144 610 139 58 517 63
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 Base: 423 412 47 77 252 231 144 610 139 58 517 63
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 423 412 47 77 252 231 144 610 139 58 517 63
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 423 412 47 77 252 231 144 610 139 58 517 63
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 423 412 47 77 252 231 144 610 139 58 517 63

Volume Module:
Base Vol: 423 412 47 77 252 231 144 610 139 58 517 63
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 Base: 423 412 47 77 252 231 144 610 139 58 517 63
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 423 412 47 77 252 231 144 610 139 58 517 63
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 423 412 47 77 252 231 144 610 139 58 517 63
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 423 412 47 77 252 231 144 610 139 58 517 63

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.49 0.99 0.99 0.78 0.78 0.85 0.95 0.92 0.92 0.95 0.93 0.93
Lanes: 1.00 0.90 0.10 0.23 0.77 1.00 1.00 1.63 0.37 1.00 1.78 0.22
Final Sat.: 933 1680 192 346 1132 1615 1805 2858 651 1805 3166 386

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.49 0.99 0.99 0.78 0.78 0.85 0.95 0.92 0.92 0.95 0.93 0.93
Lanes: 1.00 0.90 0.10 0.23 0.77 1.00 1.00 1.63 0.37 1.00 1.78 0.22
Final Sat.: 933 1680 192 346 1132 1615 1805 2858 651 1805 3166 386

Capacity Analysis Module:
Vol/Sat: 0.45 0.25 0.25 0.22 0.22 0.14 0.08 0.21 0.21 0.03 0.16 0.16
Crit Moves: ****
Green/Cycle: 0.56 0.56 0.56 0.56 0.56 0.56 0.56 0.56 0.56 0.56 0.56 0.56
Volume/Cap: 0.80 0.43 0.43 0.39 0.39 0.25 1.00 0.80 0.80 0.40 0.61 0.61
Delay/Veh: 26.1 12.9 12.9 12.5 12.5 11.2 120.0 39.4 39.4 45.6 33.4 33.4
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: 26.1 12.9 12.9 12.5 12.5 11.2 120.0 39.4 39.4 45.6 33.4 33.4
DesignQueue: 11 11 1 2 6 6 8 26 6 3 22 3

Capacity Analysis Module:
Vol/Sat: 0.45 0.25 0.25 0.22 0.22 0.14 0.08 0.21 0.21 0.03 0.16 0.16
Crit Moves: ****
Green/Cycle: 0.56 0.56 0.56 0.56 0.56 0.56 0.56 0.56 0.56 0.56 0.56 0.56
Volume/Cap: 0.80 0.43 0.43 0.39 0.39 0.25 1.00 0.80 0.80 0.40 0.61 0.61
Delay/Veh: 26.1 12.9 12.9 12.5 12.5 11.2 120.0 39.4 39.4 45.6 33.4 33.4
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: 26.1 12.9 12.9 12.5 12.5 11.2 120.0 39.4 39.4 45.6 33.4 33.4
DesignQueue: 11 11 1 2 6 6 8 26 6 3 22 3

Oakland Army Base Area Redevelopment Plan EIR Existing Conditions PM Peak Hour

Level Of Service Computation Report 1997 HCM Operations Method (Base Volume Alternative)

Intersection #39 Stanford / Market Critical Vol./Cap. (X): 0.550 Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 31.6 Optimal Cycle: 58 Level Of Service: C

Table with columns: Approach, Movement, North Bound, South Bound, East Bound, West Bound, L, T, R, L, T, R, Protected, Include, Protected, Include, Min. Green, Right, Lanes

Volume Module: Base Vol: 140 829 22 63 648 22 116 539 4 112 274 25 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: 140 829 22 63 648 22 116 539 4 112 274 25 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 PHF Volume: 140 829 22 63 648 22 116 539 4 112 274 25

Saturation Flow Module: Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 Adjustment: 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 Lanes: 1.00 1.95 0.05 1.00 1.93 0.07 1.00 1.99 0.01 1.00 1.83 0.17 Final Sat.: 1805 3503 93 1805 3474 118 1805 3580 27 1805 3265 298

Capacity Analysis Module: Vol/Sat: 0.08 0.24 0.24 0.03 0.19 0.19 0.06 0.15 0.15 0.06 0.08 0.08 Crit Moves: 0.08 0.24 0.24 0.03 0.19 0.19 0.06 0.15 0.15 0.06 0.08 0.08 Green/Cycle: 0.08 0.42 0.42 0.08 0.42 0.42 0.13 0.27 0.27 0.11 0.25 0.25 Volume/Cap: 0.97 0.56 0.56 0.44 0.44 0.44 0.49 0.56 0.56 0.56 0.34 0.34 Delay/Veh: 111.3 22.4 22.4 46.0 20.8 20.8 41.9 32.3 32.3 45.8 31.2 31.2 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: 111.3 22.4 22.4 46.0 20.8 20.8 41.9 32.3 32.3 45.8 31.2 31.2 DesignQueue: 7 28 1 3 22 1 6 23 0 6 12 1

Oakland Army Base Area Redevelopment Plan EIR Existing Conditions PM Peak Hour

Level Of Service Computation Report 1997 HCM Operations Method (Base Volume Alternative)

Intersection #40 Stanford / MLK Jr Wy Critical Vol./Cap. (X): 1.085 Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 46.4 Optimal Cycle: 180 Level Of Service: D

Table with columns: Approach, Movement, North Bound, South Bound, East Bound, West Bound, L, T, R, L, T, R, Protected, Include, Protected, Include, Min. Green, Right, Lanes

Volume Module: Base Vol: 195 2108 0 0 1482 263 468 0 516 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: 195 2108 0 0 1482 263 468 0 516 0 0 0 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 PHF Volume: 195 2108 0 0 1482 263 468 0 516 0 0 0

Saturation Flow Module: Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 Adjustment: 0.58 0.58 1.00 1.00 0.95 0.85 0.85 0.92 1.00 0.85 1.00 1.00 Lanes: 0.25 2.75 0.00 0.00 2.00 1.00 2.00 0.00 1.00 2.00 0.00 0.00 Final Sat.: 278 3010 0 0 3610 1615 3502 0 1615 0 0 0

Capacity Analysis Module: Vol/Sat: 0.70 0.70 0.00 0.00 0.41 0.16 0.13 0.00 0.32 0.00 0.00 0.00 Crit Moves: 0.70 0.70 0.00 0.00 0.41 0.16 0.13 0.00 0.32 0.00 0.00 0.00 Green/Cycle: 0.65 0.65 0.00 0.00 0.65 0.65 0.29 0.00 0.29 0.00 0.00 0.00 Volume/Cap: 1.08 1.08 0.00 0.00 0.64 0.25 0.45 0.00 1.08 0.00 0.00 0.00 Delay/Veh: 64.7 64.7 0.0 0.0 11.2 7.6 29.0 0.0 101.4 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: 64.7 64.7 0.0 0.0 11.2 7.6 29.0 0.0 101.4 0.0 0.0 0.0 DesignQueue: 4 46 0 0 33 5 19 0 22 0 0 0

Oakland Army Base Area Redevelopment Plan EIR
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Base Volume Alternative)

Intersection #41 Ashby / 7th

Cycle (sec): 100 Critical Vol./Cap. (X): 0.922
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 48.6
Optimal Cycle: 121 Level Of Service: D

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Split Phase	Split Phase	Protected	Protected
Rights:	Include	Include	Include	Include
Min. Green:	8 15 15	8 15 15	8 12 12	8 12 12
Lanes:	0 1 0 1 0	0 1 0 1 0	1 0 1 0 1	1 0 1 0 1

Volume Module:

Base Vol:	134	357	70	120	175	488	265	655	98	85	684	46
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:	134	357	70	120	175	488	265	655	98	85	684	46
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	134	357	70	120	175	488	265	655	98	85	684	46
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	134	357	70	120	175	488	265	655	98	85	684	46
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	134	357	70	120	175	488	265	655	98	85	684	46

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.85	0.85	0.85	0.95	0.93	0.93	0.95	0.94	0.94
Lanes:	0.48	1.27	0.25	0.41	0.59	1.00	1.00	1.74	0.26	1.00	1.87	0.13
Final Sat.:	836	2227	437	661	963	1624	1805	3081	461	1805	3352	225

Capacity Analysis Module:

Vol/Sat:	0.16	0.16	0.16	0.18	0.18	0.30	0.15	0.21	0.21	0.05	0.20	0.20
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green/Cycle:	0.17	0.17	0.17	0.33	0.33	0.33	0.16	0.30	0.30	0.08	0.22	0.22
Volume/Cap:	0.92	0.92	0.92	0.56	0.56	0.92	0.92	0.71	0.71	0.59	0.92	0.92
Delay/Veh:	60.3	60.3	60.3	28.3	28.3	47.8	74.8	33.3	33.3	50.7	54.3	54.3
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:	60.3	60.3	60.3	28.3	28.3	47.8	74.8	33.3	33.3	50.7	54.3	54.3
DesignQueue:	6	17	3	5	7	20	13	27	4	4	31	2

Oakland Army Base Area Redevelopment Plan EIR
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Base Volume Alternative)

Intersection #42 Ashby / San Pablo Av

Cycle (sec): 100 Critical Vol./Cap. (X): 0.812
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 32.2
Optimal Cycle: 71 Level Of Service: C

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Protected	Protected	Protected	Protected
Rights:	Include	Include	Include	Include
Min. Green:	8 15 15	8 15 15	8 12 12	8 12 12
Lanes:	1 0 1 1 0	1 0 1 1 0	1 0 1 1 0	1 0 1 1 0

Volume Module:

Base Vol:	173	941	92	216	807	108	126	662	248	80	573	110
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:	173	941	92	216	807	108	126	662	248	80	573	110
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	173	941	92	216	807	108	126	662	248	80	573	110
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	173	941	92	216	807	108	126	662	248	80	573	110
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	173	941	92	216	807	108	126	662	248	80	573	110

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.94	0.94	0.95	0.93	0.93	0.23	0.91	0.91	0.61	0.61	0.61
Lanes:	1.00	1.82	0.18	1.00	1.76	0.24	1.00	1.45	0.55	0.21	1.50	0.29
Final Sat.:	1805	3246	317	1805	3127	418	441	2519	943	243	1742	334

Capacity Analysis Module:

Vol/Sat:	0.10	0.29	0.29	0.12	0.26	0.26	0.29	0.26	0.26	0.33	0.33	0.33
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green/Cycle:	0.14	0.36	0.36	0.15	0.37	0.37	0.41	0.41	0.41	0.41	0.41	0.41
Volume/Cap:	0.70	0.81	0.81	0.81	0.70	0.70	0.71	0.65	0.65	0.81	0.81	0.81
Delay/Veh:	49.9	33.2	33.2	58.2	28.7	28.7	36.9	25.1	25.1	31.8	31.8	31.8
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:	49.9	33.2	33.2	58.2	28.7	28.7	36.9	25.1	25.1	31.8	31.8	31.8
DesignQueue:	9	36	4	11	30	4	4	23	9	3	20	4

Oakland Army Base Area Redevelopment Plan EIR
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Base Volume Alternative)

Intersection #45 Atlantic / Constitution
Cycle (sec): 100
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 20.7
Optimal Cycle: 57 Level Of Service: C
Critical Vol./Cap. (X): 0.452

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 8 20 20 8 20 20 8 20 20 8 20 20
Lanes: 1 0 2 0 1 2 0 2 0 1 1 0 1 1 0 1 0 1 1 0

Volume Module: >> Count Date: 17 Oct 2000 <<
Base Vol: 65 370 38 200 943 26 70 118 45 68 101 186
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: 65 370 38 200 943 26 70 118 45 68 101 186
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 65 370 38 200 943 26 70 118 45 68 101 186
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 65 370 38 200 943 26 70 118 45 68 101 186
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 65 370 38 200 943 26 70 118 45 68 101 186

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.95 0.95 0.85 0.92 0.95 0.85 0.48 0.91 0.91 0.62 0.86 0.86
Lanes: 1.00 2.00 1.00 2.00 2.00 1.00 1.00 1.45 0.55 1.00 1.00 1.00
Final Sat.: 1805 3610 1615 3502 3610 1615 918 2506 956 1184 1630 1630

Capacity Analysis Module:
Vol/Sat: 0.04 0.10 0.02 0.06 0.26 0.02 0.08 0.05 0.05 0.06 0.06 0.11
Crit Moves: ****
Green/Cycle: 0.08 0.47 0.47 0.19 0.58 0.58 0.25 0.25 0.25 0.25 0.25 0.25
Volume/Cap: 0.45 0.22 0.05 0.30 0.45 0.03 0.30 0.19 0.19 0.23 0.25 0.45
Delay/Veh: 46.1 15.7 14.4 35.2 12.2 9.1 31.0 29.4 29.4 30.0 29.9 32.1
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: 46.1 15.7 14.4 35.2 12.2 9.1 31.0 29.4 29.4 30.0 29.9 32.1
DesignQueue: 3 11 1 9 24 1 3 5 2 3 4 8

S2 Baseline Conditions

Trip Generation Report
 Forecast for GDA Baseline AM

Impact Analysis Report
 Level Of Service

Zone #	Subzone	Amount	Units	Rate In	Rate Out	Trips In	Trips Out	Total Trips	Total % Of Trips
2	Berth 57-59	473.00	Emp. Proposed	0.00	0.00	0	0	0	0.0
2	Berth 57-59	-373.00	Emp. Approved	0.00	0.00	0	0	0	0.0
3	Middle Harbo	331.00	Emp. Proposed	0.00	0.00	0	0	0	0.0
3	Middle Harbo	-216.00	Emp. Approved	0.00	0.00	0	0	0	0.0
4	7th St. Harb	601.00	Emp. Proposed	0.00	0.00	0	0	0	0.0
4	7th St. Harb	-560.00	Emp. Approved	0.00	0.00	0	0	0	0.0
5	Outer Harbor	618.00	Emp. Proposed	0.00	0.00	0	0	0	0.0
5	Outer Harbor	-593.00	Emp. Approved	0.00	0.00	0	0	0	0.0
6	Berth 21	189.00	Emp. Proposed	0.00	0.00	0	0	0	0.0
6	Berth 21	0.00	Emp. Approved	0.00	0.00	0	0	0	0.0
14	Central Area	1.00	1995 Employees	192.00	75.00	192	75	267	100.0
	Zone 14 Subtotal					192	75	267	100.0

TOTAL						192	75	267	100.0

Intersection	Base Del/LOS Veh C	V/LOS Veh C	Future Del/LOS Veh C	Change in
# 1 W Grand / Maritime	C 34.0	0.436	D 37.1	0.544 + 3.069
# 2 W Grand / Frontage Rd	C 30.3	0.338	C 30.7	0.352 + 0.399
# 3 W Grand / Mandela	A 9.6	0.313	A 9.6	0.317 -0.033
# 4 W Grand / Adeline	B 11.1	0.419	B 11.5	0.428 + 0.343
# 5 W Grand / Market	A 10.0	0.377	A 9.9	0.384 -0.067
# 6 W Grand / San Pablo Av	B 11.4	0.342	B 11.5	0.348 + 0.029
# 7 W Grand / MLK Jr	B 13.7	0.301	B 13.7	0.304 -0.093
# 8 W Grand / Northgate	C 23.8	0.505	C 23.9	0.511 + 0.030
# 9 W Grand / Harrison	C 24.2	0.516	C 24.2	0.516 + 0.054
# 10 7th / Maritime	C 29.7	0.381	C 30.4	0.428 + 0.701
# 11 7th / I-880 SB Ramp	A 5.2	0.101	A 5.2	0.110 -0.029
# 12 7th / I-880 North Ramp	C 29.2	0.390	C 29.3	0.413 + 0.111
# 13 7th / Peralta	A 8.6	0.156	A 8.5	0.157 -0.016
# 14 7th / Mandela	B 14.8	0.271	B 14.8	0.272 -0.017
# 15 7th / Union	A 9.0	0.331	A 9.0	0.331 -0.012
# 16 7th / Adeline	B 10.7	0.280	B 10.7	0.280 -0.010
# 17 7th / Market	B 15.0	0.238	B 15.0	0.239 -0.011
# 18 7th / Harrison	B 10.5	0.379	B 10.5	0.380 + 0.012
# 19 7th / Jackson	C 32.6	1.007	C 33.6	1.013 + 1.024
# 20 6th / Jackson	B 10.4	0.426	B 10.4	0.426 + 0.000
# 21 5th / Union / I-880 Ramps	C 31.5	0.660	C 31.5	0.661 + 0.031
# 22 5th / Adeline	C 30.4	0.471	C 30.4	0.472 + 0.011
# 23 I-880 Off Ramp / Market	B 19.5	0.343	B 19.5	0.343 + 0.000

Oakland Army Base Area Redevelopment Plan EIR
 Baseline Conditions
 AM Peak Hour

Oakland Army Base Area Redevelopment Plan EIR
 Baseline Conditions
 AM Peak Hour

Intersection	Base Del/V LOS	Future Del/V LOS	Change in V/C
# 24 5th / Broadway	20.9 0.499 C	20.9 0.499 C	+ 0.016 D/V
# 25 3rd / Broadway	11.3 0.369 B	11.3 0.369 B	+ 0.000 V/C
# 26 3rd / Market	13.9 0.000 B	13.9 0.000 B	+ 0.000 V/C
# 27 14th / Mandela	8.5 0.182 A	8.5 0.182 A	+ 0.000 D/V
# 28 12th / Brush	30.4 0.798 C	30.4 0.798 C	+ 0.000 D/V
# 29 12th / Castro	15.5 0.173 B	15.5 0.173 B	+ 0.000 D/V
# 30 27th / SR 24-580 Off Ramp	11.8 0.402 B	11.8 0.403 B	-0.005 D/V
# 31 27th / SR 24-580 On Ramp	9.5 0.353 A	9.5 0.354 A	+ 0.015 D/V
# 32 San Pablo Av / Adeline	18.3 0.762 B	18.4 0.765 B	+ 0.119 D/V
# 33 W MacArthur / Market	15.8 0.232 B	15.8 0.233 B	+ 0.008 D/V
# 34 Powell / I-80 Frontage Rd	21.3 0.545 C	21.3 0.545 C	+ 0.000 D/V
# 35 Powell / I-80 NB Ramps	25.2 0.821 C	25.2 0.822 C	+ 0.021 D/V
# 36 Powell / Christie	29.9 0.476 C	29.9 0.476 C	-0.003 D/V
# 37 Powell / Hollis	22.7 0.350 C	22.7 0.351 C	-0.010 D/V
# 38 Powell / San Pablo Av	31.8 0.732 C	31.8 0.733 C	+ 0.038 D/V
# 39 Stanford / Market	28.6 0.494 C	28.6 0.495 C	+ 0.006 D/V
# 40 Stanford / MLK Jr Wy	12.5 0.778 B	12.5 0.778 B	-0.002 D/V
# 41 Ashby / 7th	33.7 0.721 C	33.7 0.723 C	+ 0.036 D/V
# 42 Ashby / San Pablo Av	29.8 0.761 C	29.8 0.765 C	+ 0.045 D/V
# 43 Marina Village / Constitution	20.6 0.536 C	20.6 0.537 C	-0.024 D/V
# 44 Atlantic / Webster	31.5 0.525 C	31.5 0.526 C	+ 0.048 D/V
# 45 Atlantic / Constitution	22.3 0.410 C	22.3 0.412 C	-0.027 D/V

Level Of Service Computation Report
 1997 HCM Operations Method (Future Volume Alternative)

Intersection #1 W Grand / Maritime
 Cycle (sec): 100
 Loss Time (sec): 12 (Y+R = 4 sec)
 Optimal Cycle: 77
 Level Of Service: D

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

Control: Split Phase Protected Protected
 Rights: Include Include Include Include
 Min. Green: 15 20 20 15 15 15 15 15
 Lanes: 2 0 0 1 0 1 0 0 1 0 1 1 1 0 1 1 0

Volume Module:
 Base Vol: 109 16 36 18 4 16 5 212 232 339 362 17
 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: 109 16 36 18 4 16 5 212 232 339 362 17
 Added Vol: 29 0 31 0 0 0 0 0 0 0 0 0
 PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
 Initial Fut: 138 16 67 18 4 16 5 212 307 418 362 17
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 138 16 67 18 4 16 5 212 307 418 362 17
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 138 16 67 18 4 16 5 212 307 418 362 17
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Final Vol.: 138 16 67 18 4 16 5 212 307 418 362 17

Saturation Flow Module:
 Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
 Adjustment: 0.77 0.73 0.73 0.79 0.73 0.73 0.79 0.72 0.72 0.79 0.79 0.79
 Lanes: 2.00 0.19 0.81 1.00 0.20 0.80 1.00 1.23 1.77 1.00 1.91 0.09
 Final Sat.: 2917 268 1123 1504 279 1114 1504 1679 2431 1504 2852 134

Capacity Analysis Module:
 Vol/Sat: 0.05 0.06 0.06 0.01 0.01 0.01 0.00 0.13 0.13 0.28 0.13 0.13
 Crit Moves: 0.05 0.06 0.06 0.01 0.01 0.01 0.00 0.13 0.13 0.28 0.13 0.13
 Green/Cycle: 0.20 0.20 0.20 0.15 0.15 0.15 0.27 0.17 0.17 0.36 0.27 0.27
 Volume/Cap: 0.24 0.30 0.30 0.08 0.10 0.10 0.01 0.76 0.76 0.76 0.48 0.48
 Delay/Veh: 33.8 34.6 34.6 36.7 36.9 36.9 27.1 44.9 44.9 34.2 31.4 31.4
 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: 33.8 34.6 34.6 36.7 36.9 36.9 27.1 44.9 44.9 34.2 31.4 31.4
 DesignQueue: 6 1 3 1 0 1 0 10 15 16 15 1

Oakland Army Base Area Redevelopment Plan EIR
Baseline Conditions
AM Peak Hour

Oakland Army Base Area Redevelopment Plan EIR
Baseline Conditions
AM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #3 W Grand / Mandala
Cycle (sec): 64 Critical Vol./Cap. (X): 0.317
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 9.6
Optimal Cycle: 36 Level Of Service: A

Intersection #2 W Grand / Frontage Rd
Cycle (sec): 100 Critical Vol./Cap. (X): 0.352
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 30.7
Optimal Cycle: 77 Level Of Service: C

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Permitted Permitted Permitted Permitted
Rights: Include Include Include Include
Min. Green: 8 20 20 8 20 20 8 10 10 8 10 10
Lanes: 0 1 0 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Split Phase Split Phase Protected Protected
Rights: Include Include Include Include
Min. Green: 15 15 15 15 15 15 15 20 20 15 15 15 15
Lanes: 1 0 1 1 0 1 1 0 1 0 1 0 1 0 1 1 1 1

Volume Module:
Base Vol: 65 91 83 16 141 144 113 334 71 171 558 31
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 91 83 16 141 144 113 334 71 171 558 31
Added Vol: 0 0 0 0 0 0 2 15 0 0 38 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 65 91 83 16 141 150 115 349 71 171 596 31
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 65 91 83 16 141 150 115 349 71 171 596 31
Reduc Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 65 91 83 16 141 150 115 349 71 171 596 31
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol: 65 91 83 16 141 150 115 349 71 171 596 31

Volume Module:
Base Vol: 51 127 138 156 122 49 56 308 48 104 532 244
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: 51 127 138 156 122 49 56 308 48 104 532 244
Added Vol: 0 0 0 0 0 35 14 17 0 0 44 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 51 127 138 156 122 84 70 325 48 104 576 244
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 51 127 138 156 122 84 70 325 48 104 576 244
Reduc Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 51 127 138 156 122 84 70 325 48 104 576 244
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol: 51 127 138 156 122 84 70 325 48 104 576 244

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.78 0.78 0.85 0.83 0.83 0.83 0.83 0.93 0.93 0.93 0.94 0.94
Lanes: 0.42 0.58 1.00 0.10 0.92 0.98 1.00 1.66 0.34 1.00 1.00 0.10
Final Sat: 620 868 1615 164 1446 1539 711 2925 595 937 3407 177

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.95 0.88 0.88 0.90 0.90 0.90 0.95 0.93 0.93 0.95 0.91 0.91
Lanes: 1.00 1.00 1.00 1.29 1.01 0.70 1.00 1.74 0.26 1.00 2.00 1.00
Final Sat: 1805 1664 1664 2205 1724 1187 1805 3086 456 1805 3448 1724

Capacity Analysis Module:
Vol/Sat: 0.10 0.10 0.05 0.10 0.10 0.10 0.16 0.12 0.12 0.18 0.17 0.17
Crit Moves: ****
Green/Cycle: 0.33 0.33 0.33 0.33 0.33 0.33 0.58 0.58 0.58 0.58 0.58 0.58
Volume/Cap: 0.32 0.32 0.16 0.29 0.29 0.29 0.28 0.21 0.21 0.32 0.30 0.30
Delay/Veh: 16.4 16.4 15.3 16.0 16.0 16.0 7.3 6.6 6.6 7.4 7.1 7.1
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: 16.4 16.4 15.3 16.0 16.0 16.0 7.3 6.6 6.6 7.4 7.1 7.1
DesignQueue: 2 2 2 0 3 4 2 5 1 3 9 0

Capacity Analysis Module:
Vol/Sat: 0.03 0.08 0.08 0.07 0.07 0.07 0.04 0.11 0.11 0.06 0.17 0.14
Crit Moves: ****
Green/Cycle: 0.24 0.24 0.24 0.20 0.20 0.20 0.15 0.30 0.30 0.16 0.31 0.31
Volume/Cap: 0.12 0.32 0.35 0.35 0.35 0.35 0.26 0.35 0.35 0.35 0.53 0.45
Delay/Veh: 30.2 31.9 32.2 34.6 34.6 34.6 38.1 27.7 27.7 37.8 28.7 27.7
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: 30.2 31.9 32.2 34.6 34.6 34.6 38.1 27.7 27.7 37.8 28.7 27.7
DesignQueue: 2 5 6 7 6 4 3 13 2 5 23 10

Level Of Service Computation Report
 1997 HCM Operations Method (Future Volume Alternative)
 Intersection #4 W Grand / Adeline
 Cycle (sec): 64 Critical Vol./Cap. (X): 0.428
 Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 11.5
 Optimal Cycle: 41 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted Include			Permitted Include			Permitted Include			Permitted Include		
Rights:	8	20	20	8	20	20	8	15	15	8	15	15
Min. Green:	0	1	0	0	1	0	0	1	1	0	1	1
Lanes:	0	1	0	0	1	0	0	1	1	0	1	1

Volume Module:

Base Vol:	193	630	34	42	147	27	52	227	42	34	329	31
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:	193	630	34	42	147	27	52	227	42	34	329	31
Added Vol:	0	0	0	0	0	0	0	15	0	0	38	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	193	630	34	42	147	27	52	242	42	34	367	31
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	193	630	34	42	147	27	52	242	42	34	367	31
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	193	630	34	42	147	27	52	242	42	34	367	31
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	193	630	34	42	147	27	52	242	42	34	367	31

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.77	0.77	0.77	0.74	0.74	0.74	0.75	0.75	0.75	0.80	0.80	0.80
Lanes:	0.45	1.47	0.08	0.39	1.36	0.25	0.46	2.16	0.38	0.24	2.55	0.21
Final Sat.:	659	2150	116	548	1918	352	658	3064	532	360	3887	328

Capacity Analysis Module:

Vol/Sat:	0.29	0.29	0.29	0.08	0.08	0.08	0.08	0.08	0.08	0.09	0.09	0.09
Crit Moves:	****											
Green/Cycle:	0.67	0.67	0.67	0.67	0.67	0.67	0.23	0.23	0.23	0.23	0.23	0.23
Volume/Cap:	0.44	0.44	0.44	0.11	0.11	0.11	0.34	0.34	0.34	0.40	0.40	0.40
Delay/Veh:	5.0	5.0	5.0	3.8	3.8	3.8	20.6	20.6	20.6	21.0	21.0	21.0
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:	5.0	5.0	5.0	3.8	3.8	3.8	20.6	20.6	20.6	21.0	21.0	21.0
DesignQueue:	2	8	0	0	2	0	1	7	1	1	10	1

Level Of Service Computation Report
 1997 HCM Operations Method (Future Volume Alternative)
 Intersection #5 W Grand / Market
 Cycle (sec): 64 Critical Vol./Cap. (X): 0.384
 Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 9.9
 Optimal Cycle: 41 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted Include			Permitted Include			Permitted Include			Permitted Include		
Rights:	8	20	20	8	20	20	8	15	15	8	15	15
Min. Green:	0	1	0	0	1	0	0	1	1	0	1	1
Lanes:	0	1	0	0	1	0	0	1	1	0	1	1

Volume Module:

Base Vol:	87	197	82	13	212	39	24	447	40	91	800	39
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:	87	197	82	13	212	39	24	447	40	91	800	39
Added Vol:	0	0	0	0	0	0	0	11	0	0	29	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	87	197	82	13	212	39	24	458	40	91	829	39
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	87	197	82	13	212	39	24	458	40	91	829	39
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	87	197	82	13	212	39	24	458	40	91	829	39
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	87	197	82	13	212	39	24	458	40	91	829	39

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.75	0.75	0.75	0.87	0.87	0.87	0.80	0.80	0.80	0.76	0.76	0.76
Lanes:	0.47	1.08	0.45	0.10	1.61	0.29	0.14	2.63	0.23	0.28	2.60	0.12
Final Sat.:	681	1541	641	162	2648	487	209	3988	348	413	3762	177

Capacity Analysis Module:

Vol/Sat:	0.13	0.13	0.13	0.08	0.08	0.08	0.11	0.11	0.11	0.22	0.22	0.22
Crit Moves:	****											
Green/Cycle:	0.33	0.33	0.33	0.33	0.33	0.33	0.57	0.57	0.57	0.57	0.57	0.57
Volume/Cap:	0.38	0.38	0.38	0.24	0.24	0.24	0.20	0.20	0.20	0.38	0.38	0.38
Delay/Veh:	16.6	16.6	16.6	15.6	15.6	15.6	6.6	6.6	6.6	7.6	7.6	7.6
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:	16.6	16.6	16.6	15.6	15.6	15.6	6.6	6.6	6.6	7.6	7.6	7.6
DesignQueue:	2	5	2	0	5	1	0	7	1	1	13	1

Oakland Army Base Area Redevelopment Plan EIR
Baseline Conditions
AM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #6 W Grand / San Pablo Av

Cycle (sec): 64 Critical Vol./Cap. (X): 0.348
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 11.5
Optimal Cycle: 41 Level Of Service: B

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

Control: Permitted Permitted Permitted Permitted
Rights: Include Include Include Include
Min. Green: 8 20 20 8 20 20 8 15 15 8 15 15
Lanes: 1 0 1 1 0 1 0 1 0 0 1 1 0 0 1 1 0

Volume Module:

Base Vol: 49 382 28 214 462 67 14 488 43 13 693 59
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: 49 382 28 214 462 67 14 488 43 13 693 59
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 26 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 49 382 28 214 462 67 14 498 43 13 719 59
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 49 382 28 214 462 67 14 498 43 13 719 59
Reduc Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 49 382 28 214 462 67 14 498 43 13 719 59
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol: 49 382 28 214 462 67 14 498 43 13 719 59

Saturation Flow Module:

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.39 0.94 0.94 0.47 0.93 0.93 0.83 0.83 0.83 0.84 0.84 0.84
Lanes: 1.00 1.86 0.14 1.00 1.75 0.25 0.08 2.69 0.23 0.05 2.73 0.22
Final Sat: 743 3330 244 899 3093 449 119 4226 365 78 4341 356

Capacity Analysis Module:

Vol/Sat: 0.07 0.11 0.11 0.24 0.15 0.15 0.12 0.12 0.12 0.17 0.17 0.17
Crit Moves: ****
Green/Cycle: 0.43 0.43 0.43 0.43 0.43 0.43 0.48 0.48 0.48 0.48 0.48
Volume/Cap: 0.15 0.27 0.27 0.55 0.35 0.35 0.25 0.25 0.25 0.35 0.35
Delay/Veh: 11.4 11.8 11.8 15.4 12.4 12.4 10.0 10.0 10.0 10.6 10.6
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 11.4 11.8 11.8 15.4 12.4 12.4 10.0 10.0 10.0 10.6 10.6
DesignQueue: 1 8 1 4 10 1 0 10 1 0 14 1

Oakland Army Base Area Redevelopment Plan EIR
Baseline Conditions
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Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #7 W Grand / MLK Jr

Cycle (sec): 100 Critical Vol./Cap. (X): 0.304
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 13.7
Optimal Cycle: 41 Level Of Service: B

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

Control: Permitted Permitted Permitted Permitted
Rights: Include Include Include Include
Min. Green: 8 20 20 8 20 20 8 15 15 8 15 15
Lanes: 0 1 0 1 0 0 1 0 1 0 0 1 1 0 0 1 1 0

Volume Module:

Base Vol: 36 85 85 27 135 161 52 702 35 12 529 35
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: 36 85 85 27 135 161 52 702 35 12 529 35
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 26 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 36 85 85 27 135 161 52 712 35 12 555 35
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 36 85 85 27 135 161 52 712 35 12 555 35
Reduc Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 36 85 85 27 135 161 52 712 35 12 555 35
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol: 36 85 85 27 135 161 52 712 35 12 555 35

Saturation Flow Module:

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.77 0.77 0.77 0.81 0.81 0.81 0.78 0.78 0.78 0.83 0.83
Lanes: 0.35 0.83 0.82 0.17 0.83 1.00 0.20 2.67 0.13 0.06 2.77 0.17
Final Sat: 508 1200 1200 257 1283 1530 289 3952 194 94 4369 276

Capacity Analysis Module:

Vol/Sat: 0.07 0.07 0.07 0.11 0.11 0.11 0.18 0.18 0.18 0.13 0.13
Crit Moves: ****
Green/Cycle: 0.35 0.35 0.35 0.35 0.35 0.35 0.59 0.59 0.59 0.59 0.59
Volume/Cap: 0.20 0.20 0.20 0.30 0.30 0.30 0.30 0.30 0.30 0.21 0.21
Delay/Veh: 23.1 23.1 23.1 24.0 24.0 24.0 10.2 10.2 10.2 9.5 9.5
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 23.1 23.1 23.1 24.0 24.0 24.0 10.2 10.2 10.2 9.5 9.5
DesignQueue: 1 3 3 1 5 6 1 17 1 0 13 1

Oakland Army Base Area Redevelopment Plan EIR
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Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #8 W Grand / Northgate

Cycle (sec): 100 Critical Vol./Cap. (X): 0.511
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 23.9
Optimal Cycle: 52 Level Of Service: C

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Split Phase Split Phase Protected Permitted
Rights: Include Include Include Include
Min. Green: 0 0 0 0 8 20 20 8 10 0 0 15 15
Lanes: 0 0 0 0 1 0 1 0 1 0 2 0 0 0 0 2 1 0

Volume Module:
Base Vol: 0 0 0 0 234 191 532 0 0 671 60
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 0 0 0 234 191 532 0 0 671 60
Added Vol: 0 0 0 0 3 1 9 0 0 23 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 0 0 0 0 237 192 541 0 0 694 60
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 0 0 0 237 192 541 0 0 694 60
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 0 0 0 237 192 541 0 0 694 60
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 0 0 0 0 237 192 541 0 0 694 60

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 1.00 1.00 1.00 0.93 1.00 0.93 0.95 0.95 1.00 1.00 0.90
Lanes: 0.00 0.00 0.00 1.73 0.00 1.27 1.00 2.00 0.00 0.00 2.76 0.24
Final Sat.: 0 0 0 3047 0 2233 1805 3610 0 0 4717 408

Capacity Analysis Module:
Vol/Sat: 0.00 0.00 0.00 0.21 0.00 0.11 0.11 0.15 0.00 0.00 0.15 0.15
Crit Moves: ****
Green/Cycle: 0.00 0.00 0.00 0.41 0.00 0.41 0.21 0.50 0.00 0.00 0.29 0.29
Volume/Cap: 0.00 0.00 0.00 0.51 0.00 0.26 0.51 0.30 0.00 0.00 0.51 0.51
Delay/Veh: 0.0 0.0 0.0 22.0 0.0 19.2 36.3 15.0 0.0 0.0 30.0 30.0
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 0.0 0.0 0.0 22.0 0.0 19.2 36.3 15.0 0.0 0.0 30.0 30.0
DesignQueue: 0 0 0 22 0 8 9 16 0 0 28 2

Oakland Army Base Area Redevelopment Plan EIR
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Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #9 W Grand / Harrison

Cycle (sec): 100 Critical Vol./Cap. (X): 0.516
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 24.2
Optimal Cycle: 58 Level Of Service: C

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Permitted Permitted Protected Protected
Rights: Include Include Include Include
Min. Green: 8 21 21 8 21 21 8 21 21 8 20 20 8 20 20
Lanes: 0 1 2 0 2 0 1 1 1 0 2 0 2 1 0 2 0 1 1 0

Volume Module:
Base Vol: 63 717 244 8 1131 78 57 239 128 484 704 124
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 63 717 244 8 1131 78 57 239 128 484 704 124
Added Vol: 0 0 0 0 0 0 0 0 4 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 63 717 244 8 1131 78 57 243 128 484 714 124
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 63 717 244 8 1131 78 57 243 128 484 714 124
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 63 717 244 8 1131 78 57 243 128 484 714 124
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 63 717 244 8 1131 78 57 243 128 484 714 124

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.68 0.68 0.75 0.84 0.84 0.84 0.86 0.86 0.86 0.92 0.93 0.93
Lanes: 0.24 2.76 2.00 0.02 2.79 0.19 2.00 2.00 1.00 2.00 1.70 0.30
Final Sat.: 314 3571 2842 32 4462 308 3502 3278 1639 3502 3008 522

Capacity Analysis Module:
Vol/Sat: 0.20 0.20 0.09 0.25 0.25 0.25 0.02 0.07 0.08 0.14 0.24 0.24
Crit Moves: ****
Green/Cycle: 0.46 0.46 0.46 0.46 0.46 0.46 0.08 0.20 0.20 0.25 0.37 0.37
Volume/Cap: 0.44 0.44 0.19 0.55 0.55 0.55 0.20 0.37 0.39 0.55 0.64 0.64
Delay/Veh: 18.5 18.5 16.1 19.9 19.9 19.9 43.4 34.8 35.0 33.3 27.1 27.1
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: 18.5 18.5 16.1 19.9 19.9 19.9 43.4 34.8 35.0 33.3 27.1 27.1
DesignQueue: 2 22 7 0 36 2 3 11 6 21 27 5

Oakland Army Base Area Redevelopment Plan EIR
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Level Of Service Computation Report

1997 HCM Operations Method (Future Volume Alternative)

Intersection #10 7th / Maritime

Cycle (sec): 100 Critical Vol./Cap. (X): 0.428
 Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 30.4
 Optimal Cycle: 82 Level Of Service: C

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Protected	Protected	Protected	Protected
Rights:	Include	Include	Include	Include
Min. Green:	15 20 20	15 20 20	15 20 20	15 20 20
Lanes:	1 0 1 1 0	1 0 1 1 0	1 0 2 1 0	1 0 2 0 1

Volume Module:

Base Vol:	83	59	43	79	97	4	38	40	63	132	191	263
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:	83	59	43	79	97	4	38	40	63	132	191	263
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	83	59	43	94	97	4	38	40	63	132	191	301
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	83	59	43	94	97	4	38	40	63	132	191	301
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	83	59	43	94	97	4	38	40	63	132	191	301
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	83	59	43	94	97	4	38	40	63	132	191	301

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.73	0.68	0.68	0.73	0.73	0.73	0.73	0.64	0.64	0.73	0.73	0.65
Lanes:	1.00	1.16	0.84	1.00	1.92	0.08	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1388	1505	1097	1388	2650	109	1388	2415	1207	1388	2776	1242

Capacity Analysis Module:

Vol/Sat:	0.06	0.04	0.04	0.07	0.04	0.04	0.03	0.02	0.05	0.10	0.07	0.24
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green/Cycle:	0.15	0.20	0.20	0.15	0.20	0.20	0.15	0.30	0.30	0.23	0.38	0.38
Volume/Cap:	0.40	0.20	0.20	0.45	0.18	0.18	0.18	0.05	0.17	0.42	0.18	0.64
Delay/Veh:	39.7	33.5	33.5	40.3	33.4	33.4	37.6	24.7	25.8	33.9	20.7	28.3
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:	39.7	33.5	33.5	40.3	33.4	33.4	37.6	24.7	25.8	33.9	20.7	28.3
DesignQueue:	4	3	2	4	4	2	2	2	2	6	7	11

Oakland Army Base Area Redevelopment Plan EIR
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Level Of Service Computation Report

1997 HCM Operations Method (Future Volume Alternative)

Intersection #11 7th / I-880 SB Ramp

Cycle (sec): 100 Critical Vol./Cap. (X): 0.110
 Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 5.2
 Optimal Cycle: 41 Level Of Service: A

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

Volume Module:

Base Vol:	0	0	0	0	0	0	0	0	0	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:	0	0	0	0	0	0	0	0	0	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	0	0	0	0	0	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	0	0	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	0	0	0	0	0	0	0	0	0

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Final Sat.:	0	0	0	0	0	0	0	0	0	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green/Cycle:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Volume/Cap:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Delay/Veh:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DesignQueue:	0	0	0	0	0	0	0	0	0	0	0	0

Oakland Army Base Area Redevelopment Plan EIR
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Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #13 7th / Peralta
Cycle (sec): 100 Critical Vol./Cap. (X): 0.157
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 8.5
Optimal Cycle: 36 Level Of Service: A

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Permitted Permitted Permitted Permitted
Rights: Include Include Include Include
Min. Green: 0 15 15 0 15 15 0 15 15 15 15 15 15 15 15
Lanes: 0 1 0 0 1 0 1 0 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 45 10 5 28 14 16 19 334 14 4 300 27
Growth Adj: 1.00
Initial Bse: 45 10 5 28 14 16 19 334 14 4 300 27
Added Vol: 0
PasserByVol: 0
Initial Fut: 45 10 5 28 14 16 19 335 14 4 302 27
User Adj: 1.00
PHF Adj: 1.00
PHF Volume: 45 10 5 28 14 16 19 335 14 4 302 27
Reduced Vol: 0
PCE Adj: 1.00
MLF Adj: 1.00
Final Vol: 45 10 5 28 14 16 19 335 14 4 302 27

Saturation Flow Module:
Sat/Lane: 1900
Adjustment: 0.78 0.78 0.85 0.84 0.84 0.85 0.88 0.88 0.88 0.88 0.88 0.88 0.88 0.88 0.88 0.88 0.88 0.88 0.88 0.88 0.88
Lanes: 0.82 0.18 1.00 0.67 0.33 1.00 0.10 1.82 0.08 1.00 1.84 0.16
Final Sat: 1217 270 1615 1060 530 1615 172 3038 127 1001 3274 293

Capacity Analysis Module:
Vol/Sat: 0.04 0.04 0.00 0.03 0.03 0.01 0.11 0.11 0.11 0.11 0.11 0.00 0.09 0.09
Crit Moves: ****
Green/Cycle: 0.24 0.24 0.24 0.24 0.24 0.24 0.70 0.70 0.70 0.70 0.70 0.70 0.70 0.70
Volume/Cap: 0.16 0.16 0.01 0.11 0.11 0.04 0.16 0.16 0.16 0.16 0.16 0.16 0.16 0.16
Delay/Veh: 30.5 30.5 29.3 30.1 30.1 29.5 5.0 5.0 5.0 5.0 5.0 4.4 4.9 4.9
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 1.00 1.00
AdjDel/Veh: 30.5 30.5 29.3 30.1 30.1 29.5 5.0 5.0 5.0 5.0 5.0 4.4 4.9 4.9
DesignQueue: 2 0 0 1 1 1 0 6 0 0 0 5 0 5 0

Oakland Army Base Area Redevelopment Plan EIR
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Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #12 7th / I-880 North Ramp
Cycle (sec): 100 Critical Vol./Cap. (X): 0.413
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 29.3
Optimal Cycle: 77 Level Of Service: C

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Split Phase Split Phase Protected Protected
Rights: Include Ovl Include Include
Min. Green: 15 15 15 15 0 15 15 20 0 0 20 20
Lanes: 1 0 1 0 1 0 0 2 1 0 2 0 0 0 0 1 1 0

Volume Module:
Base Vol: 250 149 150 111 0 161 20 51 0 0 321 134
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: 250 149 150 111 0 161 20 51 0 0 321 134
Added Vol: 36 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 286 149 150 111 0 161 20 52 0 0 323 134
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 286 149 150 111 0 161 20 52 0 0 323 134
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol: 286 149 150 111 0 161 20 52 0 0 323 134

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.95 0.88 0.88 0.95 1.00 0.75 0.95 0.95 1.00 1.00 0.91 0.91
Lanes: 1.00 1.00 1.00 1.00 0.00 2.00 1.00 2.00 0.00 0.00 1.41 0.59
Final Sat: 1805 1670 1670 1805 0 2842 1805 3610 0 0 2439 1012

Capacity Analysis Module:
Vol/Sat: 0.16 0.09 0.09 0.06 0.00 0.06 0.01 0.01 0.00 0.00 0.13 0.13
Crit Moves: ****
Green/Cycle: 0.32 0.32 0.32 0.15 0.00 0.30 0.15 0.41 0.00 0.00 0.26 0.26
Volume/Cap: 0.50 0.28 0.28 0.41 0.00 0.19 0.07 0.03 0.00 0.00 0.50 0.50
Delay/Veh: 28.5 25.8 25.9 39.5 0 26.1 36.6 17.4 0 0 31.7 31.7
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: 28.5 25.8 25.9 39.5 0 26.1 36.6 17.4 0 0 31.7 31.7
DesignQueue: 11 6 5 0 6 1 2 0 0 0 14 6

Oakland Army Base Area Redevelopment Plan EIR
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Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #14 7th / Mandala

Cycle (sec): 100 Critical Vol./Cap. (X): 0.272
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 14.8
Optimal Cycle: 47 Level Of Service: B

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

Control: Permitted Protected Permitted Permitted
Rights: Include Include Include Include
Min. Green: 0 15 15 8 15 15 8 15 15 8 15 15
Lanes: 0 1 0 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 12 47 59 72 89 29 36 323 21 172 308 44
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: 12 47 59 72 89 29 36 323 21 172 308 44
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 12 47 59 72 89 29 36 324 21 172 310 44
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 12 47 59 72 89 29 36 324 21 172 310 44
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 12 47 59 72 89 29 36 324 21 172 310 44
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 12 47 59 72 89 29 36 324 21 172 310 44

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.85 0.85 0.85 0.95 0.91 0.91 0.53 0.94 0.94 0.53 0.93 0.93
Lanes: 0.20 0.80 1.00 1.00 1.51 0.49 1.00 1.88 0.12 1.00 1.75 0.25
Final Sat.: 328 1287 1615 1805 2622 854 998 3360 218 1007 3101 440

Capacity Analysis Module:
Vol/Sat: 0.04 0.04 0.04 0.04 0.03 0.03 0.04 0.10 0.10 0.17 0.10 0.10
Crit Moves: ****
Green/Cycle: 0.15 0.15 0.15 0.30 0.30 0.61 0.61 0.61 0.61 0.61 0.61 0.61
Volume/Cap: 0.24 0.24 0.24 0.27 0.11 0.11 0.06 0.16 0.16 0.28 0.16 0.16
Delay/Veh: 38.0 38.0 38.0 38.5 25.7 25.7 7.8 8.3 8.3 9.3 8.3 8.3
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: 38.0 38.0 38.0 38.5 25.7 25.7 7.8 8.3 8.3 9.3 8.3 8.3
DesignQueue: 1 2 3 4 1 1 7 0 0 4 7 1

Oakland Army Base Area Redevelopment Plan EIR
Baseline Conditions
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Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #15 7th / Union

Cycle (sec): 100 Critical Vol./Cap. (X): 0.331
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 9.0
Optimal Cycle: 36 Level Of Service: A

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

Control: Permitted Permitted Permitted Permitted
Rights: Include Include Include Include
Min. Green: 0 15 15 0 15 15 8 15 15 8 15 15
Lanes: 0 1 0 0 1 0 1 0 0 1 0 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 14 41 112 11 46 14 16 423 8 226 563 21
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 14 41 112 11 46 14 16 423 8 226 563 21
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 14 41 112 11 46 14 16 424 8 226 565 21
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 14 41 112 11 46 14 16 424 8 226 565 21
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 14 41 112 11 46 14 16 424 8 226 565 21
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 14 41 112 11 46 14 16 424 8 226 565 21

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.94 0.94 0.85 0.96 0.96 0.85 0.41 0.95 0.95 0.49 0.95 0.95
Lanes: 0.25 0.75 1.00 0.19 0.81 1.00 1.00 1.96 1.04 1.00 1.93 0.07
Final Sat.: 455 1331 1615 352 1470 1615 783 3533 67 933 3463 129

Capacity Analysis Module:
Vol/Sat: 0.03 0.03 0.07 0.03 0.03 0.01 0.02 0.12 0.12 0.24 0.16 0.16
Crit Moves: ****
Green/Cycle: 0.21 0.21 0.21 0.21 0.21 0.21 0.73 0.73 0.73 0.73 0.73 0.73
Volume/Cap: 0.15 0.15 0.33 0.15 0.15 0.04 0.03 0.16 0.16 0.33 0.22 0.22
Delay/Veh: 32.4 32.4 34.2 32.5 32.5 31.6 3.7 4.1 4.1 5.1 4.4 4.4
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: 32.4 32.4 34.2 32.5 32.5 31.6 3.7 4.1 4.1 5.1 4.4 4.4
DesignQueue: 1 2 5 0 2 1 0 7 0 3 9 0

Oakland Army Base Area Redevelopment Plan EIR
Baseline Conditions
AM Peak Hour

Level of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #16 7th / Adeline

Cycle (sec): 100 Critical Vol./Cap. (X): 0.280
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 10.7
Optimal Cycle: 43 Level Of Service: B

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Permitted Permitted Permitted Permitted
Rights: Include Include Include Include
Min. Green: 8 22 22 8 22 22 8 15 15 8 15 15
Lanes: 1 0 1 1 0 0 1 0 1 0 1 0 2 0 1 1 0 2 0 1

Volume Module:
Base Vol: 31 180 74 22 24 25 100 685 57 47 445 110
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 31 180 74 22 24 25 100 685 57 47 445 110
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 31 180 74 22 24 25 100 686 57 47 447 110
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 31 180 74 22 24 25 100 686 57 47 447 110
Reduc Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 31 180 74 22 24 25 100 686 57 47 447 110
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 31 180 74 22 24 25 100 686 57 47 447 110

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.71 0.91 0.91 0.76 0.76 0.76 0.48 0.95 0.85 0.36 0.95 0.85
Lanes: 1.00 1.42 0.58 0.62 0.68 0.70 1.00 2.00 1.00 1.00 2.00 1.00
Final Sat.: 1345 2446 1005 899 981 1022 904 3610 1615 675 3610 1615

Capacity Analysis Module:
Vol/Sat: 0.02 0.07 0.07 0.02 0.02 0.02 0.11 0.19 0.04 0.07 0.12 0.07
Crit Moves: ****
Green/Cycle: 0.26 0.26 0.26 0.26 0.26 0.26 0.68 0.68 0.68 0.68 0.68 0.68
Volume/Cap: 0.09 0.28 0.28 0.09 0.09 0.09 0.16 0.28 0.05 0.10 0.18 0.10
Delay/Veh: 28.0 29.5 29.5 27.9 27.9 27.9 6.0 6.5 5.4 5.7 6.0 5.6
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: 28.0 29.5 29.5 27.9 27.9 27.9 6.0 6.5 5.4 5.7 6.0 5.6
DesignQueue: 1 8 3 1 1 1 2 13 1 1 8 2

Oakland Army Base Area Redevelopment Plan EIR
Baseline Conditions
AM Peak Hour

Level of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #17 7th / Market

Cycle (sec): 100 Critical Vol./Cap. (X): 0.239
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 15.0
Optimal Cycle: 75 Level Of Service: B

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Permitted Permitted Permitted Permitted
Rights: Include Include Include Include
Min. Green: 8 22 22 8 22 22 8 22 22 8 22 22
Lanes: 1 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 57 72 96 116 154 14 169 712 15 50 385 27
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 57 72 96 116 154 14 169 712 15 50 385 27
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 57 72 96 116 154 14 169 713 15 50 387 27
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 57 72 96 116 154 14 169 713 15 50 387 27
Reduc Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 57 72 96 116 154 14 169 713 15 50 387 27
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 57 72 96 116 154 14 169 713 15 50 387 27

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.95 0.87 0.87 0.95 0.90 0.90 0.49 0.91 0.91 0.33 0.90 0.90
Lanes: 1.00 1.00 1.00 1.00 2.75 0.25 1.00 2.94 0.06 1.00 2.80 0.20
Final Sat.: 1805 1650 1650 1805 4698 427 933 5065 107 631 4800 335

Capacity Analysis Module:
Vol/Sat: 0.03 0.04 0.06 0.06 0.03 0.03 0.18 0.14 0.14 0.08 0.08 0.08
Crit Moves: ****
Green/Cycle: 0.24 0.24 0.24 0.27 0.27 0.27 0.59 0.59 0.59 0.59 0.59 0.59
Volume/Cap: 0.13 0.18 0.24 0.24 0.12 0.12 0.31 0.24 0.24 0.13 0.14 0.14
Delay/Veh: 29.7 30.0 30.5 28.8 27.6 27.6 10.6 9.8 9.8 9.3 9.2 9.2
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: 29.7 30.0 30.5 28.8 27.6 27.6 10.6 9.8 9.8 9.3 9.2 9.2
DesignQueue: 2 3 4 5 6 1 4 17 0 1 9 1

Oakland Army Base Area Redevelopment Plan EIR
Baseline Conditions
AM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #18 7th / Harrison
Cycle (sec): 45 Critical Vol./Cap. (X): 0.380
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 10.5
Optimal Cycle: 45 Level Of Service: B
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Split Phase Split Phase Split Phase Split Phase
Rights: Include Include Include Include
Min. Green: 0 0 3 0 1 0 0 0 0 0 0 1 2 0 0 0 0 0 0 0 0 0

Lanes: 0 0 3 0 1 0 0 0 0 0 0 0 1 2 0 0 0 0 0 0 0 0
Volume Module: >> Count Date: 17 Apr 2001 << AM Peak
Base Vol: 0 1066 1351 0 0 100 370 0 0 100 370 0 0 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 1.00 1.00 1.00
Initial Bse: 0 1066 1351 0 0 100 370 0 0 100 370 0 0 0 0 0
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 0 1066 1359 0 0 100 370 0 0 100 370 0 0 0 0 0
User Adj: 1.00 1.00 0.27 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 1066 360 0 0 100 370 0 0 100 370 0 0 0 0 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 1066 360 0 0 100 370 0 0 100 370 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 0 1066 360 0 0 100 370 0 0 100 370 0 0 0 0 0

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 1.00 0.91 0.85 1.00 1.00 1.00 0.77 0.77 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.00 3.00 1.00 0.00 0.00 0.00 0.64 2.36 0.00 0.64 2.36 0.00 0.00 0.00 0.00
Final Sat.: 0 5187 1615 0 0 0 938 3471 0 0 0 938 3471 0 0 0 0

Capacity Analysis Module:
Vol/Sat: 0.00 0.21 0.22 0.00 0.00 0.00 0.11 0.11 0.00 0.00 0.00 0.00 0.00 0.00 0.00
Crit Moves: ****
Green/Cycle: 0.00 0.42 0.42 0.00 0.00 0.00 0.40 0.40 0.00 0.00 0.00 0.00 0.00 0.00 0.00
Volume/Cap: 0.00 0.49 0.53 0.00 0.00 0.00 0.27 0.27 0.00 0.00 0.00 0.00 0.00 0.00 0.00
Delay/Veh: 0.0 10.2 12.6 0.0 0.0 0.0 9.4 9.4 0.0 0.0 0.0 0.0 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 1.00 1.00 1.00
AdjDel/Veh: 0.0 10.2 12.6 0.0 0.0 0.0 9.4 9.4 0.0 0.0 0.0 0.0 0.0 0.0 0.0
DesignQueue: 0 16 5 0 0 0 2 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Oakland Army Base Area Redevelopment Plan EIR
Baseline Conditions
AM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #19 7th / Jackson
Cycle (sec): 45 Critical Vol./Cap. (X): 1.013
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 33.6
Optimal Cycle: 98 Level Of Service: C
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Split Phase Split Phase Split Phase Split Phase
Rights: Include Include Include Include
Min. Green: 0 0 0 1 0 0 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Lanes: 0 0 0 1 0 0 1 0 0 0 0 1 2 0 1 0 0 0 0 0 0 0
Volume Module: >> Count Date: 23 Mar 1999 << AM Peak
Base Vol: 0 307 60 20 142 0 26 610 946 0 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 1.00 1.00 1.00
Initial Bse: 0 307 60 20 142 0 26 610 946 0 0 0 0
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 0 307 60 20 142 0 26 610 954 0 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 307 60 20 142 0 26 610 954 0 0 0 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 307 60 20 142 0 26 610 954 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 0 307 60 20 142 0 26 610 954 0 0 0 0

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 1.00 0.88 0.88 0.98 0.98 0.98 0.77 0.77 0.85 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.00 0.84 0.16 0.12 0.88 0.00 0.12 2.88 1.00 0.00 0.00 0.00 0.00 0.00 0.00
Final Sat.: 0 1395 273 230 1635 0 180 4229 1615 0 0 0 0 0 0 0

Capacity Analysis Module:
Vol/Sat: 0.00 0.22 0.22 0.09 0.09 0.00 0.14 0.14 0.59 0.00 0.00 0.00 0.00 0.00 0.00
Crit Moves: ****
Green/Cycle: 0.00 0.22 0.22 0.22 0.22 0.00 0.58 0.58 0.58 0.00 0.00 0.00 0.00 0.00 0.00
Volume/Cap: 0.00 1.01 1.01 0.40 0.40 0.00 0.25 0.25 1.01 0.00 0.00 0.00 0.00 0.00 0.00
Delay/Veh: 0.0 68.3 68.3 18.0 18.0 0.0 4.8 4.8 42.1 0.0 0.0 0.0 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 1.00 1.00 1.00
AdjDel/Veh: 0.0 68.3 68.3 18.0 18.0 0.0 4.8 4.8 42.1 0.0 0.0 0.0 0.0 0.0 0.0
DesignQueue: 0 6 1 0 3 0 0 0 7 1 1 0 0 0 0 0 0 0 0 0 0 0

Oakland Army Base Area Redevelopment Plan EIR
Baseline Conditions
AM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #20 6th / Jackson
Cycle (sec): 45 Critical Vol./Cap. (X): 0.426
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 10.4
Optimal Cycle: 23 Level Of Service: B

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Permitted Ignored Split Phase Split Phase
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Lanes: 1 0 1 0 0 0 0 1 0 1 0 0 0 0 0 1 0 1 0 1

Volume Module: >> Count Date: 6 Oct 1999 << AM Peak Hour
Base Vol: 213 301 0 0 235 1102 0 0 23 330 32
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 213 301 0 0 235 1102 0 0 23 330 32
Added Vol: 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 213 301 0 0 235 1110 0 0 23 330 32
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 213 301 0 0 235 0 0 23 330 32
Reduced Vol: 0 0 0 0 497 0 0 23 330 32
PCE Adj: 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
Final Vol.: 213 301 0 0 235 0 0 23 330 32

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.59 0.98 1.00 1.00 0.98 1.00 1.00 0.83 0.98 0.83
Lanes: 1.00 1.00 0.00 0.00 1.00 1.00 0.00 0.00 1.00 1.00
Final Sat.: 1112 1862 0 0 1862 1900 0 0 1583 1862 1583

Capacity Analysis Module:
Vol/Sat: 0.19 0.16 0.00 0.00 0.13 0.00 0.00 0.00 0.01 0.18 0.02
Crit Moves: *****
Green/Cycle: 0.51 0.51 0.00 0.00 0.51 0.00 0.00 0.00 0.31 0.31 0.31
Volume/Cap: 0.37 0.32 0.00 0.00 0.25 0.00 0.00 0.00 0.05 0.57 0.06
Delay/Veh: 8.5 7.3 0.0 0.0 6.8 0.0 0.0 0.0 11.0 17.0 11.2
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 8.5 7.3 0.0 0.0 6.8 0.0 0.0 0.0 11.0 17.0 11.2
DesignQueue: 3 4 0 0 3 0 0 0 0 6 1

Oakland Army Base Area Redevelopment Plan EIR
Baseline Conditions
AM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #21 5th / Union / I-880 Ramps
Cycle (sec): 100 Critical Vol./Cap. (X): 0.661
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 31.5
Optimal Cycle: 72 Level Of Service: C

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Permitted Protected Split Phase Split Phase
Rights: Include Include Include Include
Min. Green: 0 20 20 0 20 20 8 20 20 8 20 20
Lanes: 0 1 0 1 1 0 0 1 1 0 0 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 38 163 784 0 228 33 3 102 29 493 157 25
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 38 163 784 0 228 33 3 102 29 493 157 25
Added Vol: 0 0 3 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 38 163 787 0 228 33 3 102 29 493 157 25
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 38 163 787 0 228 33 3 102 29 493 157 25
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 38 163 787 0 228 33 3 102 29 493 157 25

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.77 0.77 0.77 1.00 0.93 0.93 0.92 0.92 0.92 0.93 0.93
Lanes: 0.19 0.81 2.00 0.00 1.75 0.25 0.04 1.53 0.43 1.00 1.73 0.27
Final Sat.: 275 1181 2913 0 3094 448 78 2657 756 1805 3049 485

Capacity Analysis Module:
Vol/Sat: 0.14 0.14 0.27 0.00 0.07 0.07 0.04 0.04 0.04 0.27 0.05 0.05
Crit Moves: *****
Green/Cycle: 0.34 0.34 0.34 0.00 0.34 0.34 0.20 0.20 0.20 0.34 0.34
Volume/Cap: 0.41 0.41 0.80 0.00 0.22 0.22 0.19 0.19 0.19 0.80 0.15 0.15
Delay/Veh: 25.5 25.5 33.8 0 23.7 23.7 33.4 33.4 33.4 37.1 22.9 22.9
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 25.5 25.5 33.8 0.0 23.7 23.7 33.4 33.4 33.4 37.1 22.9 22.9
DesignQueue: 1 6 31 0 9 1 0 5 1 19 6 1

Oakland Army Base Area Redevelopment Plan EIR
Baseline Conditions
AM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)
Intersection #22 5th / Adeline

Cycle (sec): 100 Critical Vol./Cap. (X): 0.472
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 30.4
Optimal Cycle: 80 Level Of Service: C

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Split Phase Split Phase Protected Protected
Rights: Include Include Include Include
Min. Green: 8 20 20 8 20 20 8 20 20 8 20 20
Lanes: 1 0 1 1 0 1 1 0 1 0 1 1 0 1 0 1 1 0

Volume Module:
Base Vol: 74 43 82 73 160 175 22 598 170 131 452 30
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 74 43 82 73 160 175 22 598 170 131 452 30
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 74 43 82 73 160 175 22 598 173 131 452 30
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 74 43 82 73 160 175 22 598 173 131 452 30
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 74 43 82 73 160 175 22 598 173 131 452 30
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol: 74 43 82 73 160 175 22 598 173 131 452 30

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.95 0.86 0.86 0.88 0.88 0.92 0.92 0.92 0.95 0.94 0.94
Lanes: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Sat: 1805 1628 1628 1674 1674 1674 1805 2705 782 1805 3355 223
Capacity Analysis Module:
Vol/Sat: 0.04 0.03 0.05 0.04 0.10 0.10 0.01 0.22 0.22 0.07 0.13 0.13
Crit Moves: ****
Green/Cycle: 0.20 0.20 0.20 0.20 0.20 0.20 0.14 0.36 0.36 0.12 0.34 0.34
Volume/Cap: 0.20 0.13 0.25 0.22 0.48 0.52 0.09 0.61 0.61 0.61 0.39 0.39
Delay/Veh: 33.7 32.9 34.0 33.5 35.8 36.4 37.8 27.1 27.1 47.0 25.2 25.2
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: 33.7 32.9 34.0 33.5 35.8 36.4 37.8 27.1 27.1 47.0 25.2 25.2
DesignQueue: 3 2 4 3 7 8 1 22 6 7 17 1

Oakland Army Base Area Redevelopment Plan EIR
Baseline Conditions
AM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)
Intersection #23 I-880 Off Ramp / Market

Cycle (sec): 100 Critical Vol./Cap. (X): 0.343
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 19.5
Optimal Cycle: 64 Level Of Service: B

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 15 20 0 0 20 20 0 0 0 0 0 0 0 0 15 20 20
Lanes: 1 0 2 0 0 0 0 2 1 0 0 0 0 0 0 1 1 0 1

Volume Module:
Base Vol: 36 365 0 0 140 263 0 0 0 101 222 200
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: 36 365 0 0 140 263 0 0 0 101 222 200
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 36 365 0 0 140 263 0 0 0 101 222 200
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 36 365 0 0 140 263 0 0 0 101 222 200
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 36 365 0 0 140 263 0 0 0 101 222 200
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol: 36 365 0 0 140 263 0 0 0 101 222 200

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.95 0.95 1.00 1.00 0.82 0.82 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 2.00 0.00 0.00 2.00 1.00 0.00 0.00 0.00 0.00 0.63 1.37 1.00
Final Sat: 1805 3610 0 0 3119 1560 0 0 0 960 2109 1615
Capacity Analysis Module:
Vol/Sat: 0.02 0.10 0.00 0.00 0.04 0.17 0.00 0.00 0.00 0.11 0.11 0.12
Crit Moves: ****
Green/Cycle: 0.15 0.59 0.00 0.00 0.44 0.44 0.00 0.00 0.00 0.32 0.32 0.32
Volume/Cap: 0.13 0.17 0.00 0.00 0.10 0.38 0.00 0.00 0.00 0.33 0.33 0.38
Delay/Veh: 37.1 9.5 0.0 0.0 16.5 19.2 0.0 0.0 0.0 25.9 25.9 26.7
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: 37.1 9.5 0.0 0.0 16.5 19.2 0.0 0.0 0.0 25.9 25.9 26.7
DesignQueue: 2 9 0 0 4 9 0 0 0 4 9 8

Oakland Army Base Area Redevelopment Plan EIR
Baseline Conditions
AM Peak Hour

Level Of Service Computation Report

1997 HCM Unsignalized Method (Future Volume Alternative)

Intersection #26 3rd / Market
Average Delay (sec/veh): 13.9 Worst Case Level Of Service: B
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Stop Sign Uncontrolled Uncontrolled
Rights: Include Include Include
Lanes: 1 0 0 1 0 1 0 1 1 0 0 0 1 0 0 1 0 0 1 0

Volume Module:
Base Vol: 8 14 3 27 73 75 26 163 38 10 263 14
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: 8 14 3 27 73 75 26 163 38 10 263 14
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 8 14 3 27 73 75 26 163 38 10 263 14
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 8 14 3 27 73 75 26 163 38 10 263 14
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Final Vol: 8 14 3 27 73 75 26 163 38 10 263 14

Critical Gap Module:
Critical Gap: 7.1 6.5 6.2 7.1 6.5 6.2 4.1 xxxxx 4.1 xxxxx xxxxx
FollowUpTim: 3.5 4.0 3.3 3.5 4.0 3.3 2.2 xxxxx xxxxx 2.2 xxxxx xxxxx

Capacity Module:
Conflict Vol: 598 531 182 533 543 270 277 xxxxx xxxxx 201 xxxxx xxxxx
Potent Cap.: 417 457 866 461 450 774 1298 xxxxx xxxxx 1383 xxxxx xxxxx
Move Cap.: 322 444 866 439 437 774 1298 xxxxx xxxxx 1383 xxxxx xxxxx

Level Of Service Module:
Stopped Del: 16.5 xxxxx xxxxx 13.7 14.0 xxxxx 7.8 xxxxx xxxxx 7.6 xxxxx xxxxx
LOS by Move: C * * * * * A * * * * * A * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxxx xxxxx 486 xxxxx xxxxx 618 xxxxx xxxxx xxxxx xxxxx xxxxx
Shrd StpDel: xxxxx xxxxx 12.7 xxxxx xxxxx 12.1 xxxxx xxxxx xxxxx xxxxx xxxxx
Shared LOS: * * * * * B * * * * * * * * * *
ApproachDel: 13.9 * * * * * xxxxxx * * * * *
ApproachLOS: B * * * * * * * * * *

Oakland Army Base Area Redevelopment Plan EIR
Baseline Conditions
AM Peak Hour

Level Of Service Computation Report

1997 HCM Operations Method (Future Volume Alternative)

Intersection #27 14th / Mandela
Cycle (sec): 50 Critical Vol./Cap. (X): 0.182
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 8.5
Optimal Cycle: 17 Level Of Service: A
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Permitted Permitted Permitted Permitted
Rights: Include Include Include Include
Lanes: 0 1 0 1 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0

Volume Module: >> Count Date: 29 Nov 2000 <<
Base Vol: 7 124 55 18 168 21 23 159 13 21 102 27
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: 7 124 55 18 168 21 23 159 13 21 102 27
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 7 124 55 18 168 21 23 159 13 21 102 27
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 7 124 55 18 168 21 23 159 13 21 102 27
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 7 124 55 18 168 21 23 159 13 21 102 27
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 7 124 55 18 168 21 23 159 13 21 102 27

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.86 0.86 0.86 0.63 0.98 0.98 0.87 0.87 0.87 0.87 0.84 0.84
Lanes: 0.08 1.33 0.59 1.00 0.89 0.11 0.24 1.63 0.13 0.28 1.36 0.36
Final Sat.: 123 2181 967 1203 1660 208 388 2681 219 448 2178 577

Capacity Analysis Module:
Vol/Sat: 0.06 0.06 0.06 0.01 0.10 0.10 0.06 0.06 0.06 0.05 0.05 0.05
Crit Moves: *****
Green/Cycle: 0.55 0.55 0.55 0.55 0.55 0.55 0.33 0.33 0.33 0.33 0.33 0.33
Volume/Cap: 0.10 0.10 0.10 0.03 0.18 0.18 0.18 0.18 0.18 0.14 0.14 0.14
Delay/Veh: 5.3 5.3 5.3 5.0 5.6 5.6 12.2 12.2 12.2 12.0 12.0 12.0
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: 5.3 5.3 5.3 5.0 5.6 5.6 12.2 12.2 12.2 12.0 12.0 12.0
DesignQueue: 0 2 1 0 2 0 0 0 0 3 0 2 1

Oakland Army Base Area Redevelopment Plan EIR
Baseline Conditions
AM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #30 27th / SR 24-580 Off Ramp

Cycle (sec): 100 Critical Vol./Cap. (X): 0.403
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 11.8
Optimal Cycle: 38 Level Of Service: B

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

Control: Permitted Permitted Permitted Permitted
Rights: Include Include Include Include
Min. Green: 0 0 0 0 8 20 20 0 12 12 8 12 0
Lanes: 0 0 0 0 1 1 1 0 1 0 0 2 1 0 0 1 2 0 0

Volume Module:

Base Vol: 0 0 546 867 268 0 344 20 7 167 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
Initial Bse: 0 0 546 867 268 0 344 20 7 167 0
Added Vol: 0 0 0 0 3 0 1 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 0 0 546 870 271 0 345 20 7 167 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 0 546 870 271 0 345 20 7 167 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 0 546 870 271 0 345 20 7 167 0
PCE Adj: 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
Final Vol.: 0 0 546 870 271 0 345 20 7 167 0

Saturation Flow Module:

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 1.00 1.00 1.00 0.81 0.81 0.85 1.00 0.90 0.84 0.84 1.00
Lanes: 0.00 0.00 0.00 1.16 1.84 1.00 0.00 2.84 0.16 0.12 2.88 0.00
Final Sat.: 0 0 0 1775 2828 1615 0 4864 282 192 4590 0

Capacity Analysis Module:

Vol/Sat: 0.00 0.00 0.00 0.31 0.31 0.17 0.00 0.07 0.07 0.04 0.04 0.00
Crit Moves: ****
Green/Cycle: 0.00 0.00 0.00 0.76 0.76 0.76 0.00 0.18 0.18 0.18 0.18 0.00
Volume/Cap: 0.00 0.00 0.00 0.40 0.40 0.22 0.00 0.40 0.40 0.21 0.21 0.00
Delay/Veh: 0.0 0.0 0.0 4.1 4.1 3.4 0.0 36.8 36.8 35.3 35.3 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
AdjDel/Veh: 0.0 0.0 0.0 4.1 4.1 3.4 0.0 36.8 36.8 35.3 35.3 0.0
DesignQueue: 0 0 0 8 12 4 0 16 1 0 8 0

Oakland Army Base Area Redevelopment Plan EIR
Baseline Conditions
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Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #31 27th / SR 24-580 On Ramp

Cycle (sec): 100 Critical Vol./Cap. (X): 0.354
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 9.5
Optimal Cycle: 39 Level Of Service: A

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

Control: Permitted Permitted Permitted Permitted
Rights: Include Include Include Include
Min. Green: 8 20 20 0 0 0 0 8 10 0 0 10 10
Lanes: 0 1 1 1 0 0 0 0 0 1 1 2 0 0 0 0 3 0 1

Volume Module:

Base Vol: 5 204 20 0 0 222 771 0 0 175 212
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 5 204 20 0 0 222 771 0 0 175 212
Added Vol: 0 1 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 5 205 20 0 0 223 771 0 0 175 212
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 5 205 20 0 0 223 771 0 0 175 212
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 5 205 20 0 0 223 771 0 0 175 212
PCE Adj: 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
Final Vol.: 5 205 20 0 0 223 771 0 0 175 212

Saturation Flow Module:

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.89 0.89 0.89 1.00 1.00 1.00 0.49 0.49 1.00 1.00 0.91 0.85
Lanes: 0.07 2.67 0.26 0.00 0.00 0.00 1.00 3.00 0.00 0.00 3.00 1.00
Final Sat.: 110 4504 439 0 0 930 2791 0 0 5187 1615

Capacity Analysis Module:

Vol/Sat: 0.05 0.05 0.05 0.00 0.00 0.00 0.24 0.28 0.00 0.00 0.03 0.13
Crit Moves: ****
Green/Cycle: 0.20 0.20 0.20 0.00 0.00 0.00 0.71 0.71 0.00 0.00 0.71 0.71
Volume/Cap: 0.23 0.23 0.23 0.00 0.00 0.00 0.34 0.39 0.00 0.00 0.05 0.18
Delay/Veh: 33.6 33.6 33.6 0.0 0.0 0.0 5.6 5.9 0.0 0.0 4.4 4.9
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 33.6 33.6 33.6 0.0 0.0 0.0 5.6 5.9 0.0 0.0 4.4 4.9
DesignQueue: 0 9 1 0 0 0 4 13 0 0 3 4

Oakland Army Base Area Redevelopment Plan EIR
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Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #32 San Pablo Av / Adeline

Cycle (sec): 120 Critical Vol./Cap. (X): 0.765
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 18.4
Optimal Cycle: 64 Level Of Service: B

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Permitted Include Permitted Include Split Phase
Rights: Permitted Include Permitted Include Permitted Include
Min. Green: 0 15 15 8 15 15 8 10 10 8 15 15
Lanes: 0 0 1 1 0 0 1 0 1 0 0 1 0 0 0 1 0 1 0

Volume Module:
Base Vol: 0 208 1022 6 711 106 52 3 0 12 186 4
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 208 1022 6 711 106 52 3 0 12 186 4
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 0 208 1022 6 711 106 52 5 0 12 192 4
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 208 1022 6 711 106 52 5 0 12 192 4
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 208 1022 6 711 106 52 5 0 12 192 4
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 0 208 1022 6 711 106 52 5 0 12 192 4

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 1.00 0.83 0.83 0.88 0.88 0.88 0.91 0.91 1.00 0.94 0.94 0.94
Lanes: 0.00 1.00 1.00 0.01 1.73 0.26 1.00 1.00 0.00 0.11 1.85 0.04
Final Sat.: 0 1579 1579 24 2891 431 1726 1726 0 207 3312 69

Capacity Analysis Module:
Vol/Sat: 0.00 0.13 0.65 0.25 0.25 0.25 0.03 0.00 0.00 0.06 0.06 0.06
Crit Moves: ****
Green/Cycle: 0.00 0.72 0.72 0.72 0.72 0.72 0.08 0.08 0.00 0.13 0.13 0.13
Volume/Cap: 0.00 0.18 0.90 0.34 0.34 0.34 0.36 0.03 0.00 0.46 0.46 0.46
Delay/Veh: 0.0 5.6 22.3 6.5 6.5 6.5 53.4 50.6 0.0 49.5 49.5 49.5
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: 0.0 5.6 22.3 6.5 6.5 6.5 53.4 50.6 0.0 49.5 49.5 49.5
DesignQueue: 0 4 22 0 14 2 3 0 0 1 11 0

Oakland Army Base Area Redevelopment Plan EIR
Baseline Conditions
AM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #33 W MacArthur / Market

Cycle (sec): 100 Critical Vol./Cap. (X): 0.233
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 15.8
Optimal Cycle: 41 Level Of Service: B

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Permitted Include Permitted Include Permitted Include
Rights: Permitted Include Permitted Include Permitted Include
Min. Green: 8 20 20 8 20 20 8 15 15 8 15 15
Lanes: 0 1 0 1 0 0 1 0 1 0 0 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 54 211 61 101 222 23 37 198 17 74 279 42
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 54 211 61 101 222 23 37 198 17 74 279 42
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 54 211 61 101 222 23 37 200 17 74 285 42
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 54 211 61 101 222 23 37 200 17 74 285 42
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 54 211 61 101 222 23 37 200 17 74 285 42
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 54 211 61 101 222 23 37 200 17 74 285 42

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.78 0.78 0.78 0.72 0.72 0.72 0.78 0.78 0.78 0.78 0.78 0.78
Lanes: 0.33 1.30 0.37 0.58 1.29 0.13 0.44 2.36 0.20 1.00 1.74 0.26
Final Sat.: 491 1919 555 797 1752 182 644 3481 296 1113 3087 455

Capacity Analysis Module:
Vol/Sat: 0.11 0.11 0.11 0.13 0.13 0.13 0.06 0.06 0.06 0.07 0.09 0.09
Crit Moves: ****
Green/Cycle: 0.54 0.54 0.54 0.54 0.54 0.54 0.40 0.40 0.40 0.40 0.40 0.40
Volume/Cap: 0.20 0.20 0.20 0.23 0.23 0.23 0.14 0.14 0.14 0.17 0.23 0.23
Delay/Veh: 11.8 11.8 11.8 12.0 12.0 12.0 19.4 19.4 19.4 19.7 20.2 20.2
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: 11.8 11.8 11.8 12.0 12.0 12.0 19.4 19.4 19.4 19.7 20.2 20.2
DesignQueue: 1 5 2 3 6 1 1 7 1 3 10 1

Oakland Army Base Area Redevelopment Plan EIR
Baseline Conditions
AM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)
Intersection #34 Powell / I-80 Frontage Rd
Cycle (sec): 100 Critical Vol./Cap. (X): 0.545
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 21.3
Optimal Cycle: 47 Level Of Service: C

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Protected Protected
Rights: Include Include Include Ignore
Min. Green: 0 0 0 0 15 0 0 15 8 10 10 0 15 15
Lanes: 0 0 0 0 2 0 0 0 1 1 0 1 0 0 1 1

Volume Module:
Base Vol: 0 0 685 0 288 87 260 345 0 910 593
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 0 685 0 288 87 260 345 0 910 593
Added Vol: 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 0 0 685 0 288 87 260 345 0 910 596
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 0 685 0 288 87 260 345 0 910 0
Reduc Vol: 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 0 685 0 288 87 260 345 0 910 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
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 0 0 685 0 288 87 260 345 0 910 0

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 1.00 1.00 1.00 0.92 1.00 0.85 0.95 0.87 0.87 1.00 0.95 0.95
Lanes: 0.00 0.00 0.00 2.00 0.00 1.00 1.00 1.00 1.00 0.00 2.00 1.00
Final Sat.: 0 0 3502 0 1615 1805 1652 1652 0 3610 1805

Capacity Analysis Module:
Vol/Sat: 0.00 0.00 0.00 0.20 0.00 0.18 0.05 0.16 0.21 0.00 0.25 0.00
Crit Moves: ****
Green/Cycle: 0.00 0.00 0.00 0.36 0.00 0.36 0.09 0.55 0.55 0.00 0.46 0.00
Volume/Cap: 0.00 0.00 0.00 0.54 0.00 0.50 0.54 0.29 0.38 0.00 0.54 0.00
Delay/Veh: 0.0 0.0 0.0 26.0 0.0 25.7 47.5 12.0 12.9 0.0 19.7 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
AdjDel/Veh: 0.0 0.0 0.0 26.0 0.0 25.7 47.5 12.0 12.9 0.0 19.7 0.0
DesignQueue: 0 0 0 26 0 11 4 7 9 0 29 0

Oakland Army Base Area Redevelopment Plan EIR
Baseline Conditions
AM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)
Intersection #35 Powell / I-80 NB Ramps
Cycle (sec): 100 Critical Vol./Cap. (X): 0.822
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 25.2
Optimal Cycle: 74 Level Of Service: C

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 8 10 10 10 0 0 0 8 10 0 0 10 10
Lanes: 1 0 1 0 1 0 0 0 0 0 1 0 3 0 0 0 0 3 0 1

Volume Module:
Base Vol: 553 7 918 0 0 83 782 0 0 735 365
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 553 7 918 0 0 83 782 0 0 735 365
Added Vol: 1 0 1 0 0 0 0 0 0 0 2 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 554 7 919 0 0 83 782 0 0 737 365
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 554 7 919 0 0 83 782 0 0 737 365
Reduc Vol: 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 554 7 919 0 0 83 782 0 0 737 365
PCE Adj: 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
Final Vol.: 554 7 919 0 0 83 782 0 0 737 365

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.82 0.82 0.82 1.00 1.00 1.00 0.95 0.91 1.00 1.00 0.91 0.85
Lanes: 1.37 0.01 1.62 0.00 0.00 0.00 1.00 3.00 0.00 0.00 3.00 1.00
Final Sat.: 2145 15 2529 0 0 1805 5187 0 0 5187 1615

Capacity Analysis Module:
Vol/Sat: 0.26 0.48 0.36 0.00 0.00 0.00 0.05 0.15 0.00 0.00 0.14 0.23
Crit Moves: ****
Green/Cycle: 0.56 0.56 0.56 0.00 0.00 0.00 0.08 0.35 0.00 0.00 0.27 0.27
Volume/Cap: 0.46 0.85 0.65 0.00 0.00 0.00 0.57 0.43 0.00 0.00 0.53 0.85
Delay/Veh: 13.0 22.2 15.7 0.0 0.0 0.0 49.9 25.2 0.0 0.0 31.7 48.9
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: 13.0 22.2 15.7 0.0 0.0 0.0 49.9 25.2 0.0 0.0 31.7 48.9
DesignQueue: 14 0 24 0 0 0 4 29 0 0 31 16

Oakland Army Base Area Redevelopment Plan EIR
Baseline Conditions
AM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #36 Powell / Christie

Cycle (sec): 100 Critical Vol./Cap. (X): 0.476
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 29.9
Optimal Cycle: 69 Level Of Service: C

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Split Phase Split Phase Protected Protected
Rights: Include Include Include Include
Min. Green: 8 10 10 8 24 24 8 15 15 8 10 10
Lanes: 1 1 0 0 1 0 1 0 0 2 2 0 1 1 1 0 2 1 0

Volume Module:
Base Vol: 287 30 79 72 40 272 335 795 385 71 541 80
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: 287 30 79 72 40 272 335 795 385 71 541 80
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 287 30 79 72 40 272 335 796 385 71 543 80
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 287 30 79 72 40 272 335 796 385 71 543 80
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 287 30 79 72 40 272 335 796 385 71 543 80
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 287 30 79 72 40 272 335 796 385 71 543 80

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.96 0.96 0.85 0.97 0.97 0.75 0.92 0.90 0.90 0.95 0.89 0.89
Lanes: 1.81 0.19 1.00 0.64 0.36 2.00 2.00 2.00 2.00 1.00 2.61 0.39
Final Sat.: 3292 344 1615 1184 658 2842 3502 3433 1717 1805 4435 653

Capacity Analysis Module:
Vol/Sat: 0.09 0.09 0.05 0.06 0.06 0.10 0.10 0.23 0.22 0.04 0.12 0.12
Crit Moves: ****
Green/Cycle: 0.15 0.15 0.15 0.24 0.24 0.24 0.21 0.41 0.41 0.08 0.27 0.27
Volume/Cap: 0.57 0.57 0.32 0.25 0.25 0.40 0.45 0.57 0.55 0.49 0.45 0.45
Delay/Veh: 40.7 40.7 38.5 31.1 31.1 32.3 34.6 23.3 23.0 46.7 30.3 30.3
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: 40.7 40.7 38.5 31.1 31.1 32.3 34.6 23.3 23.0 46.7 30.3 30.3
DesignQueue: 14 1 4 3 2 12 15 28 13 4 23 3

Oakland Army Base Area Redevelopment Plan EIR
Baseline Conditions
AM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #37 Powell / Hollis

Cycle (sec): 100 Critical Vol./Cap. (X): 0.351
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 22.7
Optimal Cycle: 42 Level Of Service: C

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Permitted Permitted Protected Protected
Rights: Include Include Include Include
Min. Green: 8 15 15 8 15 15 8 10 10 8 10 10
Lanes: 1 0 0 1 0 0 1 0 0 1 0 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 141 126 24 22 140 55 167 482 186 65 394 31
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: 141 126 24 22 140 55 167 482 186 65 394 31
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 141 126 24 22 140 55 167 483 186 65 396 31
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 141 126 24 22 140 55 167 483 186 65 396 31
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 141 126 24 22 140 55 167 483 186 65 396 31
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 141 126 24 22 140 55 167 483 186 65 396 31

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.54 0.98 0.98 0.95 0.95 0.85 0.95 0.91 0.91 0.95 0.94 0.94
Lanes: 1.00 0.84 0.16 0.14 0.86 1.00 1.00 1.44 0.56 1.00 1.85 0.15
Final Sat.: 1022 1558 297 246 1563 1615 1805 2497 962 1805 3311 259

Capacity Analysis Module:
Vol/Sat: 0.14 0.08 0.08 0.09 0.09 0.03 0.09 0.19 0.19 0.04 0.12 0.12
Crit Moves: ****
Green/Cycle: 0.26 0.26 0.26 0.26 0.26 0.26 0.29 0.55 0.55 0.10 0.37 0.37
Volume/Cap: 0.54 0.32 0.32 0.35 0.35 0.13 0.32 0.35 0.35 0.35 0.32 0.32
Delay/Veh: 34.4 30.5 30.5 30.9 30.9 28.8 28.5 12.6 12.6 42.9 22.8 22.8
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: 34.4 30.5 30.5 30.9 30.9 28.8 28.5 12.6 12.6 42.9 22.8 22.8
DesignQueue: 6 5 1 1 6 2 7 13 5 3 14 1

Oakland Army Base Area Redevelopment Plan EIR
Baseline Conditions
AM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #38 Powell / San Pablo Av *****

Cycle (sec): 100 Critical Vol./Cap. (X): 0.733
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 31.8
Optimal Cycle: 64 Level Of Service: C

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

Control: Protected Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 8 15 15 8 15 15 8 15 15 8 15 15
Lanes: 1 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0

Volume Module:

Base Vol: 190 871 63 61 1077 39 61 177 157 153 670 29
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: 190 871 63 61 1077 39 61 177 157 153 670 29
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 190 871 63 61 1077 39 61 178 157 153 672 29
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 190 871 63 61 1077 39 61 178 157 153 672 29
Reduc Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 190 871 63 61 1077 39 61 178 157 153 672 29
PCE Adj: 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
Final Vol: 190 871 63 61 1077 39 61 178 157 153 672 29

Saturation Flow Module:

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.95 0.94 0.94 0.95 0.95 0.88 0.88 0.95 0.94 0.94 0.94
Lanes: 1.00 1.87 0.13 1.00 1.93 0.07 1.00 1.06 0.94 1.00 1.92 0.08
Final Sat.: 1805 3333 241 1805 3466 126 1805 1784 1573 1805 3440 148

Capacity Analysis Module:

Vol/Sat: 0.11 0.26 0.26 0.03 0.31 0.31 0.03 0.10 0.10 0.08 0.20 0.20
Crit Moves: ****
Green/Cycle: 0.14 0.46 0.46 0.08 0.41 0.41 0.08 0.15 0.15 0.19 0.26 0.26
Volume/Cap: 0.76 0.56 0.56 0.42 0.76 0.76 0.42 0.67 0.67 0.46 0.76 0.76
Delay/Veh: 54.7 19.9 19.9 45.8 28.0 28.0 45.8 43.5 43.5 37.2 38.3 38.3
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: 54.7 19.9 19.9 45.8 28.0 28.0 45.8 43.5 43.5 37.2 38.3 38.3
DesignQueue: 9 28 2 3 38 1 3 9 8 7 29 1

Oakland Army Base Area Redevelopment Plan EIR
Baseline Conditions
AM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #39 Stanford / Market *****

Cycle (sec): 100 Critical Vol./Cap. (X): 0.495
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 28.6
Optimal Cycle: 58 Level Of Service: C

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

Control: Protected Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 8 15 15 8 15 15 8 15 15 8 15 15
Lanes: 1 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0

Volume Module:

Base Vol: 159 385 13 46 751 13 46 751 13 51 247 2 64 366 16
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: 159 385 13 46 751 13 46 751 13 51 247 2 64 366 16
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 159 385 13 46 751 14 51 247 2 64 367 16
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 159 385 13 46 751 14 51 247 2 64 367 16
Reduc Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 159 385 13 46 751 14 51 247 2 64 367 16
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol: 159 385 13 46 751 14 51 247 2 64 367 16

Saturation Flow Module:

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95
Lanes: 1.00 1.93 0.07 1.00 1.96 0.04 1.00 1.98 0.02 1.00 1.92 0.08
Final Sat.: 1805 3475 117 1805 3533 66 1805 3577 29 1805 3438 150

Capacity Analysis Module:

Vol/Sat: 0.09 0.11 0.11 0.03 0.21 0.21 0.03 0.07 0.07 0.04 0.11 0.11
Crit Moves: ****
Green/Cycle: 0.17 0.39 0.39 0.21 0.42 0.42 0.08 0.19 0.19 0.10 0.21 0.21
Volume/Cap: 0.51 0.29 0.29 0.12 0.51 0.51 0.35 0.37 0.37 0.35 0.51 0.51
Delay/Veh: 38.9 21.4 21.4 32.6 21.8 21.8 45.0 35.7 35.7 43.1 35.5 35.5
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: 38.9 21.4 21.4 32.6 21.8 21.8 45.0 35.7 35.7 43.1 35.5 35.5
DesignQueue: 7 14 0 2 26 0 3 11 0 3 17 1

Oakland Army Base Area Redevelopment Plan EIR
Baseline Conditions
AM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #40 Stanford / MLK Jr Wy
Cycle (sec): 100 Critical Vol./Cap. (X): 0.778
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 12.5
Optimal Cycle: 54 Level Of Service: B

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Permitted Permitted Protected Protected
Rights: Include Include Include Include
Min. Green: 8 10 10 0 15 15 20 0 20 0 0 0
Lanes: 0 1 2 0 0 0 2 0 1 2 0 0 1 0 0 0 0 0

Volume Module:
Base Vol: 243 1696 0 0 1141 207 242 0 263 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
Initial Bse: 243 1696 0 0 1141 207 242 0 263 0 0
Added Vol: 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 243 1696 0 0 1141 208 242 0 263 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
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 243 1696 0 0 1141 208 242 0 263 0 0
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 243 1696 0 0 1141 208 242 0 263 0 0

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.60 0.60 1.00 1.00 0.95 0.85 0.92 1.00 0.85 1.00 1.00 1.00
Lanes: 0.38 2.62 0.00 0.00 2.00 1.00 2.00 0.00 1.00 0.00 0.00 0.00
Final Sat.: 428 2985 0 0 3610 1615 3502 0 1615 0 0 0
Capacity Analysis Module:
Vol/Sat: 0.57 0.57 0.00 0.00 0.32 0.13 0.07 0.00 0.16 0.00 0.00 0.00
Crit Moves: *****
Green/Cycle: 0.73 0.73 0.00 0.00 0.73 0.73 0.21 0.00 0.21 0.00 0.00 0.00
Volume/Cap: 0.78 0.78 0.00 0.00 0.43 0.18 0.33 0.00 0.78 0.00 0.00 0.00
Delay/Veh: 10.0 10.0 0.0 0.0 5.4 4.2 33.8 0.0 48.2 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: 10.0 10.0 0.0 0.0 5.4 4.2 33.8 0.0 48.2 0.0 0.0 0.0
DesignQueue: 4 28 0 0 19 3 11 0 12 0 0 0

Oakland Army Base Area Redevelopment Plan EIR
Baseline Conditions
AM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #41 Ashby / 7th
Cycle (sec): 100 Critical Vol./Cap. (X): 0.723
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 33.7
Optimal Cycle: 63 Level Of Service: C

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Split Phase Split Phase Protected Protected
Rights: Include Include Include Include
Min. Green: 8 15 15 8 15 15 15 8 12 12 8 12 12 12
Lanes: 0 1 0 1 0 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 48 149 51 55 267 139 458 796 282 80 584 41
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: 48 149 51 55 267 139 458 796 282 80 584 41
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 48 149 51 55 267 139 458 798 282 80 588 41
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 48 149 51 55 267 139 458 798 282 80 588 41
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 48 149 51 55 267 139 458 798 282 80 588 41

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.91 0.91 0.91 0.90 0.90 0.90 0.95 0.91 0.91 0.95 0.94 0.94
Lanes: 0.39 1.20 0.41 0.24 1.16 0.60 1.00 1.48 0.52 1.00 1.87 0.13
Final Sat.: 670 2081 712 409 1985 1033 1805 2563 906 1805 3341 233
Capacity Analysis Module:
Vol/Sat: 0.07 0.07 0.07 0.13 0.13 0.13 0.25 0.31 0.31 0.04 0.18 0.18
Crit Moves: *****
Green/Cycle: 0.15 0.15 0.15 0.17 0.17 0.17 0.33 0.48 0.48 0.08 0.23 0.23
Volume/Cap: 0.48 0.48 0.48 0.77 0.77 0.77 0.77 0.65 0.65 0.55 0.77 0.77
Delay/Veh: 39.6 39.6 39.6 45.6 45.6 45.6 36.5 20.9 20.9 48.9 40.8 40.8
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: 39.6 39.6 39.6 45.6 45.6 45.6 36.5 20.9 20.9 48.9 40.8 40.8
DesignQueue: 2 7 2 3 13 7 18 25 9 4 26 2

Oakland Army Base Area Redevelopment Plan EIR
Baseline Conditions
AM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #42 Ashby / San Pablo Av

Cycle (sec): 100 Critical Vol./Cap. (X): 0.765
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 29.8
Optimal Cycle: 61 Level Of Service: C

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

Control: Protected Include Permitted Permitted
Rights: Include Include Include Include
Min. Green: 8 15 15 8 15 15 8 12 12 8 12 12
Lanes: 1 0 1 1 0 1 0 1 0 1 0 1 0 0 1 0 1 0

Volume Module: >> Count Date: 17 Oct 2000 <<
Base Vol: 137 717 37 137 936 134 125 648 185 44 689 91
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: 137 717 37 137 936 134 125 648 185 44 689 91
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 137 717 37 137 936 136 126 649 185 44 691 91
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 137 717 37 137 936 136 126 649 185 44 691 91
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 137 717 37 137 936 136 126 649 185 44 691 91
PCE Adj: 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
Final Vol: 137 717 37 137 936 136 126 649 185 44 691 91

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.95 0.94 0.94 0.95 0.93 0.21 0.92 0.92 0.77 0.77 0.77
Lanes: 1.00 1.90 1.00 1.00 1.75 0.25 1.00 1.56 0.44 0.11 1.67 0.22
Final Sat.: 1805 3409 176 1805 3092 449 397 2717 774 156 2449 322

Capacity Analysis Module:
Vol/Sat: 0.08 0.21 0.21 0.08 0.30 0.30 0.32 0.24 0.24 0.28 0.28 0.28
Crit Moves: ****
Green/Cycle: 0.10 0.42 0.42 0.08 0.40 0.40 0.41 0.41 0.41 0.41 0.41
Volume/Cap: 0.76 0.51 0.51 0.95 0.76 0.76 0.76 0.58 0.58 0.68 0.68
Delay/Veh: 61.6 21.9 21.9 105.1 28.7 28.7 44.1 23.1 23.1 25.4 25.4
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 61.6 21.9 21.9 105.1 28.7 28.7 44.1 23.1 23.1 25.4 25.4
DesignQueue: 7 25 1 7 34 5 4 22 6 2 24 3

Oakland Army Base Area Redevelopment Plan EIR
Baseline Conditions
AM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #43 Marina Village / Constitution

Cycle (sec): 100 Critical Vol./Cap. (X): 0.537
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 20.6
Optimal Cycle: 37 Level Of Service: C

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

Control: Protected Include Permitted Permitted
Rights: Include Include Include Include
Min. Green: 0 10 10 8 10 10 8 10 10 8 10 10
Lanes: 0 0 1 1 0 2 0 1 1 0 0 0 0 0 1 0 0 0 2

Volume Module: >> Count Date: 17 Oct 2000 <<
Base Vol: 0 957 69 344 391 0 0 0 0 0 0 0 0 0 0 0 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: 0 957 69 344 391 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Added Vol: 0 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 0 961 69 344 393 0 0 0 0 0 0 0 0 0 0 0 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 961 69 344 393 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 961 69 344 393 0 0 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 0 961 69 344 393 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 1.00 0.94 0.94 0.92 0.95 0.95 1.00 1.00 1.00 0.95 1.00 1.00
Lanes: 0.00 1.87 0.13 2.00 2.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
Final Sat.: 0 3334 239 3502 3610 0 0 0 0 0 0 1805 0 2842

Capacity Analysis Module:
Vol/Sat: 0.00 0.29 0.29 0.10 0.11 0.00 0.00 0.00 0.00 0.00 0.00 0.00
Crit Moves: ****
Green/Cycle: 0.00 0.54 0.54 0.18 0.72 0.00 0.00 0.00 0.00 0.00 0.00
Volume/Cap: 0.00 0.54 0.54 0.54 0.15 0.00 0.00 0.00 0.00 0.00 0.00
Delay/Veh: 0.0 15.4 15.4 37.9 4.4 0.0 0.0 0.0 0.0 0.0 34.2 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
AdjDel/Veh: 0.0 15.4 15.4 37.9 4.4 0.0 0.0 0.0 0.0 0.0 34.2 0.0
DesignQueue: 0 27 2 16 6 0 0 0 0 0 0 3 0 13

Oakland Army Base Area Redevelopment Plan EIR
Baseline Conditions
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Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)
Intersection #44 Atlantic / Webster

Cycle (sec): 120 Critical Vol./Cap. (X): 0.526
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 31.5
Optimal Cycle: 80 Level Of Service: C
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Protected Include Split Phase
Rights: Include Include Include
Min. Green: 8 20 20 8 20 20 8 20 20 8 20 20
Lanes: 1 0 1 0 1 0 2 0 1 1 1 1 0 1 1 0 1 0 1 0

Volume Module: >> Count Date: 17 Oct 2000 <<
Base Vol: 94 1045 59 44 472 515 443 93 41 40 142 27
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: 94 1045 59 44 472 515 443 93 41 40 142 27

Added Vol: 0 2 0 0 1 1 2 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 94 1047 59 44 473 516 445 93 41 40 142 27
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 94 1047 59 44 473 516 445 93 41 40 142 27

Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 94 1047 59 44 473 516 445 93 41 40 142 27
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 94 1047 59 44 473 516 445 93 41 40 142 27

Oakland Army Base Area Redevelopment Plan EIR
Baseline Conditions
AM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)
Intersection #45 Atlantic / Constitution

Cycle (sec): 100 Critical Vol./Cap. (X): 0.412
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 22.3
Optimal Cycle: 57 Level Of Service: C
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Protected Include Split Phase
Rights: Include Include Include
Min. Green: 8 20 20 8 20 20 8 20 20 8 20 20
Lanes: 1 0 2 0 1 2 0 2 0 1 1 0 1 1 0 1 0 1 0

Volume Module:
Base Vol: 96 769 73 179 258 48 76 113 23 30 128 180
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: 96 769 73 179 258 48 76 113 23 30 128 180

Added Vol: 0 4 0 0 2 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 96 773 73 179 260 48 76 113 23 30 128 180
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 96 773 73 179 260 48 76 113 23 30 128 180

Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 96 773 73 179 260 48 76 113 23 30 128 180
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 96 773 73 179 260 48 76 113 23 30 128 180

Oakland Army Base Area Redevelopment Plan EIR
Baseline Conditions
AM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)
Intersection #44 Atlantic / Webster

Cycle (sec): 120 Critical Vol./Cap. (X): 0.526
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 31.5
Optimal Cycle: 80 Level Of Service: C
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Protected Include Split Phase
Rights: Include Include Include
Min. Green: 8 20 20 8 20 20 8 20 20 8 20 20
Lanes: 1 0 1 0 1 0 2 0 1 1 1 1 0 1 0 1 0 1 0

Volume Module: >> Count Date: 17 Oct 2000 <<
Base Vol: 94 1045 59 44 472 515 443 93 41 40 142 27
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: 94 1045 59 44 472 515 443 93 41 40 142 27

Added Vol: 0 2 0 0 1 1 2 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 94 1047 59 44 473 516 445 93 41 40 142 27
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 94 1047 59 44 473 516 445 93 41 40 142 27

Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 94 1047 59 44 473 516 445 93 41 40 142 27
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 94 1047 59 44 473 516 445 93 41 40 142 27

Oakland Army Base Area Redevelopment Plan EIR
 Baseline Conditions
 PM Peak Hour

Trip Generation Report

Forecast for GDA Baseline PM

Zone #	Subzone	Amount	Units	Rate In	Rate Out	Trips In	Trips Out	Total % Of Trips
2	Berth 57-59	473.00	Emp.	0.00	0.00	0	0	0.0
2	Berth 57-59	-373.00	Emp.	0.00	0.00	0	0	0.0
3	Middle Harbo	331.00	Emp.	0.00	0.00	0	0	0.0
3	Middle Harbo	-216.00	Emp.	0.00	0.00	0	0	0.0
4	7th St. Harb	601.00	Emp.	0.00	0.00	0	0	0.0
4	7th St. Harb	-560.00	Emp.	0.00	0.00	0	0	0.0
5	Outer Harbor	618.00	Emp.	0.00	0.00	0	0	0.0
5	Outer Harbor	-593.00	Emp.	0.00	0.00	0	0	0.0
6	Berth 21	189.00	Emp.	0.00	0.00	0	0	0.0
6	Berth 21	0.00	Emp.	0.00	0.00	0	0	0.0
14	Central Area	1.00	1995 Employees	109.00	203.00	109	203	312 100.0
	Zone 14 Subtotal			109.00	203.00	109	203	312 100.0

TOTAL						109	203	312 100.0

Oakland Army Base Area Redevelopment Plan EIR
 Baseline Conditions
 PM Peak Hour

Impact Analysis Report
 Level Of Service

Intersection	Base Del/V/ LOS Veh C	Future Del/V/ LOS Veh C	Change in
# 1 W Grand / Maritime	D 35.4 0.679	D 37.3 0.715	+ 1.918 D/V
# 2 W Grand / Frontage Rd	B 10.7 0.443	B 10.6 0.458	-0.099 D/V
# 3 W Grand / Mandela	B 10.3 0.475	B 10.6 0.484	+ 0.330 D/V
# 4 W Grand / Adeline	B 10.6 0.369	B 10.6 0.373	-0.049 D/V
# 5 W Grand / Market	B 11.6 0.356	B 11.6 0.359	+ 0.023 D/V
# 6 W Grand / San Pablo Av	B 17.0 0.388	B 16.9 0.394	-0.106 D/V
# 7 W Grand / MLK Jr	C 21.8 0.613	C 21.8 0.615	+ 0.017 D/V
# 8 W Grand / Northgate	C 23.2 0.618	C 23.3 0.621	+ 0.104 D/V
# 9 W Grand / Harrison	C 33.3 0.421	C 33.6 0.474	+ 0.343 D/V
# 10 7th / Maritime	A 7.8 0.202	A 7.5 0.228	-0.263 D/V
# 11 7th / I-880 SB Ramp	C 30.5 0.440	C 30.6 0.443	+ 0.109 D/V
# 12 7th / I-880 North Ramp	A 8.7 0.170	A 8.7 0.170	-0.023 D/V
# 13 7th / Peralta	B 16.7 0.224	B 16.7 0.224	-0.031 D/V
# 14 7th / Mandela	B 11.9 0.282	B 11.9 0.283	-0.017 D/V
# 15 7th / Union	A 9.5 0.266	A 9.5 0.266	-0.007 D/V
# 16 7th / Adeline	C 20.8 0.249	C 20.8 0.249	-0.005 D/V
# 17 7th / Market	B 10.8 0.498	B 10.8 0.499	+ 0.006 D/V
# 18 7th / Harrison	C 21.1 0.920	C 21.3 0.923	+ 0.238 D/V
# 19 7th / Jackson	B 11.7 0.573	B 11.7 0.573	+ 0.000 D/V
# 20 6th / Jackson	C 27.1 0.307	C 27.2 0.307	+ 0.036 D/V
# 21 5th / Union / I-880 Ramps	C 29.1 0.417	C 29.1 0.420	+ 0.021 D/V
# 22 5th / Adeline	C 22.8 0.190	C 22.8 0.190	+ 0.000 D/V
# 23 I-880 Off Ramp / Market	C 22.8 0.190	C 22.8 0.190	+ 0.000 D/V

Oakland Army Base Area Redevelopment Plan EIR
 Baseline Conditions
 PM Peak Hour

Intersection	Base Del/V LOS Veh C	Future Del/V LOS Veh C	Change in
# 24 5th / Broadway	29.3 0.852 C	29.4 0.852 C	+ 0.155 D/V
# 25 3rd / Adeline	11.8 0.369 B	11.8 0.369 B	+ 0.000 V/C
# 26 3rd / Market	13.3 0.000 B	13.3 0.000 B	+ 0.000 V/C
# 27 14th / Mandela	8.4 0.148 A	8.4 0.148 A	+ 0.000 D/V
# 28 12th / Brush	22.4 0.431 C	22.4 0.431 C	+ 0.000 D/V
# 29 12th / Castro	19.1 0.521 B	19.1 0.521 B	+ 0.000 D/V
# 30 27th / SR 24-580 Off Ramp	15.9 0.255 B	15.9 0.257 B	+ 0.015 D/V
# 31 27th / SR 24-580 On Ramp	20.4 0.782 C	20.5 0.783 C	+ 0.056 D/V
# 32 San Pablo Av / Adeline	19.8 0.794 B	19.9 0.799 B	+ 0.075 D/V
# 33 W MacArthur / Market	17.3 0.403 B	17.3 0.404 B	-0.000 D/V
# 34 Powell / I-80 Frontage Rd	22.4 0.580 C	22.4 0.580 C	+ 0.000 D/V
# 35 Powell / I-80 NB Ramps	43.9 1.017 D	44.1 1.019 D	+ 0.204 D/V
# 36 Powell / Christie	30.5 0.633 C	30.5 0.633 C	-0.000 D/V
# 37 Powell / Hollis	31.1 0.768 C	31.1 0.769 C	+ 0.022 D/V
# 38 Powell / San Pablo Av	34.3 0.710 C	34.4 0.711 C	+ 0.030 D/V
# 39 Stanford / Market	31.6 0.550 C	31.6 0.551 C	+ 0.011 D/V
# 40 Stanford / MLK Jr Wy	46.4 1.085 D	46.4 1.085 D	-0.010 D/V
# 41 Ashby / 7th	48.6 0.922 D	48.6 0.923 D	+ 0.065 D/V
# 42 Ashby / San Pablo Av	32.2 0.812 C	32.3 0.812 C	+ 0.054 D/V
# 43 Marina Village / Constitution	22.0 0.464 C	21.9 0.464 C	-0.011 D/V
# 44 Atlantic / Webster	28.6 0.531 C	28.6 0.533 C	+ 0.015 D/V
# 45 Atlantic / Constitution	20.7 0.452 C	20.7 0.453 C	-0.019 D/V

Oakland Army Base Area Redevelopment Plan EIR
 Baseline Conditions
 PM Peak Hour

Intersection	Level Of Service	1997 HCM Operations Method	Future Volume	Alternative
# 24 5th / Broadway	Level of Service: C	12 (Y+R = 4 sec)	Average Delay (sec/veh): 32.6	Critical Vol./Cap. (X): 0.461
# 25 3rd / Adeline	Level of Service: C	12 (Y+R = 4 sec)	Average Delay (sec/veh): 32.6	Critical Vol./Cap. (X): 0.461
# 26 3rd / Market	Level of Service: C	12 (Y+R = 4 sec)	Average Delay (sec/veh): 32.6	Critical Vol./Cap. (X): 0.461
# 27 14th / Mandela	Level of Service: C	12 (Y+R = 4 sec)	Average Delay (sec/veh): 32.6	Critical Vol./Cap. (X): 0.461
# 28 12th / Brush	Level of Service: C	12 (Y+R = 4 sec)	Average Delay (sec/veh): 32.6	Critical Vol./Cap. (X): 0.461
# 29 12th / Castro	Level of Service: C	12 (Y+R = 4 sec)	Average Delay (sec/veh): 32.6	Critical Vol./Cap. (X): 0.461
# 30 27th / SR 24-580 Off Ramp	Level of Service: C	12 (Y+R = 4 sec)	Average Delay (sec/veh): 32.6	Critical Vol./Cap. (X): 0.461
# 31 27th / SR 24-580 On Ramp	Level of Service: C	12 (Y+R = 4 sec)	Average Delay (sec/veh): 32.6	Critical Vol./Cap. (X): 0.461
# 32 San Pablo Av / Adeline	Level of Service: C	12 (Y+R = 4 sec)	Average Delay (sec/veh): 32.6	Critical Vol./Cap. (X): 0.461
# 33 W MacArthur / Market	Level of Service: C	12 (Y+R = 4 sec)	Average Delay (sec/veh): 32.6	Critical Vol./Cap. (X): 0.461
# 34 Powell / I-80 Frontage Rd	Level of Service: C	12 (Y+R = 4 sec)	Average Delay (sec/veh): 32.6	Critical Vol./Cap. (X): 0.461
# 35 Powell / I-80 NB Ramps	Level of Service: C	12 (Y+R = 4 sec)	Average Delay (sec/veh): 32.6	Critical Vol./Cap. (X): 0.461
# 36 Powell / Christie	Level of Service: C	12 (Y+R = 4 sec)	Average Delay (sec/veh): 32.6	Critical Vol./Cap. (X): 0.461
# 37 Powell / Hollis	Level of Service: C	12 (Y+R = 4 sec)	Average Delay (sec/veh): 32.6	Critical Vol./Cap. (X): 0.461
# 38 Powell / San Pablo Av	Level of Service: C	12 (Y+R = 4 sec)	Average Delay (sec/veh): 32.6	Critical Vol./Cap. (X): 0.461
# 39 Stanford / Market	Level of Service: C	12 (Y+R = 4 sec)	Average Delay (sec/veh): 32.6	Critical Vol./Cap. (X): 0.461
# 40 Stanford / MLK Jr Wy	Level of Service: C	12 (Y+R = 4 sec)	Average Delay (sec/veh): 32.6	Critical Vol./Cap. (X): 0.461
# 41 Ashby / 7th	Level of Service: C	12 (Y+R = 4 sec)	Average Delay (sec/veh): 32.6	Critical Vol./Cap. (X): 0.461
# 42 Ashby / San Pablo Av	Level of Service: C	12 (Y+R = 4 sec)	Average Delay (sec/veh): 32.6	Critical Vol./Cap. (X): 0.461
# 43 Marina Village / Constitution	Level of Service: C	12 (Y+R = 4 sec)	Average Delay (sec/veh): 32.6	Critical Vol./Cap. (X): 0.461
# 44 Atlantic / Webster	Level of Service: C	12 (Y+R = 4 sec)	Average Delay (sec/veh): 32.6	Critical Vol./Cap. (X): 0.461
# 45 Atlantic / Constitution	Level of Service: C	12 (Y+R = 4 sec)	Average Delay (sec/veh): 32.6	Critical Vol./Cap. (X): 0.461

Control	Split Phase	Split Phase	Protected	Protected	West Bound
Control: L - T - R	L - T - R	L - T - R	L - T - R	L - T - R	L - T - R
Rights: 15 20 20	15 15 15	15 15 15	15 15 15	15 15 15	15 15 15
Min. Green: 2 0 0	1 0 0	1 0 0	1 0 0	1 0 0	1 0 0
Lanes: 2 0 0	1 0 0	1 0 0	1 0 0	1 0 0	1 0 0
Volume Module:					
Base Vol:	340 7 178	17 0 7	9 509 66	46 562 9	
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	1.00
Initial Bse:	340 7 178	17 0 7	9 509 66	46 562 9	
Added Vol:	79 0 83	0 0 0	0 0 0	43 0 0	
PasserByVol:	0 0 0	0 0 0	0 0 0	0 0 0	
Initial Fut:	419 7 261	17 0 7	9 509 109	91 562 9	
User Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00
PHF Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00
PHF Volume:	419 7 261	17 0 7	9 509 109	91 562 9	
Reduced Vol:	0 0 0	0 0 0	0 0 0	0 0 0	
Reduced Vol:	419 7 261	17 0 7	9 509 109	91 562 9	
PCE Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00
MLF Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00
Final Vol:	419 7 261	17 0 7	9 509 109	91 562 9	
Saturation Flow Module:					
Sat/Lane:	1900 1900 1900	1900 1900 1900	1900 1900 1900	1900 1900 1900	1900
Adjustment:	0.77 0.71 0.71	0.79 1.00 0.71	0.79 0.77 0.77	0.79 0.79 0.79	0.79
Lanes:	2.00 0.03 0.97	1.00 0.00 1.00	1.00 2.00 1.00	1.00 1.00 1.00	0.03
Final Sat:	2917 35 1316	1504 0 1345	1504 2929 1464	1504 2954 47	
Capacity Analysis Module:					
Vol/Sat:	0.14 0.20 0.20	0.01 0.00 0.01	0.01 0.17 0.07	0.06 0.19 0.19	
Crit Moves:	0.30 0.30 0.30	0.15 0.00 0.15	0.15 0.28 0.28	0.15 0.28 0.28	
Volume/Cycle:	0.49 0.67 0.67	0.08 0.00 0.03	0.04 0.61 0.26	0.40 0.67 0.67	
Delay/Veh:	29.4 35.3 35.3	36.7 0.0 36.4	32.1 27.8 39.6	33.7 33.7 33.7	
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:	29.4 35.3 35.3	36.7 0.0 36.4	32.1 27.8 39.6	33.7 33.7 33.7	
DesignQueue:	17 0 11	1 0 0	0 21 4	4 23 0	

Oakland Army Base Area Redevelopment Plan EIR
Baseline Conditions
PM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #2 W Grand / Frontage Rd

Cycle (sec): 100 Critical Vol./Cap. (X): 0.715
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 37.3
Optimal Cycle: 77 Level Of Service: D

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Split Phase Split Phase Protected Protected
Rights: Include Include Include Include
Min. Green: 15 15 15 15 15 20 20 15 15 15
Lanes: 1 0 1 1 0 1 1 0 1 0 1 0 1 0 1 1

Volume Module:
Base Vol: 28 157 172 84 62 5 381 309 61 95 914 298
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: 28 157 172 84 62 5 381 309 61 95 914 298
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 28 157 172 84 62 25 418 356 61 95 939 298
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 28 157 172 84 62 25 418 356 61 95 939 298
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 28 157 172 84 62 25 418 356 61 95 939 298
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 28 157 172 84 62 25 418 356 61 95 939 298

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.95 0.88 0.88 0.91 0.91 0.91 0.95 0.93 0.93 0.95 0.92 0.92
Lanes: 1.00 1.00 1.00 1.47 1.09 0.44 1.00 1.71 0.29 1.00 2.00 1.00
Final Sat.: 1805 1664 1664 2539 1874 756 1805 3014 516 1805 3480 1740

Capacity Analysis Module:
Vol/Sat: 0.02 0.09 0.10 0.03 0.03 0.03 0.23 0.12 0.12 0.05 0.27 0.17
Crit Moves: ****
Green/Cycle: 0.15 0.15 0.15 0.15 0.15 0.15 0.27 0.33 0.33 0.25 0.31 0.31
Volume/Cap: 0.10 0.63 0.69 0.22 0.22 0.22 0.86 0.36 0.36 0.21 0.86 0.55
Delay/Veh: 36.9 42.3 44.5 37.5 37.5 37.5 49.8 25.5 25.5 30.0 38.1 28.8
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: 36.9 42.3 44.5 37.5 37.5 37.5 49.8 25.5 25.5 30.0 38.1 28.8
DesignQueue: 1 8 8 4 3 1 18 14 2 4 38 12

Oakland Army Base Area Redevelopment Plan EIR
Baseline Conditions
PM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #3 W Grand / Mandela

Cycle (sec): 64 Critical Vol./Cap. (X): 0.458
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 10.6
Optimal Cycle: 36 Level Of Service: B

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Permitted Permitted Permitted Permitted
Rights: Include Include Include Include
Min. Green: 8 20 20 8 20 20 8 10 10 8 10 10
Lanes: 0 1 0 0 1 0 1 0 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 107 144 127 35 132 105 127 332 57 220 604 25
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: 107 144 127 35 132 105 127 332 57 220 604 25
Added Vol: 0 0 0 0 0 0 3 6 41 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 107 144 127 35 132 108 133 373 57 220 626 25
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 107 144 127 35 132 108 133 373 57 220 626 25
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 107 144 127 35 132 108 133 373 57 220 626 25
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 107 144 127 35 132 108 133 373 57 220 626 25

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.76 0.76 0.85 0.80 0.80 0.80 0.35 0.93 0.93 0.48 0.94 0.94
Lanes: 0.43 0.57 1.00 0.25 0.96 0.79 1.00 1.73 0.27 1.00 1.92 0.08
Final Sat.: 618 832 1615 389 1466 1199 665 3069 469 910 3451 138

Capacity Analysis Module:
Vol/Sat: 0.17 0.17 0.08 0.09 0.09 0.09 0.20 0.12 0.12 0.24 0.18 0.18
Crit Moves: ****
Green/Cycle: 0.38 0.38 0.38 0.38 0.38 0.38 0.53 0.53 0.53 0.53 0.53
Volume/Cap: 0.46 0.46 0.21 0.24 0.24 0.24 0.38 0.23 0.23 0.46 0.34 0.34
Delay/Veh: 15.6 15.6 13.6 13.7 13.7 13.7 9.6 8.2 8.2 10.1 8.8 8.8
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: 15.6 15.6 13.6 13.7 13.7 13.7 9.6 8.2 8.2 10.1 8.8 8.8
DesignQueue: 2 3 3 1 3 2 2 6 1 4 11 0

Oakland Army Base Area Redevelopment Plan EIR
Baseline Conditions
PM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #4 W Grand / Adeline

Cycle (sec): 64 Critical Vol./Cap. (X): 0.484
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 10.6
Optimal Cycle: 41 Level Of Service: B

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Permitted Permitted Permitted Permitted
Rights: Include Include Include Include
Min. Green: 8 20 20 8 20 20 8 15 15 8 15 15
Lanes: 0 1 0 1 0 0 1 0 1 0 0 1 1 1 0

Volume Module:
Base Vol: 65 660 72 119 711 67 31 310 101 63 253 62
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: 65 660 72 119 711 67 31 310 101 63 253 62
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 65 660 72 119 711 67 31 351 101 63 275 62
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 65 660 72 119 711 67 31 351 101 63 275 62
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 65 660 72 119 711 67 31 351 101 63 275 62
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 65 660 72 119 711 67 31 351 101 63 275 62

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.78 0.78 0.78 0.71 0.71 0.71 0.79 0.79 0.73 0.73 0.73 0.73
Lanes: 0.16 1.66 0.18 0.27 1.58 0.15 0.19 2.18 0.63 0.47 2.06 0.47
Final Sat.: 241 2446 267 359 2142 202 289 3276 943 654 2857 644
Capacity Analysis Module:
Vol/Sat: 0.27 0.27 0.27 0.33 0.33 0.33 0.11 0.11 0.11 0.10 0.10 0.10
Crit Moves: 0.67 0.67 0.67 0.67 0.67 0.67 0.23 0.23 0.23 0.23 0.23
Green/Cycle: 0.40 0.40 0.40 0.49 0.49 0.49 0.46 0.46 0.41 0.41 0.41
Volume/Cap: 4.9 4.9 4.9 5.4 5.4 5.4 21.3 21.3 21.3 21.0 21.0 21.0
Delay/Veh: 4.9 4.9 4.9 5.4 5.4 5.4 21.3 21.3 21.3 21.0 21.0 21.0
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 4.9 4.9 4.9 5.4 5.4 5.4 21.3 21.3 21.3 21.0 21.0 21.0
DesignQueue: 1 8 1 1 9 1 1 10 3 2 8 2

Oakland Army Base Area Redevelopment Plan EIR
Baseline Conditions
PM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #5 W Grand / Market

Cycle (sec): 64 Critical Vol./Cap. (X): 0.373
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 10.6
Optimal Cycle: 41 Level Of Service: B

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Permitted Permitted Permitted Permitted
Rights: Include Include Include Include
Min. Green: 8 20 20 8 20 20 8 15 15 8 15 15
Lanes: 0 1 0 1 0 0 1 0 1 0 0 1 1 1 0

Volume Module:
Base Vol: 105 228 82 45 155 34 56 624 65 87 636 54
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: 105 228 82 45 155 34 56 624 65 87 636 54
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 105 228 82 45 155 34 56 654 65 87 652 54
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 105 228 82 45 155 34 56 654 65 87 652 54
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 105 228 82 45 155 34 56 654 65 87 652 54
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 105 228 82 45 155 34 56 654 65 87 652 54

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.75 0.75 0.75 0.78 0.78 0.78 0.78 0.76 0.76 0.76 0.72 0.72
Lanes: 0.51 1.10 0.39 0.38 1.33 0.29 0.22 2.53 0.25 0.33 2.47 0.20
Final Sat.: 724 1572 565 572 1971 432 314 3664 364 451 3378 280
Capacity Analysis Module:
Vol/Sat: 0.15 0.15 0.15 0.08 0.08 0.08 0.18 0.18 0.18 0.19 0.19 0.19
Crit Moves: 0.39 0.39 0.39 0.39 0.39 0.39 0.52 0.52 0.52 0.52 0.52
Green/Cycle: 0.37 0.37 0.37 0.20 0.20 0.20 0.35 0.35 0.35 0.37 0.37
Volume/Cap: 14.2 14.2 14.2 13.1 13.1 13.1 9.2 9.2 9.2 9.3 9.3
Delay/Veh: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
User DelAdj: 14.2 14.2 14.2 13.1 13.1 13.1 9.2 9.2 9.2 9.3 9.3
AdjDel/Veh: 2 5 2 1 3 1 1 12 1 2 12 1
DesignQueue: 2 5 2 1 3 1 1 12 1 2 12 1

Oakland Army Base Area Redevelopment Plan EIR
Baseline Conditions
PM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #6 W Grand / San Pablo Av

Cycle (sec): 64 Critical Vol./Cap. (X): 0.359
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 11.6
Optimal Cycle: 41 Level Of Service: B

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Permitted Permitted Permitted Permitted
Rights: Include Include Include Include
Min. Green: 8 20 20 8 20 20 8 15 15 8 15 15
Lanes: 1 0 1 1 0 1 0 1 1 0 0 1 1 1 0

Volume Module:
Base Vol: 99 537 30 152 398 144 38 652 34 25 668 69
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: 99 537 30 152 398 144 38 652 34 25 668 69
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 99 537 30 152 398 144 38 679 34 25 683 69
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 99 537 30 152 398 144 38 679 34 25 683 69
Reduc Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 99 537 30 152 398 144 38 679 34 25 683 69
PCE Adj: 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
Final Vol.: 99 537 30 152 398 144 38 679 34 25 683 69

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.39 0.94 0.94 0.37 0.91 0.91 0.79 0.79 0.81 0.81 0.81
Lanes: 1.00 1.89 0.11 1.00 1.47 0.53 0.15 2.71 0.14 0.10 2.64 0.26
Final Sat.: 735 3392 189 707 2545 921 229 4093 205 149 4082 412

Capacity Analysis Module:
Vol/Sat: 0.13 0.16 0.16 0.22 0.16 0.16 0.17 0.17 0.17 0.17 0.17
Crit Moves: *****
Green/Cycle: 0.44 0.44 0.44 0.47 0.47 0.47 0.47 0.47 0.47 0.47 0.47
Volume/Cap: 0.31 0.36 0.36 0.49 0.35 0.35 0.36 0.36 0.36 0.36 0.36
Delay/Veh: 12.1 12.0 12.0 14.0 12.0 12.0 11.1 11.1 11.1 11.1 11.1
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 12.1 12.0 12.0 14.0 12.0 12.0 11.1 11.1 11.1 11.1 11.1
DesignQueue: 2 11 1 3 8 3 1 13 1 0 13 1

Oakland Army Base Area Redevelopment Plan EIR
Baseline Conditions
PM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #7 W Grand / MLK Jr

Cycle (sec): 100 Critical Vol./Cap. (X): 0.394
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 16.9
Optimal Cycle: 41 Level Of Service: B

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Permitted Permitted Permitted Permitted
Rights: Include Include Include Include
Min. Green: 8 20 20 8 20 20 8 15 15 8 15 15
Lanes: 0 1 0 1 0 0 1 0 1 0 0 1 1 0 0 1 1 0

Volume Module:
Base Vol: 37 197 280 37 88 113 69 674 12 23 691 10
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: 37 197 280 37 88 113 69 674 12 23 691 10
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 37 197 280 37 88 113 69 701 12 23 706 10
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 37 197 280 37 88 113 69 701 12 23 706 10
Reduc Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 37 197 280 37 88 113 69 701 12 23 706 10
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 37 197 280 37 88 113 69 701 12 23 706 10

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.80 0.80 0.80 0.74 0.74 0.74 0.74 0.74 0.74 0.74 0.74 0.74
Lanes: 0.16 0.84 1.00 0.31 0.74 0.95 0.26 2.69 0.05 0.09 2.87 0.04
Final Sat.: 240 1279 1519 438 1042 1338 370 3759 64 145 4456 63

Capacity Analysis Module:
Vol/Sat: 0.15 0.15 0.18 0.08 0.08 0.08 0.19 0.19 0.19 0.16 0.16
Crit Moves: *****
Green/Cycle: 0.47 0.47 0.47 0.47 0.47 0.47 0.47 0.47 0.47 0.47 0.47
Volume/Cap: 0.33 0.33 0.39 0.18 0.18 0.18 0.39 0.39 0.39 0.34 0.34
Delay/Veh: 16.9 16.9 17.6 15.6 15.6 15.6 17.2 17.2 17.2 16.6 16.6
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 16.9 16.9 17.6 15.6 15.6 15.6 17.2 17.2 17.2 16.6 16.6
DesignQueue: 1 6 9 1 3 3 2 21 0 1 21 0

Oakland Army Base Area Redevelopment Plan EIR
Baseline Conditions
PM Peak Hour

Level Of Service Computation Report

1997 HCM Operations Method (Future Volume Alternative)

Intersection #8 W Grand / Northgate

Cycle (sec): 100 Critical Vol./Cap. (X): 0.615
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 21.8
Optimal Cycle: 52 Level Of Service: C

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

Control: Split Phase Split Phase Protected Permitted
Rights: Include Include Include Include
Min. Green: 0 0 0 0 8 20 20 8 10 0 0 15 15
Lanes: 0 0 0 0 1 0 1 0 1 1 0 2 0 0 0 2 1 0

Volume Module:
Base Vol: 0 0 159 0 98 456 915 0 0 713 431
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 0 159 0 98 456 915 0 0 713 431
Added Vol: 0 0 0 0 2 3 24 0 0 13 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 0 0 159 0 100 459 939 0 0 726 431
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 0 159 0 100 459 939 0 0 726 431
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 0 159 0 100 459 939 0 0 726 431
PCE Adj: 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
Final Vol.: 0 0 159 0 100 459 939 0 0 726 431

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 1.00 1.00 1.00 0.91 1.00 0.91 0.95 0.95 1.00 1.00 0.86 0.86
Lanes: 0.00 0.00 0.00 1.61 0.00 1.39 1.00 2.00 0.00 0.00 2.00 1.00
Final Sat.: 0 0 0 2802 0 2406 1805 3610 0 0 3264 1632

Capacity Analysis Module:
Vol/Sat: 0.00 0.00 0.00 0.06 0.00 0.04 0.25 0.26 0.00 0.00 0.22 0.26
Crit Moves: ****
Green/Cycle: 0.00 0.00 0.00 0.20 0.00 0.20 0.35 0.71 0.00 0.00 0.36 0.36
Volume/Cap: 0.00 0.00 0.00 0.28 0.00 0.21 0.73 0.37 0.00 0.00 0.61 0.73
Delay/Veh: 0.0 0.0 0.0 34.1 0.0 33.5 32.8 5.8 0.0 0.0 26.8 29.4
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: 0.0 0.0 0.0 34.1 0.0 33.5 32.8 5.8 0.0 0.0 26.8 29.4
DesignQueue: 0 0 0 7 0 4 18 16 0 0 0 27 16

Oakland Army Base Area Redevelopment Plan EIR
Baseline Conditions
PM Peak Hour

Level Of Service Computation Report

1997 HCM Operations Method (Future Volume Alternative)

Intersection #9 W Grand / Harrison

Cycle (sec): 100 Critical Vol./Cap. (X): 0.621
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 23.3
Optimal Cycle: 58 Level Of Service: C

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

Control: Split Phase Split Phase Protected Permitted
Rights: Include Include Include Include
Min. Green: 0 1 2 0 2 0 1 1 1 0 2 0 2 0 2 0 1 0
Lanes: 0 1 2 0 2 0 1 1 1 0 2 0 2 0 1 0 2 0 1 0

Volume Module:
Base Vol: 8 1618 738 0 614 73 164 522 172 311 512 105
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: 8 1618 738 0 614 73 164 522 172 311 512 105
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 8 1618 738 0 614 73 164 532 172 311 518 105
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 8 1618 738 0 614 73 164 532 172 311 518 105
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 8 1618 738 0 614 73 164 532 172 311 518 105
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 8 1618 738 0 614 73 164 532 172 311 518 105

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.85 0.85 0.75 0.91 0.90 0.90 0.92 0.88 0.88 0.92 0.93 0.93
Lanes: 0.01 2.99 2.00 0.00 2.68 0.32 2.00 2.27 0.73 2.00 1.66 0.34
Final Sat.: 24 4831 2842 0 4562 542 3502 3775 1220 3502 2927 593

Capacity Analysis Module:
Vol/Sat: 0.33 0.33 0.26 0.00 0.13 0.13 0.05 0.14 0.14 0.09 0.18 0.18
Crit Moves: ****
Green/Cycle: 0.54 0.54 0.54 0.00 0.54 0.54 0.11 0.23 0.23 0.14 0.26 0.26
Volume/Cap: 0.62 0.62 0.48 0.00 0.25 0.25 0.44 0.62 0.62 0.62 0.67 0.67
Delay/Veh: 16.4 16.4 14.5 0.0 12.3 12.3 42.8 35.8 35.8 42.7 34.8 34.8
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: 16.4 16.4 14.5 0.0 12.3 12.3 42.8 35.8 35.8 42.7 34.8 34.8
DesignQueue: 0 45 20 0 16 2 8 24 8 15 22 4

Oakland Army Base Area Redevelopment Plan EIR
Baseline Conditions
PM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #10 7th / Maritime

Cycle (sec): 100 Critical Vol./Cap. (X): 0.474
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 33.6
Optimal Cycle: 82 Level Of Service: C

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

Control: Protected Protected Protected Protected Protected
Rights: Include Include Include Include Include
Min. Green: 15 20 20 15 20 20 15 20 20 15 20 20
Lanes: 1 0 1 1 0 1 0 1 1 0 1 0 2 1 0 1 0 2 0 1

Volume Module:
Base Vol: 106 139 106 164 88 4 127 143 103 35 42 82
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: 106 139 106 164 88 4 127 143 103 35 42 82
Added Vol: 0 0 41 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 106 139 106 205 88 4 127 143 103 35 42 104
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 106 139 106 205 88 4 127 143 103 35 42 104
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 106 139 106 205 88 4 127 143 103 35 42 104
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 106 139 106 205 88 4 127 143 103 35 42 104

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.73 0.68 0.68 0.73 0.73 0.73 0.73 0.66 0.66 0.73 0.73 0.65
Lanes: 1.00 1.13 0.87 1.00 1.91 0.09 1.00 2.00 1.00 1.00 2.00 1.00
Final Sat.: 1388 1473 1123 1388 2639 120 1388 2492 1246 1388 2776 1242

Capacity Analysis Module:
Vol/Sat: 0.08 0.09 0.09 0.15 0.03 0.03 0.09 0.06 0.08 0.03 0.02 0.08
Crit Moves: ****
Green/Cycle: 0.21 0.20 0.20 0.30 0.28 0.28 0.18 0.22 0.22 0.16 0.20 0.20
Volume/Cap: 0.36 0.47 0.47 0.50 0.12 0.12 0.50 0.26 0.38 0.15 0.08 0.42
Delay/Veh: 34.3 36.0 36.0 30.0 26.6 26.6 38.2 32.5 33.6 36.1 32.5 36.1
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: 34.3 36.0 36.0 30.0 26.6 26.6 38.2 32.5 33.6 36.1 32.5 36.1
DesignQueue: 5 6 5 8 4 0 6 6 5 2 2 5

Oakland Army Base Area Redevelopment Plan EIR
Baseline Conditions
PM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #11 7th / I-880 SB Ramp

Cycle (sec): 100 Critical Vol./Cap. (X): 0.228
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 7.5
Optimal Cycle: 41 Level Of Service: A

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

Control: Protected Protected Protected Protected Protected
Rights: Include Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Lanes: 0 0 0 0 0 0 0 0 0 0 0 0 2 0 1 2 0 2 0 0

Volume Module:
Base Vol: 0 0 0 0 0 0 0 0 0 0 187 231 165 341 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 1.00 1.00 1.00
Initial Bse: 0 0 0 0 0 0 0 0 0 0 187 231 165 341 0
Added Vol: 0 0 0 0 0 0 0 0 0 0 2 39 0 22 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 0 0 0 0 0 0 0 0 0 0 189 270 165 363 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 0 0 0 0 0 0 0 0 0 189 270 165 363 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 189 270 165 363 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 0 0 0 0 0 0 0 0 0 0 189 270 165 363 0

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.95 0.85 0.92 0.95 1.00
Lanes: 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 2.00 2.00 2.00 2.00 0.00
Final Sat.: 0 0 0 0 0 0 0 0 0 0 3610 1615 3502 3610 0

Capacity Analysis Module:
Vol/Sat: 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.17 0.05 0.10 0.00
Crit Moves: ****
Green/Cycle: 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.73 0.73 0.21 0.94 0.00
Volume/Cap: 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.07 0.23 0.23 0.11 0.00
Delay/Veh: 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 3.8 4.4 33.2 0.2 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 1.00 1.00 1.00
AdjDel/Veh: 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 3.8 4.4 33.2 0.2 0.0
DesignQueue: 0 0 0 0 0 0 0 0 0 0 3 4 7 1 0

Oakland Army Base Area Redevelopment Plan EIR
Baseline Conditions
PM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #12 7th / I-880 North Ramp

Cycle (sec): 100 Critical Vol./Cap. (X): 0.443
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 30.6
Optimal Cycle: 77 Level Of Service: C

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Split Phase Split Phase Protected Protected
Rights: Include Ovl Include Include
Min. Green: 15 15 15 15 15 20 0 0 20 20
Lanes: 1 0 1 0 1 0 0 2 1 0 2 0 0 0 1 1 0

Volume Module:
Base Vol: 176 116 227 171 0 106 92 109 0 0 224 240
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: 176 116 227 171 0 106 92 109 0 0 224 240
Added Vol: 21 0 0 0 0 0 2 0 0 0 1 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 197 116 227 171 0 106 92 111 0 0 225 240
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 197 116 227 171 0 106 92 111 0 0 225 240
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 197 116 227 171 0 106 92 111 0 0 225 240

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.95 0.86 0.86 0.95 1.00 0.75 0.95 0.95 1.00 1.00 0.88 0.88
Lanes: 1.00 1.00 1.00 1.00 0.00 2.00 1.00 2.00 0.00 0.00 1.00 1.00
Final Sat.: 1805 1626 1626 1805 0 2842 1805 3610 0 0 1666 1666

Capacity Analysis Module:
Vol/Sat: 0.11 0.07 0.14 0.09 0.00 0.04 0.05 0.03 0.00 0.00 0.14 0.14
Crit Moves: ****
Green/Cycle: 0.28 0.28 0.19 0.00 0.34 0.15 0.42 0.00 0.00 0.27 0.27
Volume/Cap: 0.40 0.26 0.51 0.51 0.00 0.11 0.34 0.07 0.00 0.00 0.51 0.54
Delay/Veh: 30.0 28.3 31.1 37.7 0.0 22.9 38.8 17.6 0.0 0.0 31.5 32.1
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: 30.0 28.3 31.1 37.7 0.0 22.9 38.8 17.6 0.0 0.0 31.5 32.1
DesignQueue: 8 5 9 8 0 4 4 4 0 0 9 10

Oakland Army Base Area Redevelopment Plan EIR
Baseline Conditions
PM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #13 7th / Peralta

Cycle (sec): 100 Critical Vol./Cap. (X): 0.170
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 8.7
Optimal Cycle: 36 Level Of Service: A

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Permitted Permitted Permitted Permitted
Rights: Include Include Include Include
Min. Green: 0 15 15 0 15 15 0 15 15 15
Lanes: 0 1 0 0 1 0 1 0 0 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 14 15 10 44 17 21 27 355 15 7 239 25
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 14 15 10 44 17 21 27 355 15 7 239 25
Added Vol: 0 0 0 0 0 0 0 0 2 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 14 15 10 44 17 21 27 357 15 7 240 25
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 14 15 10 44 17 21 27 357 15 7 240 25
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 14 15 10 44 17 21 27 357 15 7 240 25

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.90 0.90 0.85 0.81 0.81 0.85 0.87 0.87 0.87 0.87 0.87 0.87
Lanes: 0.48 0.52 1.00 0.72 0.28 1.00 0.14 1.79 0.07 1.00 1.81 0.19
Final Sat.: 826 885 1615 1110 429 1615 224 2963 125 967 3224 336

Capacity Analysis Module:
Vol/Sat: 0.02 0.02 0.01 0.04 0.04 0.01 0.12 0.12 0.12 0.01 0.07 0.07
Crit Moves: ****
Green/Cycle: 0.23 0.23 0.23 0.23 0.23 0.23 0.71 0.71 0.71 0.71 0.71 0.71
Volume/Cap: 0.07 0.07 0.03 0.17 0.17 0.06 0.17 0.17 0.17 0.17 0.11 0.11
Delay/Veh: 30.0 30.0 29.6 30.9 30.9 29.9 4.9 4.9 4.9 4.9 4.6 4.6
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: 30.0 30.0 29.6 30.9 30.9 29.9 4.9 4.9 4.9 4.9 4.6 4.6
DesignQueue: 1 1 0 2 1 1 0 6 0 0 4 0

Oakland Army Base Area Redevelopment Plan EIR
Baseline Conditions
PM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #14 7th / Mandela
Cycle (sec): 100 Critical Vol./Cap. (X): 0.224
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 16.7
Optimal Cycle: 47 Level Of Service: B
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Permitted Protected Permitted Permitted
Rights: Include Include Include Include
Min. Green: 0 15 15 8 15 15 8 15 15 8 15 15
Lanes: 0 1 0 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 17 54 96 68 75 32 52 425 13 112 252 41
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: 17 54 96 68 75 32 52 425 13 112 252 41
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 17 54 96 68 75 32 52 427 13 112 253 41
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 17 54 96 68 75 32 52 427 13 112 253 41
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 17 54 96 68 75 32 52 427 13 112 253 41

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.85 0.85 0.85 0.95 0.91 0.91 0.56 0.95 0.95 0.46 0.93 0.93
Lanes: 0.24 0.76 1.00 1.00 1.40 0.60 1.00 1.94 0.06 1.00 1.72 0.28
Final Sat.: 387 1228 1615 1805 2417 1031 1055 3489 106 878 3041 493
Capacity Analysis Module:
Vol/Sat: 0.04 0.04 0.06 0.04 0.03 0.03 0.05 0.12 0.12 0.13 0.08 0.08
Crit Moves: ****
Green/Cycle: 0.18 0.18 0.18 0.17 0.35 0.35 0.56 0.56 0.56 0.56 0.56 0.56
Volume/Cap: 0.24 0.24 0.33 0.22 0.09 0.09 0.09 0.22 0.22 0.23 0.15 0.15
Delay/Veh: 35.5 35.5 36.3 36.0 21.6 21.6 10.4 11.2 11.2 11.5 10.7 10.7
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: 35.5 35.5 36.3 36.0 21.6 21.6 10.4 11.2 11.2 11.5 10.7 10.7
DesignQueue: 1 2 4 3 3 1 1 11 0 3 6 1

Oakland Army Base Area Redevelopment Plan EIR
Baseline Conditions
PM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #15 7th / Union
Cycle (sec): 100 Critical Vol./Cap. (X): 0.283
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 11.9
Optimal Cycle: 36 Level Of Service: B
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Permitted Permitted Permitted Permitted
Rights: Include Include Include Include
Min. Green: 0 15 15 0 15 15 8 15 15 8 15 15
Lanes: 0 1 0 0 1 0 1 0 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 38 76 147 9 5 5 26 617 10 61 371 21
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: 38 76 147 9 5 5 26 617 10 61 371 21
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 38 76 147 9 5 5 26 619 10 61 372 21
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 38 76 147 9 5 5 26 619 10 61 372 21
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 38 76 147 9 5 5 26 619 10 61 372 21

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.91 0.91 0.85 0.90 0.90 0.85 0.50 0.95 0.95 0.37 0.94 0.94
Lanes: 0.33 0.67 1.00 0.64 0.36 1.00 1.00 1.97 0.03 1.00 1.89 0.11
Final Sat.: 579 1158 1615 1093 607 1615 954 3546 57 703 3390 191
Capacity Analysis Module:
Vol/Sat: 0.07 0.07 0.09 0.01 0.01 0.00 0.03 0.17 0.17 0.09 0.11 0.11
Crit Moves: ****
Green/Cycle: 0.32 0.32 0.32 0.32 0.32 0.62 0.62 0.62 0.62 0.62 0.62 0.62
Volume/Cap: 0.20 0.20 0.28 0.03 0.03 0.01 0.04 0.28 0.28 0.14 0.18 0.18
Delay/Veh: 24.8 24.8 25.6 23.2 23.2 23.1 7.5 8.9 8.9 8.1 8.2 8.2
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: 24.8 24.8 25.6 23.2 23.2 23.1 7.5 8.9 8.9 8.1 8.2 8.2
DesignQueue: 1 3 6 0 0 0 1 14 0 1 8 0

Oakland Army Base Area Redevelopment Plan EIR
Baseline Conditions
PM Peak Hour

Oakland Army Base Area Redevelopment Plan EIR
Baseline Conditions
PM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #16 7th / Adeline
Cycle (sec): 100 Critical Vol./Cap. (X): 0.266
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 9.5
Optimal Cycle: 43 Level Of Service: A
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Permitted Permitted Permitted Permitted
Rights: Include Include Include Include
Min. Green: 8 22 22 8 22 22 8 15 15 8 15 15
Lanes: 1 0 1 1 0 0 1 0 1 0 1 0 2 0 1 1 0 2 0 1

Intersection #17 7th / Market
Cycle (sec): 100 Critical Vol./Cap. (X): 0.249
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 20.8
Optimal Cycle: 75 Level Of Service: C
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Permitted Permitted Permitted Permitted
Rights: Include Include Include Include
Min. Green: 8 22 22 8 22 22 8 22 22 8 22 22
Lanes: 1 0 1 1 0 1 0 2 1 0 1 0 2 1 0 1 0 2 1 0

Volume Module:
Base Vol: 33 83 29 35 64 49 71 400 52 56 723 64
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: 33 83 29 35 64 49 71 400 52 56 723 64
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 33 83 29 35 64 49 71 402 52 56 724 64
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 33 83 29 35 64 49 71 402 52 56 724 64
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 33 83 29 35 64 49 71 402 52 56 724 64
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 33 83 29 35 64 49 71 402 52 56 724 64

Volume Module:
Base Vol: 48 50 66 126 199 38 34 333 40 109 727 41
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: 48 50 66 126 199 38 34 333 40 109 727 41
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 48 50 66 126 199 38 34 335 40 109 728 41
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 48 50 66 126 199 38 34 335 40 109 728 41
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 48 50 66 126 199 38 34 335 40 109 728 41
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 48 50 66 126 199 38 34 335 40 109 728 41

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.64 0.91 0.91 0.79 0.79 0.79 0.35 0.95 0.85 0.51 0.95 0.85
Lanes: 1.00 1.48 0.52 0.47 0.87 0.66 1.00 2.00 1.00 1.00 2.00 1.00
Final Sat.: 1208 2571 898 709 1296 992 657 3610 1615 967 3610 1615
Capacity Analysis Module:
Vol/Sat: 0.03 0.03 0.03 0.05 0.05 0.05 0.11 0.11 0.03 0.06 0.20 0.04
Crit Moves: ****
Green/Cycle: 0.22 0.22 0.22 0.22 0.22 0.22 0.72 0.72 0.72 0.72 0.72 0.72
Volume/Cap: 0.12 0.15 0.15 0.22 0.22 0.22 0.15 0.15 0.04 0.08 0.28 0.06
Delay/Veh: 31.5 31.5 31.5 32.2 32.2 32.2 4.5 4.4 4.1 4.2 5.0 4.1
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: 31.5 31.5 31.5 32.2 32.2 32.2 4.5 4.4 4.1 4.2 5.0 4.1
DesignQueue: 1 4 1 2 3 2 1 6 1 1 12 1

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.95 0.87 0.87 0.95 0.89 0.89 0.29 0.90 0.90 0.50 0.90 0.90
Lanes: 1.00 1.00 1.00 1.00 2.52 0.48 1.00 2.68 0.32 1.00 2.84 0.16
Final Sat.: 1805 1652 1652 1805 4251 812 557 4560 544 958 4871 274
Capacity Analysis Module:
Vol/Sat: 0.03 0.03 0.04 0.07 0.05 0.05 0.06 0.07 0.07 0.11 0.15 0.15
Crit Moves: ****
Green/Cycle: 0.22 0.22 0.22 0.22 0.22 0.22 0.47 0.47 0.47 0.47 0.47 0.47
Volume/Cap: 0.12 0.14 0.18 0.32 0.21 0.21 0.13 0.16 0.16 0.24 0.32 0.32
Delay/Veh: 31.4 31.4 31.8 33.2 32.0 32.0 15.2 15.2 15.2 16.1 16.6 16.6
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: 31.4 31.4 31.8 33.2 32.0 32.0 15.2 15.2 15.2 16.1 16.6 16.6
DesignQueue: 2 2 3 6 9 2 1 10 1 3 22 1

Oakland Army Base Area Redevelopment Plan EIR
Baseline Conditions
PM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #20 6th / Jackson
Cycle (sec): 45 Critical Vol./Cap. (X): 0.573
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 11.7
Optimal Cycle: 29 Level Of Service: B

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Permitted Ignored Split Phase Split Phase
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Lanes: 1 0 1 0 0 0 1 0 1 0 0 0 0 0 1 0 1 0 1

Volume Module: >> Count Date: 1 Jun 2098 << PM Peak Hour
Base Vol: 344 330 0 0 220 1197 0 0 10 362 67
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 344 330 0 0 220 1197 0 0 10 362 67
Added Vol: 0 0 0 0 0 0 4 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 344 330 0 0 220 1201 0 0 10 362 67
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 344 330 0 0 220 0 0 0 10 362 67
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol: 344 330 0 0 220 0 0 0 10 362 67

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.60 0.98 1.00 1.00 0.98 1.00 1.00 1.00 0.83 0.98 0.83
Lanes: 1.00 1.00 0.00 0.00 1.00 1.00 0.00 0.00 1.00 1.00 1.00
Final Sat: 1140 1862 0 0 1862 1900 0 0 1583 1862 1583

Capacity Analysis Module:
Vol/Sat: 0.30 0.18 0.00 0.00 0.12 0.00 0.00 0.00 0.01 0.19 0.04
Crit Moves: ****
Green/Cycle: 0.51 0.51 0.00 0.00 0.51 0.51 0.00 0.00 0.31 0.31 0.31
Volume/Cap: 0.59 0.35 0.00 0.00 0.23 0.00 0.00 0.00 0.02 0.62 0.14
Delay/Veh: 12.1 7.5 0.0 0.0 6.7 0.0 0.0 0.0 10.8 18.3 11.7
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 12.1 7.5 0.0 0.0 6.7 0.0 0.0 0.0 10.8 18.3 11.7
DesignQueue: 4 4 0 0 3 0 0 0 0 0 7 1

Oakland Army Base Area Redevelopment Plan EIR
Baseline Conditions
PM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #21 5th / Union / I-880 Ramps
Cycle (sec): 100 Critical Vol./Cap. (X): 0.307
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 27.2
Optimal Cycle: 72 Level Of Service: C

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Permitted Protected Split Phase Split Phase
Rights: Include Include Include Include
Min. Green: 0 20 20 0 20 20 0 20 20 8 20 20 8 20 20
Lanes: 0 1 0 1 1 0 0 1 1 0 0 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 16 269 590 0 48 6 29 151 26 301 64 19
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: 16 269 590 0 48 6 29 151 26 301 64 19
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 16 269 598 0 48 6 29 151 26 301 64 19
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 16 269 598 0 48 6 29 151 26 301 64 19
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol: 16 269 598 0 48 6 29 151 26 301 64 19

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.80 0.80 0.80 1.00 0.93 0.93 0.93 0.93 0.93 0.95 0.92 0.92
Lanes: 0.06 0.94 2.00 0.00 1.78 0.22 0.28 1.47 0.25 1.00 1.54 0.46
Final Sat: 85 1430 3031 0 3154 394 495 2578 444 1805 2689 798

Capacity Analysis Module:
Vol/Sat: 0.19 0.19 0.20 0.00 0.02 0.02 0.06 0.06 0.06 0.17 0.02 0.02
Crit Moves: ****
Green/Cycle: 0.36 0.36 0.36 0.00 0.36 0.36 0.20 0.20 0.20 0.32 0.32 0.32
Volume/Cap: 0.52 0.52 0.55 0.00 0.04 0.04 0.29 0.29 0.29 0.52 0.07 0.07
Delay/Veh: 25.5 25.5 25.9 0.0 20.8 20.8 34.2 34.2 34.2 28.6 23.7 23.7
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: 25.5 25.5 25.9 0.0 20.8 20.8 34.2 34.2 34.2 28.6 23.7 23.7
DesignQueue: 1 10 22 0 2 0 1 7 1 12 2 1

Oakland Army Base Area Redevelopment Plan EIR
Baseline Conditions
PM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #22 5th / Adeline
Cycle (sec): 100 Critical Vol./Cap. (X): 0.420
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 29.1
Optimal Cycle: 80 Level Of Service: C

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Split Phase Split Phase Protected Protected
Rights: Include Include Include Include
Min. Green: 8 20 20 8 20 20 8 20 20 8 20 20
Lanes: 1 0 1 1 0 1 1 0 1 0 1 1 0 1 0 1 1 0

Volume Module:
Base Vol: 174 149 174 138 51 33 50 724 62 24 151 13
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: 174 149 174 138 51 33 50 724 62 24 151 13
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 174 149 174 138 51 33 50 724 70 24 151 13
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 174 149 174 138 51 33 50 724 70 24 151 13
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 174 149 174 138 51 33 50 724 70 24 151 13

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.95 0.87 0.87 0.90 0.90 0.90 0.95 0.94 0.94 0.95 0.94 0.94
Lanes: 1.00 1.00 1.00 1.86 0.69 0.45 1.00 1.82 0.18 1.00 1.84 0.16
Final Sat.: 1805 1659 1659 3193 1180 764 1805 3249 314 1805 3284 283

Capacity Analysis Module:
Vol/Sat: 0.10 0.09 0.10 0.04 0.04 0.04 0.03 0.22 0.22 0.01 0.05 0.05
Crit Moves: ****
Green/Cycle: 0.20 0.20 0.20 0.20 0.20 0.20 0.14 0.40 0.40 0.08 0.34 0.34
Volume/Cap: 0.48 0.45 0.52 0.22 0.22 0.22 0.20 0.56 0.56 0.17 0.13 0.13
Delay/Veh: 36.4 35.6 36.6 33.6 33.6 33.6 38.7 23.7 23.7 43.4 22.7 22.7
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: 36.4 35.6 36.6 33.6 33.6 33.6 38.7 23.7 23.7 43.4 22.7 22.7
DesignQueue: 8 7 8 6 2 1 2 26 2 1 6 0

Oakland Army Base Area Redevelopment Plan EIR
Baseline Conditions
PM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #23 I-880 Off Ramp / Market
Cycle (sec): 100 Critical Vol./Cap. (X): 0.190
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 22.8
Optimal Cycle: 64 Level Of Service: C

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 15 20 0 0 20 20 0 0 0 0 0 0 15 20 20
Lanes: 1 0 2 0 0 0 0 2 1 0 0 0 0 0 1 1 0 1

Volume Module:
Base Vol: 56 607 0 0 103 54 0 0 0 30 117 178
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: 56 607 0 0 103 54 0 0 0 30 117 178
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 56 607 0 0 103 54 0 0 0 30 117 178
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 56 607 0 0 103 54 0 0 0 30 117 178
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 56 607 0 0 103 54 0 0 0 30 117 178

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.95 0.95 1.00 1.00 0.86 0.86 1.00 1.00 1.00 1.00 0.81 0.81
Lanes: 1.00 2.00 0.00 0.00 2.00 2.00 1.00 0.00 0.00 0.00 0.41 1.59
Final Sat.: 1805 3610 0 0 3278 1639 0 0 0 626 2442 1615

Capacity Analysis Module:
Vol/Sat: 0.03 0.17 0.00 0.00 0.03 0.03 0.00 0.00 0.00 0.05 0.05 0.11
Crit Moves: ****
Green/Cycle: 0.16 0.36 0.00 0.00 0.20 0.20 0.00 0.00 0.00 0.55 0.55
Volume/Cap: 0.20 0.47 0.00 0.00 0.16 0.16 0.00 0.00 0.00 0.09 0.09
Delay/Veh: 37.1 25.2 0.0 0.0 33.1 33.2 0.0 0.0 0.0 10.5 10.5
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 37.1 25.2 0.0 0.0 33.1 33.2 0.0 0.0 0.0 10.5 10.5
DesignQueue: 3 23 0 0 5 2 0 0 0 1 3 5

Oakland Army Base Area Redevelopment Plan EIR
Baseline Conditions
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Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #24 5th / Broadway
Cycle (sec): 75 Critical Vol./Cap. (X): 0.852
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 29.4
Optimal Cycle: 74 Level Of Service: C

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Split Phase Split Phase
Rights: Include Include Include Include
Min. Green: 0 15 15 8 15 15 8 20 20 0 0 0 0
Lanes: 0 0 2 0 1 1 0 2 0 0 1 1 1 0 1 0 0 0 0 0

Volume Module:
Base Vol: 0 299 321 567 400 0 782 363 58 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: 0 299 321 567 400 0 782 363 58 0 0 0
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 0 299 321 567 400 0 790 363 58 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 299 321 567 400 0 790 363 58 0 0 0
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 299 321 567 400 0 790 363 58 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
Final Vol.: 0 299 321 567 400 0 790 363 58 0 0 0

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 1.00 0.95 0.85 0.95 0.95 1.00 0.81 0.81 0.85 1.00 1.00 1.00
Lanes: 0.00 2.00 1.00 1.00 2.00 0.00 2.00 1.00 1.00 0.00 0.00 0.00
Final Sat.: 0 3610 1615 1805 3610 0 3069 1534 1615 0 0 0

Capacity Analysis Module:
Vol/Sat: 0.00 0.08 0.20 0.31 0.11 0.00 0.26 0.24 0.04 0.00 0.00 0.00
Crit Moves: *****
Green/Cycle: 0.00 0.23 0.23 0.36 0.59 0.00 0.29 0.29 0.29 0.00 0.00 0.00
Volume/Cap: 0.00 0.36 0.88 0.88 0.19 0.00 0.88 0.80 0.12 0.00 0.00 0.00
Delay/Veh: 0.0 24.7 48.2 35.2 7.3 0.0 32.0 27.9 19.5 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: 0.0 24.7 48.2 35.2 7.3 0.0 32.0 27.9 19.5 0.0 0.0 0.0
DesignQueue: 0 10 11 16 7 0 25 11 2 0 0 0

Oakland Army Base Area Redevelopment Plan EIR
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PM Peak Hour

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

Intersection #25 3rd / Adeline
Cycle (sec): 100 Critical Vol./Cap. (X): 0.369
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 11.8
Optimal Cycle: 0 Level Of Service: B

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 15 20 20 15 20 20 15 20 20 15 20 20
Lanes: 0 1 0 1 0 0 1 0 1 0 0 1 0 0 1 0 1 0 1 0

Volume Module:
Base Vol: 10 268 120 99 100 20 47 15 0 43 17 184
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: 10 268 120 99 100 20 47 15 0 43 17 184
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 10 268 120 99 100 20 47 15 0 43 17 184
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 10 268 120 99 100 20 47 15 0 43 17 184
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 10 268 120 99 100 20 47 15 0 43 17 184
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 10 268 120 99 100 20 47 15 0 43 17 184

Saturation Flow Module:
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.05 1.35 0.60 0.90 0.92 0.18 1.00 1.00 0.00 0.35 0.65 1.00
Final Sat.: 27 742 349 440 478 96 439 467 0 174 320 564

Capacity Analysis Module:
Vol/Sat: 0.37 0.36 0.34 0.22 0.21 0.21 0.11 0.03 xxxx 0.25 0.05 0.33
Crit Moves: *****
Delay/Veh: 12.8 12.5 11.8 11.8 11.0 10.9 11.3 10.1 0.0 11.9 11.9 11.6
AdjDel/Veh: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
LOS by Move: B B B B B B B B * B B B B
ApproachDel: 12.3 11.4 11.4 11.0 11.0 11.0 11.0 11.0 11.7 11.7
AdjDel/Veh: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
ApprAdjDel: 12.3 11.4 11.4 11.0 11.0 11.0 11.0 11.0 11.7 11.7
LOS by Appr: B B B B B B B B B B B B

Oakland Army Base Area Redevelopment Plan EIR
Baseline Conditions
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Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)
Intersection #28 12th / Brush
Cycle (sec): 100 Critical Vol./Cap. (X): 0.431
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 22.4
Optimal Cycle: 48 Level Of Service: C

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Split Phase	Split Phase	Permitted	Permitted
Rights:	Include	Include	Include	Include
Min. Green:	0 12 12	0 12 12	0 0 10	8 15 0
Lanes:	0 0 2 1 0	0 0 1 1 0	0 0 0 0 1	1 0 3 0 0

Volume Module:

Base Vol:	0	341	25	0	1008	21	0	0	0	143	180	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:	0	341	25	0	1008	21	0	0	0	143	180	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	341	25	0	1008	21	0	0	0	143	180	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	341	25	0	1008	21	0	0	0	143	180	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	341	25	0	1008	21	0	0	0	143	180	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
Final Vol:	0	341	25	0	1008	21	0	0	0	143	180	0

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.90	0.90	1.00	0.95	0.95	1.00	1.00	1.00	0.85	0.91	1.00
Lanes:	0.00	2.80	0.20	0.00	1.96	0.04	0.00	0.00	1.00	1.00	3.00	0.00
Final Sat.:	0	4784	351	0	3526	73	0	0	1900	1615	5187	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.07	0.07	0.00	0.29	0.29	0.00	0.00	0.00	0.09	0.03	0.00
Crit Moves:	0.00	0.15	0.15	0.00	0.61	0.61	0.00	0.00	0.00	0.15	0.15	0.00
Green/Cycle:	0.00	0.47	0.47	0.00	0.47	0.47	0.00	0.00	0.00	0.59	0.23	0.00
Volume/Cap:	0.00	39.2	39.2	0.0	10.9	10.9	0.0	0.0	0.0	43.5	37.6	0.0
Delay/Veh:	0.0	39.2	39.2	0.0	10.9	10.9	0.0	0.0	0.0	43.5	37.6	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:	0.0	39.2	39.2	0.0	10.9	10.9	0.0	0.0	0.0	43.5	37.6	0.0
DesignQueue:	0	16	1	0	24	0	0	0	0	7	9	0

Oakland Army Base Area Redevelopment Plan EIR
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Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)
Intersection #29 12th / Castro
Cycle (sec): 100 Critical Vol./Cap. (X): 0.521
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 19.1
Optimal Cycle: 31 Level Of Service: B

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Permitted	Permitted	Protected	Protected
Rights:	Include	Include	Include	Include
Min. Green:	8	10	10	0
Lanes:	1	1	2	1

Volume Module:

Base Vol:	27	1455	0	0	0	0	0	0	0	0	281	895
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:	27	1455	0	0	0	0	0	0	0	0	281	895
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	27	1455	0	0	0	0	0	0	0	0	281	895
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	27	1455	0	0	0	0	0	0	0	0	281	895
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	27	1455	0	0	0	0	0	0	0	0	281	895
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol:	27	1455	0	0	0	0	0	0	0	0	281	895

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.91	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.84	0.84
Lanes:	1.00	4.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	2.00
Final Sat.:	1729	6916	0	0	0	0	0	0	0	0	1599	3198

Capacity Analysis Module:

Vol/Sat:	0.02	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.28
Crit Moves:	0.40	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.54	0.54
Green/Cycle:	0.04	0.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.53	0.52
Volume/Cap:	18.1	22.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.1	15.1
Delay/Veh:	18.1	22.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.1	15.1
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:	18.1	22.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.1	15.1
DesignQueue:	1	51	0	0	0	0	0	0	0	0	8	25

Oakland Army Base Area Redevelopment Plan EIR
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Oakland Army Base Area Redevelopment Plan EIR
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Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #31 27th / SR 24-580 On Ramp

Intersection #30 27th / SR 24-580 Off Ramp

Cycle (sec): 100 Critical Vol./Cap. (X): 0.783
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 20.5
Optimal Cycle: 65 Level Of Service: C

Cycle (sec): 100 Critical Vol./Cap. (X): 0.257
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 15.9
Optimal Cycle: 38 Level Of Service: B

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

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

Control: Permitted Include Permitted Include Permitted Include Permitted Include
Rights: 8 20 20 0 0 0 0 0 0 8 10 0 0 10 10
Min. Green: 0 1 1 1 0 0 0 0 0 0 1 2 0 0 0 3 0 1
Lanes: 0 1 1 1 0 0 0 0 0 0 1 1 2 0 0 0 3 0 1

Control: Permitted Include Permitted Include Permitted Include Permitted Include
Rights: 0 0 0 0 8 20 20 0 12 12 8 12 0
Min. Green: 0 0 0 0 1 1 1 0 1 0 0 2 1 0 0 1 2 0 0
Lanes: 0 0 0 0 1 1 1 0 1 0 0 2 1 0 0 1 2 0 0

Volume Module:

Volume Module:

Base Vol: 11 884 46 0 0 0 408 464 0 0 214 852
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 Base: 11 884 46 0 0 0 408 464 0 0 214 852
Added Vol: 0 3 0 0 0 0 3 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 11 887 46 0 0 0 411 464 0 0 214 852
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 11 887 46 0 0 0 411 464 0 0 214 852
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 11 887 46 0 0 0 411 464 0 0 214 852
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol: 11 887 46 0 0 0 411 464 0 0 214 852

Base Vol: 0 0 294 244 204 0 561 23 9 205 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
Initial Base: 0 0 294 244 204 0 561 23 9 205 0
Added Vol: 0 0 0 2 0 0 3 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 0 0 294 246 206 0 564 23 9 205 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
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 0 294 246 206 0 564 23 9 205 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 0 294 246 206 0 564 23 9 205 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
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol: 0 0 294 246 206 0 564 23 9 205 0

Saturation Flow Module:

Saturation Flow Module:

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.90 0.90 0.90 1.00 1.00 1.00 0.29 0.29 1.00 1.00 0.91 0.85
Lanes: 0.03 2.82 0.15 0.00 0.00 0.00 1.88 2.12 0.00 0.00 3.00 1.00
Final Sat: 60 4806 249 0 0 0 1049 1185 0 0 5187 1615

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 1.00 1.00 1.00 0.81 0.81 0.85 1.00 0.90 0.90 0.83 0.83 1.00
Lanes: 0.00 0.00 0.00 1.63 1.37 1.00 0.00 2.88 0.12 0.13 2.87 0.00
Final Sat: 0 0 2506 2097 1615 0 4954 202 200 4556 0

Capacity Analysis Module:

Capacity Analysis Module:

Vol/Sat: 0.18 0.18 0.18 0.00 0.00 0.00 0.39 0.39 0.00 0.00 0.04 0.53
Crit Moves: ****
Green/Cycle: 0.24 0.24 0.24 0.00 0.00 0.00 0.67 0.67 0.00 0.00 0.67 0.67
Volume/Cap: 0.78 0.78 0.78 0.00 0.00 0.00 0.58 0.58 0.00 0.00 0.06 0.78
Delay/Veh: 39.2 39.2 39.2 0.0 0.0 0.0 9.3 9.3 0.0 0.0 5.5 15.0
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: 39.2 39.2 39.2 0.0 0.0 0.0 9.3 9.3 0.0 0.0 5.5 15.0
DesignQueue: 0 39 2 0 0 0 8 9 0 0 4 17

Vol/Sat: 0.00 0.00 0.00 0.12 0.12 0.13 0.00 0.11 0.11 0.04 0.04 0.00
Crit Moves: ****
Green/Cycle: 0.50 0.50 0.50 0.00 0.44 0.44 0.44 0.44 0.44 0.44 0.44 0.00
Volume/Cap: 0.00 0.00 0.00 0.24 0.24 0.26 0.00 0.26 0.26 0.10 0.10 0.00
Delay/Veh: 0.0 0.0 0.0 14.4 14.4 14.7 0.0 17.5 17.5 16.2 16.2 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: 0.0 0.0 0.0 14.4 14.4 14.7 0.0 17.5 17.5 16.2 16.2 0.0
DesignQueue: 0 0 0 8 7 6 0 18 1 0 6 0

Oakland Army Base Area Redevelopment Plan EIR
Baseline Conditions
PM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #32 San Pablo Av / Adeline

Cycle (sec): 120 Critical Vol./Cap. (X): 0.799
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 19.9
Optimal Cycle: 71 Level Of Service: B

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Permitted Include Split Phase Split Phase
Rights: Include Include Include Include
Min. Green: 0 15 15 8 15 15 8 10 10 8 15 15
Lanes: 0 0 1 0 0 1 0 0 0 1 1 0 0 1 0 1 0

Volume Module:
Base Vol: 0 302 1077 8 989 173 99 9 0 21 162 9
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 302 1077 8 989 173 99 9 0 21 162 9
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 0 302 1077 8 989 173 99 15 0 21 165 9
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 302 1077 8 989 173 99 15 0 21 165 9
Reduc Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 302 1077 8 989 173 99 15 0 21 165 9
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 0 302 1077 8 989 173 99 15 0 21 165 9

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 1.00 0.84 0.84 0.87 0.87 0.87 0.91 0.91 1.00 0.94 0.94 0.94
Lanes: 0.00 1.00 1.00 0.01 1.69 0.30 1.00 1.00 0.00 0.22 1.69 0.09
Final Sat.: 0 1594 1594 23 2808 491 1729 1729 0 384 3018 165

Capacity Analysis Module:
Vol/Sat: 0.00 0.19 0.68 0.35 0.35 0.35 0.06 0.01 0.00 0.05 0.05 0.05
Crit Moves: ****
Green/Cycle: 0.00 0.72 0.72 0.72 0.72 0.72 0.08 0.08 0.00 0.13 0.13 0.13
Volume/Cap: 0.00 0.26 0.94 0.49 0.49 0.49 0.69 0.10 0.00 0.44 0.44 0.44
Delay/Veh: 0.0 6.0 27.3 7.6 7.6 7.6 64.9 50.9 0.0 49.3 49.3 49.3
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: 0.0 6.0 27.3 7.6 7.6 7.6 64.9 50.9 0.0 49.3 49.3 49.3
DesignQueue: 0 6 24 0 20 4 6 1 0 1 10 1

Oakland Army Base Area Redevelopment Plan EIR
Baseline Conditions
PM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #33 W MacArthur / Market

Cycle (sec): 100 Critical Vol./Cap. (X): 0.404
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 17.3
Optimal Cycle: 41 Level Of Service: B

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Permitted Include Permitted Include
Rights: Include Include Include Include
Min. Green: 8 20 20 8 20 20 8 15 15 8 15 15
Lanes: 0 1 0 1 0 0 1 0 1 0 0 1 1 0 1 0 1 0

Volume Module:
Base Vol: 16 318 85 190 236 36 63 606 22 112 333 150
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: 16 318 85 190 236 36 63 606 22 112 333 150
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 16 318 85 190 236 36 63 612 22 112 336 150
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 16 318 85 190 236 36 63 612 22 112 336 150
Reduc Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 16 318 85 190 236 36 63 612 22 112 336 150
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 16 318 85 190 236 36 63 612 22 112 336 150

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.86 0.86 0.86 0.60 0.60 0.60 0.77 0.77 0.77 0.33 0.91 0.91
Lanes: 0.08 1.52 0.40 0.82 1.02 0.16 0.27 2.64 0.09 1.00 1.38 0.62
Final Sat.: 125 2482 663 943 1172 179 396 3843 138 627 2381 1063

Capacity Analysis Module:
Vol/Sat: 0.13 0.13 0.13 0.20 0.20 0.20 0.16 0.16 0.16 0.18 0.14 0.14
Crit Moves: ****
Green/Cycle: 0.50 0.50 0.50 0.50 0.50 0.50 0.44 0.44 0.44 0.44 0.44
Volume/Cap: 0.26 0.26 0.26 0.40 0.40 0.40 0.36 0.36 0.36 0.40 0.32
Delay/Veh: 14.5 14.5 14.5 16.0 16.0 16.0 18.6 18.6 18.6 19.9 18.3
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 14.5 14.5 14.5 16.0 16.0 16.0 18.6 18.6 18.6 19.9 18.3
DesignQueue: 0 9 2 5 7 1 2 20 1 4 11 5

Oakland Army Base Area Redevelopment Plan EIR
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Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #34 Powell / I-80 Frontage Rd
Cycle (sec): 100 Critical Vol./Cap. (X): 0.580
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 22.4
Optimal Cycle: 47 Level Of Service: C

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Protected Protected
Rights: Include Include Include Ignore
Min. Green: 0 0 0 0 15 8 10 10 0 15 15
Lanes: 0 0 0 0 2 0 0 0 1 1 0 1 0 0 0 1 1

Volume Module:
Base Vol: 0 0 553 0 271 242 408 592 0 613 1589
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 0 553 0 271 242 408 592 0 613 1589
Added Vol: 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 0 0 553 0 271 242 408 592 0 613 1592
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 0 553 0 271 242 408 592 0 613 0
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 0 553 0 271 242 408 592 0 613 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
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 0 0 553 0 271 242 408 592 0 613 0

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 1.00 1.00 1.00 0.92 1.00 0.85 0.95 0.87 0.87 1.00 0.95
Lanes: 0.00 0.00 0.00 2.00 0.00 1.00 1.00 1.00 1.00 2.00 1.00
Final Sat.: 0 0 3502 0 1615 1805 1644 1644 0 3610 1805

Capacity Analysis Module:
Vol/Sat: 0.00 0.00 0.00 0.16 0.00 0.17 0.13 0.25 0.36 0.00 0.17
Crit Moves: ****
Green/Cycle: 0.00 0.00 0.00 0.29 0.00 0.29 0.27 0.62 0.62 0.00 0.35
Volume/Cap: 0.00 0.00 0.00 0.55 0.00 0.58 0.49 0.40 0.58 0.00 0.49
Delay/Veh: 0.0 0.0 0.0 30.6 0.0 32.2 31.2 9.7 11.7 0.0 26.0
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 0.0 0.0 0.0 30.6 0.0 32.2 31.2 9.7 11.7 0.0 26.0
DesignQueue: 0 0 23 0 11 10 9 14 0 23 0

Oakland Army Base Area Redevelopment Plan EIR
Baseline Conditions
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Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #35 Powell / I-80 NB Ramps
Cycle (sec): 100 Critical Vol./Cap. (X): 1.019
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 44.1
Optimal Cycle: 180 Level Of Service: D

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 8 10 10 0 0 0 0 8 10 0 0 10 10
Lanes: 1 0 1 0 1 0 0 0 0 0 1 0 3 0 0 0 0 3 0 1

Volume Module:
Base Vol: 563 150 817 0 0 0 170 778 0 0 1604 475
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 563 150 817 0 0 0 170 778 0 0 1604 475
Added Vol: 2 0 2 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 565 150 819 0 0 0 170 778 0 0 1605 475
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 565 150 819 0 0 0 170 778 0 0 1605 475
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 565 150 819 0 0 0 170 778 0 0 1605 475
PCE Adj: 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
Final Vol.: 565 150 819 0 0 0 170 778 0 0 1605 475

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.85 0.85 0.85 1.00 1.00 1.00 0.95 0.91 1.00 1.00 0.91
Lanes: 1.33 0.18 1.49 0.00 0.00 0.00 1.00 3.00 0.00 0.00 3.00
Final Sat.: 2148 286 2390 0 0 0 1805 5187 0 0 5187 1615

Capacity Analysis Module:
Vol/Sat: 0.26 0.52 0.34 0.00 0.00 0.00 0.09 0.15 0.00 0.00 0.31
Crit Moves: ****
Green/Cycle: 0.51 0.51 0.51 0.00 0.00 0.00 0.09 0.40 0.00 0.00 0.30
Volume/Cap: 0.51 1.02 0.67 0.00 0.00 0.00 1.02 0.38 0.00 0.00 1.02
Delay/Veh: 16.2 52.4 18.7 0.0 0.0 0.0 120.1 21.6 0.0 0.0 62.3
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 16.2 52.4 18.7 0.0 0.0 0.0 120.1 21.6 0.0 0.0 62.3
DesignQueue: 16 5 24 0 0 0 9 27 0 0 67 20

Oakland Army Base Area Redevelopment Plan EIR
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Level Of Service Computation Report
 1997 HCM Operations Method (Future Volume Alternative)

 Intersection #38 Powell / San Pablo Av

Cycle (sec): 100 Critical Vol./Cap. (X): 0.711
 Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 34.4
 Optimal Cycle: 61 Level Of Service: C

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

Control:	Protected				Include				Protected							
	Include	Include	Include	Include	Include	Include	Include	Include	Include	Include	Include	Include				
Rights:	8	15	15	15	8	15	15	15	8	15	15	15	8	15	15	15
Min. Green:	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0
Lanes:	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0

Volume Module:

Base Vol:	158	802	107	168	810	75	164	618	152	100	315	44
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:	158	802	107	168	810	75	164	618	152	100	315	44
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	158	802	107	168	810	75	164	620	152	100	316	44
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	158	802	107	168	810	75	164	620	152	100	316	44
Reduced Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	158	802	107	168	810	75	164	620	152	100	316	44
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	158	802	107	168	810	75	164	620	152	100	316	44

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.93	0.93	0.95	0.94	0.94	0.95	0.92	0.92	0.95	0.93	0.93
Lanes:	1.00	1.76	0.24	1.00	1.83	0.17	1.00	1.61	0.39	1.00	1.76	0.24
Final Sat.:	1805	3128	417	1805	3261	302	1805	2812	689	1805	3112	433

Capacity Analysis Module:

Vol/Sat:	0.09	0.26	0.26	0.09	0.25	0.25	0.09	0.22	0.22	0.06	0.10	0.10
Crit Moves:	0.13	0.36	0.36	0.13	0.36	0.36	0.24	0.31	0.31	0.08	0.15	0.15
Green/Cycle:	0.68	0.71	0.71	0.68	0.68	0.68	0.38	0.71	0.71	0.69	0.68	0.68
Volume/Cap:	49.9	29.5	29.5	51.5	28.6	28.6	32.4	32.8	32.8	58.3	43.7	43.7
Delay/Veh:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
User DelAdj:	49.9	29.5	29.5	51.5	28.6	28.6	32.4	32.8	32.8	58.3	43.7	43.7
AdjDel/Veh:	8	30	4	8	31	3	7	25	6	5	15	2
DesignQueue:	8	30	4	8	31	3	7	25	6	5	15	2

Oakland Army Base Area Redevelopment Plan EIR
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Level Of Service Computation Report
 1997 HCM Operations Method (Future Volume Alternative)

 Intersection #39 Stanford / Market

Cycle (sec): 100 Critical Vol./Cap. (X): 0.551
 Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 31.6
 Optimal Cycle: 58 Level Of Service: C

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

Control:	Protected				Include				Protected							
	Include	Include	Include	Include	Include	Include	Include	Include	Include	Include	Include	Include				
Rights:	8	15	15	15	8	15	15	15	8	15	15	15	8	15	15	15
Min. Green:	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0
Lanes:	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0

Volume Module:

Base Vol:	140	829	22	63	648	22	116	539	4	112	274	25
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:	140	829	22	63	648	22	116	539	4	112	274	25
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	140	829	22	63	648	23	117	540	4	112	275	25
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	140	829	22	63	648	23	117	540	4	112	275	25
Reduced Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	140	829	22	63	648	23	117	540	4	112	275	25
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	140	829	22	63	648	23	117	540	4	112	275	25

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.94
Lanes:	1.00	1.95	0.05	1.00	1.93	0.07	1.00	1.99	0.01	1.00	1.83	0.17
Final Sat.:	1805	3503	93	1805	3469	123	1805	3580	27	1805	3269	297

Capacity Analysis Module:

Vol/Sat:	0.08	0.24	0.24	0.03	0.19	0.19	0.06	0.15	0.15	0.06	0.08	0.08
Crit Moves:	0.08	0.24	0.24	0.03	0.19	0.19	0.06	0.15	0.15	0.06	0.08	0.08
Green/Cycle:	0.08	0.42	0.42	0.08	0.42	0.42	0.13	0.27	0.27	0.11	0.25	0.25
Volume/Cap:	0.97	0.56	0.56	0.44	0.44	0.44	0.49	0.56	0.56	0.56	0.34	0.34
Delay/Veh:	111.3	22.4	22.4	46.0	20.8	20.8	41.9	32.3	32.3	45.8	31.2	31.2
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:	111.3	22.4	22.4	46.0	20.8	20.8	41.9	32.3	32.3	45.8	31.2	31.2
DesignQueue:	7	28	1	3	22	1	6	23	0	6	12	1

Oakland Army Base Area Redevelopment Plan EIR
Baseline Conditions
PM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #40 Stanford / MLK Jr WY

Cycle (sec): 100 Critical Vol./Cap. (X): 1.085
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 46.4
Optimal Cycle: 180 Level Of Service: D

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Permitted Permitted Protected Protected
Rights: Include Include Include Include
Min. Green: 8 10 10 0 15 15 20 0 0 20 0 0 0
Lanes: 0 1 2 0 0 0 2 0 1 2 0 0 1 0 0 0 0 0

Volume Module:
Base Vol: 195 2108 0 0 1482 263 468 0 516 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: 195 2108 0 0 1482 263 468 0 516 0 0 0
Added Vol: 0 0 0 0 1 1 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 195 2108 0 0 1482 264 469 0 516 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
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 195 2108 0 0 1482 264 469 0 516 0 0 0
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 195 2108 0 0 1482 264 469 0 516 0 0 0

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.58 0.58 1.00 1.00 0.95 0.85 0.92 1.00 0.85 1.00 1.00 1.00
Lanes: 0.25 2.75 0.00 0.00 2.00 1.00 2.00 0.00 1.00 2.00 0.00 0.00
Final Sat.: 278 3010 0 0 3610 1615 3502 0 1615 0 0 0

Capacity Analysis Module:
Vol/Sat: 0.70 0.70 0.00 0.00 0.41 0.16 0.13 0.00 0.32 0.00 0.00 0.00
Crit Moves: ****
Green/Cycle: 0.65 0.65 0.00 0.00 0.65 0.65 0.29 0.00 0.29 0.00 0.00 0.00
Volume/Cap: 1.08 1.08 0.00 0.00 0.64 0.25 0.45 0.00 1.08 0.00 0.00 0.00
Delay/Veh: 64.7 64.7 0.0 0.0 11.2 7.6 29.1 0.0 101.4 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
AdjDel/Veh: 64.7 64.7 0.0 0.0 11.2 7.6 29.1 0.0 101.4 0.0 0.0 0.0
DesignQueue: 4 46 0 0 33 5 19 0 22 0 0 0

Oakland Army Base Area Redevelopment Plan EIR
Baseline Conditions
PM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #41 Ashby / 7th

Cycle (sec): 100 Critical Vol./Cap. (X): 0.923
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 48.6
Optimal Cycle: 121 Level Of Service: D

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Split Phase Split Phase Protected Protected
Rights: Include Include Include Include
Min. Green: 8 15 15 8 15 15 8 12 12 12 12 12
Lanes: 0 1 0 1 0 0 1 0 1 0 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 134 357 70 120 175 488 265 655 98 85 684 46
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: 134 357 70 120 175 488 265 655 98 85 684 46
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 134 357 70 120 175 488 265 659 98 85 686 46
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 134 357 70 120 175 488 265 659 98 85 686 46
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 134 357 70 120 175 488 265 659 98 85 686 46

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.92 0.92 0.92 0.85 0.85 0.85 0.95 0.93 0.93 0.95 0.94 0.94
Lanes: 0.48 1.27 0.25 0.41 0.59 1.00 1.00 1.74 0.26 1.00 1.87 0.13
Final Sat.: 836 2227 437 661 963 1624 1805 3083 458 1805 3353 225

Capacity Analysis Module:
Vol/Sat: 0.16 0.16 0.16 0.18 0.18 0.18 0.30 0.15 0.21 0.21 0.05 0.20 0.20
Crit Moves: ****
Green/Cycle: 0.17 0.17 0.17 0.33 0.33 0.33 0.16 0.30 0.30 0.08 0.22 0.22
Volume/Cap: 0.92 0.92 0.92 0.56 0.56 0.92 0.92 0.71 0.71 0.59 0.92 0.92
Delay/Veh: 60.5 60.5 60.5 28.3 28.3 47.9 74.9 33.4 33.4 50.7 54.3 54.3
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: 60.5 60.5 60.5 28.3 28.3 47.9 74.9 33.4 33.4 50.7 54.3 54.3
DesignQueue: 6 17 3 5 7 20 13 27 4 4 31 2

S3 Existing and Project Conditions

Oakland Army Base Area Redevelopment Plan EIR
Existing + Project Conditions
AM Peak Hour

Oakland Army Base Area Redevelopment Plan EIR
Existing + Project Conditions
AM Peak Hour

Trip Generation Report
Forecast for GDA Ex+Proj AM

Trip Generation Report
Forecast for GDA Ex+Proj AM

Zone #	Subzone	Amount	Units	Rate		Trips		Total % Of Trips Total
				In	Out	In	Out	
1	Berth 55-56	-305.00	Emp. Approved	0.00	0.00	0	0	0
1	Berth 55-56	388.00	Emp. Proposed	0.00	0.00	0	0	0
2	Berth 57-59	-373.00	Emp. Approved	0.00	0.00	0	0	0
2	Berth 57-59	473.00	Emp. Proposed	0.00	0.00	0	0	0
3	Middle Harbo	-216.00	Emp. Approved	0.00	0.00	0	0	0
3	Middle Harbo	331.00	Emp. Proposed	0.00	0.00	0	0	0
4	7th St. Harb	-560.00	Emp. Approved	0.00	0.00	0	0	0
4	7th St. Harb	601.00	Emp. Proposed	0.00	0.00	0	0	0
5	Outer Harbor	-593.00	Emp. Approved	0.00	0.00	0	0	0
5	Outer Harbor	618.00	Emp. Proposed	0.00	0.00	0	0	0
6	Berth 21	0.00	Emp. Approved	0.00	0.00	0	0	0
6	Berth 21	189.00	Emp. Proposed	0.00	0.00	0	0	0
7	Proposed JIT	188.00	Emp. Proposed	0.00	0.00	0	0	0
8	W. Oakland Y	-146.00	Emp. Approved	0.00	0.00	0	0	0
8	W. Oakland Y	146.00	Emp. Proposed	0.00	0.00	0	0	0
9	Approved JIT	-208.00	Emp. Approved	0.00	0.00	0	0	0
11	Subaru Site	1.00	300KSF W-house	146.00	32.00	146	32	178
	Zone 11 Subtotal					146	32	178
	Zone 11 Subtotal					146	32	178
12	Baldwin Yard	1.00	15 Acre Tr Lot	21.00	31.00	21	31	52
	Zone 12 Subtotal					21	31	52
13	Western Area	1.00	29 Acre Park	7.00	2.00	7	2	9
13	Western Area	1.00	600 KSF Office	684.00	93.00	684	93	777
	Zone 13 Subtotal					691	95	786
14	Central Area	1.00	577 KSF Office	663.00	90.00	663	90	753
14	Central Area	1.00	1995 Employees	0.00	0.00	0	0	0
	Zone 14 Subtotal					663	90	753
15	Central Area	1.00	50 KSF JATC	40.00	6.00	40	6	46
15	Central Area	1.00	444 KSF Lt Ind	384.00	52.00	384	52	436
	Zone 15 Subtotal					424	58	482
16	Eastern Area	1.00	200 KSF Office	251.00	34.00	251	34	285
	Zone 16 Subtotal					251	34	285
17	Eastern Area	1.00	176 KSF Office	221.00	30.00	221	30	251
	Zone 17 Subtotal					221	30	251
18	16-Wood Nort	1.00	1 Acre Park	0.00	0.00	0	0	0

Zone #	Subzone	Amount	Units	Rate		Trips		Total % Of Trips Total
				In	Out	In	Out	
	TOTAL					2417	370	2787

Oakland Army Base Area Redevelopment Plan EIR
Existing + Project Conditions
AM Peak Hour

Trip Generation Report

Forecast for Port Ex+Proj AM

Zone #	Subzone	Amount	Units	Rate		Trips In	Trips Out	Total Trips	% Of Trips Total
				In	Out				
1	Berth 55-56	-305.00	Emp. Approved	0.34	0.06	-104	-18	-122	-2.1
1	Berth 55-56	388.00	Emp. Proposed	0.34	0.06	132	23	155	2.7
	Zone 1 Subtotal					28	5	33	0.6
2	Berth 57-59	-373.00	Emp. Approved	0.34	0.06	-127	-22	-149	-2.6
2	Berth 57-59	473.00	Emp. Proposed	0.34	0.06	161	28	189	3.3
	Zone 2 Subtotal					34	6	40	0.7
3	Middle Harbo	-216.00	Emp. Approved	0.34	0.06	-73	-13	-86	-1.5
3	Middle Harbo	331.00	Emp. Proposed	0.34	0.06	113	20	133	2.3
	Zone 3 Subtotal					40	7	47	0.8
4	7th St. Harb	-560.00	Emp. Approved	0.34	0.06	-190	-34	-224	-3.9
4	7th St. Harb	601.00	Emp. Proposed	0.34	0.06	204	36	240	4.2
	Zone 4 Subtotal					14	2	16	0.3
5	Outer Harbor	-593.00	Emp. Approved	0.34	0.06	-202	-36	-238	-4.1
5	Outer Harbor	618.00	Emp. Proposed	0.34	0.06	210	37	247	4.3
	Zone 5 Subtotal					8	1	9	0.2
6	Berth 21	0.00	Emp. Approved	0.34	0.06	0	0	0	0.0
6	Berth 21	189.00	Emp. Proposed	0.34	0.06	64	11	75	1.3
	Zone 6 Subtotal					64	11	75	1.3
7	Proposed JIT	188.00	Emp. Proposed	0.37	0.06	70	11	81	1.4
	Zone 7 Subtotal					70	11	81	1.4
8	W. Oakland Y	-146.00	Emp. Approved	0.37	0.06	-54	-9	-63	-1.1
8	W. Oakland Y	146.00	Emp. Proposed	0.37	0.06	54	9	63	1.1
9	Approved JIT	-208.00	Emp. Approved	0.37	0.06	-77	-12	-89	-1.5
	Zone 9 Subtotal					-77	-12	-89	-1.5
14	Central Area	1.00	577 KSF Office	0.00	0.00	0	0	0	0.0
14	Central Area	1.00	1995 Employees	0.00	0.00	0	0	0	0.0
21	Berth 55-56	1.00	IM Trucks Prop	187.00	199.00	187	199	386	6.7
	Zone 21 Subtotal					187	199	386	6.7
22	Berth 57-59	1.00	IM Trucks Prop	229.00	243.00	229	243	472	8.2
	Zone 22 Subtotal					229	243	472	8.2
23	Middle Harbo	1.00	IM Trucks Prop	160.00	170.00	160	170	330	5.7
	Zone 23 Subtotal					160	170	330	5.7

Oakland Army Base Area Redevelopment Plan EIR
Existing + Project Conditions
AM Peak Hour

Zone #	Subzone	Amount	Units	Rate		Trips In	Trips Out	Total Trips	% Of Trips Total
				In	Out				
24	7th St. Harb	1.00	IM Trucks Prop	290.00	309.00	290	309	599	10.4
	Zone 24 Subtotal					290	309	599	10.4
25	Outer Harbor	1.00	IM Trucks Prop	298.00	317.00	298	317	615	10.6
	Zone 25 Subtotal					298	317	615	10.6
26	Berth 21	1.00	IM Trucks Prop	91.00	97.00	91	97	188	3.3
	Zone 26 Subtotal					91	97	188	3.3
31	Berth 55-56	1.00	IM Trucks Appr	-164.00	-175.00	-164	-175	-339	-5.9
	Zone 31 Subtotal					-164	-175	-339	-5.9
32	Berth 57-59	1.00	IM Trucks Appr	-201.00	-213.00	-201	-213	-414	-7.2
	Zone 32 Subtotal					-201	-213	-414	-7.2
33	Middle Harbo	1.00	IM Trucks Appr	-116.00	-124.00	-116	-124	-240	-4.2
	Zone 33 Subtotal					-116	-124	-240	-4.2
34	7th St. Harb	1.00	IM Trucks Appr	-302.00	-321.00	-302	-321	-623	-10.8
	Zone 34 Subtotal					-302	-321	-623	-10.8
35	Outer Harbor	1.00	IM Trucks Appr	-319.00	-339.00	-319	-339	-658	-11.4
	Zone 35 Subtotal					-319	-339	-658	-11.4
41	Berth 55-56	1.00	OTR Truck Appr	-145.00	-154.00	-145	-154	-299	-5.9
41	Berth 55-56	1.00	OTR Truck Prop	165.00	176.00	165	176	341	5.9
	Zone 41 Subtotal					20	22	42	0.7
42	Berth 57-59	1.00	OTR Truck Appr	-182.00	-193.00	-182	-193	-375	-6.6
42	Berth 57-59	1.00	OTR Truck Prop	207.00	220.00	207	220	427	7.4
	Zone 42 Subtotal					25	27	52	0.9
43	Middle Harbo	1.00	OTR Truck Appr	-105.00	-112.00	-105	-112	-217	-3.3
43	Middle Harbo	1.00	OTR Truck Prop	144.00	154.00	144	154	298	5.2
	Zone 43 Subtotal					39	42	81	1.4
44	7th St. Harb	1.00	OTR Truck Appr	-273.00	-290.00	-273	-290	-563	-9.9
44	7th St. Harb	1.00	OTR Truck Prop	262.00	279.00	262	279	541	9.4
	Zone 44 Subtotal					-11	-11	-22	-0.4
45	Outer Harbor	1.00	OTR Truck Appr	-288.00	-307.00	-288	-307	-595	-10.6
45	Outer Harbor	1.00	OTR Truck Prop	270.00	287.00	270	287	557	9.6
	Zone 45 Subtotal					-18	-20	-38	-0.7
46	Berth 21	1.00	OTR Truck Appr	0.00	0.00	0	0	0	0.0
46	Berth 21	1.00	OTR Truck Prop	82.00	88.00	82	88	170	2.9
	Zone 46 Subtotal					82	88	170	2.9

Oakland Army Base Area Redevelopment Plan EIR
Existing + Project Conditions
AM Peak Hour

Oakland Army Base Area Redevelopment Plan EIR
Existing + Project Conditions
AM Peak Hour

Zone #	Subzone	Amount	Units	Rate		Trips		Total % Of Trips Total
				In	Out	In	Out	
47	Proposed JIT	1.00	OTR Truck Prop	320.00	216.00	320	216	536 9.3
	Zone 47 Subtotal					320	216	536 9.3
48	W. Oakland Y	1.00	OTR Truck Appr	-151.00	-102.00	-151	-102	-253 -4
48	W. Oakland Y	1.00	OTR Truck Prop	162.00	109.00	162	109	271 4.7
	Zone 48 Subtotal					11	7	18 0.3
49	Approved JIT	1.00	OTR Truck Appr	-331.00	-223.00	-331	-223	-554 -9
	Zone 49 Subtotal					-331	-223	-554 -9.6
52	Marine Suppo	1.00	75 Acre MSC	52.00	77.00	52	77	129 2.2
	Zone 52 Subtotal					52	77	129 2.2
53	MSC North	1.00	15 Acre Tr Lot	21.00	31.00	21	31	52 0.9
	Zone 53 Subtotal					21	31	52 0.9
TOTAL						544	450	994 17.2

Zone #	Subzone	Amount	Units	Rate		Trips		Total % Of Trips Total
				In	Out	In	Out	
18	16-Wood Nort	1.00	1 Acre Park	0.00	0.00	0	0	0 0.0
18	16-Wood Nort	1.00	1426 KSF Offic	1364.00	186.00	1364	186	1550 26.
18	16-Wood Nort	1.00	252 Live-Work	18.00	88.00	18	88	106 1.8
18	16-Wood Nort	1.00	120 ksf Lt Ind	97.00	13.00	97	13	110 1.9
	Zone 18 Subtotal					1479	287	1766 30.6
19	16-Wood Sout	1.00	123 Live-Work	10.00	50.00	10	50	60 1.0
19	16-Wood Sout	1.00	185 ksf Lt Ind	150.00	20.00	150	20	170 2.9
	Zone 19 Subtotal					160	70	230 4.0
TOTAL						1639	357	1996 34.6

Oakland Army Base Area Redevelopment Plan EIR
Existing + Project Conditions
AM Peak Hour

Impact Analysis Report
Level Of Service

Intersection	Base Del/ LOS Veh C	V/ V/	Future Del/ LOS Veh C	Change in
# 1 W Grand / Maritime	C 34.0	0.436	F 298.1	1.464 +264.114 D/V
# 2 W Grand / Frontage Rd	C 30.3	0.338	E 79.6	1.085 +49.283 D/V
# 3 W Grand / Mandela	A 9.6	0.313	B 17.4	0.947 + 7.735 D/V
# 4 W Grand / Adeline	B 11.1	0.419	B 13.9	0.681 + 2.752 D/V
# 5 W Grand / Market	A 10.0	0.377	B 10.4	0.586 + 0.445 D/V
# 6 W Grand / San Pablo Av	B 11.4	0.342	B 12.5	0.493 + 1.067 D/V
# 7 W Grand / MLK Jr	B 13.7	0.301	B 11.7	0.388 -2.011 D/V
# 8 W Grand / Northgate	C 23.8	0.505	C 25.2	0.652 + 1.370 D/V
# 9 W Grand / Harrison	C 24.2	0.516	C 25.9	0.620 + 1.703 D/V
# 10 7th / Maritime	C 29.7	0.381	F 126.8	0.938 +97.063 D/V
# 11 7th / I-880 SB Ramp	A 5.2	0.101	A 5.3	0.205 + 0.102 D/V
# 12 7th / I-880 North Ramp	C 29.2	0.390	D 43.1	0.787 +13.914 D/V
# 13 7th / Peralta	A 8.6	0.156	A 7.9	0.168 -0.672 D/V
# 14 7th / Mandela	B 14.8	0.271	B 14.5	0.281 -0.344 D/V
# 15 7th / Union	A 9.0	0.331	A 8.6	0.342 -0.386 D/V
# 16 7th / Adeline	B 10.7	0.280	B 10.7	0.292 + 0.033 D/V
# 17 7th / Market	B 15.0	0.238	C 20.7	0.359 + 5.727 D/V
# 18 7th / Harrison	B 10.5	0.379	B 10.8	0.411 + 0.307 D/V
# 19 7th / Jackson	C 32.6	1.007	E 61.5	1.139 +28.960 D/V
# 20 6th / Jackson	B 10.4	0.426	B 10.4	0.426 + 0.000 D/V
# 21 5th / Union / I-880 Ramps	C 31.5	0.660	C 33.0	0.691 + 1.576 D/V
# 22 5th / Adeline	C 30.4	0.471	C 32.8	0.551 + 2.350 D/V
# 23 I-880 Off Ramp / Market	B 19.5	0.343	C 20.3	0.372 + 0.843 D/V

Oakland Army Base Area Redevelopment Plan EIR
Existing + Project Conditions
AM Peak Hour

Intersection

Intersection	Base Del/ LOS Veh C	V/ V/	Future Del/ LOS Veh C	Change in
# 24 5th / Broadway	C 20.9	0.499	C 21.2	0.499 + 0.236 D/V
# 25 3rd / Adeline	B 11.3	0.369	B 13.3	0.483 + 0.114 V/C
# 26 3rd / Market	B 13.9	0.000	C 15.8	0.000 + 0.000 V/C
# 27 14th / Mandela	A 8.5	0.182	A 9.4	0.293 + 0.822 D/V
# 28 12th / Brush	C 30.4	0.798	C 31.9	0.807 + 1.536 D/V
# 29 12th / Castro	B 15.5	0.173	B 15.5	0.174 + 0.001 D/V
# 30 27th / SR 24-580 Off Ramp	B 11.8	0.402	B 11.5	0.450 -0.381 D/V
# 31 27th / SR 24-580 On Ramp	A 9.5	0.353	B 10.1	0.384 + 0.624 D/V
# 32 San Pablo Av / Adeline	B 18.3	0.762	C 21.0	0.812 + 2.721 D/V
# 33 W MacArthur / Market	B 15.8	0.232	B 15.9	0.265 + 0.071 D/V
# 34 Powell / I-80 Frontage Rd	C 21.3	0.545	C 21.3	0.545 + 0.000 D/V
# 35 Powell / I-80 NB Ramps	C 25.2	0.821	C 25.5	0.827 + 0.298 D/V
# 36 Powell / Christie	C 29.9	0.476	C 29.9	0.479 -0.020 D/V
# 37 Powell / Hollis	C 22.7	0.350	C 22.6	0.353 -0.133 D/V
# 38 Powell / San Pablo Av	C 31.8	0.732	C 32.5	0.746 + 0.713 D/V
# 39 Stanford / Market	C 28.6	0.494	C 28.7	0.514 + 0.078 D/V
# 40 Stanford / MLK Jr Wy	B 12.5	0.778	B 12.5	0.778 -0.009 D/V
# 41 Ashby / 7th	C 33.7	0.721	C 34.5	0.748 + 0.848 D/V
# 42 Ashby / San Pablo Av	C 29.8	0.761	C 30.8	0.816 + 1.048 D/V
# 43 Marina Village / Constitution	C 20.6	0.536	C 20.3	0.562 -0.312 D/V
# 44 Atlantic / Webster	C 31.5	0.525	C 32.5	0.501 + 0.977 D/V
# 45 Atlantic / Constitution	C 22.3	0.410	C 21.8	0.437 -0.489 D/V
# 46 Loop Rd / GDA Spine	A 0.4	0.078	B 18.1	0.388 +17.639 D/V

Oakland Army Base Area Redevelopment Plan EIR
Existing + Project Conditions
AM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #1 W Grand / Maritime
Cycle (sec): 100 Critical Vol./Cap. (X): 1.464
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 298.1
Optimal Cycle: 180 Level Of Service: F

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Split Phase Split Phase Protected Protected
Rights: Include Include Include Include
Min. Green: 15 20 20 15 15 15 15 15 15 15 15 15
Lanes: 2 0 0 1 0 1 0 0 1 0 1 1 1 0 1 1 0

Volume Module:
Base Vol: 109 16 36 18 4 16 5 212 232 339 362 17
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: 109 16 36 18 4 16 5 212 232 339 362 17
Added Vol: 120 0 141 67 0 51 73 254 910 1003 63 130
PasserByVol: -109 -11 -36 36 0 109 116 0 -116 -339 0 339
Initial Fut: 120 5 141 121 4 176 194 466 1026 1003 425 486
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 120 5 141 121 4 176 194 466 1026 1003 425 486
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 120 5 141 121 4 176 194 466 1026 1003 425 486
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 120 5 141 121 4 176 194 466 1026 1003 425 486

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.77 0.71 0.71 0.79 0.71 0.71 0.79 0.71 0.71 0.79 0.73 0.73
Lanes: 2.00 0.03 0.97 1.00 0.02 0.98 1.00 1.00 2.00 1.00 1.00 1.00
Final Sat.: 2917 46 1307 1504 30 1320 1504 1349 2697 1504 1383 1383

Capacity Analysis Module:
Vol/Sat: 0.04 0.11 0.11 0.08 0.13 0.13 0.13 0.35 0.38 0.67 0.31 0.35
Crit Moves: ****
Green/Cycle: 0.20 0.20 0.20 0.15 0.15 0.15 0.19 0.19 0.19 0.34 0.38 0.38
Volume/Cap: 0.21 0.54 0.54 0.54 0.89 0.89 0.86 1.80 1.98 1.98 0.81 0.92
Delay/Veh: 33.5 38.1 38.1 41.8 76.2 76.2 68.2 403 484.5 479.5 32.2 43.6
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: 33.5 38.1 38.1 41.8 76.2 76.2 68.2 403 484.5 479.5 32.2 43.6
DesignQueue: 5 0 6 6 0 9 9 22 50 43 16 18

Oakland Army Base Area Redevelopment Plan EIR
Existing + Project Conditions
AM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #2 W Grand / Frontage Rd
Cycle (sec): 100 Critical Vol./Cap. (X): 1.085
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 79.6
Optimal Cycle: 180 Level Of Service: E

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Split Phase Split Phase Protected Protected
Rights: Include Include Include Include
Min. Green: 15 15 15 15 15 15 15 20 20 15 15 15
Lanes: 1 0 1 1 0 1 1 0 1 0 1 0 1 0 1 1 1

Volume Module:
Base Vol: 51 127 138 156 122 49 56 308 48 104 532 244
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: 51 127 138 156 122 49 56 308 48 104 532 244
Added Vol: 154 94 111 4 355 461 82 96 267 444 581 6
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 205 221 249 160 477 510 138 404 315 548 1113 250
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 205 221 249 160 477 510 138 404 315 548 1113 250
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 205 221 249 160 477 510 138 404 315 548 1113 250
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 205 221 249 160 477 510 138 404 315 548 1113 250

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.95 0.87 0.87 0.88 0.88 0.88 0.95 0.89 0.88 0.95 0.92 0.92
Lanes: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.12 0.88 1.00 2.00 1.00
Final Sat.: 1805 1662 1662 1672 1672 1672 1805 1895 1477 1805 3513 1756

Capacity Analysis Module:
Vol/Sat: 0.11 0.13 0.15 0.10 0.29 0.30 0.08 0.21 0.21 0.30 0.32 0.14
Crit Moves: ****
Green/Cycle: 0.15 0.15 0.15 0.27 0.27 0.27 0.15 0.20 0.20 0.26 0.31 0.31
Volume/Cap: 0.76 0.89 1.00 0.36 1.07 1.15 0.51 1.07 1.07 1.15 1.01 0.45
Delay/Veh: 52.4 58.1 83.6 29.9 86.4 115.3 40.7 93.7 93.7 125.5 60.7 27.5
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: 52.4 58.1 83.6 29.9 86.4 115.3 40.7 93.7 93.7 125.5 60.7 27.5
DesignQueue: 10 11 12 7 21 22 7 19 15 24 46 10

Oakland Army Base Area Redevelopment Plan EIR
Existing + Project Conditions
AM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #3 W Grand / Mandala

Cycle (sec): 64 Critical Vol./Cap. (X): 0.947
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 17.4
Optimal Cycle: 102 Level Of Service: B

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Permitted Permitted Permitted Permitted Permitted
Rights: Include Include Include Include Include
Min. Green: 8 20 20 8 20 20 8 10 10 8 10 10
Lanes: 0 1 0 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 65 91 83 16 141 144 113 334 71 171 558 31
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 91 83 16 141 144 113 334 71 171 558 31
Added Vol: 0 4 17 9 7 97 27 183 0 89 934 6
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 65 95 100 25 148 241 140 517 71 260 1492 37
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 65 95 100 25 148 241 140 517 71 260 1492 37
Reduc Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 65 95 100 25 148 241 140 517 71 260 1492 37
PCE Adj: 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
Final Vol.: 65 95 100 25 148 241 140 517 71 260 1492 37

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.75 0.75 0.85 0.81 0.81 0.81 0.11 0.93 0.93 0.40 0.95 0.95
Lanes: 0.41 0.59 1.00 0.14 0.86 1.00 1.00 1.76 0.24 1.00 1.95 0.05
Final Sat.: 578 845 1615 222 1317 1539 200 3117 428 758 3509 87

Capacity Analysis Module:
Vol/Sat: 0.11 0.11 0.06 0.11 0.11 0.16 0.70 0.17 0.17 0.34 0.43 0.43
Crit Moves: ****
Green/Cycle: 0.31 0.31 0.31 0.31 0.31 0.59 0.59 0.59 0.59 0.59 0.59 0.59
Volume/Cap: 0.36 0.36 0.20 0.36 0.36 0.50 1.18 0.28 0.28 0.58 0.72 0.72
Delay/Veh: 17.5 17.5 16.3 17.2 17.2 18.4 152.7 6.4 6.4 9.9 10.4 10.4
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 17.5 17.5 16.3 17.2 17.2 18.4 152.7 6.4 6.4 9.9 10.4 10.4
DesignQueue: 2 2 2 1 4 6 2 8 1 4 24 1

Oakland Army Base Area Redevelopment Plan EIR
Existing + Project Conditions
AM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #4 W Grand / Adeline

Cycle (sec): 64 Critical Vol./Cap. (X): 0.681
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 13.9
Optimal Cycle: 41 Level Of Service: B

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Permitted Permitted Permitted Permitted
Rights: Include Include Include Include
Min. Green: 8 20 20 8 20 20 8 15 15 8 15 15
Lanes: 0 1 0 0 1 0 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 193 630 34 42 147 27 52 227 42 34 329 31
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: 193 630 34 42 147 27 52 227 42 34 329 31
Added Vol: 0 0 9 0 0 0 0 0 0 0 44 1000 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 193 630 43 42 147 57 58 431 42 78 1329 31
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 193 630 43 42 147 57 58 431 42 78 1329 31
Reduc Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 193 630 43 42 147 57 58 431 42 78 1329 31
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 193 630 43 42 147 57 58 431 42 78 1329 31

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.76 0.76 0.76 0.73 0.73 0.73 0.68 0.68 0.68 0.80 0.80 0.80
Lanes: 0.45 1.45 0.10 0.34 1.20 0.46 0.33 2.43 0.24 0.16 2.78 0.06
Final Sat.: 642 2094 143 473 1655 642 424 3153 307 246 4196 98

Capacity Analysis Module:
Vol/Sat: 0.30 0.30 0.30 0.09 0.09 0.09 0.14 0.14 0.14 0.32 0.32 0.32
Crit Moves: ****
Green/Cycle: 0.44 0.44 0.44 0.44 0.44 0.46 0.46 0.46 0.46 0.46 0.46 0.46
Volume/Cap: 0.68 0.68 0.68 0.20 0.20 0.20 0.29 0.29 0.29 0.68 0.68 0.68
Delay/Veh: 15.8 15.8 15.8 11.0 11.0 11.0 10.7 10.7 10.7 14.3 14.3 14.3
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: 15.8 15.8 15.8 11.0 11.0 11.0 10.7 10.7 10.7 14.3 14.3 14.3
DesignQueue: 4 13 1 1 3 1 1 8 1 2 27 1

Oakland Army Base Area Redevelopment Plan EIR
Existing + Project Conditions
AM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #9 W Grand / Harrison
Cycle (sec): 100 Critical Vol./Cap. (X): 0.620
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 25.9
Optimal Cycle: 58 Level Of Service: C

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Permitted Permitted Protected Protected
Rights: Include Include Include Include
Min. Green: 8 21 21 8 21 21 8 20 20 8 20 20
Lanes: 0 1 2 0 2 0 1 1 0 2 0 2 1 0 2 0 1 1 0

Volume Module:
Base Vol: 63 717 244 8 1131 78 57 239 128 484 704 124
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 63 717 244 8 1131 78 57 239 128 484 704 124
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 63 717 244 8 1131 78 57 282 128 484 919 124
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 63 717 244 8 1131 78 57 282 128 484 919 124
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 63 717 244 8 1131 78 57 282 128 484 919 124
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol: 63 717 244 8 1131 78 57 282 128 484 919 124

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.66 0.66 0.75 0.84 0.84 0.84 0.92 0.87 0.87 0.92 0.93 0.93
Lanes: 0.24 2.76 2.00 0.02 2.79 0.19 2.00 2.06 0.94 2.00 1.76 0.24
Final Sat.: 305 3471 2842 32 4462 308 3502 3400 1543 3502 3124 421

Capacity Analysis Module:
Vol/Sat: 0.21 0.21 0.09 0.25 0.25 0.25 0.02 0.08 0.08 0.14 0.29 0.29
Crit Moves: ****
Green/Cycle: 0.38 0.38 0.38 0.38 0.38 0.38 0.08 0.20 0.20 0.33 0.45 0.45
Volume/Cap: 0.54 0.54 0.22 0.66 0.66 0.66 0.20 0.41 0.41 0.42 0.66 0.66
Delay/Veh: 24.3 24.3 20.9 26.3 26.3 26.3 43.4 35.2 35.2 26.6 22.8 22.8
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: 24.3 24.3 20.9 26.3 26.3 26.3 43.4 35.2 35.2 26.6 22.8 22.8
DesignQueue: 2 25 8 0 41 3 3 13 6 19 31 4

Oakland Army Base Area Redevelopment Plan EIR
Existing + Project Conditions
AM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #10 7th / Maritime
Cycle (sec): 100 Critical Vol./Cap. (X): 0.938
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 126.8
Optimal Cycle: 131 Level Of Service: F

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 15 20 20 15 20 20 15 20 20 15 20 20
Lanes: 1 0 1 1 0 1 0 1 1 0 1 0 2 1 0 1 0 2 0 1

Volume Module:
Base Vol: 83 59 43 79 97 4 38 40 63 132 191 263
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 83 59 43 79 97 4 38 40 63 132 191 263
Added Vol: -9 85 36 105 89 4 3 24 -9 39 23 456
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 74 144 79 184 186 8 41 64 54 171 214 719
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 74 144 79 184 186 8 41 64 54 171 214 719
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 74 144 79 184 186 8 41 64 54 171 214 719
PCE Adj: 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
Final Vol.: 74 144 79 184 186 8 41 64 54 171 214 719

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.73 0.69 0.69 0.73 0.73 0.73 0.73 0.73 0.65 0.65 0.73 0.73
Lanes: 1.00 1.29 0.71 1.00 1.92 0.08 1.00 2.00 1.00 1.00 2.00 1.00
Final Sat.: 1388 1698 931 1388 2646 114 1388 2476 1238 1388 2776 1242

Capacity Analysis Module:
Vol/Sat: 0.05 0.08 0.08 0.13 0.07 0.07 0.03 0.03 0.04 0.12 0.08 0.58
Crit Moves: ****
Green/Cycle: 0.15 0.20 0.20 0.15 0.20 0.20 0.15 0.30 0.30 0.23 0.38 0.38
Volume/Cap: 0.36 0.42 0.42 0.88 0.35 0.35 0.20 0.09 0.14 0.54 0.20 1.52
Delay/Veh: 39.2 35.5 35.5 74.5 34.8 34.8 37.7 25.0 25.5 36.0 20.9 277.2
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: 39.2 35.5 35.5 74.5 34.8 34.8 37.7 25.0 25.5 36.0 20.9 277.2
DesignQueue: 4 7 4 9 8 0 2 2 2 8 7 28

Oakland Army Base Area Redevelopment Plan EIR
Existing + Project Conditions
AM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #11 7th / I-880 SB Ramp

Cycle (sec): 100 Critical Vol./Cap. (X): 0.205
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 5.3
Optimal Cycle: 41 Level Of Service: A

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

Volume Module:
Base Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 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 1.00 1.00 1.00 1.00
Initial Bse: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Reduc Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
Final Sat.: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Capacity Analysis Module:
Vol/Sat: 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
Crit Moves: ****
Green/Cycle: 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
Volume/Cap: 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
Delay/Veh: 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 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 1.00 1.00 1.00 1.00
AdjDel/Veh: 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
DesignQueue: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Oakland Army Base Area Redevelopment Plan EIR
Existing + Project Conditions
AM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #12 7th / I-880 North Ramp

Cycle (sec): 100 Critical Vol./Cap. (X): 0.787
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 43.1
Optimal Cycle: 77 Level Of Service: D

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Split Phase Split Phase Protected Protected
Rights: Include Include Include Include
Min. Green: 15 15 15 15 0 0 15 15 20 0 0 20 20 0 0 20 20
Lanes: 1 0 1 1 0 1 0 0 0 2 1 0 2 0 0 0 0 1 1 0

Volume Module:
Base Vol: 250 149 150 111 0 161 20 51 0 0 321 134
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: 250 149 150 111 0 161 20 51 0 0 321 134
Added Vol: 437 424 0 110 0 133 38 10 0 0 35 49
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 687 573 150 221 0 294 58 61 0 0 356 183
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 687 573 150 221 0 294 58 61 0 0 356 183
Reduc Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 687 573 150 221 0 294 58 61 0 0 356 183
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 687 573 150 221 0 294 58 61 0 0 356 183

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.95 0.92 0.92 0.95 1.00 0.75 0.95 0.95 1.00 1.00 0.90 0.90
Lanes: 1.00 1.59 0.41 1.00 0.00 2.00 1.00 2.00 0.00 0.00 1.32 0.68
Final Sat.: 1805 2772 726 1805 0 2842 1805 3610 0 0 2263 1163

Capacity Analysis Module:
Vol/Sat: 0.38 0.21 0.21 0.12 0.00 0.10 0.03 0.02 0.00 0.00 0.16 0.16
Crit Moves: ****
Green/Cycle: 0.38 0.38 0.38 0.15 0.00 0.30 0.15 0.35 0.00 0.00 0.20 0.20
Volume/Cap: 1.00 0.54 0.54 0.82 0.00 0.34 0.21 0.05 0.00 0.00 0.79 0.79
Delay/Veh: 65.8 24.7 24.7 58.4 0.0 27.6 37.7 21.5 0.0 0.0 44.0 44.0
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: 65.8 24.7 24.7 58.4 0.0 27.6 37.7 21.5 0.0 0.0 44.0 44.0
DesignQueue: 26 21 5 11 0 12 3 2 0 0 16 8

Oakland Army Base Area Redevelopment Plan EIR
Existing + Project Conditions
AM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #15 7th / Union
Cycle (sec): 100 Critical Vol./Cap. (X): 0.342
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 8.6
Optimal Cycle: 36 Level Of Service: A

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Permitted Permitted Permitted Permitted
Rights: Include Include Include Include
Min. Green: 0 15 15 0 15 15 8 15 15 8 15 15
Lanes: 0 1 0 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 14 41 112 11 46 14 16 423 8 226 563 21
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 14 41 112 11 46 14 16 423 8 226 563 21
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 14 41 112 11 46 14 16 462 8 226 652 21
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 14 41 112 11 46 14 16 462 8 226 652 21
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 14 41 112 11 46 14 16 462 8 226 652 21
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 14 41 112 11 46 14 16 462 8 226 652 21

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.94 0.94 0.85 0.96 0.85 0.37 0.95 0.95 0.47 0.95 0.95
Lanes: 0.25 0.75 1.00 0.19 0.81 1.00 1.00 1.97 0.03 1.00 1.94 0.06
Final Sat.: 454 1330 1615 351 1469 1615 705 3538 61 895 3480 112

Capacity Analysis Module:
Vol/Sat: 0.03 0.03 0.07 0.03 0.03 0.01 0.02 0.13 0.13 0.25 0.19 0.19
Crit Moves: ****
Green/Cycle: 0.20 0.20 0.20 0.20 0.20 0.74 0.74 0.74 0.74 0.74 0.74
Volume/Cap: 0.15 0.15 0.34 0.15 0.15 0.04 0.03 0.18 0.18 0.34 0.25 0.25
Delay/Veh: 33.0 33.0 34.8 33.0 33.0 32.1 3.5 4.0 4.9 4.3 4.3
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 33.0 33.0 34.8 33.0 33.0 32.1 3.5 4.0 4.9 4.3 4.3
DesignQueue: 1 2 5 0 2 1 0 7 0 3 10 0

Oakland Army Base Area Redevelopment Plan EIR
Existing + Project Conditions
AM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #16 7th / Adeline
Cycle (sec): 100 Critical Vol./Cap. (X): 0.292
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 10.7
Optimal Cycle: 43 Level Of Service: B

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Permitted Permitted Permitted Permitted
Rights: Include Include Include Include
Min. Green: 8 22 22 8 22 22 8 15 15 8 15 15
Lanes: 1 0 1 1 0 0 1 0 1 0 1 0 2 0 1 1 0 2 0 1

Volume Module:
Base Vol: 31 180 74 22 24 25 100 685 57 47 445 110
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 31 180 74 22 24 25 100 685 57 47 445 110
Added Vol: 1 0 17 26 0 0 0 0 20 19 29 89 133
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 32 180 91 48 24 25 100 705 76 76 534 243
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 32 180 91 48 24 25 100 705 76 76 534 243
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 32 180 91 48 24 25 100 705 76 76 534 243
PCE Adj: 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
Final Vol.: 32 180 91 48 24 25 100 705 76 76 534 243

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.69 0.90 0.90 0.69 0.69 0.69 0.43 0.95 0.85 0.35 0.95 0.85
Lanes: 1.00 1.33 0.67 0.99 0.49 0.52 1.00 2.00 1.00 1.00 2.00 1.00
Final Sat.: 1307 2278 1152 1306 653 680 815 3610 1615 656 3610 1615

Capacity Analysis Module:
Vol/Sat: 0.02 0.08 0.08 0.04 0.04 0.04 0.12 0.20 0.05 0.12 0.15 0.15
Crit Moves: ****
Green/Cycle: 0.27 0.27 0.27 0.27 0.27 0.67 0.67 0.67 0.67 0.67 0.67
Volume/Cap: 0.09 0.29 0.29 0.14 0.14 0.14 0.18 0.29 0.07 0.17 0.22 0.22
Delay/Veh: 27.4 29.0 29.0 27.7 27.7 27.7 6.4 6.9 5.8 6.4 6.5
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 27.4 29.0 29.0 27.7 27.7 27.7 6.4 6.9 5.8 6.4 6.5
DesignQueue: 1 7 4 2 1 1 2 14 1 1 10 5

Oakland Army Base Area Redevelopment Plan EIR
Existing + Project Conditions
AM Peak Hour

Level of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #17 7th / Market
Cycle (sec): 100 Critical Vol./Cap. (X): 0.359
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 20.7
Optimal Cycle: 75 Level Of Service: C

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Split Phase Split Phase Split Phase Split Phase
Rights: Include Include Include Include
Min. Green: 8 22 22 8 22 22 8 22 22 8 22 22
Lanes: 1 0 1 1 0 1 0 2 1 0 1 0 2 1 0 1 0 2 1 0

Volume Module: >> Count Date: 17 Apr 2001 << AM Peak
Base Vol: 57 72 96 116 154 14 169 712 15 50 385 27
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 57 72 96 116 154 14 169 712 15 50 385 27
Added Vol: 36 0 5 0 4 3 0 0 62 1 8 211 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 93 72 101 116 158 17 169 774 16 58 596 27
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 93 72 101 116 158 17 169 774 16 58 596 27
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 93 72 101 116 158 17 169 774 16 58 596 27
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 93 72 101 116 158 17 169 774 16 58 596 27

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.95 0.87 0.87 0.95 0.90 0.90 0.36 0.91 0.91 0.29 0.90 0.90
Lanes: 1.00 1.00 1.00 1.00 2.71 0.29 1.00 2.94 0.06 1.00 2.87 0.13
Final Sat.: 1805 1646 1646 1805 4613 496 680 5067 105 542 4932 223

Capacity Analysis Module:
Vol/Sat: 0.05 0.04 0.06 0.06 0.03 0.03 0.25 0.15 0.15 0.11 0.12 0.12
Crit Moves: ****
Green/Cycle: 0.22 0.22 0.22 0.22 0.22 0.22 0.47 0.47 0.47 0.47 0.47 0.47
Volume/Cap: 0.23 0.20 0.28 0.29 0.16 0.16 0.53 0.33 0.33 0.23 0.26 0.26
Delay/Veh: 32.4 31.9 32.7 32.9 31.6 31.6 20.4 16.7 16.7 16.2 16.0 16.0
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: 32.4 31.9 32.7 32.9 31.6 31.6 20.4 16.7 16.7 16.2 16.0 16.0
DesignQueue: 4 3 4 5 7 1 5 24 0 2 18 1

Oakland Army Base Area Redevelopment Plan EIR
Existing + Project Conditions
AM Peak Hour

Level of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #18 7th / Harrison
Cycle (sec): 45 Critical Vol./Cap. (X): 0.411
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 10.8
Optimal Cycle: 45 Level Of Service: B

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Split Phase Split Phase Split Phase Split Phase
Rights: Include Include Include Include
Min. Green: 0 0 3 0 1 0 0 0 0 0 0 1 2 0 0 0 0 0 0 0
Lanes: 0 0 3 0 1 0 0 0 0 0 0 1 2 0 0 0 0 0 0 0

Volume Module: >> Count Date: 17 Apr 2001 << AM Peak
Base Vol: 0 1066 1351 0 0 0 100 370 0 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: 0 1066 1351 0 0 0 100 370 0 0 0 0
Added Vol: 0 3 170 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 0 1069 1521 0 0 0 100 370 0 0 0 0
User Adj: 1.00 1.00 0.27 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 1069 403 0 0 0 100 370 0 0 0 0
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 1069 403 0 0 0 100 370 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 0 1069 403 0 0 0 100 370 0 0 0 0

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 1.00 0.91 0.85 1.00 1.00 1.00 0.77 0.77 1.00 1.00 1.00 1.00
Lanes: 0.00 3.00 1.00 0.00 0.00 0.00 0.64 2.36 0.00 0.00 0.00 0.00
Final Sat.: 0 5187 1615 0 0 0 938 3471 0 0 0 0

Capacity Analysis Module:
Vol/Sat: 0.00 0.21 0.25 0.00 0.00 0.00 0.11 0.11 0.00 0.00 0.00 0.00
Crit Moves: ****
Green/Cycle: 0.00 0.42 0.42 0.00 0.00 0.00 0.40 0.40 0.00 0.00 0.00 0.00
Volume/Cap: 0.00 0.49 0.59 0.00 0.00 0.00 0.27 0.27 0.00 0.00 0.00 0.00
Delay/Veh: 0.0 10.2 13.8 0.0 0.0 0.0 9.4 9.4 0.0 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: 0.0 10.2 13.8 0.0 0.0 0.0 9.4 9.4 0.0 0.0 0.0 0.0
DesignQueue: 0 16 6 0 0 0 2 6 0 0 0 0

Oakland Army Base Area Redevelopment Plan EIR
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AM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #21 5th / Union / I-880 Ramps
Cycle (sec): 100 Critical Vol./Cap. (X): 0.691
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 33.0
Optimal Cycle: 72 Level Of Service: C

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Permitted	Protected	Split Phase	Split Phase
Rights:	Include	Include	Include	Include
Min. Green:	0 20 20	0 20 20	8 20 20	8 20 20
Lanes:	0 1 0 1 0 1 0 0 1 0 1 0 1 0 1 0	0 1 0 1 0 1 0 0 1 0 1 0 1 0 1 0	0 1 0 1 0 1 0 0 1 0 1 0 1 0 1 0	0 1 0 1 0 1 0 0 1 0 1 0 1 0 1 0

Volume Module:

Base Vol:	38	163	784	0	228	33	3	102	29	493	157	25
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:	38	163	784	0	228	33	3	102	29	493	157	25
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	38	163	837	0	228	33	3	102	29	509	157	25
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	38	163	837	0	228	33	3	102	29	509	157	25
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	38	163	837	0	228	33	3	102	29	509	157	25
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	38	163	837	0	228	33	3	102	29	509	157	25

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.77	0.77	0.77	0.92	0.92	0.92	0.92	0.92	0.92	0.93	0.93	0.93
Lanes:	0.19	0.81	2.00	0.00	1.75	0.25	0.04	1.53	0.43	1.00	1.73	0.27
Final Sat.:	275	1180	2910	0	3094	448	78	2657	756	1805	3049	485

Capacity Analysis Module:

Vol/Sat:	0.14	0.14	0.29	0.00	0.07	0.07	0.04	0.04	0.04	0.28	0.05	0.05
Crit Moves:	0.34	0.34	0.34	0.00	0.34	0.34	0.20	0.20	0.20	0.34	0.34	0.34
Volume/Cycle:	0.40	0.40	0.84	0.00	0.21	0.21	0.19	0.19	0.19	0.84	0.15	0.15
Delay/Veh:	25.1	25.1	35.4	0.0	23.4	23.4	33.4	33.4	33.4	40.6	23.3	23.3
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:	25.1	25.1	35.4	0.0	23.4	23.4	33.4	33.4	33.4	40.6	23.3	23.3
DesignQueue:	1	6	32	0	8	1	0	5	1	20	6	1

Intersection #22 5th / Adeline
Cycle (sec): 100 Critical Vol./Cap. (X): 0.551
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 32.8
Optimal Cycle: 80 Level Of Service: C

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Split Phase	Split Phase	Protected	Protected
Rights:	Include	Include	Include	Include
Min. Green:	8 20 20	8 20 20	8 20 20	8 20 20
Lanes:	1 0 1 1 0 1 1 0 1 0 1 0 1 0 1 0	1 0 1 1 0 1 1 0 1 0 1 0 1 0 1 0	1 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1	1 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1

Volume Module:

Base Vol:	74	43	82	73	160	175	22	598	170	131	452	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	74	43	82	73	160	175	22	598	170	131	452	30
Added Vol:	10	18	47	17	32	0	0	22	31	54	6	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	84	61	129	90	192	175	22	620	201	185	458	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	84	61	129	90	192	175	22	620	201	185	458	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	84	61	129	90	192	175	22	620	201	185	458	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	84	61	129	90	192	175	22	620	201	185	458	30

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.85	0.85	0.89	0.89	0.89	0.95	0.91	0.91	0.95	0.94	0.94
Lanes:	1.00	1.00	1.00	1.00	1.05	0.95	1.00	1.51	0.49	1.00	1.88	0.12
Final Sat.:	1805	1621	1621	1685	1763	1607	1805	2625	851	1805	3358	220

Capacity Analysis Module:

Vol/Sat:	0.05	0.04	0.08	0.05	0.11	0.11	0.01	0.24	0.24	0.10	0.14	0.14
Crit Moves:	0.20	0.20	0.20	0.20	0.20	0.20	0.14	0.33	0.33	0.15	0.34	0.34
Volume/Cycle:	0.23	0.19	0.40	0.27	0.54	0.54	0.09	0.71	0.71	0.71	0.40	0.40
Delay/Veh:	33.9	33.3	35.3	33.9	36.7	36.7	37.8	31.0	31.0	49.2	25.2	25.2
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:	33.9	33.3	35.3	33.9	36.7	36.7	37.8	31.0	31.0	49.2	25.2	25.2
DesignQueue:	4	3	6	4	9	8	1	24	8	9	17	1

Oakland Army Base Area Redevelopment Plan EIR
Existing + Project Conditions
AM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #21 5th / Union / I-880 Ramps
Cycle (sec): 100 Critical Vol./Cap. (X): 0.691
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 33.0
Optimal Cycle: 72 Level Of Service: C

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Permitted	Protected	Split Phase	Split Phase
Rights:	Include	Include	Include	Include
Min. Green:	0 20 20	0 20 20	8 20 20	8 20 20
Lanes:	0 1 0 1 0 1 0 0 1 0 1 0 1 0 1 0	0 1 0 1 0 1 0 0 1 0 1 0 1 0 1 0	0 1 0 1 0 1 0 0 1 0 1 0 1 0 1 0	0 1 0 1 0 1 0 0 1 0 1 0 1 0 1 0

Volume Module:

Base Vol:	38	163	784	0	228	33	3	102	29	493	157	25
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:	38	163	784	0	228	33	3	102	29	493	157	25
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	38	163	837	0	228	33	3	102	29	509	157	25
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	38	163	837	0	228	33	3	102	29	509	157	25
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	38	163	837	0	228	33	3	102	29	509	157	25
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	38	163	837	0	228	33	3	102	29	509	157	25

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.77	0.77	0.77	0.92	0.92	0.92	0.92	0.92	0.92	0.93	0.93	0.93
Lanes:	0.19	0.81	2.00	0.00	1.75	0.25	0.04	1.53	0.43	1.00	1.73	0.27
Final Sat.:	275	1180	2910	0	3094	448	78	2657	756	1805	3049	485

Capacity Analysis Module:

Vol/Sat:	0.14	0.14	0.29	0.00	0.07	0.07	0.04	0.04	0.04	0.28	0.05	0.05
Crit Moves:	0.34	0.34	0.34	0.00	0.34	0.34	0.20	0.20	0.20	0.34	0.34	0.34
Volume/Cycle:	0.40	0.40	0.84	0.00	0.21	0.21	0.19	0.19	0.19	0.84	0.15	0.15
Delay/Veh:	25.1	25.1	35.4	0.0	23.4	23.4	33.4	33.4	33.4	40.6	23.3	23.3
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:	25.1	25.1	35.4	0.0	23.4	23.4	33.4	33.4	33.4	40.6	23.3	23.3
DesignQueue:	1	6	32	0	8	1	0	5	1	20	6	1

Oakland Army Base Area Redevelopment Plan EIR
Existing + Project Conditions
AM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #23 I-880 Off Ramp / Market
Cycle (sec): 100 Critical Vol./Cap. (X): 0.372
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 20.3
Optimal Cycle: 64 Level Of Service: C

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Permitted Permitted
Rights: Include Include Include Include
Min. Green: 15 20 0 0 20 20 0 0 0 15 20 20
Lanes: 1 0 2 0 0 0 2 1 0 0 0 0 0 1 1 0 1

Volume Module:
Base Vol: 36 365 0 0 140 263 0 0 0 101 222 200
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: 36 365 0 0 140 263 0 0 0 101 222 200
Added Vol: 6 6 0 0 11 2 0 0 0 33 52 36
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 42 371 0 0 151 265 0 0 0 134 274 236
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 42 371 0 0 151 265 0 0 0 134 274 236
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 42 371 0 0 151 265 0 0 0 134 274 236
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol: 42 371 0 0 151 265 0 0 0 134 274 236

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.95 0.95 1.00 1.00 0.82 1.00 1.00 1.00 0.81 0.81 0.85
Lanes: 1.00 2.00 0.00 0.00 2.00 1.00 0.00 0.00 0.66 1.34 1.00
Final Sat: 1805 3610 0 0 3126 1563 0 0 1008 2061 1615

Capacity Analysis Module:
Vol/Sat: 0.02 0.10 0.00 0.00 0.05 0.17 0.00 0.00 0.13 0.13 0.15
Crit Moves: ****
Green/Cycle: 0.15 0.56 0.00 0.00 0.41 0.41 0.00 0.00 0.35 0.35 0.35
Volume/Cap: 0.16 0.18 0.00 0.00 0.12 0.42 0.00 0.00 0.38 0.38 0.42
Delay/Veh: 37.3 10.9 0.0 0.0 18.4 21.4 0.0 0.0 24.5 24.5 25.1
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 37.3 10.9 0.0 0.0 18.4 21.4 0.0 0.0 24.5 24.5 25.1
DesignQueue: 2 9 0 0 5 9 0 0 5 10 9

Oakland Army Base Area Redevelopment Plan EIR
Existing + Project Conditions
AM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #24 5th / Broadway
Cycle (sec): 75 Critical Vol./Cap. (X): 0.499
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 21.2
Optimal Cycle: 52 Level Of Service: C

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Permitted Permitted
Rights: Include Include Include Include
Min. Green: 0 15 15 8 15 15 8 20 20 0 0 0 0
Lanes: 0 0 2 0 1 1 0 2 0 0 1 1 1 0 1 0 0 0 0 0

Volume Module:
Base Vol: 0 142 233 368 348 0 688 139 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: 0 142 233 368 348 0 688 139 65 0 0 0
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 0 142 233 368 348 0 732 139 65 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 142 233 368 348 0 732 139 65 0 0 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 142 233 368 348 0 732 139 65 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
Final Vol: 0 142 233 368 348 0 732 139 65 0 0 0

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 1.00 0.95 0.85 0.95 0.95 1.00 0.81 0.81 0.85 1.00 1.00 1.00
Lanes: 0.00 2.00 1.00 1.00 2.00 0.00 2.00 1.00 1.00 0.00 0.00 0.00
Final Sat: 0 3610 1615 1805 3610 0 3069 1534 1615 0 0 0

Capacity Analysis Module:
Vol/Sat: 0.00 0.04 0.14 0.20 0.10 0.00 0.24 0.09 0.04 0.00 0.00 0.00
Crit Moves: ****
Green/Cycle: 0.00 0.22 0.22 0.31 0.52 0.00 0.36 0.36 0.36 0.00 0.00 0.00
Volume/Cap: 0.00 0.18 0.67 0.67 0.18 0.00 0.67 0.25 0.11 0.00 0.00 0.00
Delay/Veh: 0.0 24.1 31.8 25.8 9.5 0.0 21.6 17.0 16.2 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: 0.0 24.1 31.8 25.8 9.5 0.0 21.6 17.0 16.2 0.0 0.0 0.0
DesignQueue: 0 5 8 11 7 0 21 4 2 0 0 0

Oakland Army Base Area Redevelopment Plan EIR
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AM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #27 14th / Mandala
Cycle (sec): 50 Critical Vol./Cap. (X): 0.293
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 9.4
Optimal Cycle: 19 Level Of Service: A

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

Volume Module: >> Count Date: 29 Nov 2000 <<
Base Vol: 7 124 55 18 168 21 23 159 13 21 102 27
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: 7 124 55 18 168 21 23 159 13 21 102 27
Added Vol: 0 3 0 0 4 92 19 34 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 7 127 55 18 172 113 42 193 13 21 279 27
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 7 127 55 18 172 113 42 193 13 21 279 27
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 7 127 55 18 172 113 42 193 13 21 279 27
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 7 127 55 18 172 113 42 193 13 21 279 27

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.86 0.86 0.86 0.86 0.86 0.86 0.86 0.86 0.86 0.86 0.86 0.86
Lanes: 0.07 1.35 0.58 1.00 0.60 0.40 0.34 1.56 0.10 0.13 1.71 0.16
Final Sat.: 121 2194 950 1201 1079 709 528 2425 163 213 2830 274

Capacity Analysis Module:
Vol/Sat: 0.06 0.06 0.06 0.06 0.06 0.06 0.06 0.06 0.06 0.06 0.06 0.06
Crit Moves: ****
Green/Cycle: 0.54 0.54 0.54 0.54 0.54 0.54 0.54 0.54 0.54 0.54 0.54 0.54
Volume/Cap: 0.11 0.11 0.11 0.03 0.29 0.29 0.24 0.24 0.24 0.29 0.29 0.29
Delay/Veh: 5.6 5.6 5.6 5.3 6.4 6.4 12.1 12.1 12.1 12.4 12.4 12.4
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: 5.6 5.6 5.6 5.3 6.4 6.4 12.1 12.1 12.1 12.4 12.4 12.4
DesignQueue: 0 2 1 0 2 1 4 0 0 5 1 1

Oakland Army Base Area Redevelopment Plan EIR
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AM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #28 12th / Brush
Cycle (sec): 100 Critical Vol./Cap. (X): 0.807
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 31.9
Optimal Cycle: 70 Level Of Service: C

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Split Phase Include	Split Phase Include	Permitted Include	Permitted Include
Rights:	0 12 12	0 12 12	0 0 0	0 10 10
Min. Green:	0 0 2	0 0 1	0 0 0	0 0 0
Lanes:	0 0 2	0 0 1	0 0 0	0 1 0

Volume Module:
Base Vol: 0 394 75 0 2170 17 0 0 0 2 78 139 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: 0 394 75 0 2170 17 0 0 0 2 78 139 0
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 0 394 75 0 2200 17 0 0 0 2 78 139 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 394 75 0 2200 17 0 0 0 2 78 139 0
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 0 394 75 0 2200 17 0 0 0 2 78 139 0
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 0 394 75 0 2200 17 0 0 0 2 78 139 0

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 1.00 0.89 0.89 1.00 0.95 0.95 1.00 1.00 0.77 0.77 0.91 1.00
Lanes: 0.00 2.52 0.48 0.00 1.98 0.02 0.00 0.00 1.00 1.00 3.00 0.00
Final Sat.: 0 4253 810 0 3579 28 0 0 0 1454 1463 5187

Capacity Analysis Module:
Vol/Sat: 0.00 0.09 0.09 0.00 0.61 0.61 0.00 0.00 0.00 0.05 0.03 0.00
Crit Moves: ****
Green/Cycle: 0.00 0.12 0.12 0.00 0.64 0.64 0.00 0.00 0.15 0.15 0.15 0.00
Volume/Cap: 0.00 0.77 0.77 0.00 0.96 0.96 0.00 0.00 0.01 0.36 0.18 0.00
Delay/Veh: 0.0 48.7 48.7 0.0 27.8 27.8 0.0 0.0 36.2 39.2 37.2 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: 0.0 48.7 48.7 0.0 27.8 27.8 0.0 0.0 36.2 39.2 37.2 0.0
DesignQueue: 0 20 4 0 52 0 0 0 0 4 7 0

Level Of Service Computation Report
 1997 HCM Operations Method (Future Volume Alternative)

 Intersection #31 27th / SR 24-580 On Ramp
 Cycle (sec): 100 Critical Vol./Cap. (X): 0.384
 Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 10.1
 Optimal Cycle: 39 Level Of Service: B

Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Permitted Permitted Permitted Permitted
 Rights: Include Include Include Include
 Min. Green: 8 20 20 0 0 0 0 8 10 0 0 10 10
 Lanes: 0 1 1 0 0 0 0 0 1 1 2 0 0 0 3 0 1

Volume Module:
 Base Vol: 5 204 20 0 0 222 771 0 0 175 212
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 5 204 20 0 0 222 771 0 0 175 212
 Added Vol: 0 36 0 0 0 42 0 0 0 0 0
 PasserByVol: 0 0 0 0 0 264 771 0 0 175 212
 Initial Fut: 5 240 20 0 0 264 771 0 0 175 212
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 5 240 20 0 0 264 771 0 0 175 212
 Reduct Vol: 0 0 0 0 0 264 771 0 0 175 212
 Reduced Vol: 5 240 20 0 0 264 771 0 0 175 212
 PCE Adj: 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
 Final Vol: 5 240 20 0 0 264 771 0 0 175 212

Saturation Flow Module:
 Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
 Adjustment: 0.89 0.89 0.89 1.00 1.00 0.46 0.46 1.00 1.00 0.91 0.85
 Lanes: 0.06 2.72 0.22 0.00 0.00 0.00 1.02 2.98 0.00 0.00 3.00 1.00
 Final Sat: 96 4595 383 0 0 889 2597 0 0 5187 1615

Capacity Analysis Module:
 Vol/Sat: 0.05 0.05 0.05 0.00 0.00 0.30 0.30 0.00 0.00 0.03 0.13
 Crit Moves: ****
 Green/Cycle: 0.20 0.20 0.20 0.00 0.00 0.71 0.71 0.00 0.00 0.71 0.71
 Volume/Cap: 0.26 0.26 0.26 0.00 0.00 0.42 0.42 0.00 0.00 0.05 0.18
 Delay/Veh: 33.9 33.9 33.9 0.0 0.0 6.1 6.1 0.0 0.0 4.4 4.9
 User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 AdjDel/Veh: 33.9 33.9 33.9 0.0 0.0 6.1 6.1 0.0 0.0 4.4 4.9
 DesignQueue: 0 11 1 0 0 4 13 0 0 3 4

Level Of Service Computation Report
 1997 HCM Operations Method (Future Volume Alternative)

 Intersection #32 San Pablo Av / Adeline
 Cycle (sec): 120 Critical Vol./Cap. (X): 0.812
 Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 21.0
 Optimal Cycle: 75 Level Of Service: C

Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Permitted Permitted Permitted Permitted
 Rights: Include Include Include Include
 Min. Green: 0 15 15 8 15 15 8 10 10 8 15 15
 Lanes: 0 0 1 1 0 0 1 0 1 0 0 1 0 0 1 0 1 0

Volume Module:
 Base Vol: 0 208 1022 6 711 106 52 3 0 12 186 4
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 208 1022 6 711 106 52 3 0 12 186 4
 Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
 Initial Fut: 0 208 1028 6 711 106 52 21 0 42 269 4
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 208 1028 6 711 106 52 21 0 42 269 4
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 208 1028 6 711 106 52 21 0 42 269 4
 PCE Adj: 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
 Final Vol: 0 208 1028 6 711 106 52 21 0 42 269 4

Saturation Flow Module:
 Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
 Adjustment: 1.00 0.83 0.83 0.88 0.88 0.88 0.92 0.92 1.00 0.94 0.94
 Lanes: 0.00 1.00 1.00 0.01 1.73 0.26 1.00 1.00 0.00 0.27 1.71 0.02
 Final Sat: 0 1579 1579 24 2888 431 1744 1744 0 477 3055 45

Capacity Analysis Module:
 Vol/Sat: 0.00 0.13 0.65 0.25 0.25 0.25 0.03 0.01 0.00 0.09 0.09 0.09
 Crit Moves: ****
 Green/Cycle: 0.00 0.72 0.72 0.72 0.72 0.72 0.08 0.08 0.00 0.13 0.13
 Volume/Cap: 0.00 0.18 0.91 0.34 0.34 0.34 0.36 0.14 0.00 0.70 0.70
 Delay/Veh: 0.0 5.6 22.9 6.5 6.5 6.5 53.0 51.2 0.0 55.4 55.4
 User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 AdjDel/Veh: 0.0 5.6 22.9 6.5 6.5 6.5 53.0 51.2 0.0 55.4 55.4
 DesignQueue: 0 4 23 0 14 2 3 1 0 3 16 0

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Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #33 W MacArthur / Market
Cycle (sec): 100 Critical Vol./Cap. (X): 0.265
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 15.9
Optimal Cycle: 41 Level Of Service: B

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Permitted	Permitted	Permitted	Permitted
Rights:	Include	Include	Include	Include
Min. Green:	8 20 20	8 20 20	8 15 15	8 15 15
Lanes:	0 1 0 1 0 0	0 1 0 1 0 0	1 0 1 0 1 0	1 0 1 0

Volume Module:	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 Vol.:
Base Vol:	54	211	61	101	222	23	37	198	17	74	279	42		
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	54	211	61	101	222	23	37	198	17	74	279	42		
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	54	211	61	101	222	23	37	222	17	74	392	42		
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	54	211	61	101	222	23	37	222	17	74	392	42		
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	54	211	61	101	222	23	37	222	17	74	392	42		
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	54	211	61	101	222	23	37	222	17	74	392	42		

Saturation Flow Module:	Sat/Lane:	Adjustment:	Lanes:	Final Sat.:
Sat/Lane:	1900	1900	1900	1900
Adjustment:	0.78	0.78	0.72	0.72
Lanes:	0.33	1.30	0.37	0.58
Final Sat.:	491	1917	554	795

Capacity Analysis Module:	Vol/Sat:	Crit Moves:	Green/Cycle:	Volume/Cap:	Delay/Veh:	User DelAdj:	AdjDel/Veh:	DesignQueue:
Vol/Sat:	0.11	0.11	0.13	0.13	0.06	0.06	0.06	0.07
Crit Moves:	0.48	0.48	0.48	0.48	0.46	0.46	0.46	0.46
Green/Cycle:	0.23	0.23	0.27	0.27	0.14	0.14	0.15	0.27
Volume/Cap:	15.3	15.3	15.6	15.6	15.6	15.6	15.7	16.7
Delay/Veh:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
User DelAdj:	15.3	15.3	15.6	15.6	15.6	15.6	15.7	16.7
AdjDel/Veh:	2	6	2	3	7	1	1	2
DesignQueue:	0.11	0.11	0.13	0.13	0.06	0.06	0.07	0.12

Capacity Analysis Module:	Vol/Sat:	Crit Moves:	Green/Cycle:	Volume/Cap:	Delay/Veh:	User DelAdj:	AdjDel/Veh:	DesignQueue:
Vol/Sat:	0.00	0.00	0.00	0.00	0.20	0.00	0.18	0.05
Crit Moves:	0.00	0.00	0.00	0.00	0.36	0.00	0.36	0.09
Green/Cycle:	0.00	0.00	0.00	0.00	0.54	0.00	0.50	0.54
Volume/Cap:	0.0	0.0	0.0	0.0	26.0	0.0	25.7	47.5
Delay/Veh:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
User DelAdj:	0.0	0.0	0.0	0.0	26.0	0.0	25.7	47.5
AdjDel/Veh:	0	0	0	0	26	0	11	4
DesignQueue:	0.00	0.00	0.00	0.00	0.20	0.00	0.18	0.05

Saturation Flow Module:	Sat/Lane:	Adjustment:	Lanes:	Final Sat.:
Sat/Lane:	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.85
Lanes:	0.00	0.00	0.00	2.00
Final Sat.:	0	0	0	3502

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)
Intersection #34 Powell / I-80 Frontage Rd
Cycle (sec): 100 Critical Vol./Cap. (X): 0.545
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 21.3
Optimal Cycle: 47 Level Of Service: C

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Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #35 Powell / I-80 NB Ramps
Cycle (sec): 100 Critical Vol./Cap. (X): 0.827
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 25.5
Optimal Cycle: 75 Level Of Service: C

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 8 10 10 0 0 0 8 10 0 0 10 10
Lanes: 1 0 1 0 0 0 0 1 0 3 0 0 0 0 3 0 1

Volume Module:
Base Vol: 553 7 918 0 0 83 782 0 0 735 365
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 553 7 918 0 0 83 782 0 0 735 365
Added Vol: 9 0 9 0 0 0 0 0 0 43 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 562 7 927 0 0 83 782 0 0 778 365
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 562 7 927 0 0 83 782 0 0 778 365
Reduc Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 562 7 927 0 0 83 782 0 0 778 365
PCE Adj: 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
Final Vol.: 562 7 927 0 0 83 782 0 0 778 365

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.82 0.82 0.82 1.00 1.00 0.95 0.91 1.00 1.00 0.91 0.85
Lanes: 1.37 0.01 1.62 0.00 0.00 1.00 3.00 0.00 0.00 3.00 1.00
Final Sat.: 2147 15 2527 0 0 1805 5187 0 0 5187 1615

Capacity Analysis Module:
Vol/Sat: 0.26 0.48 0.37 0.00 0.00 0.05 0.15 0.00 0.00 0.15 0.23
Crit Moves: ****
Green/Cycle: 0.56 0.56 0.56 0.00 0.00 0.08 0.35 0.00 0.00 0.27 0.27
Volume/Cap: 0.46 0.85 0.65 0.00 0.00 0.57 0.44 0.00 0.00 0.57 0.85
Delay/Veh: 12.9 22.5 15.6 0.0 0.0 49.9 25.4 0.0 0.0 32.3 49.9
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 12.9 22.5 15.6 0.0 0.0 49.9 25.4 0.0 0.0 32.3 49.9
DesignQueue: 14 0 24 0 0 4 30 0 0 33 16

Oakland Army Base Area Redevelopment Plan EIR
Existing + Project Conditions
AM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #36 Powell / Christie
Cycle (sec): 100 Critical Vol./Cap. (X): 0.479
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 29.9
Optimal Cycle: 69 Level Of Service: C

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 8 10 10 8 24 24 8 15 15 8 10 10
Lanes: 1 1 0 0 1 0 1 0 0 2 2 0 1 1 1 1 0 2 1 0

Volume Module:
Base Vol: 287 30 79 72 40 272 335 795 385 71 541 80
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 287 30 79 72 40 272 335 795 385 71 541 80
Added Vol: 0 0 0 0 0 0 0 0 9 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 287 30 79 72 40 272 335 804 385 71 584 80
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 287 30 79 72 40 272 335 804 385 71 584 80
Reduc Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 287 30 79 72 40 272 335 804 385 71 584 80
PCE Adj: 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
Final Vol.: 287 30 79 72 40 272 335 804 385 71 584 80

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.96 0.96 0.85 0.97 0.97 0.75 0.92 0.90 0.90 0.95 0.89 0.89
Lanes: 1.81 0.19 1.00 0.64 0.36 2.00 2.00 2.00 1.00 1.00 2.64 0.36
Final Sat.: 3292 344 1615 1184 658 2842 3502 3433 1717 1805 4480 614

Capacity Analysis Module:
Vol/Sat: 0.09 0.09 0.05 0.06 0.06 0.10 0.10 0.23 0.22 0.04 0.13 0.13
Crit Moves: ****
Green/Cycle: 0.15 0.15 0.15 0.24 0.24 0.24 0.21 0.41 0.41 0.08 0.28 0.28
Volume/Cap: 0.57 0.57 0.32 0.25 0.25 0.40 0.46 0.57 0.55 0.49 0.46 0.46
Delay/Veh: 40.9 40.9 38.6 31.1 31.1 32.3 35.3 23.3 22.9 46.7 29.9 29.9
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: 40.9 40.9 38.6 31.1 31.1 32.3 35.3 23.3 22.9 46.7 29.9 29.9
DesignQueue: 14 1 4 3 2 12 15 28 13 4 24 3

Oakland Army Base Area Redevelopment Plan EIR
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AM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #37 Powell / Hollis
Cycle (sec): 100 Critical Vol./Cap. (X): 0.353
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 22.6
Optimal Cycle: 42 Level Of Service: C

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Permitted Permitted Protected Protected
Rights: Include Include Include Include
Min. Green: 8 15 15 8 15 15 8 10 10 8 10 10
Lanes: 1 0 0 1 0 0 1 0 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 141 126 24 22 140 55 167 482 186 65 394 31
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: 141 126 24 22 140 55 167 482 186 65 394 31
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 141 126 24 22 140 55 167 491 186 65 437 31
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 141 126 24 22 140 55 167 491 186 65 437 31
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 141 126 24 22 140 55 167 491 186 65 437 31
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol: 141 126 24 22 140 55 167 491 186 65 437 31

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.54 0.98 0.98 0.95 0.95 0.85 0.95 0.91 0.91 0.95 0.94 0.94
Lanes: 1.00 0.84 0.16 0.14 0.86 1.00 1.00 1.45 0.55 1.00 1.87 0.13
Final Sat: 1018 1558 297 246 1563 1615 1805 2511 951 1805 3337 237

Capacity Analysis Module:
Vol/Sat: 0.14 0.08 0.08 0.09 0.09 0.03 0.09 0.20 0.20 0.04 0.13 0.13
Crit Moves: ****
Green/Cycle: 0.25 0.25 0.25 0.25 0.25 0.25 0.27 0.55 0.55 0.10 0.38 0.38
Volume/Cap: 0.55 0.32 0.32 0.35 0.35 0.13 0.34 0.35 0.35 0.35 0.34 0.34
Delay/Veh: 34.7 30.7 30.7 31.0 31.0 29.0 29.6 12.5 12.5 43.0 21.9 21.9
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: 34.7 30.7 30.7 31.0 31.0 29.0 29.6 12.5 12.5 43.0 21.9 21.9
DesignQueue: 6 5 1 1 6 2 7 13 5 3 15 1

Oakland Army Base Area Redevelopment Plan EIR
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AM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #38 Powell / San Pablo Av
Cycle (sec): 100 Critical Vol./Cap. (X): 0.746
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 32.5
Optimal Cycle: 66 Level Of Service: C

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 8 15 15 8 15 15 8 15 15 8 15 15
Lanes: 1 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 190 871 63 61 1077 39 61 177 157 153 670 29
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: 190 871 63 61 1077 39 61 177 157 153 670 29
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 190 871 63 61 1077 39 61 186 157 153 713 29
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 190 871 63 61 1077 39 61 186 157 153 713 29
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 190 871 63 61 1077 39 61 186 157 153 713 29
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol: 190 871 63 61 1077 39 61 186 157 153 713 29

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.95 0.94 0.94 0.95 0.95 0.95 0.95 0.88 0.88 0.95 0.94 0.94
Lanes: 1.00 1.87 0.13 1.00 1.93 0.07 1.00 1.08 0.92 1.00 1.92 0.08
Final Sat: 1805 3333 241 1805 3466 126 1805 1823 1538 1805 3448 140

Capacity Analysis Module:
Vol/Sat: 0.11 0.26 0.26 0.03 0.31 0.31 0.03 0.10 0.10 0.08 0.21 0.21
Crit Moves: ****
Green/Cycle: 0.14 0.45 0.45 0.08 0.40 0.40 0.08 0.15 0.15 0.20 0.27 0.27
Volume/Cap: 0.78 0.58 0.58 0.42 0.78 0.78 0.42 0.68 0.68 0.43 0.78 0.78
Delay/Veh: 56.5 20.7 20.7 45.8 29.0 29.0 45.8 44.0 44.0 36.2 38.1 38.1
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: 56.5 20.7 20.7 45.8 29.0 29.0 45.8 44.0 44.0 36.2 38.1 38.1
DesignQueue: 9 28 2 3 39 1 3 9 8 7 31 1

Oakland Army Base Area Redevelopment Plan EIR
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AM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #39 Stanford / Market
 Cycle (sec): 100 Critical Vol./Cap. (X): 0.514
 Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 28.7
 Optimal Cycle: 58 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	8	15	15	8	15	15	8	15	15	8	15	15
Lanes:	1	0	1	0	1	1	0	1	1	0	1	1

Volume Module:

Base Vol:	159	385	13	46	751	13	51	247	2	64	366	16
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:	159	385	13	46	751	13	51	247	2	64	366	16
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	159	385	13	46	751	13	51	249	2	64	377	16
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	159	385	13	46	751	13	51	249	2	64	377	16
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	159	385	13	46	751	13	51	249	2	64	377	16
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	159	385	13	46	751	13	51	249	2	64	377	16

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.94	0.94	0.95	0.95	0.95	0.95	0.95	0.95	0.94	0.94
Lanes:	1.00	1.93	0.07	1.00	1.89	0.11	1.00	1.98	0.02	1.00	1.92	0.08
Final Sat.:	1805	3475	117	1805	3375	202	1805	3578	29	1805	3442	146

Capacity Analysis Module:

Vol/Sat:	0.09	0.11	0.11	0.03	0.22	0.22	0.03	0.07	0.07	0.04	0.11	0.11
Crit Moves:	****											
Green/Cycle:	0.17	0.39	0.29	0.21	0.42	0.42	0.08	0.19	0.19	0.10	0.21	0.21
Volume/Cap:	0.53	0.29	0.29	0.12	0.53	0.53	0.40	0.37	0.37	0.35	0.53	0.53
Delay/Veh:	39.7	21.3	21.3	32.5	21.7	21.7	45.6	35.8	35.8	43.1	35.9	35.9
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:	39.7	21.3	21.3	32.5	21.7	21.7	45.6	35.8	35.8	43.1	35.9	35.9
DesignQueue:	8	14	0	2	25	2	3	11	0	3	17	1

Capacity Analysis Module:

Vol/Sat:	0.57	0.57	0.00	0.00	0.32	0.13	0.07	0.00	0.16	0.00	0.00	0.00
Crit Moves:	****											
Green/Cycle:	0.73	0.73	0.00	0.00	0.73	0.73	0.21	0.00	0.21	0.00	0.00	0.00
Volume/Cap:	0.78	0.78	0.00	0.00	0.43	0.18	0.33	0.00	0.78	0.00	0.00	0.00
Delay/Veh:	10.0	10.0	0.0	0.0	5.4	4.3	33.9	0.0	48.2	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:	10.0	10.0	0.0	0.0	5.4	4.3	33.9	0.0	48.2	0.0	0.0	0.0
DesignQueue:	4	28	0	0	19	3	11	0	12	0	0	0

Oakland Army Base Area Redevelopment Plan EIR
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Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #40 Stanford / MLK Jr Wy
 Cycle (sec): 100 Critical Vol./Cap. (X): 0.778
 Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 12.5
 Optimal Cycle: 54 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	8	10	10	0	15	15	20	0	20	0	0	0
Lanes:	0	1	2	0	0	2	0	1	2	0	0	0

Volume Module:

Base Vol:	243	1696	0	0	1141	207	242	0	263	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:	243	1696	0	0	1141	207	242	0	263	0	0	0
Added Vol:	0	0	0	0	0	11	2	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	243	1696	0	0	1141	218	244	0	263	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	243	1696	0	0	1141	218	244	0	263	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	243	1696	0	0	1141	218	244	0	263	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
Final Vol.:	243	1696	0	0	1141	218	244	0	263	0	0	0

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.60	0.60	1.00	1.00	0.95	0.85	0.92	1.00	0.85	1.00	1.00	1.00
Lanes:	0.38	2.62	0.00	0.00	2.00	1.00	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	428	2985	0	0	3610	1615	3502	0	1615	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.57	0.57	0.00	0.00	0.32	0.13	0.07	0.00	0.16	0.00	0.00	0.00
Crit Moves:	****											
Green/Cycle:	0.73	0.73	0.00	0.00	0.73	0.73	0.21	0.00	0.21	0.00	0.00	0.00
Volume/Cap:	0.78	0.78	0.00	0.00	0.43	0.18	0.33	0.00	0.78	0.00	0.00	0.00
Delay/Veh:	10.0	10.0	0.0	0.0	5.4	4.3	33.9	0.0	48.2	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:	10.0	10.0	0.0	0.0	5.4	4.3	33.9	0.0	48.2	0.0	0.0	0.0
DesignQueue:	4	28	0	0	19	3	11	0	12	0	0	0

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Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #41 Ashby / 7th
Cycle (sec): 100 Critical Vol./Cap. (X): 0.748
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 34.5
Optimal Cycle: 67 Level Of Service: C

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Split Phase Split Phase Protected Protected
Rights: Include Include Include Include
Min. Green: 8 15 15 8 15 15 8 12 12 8 12 12
Lanes: 0 1 0 1 0 0 1 0 1 0 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 48 149 51 55 267 139 458 796 282 80 584 41
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: 48 149 51 55 267 139 458 796 282 80 584 41
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 48 149 51 55 267 139 458 813 282 80 670 41
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 48 149 51 55 267 139 458 813 282 80 670 41
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 48 149 51 55 267 139 458 813 282 80 670 41
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 48 149 51 55 267 139 458 813 282 80 670 41

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.91 0.91 0.91 0.90 0.90 0.90 0.95 0.91 0.91 0.95 0.94 0.94
Lanes: 0.39 1.20 0.41 0.24 1.16 0.60 1.00 1.48 0.52 1.00 1.88 0.12
Final Sat.: 670 2081 712 409 1985 1033 1805 2576 893 1805 3371 206

Capacity Analysis Module:
Vol/Sat: 0.07 0.07 0.07 0.13 0.13 0.13 0.25 0.32 0.32 0.04 0.20 0.20
Crit Moves: ****
Green/Cycle: 0.15 0.15 0.15 0.17 0.17 0.17 0.32 0.48 0.48 0.08 0.25 0.25
Volume/Cap: 0.48 0.48 0.48 0.80 0.80 0.80 0.65 0.65 0.65 0.55 0.80 0.80
Delay/Veh: 39.6 39.6 39.6 48.2 48.2 48.2 39.5 20.5 20.5 48.9 40.8 40.8
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: 39.6 39.6 39.6 48.2 48.2 48.2 39.5 20.5 20.5 48.9 40.8 40.8
DesignQueue: 2 2 2 3 3 3 7 19 25 9 4 29 2

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Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #42 Ashby / San Pablo Av
Cycle (sec): 100 Critical Vol./Cap. (X): 0.816
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 30.8
Optimal Cycle: 72 Level Of Service: C

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 8 15 15 8 15 15 8 12 12 8 12 12
Lanes: 1 0 1 1 0 1 0 1 1 0 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 137 717 37 137 936 134 125 648 185 44 689 91
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: 137 717 37 137 936 134 125 648 185 44 689 91
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 137 717 37 137 936 177 134 657 185 44 732 91
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 137 717 37 137 936 177 134 657 185 44 732 91
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 137 717 37 137 936 177 134 657 185 44 732 91
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 137 717 37 137 936 177 134 657 185 44 732 91

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.95 0.94 0.94 0.95 0.93 0.93 0.20 0.92 0.92 0.78 0.78 0.78
Lanes: 1.00 1.90 0.10 1.00 1.68 0.32 1.00 1.56 0.44 0.10 1.69 0.21
Final Sat.: 1805 3409 176 1805 2963 560 382 2724 767 151 2507 312

Capacity Analysis Module:
Vol/Sat: 0.08 0.21 0.21 0.08 0.32 0.32 0.35 0.24 0.24 0.29 0.29 0.29
Crit Moves: ****
Green/Cycle: 0.09 0.40 0.40 0.08 0.39 0.39 0.43 0.43 0.43 0.43 0.43 0.43
Volume/Cap: 0.82 0.53 0.53 0.95 0.82 0.82 0.82 0.56 0.56 0.68 0.68 0.68
Delay/Veh: 70.2 23.2 23.2 105.1 31.4 31.4 51.1 21.9 21.9 24.4 24.4 24.4
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: 70.2 23.2 23.2 105.1 31.4 31.4 51.1 21.9 21.9 24.4 24.4 24.4
DesignQueue: 7 25 1 7 35 7 4 22 6 1 25 3

Oakland Army Base Area Redevelopment Plan EIR
Existing + Project Conditions
AM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #43 Marina Village / Constitution
Cycle (sec): 100 Critical Vol./Cap. (X): 0.562
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 20.3
Optimal Cycle: 38 Level Of Service: C

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Split Phase Split Phase
Rights: Include Include Include Include
Min. Green: 0 10 10 8 10 10 0 0 0 0 8 10 10
Lanes: 0 0 1 1 0 2 0 1 1 0 0 0 0 1 0 0 0 2

Volume Module: >> Count Date: 17 Oct 2000 <<
Base Vol: 0 957 69 344 391 0 0 0 0 60 0 290
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 957 69 344 391 0 0 0 0 60 0 290
Added Vol: 0 86 0 17 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 0 1043 69 344 408 0 0 0 0 60 0 290
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 1043 69 344 408 0 0 0 0 60 0 290
Reduc Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 1043 69 344 408 0 0 0 0 60 0 290
PCE Adj: 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
Final Vol.: 0 1043 69 344 408 0 0 0 0 60 0 290

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 1.00 0.94 0.94 0.92 0.95 0.95 1.00 1.00 1.00 1.00 0.75
Lanes: 0.00 1.88 0.12 2.00 2.00 0.00 0.00 0.00 0.00 1.00 0.00 2.00
Final Sat.: 0 3356 222 3502 3610 0 0 0 0 1805 0 2842

Capacity Analysis Module:
Vol/Sat: 0.00 0.31 0.31 0.10 0.11 0.00 0.00 0.00 0.00 0.03 0.00 0.10
Crit Moves: ****
Green/Cycle: 0.00 0.55 0.55 0.17 0.73 0.00 0.00 0.00 0.00 0.18 0.00 0.18
Volume/Cap: 0.00 0.56 0.56 0.56 0.16 0.00 0.00 0.00 0.00 0.18 0.00 0.56
Delay/Veh: 0.0 14.8 14.8 38.9 4.2 0.0 0.0 0.0 0.0 34.9 0.0 38.7
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 0.0 14.8 14.8 38.9 4.2 0.0 0.0 0.0 0.0 34.9 0.0 38.7
DesignQueue: 0 28 2 16 6 0 0 0 0 3 0 13

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Oakland Army Base Area Redevelopment Plan EIR
Existing + Project Conditions
AM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #44 Atlantic / Webster
Cycle (sec): 120 Critical Vol./Cap. (X): 0.501
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 32.5
Optimal Cycle: 80 Level Of Service: C

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Split Phase Split Phase
Rights: Include Include Include Include
Min. Green: 8 20 20 8 20 20 8 20 20 8 20 20
Lanes: 1 0 1 1 0 1 0 2 0 1 1 1 0 1 1 0 1 0

Volume Module: >> Count Date: 17 Oct 2000 <<
Base Vol: 94 1045 59 44 472 515 443 93 41 40 142 27
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: 94 1045 59 44 472 515 443 93 41 40 142 27
Added Vol: 0 60 0 0 0 0 7 26 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 94 1105 59 44 482 522 469 93 41 40 142 27
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 94 1105 59 44 482 522 469 93 41 40 142 27
Reduc Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 94 1105 59 44 482 522 469 93 41 40 142 27
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 94 1105 59 44 482 522 469 93 41 40 142 27

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.95 0.94 0.94 0.90 0.95 0.95 0.85 0.91 0.91 0.85 0.95 0.93
Lanes: 1.00 1.90 0.10 1.00 2.00 1.00 2.00 1.00 1.00 1.00 1.68 0.32
Final Sat.: 1805 3400 182 1805 3610 1615 3466 1733 1615 1805 2960 563

Capacity Analysis Module:
Vol/Sat: 0.05 0.33 0.33 0.02 0.13 0.32 0.14 0.05 0.03 0.02 0.05 0.05
Crit Moves: ****
Green/Cycle: 0.07 0.47 0.47 0.07 0.47 0.47 0.20 0.20 0.20 0.17 0.17 0.17
Volume/Cap: 0.78 0.69 0.69 0.37 0.28 0.69 0.69 0.27 0.13 0.13 0.29 0.29
Delay/Veh: 82.5 26.1 26.1 55.5 19.5 27.5 47.4 41.1 40.0 42.8 44.0 44.0
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: 82.5 26.1 26.1 55.5 19.5 27.5 47.4 41.1 40.0 42.8 44.0 44.0
DesignQueue: 6 42 2 3 18 20 26 5 2 8 2

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Oakland Army Base Area Redevelopment Plan EIR
Existing + Project Conditions
AM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #45 Atlantic / Constitution
Cycle (sec): 100 Critical Vol./Cap. (X): 0.437
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 21.8
Optimal Cycle: 57 Level Of Service: C

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

Control:	Protected				Permitted				
	Include	Include	Include	Include	Include	Include	Include	Include	
Rights:	8	20	20	8	20	20	8	20	20
Min. Green:	1	0	2	0	1	1	0	1	0
Lanes:	1	0	2	0	1	1	0	1	0

Volume Module:

Base Vol:	96	769	73	179	258	48	76	113	23	30	128	180
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:	96	769	73	179	258	48	76	113	23	30	128	180
Added Vol:	0	86	0	0	17	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	96	855	73	179	275	48	76	113	23	30	128	180
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	96	855	73	179	275	48	76	113	23	30	128	180
Reduc Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	96	855	73	179	275	48	76	113	23	30	128	180
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	96	855	73	179	275	48	76	113	23	30	128	180

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.46	0.93	0.93	0.66	0.87	0.87	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	2.00	2.00	1.00	1.00	1.66	0.34	1.00	1.00	1.00
Final Sat.:	1805	3610	1615	3502	3610	1615	876	2924	595	1250	1646	1646

Capacity Analysis Module:

Vol/Sat:	0.05	0.24	0.05	0.05	0.08	0.03	0.09	0.04	0.04	0.02	0.08	0.11
Crit Moves:	0.19	0.54	0.54	0.12	0.47	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Green/Cycle:	0.28	0.44	0.08	0.44	0.16	0.06	0.35	0.15	0.15	0.10	0.31	0.44
Volume/Cap:	35.2	13.9	11.0	41.8	15.2	14.4	31.7	29.3	29.3	28.9	30.6	32.0
Delay/Veh:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
User DelAdj:	35.2	13.9	11.0	41.8	15.2	14.4	31.7	29.3	29.3	28.9	30.6	32.0
AdjDel/Veh:	4	23	2	9	8	1	3	5	1	1	5	8
DesignQueue:	4	23	2	9	8	1	3	5	1	1	5	8

Oakland Army Base Area Redevelopment Plan EIR
Existing + Project Conditions
AM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #46 Loop Rd / GDA Spine
Cycle (sec): 100 Critical Vol./Cap. (X): 0.388
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 18.1
Optimal Cycle: 44 Level Of Service: B

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

Control:	Protected				Permitted				
	Include	Include	Include	Include	Include	Include	Include	Include	
Rights:	10	15	0	0	15	0	10	0	10
Min. Green:	1	0	2	0	0	1	1	0	1
Lanes:	1	0	2	0	0	1	1	0	1

Volume Module:

Base Vol:	0	259	0	0	256	0	0	0	0	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:	0	259	0	0	256	0	0	0	0	0	0	0
Added Vol:	379	69	0	0	66	0	0	0	0	87	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	379	328	0	0	322	0	0	0	0	87	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	379	328	0	0	322	0	0	0	0	87	0	0
Reduc Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	379	328	0	0	322	0	0	0	0	87	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
Final Vol.:	379	328	0	0	322	0	0	0	0	87	0	0

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	0.85	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.00	0.00	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1805	3610	0	0	3610	0	3610	0	1900	0	1615	0

Capacity Analysis Module:

Vol/Sat:	0.21	0.09	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.05	0.00	0.00
Crit Moves:	0.54	0.77	0.00	0.00	0.23	0.00	0.00	0.00	0.00	0.14	0.00	0.00
Green/Cycle:	0.39	0.12	0.00	0.00	0.39	0.00	0.00	0.00	0.00	0.39	0.00	0.00
Volume/Cap:	13.6	2.9	0.0	0.0	32.9	0.0	0.0	0.0	0.0	40.3	0.0	0.0
Delay/Veh:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
User DelAdj:	13.6	2.9	0.0	0.0	32.9	0.0	0.0	0.0	0.0	40.3	0.0	0.0
AdjDel/Veh:	10	4	0	0	14	0	0	0	0	4	0	0
DesignQueue:	10	4	0	0	14	0	0	0	0	4	0	0

Oakland Army Base Area Redevelopment Plan EIR
 Existing + Project Conditions
 PM Peak Hour

Trip Generation Report
 Forecast for GDA Ex+Proj PM

Zone #	Subzone	Amount	Units	Rate		Trips In	Trips Out	Trips Total	Total % Of Trips Total
				In	Out				
1	Berth 55-56	-305.00	Emp. Approved	0.00	0.00	0	0	0	0.0
1	Berth 55-56	388.00	Emp. Proposed	0.00	0.00	0	0	0	0.0
2	Berth 57-59	-473.00	Emp. Proposed	0.00	0.00	0	0	0	0.0
2	Berth 57-59	473.00	Emp. Proposed	0.00	0.00	0	0	0	0.0
3	Middle Harbo	-216.00	Emp. Proposed	0.00	0.00	0	0	0	0.0
3	Middle Harbo	331.00	Emp. Proposed	0.00	0.00	0	0	0	0.0
4	7th St. Harb	-560.00	Emp. Approved	0.00	0.00	0	0	0	0.0
4	7th St. Harb	601.00	Emp. Proposed	0.00	0.00	0	0	0	0.0
5	Outer Harbor	-593.00	Emp. Approved	0.00	0.00	0	0	0	0.0
5	Outer Harbor	618.00	Emp. Proposed	0.00	0.00	0	0	0	0.0
6	Berth 21	0.00	Emp. Approved	0.00	0.00	0	0	0	0.0
6	Berth 21	189.00	Emp. Proposed	0.00	0.00	0	0	0	0.0
7	Proposed JIT	188.00	Emp. Proposed	0.00	0.00	0	0	0	0.0
8	W. Oakland Y	-146.00	Emp. Approved	0.00	0.00	0	0	0	0.0
8	W. Oakland Y	146.00	Emp. Proposed	0.00	0.00	0	0	0	0.0
9	Approved JIT	-208.00	Emp. Approved	0.00	0.00	0	0	0	0.0
11	Subaru Site	1.00	300KSF W-house	40.00	128.00	40	128	168	3.1
	Zone 11 Subtotal					40	128	168	3.1
12	Baldwin Yard	1.00	15 Acre Tr Lot	21.00	23.00	21	23	44	0.8
	Zone 12 Subtotal					21	23	44	0.8
13	Western Area	1.00	29 Acre Park	8.00	11.00	8	11	19	0.3
13	Western Area	1.00	600 KSF Office	128.00	624.00	128	624	752	13.7
	Zone 13 Subtotal					136	635	771	14.1
14	Central Area	1.00	577 KSF Office	123.00	603.00	123	603	726	13.3
14	Central Area	1.00	1995 Employees	0.00	0.00	0	0	0	0.0
	Zone 14 Subtotal					123	603	726	13.3
15	Central Area	1.00	50 KSF JATC	6.00	43.00	6	43	49	0.9
15	Central Area	1.00	444 KSF Lt Ind	57.00	416.00	57	416	473	8.6
	Zone 15 Subtotal					63	459	522	9.5
16	Eastern Area	1.00	200 KSF Office	45.00	221.00	45	221	266	4.9
	Zone 16 Subtotal					45	221	266	4.9
17	Eastern Area	1.00	176 KSF Office	40.00	195.00	40	195	235	4.3
	Zone 17 Subtotal					40	195	235	4.3
18	16-Wood Nort	1.00	1 Acre Park	0.00	0.00	0	0	0	0.0

Zone #	Subzone	Amount	Units	Rate In	Rate Out	Trips In	Trips Out	Trips Total	Total % Of Trips Total
	TOTAL					468	2264	2732	49.9

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Oakland Army Base Area Redevelopment Plan EIR
Existing + Project Conditions
PM Peak Hour

Trip Generation Report
Forecast for Port Ex+Proj PM

Zone #	Subzone	Amount	Units	Rate		Trips		Total % Of Trips	
				In	Out	In	Out		
1	Berth 55-56	-305.00	Emp. Approved	0.07	0.30	-21	-92	-113	-2.1
1	Berth 55-56	388.00	Emp. Proposed	0.07	0.30	27	116	143	2.6
	Zone 1 Subtotal					6	24	30	0.5
2	Berth 57-59	-373.00	Emp. Approved	0.07	0.30	-26	-112	-138	-2.5
2	Berth 57-59	473.00	Emp. Proposed	0.07	0.30	33	142	175	3.2
	Zone 2 Subtotal					7	30	37	0.7
3	Middle Harbo	-216.00	Emp. Approved	0.07	0.30	-15	-65	-80	-1.5
3	Middle Harbo	331.00	Emp. Proposed	0.07	0.30	23	99	122	2.2
	Zone 3 Subtotal					8	34	42	0.8
4	7th St. Harb	-560.00	Emp. Approved	0.07	0.30	-39	-168	-207	-3.8
4	7th St. Harb	601.00	Emp. Proposed	0.07	0.30	42	180	222	4.1
	Zone 4 Subtotal					3	12	15	0.3
5	Outer Harbor	-593.00	Emp. Approved	0.07	0.30	-42	-178	-220	-4.0
5	Outer Harbor	618.00	Emp. Proposed	0.07	0.30	43	185	228	4.2
	Zone 5 Subtotal					1	7	8	0.1
6	Berth 21	0.00	Emp. Approved	0.07	0.30	0	0	0	0.0
6	Berth 21	189.00	Emp. Proposed	0.07	0.30	13	57	70	1.3
	Zone 6 Subtotal					13	57	70	1.3
7	Proposed JIT	188.00	Emp. Proposed	0.07	0.29	13	55	68	1.2
	Zone 7 Subtotal					13	55	68	1.2
8	W. Oakland Y	-146.00	Emp. Approved	0.07	0.29	-10	-42	-52	-0.9
8	W. Oakland Y	146.00	Emp. Proposed	0.07	0.29	10	42	52	0.9
9	Approved JIT	-208.00	Emp. Approved	0.07	0.29	-15	-60	-75	-1.4
	Zone 9 Subtotal					-15	-60	-75	-1.4
14	Central Area	1.00	577 KSF Office	0.00	0.00	0	0	0	0.0
14	Central Area	1.00	1995 Employees	0.00	0.00	0	0	0	0.0
21	Berth 55-56	1.00	IM Trucks Prop	41.00	96.00	41	96	137	2.5
	Zone 21 Subtotal					41	96	137	2.5
22	Berth 57-59	1.00	IM Trucks Prop	50.00	118.00	50	118	168	3.1
	Zone 22 Subtotal					50	118	168	3.1
23	Middle Harbo	1.00	IM Trucks Prop	35.00	82.00	35	82	117	2.1
	Zone 23 Subtotal					35	82	117	2.1

Oakland Army Base Area Redevelopment Plan EIR
Existing + Project Conditions
PM Peak Hour

Trip Generation Report
Forecast for Port Ex+Proj PM

Zone #	Subzone	Amount	Units	Rate		Trips		Total % Of Trips	
				In	Out	In	Out		
24	7th St. Harb	1.00	IM Trucks Prop	63.00	150.00	63	150	213	3.9
	Zone 24 Subtotal					63	150	213	3.9
25	Outer Harbor	1.00	IM Trucks Prop	65.00	154.00	65	154	219	4.0
	Zone 25 Subtotal					65	154	219	4.0
26	Berth 21	1.00	IM Trucks Prop	20.00	47.00	20	47	67	1.2
	Zone 26 Subtotal					20	47	67	1.2
31	Berth 55-56	1.00	IM Trucks Appr	-36.00	-85.00	-36	-85	-121	-2.2
	Zone 31 Subtotal					-36	-85	-121	-2.2
32	Berth 57-59	1.00	IM Trucks Appr	-44.00	-103.00	-44	-103	-147	-2.7
	Zone 32 Subtotal					-44	-103	-147	-2.7
33	Middle Harbo	1.00	IM Trucks Appr	-25.00	-60.00	-25	-60	-85	-1.6
	Zone 33 Subtotal					-25	-60	-85	-1.6
34	7th St. Harb	1.00	IM Trucks Appr	-66.00	-156.00	-66	-156	-222	-4.1
	Zone 34 Subtotal					-66	-156	-222	-4.1
35	Outer Harbor	1.00	IM Trucks Appr	-70.00	-165.00	-70	-165	-235	-4.3
	Zone 35 Subtotal					-70	-165	-235	-4.3
41	Berth 55-56	1.00	OTR Truck Appr	-32.00	-75.00	-32	-75	-107	-2.0
41	Berth 55-56	1.00	OTR Truck Prop	37.00	87.00	37	87	124	2.3
	Zone 41 Subtotal					5	12	17	0.3
42	Berth 57-59	1.00	OTR Truck Appr	-40.00	-94.00	-40	-94	-134	-2.4
42	Berth 57-59	1.00	OTR Truck Prop	45.00	107.00	45	107	152	2.8
	Zone 42 Subtotal					5	13	18	0.3
43	Middle Harbo	1.00	OTR Truck Appr	-23.00	-54.00	-23	-54	-77	-1.4
43	Middle Harbo	1.00	OTR Truck Prop	32.00	74.00	32	74	106	1.9
	Zone 43 Subtotal					9	20	29	0.5
44	7th St. Harb	1.00	OTR Truck Appr	-59.00	-141.00	-59	-141	-200	-3.5
44	7th St. Harb	1.00	OTR Truck Prop	57.00	135.00	57	135	192	3.5
	Zone 44 Subtotal					-2	-6	-8	-0.1
45	Outer Harbor	1.00	OTR Truck Appr	-63.00	-149.00	-63	-149	-212	-3.6
45	Outer Harbor	1.00	OTR Truck Prop	59.00	139.00	59	139	198	3.6
	Zone 45 Subtotal					-4	-10	-14	-0.3
46	Berth 21	1.00	OTR Truck Appr	0.00	0.00	0	0	0	0.0
46	Berth 21	1.00	OTR Truck Prop	18.00	42.00	18	42	60	1.1
	Zone 46 Subtotal					18	42	60	1.1

Oakland Army Base Area Redevelopment Plan EIR
Existing + Project Conditions
PM Peak Hour

Zone #	Subzone	Amount	Units	Rate		Trips		Trips Total	Total % Of Trips Total
				In	Out	In	Out		
47	Proposed JIT	1.00	OTR Truck Prop	195.00	341.00	195	341	536	9.8
	Zone 47 Subtotal					195	341	536	9.8
48	W. Oakland Y	1.00	OTR Truck Appr	-92.00	-161.00	-92	-161	-253	-4.0
48	W. Oakland Y	1.00	OTR Truck Prop	99.00	173.00	99	173	272	5.0
	Zone 48 Subtotal					7	12	19	0.3
49	Approved JIT	1.00	OTR Truck Appr	-201.00	-352.00	-201	-352	-553	-10.0
	Zone 49 Subtotal					-201	-352	-553	-10.1
52	Marine Suppo	1.00	75 Acre MSC	51.00	57.00	51	57	108	2.0
	Zone 52 Subtotal					51	57	108	2.0
53	MSC North	1.00	15 Acre Tr Lot	21.00	23.00	21	23	44	0.8
	Zone 53 Subtotal					21	23	44	0.8
TOTAL						173	389	562	10.3

Oakland Army Base Area Redevelopment Plan EIR
Existing + Project Conditions
PM Peak Hour

Zone #	Subzone	Amount	Units	Rate		Trips		Trips Total	Total % Of Trips Total
				In	Out	In	Out		
18	16-Wood Nort	1.00	1 Acre Park	0.00	1.00	0	1	1	0.0
18	16-Wood Nort	1.00	1426 KSF Offic	285.00	1393.00	285	1393	1678	30.0
18	16-Wood Nort	1.00	252 Live-Work	88.00	44.00	88	44	132	2.4
18	16-Wood Nort	1.00	120 ksf Lt Ind	14.00	103.00	14	103	117	2.1
	Zone 18 Subtotal					387	1541	1928	35.2
19	16-Wood Sout	1.00	123 Live-Work	49.00	24.00	49	24	73	1.3
19	16-Wood Sout	1.00	185 ksf Lt Ind	22.00	160.00	22	160	182	3.3
	Zone 19 Subtotal					71	184	255	4.7
TOTAL						458	1725	2183	39.9

Oakland Army Base Area Redevelopment Plan EIR
Existing + Project Conditions
PM Peak Hour

Intersection	Base		Future		Change in
	Del/ LOS Veh C	V/ C	Del/ LOS Veh C	V/ C	
# 1 W Grand / Maritime	29.6	0.391	262.6	1.591	+232.946 D/V
# 2 W Grand / Frontage Rd	35.4	0.679	171.1	1.362	+135.767 D/V
# 3 W Grand / Mandela	10.7	0.443	31.3	1.224	+20.634 D/V
# 4 W Grand / Adeline	10.3	0.475	15.4	0.754	+ 5.062 D/V
# 5 W Grand / Market	10.6	0.369	10.0	0.549	-0.668 D/V
# 6 W Grand / San Pablo Av	11.6	0.356	12.5	0.501	+ 0.851 D/V
# 7 W Grand / MLK Jr	17.0	0.388	15.0	0.543	-1.977 D/V
# 8 W Grand / Northgate	21.8	0.613	25.0	0.732	+ 3.242 D/V
# 9 W Grand / Harrison	23.2	0.618	24.7	0.662	+ 1.547 D/V
# 10 7th / Maritime	33.3	0.421	78.5	0.870	+45.204 D/V
# 11 7th / I-880 SB Ramp	7.8	0.202	14.0	0.596	+ 6.241 D/V
# 12 7th / I-880 North Ramp	30.5	0.440	33.0	0.649	+ 2.538 D/V
# 13 7th / Peralta	8.7	0.170	7.8	0.198	-0.947 D/V
# 14 7th / Mandela	16.7	0.224	15.6	0.252	-1.113 D/V
# 15 7th / Union	11.9	0.282	11.2	0.309	-0.724 D/V
# 16 7th / Adeline	9.5	0.266	12.0	0.317	+ 2.504 D/V
# 17 7th / Market	20.8	0.249	20.6	0.262	-0.179 D/V
# 18 7th / Harrison	10.8	0.498	10.9	0.506	+ 0.066 D/V
# 19 7th / Jackson	21.1	0.920	23.8	0.951	+ 2.727 D/V
# 20 6th / Jackson	11.7	0.573	11.7	0.573	+ 0.000 D/V
# 21 5th / Union / I-880 Ramps	27.1	0.307	27.2	0.377	+ 0.029 D/V
# 22 5th / Adeline	29.1	0.417	30.8	0.510	+ 1.720 D/V
# 23 I-880 Off Ramp / Market	22.8	0.190	22.6	0.205	-0.226 D/V

Oakland Army Base Area Redevelopment Plan EIR
Existing + Project Conditions
PM Peak Hour

Intersection	Base		Future		Change in
	Del/ LOS Veh C	V/ C	Del/ LOS Veh C	V/ C	
# 24 5th / Broadway	29.3	0.852	34.4	0.938	+ 5.099 D/V
# 25 3rd / Adeline	11.8	0.369	13.1	0.466	+ 0.097 V/C
# 26 3rd / Market	13.3	0.000	14.1	0.000	+ 0.000 V/C
# 27 14th / Mandela	8.4	0.148	8.2	0.275	-0.195 D/V
# 28 12th / Brush	22.4	0.431	22.4	0.434	-0.060 D/V
# 29 12th / Castro	19.1	0.521	19.1	0.522	+ 0.002 D/V
# 30 27th / SR 24-580 Off Ramp	15.9	0.255	16.3	0.324	+ 0.451 D/V
# 31 27th / SR 24-580 On Ramp	20.4	0.782	26.1	0.897	+ 5.672 D/V
# 32 San Pablo Av / Adeline	19.8	0.794	23.1	0.872	+ 3.266 D/V
# 33 W MacArthur / Market	17.3	0.403	17.1	0.428	-0.128 D/V
# 34 Powell / I-80 Frontage Rd	22.4	0.580	22.4	0.580	+ 0.000 D/V
# 35 Powell / I-80 NB Ramps	43.9	1.017	48.4	1.048	+ 4.432 D/V
# 36 Powell / Christie	30.5	0.633	30.5	0.635	+ 0.002 D/V
# 37 Powell / Hollis	31.1	0.768	31.6	0.784	+ 0.526 D/V
# 38 Powell / San Pablo Av	34.3	0.710	34.9	0.723	+ 0.528 D/V
# 39 Stanford / Market	31.6	0.550	32.4	0.554	+ 0.747 D/V
# 40 Stanford / MLK Jr Wy	46.4	1.085	46.4	1.085	-0.049 D/V
# 41 Ashby / 7th	48.6	0.922	49.5	0.929	+ 0.870 D/V
# 42 Ashby / San Pablo Av	32.2	0.812	33.7	0.853	+ 1.473 D/V
# 43 Marina Village / Constitution	22.0	0.464	26.6	0.481	+ 4.635 D/V
# 44 Atlantic / Webster	28.6	0.531	28.7	0.552	+ 0.154 D/V
# 45 Atlantic / Constitution	20.7	0.452	20.3	0.478	-0.364 D/V
# 46 Loop Rd / GDA Spine	0.4	0.046	21.4	0.335	+21.008 D/V

Oakland Army Base Area Redevelopment Plan EIR
Existing + Project Conditions
PM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #1 W Grand / Maritime
Cycle (sec): 100 Critical Vol./Cap. (X): 1.591
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 262.6
Optimal Cycle: 180 Level Of Service: F

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Split Phase Split Phase Protected Protected
Rights: Include Include Include Include
Min. Green: 15 20 20 15 15 15 15 15 15 15 15 15
Lanes: 2 0 0 1 0 1 0 0 1 0 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 340 7 178 17 0 7 9 509 66 46 562 9
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 340 7 178 17 0 7 9 509 66 46 562 9
Added Vol: 824 0 961 100 0 92 24 76 172 183 270 38
PasserByVol: -340 -2 -178 178 0 340 33 0 -33 -46 0 46
Initial Fut: 824 5 961 295 0 439 66 585 205 183 832 93
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 824 5 961 295 0 439 66 585 205 183 832 93
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 824 5 961 295 0 439 66 585 205 183 832 93
PCE Adj: 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
Final Vol.: 824 5 961 295 0 439 66 585 205 183 832 93

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.77 0.71 0.71 0.79 1.00 0.71 0.79 0.76 0.76 0.79 0.78 0.78
Lanes: 2.00 0.01 0.99 1.00 0.00 1.00 1.00 2.00 1.00 1.00 1.80 0.20
Final Sat.: 2917 7 1340 1504 0 1345 1504 2890 1445 1504 2664 298

Capacity Analysis Module:
Vol/Sat: 0.28 0.72 0.72 0.20 0.00 0.33 0.04 0.20 0.14 0.12 0.31 0.31
Crit Moves: ****
Green/Cycle: 0.39 0.39 0.39 0.18 0.00 0.18 0.15 0.17 0.17 0.15 0.17 0.17
Volume/Cap: 0.73 1.86 1.86 1.12 0.00 1.86 0.29 1.20 0.84 0.81 1.86 1.86
Delay/Veh: 28.7 424 423.8 131.6 0.0 442.8 38.5 147 47.4 60.6 435 435.1
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: 28.7 424 423.8 131.6 0.0 442.8 38.5 147 47.4 60.6 435 435.1
DesignQueue: 30 0 38 14 0 21 3 28 10 9 41 5

Oakland Army Base Area Redevelopment Plan EIR
Existing + Project Conditions
PM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #2 W Grand / Frontage Rd
Cycle (sec): 100 Critical Vol./Cap. (X): 1.362
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 171.1
Optimal Cycle: 180 Level Of Service: F

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Split Phase Split Phase Protected Protected
Rights: Include Include Include Include
Min. Green: 15 15 15 15 15 15 15 15 15 15 15 15
Lanes: 1 0 1 1 0 1 1 0 1 0 1 0 1 0 1 1 1

Volume Module:
Base Vol: 28 157 172 84 62 5 381 309 61 95 914 298
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: 28 157 172 84 62 5 381 309 61 95 914 298
Added Vol: 288 369 459 4 104 90 425 538 160 130 113 4
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 316 526 631 88 166 95 806 847 221 225 1027 302
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 316 526 631 88 166 95 806 847 221 225 1027 302
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 316 526 631 88 166 95 806 847 221 225 1027 302
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 316 526 631 88 166 95 806 847 221 225 1027 302

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.95 0.87 0.87 0.90 0.90 0.90 0.95 0.92 0.92 0.95 0.92 0.92
Lanes: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.59 0.41 1.00 2.00 1.00
Final Sat.: 1805 1657 1657 1710 2175 1245 1805 2774 724 1805 3487 1744

Capacity Analysis Module:
Vol/Sat: 0.18 0.32 0.38 0.05 0.08 0.08 0.45 0.31 0.31 0.12 0.29 0.17
Crit Moves: ****
Green/Cycle: 0.25 0.25 0.25 0.15 0.15 0.15 0.29 0.33 0.33 0.15 0.19 0.19
Volume/Cap: 0.71 1.28 1.54 0.34 0.51 0.51 1.54 0.92 0.92 0.83 1.54 0.90
Delay/Veh: 39.4 173 285.8 38.3 39.7 286.5 43.7 43.7 60.3 288 47.7
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: 39.4 173 285.8 38.3 39.7 286.5 43.7 43.7 60.3 288 47.7
DesignQueue: 14 24 29 4 8 5 36 34 9 11 50 14

Oakland Army Base Area Redevelopment Plan EIR
Existing + Project Conditions
PM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #3 W Grand / Mandala

Cycle (sec): 64 Critical Vol./Cap. (X): 1.224
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 31.3
Optimal Cycle: 180 Level Of Service: C

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

Control: Permitted Permitted Permitted Permitted
Rights: Include Include Include Include
Min. Green: 8 20 20 8 10 10 8 10 10 10

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

Volume Module:

Table with 16 columns: 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 Vol, Sat/Lane, Adj, Lanes, Final Sat. Rows include various traffic metrics for each movement.

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900

Adjustment: 0.74 0.74 0.85 0.79 0.79 0.79 0.28 0.94 0.94 0.14 0.95 0.95
Lanes: 0.41 0.59 1.00 0.27 0.87 0.86 1.00 1.91 0.09 1.00 1.93 0.07
Final Sat.: 586 827 1615 403 1304 1294 532 3428 156 262 3461 131

Capacity Analysis Module:
Vol/Sat: 0.18 0.18 0.14 0.10 0.10 0.10 0.40 0.36 0.36 0.93 0.24 0.24

Crit Moves: ****
Green/Cycle: 0.31 0.31 0.31 0.31 0.31 0.59 0.59 0.59 0.59 0.59 0.59 0.59
Volume/Cap: 0.58 0.58 0.43 0.33 0.33 0.33 0.67 0.61 0.61 1.56 0.40 0.40
Delay/Veh: 20.5 20.5 18.1 17.1 17.1 17.1 14.3 8.8 8.8 294.3 7.0 7.0
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: 20.5 20.5 18.1 17.1 17.1 17.1 14.3 8.8 8.8 294.3 7.0 7.0
DesignQueue: 3 4 6 1 3 3 20 1 4 13 0 0

Oakland Army Base Area Redevelopment Plan EIR
Existing + Project Conditions
PM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #4 W Grand / Adeline

Cycle (sec): 64 Critical Vol./Cap. (X): 0.754
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 15.4
Optimal Cycle: 45 Level Of Service: B

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

Control: Permitted Permitted Permitted Permitted
Rights: Include Include Include Include
Min. Green: 8 20 20 8 20 20 8 15 15 15

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

Volume Module:

Table with 16 columns: 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 Vol, Sat/Lane, Adj, Lanes, Final Sat. Rows include various traffic metrics for each movement.

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900

Adjustment: 0.76 0.76 0.76 0.76 0.66 0.66 0.66 0.80 0.80 0.80 0.80 0.64 0.64
Lanes: 0.15 1.57 0.28 0.26 1.57 0.17 0.13 2.66 0.21 0.36 2.35 0.29
Final Sat.: 224 2274 407 329 1967 207 193 4027 314 437 2869 362

Capacity Analysis Module:
Vol/Sat: 0.29 0.29 0.29 0.36 0.36 0.36 0.32 0.32 0.32 0.17 0.17 0.17

Crit Moves: ****
Green/Cycle: 0.48 0.48 0.48 0.48 0.48 0.43 0.43 0.43 0.43 0.43 0.43 0.43
Volume/Cap: 0.61 0.61 0.61 0.75 0.75 0.75 0.75 0.75 0.75 0.75 0.75 0.40 0.40
Delay/Veh: 13.0 13.0 13.0 16.3 16.3 16.3 17.2 17.2 17.2 12.9 12.9 12.9
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: 13.0 13.0 13.0 16.3 16.3 16.3 17.2 17.2 17.2 12.9 12.9 12.9
DesignQueue: 1 13 2 2 14 1 1 28 2 10 2 1

Oakland Army Base Area Redevelopment Plan EIR
Existing + Project Conditions
PM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #9 W Grand / Harrison
Cycle (sec): 100 Critical Vol./Cap. (X): 0.662
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 24.7
Optimal Cycle: 58 Level Of Service: C

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Permitted Permitted Protected Protected
Rights: Include Include Include Include
Min. Green: 8 21 21 8 21 21 8 20 20 8 20 20
Lanes: 0 1 2 0 2 0 1 1 0 2 0 2 1 0 2 0 1 1 0

Volume Module:
Base Vol: 8 1618 738 0 614 73 164 522 172 311 512 105
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: 8 1618 738 0 614 73 164 522 172 311 512 105
Added Vol: 0 0 0 0 0 0 0 205 0 0 49 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 8 1618 738 0 614 73 164 727 172 311 561 105
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 8 1618 738 0 614 73 164 727 172 311 561 105
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 8 1618 738 0 614 73 164 727 172 311 561 105

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.85 0.85 0.75 0.91 0.90 0.90 0.92 0.88 0.88 0.92 0.93 0.93
Lanes: 0.01 2.99 2.00 0.00 2.68 0.32 2.00 2.43 0.57 2.00 1.68 0.32
Final Sat.: 24 4831 2842 0 4562 542 3502 4073 964 3502 2968 555

Capacity Analysis Module:
Vol/Sat: 0.33 0.33 0.26 0.00 0.13 0.13 0.05 0.18 0.18 0.09 0.19 0.19
Crit Moves: ****
Green/Cycle: 0.51 0.51 0.51 0.00 0.51 0.51 0.12 0.27 0.27 0.13 0.29 0.29
Volume/Cap: 0.66 0.66 0.51 0.00 0.27 0.27 0.41 0.66 0.66 0.66 0.66 0.66
Delay/Veh: 19.0 19.0 16.8 0.0 14.2 14.2 41.7 33.7 33.7 44.6 32.8 32.8
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: 19.0 19.0 16.8 0.0 14.2 14.2 41.7 33.7 33.7 44.6 32.8 32.8
DesignQueue: 0 48 21 0 17 2 8 31 7 15 23 4

Oakland Army Base Area Redevelopment Plan EIR
Existing + Project Conditions
PM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #10 7th / Maritime
Cycle (sec): 100 Critical Vol./Cap. (X): 0.870
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 78.5
Optimal Cycle: 97 Level Of Service: E

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 15 20 20 15 20 20 15 20 20 15 20 20
Lanes: 1 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1

Volume Module:
Base Vol: 106 139 106 164 88 4 127 143 103 35 42 82
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: 106 139 106 164 88 4 127 143 103 35 42 82
Added Vol: -2 28 30 413 44 3 5 27 -4 17 22 89
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 104 167 136 577 132 7 132 170 99 52 64 171
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 104 167 136 577 132 7 132 170 99 52 64 171
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 104 167 136 577 132 7 132 170 99 52 64 171

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.73 0.68 0.68 0.73 0.73 0.73 0.73 0.66 0.66 0.73 0.73 0.65
Lanes: 1.00 1.10 0.90 1.00 1.90 0.10 1.00 2.00 1.00 1.00 2.00 1.00
Final Sat.: 1388 1428 1163 1388 2618 139 1388 2513 1256 1388 2776 1242

Capacity Analysis Module:
Vol/Sat: 0.07 0.12 0.12 0.42 0.05 0.05 0.10 0.07 0.08 0.04 0.02 0.14
Crit Moves: ****
Green/Cycle: 0.23 0.20 0.20 0.33 0.30 0.30 0.15 0.20 0.20 0.15 0.20 0.20
Volume/Cap: 0.33 0.58 0.58 1.26 0.17 0.17 0.63 0.34 0.39 0.25 0.12 0.69
Delay/Veh: 32.9 38.0 38.0 167.0 25.7 25.7 46.2 34.6 35.1 38.2 32.8 45.0
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: 32.9 38.0 38.0 167.0 25.7 25.7 46.2 34.6 35.1 38.2 32.8 45.0
DesignQueue: 5 8 6 23 5 0 6 8 4 2 3 8

Oakland Army Base Area Redevelopment Plan EIR
Existing + Project Conditions
PM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #13 7th / Peralta
Cycle (sec): 100 Critical Vol./Cap. (X): 0.198
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 7.8
Optimal Cycle: 36 Level Of Service: A

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Permitted Permitted Permitted Permitted
Rights: Include Include Include Include
Min. Green: 0 15 15 0 15 15 0 15 15 8 15 15
Lanes: 0 1 0 0 1 0 1 0 0 1 0 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 14 15 10 44 17 21 27 355 15 7 239 25
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 14 15 10 44 17 21 27 355 15 7 239 25
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 14 15 10 44 17 21 27 445 15 7 271 25
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 14 15 10 44 17 21 27 445 15 7 271 25
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 14 15 10 44 17 21 27 445 15 7 271 25
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 14 15 10 44 17 21 27 445 15 7 271 25

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.90 0.90 0.85 0.81 0.81 0.85 0.88 0.88 0.88 0.46 0.94 0.94
Lanes: 0.48 0.52 1.00 0.72 0.28 1.00 0.11 1.83 0.06 1.00 1.83 0.17
Final Sat.: 823 882 1615 1103 426 1615 185 3043 103 878 3262 301

Capacity Analysis Module:
Vol/Sat: 0.02 0.02 0.01 0.04 0.04 0.01 0.15 0.15 0.15 0.01 0.08 0.08
Crit Moves: *****
Green/Cycle: 0.20 0.20 0.20 0.20 0.20 0.20 0.74 0.74 0.74 0.74 0.74 0.74
Volume/Cap: 0.08 0.08 0.03 0.20 0.20 0.06 0.20 0.20 0.20 0.01 0.11 0.11
Delay/Veh: 32.5 32.5 32.1 33.5 33.5 32.4 4.0 4.0 4.0 3.5 3.7 3.7
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: 32.5 32.5 32.1 33.5 33.5 32.4 4.0 4.0 4.0 3.5 3.7 3.7
DesignQueue: 1 1 0 2 1 1 0 7 0 0 4 0

Oakland Army Base Area Redevelopment Plan EIR
Existing + Project Conditions
PM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #14 7th / Mandela
Cycle (sec): 100 Critical Vol./Cap. (X): 0.252
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 15.6
Optimal Cycle: 47 Level Of Service: B

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Permitted Permitted Permitted Permitted
Rights: Include Include Include Include
Min. Green: 0 15 15 0 15 15 0 15 15 8 15 15
Lanes: 0 1 0 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 17 54 96 68 75 32 52 425 13 112 252 41
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: 17 54 96 68 75 32 52 425 13 112 252 41
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 17 54 96 70 75 32 52 515 13 112 284 44
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 17 54 96 70 75 32 52 515 13 112 284 44
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 17 54 96 70 75 32 52 515 13 112 284 44
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 17 54 96 70 75 32 52 515 13 112 284 44

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.85 0.85 0.85 0.95 0.91 0.91 0.54 0.95 0.95 0.42 0.93 0.93
Lanes: 0.24 0.76 1.00 1.00 1.40 0.60 1.00 1.95 0.05 1.00 1.73 0.27
Final Sat.: 387 1228 1615 1805 2417 1031 1022 3507 89 794 3063 475

Capacity Analysis Module:
Vol/Sat: 0.04 0.04 0.06 0.04 0.03 0.03 0.05 0.15 0.15 0.14 0.09 0.09
Crit Moves: *****
Green/Cycle: 0.16 0.16 0.16 0.16 0.32 0.32 0.59 0.59 0.59 0.59 0.59 0.59
Volume/Cap: 0.27 0.27 0.37 0.25 0.10 0.10 0.09 0.25 0.25 0.24 0.16 0.16
Delay/Veh: 37.4 37.4 38.3 37.5 24.1 24.1 8.8 9.8 9.8 9.9 9.2 9.2
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: 37.4 37.4 38.3 37.5 24.1 24.1 8.8 9.8 9.8 9.9 9.2 9.2
DesignQueue: 1 3 5 3 3 1 1 12 0 3 7 1

Oakland Army Base Area Redevelopment Plan EIR
Existing + Project Conditions
PM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)
Intersection #15 7th / Union

Cycle (sec): 100 Critical Vol./Cap. (X): 0.309
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 11.2
Optimal Cycle: 36 Level Of Service: B
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Permitted Permitted Permitted Permitted
Rights: Include Include Include Include
Min. Green: 0 15 15 0 15 15 8 15 15 8 15 15
Lanes: 0 1 0 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 38 76 147 9 5 5 26 617 10 61 371 21
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: 38 76 147 9 5 5 26 617 10 61 371 21
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 38 76 147 9 5 5 26 710 10 61 406 21
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 38 76 147 9 5 5 26 710 10 61 406 21
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 38 76 147 9 5 5 26 710 10 61 406 21

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.91 0.91 0.85 0.89 0.89 0.85 0.49 0.95 0.95 0.33 0.94 0.94
Lanes: 0.33 0.67 1.00 0.64 0.36 1.00 1.00 1.97 0.03 1.00 1.90 0.10
Final Sat.: 578 1156 1615 1090 605 1615 922 3553 50 635 3408 176

Capacity Analysis Module:
Vol/Sat: 0.07 0.07 0.09 0.01 0.01 0.00 0.03 0.20 0.20 0.10 0.12 0.12
Crit Moves: ****
Green/Cycle: 0.29 0.29 0.29 0.29 0.29 0.29 0.65 0.65 0.65 0.65 0.65 0.65
Volume/Cap: 0.22 0.22 0.31 0.03 0.03 0.01 0.04 0.31 0.31 0.15 0.18 0.18
Delay/Veh: 26.9 26.9 27.8 25.1 25.1 25.0 6.5 7.9 7.9 7.1 7.2 7.2
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: 26.9 26.9 27.8 25.1 25.1 25.0 6.5 7.9 7.9 7.1 7.2 7.2
DesignQueue: 2 3 6 0 0 0 1 15 0 1 8 0

Oakland Army Base Area Redevelopment Plan EIR
Existing + Project Conditions
PM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)
Intersection #16 7th / Adeline

Cycle (sec): 100 Critical Vol./Cap. (X): 0.317
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 12.0
Optimal Cycle: 43 Level Of Service: B
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Permitted Permitted Permitted Permitted
Rights: Include Include Include Include
Min. Green: 8 22 22 8 22 22 8 15 15 15 15 15
Lanes: 1 0 1 0 0 1 0 1 0 1 0 2 0 1 1 0 2 0 1

Volume Module:
Base Vol: 33 83 29 35 64 49 71 400 52 56 723 64
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: 33 83 29 35 64 49 71 400 52 56 723 64
Added Vol: 2 0 26 139 0 0 0 0 0 49 43 11 33 35
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 35 83 55 174 64 49 71 449 95 67 756 99
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 35 83 55 174 64 49 71 449 95 67 756 99
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 35 83 55 174 64 49 71 449 95 67 756 99

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.50 0.89 0.89 0.67 0.67 0.67 0.32 0.95 0.85 0.47 0.95 0.85
Lanes: 1.00 1.20 0.80 1.00 0.57 0.43 1.00 2.00 1.00 1.00 2.00 1.00
Final Sat.: 944 2041 1352 1273 721 552 612 3610 1615 899 3610 1615

Capacity Analysis Module:
Vol/Sat: 0.04 0.04 0.04 0.14 0.09 0.09 0.12 0.12 0.06 0.07 0.21 0.06
Crit Moves: ****
Green/Cycle: 0.28 0.28 0.28 0.28 0.28 0.28 0.66 0.66 0.66 0.66 0.66 0.66
Volume/Cap: 0.13 0.15 0.15 0.49 0.32 0.32 0.18 0.19 0.09 0.11 0.32 0.09
Delay/Veh: 27.2 27.1 27.1 30.7 28.7 28.7 6.7 6.6 6.2 6.3 7.4 6.2
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: 27.2 27.1 27.1 30.7 28.7 28.7 6.7 6.6 6.2 6.3 7.4 6.2
DesignQueue: 1 3 2 7 3 2 1 9 2 1 15 2

Oakland Army Base Area Redevelopment Plan EIR
Existing + Project Conditions
PM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #17 7th / Market
 Cycle (sec): 100 Critical Vol./Cap. (X): 0.262
 Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 20.6
 Optimal Cycle: 75 Level Of Service: C

Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Split Phase Split Phase Permitted Permitted
 Rights: Include Include Include Include
 Min. Green: 8 22 22 8 22 22 8 22 22 8 22 22
 Lanes: 1 0 1 1 0 1 0 2 1 0 1 0 2 1 0 1 0 2 1 0

Volume Module:
 Base Vol: 48 50 66 126 199 38 34 333 40 109 727 41
 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: 48 50 66 126 199 38 34 333 40 109 727 41
 Added Vol: 17 0 8 0 0 1 1 0 214 0 2 61 0
 PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
 Initial Fut: 65 50 74 126 200 39 34 547 40 111 788 41
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 65 50 74 126 200 39 34 547 40 111 788 41
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 65 50 74 126 200 39 34 547 40 111 788 41
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Final Vol.: 65 50 74 126 200 39 34 547 40 111 788 41

Saturation Flow Module:
 Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
 Adjustment: 0.95 0.86 0.86 0.95 0.89 0.89 0.27 0.90 0.90 0.38 0.90 0.90
 Lanes: 1.00 1.00 1.00 1.00 2.51 0.49 1.00 2.80 0.20 1.00 2.85 0.15
 Final Sat.: 1805 1643 1643 1805 4236 826 515 4785 350 718 4896 255

Capacity Analysis Module:
 Vol/Sat: 0.04 0.03 0.05 0.07 0.05 0.05 0.07 0.11 0.11 0.15 0.16 0.16
 Crit Moves: ****
 Green/Cycle: 0.22 0.22 0.22 0.22 0.22 0.22 0.47 0.47 0.47 0.47 0.47 0.47
 Volume/Cap: 0.16 0.14 0.20 0.32 0.21 0.21 0.14 0.24 0.24 0.33 0.34 0.34
 Delay/Veh: 31.8 31.4 32.0 33.2 32.0 32.0 15.3 15.9 15.9 17.2 16.8 16.8
 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: 31.8 31.4 32.0 33.2 32.0 32.0 15.3 15.9 15.9 17.2 16.8 16.8
 DesignQueue: 3 2 3 6 9 2 1 17 1 3 24 1

Oakland Army Base Area Redevelopment Plan EIR
Existing + Project Conditions
PM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #18 7th / Harrison
 Cycle (sec): 45 Critical Vol./Cap. (X): 0.506
 Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 10.9
 Optimal Cycle: 45 Level Of Service: B

Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 Control: Split Phase Split Phase Split Phase
 Rights: Include Include Include
 Min. Green: 0 0 3 0 1 0 0 0 0 0 0 1 2 0 0 0 0 0 0 0
 Lanes: 0 0 3 0 1 0 0 0 0 0 0 1 2 0 0 0 0 0 0 0

Volume Module: >> Count Date: 17 Apr 2001 << 4:45-5:45 p.m.
 Base Vol: 0 911 1433 0 0 0 226 641 0 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: 0 911 1433 0 0 0 226 641 0 0 0 0
 Added Vol: 0 1 41 0 0 0 0 0 0 0 0 0
 PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
 Initial Fut: 0 912 1474 0 0 0 226 641 0 0 0 0
 User Adj: 1.00 1.00 0.27 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 912 391 0 0 0 226 641 0 0 0 0
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 912 391 0 0 0 226 641 0 0 0 0
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Final Vol.: 0 912 391 0 0 0 226 641 0 0 0 0

Saturation Flow Module:
 Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
 Adjustment: 1.00 0.91 0.85 1.00 1.00 1.00 0.77 0.77 1.00 1.00 1.00 1.00
 Lanes: 0.00 3.00 1.00 0.00 0.00 0.00 0.78 2.22 0.00 0.00 0.00 0.00
 Final Sat.: 0 5187 1615 0 0 0 1149 3260 0 0 0 0

Capacity Analysis Module:
 Vol/Sat: 0.00 0.18 0.24 0.00 0.00 0.00 0.20 0.20 0.00 0.00 0.00 0.00
 Crit Moves: ****
 Green/Cycle: 0.00 0.42 0.42 0.00 0.00 0.00 0.40 0.40 0.00 0.00 0.00 0.00
 Volume/Cap: 0.00 0.42 0.57 0.00 0.00 0.00 0.49 0.49 0.00 0.00 0.00 0.00
 Delay/Veh: 0.0 9.7 13.4 0.0 0.0 0.0 11.1 11.1 0.0 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: 0.0 9.7 13.4 0.0 0.0 0.0 11.1 11.1 0.0 0.0 0.0 0.0
 DesignQueue: 0 14 6 0 0 0 4 10 0 0 0 0

Oakland Army Base Area Redevelopment Plan EIR
Existing + Project Conditions
PM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #23 I-880 Off Ramp / Market
Cycle (sec): 100 Critical Vol./Cap. (X): 0.205
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 22.6
Optimal Cycle: 64 Level Of Service: C

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Protected Permitted Permitted
Rights: Include Include Include Include Include
Min. Green: 15 20 0 0 20 20 0 0 0 0 15 20 20
Lanes: 1 0 2 0 0 0 0 2 1 0 0 0 0 0 1 0 1

Volume Module:
Base Vol: 56 607 0 0 103 54 0 0 0 30 117 178
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: 56 607 0 0 103 54 0 0 0 30 117 178
Added Vol: 6 9 0 0 3 0 0 0 0 9 12 16
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 62 616 0 0 106 54 0 0 0 39 129 194
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 62 616 0 0 106 54 0 0 0 39 129 194
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 62 616 0 0 106 54 0 0 0 39 129 194
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 62 616 0 0 106 54 0 0 0 39 129 194

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.95 0.95 1.00 1.00 0.86 1.00 1.00 1.00 0.81 0.81 0.85
Lanes: 1.00 2.00 0.00 0.00 2.00 1.00 0.00 0.00 0.46 1.54 1.00
Final Sat.: 1805 3610 0 0 3282 1641 0 0 712 2356 1615

Capacity Analysis Module:
Vol/Sat: 0.03 0.17 0.00 0.00 0.03 0.03 0.00 0.00 0.00 0.05 0.05 0.12
Crit Moves: ****
Green/Cycle: 0.16 0.36 0.00 0.00 0.20 0.20 0.00 0.00 0.55 0.55 0.55
Volume/Cap: 0.22 0.48 0.00 0.00 0.16 0.16 0.00 0.00 0.10 0.10 0.22
Delay/Veh: 37.1 25.1 0.0 0.0 33.1 33.2 0.0 0.0 10.6 10.6 11.5
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 37.1 25.1 0.0 0.0 33.1 33.2 0.0 0.0 10.6 10.6 11.5
DesignQueue: 3 23 0 0 5 2 0 0 1 3 5

Oakland Army Base Area Redevelopment Plan EIR
Existing + Project Conditions
PM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #24 5th / Broadway
Cycle (sec): 75 Critical Vol./Cap. (X): 0.938
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 34.4
Optimal Cycle: 107 Level Of Service: C

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

Volume Module:
Base Vol: 0 299 321 567 400 0 782 363 58 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: 0 299 321 567 400 0 782 363 58 0 0 0
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 0 299 321 567 400 0 960 363 58 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 299 321 567 400 0 960 363 58 0 0 0
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 0 299 321 567 400 0 960 363 58 0 0 0
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 0 299 321 567 400 0 960 363 58 0 0 0

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 1.00 0.95 0.85 0.95 0.95 1.00 0.81 0.81 0.85 1.00 1.00 1.00
Lanes: 0.00 2.00 1.00 1.00 2.00 0.00 2.00 1.00 1.00 0.00 0.00 0.00
Final Sat.: 0 3610 1615 1805 3610 0 3069 1534 1615 0 0 0

Capacity Analysis Module:
Vol/Sat: 0.00 0.08 0.20 0.31 0.11 0.00 0.31 0.24 0.04 0.00 0.00 0.00
Crit Moves: ****
Green/Cycle: 0.00 0.21 0.21 0.33 0.55 0.00 0.33 0.33 0.33 0.00 0.00 0.00
Volume/Cap: 0.00 0.39 0.94 0.94 0.20 0.00 0.94 0.71 0.11 0.00 0.00 0.00
Delay/Veh: 0.00 25.7 62.1 46.7 8.7 0.0 36.4 23.1 17.4 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: 0.0 25.7 62.1 46.7 8.7 0.0 36.4 23.1 17.4 0.0 0.0 0.0
DesignQueue: 0 10 11 17 8 0 29 11 2 0 0 0

Oakland Army Base Area Redevelopment Plan EIR
Existing + Project Conditions
PM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #29 12th / Castro

Cycle (sec): 100 Critical Vol./Cap. (X): 0.522
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 19.1
Optimal Cycle: 31 Level Of Service: B

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Permitted Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 8 10 10 0 0 0 0 0 0 0 0 0 0 15 15
Lanes: 1 2 1 0 0 0 0 0 0 0 0 0 0 1 1

Volume Module:
Base Vol: 27 1455 0 0 0 0 0 0 0 0 0 0 0 281 895
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 1.00 1.00 1.00
Initial Bse: 27 1455 0 0 0 0 0 0 0 0 0 0 0 281 895
Added Vol: 26 5 0 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 53 1460 0 0 0 0 0 0 0 0 0 0 0 281 895
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 53 1460 0 0 0 0 0 0 0 0 0 0 0 281 895
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 53 1460 0 0 0 0 0 0 0 0 0 0 0 281 895
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol: 53 1460 0 0 0 0 0 0 0 0 0 0 0 281 895

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.91 0.91 0.91 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 4.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 1.00 2.00
Final Sat: 1729 6916 0 0 0 0 0 0 0 0 0 0 0 1599 3198

Capacity Analysis Module:
Vol/Sat: 0.03 0.21 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.18 0.28
Crit Moves: ****
Green/Cycle: 0.40 0.40 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.54 0.54
Volume/Cap: 0.08 0.52 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.33 0.52
Delay/Veh: 18.3 22.7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 13.1 15.2
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 1.00 1.00 1.00
AdjDel/Veh: 18.3 22.7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 13.1 15.2
DesignQueue: 2 51 0 0 0 0 0 0 0 0 0 0 0 8 25

Oakland Army Base Area Redevelopment Plan EIR
Existing + Project Conditions
PM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #30 27th / SR 24-580 Off Ramp

Cycle (sec): 100 Critical Vol./Cap. (X): 0.324
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 16.3
Optimal Cycle: 38 Level Of Service: B

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Permitted Permitted Permitted Permitted
Rights: Include Include Include Include
Min. Green: 0 0 0 0 8 20 20 0 12 12 12 8 12 0
Lanes: 0 0 0 0 1 1 1 0 1 0 0 2 1 0 0 1 2 0 0

Volume Module:
Base Vol: 0 0 294 244 204 0 561 23 9 205 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 1.00 1.00
Initial Bse: 0 0 294 244 204 0 561 23 9 205 0
Added Vol: 0 0 0 0 45 48 0 185 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 0 0 294 289 252 0 746 23 9 205 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 0 294 289 252 0 746 23 9 205 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 0 294 289 252 0 746 23 9 205 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol: 0 0 294 289 252 0 746 23 9 205 0

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 1.00 1.00 1.00 0.81 0.81 0.85 1.00 0.91 0.91 0.83 0.83 1.00 0.83 0.83
Lanes: 0.00 0.00 0.00 1.51 1.49 1.00 0.00 2.91 0.09 0.13 2.87 0.00 0.13 2.87
Final Sat: 0 0 2321 2282 1615 0 5012 155 199 4527 0

Capacity Analysis Module:
Vol/Sat: 0.00 0.00 0.00 0.13 0.13 0.16 0.00 0.15 0.15 0.05 0.05 0.00 0.05 0.05
Crit Moves: ****
Green/Cycle: 0.00 0.00 0.00 0.48 0.48 0.48 0.00 0.46 0.46 0.46 0.46 0.00 0.46 0.46
Volume/Cap: 0.00 0.00 0.00 0.26 0.26 0.32 0.00 0.32 0.32 0.10 0.10 0.00 0.32 0.32
Delay/Veh: 0.0 0.0 0.0 15.5 15.5 16.2 0.0 17.3 17.3 15.4 15.4 0.0 15.4 15.4
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 1.00 1.00
AdjDel/Veh: 0.0 0.0 0.0 15.5 15.5 16.2 0.0 17.3 17.3 15.4 15.4 0.0 15.4 15.4
DesignQueue: 0 0 0 9 9 8 0 23 1 0 6 0 23 1

Oakland Army Base Area Redevelopment Plan EIR
Existing + Project Conditions
PM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #37 Powell / Hollis

Cycle (sec): 100 Critical Vol./Cap. (X): 0.784
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 31.6
Optimal Cycle: 65 Level Of Service: C

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

Table with 4 columns: Control, Rights, Min. Green, Lanes. Rows for North Bound, South Bound, East Bound, West Bound movements.

Volume Module: 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 Vol. (Lanes: 1 0 1 0 0 1 0 1 0 1 0 1 0)

Saturation Flow Module: Sat/Lane, Adjustment, Lanes, Final Sat. (1900 1900 1900 1900)

Capacity Analysis Module: Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, DesignQueue. (0.46 0.25 0.25 0.22 0.14 0.08 0.22 0.22 0.03 0.17 0.17)

Oakland Army Base Area Redevelopment Plan EIR
Existing + Project Conditions
PM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #38 Powell / San Pablo Av

Cycle (sec): 100 Critical Vol./Cap. (X): 0.723
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 34.9
Optimal Cycle: 63 Level Of Service: C

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

Table with 4 columns: Control, Rights, Min. Green, Lanes. Rows for North Bound, South Bound, East Bound, West Bound movements.

Volume Module: 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 Vol. (Lanes: 1 0 1 1 0 1 0 1 1 0 1 0 1 0)

Saturation Flow Module: Sat/Lane, Adjustment, Lanes, Final Sat. (1900 1900 1900 1900)

Capacity Analysis Module: Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, DesignQueue. (0.09 0.26 0.26 0.09 0.25 0.25 0.09 0.23 0.23 0.06 0.10 0.10)

Oakland Army Base Area Redevelopment Plan EIR
Existing + Project Conditions
PM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #43 Marina Village / Constitution

Cycle (sec): 100 Critical Vol./Cap. (X): 0.481
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 26.6
Optimal Cycle: 37 Level Of Service: C

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Protected Split Phase
Rights: Include Include Include Include
Min. Green: 0 10 10 8 10 10 0 0 0 0 8 10 10
Lanes: 0 0 1 1 0 2 0 1 1 0 0 0 0 1 0 0 0 2

Volume Module: >> Count Date: 17 Oct 2000 <<
Base Vol: 0 448 162 279 894 0 0 0 258 0 473
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 448 162 279 894 0 0 0 258 0 473
Added Vol: 0 21 0 0 85 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 0 469 162 279 979 0 0 0 258 0 473
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 469 162 279 979 0 0 0 258 0 473
Reduced Vol: 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 469 162 279 979 0 0 0 258 0 473
PCE Adj: 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
Final Vol.: 0 469 162 279 979 0 0 0 258 0 473

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 1.00 0.91 0.91 0.92 0.95 0.95 1.00 1.00 1.00 0.95 1.00 0.75
Lanes: 0.00 1.49 0.51 2.00 2.00 0.00 0.00 0.00 0.00 1.00 0.00 2.00
Final Sat.: 0 2579 891 3502 3610 0 0 0 1805 0 2842

Capacity Analysis Module:
Vol/Sat: 0.00 0.18 0.18 0.08 0.27 0.00 0.00 0.00 0.14 0.00 0.17
Crit Moves: ****
Green/Cycle: 0.00 0.48 0.48 0.08 0.56 0.00 0.00 0.00 0.35 0.00 0.35
Volume/Cap: 0.00 0.38 0.38 0.00 0.48 0.00 0.00 0.00 0.41 0.00 0.48
Delay/Veh: 0.0 16.4 16.4 98.6 13.2 0.0 0.0 0.0 25.4 0.0 26.0
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 0.0 16.4 16.4 98.6 13.2 0.0 0.0 0.0 25.4 0.0 26.0
DesignQueue: 0 14 5 15 25 0 0 0 10 0 18

Oakland Army Base Area Redevelopment Plan EIR
Existing + Project Conditions
PM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #44 Atlantic / Webster

Cycle (sec): 120 Critical Vol./Cap. (X): 0.552
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 28.7
Optimal Cycle: 80 Level Of Service: C

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Protected Split Phase
Rights: Include Include Include Include
Min. Green: 8 20 20 8 20 20 8 20 20 8 20 20
Lanes: 1 0 1 1 0 1 0 2 0 1 1 1 0 1 1 0 1 0

Volume Module: >> Count Date: 17 Oct 2000 <<
Base Vol: 70 530 72 53 824 519 294 133 96 75 102 42
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 70 530 72 53 824 519 294 133 96 75 102 42
Added Vol: 0 15 0 0 54 30 6 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 70 545 72 53 878 549 300 133 96 75 102 42
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 70 545 72 53 878 549 300 133 96 75 102 42
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 70 545 72 53 878 549 300 133 96 75 102 42
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 70 545 72 53 878 549 300 133 96 75 102 42

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.95 0.93 0.93 0.95 0.95 0.85 0.92 0.92 0.85 0.95 0.91 0.91
Lanes: 1.00 1.77 0.23 1.00 2.00 1.00 2.00 1.00 1.00 1.00 1.42 0.58
Final Sat.: 1805 3131 414 1805 3610 1615 3491 1745 1615 1805 2445 1007

Capacity Analysis Module:
Vol/Sat: 0.04 0.17 0.17 0.03 0.24 0.34 0.09 0.08 0.06 0.04 0.04 0.04
Crit Moves: ****
Green/Cycle: 0.07 0.50 0.50 0.07 0.50 0.50 0.17 0.17 0.17 0.17 0.17
Volume/Cap: 0.58 0.35 0.35 0.44 0.49 0.68 0.52 0.46 0.36 0.25 0.25
Delay/Veh: 61.4 18.3 18.3 56.4 20.0 25.1 46.1 45.5 45.1 43.9 43.7
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 61.4 18.3 18.3 56.4 20.0 25.1 46.1 45.5 45.1 43.9 43.7
DesignQueue: 4 19 3 3 31 20 17 8 5 4 6

Oakland Army Base Area Redevelopment Plan EIR
Existing + Project Conditions
PM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #45 Atlantic / Constitution
Cycle (sec): 100 Critical Vol./Cap. (X): 0.478
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 20.3
Optimal Cycle: 57 Level Of Service: C

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

Control: Protected Protected Permitted Permitted
Rights: Include Include Include Include
Min. Green: 8 20 20 8 20 20 8 20 20 8 20 20
Lanes: 1 0 2 0 1 2 0 2 0 1 1 0 1 0 1 0 1 0

Volume Module: >> Count Date: 17 Oct 2000 <<
Base Vol: 65 370 38 200 943 26 70 118 45 68 101 186
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: 65 370 38 200 943 26 70 118 45 68 101 186
Added Vol: 0 21 0 0 85 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 65 391 38 200 1028 26 70 118 45 68 101 186
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 65 391 38 200 1028 26 70 118 45 68 101 186
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 65 391 38 200 1028 26 70 118 45 68 101 186
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 65 391 38 200 1028 26 70 118 45 68 101 186

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.95 0.95 0.85 0.92 0.95 0.85 0.48 0.91 0.91 0.62 0.86 0.86
Lanes: 1.00 2.00 1.00 2.00 2.00 1.00 1.00 1.45 0.55 1.00 1.00 1.00
Final Sat.: 1805 3610 1615 3502 3610 1615 903 2506 956 1178 1630 1630

Capacity Analysis Module:
Vol/Sat: 0.04 0.11 0.02 0.06 0.28 0.02 0.08 0.05 0.05 0.06 0.06 0.11
Crit Moves: ****
Green/Cycle: 0.08 0.48 0.48 0.19 0.59 0.59 0.24 0.24 0.24 0.24 0.24 0.24
Volume/Cap: 0.45 0.23 0.05 0.30 0.48 0.03 0.33 0.20 0.20 0.24 0.26 0.48
Delay/Veh: 46.1 15.2 13.9 34.9 11.8 8.4 32.4 30.6 30.6 31.3 31.1 33.4
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: 46.1 15.2 13.9 34.9 11.8 8.4 32.4 30.6 30.6 31.3 31.1 33.4
DesignQueue: 3 12 1 9 25 1 3 5 2 3 4 8

Oakland Army Base Area Redevelopment Plan EIR
Existing + Project Conditions
PM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #46 Loop Rd / GDA Spine
Cycle (sec): 100 Critical Vol./Cap. (X): 0.335
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 21.4
Optimal Cycle: 44 Level Of Service: C

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

Control: Protected Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 10 15 0 0 15 0 10 0 10 10 0 0 0
Lanes: 1 0 2 0 0 0 0 1 1 0 1 0 0 1 0 0 0 0 0

Volume Module:
Base Vol: 0 151 0 0 70 0 0 0 0 0 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: 0 151 0 0 70 0 0 0 0 0 0 0 0
Added Vol: 91 55 0 0 28 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 91 206 0 0 98 0 0 0 0 0 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 91 206 0 0 98 0 0 0 0 0 0 0 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 91 206 0 0 98 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 91 206 0 0 98 0 0 0 0 0 0 0 0

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.95 0.95 1.00 1.00 0.95 0.95 1.00 1.00 0.85 1.00 1.00 1.00
Lanes: 1.00 2.00 0.00 0.00 2.00 0.00 1.00 1.00 0.00 1.00 0.00 0.00
Final Sat.: 1805 3610 0 0 3610 0 1900 0 1615 0 0 0

Capacity Analysis Module:
Vol/Sat: 0.05 0.06 0.00 0.00 0.03 0.00 0.00 0.00 0.23 0.00 0.00 0.00
Crit Moves: ****
Green/Cycle: 0.14 0.29 0.00 0.00 0.15 0.00 0.00 0.00 0.62 0.00 0.00 0.00
Volume/Cap: 0.37 0.20 0.00 0.00 0.18 0.00 0.00 0.00 0.37 0.00 0.00 0.00
Delay/Veh: 40.0 27.0 0.0 0.0 37.3 0.0 0.0 0.0 9.5 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: 40.0 27.0 0.0 0.0 37.3 0.0 0.0 0.0 9.5 0.0 0.0 0.0
DesignQueue: 4 8 0 0 5 0 0 0 8 0 0 0

S4 Cumulative Conditions

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

PM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report
1997 HCM Operations Method (Base Volume Alternative)

Intersection #4 W Grand / Adeline

Cycle (sec): 64 Critical Vol./Cap. (X): 0.741
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 15.7
Optimal Cycle: 44 Level Of Service: B

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

Control: Permitted Permitted Permitted Permitted
Rights: Include Include Include Include
Min. Green: 8 20 20 8 20 20 8 15 15 8 15 15
Lanes: 0 1 0 1 0 0 1 0 1 0 0 1 1 0 0 1 1 1 0

Volume Module:

Table with 18 columns: Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, Final Vol, Sat/Lane, Adjustment, Lanes, Final Sat, Capacity Analysis Module (Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, DesignQueue).

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

PM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #4 W Grand / Adeline

Cycle (sec): 64 Critical Vol./Cap. (X): 0.580
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 10.5
Optimal Cycle: 41 Level Of Service: B

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

Control: Permitted Permitted Permitted Permitted
Rights: Include Include Include Include
Min. Green: 8 20 20 8 20 20 8 15 15 8 15 15
Lanes: 0 1 0 1 0 0 1 0 1 0 0 1 1 0 0 1 1 1 0

Volume Module:

Table with 18 columns: Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, Final Vol, Sat/Lane, Adjustment, Lanes, Final Sat, Capacity Analysis Module (Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, DesignQueue).

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

PM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report
1997 HCM Operations Method (Base Volume Alternative)

Intersection #5 w Grand / Market
Cycle (sec): 64 Critical Vol./Cap. (X): 0.491
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 11.2
Optimal Cycle: 41 Level Of Service: B

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Permitted Permitted Permitted Permitted
Rights: Include Include Include Include
Min. Green: 8 20 20 8 20 20 8 15 15 8 15 15
Lanes: 0 1 0 1 0 0 1 0 1 0 0 1 1 0 0 1 1 0

Volume Module:
Base Vol: 105 293 133 103 155 43 64 990 65 87 760 90
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: 105 293 133 103 155 43 64 990 65 87 760 90
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 105 293 133 103 155 43 64 990 65 87 760 90
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol: 105 293 133 103 155 43 64 990 65 87 760 90

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.75 0.75 0.75 0.65 0.65 0.65 0.76 0.76 0.76 0.69 0.69 0.69
Lanes: 0.40 1.10 0.50 0.68 1.03 0.29 0.17 2.66 0.17 0.28 2.43 0.29
Final Sat: 565 1577 716 845 1272 353 247 3825 251 367 3202 379

Capacity Analysis Module:
Vol/Sat: 0.19 0.19 0.19 0.12 0.12 0.12 0.26 0.26 0.26 0.24 0.24
Crit Moves: ****
Green/Cycle: 0.38 0.38 0.38 0.38 0.38 0.53 0.53 0.53 0.53 0.53 0.53
Volume/Cap: 0.49 0.49 0.49 0.32 0.32 0.49 0.49 0.49 0.45 0.45 0.45
Delay/Veh: 15.5 15.5 15.5 14.3 14.3 9.8 9.8 9.8 9.5 9.5 9.5
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 15.5 15.5 15.5 14.3 14.3 9.8 9.8 9.8 9.5 9.5 9.5
DesignQueue: 2 7 3 2 3 1 1 18 1 2 13 2

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

PM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #5 W Grand / Market
Cycle (sec): 64 Critical Vol./Cap. (X): 0.388
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 11.5
Optimal Cycle: 41 Level Of Service: B

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Permitted Permitted Permitted Permitted
Rights: Include Include Include Include
Min. Green: 8 20 20 8 20 20 8 15 15 8 15 15
Lanes: 0 1 0 1 0 0 1 0 1 0 0 1 1 0 0 1 1 0

Volume Module:
Base Vol: 105 293 133 103 155 43 64 990 65 87 760 90
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: 105 293 133 103 155 43 64 990 65 87 760 90
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 105 293 133 103 155 43 64 990 65 87 760 90
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol: 105 293 133 103 155 43 64 990 65 87 760 90

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.75 0.75 0.75 0.67 0.67 0.67 0.68 0.68 0.68 0.77 0.77 0.77
Lanes: 0.40 1.10 0.50 0.68 1.03 0.29 0.66 1.67 0.67 0.35 2.28 0.37
Final Sat: 567 1583 718 870 1309 363 860 2164 874 511 3343 541

Capacity Analysis Module:
Vol/Sat: 0.19 0.19 0.19 0.12 0.12 0.12 0.07 0.07 0.07 0.17 0.17 0.17
Crit Moves: ****
Green/Cycle: 0.48 0.48 0.48 0.48 0.48 0.48 0.43 0.43 0.43 0.43 0.43
Volume/Cap: 0.39 0.39 0.39 0.25 0.25 0.25 0.17 0.17 0.17 0.39 0.39 0.39
Delay/Veh: 10.9 10.9 10.9 10.0 10.0 10.0 11.3 11.3 11.3 12.7 12.7 12.7
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: 10.9 10.9 10.9 10.0 10.0 10.0 11.3 11.3 11.3 12.7 12.7 12.7
DesignQueue: 2 6 3 2 3 1 1 3 1 2 12 2

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

PM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report

1997 HCM Operations Method (Base Volume Alternative)

Intersection #6 W Grand / San Pablo Av

Cycle (sec): 64 Critical Vol./Cap. (X): 0.672
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 13.7
Optimal Cycle: 41 Level Of Service: B

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Permitted Permitted Permitted Permitted
Rights: Include Include Include Include
Min. Green: 8 20 20 8 20 20 8 15 15 8 15 15
Lanes: 1 0 1 0 1 0 1 0 0 1 1 0 0 1 1 0

Volume Module:

Base Vol: 120 877 40 152 518 144 68 994 64 37 788 102
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: 120 877 40 152 518 144 68 994 64 37 788 102
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 120 877 40 152 518 144 68 994 64 37 788 102
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 120 877 40 152 518 144 68 994 64 37 788 102
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 120 877 40 152 518 144 68 994 64 37 788 102

Saturation Flow Module:

Sat/Lane: 1900 1900
Adjustment: 0.34 0.94 0.94 0.23 0.92 0.92 0.75 0.75 0.75 0.77 0.77 0.77
Lanes: 1.00 1.91 0.09 1.00 1.56 0.44 0.18 2.65 0.17 0.12 2.55 0.33
Final Sat.: 646 3428 156 441 2732 759 258 3766 242 176 3749 485

Capacity Analysis Module:

Vol/Sat: 0.19 0.26 0.26 0.34 0.19 0.19 0.26 0.26 0.26 0.21 0.21 0.21
Crit Moves: 2 16 1 3 9 3 2 23 1 18 2
Green/Cycle: 0.51 0.51 0.51 0.51 0.51 0.51 0.39 0.39 0.39 0.39 0.39 0.39
Volume/Cap: 0.36 0.50 0.50 0.67 0.37 0.37 0.67 0.67 0.67 0.54 0.54 0.54
Delay/Veh: 10.0 10.4 10.4 19.2 9.5 9.5 17.1 17.1 17.1 15.3 15.3 15.3
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: 10.0 10.4 10.4 19.2 9.5 9.5 17.1 17.1 17.1 15.3 15.3 15.3
DesignQueue: 2 16 1 3 9 3 2 23 1 18 2

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

PM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report

1997 HCM Operations Method (Future Volume Alternative)

Intersection #6 W Grand / San Pablo Av

Cycle (sec): 64 Critical Vol./Cap. (X): 0.530
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 11.6
Optimal Cycle: 41 Level Of Service: B

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Permitted Permitted Permitted Permitted
Rights: Include Include Include Include
Min. Green: 8 20 20 8 20 20 8 15 15 8 15 15
Lanes: 1 0 1 0 1 0 1 0 0 1 1 0 0 1 1 0

Volume Module:

Base Vol: 120 877 40 152 518 144 68 994 64 37 788 102
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: 120 877 40 152 518 144 68 994 64 37 788 102
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 120 877 40 152 518 144 68 994 64 37 788 102
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 120 877 40 152 518 144 68 994 64 37 788 102
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 120 877 40 152 518 144 68 994 64 37 788 102

Saturation Flow Module:

Sat/Lane: 1900 1900
Adjustment: 0.36 0.94 0.94 0.26 0.92 0.92 0.70 0.70 0.70 0.70 0.70 0.70
Lanes: 1.00 1.91 0.09 1.00 1.56 0.44 0.42 2.18 0.40 0.14 2.46 0.40
Final Sat.: 682 3428 156 486 2732 759 560 2883 527 220 3753 607

Capacity Analysis Module:

Vol/Sat: 0.18 0.26 0.26 0.31 0.19 0.19 0.12 0.12 0.12 0.17 0.17 0.17
Crit Moves: 2 14 1 2 8 2 9 2 1 16 3
Green/Cycle: 0.59 0.59 0.59 0.59 0.59 0.59 0.32 0.32 0.32 0.32 0.32 0.32
Volume/Cap: 0.30 0.43 0.43 0.53 0.32 0.32 0.38 0.38 0.38 0.53 0.53 0.53
Delay/Veh: 7.0 7.4 7.4 9.7 6.8 6.8 17.2 17.2 17.2 18.3 18.3 18.3
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: 7.0 7.4 7.4 9.7 6.8 6.8 17.2 17.2 17.2 18.3 18.3 18.3
DesignQueue: 2 14 1 2 8 2 9 2 1 16 3

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

PM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report
1997 HCM Operations Method (Base Volume Alternative)
Intersection #7 W Grand / MLK Jr
Cycle (sec): 100 Critical Vol./Cap. (X): 0.525
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 16.9
Optimal Cycle: 41 Level Of Service: B

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R
Control: Permitted Permitted Permitted Permitted
Rights: Include Include Include Include
Min. Green: 8 20 20 8 20 20 8 15 15 8 15 15
Lanes: 0 1 0 1 0 0 1 0 1 0 0 1 1 0 0 1 1 0

Volume Module:
Base Vol: 38 208 331 44 128 122 87 1002 20 36 846 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: 38 208 331 44 128 122 87 1002 20 36 846 11
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 38 208 331 44 128 122 87 1002 20 36 846 11
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 38 208 331 44 128 122 87 1002 20 36 846 11
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 38 208 331 44 128 122 87 1002 20 36 846 11

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.79 0.79 0.79 0.74 0.74 0.74 0.71 0.71 0.71 0.78 0.78 0.78
Lanes: 0.15 0.85 1.00 0.30 0.87 0.83 0.24 2.71 0.05 0.12 2.84 0.04
Final Sat.: 233 1275 1508 418 1216 1159 318 3659 73 178 4193 55

Capacity Analysis Module:
Vol/Sat: 0.16 0.16 0.22 0.11 0.11 0.11 0.27 0.27 0.27 0.20 0.20 0.20
Crit Moves: ****
Green/Cycle: 0.42 0.42 0.42 0.42 0.42 0.42 0.52 0.52 0.52 0.52 0.52
Volume/Cap: 0.39 0.39 0.52 0.25 0.25 0.25 0.52 0.52 0.52 0.39 0.39
Delay/Veh: 20.4 20.4 22.2 19.0 19.0 19.0 16.0 16.0 16.0 14.4 14.4
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 20.4 20.4 22.2 19.0 19.0 19.0 16.0 16.0 16.0 14.4 14.4
DesignQueue: 1 7 11 1 4 4 2 28 1 1 23 0

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

PM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)
Intersection #7 W Grand / MLK Jr
Cycle (sec): 100 Critical Vol./Cap. (X): 0.400
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 17.7
Optimal Cycle: 41 Level Of Service: B

Approach: North Bound South Bound East Bound West Bound
Movement: L-T-R L-T-R L-T-R L-T-R
Control: Permitted Permitted Permitted Permitted
Rights: Include Include Include Include
Min. Green: 8 20 20 8 20 20 8 15 15 8 15 15
Lanes: 0 1 0 1 0 0 1 0 1 0 0 1 1 0 0 1 1 0

Volume Module:
Base Vol: 38 208 331 44 128 122 87 1002 20 36 846 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: 38 208 331 44 128 122 87 1002 20 36 846 11
User Adj: 0 0 -3 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 38 208 328 44 128 122 87 358 20 36 689 11
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 38 208 328 44 128 122 87 358 20 36 689 11
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 38 208 328 44 128 122 87 358 20 36 689 11
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 38 208 328 44 128 122 87 358 20 36 689 11

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.79 0.79 0.79 0.74 0.74 0.74 0.66 0.66 0.66 0.81 0.81 0.81
Lanes: 0.15 0.85 1.00 0.30 0.87 0.83 0.56 2.31 0.13 0.15 2.81 0.04
Final Sat.: 233 1276 1510 419 1219 1162 705 2902 162 227 4347 69

Capacity Analysis Module:
Vol/Sat: 0.16 0.16 0.22 0.10 0.10 0.10 0.12 0.12 0.12 0.16 0.16 0.16
Crit Moves: ****
Green/Cycle: 0.54 0.54 0.54 0.54 0.54 0.54 0.40 0.40 0.40 0.40 0.40
Volume/Cap: 0.30 0.30 0.40 0.19 0.19 0.19 0.31 0.31 0.31 0.31 0.31
Delay/Veh: 12.5 12.5 13.5 11.7 11.7 11.7 20.9 20.9 20.9 21.8 21.8
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 12.5 12.5 13.5 11.7 11.7 11.7 20.9 20.9 20.9 21.8 21.8
DesignQueue: 1 5 9 1 3 3 3 12 1 1 24 0

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

PM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report
1997 HCM Operations Method (Base Volume Alternative)
Intersection #8 W Grand / Northgate

Cycle (sec): 100 Critical Vol./Cap. (X): 0.709
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 24.2
Optimal Cycle: 52 Level Of Service: C

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Split Phase Split Phase Protected Permitted
Rights: Include Include Include Include
Min. Green: 0 0 0 0 8 20 20 8 10 0 0 15 15
Lanes: 0 0 0 0 1 0 1 0 1 1 0 2 0 0 0 0 2 1 0

Volume Module:
Base Vol: 0 0 159 0 98 535 1221 0 0 901 503
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 0 159 0 98 535 1221 0 0 901 503
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 0 0 159 0 98 535 1221 0 0 901 503
User Adj: 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 0 159 0 98 535 1221 0 0 901 503
PCE Adj: 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
Final Vol.: 0 0 159 0 98 535 1221 0 0 901 503

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adj: 1.00 1.00 1.00 0.91 0.95 0.95 1.00 1.00 0.86 0.86
Lanes: 0.00 0.00 0.00 1.62 0.00 1.38 1.00 2.00 0.00 2.00
Final Sat.: 0 0 2813 0 2401 1805 3610 0 0 3271 1636

Capacity Analysis Module:
Vol/Sat: 0.00 0.00 0.00 0.06 0.00 0.04 0.30 0.34 0.00 0.00 0.28 0.31
Crit Moves: **** *
Green/Cycle: 0.00 0.00 0.20 0.00 0.20 0.35 0.71 0.00 0.00 0.36 0.36
Volume/Cap: 0.00 0.00 0.28 0.00 0.20 0.85 0.48 0.00 0.00 0.76 0.85
Delay/Veh: 0.0 0.0 34.1 0.0 33.4 40.8 6.5 0.0 0.0 30.1 33.9
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 0.0 0.0 0.0 34.1 0.0 33.4 40.8 6.5 0.0 30.1 33.9
DesignQueue: 0 0 0 7 0 4 21 21 0 0 34 19

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

PM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)
Intersection #8 W Grand / Northgate

Cycle (sec): 100 Critical Vol./Cap. (X): 0.587
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 20.9
Optimal Cycle: 52 Level Of Service: C

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Split Phase Split Phase Protected Permitted
Rights: Include Include Include Include
Min. Green: 0 0 0 0 8 20 20 8 10 0 0 15 15
Lanes: 0 0 0 0 1 0 1 0 1 1 0 2 0 0 0 0 2 1 0

Volume Module:
Base Vol: 0 0 159 0 98 535 1221 0 0 901 503
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 0 159 0 98 535 1221 0 0 901 503
User Adj: 0 0 0 0 -45 -171 -475 0 0 -112 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 0 0 159 0 53 364 746 0 0 789 503
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 0 159 0 53 364 746 0 0 789 503
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 0 0 159 0 53 364 746 0 0 789 503

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adj: 1.00 1.00 1.00 0.93 0.95 0.95 1.00 1.00 0.86 0.86
Lanes: 0.00 0.00 0.00 1.75 0.00 1.25 1.00 2.00 0.00 2.00
Final Sat.: 0 0 3087 0 2205 1805 3610 0 0 3257 1629

Capacity Analysis Module:
Vol/Sat: 0.00 0.00 0.00 0.05 0.00 0.02 0.20 0.21 0.00 0.00 0.24 0.31
Crit Moves: **** *
Green/Cycle: 0.00 0.00 0.00 0.20 0.00 0.20 0.28 0.71 0.00 0.00 0.43 0.43
Volume/Cap: 0.00 0.00 0.00 0.26 0.00 0.12 0.72 0.29 0.00 0.00 0.56 0.72
Delay/Veh: 0.0 0.0 0.0 33.9 0.0 32.8 37.4 5.4 0.0 0.0 21.8 25.0
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 0.0 0.0 0.0 33.9 0.0 32.8 37.4 5.4 0.0 0.0 21.8 25.0
DesignQueue: 0 0 0 7 0 2 15 13 0 0 26 17

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

PM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report

1997 HCM Operations Method (Base Volume Alternative)

Intersection #9 W Grand / Harrison

Cycle (sec): 100 Critical Vol./Cap. (X): 0.759
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 28.7
Optimal Cycle: 60 Level Of Service: C

Table with columns: Approach, Movement, L, T, R, L, T, R, L, T, R, L, T, R, Permitted, Include, Protected, Include, Protected, Include. Rows for North Bound, South Bound, East Bound, West Bound.

Volume Module:

Base Vol: 13 1894 757 0 794 144 226 677 261 311 712 105
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: 13 1894 757 0 794 144 226 677 261 311 712 105
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 13 1894 757 0 794 144 226 677 261 311 712 105
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 13 1894 757 0 794 144 226 677 261 311 712 105

Saturation Flow Module:

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.85 0.85 0.75 0.91 0.89 0.89 0.92 0.87 0.87 0.92 0.93 0.93
Lanes: 0.02 2.98 2.00 0.00 2.54 0.46 2.00 2.17 0.83 2.00 1.74 0.26
Final Sat.: 33 4786 2842 0 4290 778 3502 3586 1383 3502 3086 455

Capacity Analysis Module:

Vol/Sat: 0.40 0.40 0.27 0.00 0.19 0.19 0.06 0.19 0.19 0.09 0.23 0.23
Crit Moves: ****
Green/Cycle: 0.52 0.52 0.52 0.00 0.52 0.52 0.08 0.20 0.20 0.19 0.30 0.30
Volume/Cap: 0.76 0.76 0.51 0.00 0.36 0.36 0.76 0.94 0.94 0.47 0.76 0.76
Delay/Veh: 20.4 20.4 15.9 0.0 14.1 14.1 55.6 56.1 56.1 36.6 34.7 34.7
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: 20.4 20.4 15.9 0.0 14.1 14.1 55.6 56.1 56.1 36.6 34.7 34.7
DesignQueue: 0 55 21 0 22 4 12 31 12 14 29 4

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

PM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report

1997 HCM Operations Method (Future Volume Alternative)

Intersection #9 W Grand / Harrison

Cycle (sec): 100 Critical Vol./Cap. (X): 0.745
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 25.2
Optimal Cycle: 58 Level Of Service: C

Table with columns: Approach, Movement, L, T, R, L, T, R, L, T, R, L, T, R, Permitted, Include, Protected, Include, Protected, Include. Rows for North Bound, South Bound, East Bound, West Bound.

Volume Module:

Base Vol: 13 1894 757 0 794 144 226 677 261 311 712 105
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: 13 1894 757 0 794 144 226 677 261 311 712 105
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 13 1894 757 0 794 144 226 677 261 311 712 105
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 13 1894 757 0 794 144 226 677 261 311 712 105

Saturation Flow Module:

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.85 0.85 0.75 0.91 0.89 0.89 0.92 0.86 0.86 0.92 0.93 0.93
Lanes: 0.02 2.98 2.00 0.00 2.54 0.46 2.00 2.00 1.00 2.00 1.73 0.27
Final Sat.: 33 4786 2842 0 4290 778 3502 3275 1637 3502 3051 483

Capacity Analysis Module:

Vol/Sat: 0.40 0.40 0.27 0.00 0.19 0.19 0.06 0.14 0.16 0.09 0.22 0.22
Crit Moves: ****
Green/Cycle: 0.53 0.53 0.53 0.00 0.53 0.53 0.09 0.20 0.20 0.18 0.29 0.29
Volume/Cap: 0.74 0.74 0.50 0.00 0.35 0.35 0.74 0.72 0.80 0.50 0.74 0.74
Delay/Veh: 19.4 19.4 15.2 0.0 13.5 13.5 54.2 39.9 43.0 37.7 35.0 35.0
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: 19.4 19.4 15.2 0.0 13.5 13.5 54.2 39.9 43.0 37.7 35.0 35.0
DesignQueue: 0 54 21 0 22 4 12 22 12 15 28 4

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

PM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report
1997 HCM Operations Method (Base Volume Alternative)

Intersection #10 7th / Maritime

Cycle (sec): 100 Critical Vol./Cap. (X): 1.241
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 112.3
Optimal Cycle: 180 Level Of Service: F
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Protected Include Protected Protected
Rights: 15 20 20 15 20 20 15 20 20 15 20 20
Lanes: 1 0 1 1 0 1 0 1 1 0 1 0 2 1 0 1 0 2 0 1

Volume Module:

Base Vol: 159 314 541 436 351 11 133 285 215 242 94 154
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: 159 314 541 436 351 11 133 285 215 242 94 154
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 159 314 541 436 351 11 133 285 215 242 94 154
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 159 314 541 436 351 11 133 285 215 242 94 154
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol: 159 314 541 436 351 11 133 285 215 242 94 154

Saturation Flow Module:

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adj: 0.73 0.66 0.66 0.73 0.73 0.73 0.73 0.73 0.66 0.73 0.73 0.65
Lanes: 1.00 1.00 1.00 1.00 1.94 0.06 1.00 2.00 1.00 1.00 2.00 1.00
Final Sat.: 1388 1256 1256 1388 2681 84 1388 2489 1245 1388 2776 1242

Capacity Analysis Module:

Vol/Sat: 0.11 0.25 0.43 0.31 0.13 0.13 0.10 0.11 0.17 0.17 0.03 0.12
Crit Moves: ****
Green/Cycle: 0.23 0.31 0.31 0.22 0.30 0.30 0.15 0.20 0.20 0.15 0.20 0.20
Volume/Cap: 0.50 0.82 1.41 1.41 0.43 0.43 0.64 0.57 0.86 1.16 0.17 0.62
Delay/Veh: 35.0 37.1 226.8 239.5 28.3 28.3 46.5 37.1 51.4 155.5 33.3 41.3
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: 35.0 37.1 226.8 239.5 28.3 28.3 46.5 37.1 51.4 155.5 33.3 41.3
DesignQueue: 7 13 23 20 14 0 6 13 10 12 4 7

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

PM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #10 7th / Maritime

Cycle (sec): 100 Critical Vol./Cap. (X): 0.867
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 55.9
Optimal Cycle: 96 Level Of Service: E
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Protected Include Protected Protected
Rights: 15 20 20 15 20 20 15 20 20 15 20 20
Lanes: 1 0 1 1 0 1 0 1 1 0 1 0 2 1 0 1 0 2 0 1

Volume Module:

Base Vol: 159 314 541 436 351 11 133 285 215 242 94 154
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: 159 314 541 436 351 11 133 285 215 242 94 154
User Adj: 2 -28 -30 -413 -44 -3 -5 -27 4 -17 -22 -89
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 161 286 511 23 307 8 128 258 219 225 72 65
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 161 286 511 23 307 8 128 258 219 225 72 65
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 161 286 511 23 307 8 128 258 219 225 72 65
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol: 161 286 511 23 307 8 128 258 219 225 72 65

Saturation Flow Module:

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adj: 0.73 0.66 0.66 0.73 0.73 0.73 0.73 0.73 0.65 0.73 0.73 0.65
Lanes: 1.00 1.00 1.00 1.00 1.95 0.05 1.00 2.00 1.00 1.00 2.00 1.00
Final Sat.: 1388 1255 1255 1388 2695 70 1388 2476 1238 1388 2776 1242

Capacity Analysis Module:

Vol/Sat: 0.12 0.23 0.41 0.02 0.11 0.11 0.09 0.10 0.18 0.16 0.03 0.05
Crit Moves: ****
Green/Cycle: 0.23 0.38 0.38 0.15 0.30 0.30 0.15 0.20 0.20 0.15 0.20 0.20
Volume/Cap: 0.51 0.60 1.07 0.11 0.38 0.38 0.61 0.52 0.88 1.07 0.13 0.26
Delay/Veh: 35.2 25.7 85.8 37.0 27.8 27.8 45.1 36.3 54.8 125.7 32.9 34.3
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: 35.2 25.7 85.8 37.0 27.8 27.8 45.1 36.3 54.8 125.7 32.9 34.3
DesignQueue: 7 10 19 1 12 0 6 12 10 11 3 3

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

PM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report
1997 HCM Operations Method (Base Volume Alternative)

Intersection #11 7th / I-880 SB Ramp

Cycle (sec): 100 Critical Vol./Cap. (X): 0.660
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 10.9
Optimal Cycle: 41 Level Of Service: B

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 20 20 15 20 0
Lanes: 0 0 0 0 0 0 0 0 0 2 0 1 2 0 2 0 0

Volume Module:
Base Vol: 0 0 0 0 0 0 474 793 453 672 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
Initial Bse: 0 0 0 0 0 0 474 793 453 672 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 0 0 0 0 0 474 793 453 672 0
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 0 0 0 0 0 0 474 793 453 672 0

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0 0 0 0 0 0 0 3610 1615 3502 3610 0
Final Sat.: 0 0 0 0 0 0 0 3610 1615 3502 3610 0
Capacity Analysis Module:
Vol/Sat: 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.13 0.49 0.13 0.19 0.00
Crit Moves: ****
Green/Cycle: 0.00 0.00 0.00 0.00 0.00 0.00 0.74 0.74 0.20 0.94 0.00
Volume/Cap: 0.00 0.00 0.00 0.00 0.00 0.00 0.18 0.66 0.66 0.20 0.00
Delay/Veh: 0.0 0.0 0.0 0.0 0.0 0.0 3.8 7.8 39.5 0.2 0.0
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 0.0 0.0 0.0 0.0 0.0 0.0 3.8 7.8 39.5 0.2 0.0
DesignQueue: 0 0 0 0 0 0 0 7 13 21 2 0

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

PM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #11 7th / I-880 SB Ramp

Cycle (sec): 100 Critical Vol./Cap. (X): 0.266
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 2.3
Optimal Cycle: 41 Level Of Service: A

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 20 20 15 20 0
Lanes: 0 0 0 0 0 0 0 0 0 2 0 1 2 0 2 0 0

Volume Module:
Base Vol: 0 0 0 0 0 0 474 793 453 672 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 0 0 0 0 0 474 793 453 672 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 0 0 0 0 0 474 793 453 672 0
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 0 0 0 0 0 0 474 793 453 672 0

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0 0 0 0 0 0 0 3610 1615 3502 3610 0
Final Sat.: 0 0 0 0 0 0 0 3610 1615 3502 3610 0
Capacity Analysis Module:
Vol/Sat: 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.11 0.24 0.01 0.15 0.00
Crit Moves: ****
Green/Cycle: 0.00 0.00 0.00 0.00 0.00 0.00 0.79 0.79 0.15 0.94 0.00
Volume/Cap: 0.00 0.00 0.00 0.00 0.00 0.00 0.14 0.31 0.04 0.16 0.00
Delay/Veh: 0.0 0.0 0.0 0.0 0.0 0.0 2.5 3.1 36.4 0.2 0.0
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 0.0 0.0 0.0 0.0 0.0 0.0 2.5 3.1 36.4 0.2 0.0
DesignQueue: 0 0 0 0 0 0 0 5 1 2 0

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions
PM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report
1997 HCM Operations Method (Base Volume Alternative)

Intersection #12 7th / I-880 North Ramp
Cycle (sec): 100 Critical Vol./Cap. (X): 0.852
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 40.0
Optimal Cycle: 91 Level Of Service: D

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Split Phase Split Phase Protected Protected
Rights: Include Include Include Include
Min. Green: 15 15 15 15 15 20 0 0 20 20
Lanes: 1 0 1 1 0 1 0 0 2 1 0 2 0 0 0 1 1 0

Volume Module:
Base Vol: 407 189 227 265 0 474 365 122 0 237 290
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 407 189 227 265 0 474 365 122 0 237 290
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 407 189 227 265 0 474 365 122 0 237 290
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 407 189 227 265 0 474 365 122 0 237 290

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.95 0.87 0.87 0.95 1.00 0.75 0.95 0.95 1.00 1.00 0.87
Lanes: 1.00 1.00 1.00 1.00 0.00 2.00 1.00 2.00 0.00 1.00 1.00
Final Sat.: 1805 1657 1657 1805 0 2842 1805 3610 0 1657 1657

Capacity Analysis Module:
Vol/Sat: 0.23 0.11 0.14 0.15 0.00 0.17 0.20 0.03 0.00 0.00 0.14
Crit Moves: ****
Green/Cycle: 0.26 0.26 0.26 0.17 0.00 0.41 0.24 0.44 0.00 0.00 0.21
Volume/Cap: 0.85 0.43 0.52 0.85 0.00 0.41 0.85 0.08 0.00 0.00 0.70
Delay/Veh: 48.6 30.8 31.9 59.7 0.0 21.1 51.5 16.1 0.0 0.0 39.7
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 48.6 30.8 31.9 59.7 0.0 21.1 51.5 16.1 0.0 0.0 39.7
DesignQueue: 18 8 10 13 0 16 16 4 0 0 11

DesignQueue: 18 8 10 13 0 16 16 4 0 0 11

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions
PM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #12 7th / I-880 North Ramp
Cycle (sec): 100 Critical Vol./Cap. (X): 0.666
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 36.5
Optimal Cycle: 77 Level Of Service: D

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Split Phase Split Phase Protected Protected
Rights: Include Include Include Include
Min. Green: 15 15 15 15 15 20 0 0 20 20
Lanes: 1 0 1 1 0 1 0 0 2 1 0 2 0 0 0 1 1 0

Volume Module:
Base Vol: 407 189 227 265 0 474 365 122 0 237 290
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 407 189 227 265 0 474 365 122 0 237 290
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 407 189 227 265 0 474 365 122 0 237 290
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 407 189 227 265 0 474 365 122 0 237 290

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.95 0.87 0.87 0.95 1.00 0.75 0.95 0.95 1.00 1.00 0.87
Lanes: 1.00 1.00 1.00 1.00 0.00 2.00 1.00 2.00 0.00 1.00 1.00
Final Sat.: 1805 1657 1657 1805 0 2842 1805 3610 0 1657 1657

Capacity Analysis Module:
Vol/Sat: 0.23 0.11 0.14 0.15 0.00 0.17 0.20 0.03 0.00 0.00 0.14
Crit Moves: ****
Green/Cycle: 0.26 0.26 0.26 0.17 0.00 0.41 0.24 0.44 0.00 0.00 0.21
Volume/Cap: 0.85 0.43 0.52 0.85 0.00 0.41 0.85 0.08 0.00 0.00 0.70
Delay/Veh: 48.6 30.8 31.9 59.7 0.0 21.1 51.5 16.1 0.0 0.0 39.7
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 48.6 30.8 31.9 59.7 0.0 21.1 51.5 16.1 0.0 0.0 39.7
DesignQueue: 18 8 10 13 0 16 16 4 0 0 11

DesignQueue: 18 8 10 13 0 16 16 4 0 0 11

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

PM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report
1997 HCM Operations Method (Base Volume Alternative)

Intersection #13 7th / Peralta

Cycle (sec): 100 Critical Vol./Cap. (X): 0.212
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 7.9
Optimal Cycle: 36 Level Of Service: A

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

Control: Permitted Permitted Permitted Permitted
Rights: Include Include Include Include
Min. Green: 0 15 15 0 15 15 0 15 15 8 15 15
Lanes: 0 1 0 0 1 0 1 0 0 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 21 18 15 44 18 21 27 479 22 9 285 25
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: 21 18 15 44 18 21 27 479 22 9 285 25
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 21 18 15 44 18 21 27 479 22 9 285 25
Reduc Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 21 18 15 44 18 21 27 479 22 9 285 25
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 21 18 15 44 18 21 27 479 22 9 285 25

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.87 0.87 0.85 0.80 0.80 0.85 0.87 0.87 0.87 0.44 0.94 0.94
Final Sat.: 886 759 1615 1079 441 1615 170 3014 138 840 3279 288

Capacity Analysis Module:
Vol/Sat: 0.02 0.02 0.01 0.04 0.04 0.01 0.16 0.16 0.16 0.01 0.09 0.09
Crit Moves: ****
Green/Cycle: 0.19 0.19 0.19 0.19 0.19 0.19 0.75 0.75 0.75 0.75 0.75 0.75
Volume/Cap: 0.12 0.12 0.05 0.21 0.21 0.07 0.21 0.21 0.21 0.01 0.12 0.12
Delay/Veh: 33.6 33.6 33.0 34.4 34.4 33.2 3.8 3.8 3.8 3.2 3.5 3.5
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: 33.6 33.6 33.0 34.4 34.4 33.2 3.8 3.8 3.8 3.2 3.5 3.5
DesignQueue: 1 1 2 1 1 0 7 0 0 4 0 0

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

PM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #13 7th / Peralta

Cycle (sec): 100 Critical Vol./Cap. (X): 0.184
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 8.7
Optimal Cycle: 36 Level Of Service: A

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

Control: Permitted Permitted Permitted Permitted
Rights: Include Include Include Include
Min. Green: 0 15 15 0 15 15 0 15 15 8 15 15
Lanes: 0 1 0 0 1 0 1 0 0 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 21 18 15 44 18 21 27 479 22 9 285 25
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: 21 18 15 44 18 21 27 479 22 9 285 25
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 21 18 15 44 18 21 27 389 22 9 253 25
Reduc Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 21 18 15 44 18 21 27 389 22 9 253 25
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 21 18 15 44 18 21 27 389 22 9 253 25

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.87 0.87 0.85 0.81 0.81 0.85 0.87 0.87 0.87 0.49 0.94 0.94
Final Sat.: 891 764 1615 1087 445 1615 204 2942 166 925 3243 320

Capacity Analysis Module:
Vol/Sat: 0.02 0.02 0.01 0.04 0.04 0.01 0.13 0.13 0.13 0.01 0.08 0.08
Crit Moves: ****
Green/Cycle: 0.22 0.22 0.22 0.22 0.22 0.22 0.72 0.72 0.72 0.72 0.72 0.72
Volume/Cap: 0.11 0.11 0.04 0.18 0.18 0.06 0.18 0.18 0.18 0.01 0.11 0.11
Delay/Veh: 31.3 31.3 30.7 31.9 31.9 30.9 4.6 4.6 4.6 4.0 4.3 4.3
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: 31.3 31.3 30.7 31.9 31.9 30.9 4.6 4.6 4.6 4.0 4.3 4.3
DesignQueue: 1 1 2 1 1 0 6 0 0 4 0 0

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

PM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report
1997 HCM Operations Method (Base Volume Alternative)

Intersection #16 7th / Adeline

Cycle (sec): 100 Critical Vol./Cap. (X): 0.372
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 12.5
Optimal Cycle: 43 Level Of Service: B

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Permitted Permitted Permitted Permitted
Rights: Include Include Include Include
Min. Green: 8 22 22 8 22 22 8 15 15 8 15 15
Lanes: 1 0 1 1 0 0 1 0 1 0 1 0 2 0 1 1 0 2 0 1

Volume Module:
Base Vol: 86 119 89 148 68 60 73 643 82 71 883 64
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: 86 119 89 148 68 60 73 643 82 71 883 64
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 86 119 89 148 68 60 73 643 82 71 883 64
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 86 119 89 148 68 60 73 643 82 71 883 64
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 86 119 89 148 68 60 73 643 82 71 883 64

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.51 0.89 0.89 0.64 0.64 0.64 0.28 0.95 0.85 0.37 0.95 0.85
Lanes: 1.00 1.14 0.86 1.00 0.53 0.47 1.00 2.00 1.00 1.00 2.00 1.00
Final Sat.: 967 1933 1446 1213 644 569 526 3610 1615 705 3610 1615

Capacity Analysis Module:
Vol/Sat: 0.09 0.06 0.06 0.12 0.11 0.11 0.14 0.18 0.05 0.10 0.24 0.04
Crit Moves: *****
Green/Cycle: 0.28 0.28 0.28 0.28 0.28 0.28 0.66 0.66 0.66 0.66 0.66 0.66
Volume/Cap: 0.31 0.22 0.22 0.43 0.37 0.37 0.21 0.27 0.08 0.15 0.37 0.06
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: 28.9 27.5 27.5 29.7 29.0 29.0 7.1 7.2 6.2 6.7 7.9 6.2
DesignQueue: 3 5 4 6 3 2 1 13 2 1 18 1

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

PM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #16 7th / Adeline

Cycle (sec): 100 Critical Vol./Cap. (X): 0.307
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 10.3
Optimal Cycle: 43 Level Of Service: B

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Permitted Permitted Permitted Permitted
Rights: Include Include Include Include
Min. Green: 8 22 22 8 22 22 8 15 15 8 15 15
Lanes: 1 0 1 1 0 0 1 0 1 0 1 0 2 0 1 1 0 2 0 1

Volume Module:
Base Vol: 86 119 89 148 68 60 73 643 82 71 883 64
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: 86 119 89 148 68 60 73 643 82 71 883 64
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 86 119 89 148 68 60 73 643 82 71 883 64
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 86 119 89 148 68 60 73 643 82 71 883 64
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 86 119 89 148 68 60 73 643 82 71 883 64

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.65 0.90 0.90 0.83 0.83 0.83 0.30 0.95 0.85 0.41 0.95 0.85
Lanes: 1.00 1.31 0.69 0.13 0.99 0.88 1.00 2.00 1.00 1.00 2.00 1.00
Final Sat.: 1239 2238 1185 208 1568 1384 572 3610 1615 771 3610 1615

Capacity Analysis Module:
Vol/Sat: 0.07 0.05 0.05 0.04 0.04 0.04 0.13 0.16 0.02 0.08 0.24 0.02
Crit Moves: *****
Green/Cycle: 0.22 0.22 0.22 0.22 0.22 0.22 0.72 0.72 0.72 0.72 0.72 0.72
Volume/Cap: 0.31 0.24 0.24 0.20 0.20 0.20 0.18 0.23 0.03 0.11 0.33 0.02
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: 33.3 32.3 32.3 31.9 31.9 31.9 4.7 4.7 4.0 4.3 5.2 4.0
DesignQueue: 4 5 3 0 3 3 1 10 1 1 14 0

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions
PM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report
1997 HCM Operations Method (Base Volume Alternative)

Intersection #19 7th / Jackson
Cycle (sec): 45 Critical Vol./Cap. (X): 0.992
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 25.3
Optimal Cycle: 90 Level Of Service: C

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Permitted Permitted Split Phase Split Phase
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Lanes: 0 0 0 1 0 0 1 0 0 0 0 1 2 0 1 0 0 0 0 0 0

Volume Module:
Base Vol: 0 321 63 37 311 0 71 1434 910 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: 0 321 63 37 311 0 71 1434 910 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 321 63 37 311 0 71 1434 910 0 0 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 321 63 37 311 0 71 1434 910 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
Final Vol.: 0 321 63 37 311 0 71 1434 910 0 0 0

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 1.00 0.88 0.88 0.98 0.98 1.00 0.14 2.86 1.00 0.00 0.00 0.00
Lanes: 0 0 0.84 0.16 0.11 0.89 0 208 4201 1615 0 0
Final Sat.: 0 1395 274 198 1664 0 208 4201 1615 0 0 0

Capacity Analysis Module:
Vol/Sat: 0.00 0.23 0.23 0.19 0.19 0.00 0.34 0.34 0.56 0.00 0.00 0.00
Crit Moves: 0.00 0.23 0.23 0.00 0.00 0.00 0.57 0.57 0.57 0.00 0.00 0.00
Green/Cycle: 0.00 0.99 0.99 0.81 0.81 0.00 0.60 0.60 0.99 0.00 0.00 0.00
Volume/Cap: 0.0 61.1 61.1 31.1 31.1 0.0 7.5 7.5 37.5 0.0 0.0 0.0
Delay/Veh: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
User DelAdj: 0.0 61.1 61.1 31.1 31.1 0.0 7.5 7.5 37.5 0.0 0.0 0.0
AdjDel/Veh: 0.0 7 1 1 6 0 1 17 11 0 0 0
DesignQueue: 0 7 1 1 6 0 1 17 11 0 0 0

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions
PM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #19 7th / Jackson
Cycle (sec): 45 Critical Vol./Cap. (X): 0.960
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 22.2
Optimal Cycle: 80 Level Of Service: C

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

Volume Module:
Base Vol: 0 321 63 37 311 0 71 1434 910 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: 0 321 63 37 311 0 71 1434 910 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 321 63 37 311 0 71 1434 869 0 0 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 321 63 37 311 0 71 1434 869 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
Final Vol.: 0 321 63 37 311 0 71 1434 869 0 0 0

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 1.00 0.88 0.88 0.98 0.98 1.00 0.14 2.86 1.00 0.00 0.00 0.00
Lanes: 0 0 0.84 0.16 0.11 0.89 0 208 4201 1615 0 0
Final Sat.: 0 1395 274 197 1657 0 208 4201 1615 0 0 0

Capacity Analysis Module:
Vol/Sat: 0.00 0.23 0.23 0.19 0.19 0.00 0.34 0.34 0.54 0.00 0.00 0.00
Crit Moves: 0.00 0.23 0.23 0.00 0.00 0.00 0.56 0.56 0.56 0.00 0.00 0.00
Green/Cycle: 0.00 0.96 0.96 0.78 0.78 0.00 0.61 0.61 0.96 0.00 0.00 0.00
Volume/Cap: 0.0 53.0 53.0 28.9 28.9 0.0 7.7 7.7 31.1 0.0 0.0 0.0
Delay/Veh: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
User DelAdj: 0.0 53.0 53.0 28.9 28.9 0.0 7.7 7.7 31.1 0.0 0.0 0.0
AdjDel/Veh: 0.0 6 1 1 6 0 1 17 11 0 0 0
DesignQueue: 0 6 1 1 6 0 1 17 11 0 0 0

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

PM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report
1997 HCM Operations Method (Base Volume Alternative)

Intersection #21 5th / Union / I-880 Ramps

Cycle (sec): 100 Critical Vol./Cap. (X): 0.624
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 30.4
Optimal Cycle: 72 Level Of Service: C

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

Control: Permitted Protected Split Phase
Rights: Include Include Include
Min. Green: 0 20 20 0 20 20 8 20 20 8 20 20
Lanes: 0 1 0 1 1 0 0 1 1 0 0 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 16 367 590 0 86 10 81 254 56 409 64 28
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: 16 367 590 0 86 10 81 254 56 409 64 28
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 16 367 590 0 86 10 81 254 56 409 64 28
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 16 367 590 0 86 10 81 254 56 409 64 28

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.81 0.81 0.81 0.93 0.92 0.92 0.92 0.92 0.92 0.92 0.92 0.92
Lanes: 0.05 1.13 1.82 0.00 1.79 0.21 0.41 1.30 0.29 1.00 1.39 0.61
Final Sat.: 76 1738 2794 0 3182 370 725 2273 501 1805 2396 1048

Capacity Analysis Module:
Vol/Sat: 0.21 0.21 0.21 0.00 0.03 0.03 0.11 0.11 0.11 0.23 0.03 0.03
Crit Moves: ****
Green/Cycle: 0.33 0.33 0.33 0.00 0.33 0.33 0.20 0.20 0.20 0.35 0.35 0.35
Volume/Cap: 0.04 0.64 0.64 0.00 0.08 0.08 0.56 0.56 0.56 0.64 0.08 0.08
Delay/Veh: 29.6 29.6 29.6 0.0 23.2 23.2 37.0 37.0 37.0 29.4 21.6 21.6
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: 29.6 29.6 29.6 0.0 23.2 23.2 37.0 37.0 37.0 29.4 21.6 21.6
DesignQueue: 1 14 23 0 3 0 4 12 3 16 2 1

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

PM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #21 5th / Union / I-880 Ramps

Cycle (sec): 100 Critical Vol./Cap. (X): 0.571
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 29.9
Optimal Cycle: 72 Level Of Service: C

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

Control: Permitted Protected Split Phase
Rights: Include Include Include
Min. Green: 0 20 20 0 20 20 8 20 20 8 20 20
Lanes: 0 1 0 1 1 0 0 1 1 0 0 1 0 1 0 1 0

Volume Module:
Base Vol: 16 367 590 0 86 10 81 254 56 409 64 28
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: 16 367 590 0 86 10 81 254 56 409 64 28
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 16 367 429 0 86 10 81 254 56 391 64 28
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 16 367 429 0 86 10 81 254 56 391 64 28

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.82 0.82 0.82 1.00 0.93 0.93 0.92 0.92 0.92 0.92 0.92 0.92
Lanes: 0.06 1.36 1.58 0.00 1.79 0.21 0.41 1.30 0.29 1.00 1.39 0.61
Final Sat.: 92 2108 2464 0 3182 370 725 2273 501 1805 2396 1048

Capacity Analysis Module:
Vol/Sat: 0.17 0.17 0.17 0.00 0.03 0.03 0.11 0.11 0.11 0.22 0.03 0.03
Crit Moves: ****
Green/Cycle: 0.30 0.30 0.30 0.00 0.30 0.30 0.20 0.20 0.20 0.38 0.38 0.38
Volume/Cap: 0.57 0.57 0.57 0.00 0.09 0.09 0.56 0.56 0.56 0.57 0.07 0.07
Delay/Veh: 30.0 30.0 30.0 0.0 25.0 25.0 37.0 37.0 37.0 26.0 20.0 20.0
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: 30.0 30.0 30.0 0.0 25.0 25.0 37.0 37.0 37.0 26.0 20.0 20.0
DesignQueue: 1 15 17 0 3 0 4 12 3 14 2 1

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

PM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report

1997 HCM Operations Method (Base Volume Alternative)

Intersection #22 5th / Adeline

Cycle (sec): 100 Critical Vol./Cap. (X): 0.657
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 34.7
Optimal Cycle: 80 Level Of Service: C

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

Control: Split Phase Split Phase Protected Protected
Rights: Include Include Include Include
Min. Green: 8 20 20 8 20 20 8 20 20 8 20 20
Lanes: 1 0 1 1 0 1 1 0 1 0 1 1 0 1 0 1 1 0

Volume Module:

Base Vol: 191 253 402 178 65 33 67 724 95 88 247 42
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 191 253 402 178 65 33 67 724 95 88 247 42
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 191 253 402 178 65 33 67 724 95 88 247 42
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 191 253 402 178 65 33 67 724 95 88 247 42

Saturation Flow Module:

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.95 0.86 0.86 0.90 0.90 0.90 0.95 0.93 0.93 0.95 0.93 0.93
Lanes: 1.00 1.00 1.00 1.93 0.71 0.36 1.00 1.77 0.23 1.00 1.71 0.29
Final Sat.: 1805 1639 1639 3323 1213 616 1805 3137 412 1805 3017 513

Capacity Analysis Module:

Vol/Sat: 0.11 0.15 0.25 0.05 0.05 0.05 0.04 0.23 0.23 0.05 0.08 0.08
Crit Moves: ****
Green/Cycle: 0.31 0.31 0.31 0.20 0.20 0.20 0.11 0.29 0.29 0.08 0.26 0.26
Volume/Cap: 0.34 0.50 0.79 0.27 0.27 0.27 0.35 0.79 0.79 0.61 0.31 0.31
Delay/Veh: 27.1 28.5 36.9 34.0 34.0 34.0 42.6 37.0 37.0 51.9 29.6 29.6
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: 27.1 28.5 36.9 34.0 34.0 34.0 42.6 37.0 37.0 51.9 29.6 29.6
DesignQueue: 8 10 16 8 3 1 3 30 4 5 10 2

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

PM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report

1997 HCM Operations Method (Future Volume Alternative)

Intersection #22 5th / Adeline

Cycle (sec): 100 Critical Vol./Cap. (X): 0.549
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 32.2
Optimal Cycle: 80 Level Of Service: C

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

Control: Split Phase Split Phase Protected Protected
Rights: Include Include Include Include
Min. Green: 8 20 20 8 20 20 8 20 20 8 20 20
Lanes: 1 0 1 1 0 1 1 0 1 0 1 1 0 1 1 0

Volume Module:

Base Vol: 191 253 402 178 65 33 67 724 95 88 247 42
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 191 253 402 178 65 33 67 724 95 88 247 42
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 179 226 353 137 52 33 67 658 0 76 241 42
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 179 226 353 137 52 33 67 658 0 76 241 42

Saturation Flow Module:

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.95 0.86 0.86 0.90 0.90 0.90 0.95 0.95 0.95 0.95 0.93 0.93
Lanes: 1.00 1.00 1.00 1.85 0.70 0.45 1.00 2.00 0.00 1.00 1.70 0.30
Final Sat.: 1805 1641 1641 3170 1203 764 1805 3610 0 1805 3007 524

Capacity Analysis Module:

Vol/Sat: 0.10 0.14 0.22 0.04 0.04 0.04 0.04 0.18 0.00 0.04 0.08 0.08
Crit Moves: ****
Green/Cycle: 0.32 0.32 0.32 0.20 0.20 0.20 0.10 0.28 0.00 0.08 0.25 0.25
Volume/Cap: 0.31 0.42 0.66 0.22 0.22 0.22 0.37 0.66 0.00 0.53 0.32 0.32
Delay/Veh: 25.6 26.6 31.0 33.6 33.6 33.6 43.2 33.8 0.0 47.8 30.5 30.5
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: 25.6 26.6 31.0 33.6 33.6 33.6 43.2 33.8 0.0 47.8 30.5 30.5
DesignQueue: 7 9 14 6 2 1 3 28 0 4 10 2

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

PM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report

1997 HCM Operations Method (Base Volume Alternative)

Intersection #23 I-880 Off Ramp / Market

Cycle (sec): 100 Critical Vol./Cap. (X): 0.251
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 20.4
Optimal Cycle: 64 Level Of Service: C

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

Control: Protected Include Permitted Include Permitted Include
Rights: 15 20 0 0 20 20 0 0 0 15 20 20
Min. Green: 1 0 2 0 0 0 2 1 0 0 0 0 0 0 1 1 0 1
Lanes: 1 0 2 0 0 0 2 1 0 0 0 0 0 0 1 1 0 1

Volume Module:
Base Vol: 148 1034 0 0 103 59 0 0 0 95 211 178
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: 148 1034 0 0 103 59 0 0 0 95 211 178
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 148 1034 0 0 103 59 0 0 0 95 211 178
Initial Fut: 148 1034 0 0 103 59 0 0 0 95 211 178
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 148 1034 0 0 103 59 0 0 0 95 211 178
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 148 1034 0 0 103 59 0 0 0 95 211 178

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.95 0.95 1.00 1.00 0.86 0.86 1.00 1.00 1.00 0.81 0.81 0.85
Lanes: 1.00 2.00 0.00 0.00 2.00 1.00 0.00 0.00 0.00 0.62 1.38 1.00
Final Sat.: 1805 3610 0 0 3268 1634 0 0 0 953 2116 1615

Capacity Analysis Module:
Vol/Sat: 0.08 0.29 0.00 0.00 0.03 0.04 0.00 0.00 0.00 0.10 0.10 0.11
Crit Moves: ****
Green/Cycle: 0.30 0.50 0.00 0.00 0.20 0.20 0.00 0.00 0.00 0.41 0.41 0.41
Volume/Cap: 0.27 0.57 0.00 0.00 0.16 0.18 0.00 0.00 0.00 0.24 0.24 0.27
Delay/Veh: 26.7 17.8 0.0 0.0 33.1 33.3 0.0 0.0 0.0 19.6 19.6 20.0
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: 26.7 17.8 0.0 0.0 33.1 33.3 0.0 0.0 0.0 19.6 19.6 20.0
DesignQueue: 6 31 0 0 5 3 0 0 0 3 7 6

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

PM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report

1997 HCM Operations Method (Future Volume Alternative)

Intersection #23 I-880 Off Ramp / Market

Cycle (sec): 100 Critical Vol./Cap. (X): 0.236
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 20.0
Optimal Cycle: 64 Level Of Service: B

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

Control: Protected Include Permitted Include Permitted Include
Rights: 15 20 0 0 20 20 0 0 0 15 20 20
Min. Green: 1 0 2 0 0 0 2 1 0 0 0 0 0 0 1 1 0 1
Lanes: 1 0 2 0 0 0 2 1 0 0 0 0 0 0 1 1 0 1

Volume Module:
Base Vol: 148 1034 0 0 103 59 0 0 0 95 211 178
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: 148 1034 0 0 103 59 0 0 0 95 211 178
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 148 1034 0 0 103 59 0 0 0 95 211 178
Initial Fut: 148 1034 0 0 103 59 0 0 0 95 211 178
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 148 1034 0 0 103 59 0 0 0 95 211 178
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 148 1034 0 0 103 59 0 0 0 95 211 178

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.95 0.95 1.00 1.00 0.86 0.86 1.00 1.00 1.00 0.81 0.81 0.85
Lanes: 1.00 2.00 0.00 0.00 2.00 1.00 0.00 0.00 0.00 0.60 1.40 1.00
Final Sat.: 1805 3610 0 0 3264 1632 0 0 0 926 2143 1615

Capacity Analysis Module:
Vol/Sat: 0.08 0.28 0.00 0.00 0.03 0.04 0.00 0.00 0.00 0.09 0.09 0.10
Crit Moves: ****
Green/Cycle: 0.31 0.51 0.00 0.00 0.20 0.20 0.00 0.00 0.00 0.40 0.40 0.40
Volume/Cap: 0.25 0.55 0.00 0.00 0.15 0.18 0.00 0.00 0.00 0.23 0.23 0.25
Delay/Veh: 25.9 17.0 0.0 0.0 33.1 33.3 0.0 0.0 0.0 20.1 20.1 20.4
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: 25.9 17.0 0.0 0.0 33.1 33.3 0.0 0.0 0.0 20.1 20.1 20.4
DesignQueue: 6 30 0 0 4 3 0 0 0 3 7 6

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

PM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report
1997 HCM Unsignalized Method (Base Volume Alternative)
Intersection #26 3rd / Market

Average Delay (sec/veh): 207.3 Worst Case Level Of Service: F
Approach: North Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Stop Sign Stop Sign Uncontrolled Uncontrolled
Rights: Include Include Include Include
Lanes: 1 0 0 1 0 1 0 1 0 0 0 1 0 0 1 0 1 0

Volume Module:
Base Vol: 90 430 49 50 126 99 90 237 47 10 142 146
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: 90 430 49 50 126 99 90 237 47 10 142 146
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 90 430 49 50 126 99 90 237 47 10 142 146
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Final Vol.: 90 430 49 50 126 99 90 237 47 10 142 146

Critical Gap Module:
Critical Gap: 7.1 6.5 6.2 7.1 6.5 6.2 4.1 xxxxx xxxxx 4.1 xxxxx xxxxx
FollowUpTim: 3.5 4.0 3.3 3.5 4.0 3.3 2.2 xxxxx xxxxx 2.2 xxxxx xxxxx

Capacity Module:
Conflict Vol: 788 749 261 915 699 215 288 xxxxx xxxxx 284 xxxxx xxxxx
Potent Cap.: 311 343 783 256 366 830 1286 xxxxx xxxxx 1290 xxxxx xxxxx
Move Cap.: 183 315 783 0 337 830 1286 xxxxx xxxxx 1290 xxxxx xxxxx

Level Of Service Module:
Stopped Del: 42.3 xxxxx xxxxx 0.0 18.1 xxxxx 7.8 xxxxx xxxxx 7.8 xxxxx xxxxx
LOS by Move: E * * * * * C * * * * * A * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxxx xxxxx 336 xxxxx xxxxx 529 xxxxx xxxxx xxxxx xxxxx xxxxx
Shrd StpDel: xxxxx xxxxx 238.3 xxxxx xxxxx 14.8 xxxxx xxxxx xxxxx xxxxx xxxxx
Shared LOS: * * * * * F * * * * * B * * * * * * * * * *
ApproachDel: 207.3 * * * * * 12.9 * * * * * * * * * *
ApproachLOS: F * * * * * B * * * * * * * * * *

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

PM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report
1997 HCM Unsignalized Method (Future Volume Alternative)
Intersection #26 3rd / Market

Average Delay (sec/veh): 177.0 Worst Case Level Of Service: F
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Stop Sign Stop Sign Uncontrolled Uncontrolled
Rights: Include Include Include Include
Lanes: 1 0 0 1 0 1 0 1 0 0 0 1 0 0 1 0

Volume Module:
Base Vol: 90 430 49 50 126 99 90 237 47 10 142 146
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: 90 430 49 50 126 99 90 237 47 10 142 146
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 90 430 49 50 126 99 90 237 47 10 142 146
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Final Vol.: 90 430 49 50 126 99 90 237 47 10 142 146

Critical Gap Module:
Critical Gap: 7.1 6.5 6.2 7.1 6.5 6.2 4.1 xxxxx xxxxx 4.1 xxxxx xxxxx
FollowUpTim: 3.5 4.0 3.3 3.5 4.0 3.3 2.2 xxxxx xxxxx 2.2 xxxxx xxxxx

Capacity Module:
Conflict Vol: 774 741 259 897 690 215 288 xxxxx xxxxx 281 xxxxx xxxxx
Potent Cap.: 318 347 785 263 371 830 1286 xxxxx xxxxx 1293 xxxxx xxxxx
Move Cap.: 195 319 785 0 342 830 1286 xxxxx xxxxx 1293 xxxxx xxxxx

Level Of Service Module:
Stopped Del: 36.5 xxxxx xxxxx 0.0 17.7 xxxxx 7.8 xxxxx xxxxx 7.8 xxxxx xxxxx
LOS by Move: E * * * * * C * * * * * A * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxxx xxxxx 341 xxxxx xxxxx 532 xxxxx xxxxx xxxxx xxxxx xxxxx
Shrd StpDel: xxxxx xxxxx 202.5 xxxxx xxxxx 14.4 xxxxx xxxxx xxxxx xxxxx xxxxx
Shared LOS: * * * * * F * * * * * B * * * * * * * * * *
ApproachDel: 177.0 * * * * * 12.4 * * * * * * * * * *
ApproachLOS: F * * * * * B * * * * * * * * * *

Oakland Army Base Area Redevelopment Plan EIR
 2025 Conditions
 PM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report
 1997 HCM Operations Method (Base Volume Alternative)
 Intersection #30 27th / SR 24-580 Off Ramp
 Cycle (sec): 100 Critical Vol./Cap. (X): 0.391
 Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 16.5
 Optimal Cycle: 38 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	8	20	20	0	12	12	8	12	0
Lanes:	0	0	0	1	1	0	1	0	2	1	0	0

Volume Module:
 Base Vol: 0 0 294 244 284 0 949 37 9 264 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: 0 0 294 244 284 0 949 37 9 264 0
 Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 0 294 244 284 0 949 37 9 264 0
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 0 294 244 284 0 949 37 9 264 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
 Final Vol.: 0 0 294 244 284 0 949 37 9 264 0

Oakland Army Base Area Redevelopment Plan EIR
 2025 Conditions
 PM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report
 1997 HCM Operations Method (Future Volume Alternative)
 Intersection #30 27th / SR 24-580 Off Ramp
 Cycle (sec): 100 Critical Vol./Cap. (X): 0.321
 Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 16.0
 Optimal Cycle: 38 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	8	20	20	0	12	12	8	12	0
Lanes:	0	0	0	1	1	0	1	0	2	1	0	0

Volume Module:
 Base Vol: 0 0 294 244 284 0 949 37 9 264 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: 0 0 294 244 284 0 949 37 9 264 0
 Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 0 0 294 244 284 0 949 37 9 264 0
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 0 294 244 284 0 949 37 9 264 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
 Final Vol.: 0 0 294 244 284 0 949 37 9 264 0

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

PM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report
1997 HCM Operations Method (Base Volume Alternative)

Intersection #31 27th / SR 24-580 On Ramp
 Cycle (sec): 100 Critical Vol./Cap. (X): 0.882
 Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 25.3
 Optimal Cycle: 94 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound					
	L	T	R	L	T	R	L	T	R	L	T	R			
Movement:	0	1	1	0	0	0	0	1	2	0	0	0	3	0	1
Control:	Permitted Include			Permitted Include			Permitted Include			Permitted Include					
Rights:	8	20	20	0	0	0	0	8	10	0	0	10	10	10	10
Min. Green:	0	1	1	0	0	0	0	1	2	0	0	0	0	3	0
Lanes:	0	1	1	0	0	0	0	1	2	0	0	0	0	3	0

Volume Module:

Base Vol:	17	987	56	0	0	0	541	685	0	0	266	852
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:	17	987	56	0	0	0	541	685	0	0	266	852
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	17	987	56	0	0	0	541	685	0	0	266	852
Reduced Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	17	987	56	0	0	0	541	685	0	0	266	852
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	17	987	56	0	0	0	541	685	0	0	266	852

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	0.90	0.90	0.27	0.27	1.00	1.00	0.91	0.85	0.05	2.79	0.16
Lanes:	0.05	2.79	0.16	0.00	0.00	1.77	2.23	0.00	0.00	3.00	1.00	1.00
Final Sat.:	82	4753	270	0	0	909	1152	0	0	5187	1615	1615

Capacity Analysis Module:

Vol/Sat:	0.21	0.21	0.21	0.00	0.00	0.59	0.59	0.00	0.00	0.00	0.05	0.53
Crit Moves:	0.24	0.24	0.24	0.00	0.00	0.67	0.67	0.00	0.00	0.67	0.67	0.67
Green/Cycle:	0.88	0.88	0.88	0.00	0.00	0.88	0.88	0.00	0.00	0.88	0.88	0.88
Volume/Cap:	44.8	44.8	44.8	0.0	0.0	20.0	20.0	0.0	0.0	5.6	15.0	15.0
Delay/Veh:	44.8	44.8	44.8	0.0	0.0	20.0	20.0	0.0	0.0	5.6	15.0	15.0
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	44.8	44.8	0.0	0.0	20.0	20.0	0.0	0.0	5.6	15.0	15.0
DesignQueue:	1	44	3	0	0	10	13	0	0	5	17	17

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

PM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report
1997 HCM Operations Method (Base Volume Alternative)

Intersection #31 27th / SR 24-580 On Ramp
 Cycle (sec): 100 Critical Vol./Cap. (X): 0.772
 Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 19.1
 Optimal Cycle: 62 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound					
	L	T	R	L	T	R	L	T	R	L	T	R			
Movement:	0	1	1	0	0	0	0	1	2	0	0	0	3	0	1
Control:	Permitted Include			Permitted Include			Permitted Include			Permitted Include					
Rights:	8	20	20	0	0	0	0	8	10	0	0	10	10	10	10
Min. Green:	0	1	1	0	0	0	0	1	2	0	0	0	0	3	0
Lanes:	0	1	1	0	0	0	0	1	2	0	0	0	0	3	0

Volume Module:

Base Vol:	17	987	56	0	0	0	541	685	0	0	266	852
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:	17	987	56	0	0	0	541	685	0	0	266	852
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	17	987	56	0	0	0	541	685	0	0	266	852
Reduced Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	17	987	56	0	0	0	541	685	0	0	266	852
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	17	987	56	0	0	0	541	685	0	0	266	852

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	0.90	0.90	0.27	0.27	1.00	1.00	0.91	0.85	0.05	2.79	0.16
Lanes:	0.05	2.79	0.16	0.00	0.00	1.77	2.23	0.00	0.00	3.00	1.00	1.00
Final Sat.:	82	4753	270	0	0	909	1152	0	0	5187	1615	1615

Capacity Analysis Module:

Vol/Sat:	0.21	0.21	0.21	0.00	0.00	0.59	0.59	0.00	0.00	0.00	0.05	0.53
Crit Moves:	0.24	0.24	0.24	0.00	0.00	0.67	0.67	0.00	0.00	0.67	0.67	0.67
Green/Cycle:	0.88	0.88	0.88	0.00	0.00	0.88	0.88	0.00	0.00	0.88	0.88	0.88
Volume/Cap:	44.8	44.8	44.8	0.0	0.0	20.0	20.0	0.0	0.0	5.6	15.0	15.0
Delay/Veh:	44.8	44.8	44.8	0.0	0.0	20.0	20.0	0.0	0.0	5.6	15.0	15.0
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	44.8	44.8	0.0	0.0	20.0	20.0	0.0	0.0	5.6	15.0	15.0
DesignQueue:	1	44	3	0	0	10	13	0	0	5	17	17

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

PM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report
1997 HCM Operations Method (Base Volume Alternative)

Intersection #32 San Pablo Av / Adeline

Cycle (sec): 120 Critical Vol./Cap. (X): 1.094
 Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 50.6
 Optimal Cycle: 180 Level Of Service: D

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

Control: Permitted Include Split Phase Split Phase
 Rights: 0 15 15 8 15 15 8 10 10 8 15 15
 Min. Green: 0 1 0 1 0 0 1 0 1 0 0 1 0 0 1 0 1 0 1 0 1 0

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

Volume Module:
 Base Vol: 1 551 1163 8 1189 173 201 78 0 100 350 59
 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: 1 551 1163 8 1189 173 201 78 0 100 350 59
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 1 551 1163 8 1189 173 201 78 0 100 350 59
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 1 551 1163 8 1189 173 201 78 0 100 350 59
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Final Vol.: 1 551 1163 8 1189 173 201 78 0 100 350 59

Saturation Flow Module:
 Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
 Adjustment: 0.81 0.81 0.81 0.88 0.88 0.92 0.92 1.00 0.92 0.92 0.92 0.92
 Lanes: 0.01 0.99 1.00 0.01 1.74 0.25 1.00 1.00 0.00 0.39 1.38 0.23
 Final Sat.: 3 1545 1548 20 2901 422 1742 1742 0 690 2416 407

Capacity Analysis Module:
 Vol/Sat: 0.36 0.36 0.75 0.41 0.41 0.12 0.04 0.00 0.14 0.14 0.14 0.14
 Crit Moves: ****
 Green/Cycle: 0.69 0.69 0.69 0.69 0.69 0.11 0.11 0.00 0.13 0.13 0.13 0.13
 Volume/Cap: 0.52 0.52 1.09 0.60 0.60 0.60 1.09 0.42 0.00 1.09 1.09 1.09
 Delay/Veh: 9.3 9.3 71.6 10.4 10.4 10.4 137.3 50.7 0.0 121.6 122 121.6
 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: 9.3 9.3 71.6 10.4 10.4 10.4 137.3 50.7 0.0 121.6 122 121.6
 DesignQueue: 0 12 29 0 27 4 12 5 0 6 21 4

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

PM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #32 San Pablo Av / Adeline

Cycle (sec): 120 Critical Vol./Cap. (X): 1.065
 Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 45.6
 Optimal Cycle: 180 Level Of Service: D

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

Control: Permitted Include Split Phase Split Phase
 Rights: 0 15 15 8 15 15 8 10 10 8 15 15
 Min. Green: 0 1 0 1 0 0 1 0 1 0 0 1 0 0 1 0 1 0 1 0 1 0

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

Volume Module:
 Base Vol: 1 551 1163 8 1189 173 201 78 0 100 350 59
 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: 1 551 1163 8 1189 173 201 78 0 100 350 59
 User Adj: 0 0 -31 0 0 0 0 -78 0 0 -8 -18 0
 PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
 Initial Fut: 1 551 1132 8 1189 173 201 0 0 92 332 59
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 1 551 1132 8 1189 173 201 0 0 92 332 59
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 1 551 1132 8 1189 173 201 0 0 92 332 59
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Final Vol.: 1 551 1132 8 1189 173 201 0 0 92 332 59

Saturation Flow Module:
 Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
 Adjustment: 0.82 0.82 0.82 0.88 0.88 0.88 0.90 0.95 1.00 0.92 0.92 0.92
 Lanes: 0.01 0.99 1.00 0.01 1.74 0.25 1.00 1.00 0.00 0.38 1.38 0.24
 Final Sat.: 3 1547 1550 20 2901 422 1718 1805 0 669 2415 429

Capacity Analysis Module:
 Vol/Sat: 0.36 0.36 0.73 0.41 0.41 0.12 0.00 0.00 0.14 0.14 0.14 0.14
 Crit Moves: ****
 Green/Cycle: 0.69 0.69 0.69 0.69 0.69 0.11 0.00 0.00 0.13 0.13 0.13 0.13
 Volume/Cap: 0.52 0.52 1.06 0.60 0.60 0.60 1.06 0.00 0.00 1.06 1.06 1.06
 Delay/Veh: 9.3 9.3 60.9 10.5 10.5 10.5 137.1 0.0 0.0 112.8 113 112.8
 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: 9.3 9.3 60.9 10.5 10.5 10.5 137.1 0.0 0.0 112.8 113 112.8
 DesignQueue: 0 12 28 0 27 4 12 0 0 6 20 4

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

PM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report

1997 HCM Operations Method (Base Volume Alternative)

Intersection #33 W MacArthur / Market

Cycle (sec): 100 Critical Vol./Cap. (X): 0.695
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 21.2
Optimal Cycle: 42 Level Of Service: C

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

Control: Permitted Permitted Permitted Permitted
Rights: Include Include Include Include
Min. Green: 8 20 20 8 20 20 8 15 15 8 15 15
Lanes: 0 1 0 1 0 0 1 0 1 0 0 1 1 1 0 1 0 1 1 0

Volume Module:

Base Vol: 32 465 132 405 236 96 70 751 22 112 515 170
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 Base: 32 465 132 405 236 96 70 751 22 112 515 170
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 32 465 132 405 236 96 70 751 22 112 515 170
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 32 465 132 405 236 96 70 751 22 112 515 170
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol: 32 465 132 405 236 96 70 751 22 112 515 170

Saturation Flow Module:

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.82 0.82 0.82 0.82 0.82 0.82 0.82 0.82 0.82 0.82 0.82 0.82
Lanes: 0.10 1.48 0.42 1.00 0.71 0.29 0.25 2.67 0.08 1.00 1.50 0.50
Final Sat.: 159 2304 654 993 706 287 328 3521 103 456 2614 863

Capacity Analysis Module:

Vol/Sat: 0.20 0.20 0.20 0.41 0.33 0.33 0.21 0.21 0.21 0.25 0.20 0.20
Crit Moves: *****
Green/Cycle: 0.59 0.59 0.59 0.59 0.59 0.59 0.59 0.59 0.59 0.35 0.35 0.35
Volume/Cap: 0.34 0.34 0.34 0.70 0.57 0.57 0.60 0.60 0.60 0.70 0.56 0.56
Delay/Veh: 10.8 10.8 10.8 16.5 13.4 13.4 27.3 27.3 27.3 40.1 26.6 26.6
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: 10.8 10.8 10.8 16.5 13.4 13.4 27.3 27.3 27.3 40.1 26.6 26.6
DesignQueue: 1 11 3 10 6 2 3 28 1 4 19 6

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

PM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report

1997 HCM Operations Method (Future Volume Alternative)

Intersection #33 W MacArthur / Market

Cycle (sec): 100 Critical Vol./Cap. (X): 0.662
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 20.8
Optimal Cycle: 41 Level Of Service: C

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

Control: Permitted Permitted Permitted Permitted
Rights: Include Include Include Include
Min. Green: 8 20 20 8 20 20 8 15 15 8 15 15
Lanes: 0 1 0 1 0 0 1 0 1 0 0 1 1 1 0 1 0 1 1 0

Volume Module:

Base Vol: 32 465 132 405 236 96 70 751 22 112 515 170
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 Base: 32 465 132 405 236 96 70 751 22 112 515 170
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 32 465 132 405 236 96 70 751 22 112 489 170
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 32 465 132 405 236 96 70 751 22 112 489 170
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol: 32 465 132 405 236 96 70 751 22 112 489 170

Saturation Flow Module:

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.82 0.82 0.82 0.82 0.82 0.82 0.82 0.82 0.82 0.82 0.82 0.82
Lanes: 0.10 1.48 0.42 1.00 0.71 0.29 0.29 2.62 0.09 1.00 1.48 0.52
Final Sat.: 159 2304 654 997 709 288 370 3403 116 519 2574 895

Capacity Analysis Module:

Vol/Sat: 0.20 0.20 0.20 0.41 0.33 0.33 0.19 0.19 0.19 0.22 0.19 0.19
Crit Moves: *****
Green/Cycle: 0.61 0.61 0.61 0.61 0.61 0.61 0.33 0.33 0.33 0.33 0.33 0.33
Volume/Cap: 0.33 0.33 0.33 0.66 0.54 0.54 0.58 0.58 0.58 0.66 0.58 0.58
Delay/Veh: 9.4 9.4 9.4 14.1 11.6 11.6 28.7 28.7 28.7 38.3 28.8 28.8
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: 9.4 9.4 9.4 14.1 11.6 11.6 28.7 28.7 28.7 38.3 28.8 28.8
DesignQueue: 1 10 3 9 5 2 3 25 1 4 19 7

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

PM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report
1997 HCM Operations Method (Base Volume Alternative)

Intersection #35 Powell / I-80 NB Ramps
Cycle (sec): 100 Critical Vol./Cap. (X): 1.386
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 75.3
Optimal Cycle: 180 Level Of Service: E

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 8 10 10 0 0 0 8 10 0 0 10 10
Lanes: 1 0 1 0 1 0 0 0 0 1 0 3 0 0 0 0 3 0 1

Volume Module:
Base Vol: 635 267 1119 0 0 191 778 0 0 1604 709
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 635 267 1119 0 0 191 778 0 0 1604 709
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 635 267 1119 0 0 191 778 0 0 1604 709
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 635 267 1119 0 0 191 778 0 0 1604 709

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.84 0.84 0.84 0.00 0.00 0.95 0.91 1.00 1.00 0.91 0.85
Lanes: 1.28 0.23 1.49 0.00 0.00 0.00 3.00 0.00 0.00 3.00 1.00
Final Sat.: 2041 373 2379 0 0 1805 5187 0 0 5187 1615

Capacity Analysis Module:
Vol/Sat: 0.31 0.72 0.47 0.00 0.00 0.11 0.15 0.00 0.00 0.31 0.44
Crit Moves: ****
Green/Cycle: 0.51 0.51 0.51 0.00 0.00 0.08 0.40 0.00 0.00 0.32 0.32
Volume/Cap: 0.60 1.39 0.91 0.00 0.00 1.32 0.38 0.00 0.00 0.98 1.39
Delay/Veh: 17.4 205 28.7 0.0 0.0 0.0 231.3 21.6 0.0 0.0 51.6 222.2
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 17.4 205 28.7 0.0 0.0 0.0 231.3 21.6 0.0 0.0 51.6 222.2
DesignQueue: 18 9 34 0 0 0 10 27 0 0 66 30

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

PM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #35 Powell / I-80 NB Ramps
Cycle (sec): 100 Critical Vol./Cap. (X): 1.357
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 71.3
Optimal Cycle: 180 Level Of Service: E

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 8 10 10 0 0 0 8 10 0 0 10 10
Lanes: 1 0 1 0 1 0 0 0 0 1 0 3 0 0 0 0 3 0 1

Volume Module:
Base Vol: 635 267 1119 0 0 191 778 0 0 1604 709
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 635 267 1119 0 0 191 778 0 0 1604 709
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 635 267 1119 0 0 191 778 0 0 1604 709
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 635 267 1119 0 0 191 778 0 0 1604 709

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.84 0.84 0.84 0.00 0.00 0.95 0.91 1.00 1.00 0.91 0.85
Lanes: 1.27 0.24 1.49 0.00 0.00 0.00 3.00 0.00 0.00 3.00 1.00
Final Sat.: 2028 387 2378 0 0 1805 5187 0 0 5187 1615

Capacity Analysis Module:
Vol/Sat: 0.29 0.69 0.45 0.00 0.00 0.11 0.15 0.00 0.00 0.31 0.44
Crit Moves: ****
Green/Cycle: 0.51 0.51 0.51 0.00 0.00 0.08 0.40 0.00 0.00 0.32 0.32
Volume/Cap: 0.58 1.36 0.89 0.00 0.00 1.32 0.37 0.00 0.00 0.95 1.36
Delay/Veh: 17.4 191 27.4 0.0 0.0 0.0 231.3 21.1 0.0 0.0 45.6 208.0
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 17.4 191 27.4 0.0 0.0 0.0 231.3 21.1 0.0 0.0 45.6 208.0
DesignQueue: 17 9 33 0 0 0 10 27 0 0 65 30

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions
PM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report
1997 HCM Operations Method (Base Volume Alternative)
Intersection #37 Powell / Hollis
Cycle (sec): 100 Critical Vol./Cap. (X): 1.088
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 66.7
Optimal Cycle: 180 Level Of Service: E

Table with columns: Approach, Movement, L-T-R, North Bound, South Bound, East Bound, West Bound, Permitted, Include, Protected, Include, Protected, Include. Rows for Control, Rights, Min. Green, Lanes.

Table with columns: Volume Module, Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduced Vol, PCE Adj, MLF Adj, Final Vol. Rows for Volume Module, Sat/Lane, Adjustment, Lanes, Final Sat.

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

Table with columns: Capacity Analysis Module, Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, DesignQueue. Rows for Capacity Analysis Module, Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, DesignQueue.

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions
PM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)
Intersection #37 Powell / Hollis
Cycle (sec): 100 Critical Vol./Cap. (X): 1.069
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 63.1
Optimal Cycle: 180 Level Of Service: E

Table with columns: Approach, Movement, L-T-R, North Bound, South Bound, East Bound, West Bound, Permitted, Include, Protected, Include, Protected, Include. Rows for Control, Rights, Min. Green, Lanes.

Table with columns: Volume Module, Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduced Vol, PCE Adj, MLF Adj, Final Vol. Rows for Volume Module, Sat/Lane, Adjustment, Lanes, Final Sat.

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

Table with columns: Capacity Analysis Module, Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, DesignQueue. Rows for Capacity Analysis Module, Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, DesignQueue.

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

PM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report
1997 HCM Operations Method (Base Volume Alternative)

Intersection #38 Powell / San Pablo Av
Critical Vol./Cap. (X): 0.930
Average Delay (sec/veh): 46.8
Level Of Service: D

Table with columns: Approach, Movement, L, T, R, L, T, R, L, T, R, L, T, R, L, T, R. Rows include North Bound, South Bound, East Bound, West Bound. Values represent traffic volume and control status.

Volume Module:

Table with columns: Base Vol, Growth Adj, Initial Bse, User Adj, PHF Vol, PCE Adj, MLF Adj, Final Vol, Sat/Lane, Adjustment, Lanes, Final Sat, Capacity Analysis Module. Rows include various traffic metrics and analysis results.

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

PM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #38 Powell / San Pablo Av
Critical Vol./Cap. (X): 0.917
Average Delay (sec/veh): 45.2
Level Of Service: D

Table with columns: Approach, Movement, L, T, R, L, T, R, L, T, R, L, T, R, L, T, R. Rows include North Bound, South Bound, East Bound, West Bound. Values represent traffic volume and control status.

Volume Module:

Table with columns: Base Vol, Growth Adj, Initial Bse, User Adj, PHF Vol, PCE Adj, MLF Adj, Final Vol, Sat/Lane, Adjustment, Lanes, Final Sat, Capacity Analysis Module. Rows include various traffic metrics and analysis results.

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

PM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report

1997 HCM Operations Method (Base Volume Alternative)

Intersection #39 Stanford / Market

Cycle (sec): 100 Critical Vol./Cap. (X): 0.680
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 33.4
Optimal Cycle: 58 Level Of Service: C

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

Control: Protected Protected Protected Protected Protected
Rights: Include Include Include Include Include
Min. Green: 8 15 15 8 15 15 8 15 15 8 15 15
Lanes: 1 0 1 1 0 1 0 1 1 0 1 0 1 1 0 1 0 1 1 0

Volume Module: 219 977 27 88 771 40 157 745 6 112 274 25

Base Vol: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Growth Adj: 219 977 27 88 771 40 157 745 6 112 274 25
Initial Bse: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 219 977 27 88 771 40 157 745 6 112 274 25
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 219 977 27 88 771 40 157 745 6 112 274 25

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95
Lanes: 1.00 1.95 0.05 1.00 1.90 0.10 1.00 1.98 0.02 1.00 1.83 0.17
Final Sat.: 1805 3499 97 1805 3408 177 1805 3578 29 1805 3265 298

Capacity Analysis Module:
Vol/Sat: 0.12 0.28 0.28 0.05 0.23 0.23 0.09 0.21 0.21 0.06 0.08 0.08
Crit Moves: ****
Green/Cycle: 0.17 0.41 0.41 0.08 0.32 0.32 0.24 0.30 0.30 0.09 0.15 0.15
Volume/Cap: 0.71 0.69 0.69 0.61 0.71 0.71 0.36 0.69 0.69 0.69 0.56 0.56
Delay/Veh: 47.0 25.8 25.8 51.9 32.4 32.4 31.8 32.5 32.5 55.7 40.8 40.8
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: 47.0 25.8 25.8 51.9 32.4 32.4 31.8 32.5 32.5 55.7 40.8 40.8
DesignQueue: 10 35 1 5 31 2 7 30 0 6 13 1

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

PM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report

1997 HCM Operations Method (Future Volume Alternative)

Intersection #39 Stanford / Market

Cycle (sec): 100 Critical Vol./Cap. (X): 0.676
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 32.7
Optimal Cycle: 58 Level Of Service: C

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

Control: Protected Protected Protected Protected Protected
Rights: Include Include Include Include Include
Min. Green: 8 15 15 8 15 15 8 15 15 8 15 15
Lanes: 1 0 1 1 0 1 0 1 1 0 1 0 1 1 0 1 1 0

Volume Module: 219 977 27 88 771 40 157 745 6 112 274 25

Base Vol: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Growth Adj: 219 977 27 88 771 40 157 745 6 112 274 25
Initial Bse: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 219 977 27 88 771 40 157 745 6 112 274 25
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 219 977 27 88 771 40 157 745 6 112 274 25

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95
Lanes: 1.00 1.95 0.05 1.00 1.92 0.08 1.00 1.98 0.02 1.00 1.83 0.17
Final Sat.: 1805 3499 97 1805 3445 143 1805 3577 29 1805 3262 301

Capacity Analysis Module:
Vol/Sat: 0.12 0.28 0.28 0.05 0.22 0.22 0.07 0.21 0.21 0.06 0.08 0.08
Crit Moves: ****
Green/Cycle: 0.17 0.41 0.41 0.08 0.32 0.32 0.14 0.30 0.30 0.09 0.26 0.26
Volume/Cap: 0.71 0.68 0.68 0.61 0.71 0.71 0.51 0.68 0.68 0.68 0.33 0.33
Delay/Veh: 46.3 25.6 25.6 51.9 32.1 32.1 41.9 32.6 32.6 55.3 30.5 30.5
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: 46.3 25.6 25.6 51.9 32.1 32.1 41.9 32.6 32.6 55.3 30.5 30.5
DesignQueue: 10 34 1 5 31 1 6 30 0 6 11 1

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

PM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #40 Stanford / MLK Jr WY
Cycle (sec): 100 Critical Vol./Cap. (X): 1.287
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 98.0
Optimal Cycle: 180 Level Of Service: F

Table with columns for Approach (North Bound, South Bound, East Bound, West Bound), Movement (L-T-R), Permitted (Include, Permitted), Protected (Include, Protected), and Lanes (0, 1, 2, 0, 0, 0, 2, 0, 0, 1, 0, 0, 0, 0, 0).

Volume Module: Base Vol: 265 2505 0 0 1588 266 468 0 589 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 1.00 1.00 1.00

Capacity Analysis Module: Vol/Sat: 0.84 0.84 0.00 0.00 0.44 0.16 0.13 0.00 0.36 0.00 0.00 0.00
Crit Moves: 0.66 0.66 0.00 0.00 0.66 0.66 0.28 0.00 0.28 0.00 0.00 0.00
Volume/Cycle: 1.29 1.29 0.00 0.00 0.67 0.25 0.46 0.00 1.29 0.00 0.00 0.00

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

PM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report
1997 HCM Operations Method (Base Volume Alternative)

Intersection #40 Stanford / MLK Jr WY
Cycle (sec): 100 Critical Vol./Cap. (X): 1.287
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 97.8
Optimal Cycle: 180 Level Of Service: F

Table with columns for Approach (North Bound, South Bound, East Bound, West Bound), Movement (L-T-R), Permitted (Include, Permitted), Protected (Include, Protected), and Lanes (0, 1, 2, 0, 0, 0, 2, 0, 0, 1, 0, 0, 0, 0, 0).

Volume Module: Base Vol: 265 2505 0 0 1588 266 468 0 589 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 1.00 1.00 1.00

Capacity Analysis Module: Vol/Sat: 0.84 0.84 0.00 0.00 0.44 0.16 0.13 0.00 0.36 0.00 0.00 0.00
Crit Moves: 0.66 0.66 0.00 0.00 0.66 0.66 0.28 0.00 0.28 0.00 0.00 0.00
Volume/Cycle: 1.29 1.29 0.00 0.00 0.67 0.25 0.47 0.00 1.29 0.00 0.00 0.00

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

PM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report
1997 HCM Operations Method (Base Volume Alternative)

Intersection #41 Ashby / 7th
Cycle (sec): 100 Critical Vol./Cap. (X): 0.954
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 53.1
Optimal Cycle: 142 Level Of Service: D

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Split Phase Split Phase Protected Protected
Rights: Include Include Include Include
Min. Green: 8 15 15 8 15 15 8 12 12 8 12 12
Lanes: 0 1 0 1 0 0 1 0 1 0 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 134 450 75 228 220 488 265 655 98 85 684 60
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: 134 450 75 228 220 488 265 655 98 85 684 60
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 134 450 75 228 220 488 265 655 98 85 684 60
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 134 450 75 228 220 488 265 655 98 85 684 60
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 134 450 75 228 220 488 265 655 98 85 684 60

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.92 0.92 0.23 0.51 0.49 1.00 1.00 1.74 0.26 1.00 1.84 0.16
Lanes: 0.41 1.36 0.23 0.51 0.49 1.00 1.00 1.74 0.26 1.00 1.84 0.16
Final Sat.: 714 2399 400 837 807 1644 1805 3081 461 1805 3279 288

Capacity Analysis Module:
Vol/Sat: 0.19 0.19 0.19 0.27 0.27 0.30 0.15 0.21 0.21 0.05 0.21 0.21
Crit Moves: 0.20 0.20 0.31 0.31 0.31 0.15 0.29 0.29 0.08 0.22 0.22
Green/Cycle: 0.20 0.20 0.31 0.31 0.31 0.15 0.29 0.29 0.08 0.22 0.22
Volume/Cap: 0.95 0.95 0.95 0.88 0.88 0.95 0.95 0.73 0.73 0.59 0.95 0.95
Delay/Veh: 63.3 63.3 63.3 40.9 40.9 52.4 83.5 34.4 34.4 50.7 60.3 60.3
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: 63.3 63.3 63.3 40.9 40.9 52.4 83.5 34.4 34.4 50.7 60.3 60.3
DesignQueue: 6 21 4 9 9 20 13 27 4 4 31 3

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

PM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #41 Ashby / 7th
Cycle (sec): 100 Critical Vol./Cap. (X): 0.948
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 52.3
Optimal Cycle: 137 Level Of Service: D

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Split Phase Split Phase Protected Protected
Rights: Include Include Include Include
Min. Green: 8 15 15 8 15 15 8 12 12 8 12 12
Lanes: 0 1 0 1 0 0 1 0 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 134 450 75 228 220 488 265 655 98 85 684 60
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: 134 450 75 228 220 488 265 655 98 85 684 60
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 134 450 75 228 220 488 265 655 98 85 684 60
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 134 450 75 228 220 488 265 655 98 85 684 60
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 134 450 75 228 220 488 265 655 98 85 684 60

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.92 0.92 0.23 0.51 0.49 1.00 1.00 1.71 0.29 1.00 1.83 0.17
Lanes: 0.41 1.36 0.23 0.51 0.49 1.00 1.00 1.71 0.29 1.00 1.83 0.17
Final Sat.: 714 2399 400 837 807 1644 1805 3013 518 1805 3271 296

Capacity Analysis Module:
Vol/Sat: 0.19 0.19 0.19 0.27 0.27 0.30 0.15 0.19 0.19 0.05 0.20 0.20
Crit Moves: 0.20 0.20 0.31 0.31 0.31 0.15 0.29 0.29 0.08 0.21 0.21
Green/Cycle: 0.20 0.20 0.31 0.31 0.31 0.15 0.29 0.29 0.08 0.21 0.21
Volume/Cap: 0.95 0.95 0.95 0.87 0.87 0.95 0.95 0.66 0.66 0.59 0.95 0.95
Delay/Veh: 61.7 61.7 61.7 40.2 40.2 50.9 81.6 32.7 32.7 50.7 59.5 59.5
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: 61.7 61.7 61.7 40.2 40.2 50.9 81.6 32.7 32.7 50.7 59.5 59.5
DesignQueue: 6 21 4 9 9 20 13 24 4 4 30 3

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

PM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report

1997 HCM Operations Method (Base Volume Alternative)

Intersection #44 Atlantic / Webster

Cycle (sec): 120 Critical Vol./Cap. (X): 0.916
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 46.7
Optimal Cycle: 130 Level Of Service: D

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: 8 20 20 8 20 20 8 20 20 8 20 20
Lanes: 1 0 1 0 1 0 2 0 1 1 1 0 1 1 0 1 0 1 0

Volume Module:

Base Vol: 97 661 106 64 824 615 798 425 225 224 397 145
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: 97 661 106 64 824 615 798 425 225 224 397 145
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 97 661 106 64 824 615 798 425 225 224 397 145
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 97 661 106 64 824 615 798 425 225 224 397 145

Saturation Flow Module:

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.95 0.93 0.93 0.95 0.95 0.85 0.92 0.92 0.85 0.95 0.91 0.91
Lanes: 1.00 1.72 0.28 1.00 2.00 1.00 1.96 1.04 1.00 1.00 1.46 0.54
Final Sat.: 1805 3046 488 1805 3610 1615 3420 1822 1615 1805 2538 927

Capacity Analysis Module:

Vol/Sat: 0.05 0.22 0.22 0.04 0.23 0.38 0.23 0.23 0.14 0.12 0.16 0.16
Crit Moves: ****
Green/Cycle: 0.07 0.41 0.41 0.07 0.41 0.41 0.25 0.25 0.25 0.17 0.17 0.17
Volume/Cap: 0.81 0.53 0.53 0.53 0.55 0.92 0.92 0.92 0.55 0.73 0.92 0.92
Delay/Veh: 86.7 26.9 26.9 58.7 27.4 52.3 54.8 54.8 40.6 56.2 69.7 69.7
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: 86.7 26.9 26.9 58.7 27.4 52.3 54.8 54.8 40.6 56.2 69.7 69.7
DesignQueue: 6 27 4 4 34 26 42 22 12 13 23 8

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

PM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report

1997 HCM Operations Method (Future Volume Alternative)

Intersection #44 Atlantic / Webster

Cycle (sec): 120 Critical Vol./Cap. (X): 0.894
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 45.2
Optimal Cycle: 117 Level Of Service: D

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: 8 20 20 8 20 20 8 20 20 8 20 20
Lanes: 1 0 1 0 1 0 2 0 1 1 1 0 1 1 0 1 0

Volume Module:

Base Vol: 97 661 106 64 824 615 798 425 225 224 397 145
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: 97 661 106 64 824 615 798 425 225 224 397 145
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 97 661 106 64 770 585 792 425 225 224 397 145
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 97 661 106 64 770 585 792 425 225 224 397 145

Saturation Flow Module:

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.95 0.93 0.93 0.95 0.95 0.85 0.92 0.92 0.85 0.95 0.91 0.91
Lanes: 1.00 1.72 0.28 1.00 2.00 1.00 1.95 1.05 1.00 1.00 1.46 0.54
Final Sat.: 1805 3036 498 1805 3610 1615 3411 1831 1615 1805 2538 927

Capacity Analysis Module:

Vol/Sat: 0.05 0.21 0.21 0.04 0.21 0.36 0.23 0.23 0.14 0.12 0.16 0.16
Crit Moves: ****
Green/Cycle: 0.07 0.40 0.40 0.07 0.40 0.40 0.26 0.26 0.26 0.17 0.17 0.17
Volume/Cap: 0.81 0.53 0.53 0.53 0.53 0.90 0.90 0.90 0.54 0.71 0.90 0.90
Delay/Veh: 86.7 27.6 27.6 58.7 27.6 49.3 51.6 51.6 39.9 54.4 65.2 65.2
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: 86.7 27.6 27.6 58.7 27.6 49.3 51.6 51.6 39.9 54.4 65.2 65.2
DesignQueue: 6 27 4 4 32 25 42 22 11 13 23 8

Oakland Army Base Area Redevelopment Plan EIR

2025 Conditions

PM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report
1997 HCM Operations Method (Base Volume Alternative)

Intersection #36 Powell / Christie
Cycle (sec): 100 Critical Vol./Cap. (X): 0.800
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 35.8
Optimal Cycle: 77 Level Of Service: D

Table with columns: Approach, North Bound, South Bound, East Bound, West Bound, Movement, Control, Rights, Lanes. Data includes split phase include/exclude and protected/include values for various movements.

Volume Module: Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduced Vol, PCE Adj, MLF Adj, Final Vol. Data for North, South, East, West bounds.

Saturation Flow Module: Sat/Lane, Adjustment, Lanes, Final Sat. Data for North, South, East, West bounds.

Capacity Analysis Module: Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, DesignQueue. Data for North, South, East, West bounds.

Oakland Army Base Area Redevelopment Plan EIR

2025 Conditions

PM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #36 Powell / Christie
Cycle (sec): 100 Critical Vol./Cap. (X): 0.791
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 35.7
Optimal Cycle: 75 Level Of Service: D

Table with columns: Approach, North Bound, South Bound, East Bound, West Bound, Movement, Control, Rights, Lanes. Data includes split phase include/exclude and protected/include values for various movements.

Volume Module: Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduced Vol, PCE Adj, MLF Adj, Final Vol. Data for North, South, East, West bounds.

Saturation Flow Module: Sat/Lane, Adjustment, Lanes, Final Sat. Data for North, South, East, West bounds.

Capacity Analysis Module: Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, DesignQueue. Data for North, South, East, West bounds.

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions
PM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report
1997 HCM Operations Method (Base Volume Alternative)

Intersection #45 Atlantic / Constitution
Cycle (sec): 100 Critical Vol./Cap. (X): 0.986
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 40.4
Optimal Cycle: 180 Level Of Service: D

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Protected Permitted Permitted
Rights: Include Include Include Include Include
Min. Green: 8 20 20 8 20 20 8 20 20 8 20 20
Lanes: 1 0 2 0 1 2 0 2 0 1 1 0 1 1 0 1 0 1 0

Volume Module:
Base Vol: 164 443 52 478 1355 117 171 327 74 98 457 398
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: 164 443 52 478 1355 117 171 327 74 98 457 398
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 164 443 52 478 1355 117 171 327 74 98 457 398
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 164 443 52 478 1355 117 171 327 74 98 457 398
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 164 443 52 478 1355 117 171 327 74 98 457 398

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.95 0.95 0.85 0.92 0.95 0.85 0.21 0.92 0.92 0.46 0.88 0.88
Lanes: 1.00 2.00 1.00 2.00 2.00 1.00 1.00 1.63 0.37 1.00 1.07 0.93
Final Sat.: 1805 3610 1615 3502 3610 1615 397 2861 648 878 1794 1563

Capacity Analysis Module:
Vol/Sat: 0.09 0.12 0.03 0.14 0.38 0.07 0.43 0.11 0.11 0.11 0.25 0.25
Crit Moves: ****
Green/Cycle: 0.09 0.20 0.20 0.27 0.38 0.38 0.44 0.44 0.44 0.44 0.44
Volume/Cap: 0.99 0.61 0.16 0.50 0.99 0.19 0.99 0.26 0.26 0.26 0.58 0.58
Delay/Veh: 110.6 38.1 33.3 31.0 51.5 20.8 91.7 18.0 18.0 18.2 21.9 21.9
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 110.6 38.1 33.3 31.0 51.5 20.8 91.7 18.0 18.0 18.2 21.9 21.9
DesignQueue: 8 20 2 20 51 4 5 11 2 3 15 13

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions
PM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #45 Atlantic / Constitution
Cycle (sec): 100 Critical Vol./Cap. (X): 0.951
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 37.1
Optimal Cycle: 138 Level Of Service: D

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Protected Permitted Permitted
Rights: Include Include Include Include Include
Min. Green: 8 20 20 8 20 20 8 20 20 8 20 20
Lanes: 1 0 2 0 1 2 0 2 0 1 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 164 443 52 478 1355 117 171 327 74 98 457 398
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: 164 443 52 478 1355 117 171 327 74 98 457 398
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 164 443 52 478 1355 117 171 327 74 98 457 398
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 164 443 52 478 1355 117 171 327 74 98 457 398
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 164 443 52 478 1355 117 171 327 74 98 457 398

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.95 0.95 0.85 0.92 0.95 0.85 0.21 0.92 0.92 0.46 0.88 0.88
Lanes: 1.00 2.00 1.00 2.00 2.00 1.00 1.00 1.63 0.37 1.00 1.07 0.93
Final Sat.: 1805 3610 1615 3502 3610 1615 405 2861 648 882 1794 1563

Capacity Analysis Module:
Vol/Sat: 0.09 0.12 0.03 0.14 0.35 0.07 0.42 0.11 0.11 0.11 0.25 0.25
Crit Moves: ****
Green/Cycle: 0.10 0.20 0.20 0.27 0.37 0.37 0.44 0.44 0.44 0.44 0.44
Volume/Cap: 0.95 0.58 0.16 0.51 0.95 0.20 0.95 0.26 0.26 0.25 0.57 0.57
Delay/Veh: 99.0 37.5 33.3 31.7 45.1 21.6 79.4 17.5 17.5 17.7 21.3 21.3
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: 99.0 37.5 33.3 31.7 45.1 21.6 79.4 17.5 17.5 17.7 21.3 21.3
DesignQueue: 8 19 2 20 49 4 5 10 2 3 15 13

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

PM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report
1997 HCM Operations Method (Base Volume Alternative)

Intersection #46 Loop Rd / GDA Spine

Cycle (sec): 100 Critical Vol./Cap. (X): 0.326
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 20.2
Optimal Cycle: 44 Level Of Service: C

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

Control: Protected Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 10 15 0 0 15 0 10 0 10 0 0 0 0 0 0 0 0 0 0 0

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

Volume Module:

Base Vol: 91 151 0 0 70 0 0 0 367 0 0 0 0 0 0 0 0 0 0 0
Growth Adj: 1.00
Initial Bse: 91 151 0 0 70 0 0 0 367 0 0 0 0 0 0 0 0 0 0 0 0
User Adj: 1.00
PHF Vol: 1.00
PHF Adj: 1.00
Reduced Vol: 0
PCE Adj: 1.00
MLF Adj: 1.00
Final Vol.: 91 151 0 0 70 0 0 0 367 0 0 0 0 0 0 0 0 0 0 0

Saturation Flow Module:

Sat/Lane: 1900
Adjustment: 0.95 0.95 1.00 1.00 0.95 1.00 1.00 0.85 1.00 1.00 0.85 1.00 1.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
Lanes: 1.00 2.00 0.00 0.00 2.00 0.00 1.00 0.00 1.00 0.00 1.00 0.00 1.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
Final Sat.: 1805 3610 0 0 3610 0 1900 0 1615 0 0 0 0 0 0 0 0 0 0 0 0

Capacity Analysis Module:

Vol/Sat: 0.05 0.04 0.00 0.00 0.02 0.00 0.00 0.00 0.23 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
Crit Moves: ****
Green/Cycle: 0.14 0.29 0.00 0.00 0.15 0.00 0.00 0.00 0.62 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
Volume/Cap: 0.37 0.15 0.00 0.00 0.13 0.00 0.00 0.00 0.37 0.00 0.00 0.00 0.37 0.00 0.00 0.00 0.00 0.00 0.00 0.00
Delay/Veh: 40.0 26.5 0.0 0.0 36.9 0.0 0.0 0.0 9.5 0.0 0.0 0.0 9.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0
User DelAdj: 1.00
AdjDel/Veh: 40.0 26.5 0.0 0.0 36.9 0.0 0.0 0.0 9.5 0.0 0.0 0.0 9.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0
DesignQueue: 4 6 0 0 3 0 0 0 8 0 0 0 0 0 0 0 0 0 0 0 0

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

PM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #46 Loop Rd / GDA Spine

Cycle (sec): 100 Critical Vol./Cap. (X): 0.029
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 0.4
Optimal Cycle: 24 Level Of Service: A

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

Control: Protected Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 10 15 0 0 15 0 10 0 10 0 0 0 0 0 0 0 0 0 0 0 0

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

Volume Module:

Base Vol: 91 151 0 0 70 0 0 0 367 0 0 0 0 0 0 0 0 0 0 0
Growth Adj: 1.00
Initial Bse: 91 151 0 0 70 0 0 0 367 0 0 0 0 0 0 0 0 0 0 0 0
User Adj: 1.00
PHF Vol: 1.00
PHF Adj: 1.00
Reduced Vol: 0
PCE Adj: 1.00
MLF Adj: 1.00
Final Vol.: 91 151 0 0 70 0 0 0 367 0 0 0 0 0 0 0 0 0 0 0

Saturation Flow Module:

Sat/Lane: 1900
Adjustment: 0.95 0.95 1.00 1.00 0.95 1.00 1.00 0.85 1.00 1.00 0.85 1.00 1.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
Lanes: 1.00 2.00 0.00 0.00 2.00 0.00 1.00 0.00 1.00 0.00 1.00 0.00 1.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
Final Sat.: 1805 3610 0 0 3610 0 1900 0 1615 0 0 0 0 0 0 0 0 0 0 0 0

Capacity Analysis Module:

Vol/Sat: 0.05 0.04 0.00 0.00 0.02 0.00 0.00 0.00 0.23 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
Crit Moves: ****
Green/Cycle: 0.14 0.29 0.00 0.00 0.15 0.00 0.00 0.00 0.62 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
Volume/Cap: 0.37 0.15 0.00 0.00 0.13 0.00 0.00 0.00 0.37 0.00 0.00 0.00 0.37 0.00 0.00 0.00 0.00 0.00 0.00 0.00
Delay/Veh: 40.0 26.5 0.0 0.0 36.9 0.0 0.0 0.0 9.5 0.0 0.0 0.0 9.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0
User DelAdj: 1.00
AdjDel/Veh: 40.0 26.5 0.0 0.0 36.9 0.0 0.0 0.0 9.5 0.0 0.0 0.0 9.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0
DesignQueue: 4 6 0 0 3 0 0 0 8 0 0 0 0 0 0 0 0 0 0 0 0

Oakland Army Base Area Redevelopment Plan EIR

AM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Trip Generation Report

Forecast for GDA 2025 AM

Zone #	Subzone	Amount	Units	Rate		Trips		Total % Of Trips Total
				In	Out	In	Out	
1	Berth 55-56	-305.00	Emp. Approved	0.00	0.00	0	0	0 0.0
1	Berth 55-56	388.00	Emp. Proposed	0.00	0.00	0	0	0 0.0
2	Berth 57-59	-373.00	Emp. Approved	0.00	0.00	0	0	0 0.0
2	Berth 57-59	473.00	Emp. Proposed	0.00	0.00	0	0	0 0.0
3	Middle Harbo	-216.00	Emp. Approved	0.00	0.00	0	0	0 0.0
3	Middle Harbo	331.00	Emp. Proposed	0.00	0.00	0	0	0 0.0
4	7th St. Harb	-560.00	Emp. Approved	0.00	0.00	0	0	0 0.0
4	7th St. Harb	601.00	Emp. Proposed	0.00	0.00	0	0	0 0.0
5	Outer Harbor	-593.00	Emp. Approved	0.00	0.00	0	0	0 0.0
5	Outer Harbor	618.00	Emp. Proposed	0.00	0.00	0	0	0 0.0
6	Berth 21	0.00	Emp. Approved	0.00	0.00	0	0	0 0.0
6	Berth 21	189.00	Emp. Proposed	0.00	0.00	0	0	0 0.0
7	Proposed JIT	188.00	Emp. Proposed	0.00	0.00	0	0	0 0.0
8	W. Oakland Y	-146.00	Emp. Approved	0.00	0.00	0	0	0 0.0
8	W. Oakland Y	146.00	Emp. Proposed	0.00	0.00	0	0	0 0.0
9	Approved JIT	-208.00	Emp. Approved	0.00	0.00	0	0	0 0.0
11	Subaru Site	1.00	300KSF W-house	-146.00	-32.00	-146	-32	-178 3.1
	Zone 11 Subtotal					-146	-32	-178 3.1
12	Baldwin Yard	1.00	15 Acre Tr Lot	-21.00	-31.00	-21	-31	-52 0.9
	Zone 12 Subtotal					-21	-31	-52 0.9
13	Western Area	1.00	29 Acre Park	-7.00	-2.00	-7	-2	-9 0.2
13	Western Area	1.00	600 KSF Office	-684.00	-93.00	-684	-93	-777 13.6
	Zone 13 Subtotal					-691	-95	-786 13.6
14	Central Area	1.00	577 KSF Office	-663.00	-90.00	-663	-90	-753 13.1
14	Central Area	1.00	1995 Employees	0.00	0.00	0	0	0 0.0
	Zone 14 Subtotal					-663	-90	-753 13.0
15	Central Area	1.00	50 KSF JATC	-40.00	-6.00	-40	-6	-46 0.8
15	Central Area	1.00	444 KSF Lt Ind	-384.00	-52.00	-384	-52	-436 7.1
	Zone 15 Subtotal					-424	-58	-482 8.3
16	Eastern Area	1.00	200 KSF Office	-251.00	-34.00	-251	-34	-285 4.1
	Zone 16 Subtotal					-251	-34	-285 4.9
17	Eastern Area	1.00	176 KSF Office	-221.00	-30.00	-221	-30	-251 4.1
	Zone 17 Subtotal					-221	-30	-251 4.3
18	16-Wood Nort	1.00	1 Acre Park	0.00	0.00	0	0	0 0.0

Oakland Army Base Area Redevelopment Plan EIR

AM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Zone #	Subzone	Amount	Units	Rate		Trips		Total % Of Trips Total
				In	Out	In	Out	
	TOTAL					-2417	-370	-2787 48.2

Oakland Army Base Area Redevelopment Plan EIR

2025 Conditions

AM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Trip Generation Report

Forecast for Port 2025 AM

Zone #	Subzone	Amount	Units	Rate		Trips		Total % Of Trips Total
				In	Out	In	Out	
1	Berth 55-56	-305.00	Emp. Approved	-0.34	-0.06	104	18	122
1	Berth 55-56	388.00	Emp. Proposed	-0.34	-0.06	-132	-23	-155
	Zone 1 Subtotal					-28	-5	-33
2	Berth 57-59	-373.00	Emp. Approved	-0.34	-0.06	127	22	149
2	Berth 57-59	473.00	Emp. Proposed	-0.34	-0.06	-161	-28	-189
	Zone 2 Subtotal					-34	-6	-40
3	Middle Harbo	-216.00	Emp. Approved	-0.34	-0.06	73	13	86
3	Middle Harbo	331.00	Emp. Proposed	-0.34	-0.06	-113	-20	-133
	Zone 3 Subtotal					-40	-7	-47
4	7th St. Harb	-560.00	Emp. Approved	-0.34	-0.06	190	34	224
4	7th St. Harb	601.00	Emp. Proposed	-0.34	-0.06	-204	-36	-240
	Zone 4 Subtotal					-14	-2	-16
5	Outer Harbor	-593.00	Emp. Approved	-0.34	-0.06	202	36	238
5	Outer Harbor	618.00	Emp. Proposed	-0.34	-0.06	-210	-37	-247
	Zone 5 Subtotal					-8	-1	-9
6	Berth 21	0.00	Emp. Approved	-0.34	-0.06	0	0	0
6	Berth 21	189.00	Emp. Proposed	-0.34	-0.06	-64	-11	-75
	Zone 6 Subtotal					-64	-11	-75
7	Proposed JIT	188.00	Emp. Proposed	-0.37	-0.06	-70	-11	-81
	Zone 7 Subtotal					-70	-11	-81
8	W. Oakland Y	-146.00	Emp. Approved	-0.37	-0.06	54	9	63
8	W. Oakland Y	146.00	Emp. Proposed	-0.37	-0.06	-54	-9	-63
9	Approved JIT	-208.00	Emp. Approved	-0.37	-0.06	77	12	89
	Zone 9 Subtotal					77	12	89
21	Berth 55-56	1.00	IM Trucks Prop	-187.00	-199.00	-187	-199	-386
	Zone 21 Subtotal					-187	-199	-386
22	Berth 57-59	1.00	IM Trucks Prop	-229.00	-243.00	-229	-243	-472
	Zone 22 Subtotal					-229	-243	-472
23	Middle Harbo	1.00	IM Trucks Prop	-160.00	-170.00	-160	-170	-330
	Zone 23 Subtotal					-160	-170	-330
24	7th St. Harb	1.00	IM Trucks Prop	-290.00	-309.00	-290	-309	-599
	Zone 24 Subtotal					-290	-309	-599

Traffic 7.5.1115 (c) 2001 Dowling Assoc. Licensed to DOWLING ASSOCIATES, INC.

Oakland Army Base Area Redevelopment Plan EIR

2025 Conditions

AM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Trip Generation Report

Forecast for Port 2025 AM

Zone #	Subzone	Amount	Units	Rate		Trips		Total % Of Trips Total
				In	Out	In	Out	
25	Outer Harbor	1.00	IM Trucks Prop	-298.00	-317.00	-298	-317	-615
	Zone 25 Subtotal					-298	-317	-615
26	Berth 21	1.00	IM Trucks Prop	-91.00	-97.00	-91	-97	-188
	Zone 26 Subtotal					-91	-97	-188
31	Berth 55-56	1.00	IM Trucks Appr	164.00	175.00	164	175	339
	Zone 31 Subtotal					164	175	339
32	Berth 57-59	1.00	IM Trucks Appr	201.00	213.00	201	213	414
	Zone 32 Subtotal					201	213	414
33	Middle Harbo	1.00	IM Trucks Appr	116.00	124.00	116	124	240
	Zone 33 Subtotal					116	124	240
34	7th St. Harb	1.00	IM Trucks Appr	302.00	321.00	302	321	623
	Zone 34 Subtotal					302	321	623
35	Outer Harbor	1.00	IM Trucks Appr	319.00	339.00	319	339	658
	Zone 35 Subtotal					319	339	658
41	Berth 55-56	1.00	OTR Truck Appr	145.00	154.00	145	154	299
41	Berth 55-56	1.00	OTR Truck Prop	-165.00	-176.00	-165	-176	-341
	Zone 41 Subtotal					-20	-22	-42
42	Berth 57-59	1.00	OTR Truck Appr	182.00	193.00	182	193	375
42	Berth 57-59	1.00	OTR Truck Prop	-207.00	-220.00	-207	-220	-427
	Zone 42 Subtotal					-25	-27	-52
43	Middle Harbo	1.00	OTR Truck Appr	105.00	112.00	105	112	217
43	Middle Harbo	1.00	OTR Truck Prop	-144.00	-154.00	-144	-154	-298
	Zone 43 Subtotal					-39	-42	-81
44	7th St. Harb	1.00	OTR Truck Appr	273.00	290.00	273	290	563
44	7th St. Harb	1.00	OTR Truck Prop	-262.00	-279.00	-262	-279	-541
	Zone 44 Subtotal					11	11	22
45	Outer Harbor	1.00	OTR Truck Appr	288.00	307.00	288	307	595
45	Outer Harbor	1.00	OTR Truck Prop	-270.00	-287.00	-270	-287	-557
	Zone 45 Subtotal					18	20	38
46	Berth 21	1.00	OTR Truck Appr	0.00	0.00	0	0	0
46	Berth 21	1.00	OTR Truck Prop	-82.00	-88.00	-82	-88	-170
	Zone 46 Subtotal					-82	-88	-170
47	Proposed JIT	1.00	OTR Truck Prop	-320.00	-216.00	-320	-216	-536

Traffic 7.5.1115 (c) 2001 Dowling Assoc. Licensed to DOWLING ASSOCIATES, INC.

Oakland Army Base Area Redevelopment Plan EIR

2025 Conditions
 AM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Zone #	Subzone	Amount	Units	Rate		Trips		Total % Of Trips Total
				In	Out	In	Out	
Zone 47 Subtotal								
48 W. Oakland Y	1.00 OTR Truck Appr	151.00	102.00	-320	-216	-536	9.3	
48 W. Oakland Y	1.00 OTR Truck Prop	-162.00	-109.00	151	102	253	-4.4	
Zone 48 Subtotal								
49 Approved JIT	1.00 OTR Truck Appr	331.00	223.00	-11	-7	-18	0.3	
Zone 49 Subtotal								
52 Marine Suppo	1.00 75 Acre MSC	-52.00	-77.00	331	223	554	-9.6	
Zone 52 Subtotal								
53 MSC North	1.00 15 Acre Tr Lot	-21.00	-31.00	331	223	554	-9.6	
Zone 53 Subtotal								
TOTAL				-544	-450	-994	17.2	

Oakland Army Base Area Redevelopment Plan EIR

2025 Conditions
 AM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Zone #	Subzone	Amount	Units	Rate		Trips		Total % Of Trips Total
				In	Out	In	Out	
Zone 18 Subtotal								
18 16-Wood Nort	1.00 1 Acre Park	0.00	0.00	0.00	0.00	0	0	0.0
18 16-Wood Nort	1.00 1426 KSF Offic	-1364.00	-186.00	-1364	-186	-1550	2	
18 16-Wood Nort	1.00 252 Live-Work	-18.00	-88.00	-18	-88	-106	1.8	
18 16-Wood Nort	1.00 120 ksf Lt Ind	-97.00	-13.00	-97	-13	-110	1.9	
Zone 18 Subtotal								
19 16-Wood Sout	1.00 123 Live-Work	-10.00	-50.00	-10	-50	-60	1.0	
19 16-Wood Sout	1.00 185 ksf Lt Ind	-150.00	-20.00	-150	-20	-170	2.0	
Zone 19 Subtotal								
TOTAL				-1639	-357	-1996	34.6	

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

AM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Impact Analysis Report
Level Of Service

Intersection	LOS	Base Del/V	Base V/C	Future Del/V	Future V/C	Change in
# 1 W Grand / Maritime	F	254.6	1.418	32.6	0.527	-222.062 D/V
# 2 W Grand / Frontage Rd	F	87.4	1.049	38.2	0.335	-49.193 D/V
# 3 W Grand / Mandela	B	15.2	0.875	11.1	0.388	-4.074 D/V
# 4 W Grand / Adeline	B	15.2	0.731	8.6	0.497	-6.684 D/V
# 5 W Grand / Market	B	10.7	0.609	10.8	0.393	+ 0.035 D/V
# 6 W Grand / San Pablo Av	B	13.6	0.687	11.4	0.509	-2.136 D/V
# 7 W Grand / MLK Jr	B	13.5	0.423	15.3	0.329	+ 1.758 D/V
# 8 W Grand / Northgate	C	24.7	0.664	23.6	0.513	-1.109 D/V
# 9 W Grand / Harrison	C	29.0	0.772	26.5	0.709	-2.556 D/V
# 10 7th / Maritime	F	188.5	1.464	150.6	1.304	-37.962 D/V
# 11 7th / I-880 SB Ramp	A	4.3	0.424	3.6	0.321	-0.661 D/V
# 12 7th / I-880 North Ramp	F	82.5	1.019	34.3	0.621	-48.222 D/V
# 13 7th / Peralta	B	12.1	0.219	12.7	0.208	+ 0.599 D/V
# 14 7th / Mandela	B	15.8	0.468	16.4	0.450	+ 0.589 D/V
# 15 7th / Union	A	7.8	0.552	8.0	0.532	+ 0.215 D/V
# 16 7th / Adeline	B	11.7	0.337	11.7	0.321	+ 0.038 D/V
# 17 7th / Market	D	40.1	0.803	27.6	0.635	-12.512 D/V
# 18 7th / Harrison	B	14.2	0.536	14.0	0.535	-0.230 D/V
# 19 7th / Jackson	D	39.2	1.057	21.0	0.925	-18.225 D/V
# 20 6th / Jackson	B	10.5	0.448	10.5	0.448	+ 0.000 D/V
# 21 5th / Union / I-880 Ramps	C	32.0	0.686	30.7	0.655	-1.350 D/V
# 22 5th / Adeline	D	53.8	0.915	42.1	0.819	-11.651 D/V
# 23 I-880 Off Ramp / Market	C	22.0	0.530	21.6	0.495	-0.457 D/V

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

AM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Impact Analysis Report
Level Of Service

Intersection	LOS	Base Del/V	Base V/C	Future Del/V	Future V/C	Change in
# 24 5th / Broadway	C	28.5	0.831	27.8	0.831	-0.650 D/V
# 25 3rd / Adeline	E	42.2	0.923	26.8	0.786	-0.137 V/C
# 26 3rd / Market	E	46.1	0.000	30.5	0.000	+ 0.000 V/C
# 27 14th / Mandela	A	9.1	0.254	7.8	0.157	-1.276 D/V
# 28 12th / Brush	F	87.6	0.963	83.2	0.954	-4.391 D/V
# 29 12th / Castro	B	16.2	0.286	16.2	0.285	-0.094 D/V
# 30 27th / SR 24-580 Off Ramp	B	15.1	0.478	15.5	0.401	+ 0.384 D/V
# 31 27th / SR 24-580 On Ramp	B	12.9	0.666	11.2	0.598	-1.677 D/V
# 32 San Pablo Av / Adeline	D	41.4	1.033	33.5	0.995	-7.895 D/V
# 33 W MacArthur / Market	B	16.6	0.473	16.7	0.438	+ 0.107 D/V
# 34 Powell / I-80 Frontage Rd	C	21.8	0.570	21.8	0.570	+ 0.000 D/V
# 35 Powell / I-80 NB Ramps	C	28.5	0.915	28.1	0.909	-0.415 D/V
# 36 Powell / Christie	C	32.9	0.590	32.9	0.588	+ 0.005 D/V
# 37 Powell / Hollis	C	26.8	0.607	26.7	0.592	-0.138 D/V
# 38 Powell / San Pablo Av	D	38.6	0.867	37.3	0.853	-1.359 D/V
# 39 Stanford / Market	C	30.8	0.595	30.7	0.576	-0.122 D/V
# 40 Stanford / MLK Jr Wy	B	18.1	0.924	18.2	0.924	+ 0.024 D/V
# 41 Ashby / 7th	D	36.6	0.774	35.8	0.747	-0.735 D/V
# 42 Ashby / San Pablo Av	D	36.8	0.881	34.8	0.873	-1.938 D/V
# 43 Marina Village / Constitution	D	47.0	0.995	42.4	0.970	-4.672 D/V
# 44 Atlantic / Webster	F	86.6	1.154	84.5	1.144	-2.029 D/V
# 45 Atlantic / Constitution	D	50.6	1.053	45.5	1.017	-5.058 D/V
# 46 Loop Rd / GBA Spine	B	18.1	0.368	0.4	0.058	-17.693 D/V

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

AM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report

1997 HCM Operations Method (Base Volume Alternative)

Intersection #1 W Grand / Maritime

Cycle (sec): 100
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 1.418
Optimal Cycle: 180 Level Of Service: 254.6 F

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

Control: Split Phase Protected Protected
Rights: Include Include Include Include
Min. Green: 15 20 20 15 15 15 15 15 15 15 15 15

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

Volume Module:

Base Vol: 184 33 141 143 6 151 150 338 910 1003 700 159
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: 184 33 141 143 6 151 150 338 910 1003 700 159
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 184 33 141 143 6 151 150 338 910 1003 700 159
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 184 33 141 143 6 151 150 338 910 1003 700 159
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 184 33 141 143 6 151 150 338 910 1003 700 159

Saturation Flow Module:

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.77 0.73 0.73 0.79 0.71 0.71 0.79 0.71 0.71 0.79 0.77 0.77
Lanes: 2.00 0.19 0.81 1.00 0.04 0.96 1.00 1.00 2.00 1.00 1.63 0.37
Final Sat.: 2917 264 1127 1504 52 1303 1504 1340 2679 1504 2382 541

Capacity Analysis Module:

Vol/Sat: 0.06 0.13 0.13 0.10 0.12 0.12 0.10 0.25 0.34 0.67 0.29 0.29
Crit Moves: ****
Green/Cycle: 0.20 0.20 0.20 0.15 0.15 0.15 0.15 0.18 0.18 0.35 0.38 0.38
Volume/Cap: 0.32 0.63 0.63 0.63 0.77 0.77 0.67 1.41 1.90 1.90 0.77 0.77
Delay/Veh: 34.5 41.0 41.0 45.7 57.5 57.5 47.4 233 451.5 444.3 30.7 30.7
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: 34.5 41.0 41.0 45.7 57.5 57.5 47.4 233 451.5 444.3 30.7 30.7
DesignQueue: 8 2 6 7 0 7 16 44 42 26 6

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

AM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report

1997 HCM Operations Method (Future Volume Alternative)

Intersection #1 W Grand / Maritime

Cycle (sec): 100
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 0.527
Optimal Cycle: 77 Level Of Service: C

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

Control: Split Phase Protected Protected
Rights: Include Include Include Include
Min. Green: 15 20 20 15 15 15 15 15 15 15 15 15

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

Volume Module:

Base Vol: 184 33 141 143 6 151 150 338 910 1003 700 159
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: 184 33 141 143 6 151 150 338 910 1003 700 159
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 184 33 141 143 6 151 150 338 910 1003 700 159
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 184 33 141 143 6 151 150 338 910 1003 700 159
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 184 33 141 143 6 151 150 338 910 1003 700 159

Saturation Flow Module:

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.77 0.77 0.77 0.79 0.72 0.72 0.79 0.73 0.73 0.79 0.79 0.79
Lanes: 2.00 0.48 0.52 1.00 0.06 0.94 1.00 1.53 1.47 1.00 1.91 0.09
Final Sat.: 2917 698 761 1504 77 1283 1504 2135 2047 1504 2856 130

Capacity Analysis Module:

Vol/Sat: 0.04 0.05 0.05 0.05 0.08 0.08 0.05 0.11 0.11 0.23 0.22 0.22
Crit Moves: ****
Green/Cycle: 0.20 0.20 0.20 0.15 0.15 0.15 0.15 0.18 0.18 0.35 0.38 0.38
Volume/Cap: 0.19 0.24 0.24 0.34 0.52 0.52 0.34 0.64 0.64 0.64 0.59 0.59
Delay/Veh: 33.4 34.0 34.0 38.9 41.6 41.6 39.0 40.1 40.1 29.7 25.5 25.5
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: 33.4 34.0 34.0 38.9 41.6 41.6 39.0 40.1 40.1 29.7 25.5 25.5
DesignQueue: 5 1 2 4 0 5 4 11 11 13 23 1

Oakland Army Base Area Redevelopment Plan EIR

AM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report
1997 HCM Operations Method (Base Volume Alternative)
Intersection #2 W Grand / Frontage Rd

Cycle (sec): 100
Loss Time (sec): 12 (Y+R = 4 sec)
Optimal Cycle: 180
Level Of Service: F
Approach: North Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Split Phase
Rights: Include
Min. Green: 15 15 15 15 15 20 20 15 15 15
Lanes: 1 0 1 1 0 1 1 0 1 0 1 0 1 0 1 1 1

Volume Module:
Base Vol: 198 492 237 156 426 461 181 308 281 512 1171 330
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

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.95 0.90 0.90 0.88 0.88 0.88 0.95 0.88 0.88 0.95 0.92 0.92

Capacity Analysis Module:
Vol/Sat: 0.11 0.21 0.21 0.09 0.25 0.28 0.10 0.18 0.18 0.28 0.34 0.19
Crit Moves: ****
Green/Cycle: 0.19 0.19 0.19 0.24 0.24 0.24 0.15 0.20 0.20 0.25 0.30 0.30

Oakland Army Base Area Redevelopment Plan EIR

AM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)
Intersection #2 W Grand / Frontage Rd

Cycle (sec): 100
Loss Time (sec): 12 (Y+R = 4 sec)
Optimal Cycle: 77
Level Of Service: D
Approach: North Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Split Phase
Rights: Include
Min. Green: 15 15 15 15 15 20 20 15 15 15
Lanes: 1 0 1 1 0 1 1 0 1 0 1 0 1 0 1 1 1

Volume Module:
Base Vol: 198 492 237 156 426 461 181 308 281 512 1171 330
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

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.95 0.92 0.92 0.92 0.92 0.92 0.95 0.94 0.94 0.95 0.94 0.90

Capacity Analysis Module:
Vol/Sat: 0.02 0.15 0.15 0.04 0.04 0.00 0.05 0.06 0.06 0.04 0.18 0.18
Crit Moves: ****
Green/Cycle: 0.38 0.38 0.38 0.15 0.15 0.00 0.15 0.20 0.20 0.15 0.20 0.20

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

AM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level of Service Computation Report

1997 HCM Operations Method (Base Volume Alternative)

Intersection #4 W Grand / Adeline

Cycle (sec): 64 Critical Vol./Cap. (X): 0.731

Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 15.2

Optimal Cycle: 43 Level Of Service: B

Approach: North Bound South Bound East Bound West Bound

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

Control: Permitted Permitted Permitted Permitted

Rights: Include Include Include Include

Min. Green: 8 20 20 8 20 20 8 15 15 8 15 15

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

Volume Module:

Base Vol: 355 630 34 66 182 148 68 317 42 47 1083 47

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: 355 630 34 66 182 148 68 317 42 47 1083 47

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

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

PHF Volume: 355 630 34 66 182 148 68 317 42 47 1083 47

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

Reduced Vol: 355 630 34 66 182 148 68 317 42 47 1083 47

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

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

Final Vol.: 355 630 34 66 182 148 68 317 42 47 1083 47

Saturation Flow Module:

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

Adjustment: 0.65 0.65 0.65 0.67 0.67 0.67 0.65 0.65 0.65 0.65 0.82 0.82 0.82

Lanes: 0.70 1.23 0.07 0.33 0.92 0.75 0.48 2.23 0.29 0.12 2.76 0.12

Final Sat.: 865 1535 83 424 1168 950 587 2735 362 187 4298 187

Capacity Analysis Module:

Vol/Sat: 0.41 0.41 0.41 0.16 0.16 0.16 0.12 0.12 0.12 0.25 0.25 0.25

Crit Moves: ****

Green/Cycle: 0.56 0.56 0.56 0.56 0.56 0.56 0.34 0.34 0.34 0.34 0.34 0.34

Volume/Cap: 0.73 0.73 0.73 0.28 0.28 0.28 0.34 0.34 0.34 0.73 0.73 0.73

Delay/Veh: 12.4 12.4 12.4 7.4 7.4 7.4 15.7 15.7 15.7 20.1 20.1 20.1

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: 12.4 12.4 12.4 7.4 7.4 7.4 15.7 15.7 15.7 20.1 20.1 20.1

DesignQueue: 6 11 1 1 3 2 8 1 1 27 1

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

AM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level of Service Computation Report

1997 HCM Operations Method (Future Volume Alternative)

Intersection #4 W Grand / Adeline

Cycle (sec): 64 Critical Vol./Cap. (X): 0.497

Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 8.6

Optimal Cycle: 41 Level Of Service: A

Approach: North Bound South Bound East Bound West Bound

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

Control: Permitted Permitted Permitted Permitted

Rights: Include Include Include Include

Min. Green: 8 20 20 8 20 20 8 15 15 8 15 15

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

Volume Module:

Base Vol: 355 630 34 66 182 148 68 317 42 47 1083 47

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: 355 630 34 66 182 148 68 317 42 47 1083 47

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

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

PHF Volume: 355 630 34 66 182 148 68 317 42 47 1083 47

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

Reduced Vol: 355 630 34 66 182 148 68 317 42 47 1083 47

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

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

Final Vol.: 355 630 34 66 182 148 68 317 42 47 1083 47

Saturation Flow Module:

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

Adjustment: 0.67 0.67 0.67 0.67 0.67 0.67 0.67 0.67 0.67 0.67 0.67 0.67

Lanes: 0.70 1.25 0.05 0.36 1.00 0.64 0.86 1.56 0.58 0.07 1.93 1.00

Final Sat.: 888 1577 63 461 1271 824 1212 2208 821 107 2955 1531

Capacity Analysis Module:

Vol/Sat: 0.40 0.40 0.40 0.14 0.14 0.14 0.05 0.05 0.05 0.03 0.03 0.03

Crit Moves: ****

Green/Cycle: 0.67 0.67 0.67 0.67 0.67 0.67 0.23 0.23 0.23 0.23 0.23 0.23

Volume/Cap: 0.59 0.59 0.59 0.21 0.21 0.21 0.22 0.22 0.22 0.12 0.12 0.13

Delay/Veh: 6.3 6.3 6.3 4.1 4.1 4.1 19.9 19.9 19.9 19.3 19.3 19.4

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: 6.3 6.3 6.3 4.1 4.1 4.1 19.9 19.9 19.9 19.3 19.3 19.4

DesignQueue: 4 8 0 1 2 1 2 3 1 0 2 1

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

AM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report
1997 HCM Operations Method (Base Volume Alternative)

Intersection #5 W Grand / Market
Critical Vol./Cap. (X): 0.609
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 10.7
Optimal Cycle: 41 Level Of Service: B

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Permitted Permitted Permitted Permitted
Rights: Include Include Include Include
Min. Green: 8 20 20 8 20 20 8 15 15 8 15 15
Lanes: 0 1 0 1 0 0 1 0 1 0 0 1 1 1 0 0 1 1 1 0

Volume Module:
Base Vol: 115 229 82 13 212 44 34 514 52 151 1461 61
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: 115 229 82 13 212 44 34 514 52 151 1461 61
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 115 229 82 13 212 44 34 514 52 151 1461 61
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 115 229 82 13 212 44 34 514 52 151 1461 61
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 115 229 82 13 212 44 34 514 52 151 1461 61

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.73 0.73 0.73 0.86 0.86 0.86 0.74 0.74 0.74 0.74 0.74 0.74
Lanes: 0.54 1.08 0.38 0.10 1.57 0.33 0.17 2.57 0.26 0.27 2.62 0.11
Final Sat.: 749 1492 534 158 2583 536 239 3609 365 379 3669 153

Capacity Analysis Module:
Vol/Sat: 0.15 0.15 0.15 0.08 0.08 0.08 0.14 0.14 0.14 0.40 0.40 0.40
Crit Moves: ****
Green/Cycle: 0.31 0.31 0.31 0.31 0.31 0.31 0.59 0.59 0.59 0.59 0.59 0.59
Volume/Cap: 0.49 0.49 0.49 0.26 0.26 0.26 0.24 0.24 0.24 0.67 0.67 0.67
Delay/Veh: 18.3 18.3 18.3 16.6 16.6 16.6 6.2 6.2 6.2 9.5 9.5 9.5
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: 18.3 18.3 18.3 16.6 16.6 16.6 6.2 6.2 6.2 9.5 9.5 9.5
DesignQueue: 3 6 2 0 5 1 1 8 1 2 3 1

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

AM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #5 W Grand / Market
Critical Vol./Cap. (X): 0.393
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 10.8
Optimal Cycle: 41 Level Of Service: B

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Permitted Permitted Permitted Permitted
Rights: Include Include Include Include
Min. Green: 8 20 20 8 20 20 8 15 15 8 15 15
Lanes: 0 1 0 1 0 0 1 0 1 0 0 1 1 1 0 0 1 1 1 0

Volume Module:
Base Vol: 115 229 82 13 212 44 34 514 52 151 1461 61
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: 115 229 82 13 212 44 34 514 52 151 1461 61
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 115 229 82 13 212 44 34 514 52 151 1461 61
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 115 229 82 13 212 44 34 514 52 151 1461 61
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 115 229 82 13 212 44 34 514 52 151 1461 61

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.73 0.73 0.73 0.86 0.86 0.86 0.77 0.77 0.77 0.71 0.71 0.71
Lanes: 0.54 1.08 0.38 0.10 1.57 0.33 0.24 2.40 0.36 0.52 2.26 0.22
Final Sat.: 753 1500 537 159 2588 537 348 3500 532 707 3062 299

Capacity Analysis Module:
Vol/Sat: 0.15 0.15 0.15 0.08 0.08 0.08 0.10 0.10 0.10 0.20 0.20 0.20
Crit Moves: ****
Green/Cycle: 0.39 0.39 0.39 0.39 0.39 0.39 0.52 0.52 0.52 0.52 0.52 0.52
Volume/Cap: 0.39 0.39 0.39 0.21 0.21 0.21 0.19 0.19 0.19 0.39 0.39 0.39
Delay/Veh: 14.4 14.4 14.4 13.1 13.1 13.1 8.3 8.3 8.3 9.5 9.5 9.5
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: 14.4 14.4 14.4 13.1 13.1 13.1 8.3 8.3 8.3 9.5 9.5 9.5
DesignQueue: 3 5 2 0 5 1 1 6 1 3 11 1

Oakland Army Base Area Redevelopment Plan EIR

2025 Conditions

AM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report

1997 HCM Operations Method (Base Volume Alternative)

Intersection #6 W Grand / San Pablo Av

Cycle (sec): 64 Critical Vol./Cap. (X): 0.687
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 13.6
Optimal Cycle: 41 Level Of Service: B

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

Control: Permitted Include Permitted Include Permitted Include Permitted Include
Rights: 8 20 20 8 20 20 8 15 15 8 15 15 8 15 15 15
Min. Green: 1 0 1 1 0 1 0 1 1 0 0 1 1 0 0 1 1 1 0

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

Volume Module:

Base Vol: 90 553 46 247 548 88 14 553 43 19 1216 71
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: 90 553 46 247 548 88 14 553 43 19 1216 71
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 90 553 46 247 548 88 14 553 43 19 1216 71
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 90 553 46 247 548 88 14 553 43 19 1216 71
PLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 90 553 46 247 548 88 14 553 43 19 1216 71

Saturation Flow Module:

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.35 0.94 0.94 0.37 0.93 0.93 0.81 0.81 0.81 0.84 0.84 0.84
Lanes: 1.00 1.85 0.15 1.00 1.72 0.28 0.07 2.72 0.21 0.04 2.80 0.16
Final Sat.: 669 3293 274 709 3045 489 106 4199 327 69 4441 259

Capacity Analysis Module:

Vol/Sat: 0.13 0.17 0.17 0.35 0.18 0.18 0.13 0.13 0.13 0.27 0.27 0.27
Crit Moves: 0.51 0.51 0.51 0.51 0.51 0.51 0.40 0.40 0.40 0.40 0.40 0.40
Green/Cycle: 0.27 0.33 0.33 0.69 0.35 0.35 0.33 0.33 0.33 0.69 0.69 0.69
Volume/Cap: 9.4 9.4 9.4 17.4 9.6 9.6 13.4 13.4 13.4 17.0 17.0 17.0
Delay/Veh: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
User DelAdj: 9.4 9.4 9.4 17.4 9.6 9.6 13.4 13.4 13.4 17.0 17.0 17.0
AdjDel/Veh: 2 10 1 4 10 2 0 12 1 0 28 2
DesignQueue: 0.51 0.51 0.51 0.51 0.51 0.51 0.40 0.40 0.40 0.40 0.40 0.40

Oakland Army Base Area Redevelopment Plan EIR

2025 Conditions

AM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report

1997 HCM Operations Method (Future Volume Alternative)

Intersection #6 W Grand / San Pablo Av

Cycle (sec): 64 Critical Vol./Cap. (X): 0.509
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 11.4
Optimal Cycle: 41 Level Of Service: B

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

Control: Permitted Include Permitted Include Permitted Include Permitted Include
Rights: 8 20 20 8 20 20 8 15 15 8 15 15 8 15 15 15
Min. Green: 1 0 1 1 0 1 0 1 1 0 0 1 1 0 0 1 1 1 0

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

Volume Module:

Base Vol: 90 553 46 247 548 88 14 553 43 19 1216 71
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: 90 553 46 247 548 88 14 553 43 19 1216 71
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 90 553 46 247 548 88 14 553 43 19 1216 71
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 90 553 46 247 548 88 14 553 43 19 1216 71
PLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 90 553 46 247 548 88 14 553 43 19 1216 71

Saturation Flow Module:

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.38 0.94 0.94 0.40 0.93 0.93 0.82 0.82 0.82 0.82 0.82 0.82
Lanes: 1.00 1.85 0.15 1.00 1.72 0.28 0.09 2.64 0.27 0.09 2.58 0.33
Final Sat.: 726 3293 274 762 3045 489 137 4137 421 139 4033 519

Capacity Analysis Module:

Vol/Sat: 0.12 0.17 0.17 0.32 0.18 0.18 0.10 0.10 0.10 0.14 0.14 0.14
Crit Moves: 0.64 0.64 0.64 0.64 0.64 0.64 0.27 0.27 0.27 0.27 0.27 0.27
Green/Cycle: 0.19 0.26 0.26 0.51 0.28 0.28 0.38 0.38 0.38 0.51 0.51 0.51
Volume/Cap: 5.0 5.1 5.1 7.1 5.2 5.2 19.2 19.2 19.2 20.2 20.2 20.2
Delay/Veh: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
User DelAdj: 5.0 5.1 5.1 7.1 5.2 5.2 19.2 19.2 19.2 20.2 20.2 20.2
AdjDel/Veh: 1 7 1 3 7 1 0 11 1 15 2 2
DesignQueue: 0.12 0.17 0.17 0.32 0.18 0.18 0.10 0.10 0.10 0.14 0.14 0.14

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

AM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report

1997 HCM Operations Method (Base Volume Alternative)

Intersection #7 W Grand / MLK Jr

Cycle (sec): 100
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 13.5
Optimal Cycle: 41
Level Of Service: B

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

Control: Permitted Permitted Permitted Permitted
Rights: Include Include Include Include
Min. Green: 8 20 20 8 20 20 8 15 15 8 15 15
Lanes: 0 1 0 1 0 0 1 0 1 0 0 1 1 0 0 1 1 0

Volume Module:

Base Vol: 36 85 101 29 232 161 52 801 57 39 1084 63
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: 36 85 101 29 232 161 52 801 57 39 1084 63
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 36 85 101 29 232 161 52 801 57 39 1084 63
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 36 85 101 29 232 161 52 801 57 39 1084 63
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 36 85 101 29 232 161 52 801 57 39 1084 63

Saturation Flow Module:

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.75 0.75 0.75 0.83 0.83 0.83 0.73 0.73 0.79 0.79 0.79 0.79
Lanes: 0.32 0.77 0.91 0.14 1.10 0.76 0.17 2.64 0.19 0.10 2.74 0.16
Final Sat.: 462 1091 1297 216 1726 1197 238 3660 260 148 4120 239

Capacity Analysis Module:

Vol/Sat: 0.08 0.08 0.08 0.13 0.13 0.13 0.22 0.22 0.22 0.26 0.26 0.26
Crit Moves: ****
Green/Cycle: 0.32 0.32 0.32 0.32 0.32 0.32 0.62 0.62 0.62 0.62 0.62 0.62
Volume/Cap: 0.25 0.25 0.25 0.42 0.42 0.42 0.35 0.35 0.35 0.42 0.42 0.42
Delay/Veh: 25.4 25.4 25.4 27.2 27.2 27.2 9.2 9.2 9.2 9.8 9.8 9.8
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: 25.4 25.4 25.4 27.2 27.2 27.2 9.2 9.2 9.2 9.8 9.8 9.8
DesignQueue: 1 3 4 1 9 6 1 18 1 1 24 1

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

AM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report

1997 HCM Operations Method (Future Volume Alternative)

Intersection #7 W Grand / MLK Jr

Cycle (sec): 100
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 15.3
Optimal Cycle: 41
Level Of Service: B

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

Control: Permitted Permitted Permitted Permitted
Rights: Include Include Include Include
Min. Green: 8 20 20 8 20 20 8 15 15 8 15 15
Lanes: 0 1 0 1 0 0 1 0 1 0 0 1 1 0 0 1 1 0

Volume Module:

Base Vol: 36 85 101 29 232 161 52 801 57 39 1084 63
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: 36 85 101 29 232 161 52 801 57 39 1084 63
User Adj: 0 0 -3 0 0 0 0 -130 0 0 -664 0
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 36 85 98 29 232 161 52 671 57 39 420 63
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 36 85 98 29 232 161 52 671 57 39 420 63
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 36 85 98 29 232 161 52 671 57 39 420 63

Saturation Flow Module:

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.75 0.75 0.75 0.83 0.83 0.83 0.78 0.78 0.78 0.78 0.76 0.76
Lanes: 0.33 0.78 0.89 0.14 1.10 0.76 0.20 2.58 0.22 2.22 2.42 0.36
Final Sat.: 470 1110 1280 216 1727 1199 297 3831 325 322 3467 520

Capacity Analysis Module:

Vol/Sat: 0.08 0.08 0.08 0.13 0.13 0.13 0.18 0.18 0.18 0.12 0.12 0.12
Crit Moves: ****
Green/Cycle: 0.41 0.41 0.41 0.41 0.41 0.41 0.53 0.53 0.53 0.53 0.53 0.53
Volume/Cap: 0.19 0.19 0.19 0.33 0.33 0.33 0.33 0.33 0.33 0.23 0.23 0.23
Delay/Veh: 19.1 19.1 19.1 20.4 20.4 20.4 13.4 13.4 13.4 12.5 12.5 12.5
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: 19.1 19.1 19.1 20.4 20.4 20.4 13.4 13.4 13.4 12.5 12.5 12.5
DesignQueue: 1 3 3 1 8 5 1 18 2 1 11 2

Oakland Army Base Area Redevelopment Plan EIR

AM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report
1997 HCM Operations Method (Base Volume Alternative)

Intersection #8 W Grand / Northgate
Cycle (sec): 100
Loss Time (sec): 9 (Y+R = 4 sec)
Optimal Cycle: 52

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

Control: Split Phase Protected Permitted
Rights: Include Include Include Include

Min. Green: 0 0 0 0 8 20 20 8 10 0 0 15 15
Lanes: 0 0 0 0 1 0 1 0 1 1 0 2 0 0 0 2 1 0

Volume Module:

Base Vol: 0 0 0 0 674 0 276 212 628 0 1243 100
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

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 1.00 1.00 1.00 0.92 1.00 0.95 0.95 1.00 1.00 0.90 0.90

Capacity Analysis Module:
Vol/Sat: 0.00 0.00 0.00 0.22 0.00 0.12 0.12 0.17 0.00 0.00 0.26 0.26

Crit Moves:
Green/Cycle: 0.00 0.00 0.00 0.34 0.00 0.34 0.18 0.57 0.00 0.00 0.39 0.39
Volume/Cap: 0.00 0.00 0.00 0.66 0.00 0.36 0.66 0.30 0.00 0.00 0.66 0.66

Oakland Army Base Area Redevelopment Plan EIR

AM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #8 W Grand / Northgate
Cycle (sec): 100
Loss Time (sec): 9 (Y+R = 4 sec)
Optimal Cycle: 52

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

Control: Split Phase Protected Permitted
Rights: Include Include Include Include

Min. Green: 0 0 0 0 8 20 20 8 10 0 0 15 15
Lanes: 0 0 0 0 1 0 1 0 1 1 0 2 0 0 0 2 1 0

Volume Module:

Base Vol: 0 0 0 0 674 0 276 212 628 0 1243 100
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

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 1.00 1.00 1.00 0.94 1.00 0.94 0.95 0.95 1.00 1.00 0.89 0.89

Capacity Analysis Module:
Vol/Sat: 0.00 0.00 0.00 0.20 0.00 0.05 0.10 0.15 0.00 0.00 0.17 0.17

Crit Moves:
Green/Cycle: 0.00 0.00 0.00 0.39 0.00 0.39 0.19 0.52 0.00 0.00 0.33 0.33
Volume/Cap: 0.00 0.00 0.00 0.51 0.00 0.13 0.51 0.29 0.00 0.00 0.51 0.51

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

AM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report

1997 HCM Operations Method (Base Volume Alternative)
Intersection #9 W Grand / Harrison
Critical Vol./Cap. (X): 0.772
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 29.0
Optimal Cycle: 62 Level Of Service: C

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Permitted Permitted Protected Protected
Rights: Include Include Include Include
Min. Green: 8 21 21 8 21 21 8 20 20 8 20 20
Lanes: 0 1 2 0 2 0 1 1 0 2 0 2 1 0 2 0 1 1 0

Volume Module:

Base Vol: 139 1042 293 10 1438 170 83 341 166 484 1031 124
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: 139 1042 293 10 1438 170 83 341 166 484 1031 124
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 139 1042 293 10 1438 170 83 341 166 484 1031 124
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 139 1042 293 10 1438 170 83 341 166 484 1031 124
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 139 1042 293 10 1438 170 83 341 166 484 1031 124

Saturation Flow Module:

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adj/Adj: 0.59 0.59 0.75 0.83 0.83 0.83 0.92 0.87 0.87 0.92 0.93 0.93
Lanes: 0.35 2.65 2.00 0.02 2.67 0.31 2.00 2.02 0.98 2.00 1.79 0.21
Final Sat.: 393 2947 2842 29 4223 499 3502 3318 1615 3502 3171 381

Capacity Analysis Module:

Vol/Sat: 0.35 0.35 0.10 0.34 0.34 0.34 0.02 0.10 0.10 0.14 0.33 0.33
Crit Moves: ****
Green/Cycle: 0.43 0.43 0.43 0.43 0.43 0.08 0.20 0.20 0.28 0.40 0.40
Volume/Cap: 0.82 0.82 0.24 0.79 0.79 0.79 0.30 0.51 0.51 0.50 0.82 0.82
Delay/Veh: 28.7 28.7 18.1 26.5 26.5 26.5 43.9 36.1 36.1 30.7 30.7 30.7
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 28.7 28.7 18.1 26.5 26.5 26.5 43.9 36.1 36.1 30.7 30.7 30.7
DesignQueue: 5 35 9 0 49 6 4 16 8 20 38 5

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

AM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report

1997 HCM Operations Method (Future Volume Alternative)
Intersection #9 W Grand / Harrison
Critical Vol./Cap. (X): 0.709
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 26.5
Optimal Cycle: 58 Level Of Service: C

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Permitted Permitted Protected Protected
Rights: Include Include Include Include
Min. Green: 8 21 21 8 21 21 8 20 20 8 20 20
Lanes: 0 1 2 0 2 0 1 1 0 2 0 2 1 0 2 0 1 1 0

Volume Module:

Base Vol: 139 1042 293 10 1438 170 83 341 166 484 1031 124
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: 139 1042 293 10 1438 170 83 341 166 484 1031 124
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 139 1042 293 10 1438 170 83 298 166 484 816 124
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 139 1042 293 10 1438 170 83 298 166 484 816 124
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 139 1042 293 10 1438 170 83 298 166 484 816 124

Saturation Flow Module:

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adj/Adj: 0.58 0.58 0.75 0.83 0.83 0.83 0.92 0.86 0.86 0.92 0.93 0.93
Lanes: 0.35 2.65 2.00 0.02 2.67 0.31 2.00 2.00 1.00 2.00 1.74 0.26
Final Sat.: 391 2929 2842 29 4223 499 3502 3271 1636 3502 3071 467

Capacity Analysis Module:

Vol/Sat: 0.36 0.36 0.10 0.34 0.34 0.34 0.02 0.09 0.10 0.14 0.27 0.27
Crit Moves: ****
Green/Cycle: 0.48 0.48 0.48 0.48 0.48 0.08 0.20 0.20 0.23 0.35 0.35
Volume/Cap: 0.75 0.75 0.22 0.72 0.72 0.72 0.30 0.46 0.51 0.59 0.75 0.75
Delay/Veh: 23.4 23.4 15.4 22.0 22.0 22.0 43.9 35.5 36.1 35.1 30.9 30.9
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: 23.4 23.4 15.4 22.0 22.0 22.0 43.9 35.5 36.1 35.1 30.9 30.9
DesignQueue: 4 32 9 0 45 5 4 14 8 21 31 5

Oakland Army Base Area Redevelopment Plan EIR

AM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report

1997 HCM Operations Method (Base Volume Alternative)
Intersection #10 7th / Maritime

Cycle (sec): 100
Loss Time (sec): 12 (Y+R = 4 sec)
Optimal Cycle: 180
Level Of Service: F

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

Control: Protected Protected Protected Protected
Rights: Include Include Include Include

Min. Green: 15 20 20 15 20 20 15 20 20 15 20 20
Lanes: 1 0 1 1 0 1 0 1 0 1 0 2 1 0 1 0 2 0 1

Volume Module:

Base Vol: 333 518 391 298 603 33 67 286 346 611 413 535
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

Saturation Flow Module:

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.73 0.68 0.68 0.73 0.72 0.72 0.73 0.64 0.64 0.73 0.73 0.65

Capacity Analysis Module:

Vol/Sat: 0.24 0.35 0.35 0.21 0.23 0.23 0.05 0.12 0.28 0.44 0.15 0.43
Crit Moves: ****

Green/Cycle: 0.20 0.23 0.23 0.15 0.19 0.19 0.15 0.20 0.20 0.30 0.35 0.35
Volume/Cap: 1.22 1.49 1.49 1.43 1.22 1.22 0.32 0.59 1.42 1.49 0.43 1.25
Delay/Veh: 169.2 268 267.7 261.9 158 157.7 38.9 37.1 240.6 268.6 25.5 162.3

Oakland Army Base Area Redevelopment Plan EIR

AM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report

1997 HCM Operations Method (Future Volume Alternative)
Intersection #10 7th / Maritime

Cycle (sec): 100
Loss Time (sec): 12 (Y+R = 4 sec)
Optimal Cycle: 180
Level Of Service: F

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

Control: Protected Protected Protected Protected
Rights: Include Include Include Include

Min. Green: 15 20 20 15 20 20 15 20 20 15 20 20
Lanes: 1 0 1 1 0 1 0 1 0 1 0 2 1 0 1 0 2 0 1

Volume Module:

Base Vol: 333 518 391 298 603 33 67 286 346 611 413 535
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

Saturation Flow Module:

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.73 0.68 0.68 0.73 0.72 0.72 0.73 0.64 0.64 0.73 0.73 0.65

Capacity Analysis Module:

Vol/Sat: 0.25 0.30 0.30 0.14 0.20 0.20 0.05 0.11 0.29 0.41 0.14 0.06
Crit Moves: ****

Green/Cycle: 0.18 0.23 0.23 0.15 0.20 0.20 0.22 0.21 0.21 0.29 0.29 0.29
Volume/Cap: 1.40 1.35 1.35 0.93 0.99 0.99 0.21 0.52 1.40 1.40 0.49 0.22
Delay/Veh: 243.2 206 205.6 84.3 74.5 74.5 32.6 35.5 232.0 228.6 30.0 27.4

Oakland Army Base Area Redevelopment Plan EIR

2025 Conditions

AM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report

1997 HCM Operations Method (Base Volume Alternative)

Intersection #12 7th / I-880 North Ramp

Cycle (sec): 100 Critical Vol./Cap. (X): 1.019
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 82.5
Optimal Cycle: 180 Level Of Service: F

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

Control: Split Phase Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 15 15 15 15 15 20 0 0 20 20 20

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

Volume Module:

Base Vol: 853 446 164 123 0 565 339 77 0 0 339 230
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: 853 446 164 123 0 565 339 77 0 0 339 230

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 853 446 164 123 0 565 339 77 0 0 339 230

Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 853 446 164 123 0 565 339 77 0 0 339 230

Saturation Flow Module:

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.95 0.91 0.91 0.95 1.00 0.75 0.95 0.95 1.00 1.00 0.89 0.89
Lanes: 1.00 1.46 0.54 1.00 0.00 2.00 1.00 2.00 0.00 0.00 1.19 0.81

Final Sat.: 1805 2534 932 1805 0 2842 1805 3610 0 0 2020 1370

Capacity Analysis Module:

Vol/Sat: 0.47 0.18 0.18 0.07 0.00 0.20 0.19 0.02 0.00 0.00 0.17 0.17
Crit Moves: ****
Green/Cycle: 0.38 0.38 0.38 0.15 0.00 0.30 0.15 0.35 0.00 0.00 0.20 0.20
Volume/Cap: 1.25 0.46 0.46 0.45 0.00 0.66 1.25 0.06 0.00 0.00 0.84 0.84

Oakland Army Base Area Redevelopment Plan EIR

2025 Conditions

AM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report

1997 HCM Operations Method (Future Volume Alternative)

Intersection #12 7th / I-880 North Ramp

Cycle (sec): 100 Critical Vol./Cap. (X): 0.621
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 34.3
Optimal Cycle: 77 Level Of Service: C

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

Control: Split Phase Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 15 15 15 15 15 20 0 0 20 20 20

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

Volume Module:

Base Vol: 853 446 164 123 0 565 339 77 0 0 339 230
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: 853 446 164 123 0 565 339 77 0 0 339 230

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 853 446 164 123 0 565 339 77 0 0 339 230

Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 853 446 164 123 0 565 339 77 0 0 339 230

Saturation Flow Module:

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.95 0.82 0.82 0.95 1.00 0.75 0.95 0.95 1.00 1.00 0.90 0.90
Lanes: 1.00 1.00 1.00 1.00 1.00 2.00 1.00 2.00 0.00 0.00 1.25 0.75

Final Sat.: 1805 1567 1567 1805 0 2842 1805 3610 0 0 2136 1272

Capacity Analysis Module:

Vol/Sat: 0.23 0.01 0.10 0.01 0.00 0.15 0.17 0.02 0.00 0.00 0.14 0.14
Crit Moves: ****
Green/Cycle: 0.31 0.31 0.31 0.15 0.00 0.37 0.22 0.42 0.00 0.00 0.20 0.20
Volume/Cap: 0.75 0.05 0.34 0.05 0.00 0.41 0.75 0.04 0.00 0.00 0.71 0.71

Oakland Army Base Area Redevelopment Plan EIR

2025 Conditions

AM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report

1997 HCM Operations Method (Base Volume Alternative)

Intersection #13 7th / Peralta

Cycle (sec): 100 Critical Vol./Cap. (X): 0.219
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 12.1
Optimal Cycle: 36 Level Of Service: B

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

Control: Permitted Permitted Permitted Permitted
Rights: Include Include Include Include
Min. Green: 0 15 15 0 15 15 0 15 15 8 15 15
Lanes: 0 1 0 0 1 0 1 0 0 1 0 1 0 1 0 1 0 1 0

Volume Module:

Base Vol: 94 16 10 28 16 17 19 389 17 6 402 27
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: 94 16 10 28 16 17 19 389 17 6 402 27
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 94 16 10 28 16 17 19 389 17 6 402 27
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 94 16 10 28 16 17 19 389 17 6 402 27
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 94 16 10 28 16 17 19 389 17 6 402 27

Saturation Flow Module:

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.74 0.74 0.85 0.84 0.84 0.85 0.88 0.88 0.88 0.48 0.94 0.94
Lanes: 0.85 0.15 1.00 0.64 0.36 1.00 0.09 1.83 0.08 1.00 1.87 0.13
Final Sat.: 1198 204 1615 1011 578 1615 149 3051 133 904 3352 225

Capacity Analysis Module:

Vol/Sat: 0.08 0.08 0.01 0.03 0.03 0.01 0.13 0.13 0.13 0.01 0.12 0.12
Crit Moves: ****
Green/Cycle: 0.36 0.36 0.36 0.36 0.58 0.58 0.58 0.58 0.58 0.58 0.58 0.58
Volume/Cap: 0.22 0.22 0.02 0.08 0.08 0.03 0.22 0.22 0.22 0.01 0.21 0.21
Delay/Veh: 22.6 22.6 20.7 21.2 21.2 20.8 10.1 10.1 10.1 8.8 10.0 10.0
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: 22.6 22.6 20.7 21.2 21.2 20.8 10.1 10.1 10.1 8.8 10.0 10.0
DesignQueue: 3 1 0 1 1 1 0 9 0 0 10 1

Oakland Army Base Area Redevelopment Plan EIR

2025 Conditions

AM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report

1997 HCM Operations Method (Future Volume Alternative)

Intersection #13 7th / Peralta

Cycle (sec): 100 Critical Vol./Cap. (X): 0.208
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 12.7
Optimal Cycle: 36 Level Of Service: B

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

Control: Permitted Permitted Permitted Permitted
Rights: Include Include Include Include
Min. Green: 0 15 15 0 15 15 0 15 15 8 15 15
Lanes: 0 1 0 0 1 0 1 0 0 1 0 1 0 1 0 1 0

Volume Module:

Base Vol: 94 16 10 28 16 17 19 389 17 6 402 27
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: 94 16 10 28 16 17 19 389 17 6 402 27
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 94 16 10 28 16 17 19 389 17 6 402 27
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 94 16 10 28 16 17 19 389 17 6 402 27
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 94 16 10 28 16 17 19 389 17 6 402 27

Saturation Flow Module:

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.74 0.74 0.85 0.84 0.84 0.85 0.88 0.88 0.88 0.50 0.94 0.94
Lanes: 0.85 0.15 1.00 0.64 0.36 1.00 0.10 1.81 0.09 1.00 1.84 0.16
Final Sat.: 1200 204 1615 1012 578 1615 162 3026 145 942 3285 282

Capacity Analysis Module:

Vol/Sat: 0.08 0.08 0.01 0.03 0.03 0.01 0.12 0.12 0.12 0.01 0.10 0.10
Crit Moves: ****
Green/Cycle: 0.38 0.38 0.38 0.38 0.56 0.56 0.56 0.56 0.56 0.56 0.56 0.56
Volume/Cap: 0.21 0.21 0.02 0.07 0.07 0.03 0.21 0.21 0.21 0.01 0.17 0.17
Delay/Veh: 21.3 21.3 19.5 20.0 20.0 19.6 10.9 10.9 10.9 9.6 10.6 10.6
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: 21.3 21.3 19.5 20.0 20.0 19.6 10.9 10.9 10.9 9.6 10.6 10.6
DesignQueue: 3 1 0 1 1 1 0 9 0 0 8 1

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

AM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report

1997 HCM Operations Method (Base Volume Alternative)

Intersection #14 7th / Mandela

Cycle (sec): 100 Critical Vol./Cap. (X): 0.468
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 15.8
Optimal Cycle: 47 Level Of Service: B

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

Control: Permitted Protected Permitted Permitted
Rights: Include Include Include Include
Min. Green: 0 15 15 8 15 15 8 15 15 8 15 15
Lanes: 0 1 0 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0

Volume Module:

Base Vol: 24 87 148 72 101 29 36 380 28 301 396 51
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: 24 87 148 72 101 29 36 380 28 301 396 51
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 24 87 148 72 101 29 36 380 28 301 396 51
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 24 87 148 72 101 29 36 380 28 301 396 51
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 24 87 148 72 101 29 36 380 28 301 396 51

Saturation Flow Module:

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.85 0.85 0.85 0.95 0.92 0.92 0.48 0.94 0.94 0.50 0.93 0.93
Lanes: 0.22 0.78 1.00 1.00 1.55 0.45 1.00 1.86 0.14 1.00 1.77 0.23
Final Sat.: 349 1266 1615 1805 2712 779 904 3329 245 950 3144 405

Capacity Analysis Module:

Vol/Sat: 0.07 0.07 0.09 0.04 0.04 0.04 0.04 0.11 0.11 0.32 0.13 0.13
Crit Moves: ****
Green/Cycle: 0.15 0.15 0.15 0.09 0.24 0.24 0.67 0.67 0.67 0.67 0.67 0.67
Volume/Cap: 0.46 0.46 0.61 0.47 0.16 0.16 0.06 0.17 0.17 0.47 0.19 0.19
Delay/Veh: 40.2 40.2 44.3 45.8 30.5 30.5 5.6 6.0 6.0 8.3 6.1 6.1
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: 40.2 40.2 44.3 45.8 30.5 30.5 5.6 6.0 6.0 8.3 6.1 6.1
DesignQueue: 1 4 7 4 4 1 1 7 1 6 7 1

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

AM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report

1997 HCM Operations Method (Future Volume Alternative)

Intersection #14 7th / Mandela

Cycle (sec): 100 Critical Vol./Cap. (X): 0.450
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 16.4
Optimal Cycle: 47 Level Of Service: B

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

Control: Permitted Protected Permitted Permitted
Rights: Include Include Include Include
Min. Green: 0 15 15 8 15 15 8 15 15 8 15 15
Lanes: 0 1 0 0 1 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0

Volume Module:

Base Vol: 24 87 148 72 101 29 36 380 28 301 396 51
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: 24 87 148 72 101 29 36 380 28 301 396 51
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 24 87 148 72 101 29 36 380 28 301 396 51
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 24 87 148 72 101 29 36 380 28 301 396 51
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 24 87 148 72 101 29 36 380 28 301 396 51

Saturation Flow Module:

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.85 0.85 0.85 0.95 0.92 0.92 0.53 0.94 0.94 0.52 0.93 0.93
Lanes: 0.22 0.78 1.00 1.00 1.55 0.45 1.00 1.85 0.15 1.00 1.73 0.27
Final Sat.: 349 1266 1615 1805 2712 779 1007 3302 268 992 3062 476

Capacity Analysis Module:

Vol/Sat: 0.07 0.07 0.09 0.04 0.04 0.04 0.04 0.10 0.10 0.30 0.10 0.10
Crit Moves: ****
Green/Cycle: 0.15 0.15 0.15 0.08 0.23 0.23 0.68 0.68 0.68 0.68 0.68 0.68
Volume/Cap: 0.46 0.46 0.61 0.45 0.16 0.16 0.05 0.15 0.15 0.45 0.15 0.15
Delay/Veh: 40.2 40.2 44.3 45.7 30.5 30.5 5.5 5.9 5.9 8.0 5.9 5.9
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: 40.2 40.2 44.3 45.7 30.5 30.5 5.5 5.9 5.9 8.0 5.9 5.9
DesignQueue: 1 4 7 3 4 1 1 6 1 6 6 1

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

AM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report

1997 HCM Operations Method (Base Volume Alternative)

Intersection #15 7th / Union

Cycle (sec): 100 Critical Vol./Cap. (X): 0.552
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 7.8
Optimal Cycle: 36 Level Of Service: A

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

Control: Permitted Permitted Permitted Permitted
Rights: Include Include Include Include
Min. Green: 0 15 15 0 15 15 8 15 15 8 15 15
Lanes: 0 1 0 0 1 0 1 0 1 1 0 1 0 1 0 1 0 1 0

Volume Module:

Base Vol: 14 41 119 11 55 14 18 563 11 360 784 26
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 14 41 119 11 55 14 18 563 11 360 784 26
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 14 41 119 11 55 14 18 563 11 360 784 26
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 14 41 119 11 55 14 18 563 11 360 784 26

Saturation Flow Module:

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.93 0.93 0.85 0.96 0.96 0.85 0.33 0.95 0.95 0.43 0.95 0.95
Lanes: 0.25 0.75 1.00 0.17 0.83 1.00 1.00 1.96 0.04 1.00 1.94 0.06
Final Sat.: 450 1319 1615 303 1517 1615 619 3530 69 809 3477 115

Capacity Analysis Module:

Vol/Sat: 0.03 0.03 0.07 0.04 0.04 0.01 0.03 0.16 0.16 0.44 0.23 0.23
Crit Moves: ****

Green/Cycle: 0.15 0.15 0.15 0.15 0.15 0.15 0.79 0.79 0.79 0.79 0.79 0.79
Volume/Cap: 0.21 0.21 0.49 0.24 0.24 0.06 0.04 0.20 0.20 0.56 0.29 0.29
Delay/Veh: 37.7 37.7 40.6 37.9 37.9 36.5 2.3 2.7 2.7 5.1 2.9 2.9
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: 37.7 37.7 40.6 37.9 37.9 36.5 2.3 2.7 2.7 5.1 2.9 2.9
DesignQueue: 1 2 6 1 3 1 0 7 0 4 10 0

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

AM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report

1997 HCM Operations Method (Future Volume Alternative)

Intersection #15 7th / Union

Cycle (sec): 100 Critical Vol./Cap. (X): 0.552
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 8.0
Optimal Cycle: 36 Level Of Service: A

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

Control: Permitted Permitted Permitted Permitted
Rights: Include Include Include Include
Min. Green: 0 15 15 0 15 15 8 15 15 8 15 15
Lanes: 0 1 0 0 1 0 1 0 0 1 0 1 0 1 0 1 0 1 0

Volume Module:

Base Vol: 14 41 119 11 55 14 18 563 11 360 784 26
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 14 41 119 11 55 14 18 563 11 360 784 26
User Adj: 0 0 0 0 0 0 0 0 -39 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 14 41 119 11 55 14 18 524 11 360 695 26
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 14 41 119 11 55 14 18 524 11 360 695 26
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 14 41 119 11 55 14 18 524 11 360 695 26
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 14 41 119 11 55 14 18 524 11 360 695 26

Saturation Flow Module:

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.93 0.93 0.85 0.96 0.96 0.85 0.36 0.95 0.95 0.44 0.95 0.95
Lanes: 0.25 0.75 1.00 0.17 0.83 1.00 1.00 1.96 0.04 1.00 1.93 0.07
Final Sat.: 450 1319 1615 303 1517 1615 680 3525 74 844 3462 130

Capacity Analysis Module:

Vol/Sat: 0.03 0.03 0.07 0.04 0.04 0.01 0.03 0.15 0.15 0.43 0.20 0.20
Crit Moves: ****

Green/Cycle: 0.15 0.15 0.15 0.15 0.15 0.15 0.79 0.79 0.79 0.79 0.79 0.79
Volume/Cap: 0.21 0.21 0.49 0.24 0.24 0.06 0.03 0.19 0.19 0.54 0.25 0.25
Delay/Veh: 37.7 37.7 40.6 37.9 37.9 36.5 2.3 2.6 2.6 4.7 2.8 2.8
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: 37.7 37.7 40.6 37.9 37.9 36.5 2.3 2.6 2.6 4.7 2.8 2.8
DesignQueue: 1 2 6 1 3 1 0 6 0 4 9 0

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

AM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report
1997 HCM Operations Method (Base Volume Alternative)
Intersection #18 7th / Harrison

Cycle (sec): 45
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 14.2
Optimal Cycle: 45
Level Of Service: B

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

Control: Split Phase Split Phase Split Phase Split Phase
Rights: Include Include Include Include
Min. Green: 0 0 3 0 1 0 0 0 0 0 0 1 2 0 0 0 0 0 0 0 0

Lanes: 0 0 3 0 1 0 0 0 0 0 0 1 2 0 0 0 0 0 0 0 0
Volume Module:
Base Vol: 0 1818 1608 0 0 0 132 370 0 0 0 0 0 0 0 0 0 0 0 0

Growth Adj: 1.00
Initial Bse: 0 1818 1608 0 0 0 132 370 0 0 0 0 0 0 0 0 0 0 0 0
User Adj: 1.00

PHF Adj: 1.00
PHF Volume: 0 1818 1608 0 0 0 132 370 0 0 0 0 0 0 0 0 0 0 0 0 0
PHF Vol: 0
Reduced Vol: 0 1818 1608 0 0 0 132 370 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00

MLF Adj: 1.00
Final Vol.: 0 1818 1608 0 0 0 132 370 0 0 0 0 0 0 0 0 0 0 0 0 0
Saturation Flow Module:
Sat/Lane: 1900

Adjustment: 1.00 0.91 0.85 1.00 1.00 1.00 0.77 0.77 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.00 3.00 1.00 0.00 0.00 0.00 0.79 2.21 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
Final Sat.: 0 5187 1615 0 0 0 1159 3250 0 0 0 0 0 0 0 0 0 0 0 0 0
Capacity Analysis Module:
Vol/Sat: 0.00 0.35 0.26 0.00 0.00 0.00 0.11 0.11 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00

Crit Moves: ****
Green/Cycle: 0.00 0.42 0.42 0.00 0.00 0.00 0.40 0.40 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
Volume/Cap: 0.00 0.83 0.62 0.00 0.00 0.00 0.28 0.28 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
Delay/Veh: 0.0 15.4 14.5 0.0 0.0 0.0 9.5 9.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
User DelAdj: 1.00
AdjDel/Veh: 0.0 15.4 14.5 0.0 0.0 0.0 9.5 9.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
DesignQueue: 0 29 7 0 0 0 2 6 0 0 0 0 0 0 0 0 0 0 0 0

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

AM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)
Intersection #18 7th / Harrison

Cycle (sec): 45
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 14.0
Optimal Cycle: 45
Level Of Service: B

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

Control: Split Phase Split Phase Split Phase Split Phase
Rights: Include Include Include Include
Min. Green: 0 0 3 0 1 0 0 0 0 0 0 1 2 0 0 0 0 0 0 0 0

Lanes: 0 0 3 0 1 0 0 0 0 0 0 1 2 0 0 0 0 0 0 0 0
Volume Module:
Base Vol: 0 1818 1608 0 0 0 132 370 0 0 0 0 0 0 0 0 0 0 0 0

Growth Adj: 1.00
Initial Bse: 0 1818 1608 0 0 0 132 370 0 0 0 0 0 0 0 0 0 0 0 0 0
User Adj: 1.00

PHF Adj: 1.00
PHF Volume: 0 1815 381 0 0 0 132 370 0 0 0 0 0 0 0 0 0 0 0 0 0
PHF Vol: 0
Reduced Vol: 0 1815 381 0 0 0 132 370 0 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00

MLF Adj: 1.00
Final Vol.: 0 1815 381 0 0 0 132 370 0 0 0 0 0 0 0 0 0 0 0 0 0
Saturation Flow Module:
Sat/Lane: 1900

Adjustment: 1.00 0.91 0.85 1.00 1.00 1.00 0.77 0.77 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.00 3.00 1.00 0.00 0.00 0.00 0.79 2.21 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
Final Sat.: 0 5187 1615 0 0 0 1159 3250 0 0 0 0 0 0 0 0 0 0 0 0 0
Capacity Analysis Module:
Vol/Sat: 0.00 0.35 0.24 0.00 0.00 0.00 0.11 0.11 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00

Crit Moves: ****
Green/Cycle: 0.00 0.42 0.42 0.00 0.00 0.00 0.40 0.40 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
Volume/Cap: 0.00 0.83 0.56 0.00 0.00 0.00 0.28 0.28 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
Delay/Veh: 0.0 15.3 13.1 0.0 0.0 0.0 9.5 9.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
User DelAdj: 1.00
AdjDel/Veh: 0.0 15.3 13.1 0.0 0.0 0.0 9.5 9.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
DesignQueue: 0 29 6 0 0 0 2 6 0 0 0 0 0 0 0 0 0 0 0 0

Oakland Army Base Area Redevelopment Plan EIR

Oakland Army Base Area Redevelopment Plan EIR

AM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

AM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report

Level Of Service Computation Report

1997 HCM Operations Method (Base Volume Alternative)

1997 HCM Operations Method (Future Volume Alternative)

Intersection #22 5th / Adeline

Intersection #22 5th / Adeline

Cycle (sec): 100
Loss Time (sec): 12 (Y+R = 4 sec)
Optimal Cycle: 117
Level Of Service: D

Cycle (sec): 100
Loss Time (sec): 12 (Y+R = 4 sec)
Optimal Cycle: 82
Level Of Service: D

Approach: North Bound South Bound East Bound West Bound

Approach: North Bound South Bound East Bound West Bound

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

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

Control: Split Phase Protected Protected

Control: Split Phase Protected Protected

Rights: Include Include Include

Rights: Include Include Include

Min. Green: 8 20 20 8 20 20 8 20 20 8 20 20

Min. Green: 8 20 20 8 20 20 8 20 20 8 20 20

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

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

Volume Module:

Volume Module:

Base Vol: 111 103 392 114 252 202 33 598 210 346 508 71

Base Vol: 111 103 392 114 252 202 33 598 210 346 508 71

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

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: 111 103 392 114 252 202 33 598 210 346 508 71

Initial Bse: 111 103 392 114 252 202 33 598 210 346 508 71

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

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

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

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

Oakland Army Base Area Redevelopment Plan EIR

2025 Conditions

AM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report

1997 HCM Operations Method (Base Volume Alternative)

***** Intersection #24 5th / Broadway *****

Cycle (sec): 75 Critical Vol./Cap. (X): 0.831
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 28.5
Optimal Cycle: 69 Level Of Service: C

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

Control: Protected Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 0 15 15 8 15 15 8 20 20 0 0 0 0

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

Volume Module:

Base Vol: 0 142 377 463 350 0 815 370 139 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 1.00 1.00 1.00 1.00 1.00 1.00

Saturation Flow Module:

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 1.00 0.95 0.85 0.95 0.95 1.00 0.81 0.81 0.85 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Capacity Analysis Module:

Vol/Sat: 0.00 0.04 0.23 0.26 0.10 0.00 0.27 0.24 0.09 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
Crit Moves: ****
Green/Cycle: 0.00 0.27 0.27 0.30 0.57 0.00 0.31 0.31 0.31 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00

Oakland Army Base Area Redevelopment Plan EIR

2025 Conditions

AM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report

1997 HCM Operations Method (Future Volume Alternative)

***** Intersection #24 5th / Broadway *****

Cycle (sec): 75 Critical Vol./Cap. (X): 0.831
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 27.8
Optimal Cycle: 69 Level Of Service: C

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

Control: Protected Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 0 15 15 8 15 15 8 20 20 0 0 0 0

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

Volume Module:

Base Vol: 0 142 377 463 350 0 815 370 139 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 1.00 1.00 1.00 1.00 1.00 1.00

Saturation Flow Module:

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 1.00 0.95 0.85 0.95 0.95 1.00 0.81 0.81 0.85 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Capacity Analysis Module:

Vol/Sat: 0.00 0.04 0.23 0.26 0.10 0.00 0.25 0.24 0.09 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
Crit Moves: ****
Green/Cycle: 0.00 0.28 0.28 0.30 0.58 0.00 0.30 0.30 0.30 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

AM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report

1997 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #25 3rd / Adeline

Cycle (sec): 100
Loss Time (sec): 12 (Y+R = 4 sec)
Optimal Cycle: 0
Level Of Service: E

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

Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 15 20 20 15 20 20 15 20 20 15 20 20

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

Volume Module:

Base Vol: 1 519 121 172 531 45 18 13 8 357 20 79
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: 1 519 121 172 531 45 18 13 8 357 20 79
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 1 519 121 172 531 45 18 13 8 357 20 79
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 1 519 121 172 531 45 18 13 8 357 20 79
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 1 519 121 172 531 45 18 13 8 357 20 79

Saturation Flow Module:

Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.01 1.62 0.37 0.46 1.42 0.12 0.92 0.67 0.41 1.00 0.65 0.35
Final Sat.: 1 674 160 189 598 51 296 227 141 387 270 143

Capacity Analysis Module:

Vol/Sat: 0.78 0.77 0.76 0.91 0.89 0.88 0.06 0.06 0.06 0.06 0.92 0.07 0.55
Crit Moves: ****
Delay/Veh: 35.1 34.0 32.1 53.3 49.2 46.6 14.0 13.3 13.2 58.1 20.8 20.8
AdjDel/Veh: 35.1 34.0 32.1 53.3 49.2 46.6 14.0 13.3 13.2 58.1 20.8 20.8
LOS by Move: E D F E E B B B F C C
ApproachDel: 33.6 50.0 50.0 13.6 43.5
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
ApprAdjDel: 33.6 50.0 50.0 13.6 43.5
LOS by Appr: D E B E

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

AM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report

1997 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #25 3rd / Adeline

Cycle (sec): 100
Loss Time (sec): 12 (Y+R = 4 sec)
Optimal Cycle: 0
Level Of Service: D

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

Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 15 20 20 15 20 20 15 20 20 15 20 20

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

Volume Module:

Base Vol: 1 519 121 172 531 45 18 13 8 357 20 79
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: 1 519 121 172 531 45 18 13 8 357 20 79
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 1 519 121 172 531 45 18 13 8 357 20 79
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 1 519 121 172 531 45 18 13 8 357 20 79
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 1 519 121 172 531 45 18 13 8 357 20 79

Saturation Flow Module:

Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.01 1.61 0.38 0.53 1.33 0.14 0.92 0.67 0.41 1.00 0.62 0.38
Final Sat.: 2 709 172 229 590 63 313 241 150 406 274 167

Capacity Analysis Module:

Vol/Sat: 0.63 0.62 0.61 0.75 0.73 0.72 0.06 0.05 0.05 0.79 0.07 0.47
Crit Moves: ****
Delay/Veh: 23.5 22.9 21.9 31.4 29.1 27.9 13.2 12.5 12.4 36.1 17.5 17.5
AdjDel/Veh: 23.5 22.9 21.9 31.4 29.1 27.9 13.2 12.5 12.4 36.1 17.5 17.5
LOS by Move: C C C D D D B B B E C
ApproachDel: 22.7 29.6 29.6 12.8 28.7
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
ApprAdjDel: 22.7 29.6 29.6 12.8 28.7
LOS by Appr: C D B D

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

AM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report

1997 HCM Unsignalized Method (Base Volume Alternative)

Intersection #26 3rd / Market

Average Delay (sec/veh): 46.1 Worst Case Level Of Service: E

Approach: North Bound South Bound East Bound West Bound

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

Control: Stop Sign Uncontrolled Uncontrolled

Rights: Include Include Include

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

Volume Module:

Base Vol: 72 179 13 65 197 236 53 163 81 20 267 64

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: 72 179 13 65 197 236 53 163 81 20 267 64

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

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

PHF Volume: 72 179 13 65 197 236 53 163 81 20 267 64

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

Final Vol.: 72 179 13 65 197 236 53 163 81 20 267 64

Critical Gap Module:

Critical Gp: 7.1 6.5 6.2 7.1 6.5 6.2 4.1 xxxxx 4.1 xxxxx xxxxx

FollowUpTm: 3.5 4.0 3.3 3.5 4.0 3.3 2.2 xxxxx xxxxx 2.2 xxxxx xxxxx

Capacity Module:

Conflict Vol: 865 681 204 745 689 299 331 xxxxx xxxxx 244 xxxxx xxxxx

Potent Cap.: 276 375 842 333 371 745 1240 xxxxx xxxxx 1334 xxxxx xxxxx

Move Cap.: 100 354 842 189 350 745 1240 xxxxx xxxxx 1334 xxxxx xxxxx

Level Of Service Module:

Stopped Del:102.5 xxxxx xxxxx 33.7 19.3 xxxxx 7.9 xxxxx xxxxx 7.7 xxxxx xxxxx

LOS by Move: F * * * * * A * * * * * A * * * * *

Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT

Shared Cap.: xxxxx xxxxx 368 xxxxx xxxxx 559 xxxxx xxxxx xxxxx xxxxx xxxxx

Shrd StpDel:xxxxx xxxxx 25.0 xxxxx xxxxx 20.6 xxxxx xxxxx xxxxx xxxxx xxxxx

Shared LOS: * * * * * C * * * * * C * * * * * C * * * * *

ApproachDel: 46.1 E *

ApproachLOS: E *

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

AM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report

1997 HCM Unsignalized Method (Future Volume Alternative)

Intersection #26 3rd / Market

Average Delay (sec/veh): 30.5 Worst Case Level Of Service: D

Approach: North Bound South Bound East Bound West Bound

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

Control: Stop Sign Uncontrolled Uncontrolled

Rights: Include Include Include

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

Volume Module:

Base Vol: 72 179 13 65 197 236 53 163 81 20 267 64

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: 72 179 13 65 197 236 53 163 81 20 267 64

Added Vol: -15 -20 0 0 -31 -22 -1 0 -15 0 0 0

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

Initial Fut: 57 159 13 65 166 214 52 163 66 20 267 64

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

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

PHF Volume: 57 159 13 65 166 214 52 163 66 20 267 64

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

Final Vol.: 57 159 13 65 166 214 52 163 66 20 267 64

Critical Gap Module:

Critical Gp: 7.1 6.5 6.2 7.1 6.5 6.2 4.1 xxxxx xxxxx 4.1 xxxxx xxxxx

FollowUpTm: 3.5 4.0 3.3 3.5 4.0 3.3 2.2 xxxxx xxxxx 2.2 xxxxx xxxxx

Capacity Module:

Conflict Vol: 829 671 196 725 672 299 331 xxxxx xxxxx 229 xxxxx xxxxx

Potent Cap.: 292 380 850 343 380 745 1240 xxxxx xxxxx 1351 xxxxx xxxxx

Move Cap.: 127 358 850 212 358 745 1240 xxxxx xxxxx 1351 xxxxx xxxxx

Level Of Service Module:

Stopped Del: 54.5 xxxxx xxxxx 29.4 18.1 xxxxx 7.9 xxxxx xxxxx 7.7 xxxxx xxxxx

LOS by Move: F * * * * * D C * * * * * A * * * * *

Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT

Shared Cap.: xxxxx xxxxx 375 xxxxx xxxxx 572 xxxxx xxxxx xxxxx xxxxx xxxxx

Shrd StpDel:xxxxx xxxxx 22.5 xxxxx xxxxx 17.9 xxxxx xxxxx xxxxx xxxxx xxxxx

Shared LOS: * * * * * C * * * * * C * * * * * C * * * * *

ApproachDel: 30.5 D *

ApproachLOS: D *

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

AM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report
1997 HCM Operations Method (Base Volume Alternative)

Intersection #30 27th / SR 24-580 Off Ramp
Level Of Service: B
Critical Vol./Cap. (X): 0.478
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 15.1
Optimal Cycle: 38 Level Of Service: B

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

Control: Permitted Permitted Permitted Permitted
Rights: Include Include Include Include
Min. Green: 0 0 0 0 8 20 20 0 12 12 8 12 0
Lanes: 0 0 0 0 1 1 1 0 1 0 0 2 1 0 0 1 2 0 0

Volume Module:

Base Vol: 0 0 546 886 558 0 433 36 10 488 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: 0 0 546 886 558 0 433 36 10 488 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 0 546 886 558 0 433 36 10 488 0
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 0 0 546 886 558 0 433 36 10 488 0

Saturation Flow Module:

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.00 0.00 0.00 1.14 1.86 1.00 0.00 2.77 0.23 0.06 2.94 0.00
Final Sat.: 0 0 1755 2848 1615 0 4731 393 97 4717 0

Capacity Analysis Module:

Vol/Sat: 0.00 0.00 0.00 0.31 0.31 0.35 0.00 0.09 0.09 0.10 0.10 0.00
Crit Moves: ****
Green/Cycle: 0.00 0.00 0.00 0.72 0.72 0.72 0.00 0.22 0.22 0.22 0.22 0.00
Volume/Cap: 0.00 0.00 0.00 0.43 0.43 0.48 0.00 0.42 0.42 0.48 0.48 0.00
Delay/Veh: 0.0 0.0 0.0 5.6 5.6 6.2 0.0 34.0 34.0 34.6 34.6 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
AdjDel/Veh: 0.0 0.0 0.0 5.6 5.6 6.2 0.0 34.0 34.0 34.6 34.6 0.0
DesignQueue: 0 0 9 15 9 0 19 2 0 22 0

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

AM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #30 27th / SR 24-580 Off Ramp
Level Of Service: B
Critical Vol./Cap. (X): 0.401
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 15.5
Optimal Cycle: 38 Level Of Service: B

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

Control: Permitted Permitted Permitted Permitted
Rights: Include Include Include Include
Min. Green: 0 0 0 0 8 20 20 0 12 12 8 12 0
Lanes: 0 0 0 0 1 1 1 0 1 0 0 2 1 0 0 1 2 0 0

Volume Module:

Base Vol: 0 0 546 886 558 0 433 36 10 488 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: 0 0 546 886 558 0 433 36 10 488 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 0 546 713 379 0 391 36 10 488 0
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 0 0 546 713 379 0 391 36 10 488 0

Saturation Flow Module:

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.00 0.00 0.00 1.30 1.70 1.00 0.00 2.75 0.25 0.06 2.94 0.00
Final Sat.: 0 0 1996 2607 1615 0 4688 432 97 4727 0

Capacity Analysis Module:

Vol/Sat: 0.00 0.00 0.00 0.27 0.27 0.23 0.00 0.08 0.08 0.10 0.10 0.00
Crit Moves: ****
Green/Cycle: 0.00 0.00 0.00 0.68 0.68 0.68 0.00 0.26 0.26 0.26 0.26 0.00
Volume/Cap: 0.00 0.00 0.00 0.40 0.40 0.34 0.00 0.32 0.32 0.40 0.40 0.00
Delay/Veh: 0.0 0.0 0.0 7.0 7.0 6.8 0.0 30.2 30.2 30.9 30.9 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
AdjDel/Veh: 0.0 0.0 0.0 7.0 7.0 6.8 0.0 30.2 30.2 30.9 30.9 0.0
DesignQueue: 0 0 0 10 13 7 0 16 2 0 21 0

Oakland Army Base Area Redevelopment Plan EIR

2025 Conditions

AM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report

1997 HCM Operations Method (Base Volume Alternative)

Intersection #31 27th / SR 24-580 On Ramp

Cycle (sec): 100 Critical Vol./Cap. (X): 0.666
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 12.9
Optimal Cycle: 47 Level Of Service: B

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

Control: Permitted Permitted Permitted Permitted
Rights: Include Include Include Include
Min. Green: 8 20 20 0 0 0 0 8 10 0 0 10 10

Lanes: 0 1 1 1 0 0 0 0 0 1 1 2 0 0 0 0 3 0 1

Volume Module:
Base Vol: 17 288 20 0 0 272 771 0 488 227

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 17 288 20 0 0 272 771 0 488 227

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

PHF Volume: 17 288 20 0 0 272 771 0 488 227
Reduced Vol: 0 0 0 0 0 272 771 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

MUF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 17 288 20 0 0 272 771 0 488 227

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900

Adjustment: 0.89 0.89 0.89 1.00 1.00 1.00 1.00 1.00 0.91 0.85
Lanes: 0.16 2.66 0.18 0.00 0.00 0.00 1.04 2.96 0.00 3.00 1.00

Final Sat.: 266 4514 313 0 0 501 1421 0 0 5187 1615
Capacity Analysis Module:
Vol/Sat: 0.06 0.06 0.06 0.00 0.54 0.54 0.00 0.00 0.09 0.14

Oakland Army Base Area Redevelopment Plan EIR

2025 Conditions

AM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report

1997 HCM Operations Method (Future Volume Alternative)

Intersection #31 27th / SR 24-580 On Ramp

Cycle (sec): 100 Critical Vol./Cap. (X): 0.598
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 11.2
Optimal Cycle: 41 Level Of Service: B

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

Control: Permitted Permitted Permitted Permitted
Rights: Include Include Include Include
Min. Green: 8 20 20 0 0 0 0 8 10 0 0 10 10

Lanes: 0 1 1 1 0 0 0 0 0 1 1 2 0 0 0 0 3 0 1

Volume Module:
Base Vol: 17 288 20 0 0 272 771 0 488 227

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 17 288 20 0 0 272 771 0 488 227

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

PHF Volume: 17 252 20 0 0 230 771 0 488 227
Reduced Vol: 0 0 0 0 0 230 771 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

MUF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 17 252 20 0 0 230 771 0 488 227

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900

Adjustment: 0.89 0.89 0.89 1.00 1.00 1.00 1.00 1.00 0.91 0.85
Lanes: 0.18 2.61 0.21 0.00 0.00 0.00 1.00 3.00 0.00 3.00 1.00

Final Sat.: 299 4433 352 0 0 527 1582 0 0 5187 1615
Capacity Analysis Module:
Vol/Sat: 0.06 0.06 0.06 0.00 0.44 0.44 0.00 0.00 0.09 0.14

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

AM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report

1997 HCM Operations Method (Base Volume Alternative)

Intersection #34 Powell / I-80 Frontage Rd

Cycle (sec): 100
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 0.570
Optimal Cycle: 47 Level Of Service: C

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

Control: Protected Protected Protected Protected Protected
Rights: Include Include Include Include Include
Min. Green: 0 0 0 0 15 8 10 10 0 15 15

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

Volume Module:

Base Vol: 0 0 0 0 765 0 288 87 260 345 0 910 749
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 0 0 0 765 0 288 87 260 345 0 910 749
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 0 0 0 765 0 288 87 260 345 0 910 749
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 0 0 0 0 765 0 288 87 260 345 0 910 749

Saturation Flow Module:

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 1.00 1.00 1.00 1.00 0.92 1.00 0.85 0.95 0.87 0.87 1.00 0.95
Lanes: 0.00 0.00 0.00 0.00 2.00 0.00 1.00 1.00 1.00 1.00 0.00 1.00
Final Sat.: 0 0 0 0 3502 0 1615 1805 1652 1652 0 3610 1805

Capacity Analysis Module:

Vol/Sat: 0.00 0.00 0.00 0.00 0.22 0.00 0.18 0.05 0.16 0.21 0.00 0.25 0.00
Crit Moves: ****
Green/Cycle: 0.00 0.00 0.00 0.00 0.38 0.00 0.38 0.08 0.53 0.53 0.00 0.44 0.00
Volume/Cap: 0.00 0.00 0.00 0.00 0.57 0.00 0.47 0.57 0.30 0.40 0.00 0.57 0.00
Delay/Veh: 0.0 0.0 0.0 0.0 24.9 0.0 23.7 49.1 13.4 14.3 0.0 21.3 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: 0.0 0.0 0.0 0.0 24.9 0.0 23.7 49.1 13.4 14.3 0.0 21.3 0.0
DesignQueue: 0 0 0 0 28 0 10 4 7 10 0 30 0

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

AM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report

1997 HCM Operations Method (Future Volume Alternative)

Intersection #34 Powell / I-80 Frontage Rd

Cycle (sec): 100
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 0.570
Optimal Cycle: 47 Level Of Service: C

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

Control: Protected Protected Protected Protected Protected
Rights: Include Include Include Include Include
Min. Green: 0 0 0 0 15 8 10 10 0 15 15

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

Volume Module:

Base Vol: 0 0 0 0 765 0 288 87 260 345 0 910 749
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 0 0 0 765 0 288 87 260 345 0 910 749
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 0 0 0 765 0 288 87 260 345 0 910 749
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 0 0 0 0 765 0 288 87 260 345 0 910 749

Saturation Flow Module:

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 1.00 1.00 1.00 1.00 0.92 1.00 0.85 0.95 0.87 0.87 1.00 0.95
Lanes: 0.00 0.00 0.00 0.00 2.00 0.00 1.00 1.00 1.00 1.00 0.00 1.00
Final Sat.: 0 0 0 0 3502 0 1615 1805 1652 1652 0 3610 1805

Capacity Analysis Module:

Vol/Sat: 0.00 0.00 0.00 0.00 0.22 0.00 0.18 0.05 0.16 0.21 0.00 0.25 0.00
Crit Moves: ****
Green/Cycle: 0.00 0.00 0.00 0.00 0.38 0.00 0.38 0.08 0.53 0.53 0.00 0.44 0.00
Volume/Cap: 0.00 0.00 0.00 0.00 0.57 0.00 0.47 0.57 0.30 0.40 0.00 0.57 0.00
Delay/Veh: 0.0 0.0 0.0 0.0 24.9 0.0 23.7 49.1 13.4 14.3 0.0 21.3 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: 0.0 0.0 0.0 0.0 24.9 0.0 23.7 49.1 13.4 14.3 0.0 21.3 0.0
DesignQueue: 0 0 0 0 28 0 10 4 7 10 0 30 0

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

AM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report

1997 HCM Operations Method (Base Volume Alternative)

Intersection #35 Powell / I-80 NB Ramps

Cycle (sec): 100 Critical Vol./Cap. (X): 0.915
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 28.5
Optimal Cycle: 111 Level Of Service: C

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

Control: Protected Protected Protected Protected Protected
Rights: Include Include Include Include Include
Min. Green: 8 10 10 0 0 0 0 8 10 0 0 10 10
Lanes: 1 0 1 0 1 0 0 0 0 1 0 3 0 0 0 0 3 0 1

Volume Module:

Base Vol: 553 7 1079 0 0 83 782 0 0 920 409
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 553 7 1079 0 0 83 782 0 0 920 409
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 553 7 1079 0 0 83 782 0 0 920 409
Reduced Vol: 0 0 0 0 0 0 0 0 0 0
PCE Adj: 553 7 1079 0 0 83 782 0 0 920 409
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 553 7 1079 0 0 83 782 0 0 920 409

Saturation Flow Module:

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.81 0.81 0.81 0.81 0.81 0.81 0.81 0.81 0.81 0.81
Lanes: 1.34 0.01 1.65 0.00 0.00 0.00 0.00 0.00 0.00 0.00
Final Sat.: 2061 13 2554 0 0 1805 5187 0 0 5187 1615

Capacity Analysis Module:

Vol/Sat: 0.27 0.53 0.42 0.00 0.00 0.05 0.15 0.00 0.00 0.18 0.25
Crit Moves: ****
Green/Cycle: 0.56 0.56 0.56 0.00 0.00 0.08 0.35 0.00 0.00 0.27 0.27
Volume/Cap: 0.48 0.95 0.75 0.00 0.00 0.57 0.43 0.00 0.00 0.66 0.95
Delay/Veh: 13.2 32.1 18.0 0.0 0.0 0.0 49.9 25.3 0.0 0.0 33.9 66.3
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 13.2 32.1 18.0 0.0 0.0 0.0 49.9 25.3 0.0 0.0 33.9 66.3
DesignQueue: 14 0 29 0 0 4 29 0 0 39 18

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

AM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report

1997 HCM Operations Method (Future Volume Alternative)

Intersection #35 Powell / I-80 NB Ramps

Cycle (sec): 100 Critical Vol./Cap. (X): 0.909
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 28.1
Optimal Cycle: 107 Level Of Service: C

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

Control: Protected Protected Protected Protected Protected
Rights: Include Include Include Include Include
Min. Green: 8 10 10 0 0 0 0 8 10 0 0 10 10
Lanes: 1 0 1 0 1 0 0 0 0 1 0 3 0 0 0 0 3 0 1

Volume Module:

Base Vol: 553 7 1079 0 0 83 782 0 0 920 409
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 553 7 1079 0 0 83 782 0 0 920 409
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 544 7 1070 0 0 83 782 0 0 877 409
Reduced Vol: 0 0 0 0 0 0 0 0 0 0
PCE Adj: 544 7 1070 0 0 83 782 0 0 877 409
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 544 7 1070 0 0 83 782 0 0 877 409

Saturation Flow Module:

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.81 0.81 0.81 0.81 0.81 0.81 0.81 0.81 0.81 0.81
Lanes: 1.33 0.01 1.66 0.00 0.00 0.00 0.00 0.00 0.00 0.00
Final Sat.: 2058 13 2556 0 0 1805 5187 0 0 5187 1615

Capacity Analysis Module:

Vol/Sat: 0.26 0.53 0.42 0.00 0.00 0.05 0.15 0.00 0.00 0.17 0.25
Crit Moves: ****
Green/Cycle: 0.56 0.56 0.56 0.00 0.00 0.08 0.35 0.00 0.00 0.27 0.27
Volume/Cap: 0.47 0.94 0.75 0.00 0.00 0.57 0.43 0.00 0.00 0.63 0.94
Delay/Veh: 13.2 31.2 18.0 0.0 0.0 0.0 49.9 25.1 0.0 0.0 33.1 64.5
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 13.2 31.2 18.0 0.0 0.0 0.0 49.9 25.1 0.0 0.0 33.1 64.5
DesignQueue: 14 0 29 0 0 4 29 0 0 37 18

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

AM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report

1997 HCM Operations Method (Base Volume Alternative)
Intersection #36 Powell / Christie

Cycle (sec): 100 Critical Vol./Cap. (X): 0.590
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 32.9
Optimal Cycle: 69 Level Of Service: C

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

Control: Split Phase Split Phase Protected Protected
Rights: Include Include Include Include
Min. Green: 8 10 10 8 24 24 8 15 15 8 10 10
Lanes: 1 1 0 0 1 0 1 0 0 2 2 0 1 1 1 0 2 1 0

Volume Module:

Base Vol: 367 42 126 86 57 272 335 830 469 136 701 116
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: 367 42 126 86 57 272 335 830 469 136 701 116
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 367 42 126 86 57 272 335 830 469 136 701 116
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 367 42 126 86 57 272 335 830 469 136 701 116
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 367 42 126 86 57 272 335 830 469 136 701 116

Saturation Flow Module:

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.96 0.96 0.85 0.97 0.97 0.75 0.92 0.90 0.90 0.95 0.89 0.89
Lanes: 1.79 0.21 1.00 0.60 0.40 2.00 2.00 1.92 1.08 1.00 2.57 0.43
Final Sat.: 3263 373 1615 1110 735 2842 3502 3273 1849 1805 4357 721

Capacity Analysis Module:

Vol/Sat: 0.11 0.11 0.08 0.08 0.08 0.10 0.10 0.25 0.25 0.08 0.16 0.16
Crit Moves: ****
Green/Cycle: 0.16 0.16 0.16 0.24 0.24 0.24 0.18 0.37 0.37 0.11 0.30 0.30
Volume/Cap: 0.69 0.69 0.48 0.32 0.32 0.40 0.54 0.69 0.69 0.69 0.54 0.54
Delay/Veh: 42.9 42.9 39.4 31.7 31.7 32.3 38.3 27.9 27.9 52.8 29.7 29.7
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: 42.9 42.9 39.4 31.7 31.7 32.3 38.3 27.9 27.9 52.8 29.7 29.7
DesignQueue: 18 2 6 4 2 12 16 31 18 7 28 5

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

AM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report

1997 HCM Operations Method (Future Volume Alternative)
Intersection #36 Powell / Christie

Cycle (sec): 100 Critical Vol./Cap. (X): 0.588
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 32.9
Optimal Cycle: 69 Level Of Service: C

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

Control: Split Phase Split Phase Protected Protected
Rights: Include Include Include Include
Min. Green: 8 10 10 8 24 24 8 15 15 8 10 10
Lanes: 1 1 0 0 1 0 1 0 0 2 2 0 1 1 1 0 2 1 0

Volume Module:

Base Vol: 367 42 126 86 57 272 335 830 469 136 701 116
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: 367 42 126 86 57 272 335 830 469 136 701 116
Added Vol: 0 0 0 0 0 0 0 0 -9 0 0 -43 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 367 42 126 86 57 272 335 821 469 136 658 116
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 367 42 126 86 57 272 335 821 469 136 658 116
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 367 42 126 86 57 272 335 821 469 136 658 116
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 367 42 126 86 57 272 335 821 469 136 658 116

Saturation Flow Module:

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.96 0.96 0.85 0.97 0.97 0.75 0.92 0.90 0.90 0.95 0.89 0.89
Lanes: 1.79 0.21 1.00 0.60 0.40 2.00 2.00 1.91 1.09 1.00 2.55 0.45
Final Sat.: 3263 373 1615 1110 735 2842 3502 3257 1860 1805 4313 760

Capacity Analysis Module:

Vol/Sat: 0.11 0.11 0.08 0.08 0.08 0.10 0.10 0.25 0.25 0.08 0.15 0.15
Crit Moves: ****
Green/Cycle: 0.16 0.16 0.16 0.24 0.24 0.24 0.18 0.37 0.37 0.11 0.29 0.29
Volume/Cap: 0.69 0.69 0.48 0.32 0.32 0.40 0.52 0.69 0.69 0.69 0.52 0.52
Delay/Veh: 42.8 42.8 39.3 31.7 31.7 32.3 37.6 27.9 27.9 52.6 29.8 29.8
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: 42.8 42.8 39.3 31.7 31.7 32.3 37.6 27.9 27.9 52.6 29.8 29.8
DesignQueue: 18 2 6 4 2 12 16 31 18 7 27 5

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

AM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report

1997 HCM Operations Method (Base Volume Alternative)

Intersection #37 Powell / Hollis

Cycle (sec): 100
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 26.8
Optimal Cycle: 42

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Permitted Permitted Protected Protected
Rights: Include Include Include Include
Min. Green: 8 15 15 8 15 15 8 10 10 8 10 10
Lanes: 1 0 0 1 0 0 1 0 0 1 1 0 1 0 1 0 1 0 1 0

Volume Module:

Base Vol: 210 317 41 40 222 93 259 507 186 86 553 72
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: 210 317 41 40 222 93 259 507 186 86 553 72
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 210 317 41 40 222 93 259 507 186 86 553 72
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 210 317 41 40 222 93 259 507 186 86 553 72
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 210 317 41 40 222 93 259 507 186 86 553 72

Saturation Flow Module:

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.48 0.98 0.98 0.89 0.89 0.85 0.95 0.91 0.91 0.95 0.93 0.93
Lanes: 1.00 0.89 0.11 0.15 0.85 1.00 1.00 1.46 0.54 1.00 1.77 0.23
Final Sat.: 903 1654 214 257 1428 1615 1805 2535 930 1805 3140 409

Capacity Analysis Module:

Vol/Sat: 0.23 0.19 0.19 0.16 0.16 0.06 0.14 0.20 0.20 0.05 0.18 0.18
Crit Moves: *****
Green/Cycle: 0.38 0.38 0.38 0.38 0.38 0.38 0.24 0.45 0.45 0.08 0.29 0.29
Volume/Cap: 0.61 0.50 0.50 0.41 0.41 0.15 0.61 0.45 0.45 0.60 0.61 0.61
Delay/Veh: 27.9 24.1 24.1 22.9 22.9 20.3 36.5 19.3 19.3 51.0 31.6 31.6
User DelAdj: 27.9 24.1 24.1 22.9 22.9 20.3 36.5 19.3 19.3 51.0 31.6 31.6
AdjDel/Veh: 27.9 24.1 24.1 22.9 22.9 20.3 36.5 19.3 19.3 51.0 31.6 31.6
DesignQueue: 7 11 1 1 8 3 11 16 6 4 23 3

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

AM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report

1997 HCM Operations Method (Future Volume Alternative)

Intersection #37 Powell / Hollis

Cycle (sec): 100
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 26.7
Optimal Cycle: 42

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Permitted Permitted Protected Protected
Rights: Include Include Include Include
Min. Green: 8 15 15 8 15 15 8 10 10 8 10 10
Lanes: 1 0 0 1 0 0 1 0 0 1 1 0 1 0 1 0 1 0 1 0

Volume Module:

Base Vol: 210 317 41 40 222 93 259 507 186 86 553 72
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: 210 317 41 40 222 93 259 507 186 86 553 72
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 210 317 41 40 222 93 259 498 186 86 510 72
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 210 317 41 40 222 93 259 498 186 86 510 72
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 210 317 41 40 222 93 259 498 186 86 510 72

Saturation Flow Module:

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.48 0.98 0.98 0.89 0.89 0.85 0.95 0.91 0.91 0.95 0.93 0.93
Lanes: 1.00 0.89 0.11 0.15 0.85 1.00 1.00 1.46 0.54 1.00 1.75 0.25
Final Sat.: 910 1654 214 260 1444 1615 1805 2521 941 1805 3103 438

Capacity Analysis Module:

Vol/Sat: 0.23 0.19 0.19 0.15 0.15 0.06 0.14 0.20 0.20 0.05 0.16 0.16
Crit Moves: *****
Green/Cycle: 0.39 0.39 0.39 0.39 0.39 0.39 0.24 0.44 0.44 0.08 0.28 0.28
Volume/Cap: 0.59 0.49 0.49 0.39 0.39 0.15 0.59 0.45 0.45 0.60 0.59 0.59
Delay/Veh: 26.9 23.6 23.6 22.4 22.4 19.9 35.7 19.7 19.7 51.0 32.2 32.2
User DelAdj: 26.9 23.6 23.6 22.4 22.4 19.9 35.7 19.7 19.7 51.0 32.2 32.2
AdjDel/Veh: 26.9 23.6 23.6 22.4 22.4 19.9 35.7 19.7 19.7 51.0 32.2 32.2
DesignQueue: 7 11 1 1 8 3 11 16 6 4 21 3

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

AM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report

1997 HCM Operations Method (Base Volume Alternative)

Intersection #38 Powell / San Pablo Av
Critical Vol./Cap. (X): 0.867
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 38.6
Optimal Cycle: 96 Level Of Service: D

Approach: North Bound South Bound East Bound West Bound

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

Control: Protected Protected Protected Protected Protected Protected

Rights: Include Include Include Include Include Include

Min. Green: 8 15 15 8 15 15 8 15 15 8 15 15

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

Volume Module:

Base Vol: 249 1105 87 77 1249 48 67 209 169 170 778 33

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: 249 1105 87 77 1249 48 67 209 169 170 778 33

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

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

PHF Volume: 249 1105 87 77 1249 48 67 209 169 170 778 33

PHF Vol: 0 0 0 0 0 0 0 0 0 0 0 0

Reduced Vol: 249 1105 87 77 1249 48 67 209 169 170 778 33

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

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

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

Final Vol.: 249 1105 87 77 1249 48 67 209 169 170 778 33

Saturation Flow Module:

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

Adjustment: 0.95 0.94 0.94 0.95 0.94 0.94 0.95 0.89 0.89 0.95 0.94 0.94

Lanes: 1.00 1.85 0.15 1.00 1.93 0.07 1.00 1.11 0.89 1.00 1.92 0.08

Final Sat.: 1805 3310 261 1805 3456 133 1805 1862 1506 1805 3442 146

Capacity Analysis Module:

Vol/Sat: 0.14 0.33 0.33 0.04 0.36 0.36 0.04 0.11 0.11 0.09 0.23 0.23

Crit Moves: ****

Green/Cycle: 0.15 0.47 0.47 0.08 0.40 0.40 0.08 0.15 0.15 0.18 0.25 0.25

Volume/Cap: 0.91 0.71 0.71 0.53 0.91 0.91 0.46 0.75 0.75 0.53 0.91 0.91

Delay/Veh: 72.8 22.5 22.5 48.0 37.0 37.0 46.3 46.8 46.8 38.8 49.2 49.2

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: 72.8 22.5 22.5 48.0 37.0 37.0 46.3 46.8 46.8 38.8 49.2 49.2

DesignQueue: 12 35 3 4 46 2 3 10 8 8 34 1

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

AM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report

1997 HCM Operations Method (Future Volume Alternative)

Intersection #38 Powell / San Pablo Av
Critical Vol./Cap. (X): 0.853
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 37.3
Optimal Cycle: 91 Level Of Service: D

Approach: North Bound South Bound East Bound West Bound

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

Control: Protected Protected Protected Protected Protected Protected

Rights: Include Include Include Include Include Include

Min. Green: 8 15 15 8 15 15 8 15 15 8 15 15

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

Volume Module:

Base Vol: 249 1105 87 77 1249 48 67 209 169 170 778 33

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: 249 1105 87 77 1249 48 67 209 169 170 778 33

Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0

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

Initial Fut: 249 1105 87 77 1249 48 67 209 169 170 778 33

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

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

PHF Volume: 249 1105 87 77 1249 48 67 209 169 170 778 33

PHF Vol: 0 0 0 0 0 0 0 0 0 0 0 0

Reduced Vol: 249 1105 87 77 1249 48 67 209 169 170 778 33

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

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

Final Vol.: 249 1105 87 77 1249 48 67 209 169 170 778 33

Saturation Flow Module:

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

Adjustment: 0.95 0.94 0.94 0.95 0.94 0.94 0.95 0.88 0.88 0.95 0.94 0.94

Lanes: 1.00 1.85 0.15 1.00 1.93 0.07 1.00 1.08 0.92 1.00 1.91 0.09

Final Sat.: 1805 3310 261 1805 3456 133 1805 1822 1539 1805 3434 154

Capacity Analysis Module:

Vol/Sat: 0.14 0.33 0.33 0.04 0.36 0.36 0.04 0.11 0.11 0.09 0.21 0.21

Crit Moves: ****

Green/Cycle: 0.15 0.48 0.48 0.08 0.41 0.41 0.08 0.15 0.15 0.17 0.24 0.24

Volume/Cap: 0.89 0.70 0.70 0.53 0.89 0.89 0.46 0.73 0.73 0.55 0.89 0.89

Delay/Veh: 69.4 21.6 21.6 48.0 35.0 35.0 46.3 46.0 46.0 40.2 48.3 48.3

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: 69.4 21.6 21.6 48.0 35.0 35.0 46.3 46.0 46.0 40.2 48.3 48.3

DesignQueue: 12 35 3 4 45 2 3 10 8 8 33 1

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

AM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report

1997 HCM Operations Method (Base Volume Alternative)

Intersection #39 Stanford / Market

Cycle (sec): 100 Critical Vol./Cap. (X): 0.595
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 30.8
Optimal Cycle: 58 Level Of Service: C

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

Control: Protected Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 8 15 15 8 15 15 8 15 15 8 15 15

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

Volume Module:

Table with 18 columns: Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, Final Vol, Sat/Lane, Adj, Lanes, Final Sat, Capacity Analysis Module, Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, DesignQueue.

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

AM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report

1997 HCM Operations Method (Future Volume Alternative)

Intersection #39 Stanford / Market

Cycle (sec): 100 Critical Vol./Cap. (X): 0.576
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 30.7
Optimal Cycle: 58 Level Of Service: C

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

Control: Protected Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 8 15 15 8 15 15 8 15 15 8 15 15

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

Volume Module:

Table with 18 columns: Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, Final Vol, Sat/Lane, Adj, Lanes, Final Sat, Capacity Analysis Module, Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, DesignQueue.

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

AM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report
1997 HCM Operations Method (Base Volume Alternative)

Intersection #40 Stanford / MLK Jr Wy

Cycle (sec): 100 Critical Vol./Cap. (X): 0.924
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 18.1
Optimal Cycle: 109 Level Of Service: B

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

Control: Permitted Include Protected Include Protected Include
Rights: 8 10 10 0 15 15 20 0 0 20 0 0 0 0 0
Min. Green: 0 1 2 0 0 0 2 0 1 2 0 0 1 2 0 0 0 0 0 0

Volume Module:

Base Vol: 265 1932 0 0 1465 207 242 0 320 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: 265 1932 0 0 1465 207 242 0 320 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 265 1932 0 0 1465 207 242 0 320 0 0 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 265 1932 0 0 1465 207 242 0 320 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
Final Vol.: 265 1932 0 0 1465 207 242 0 320 0 0 0

Saturation Flow Module:

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.58 0.58 1.00 1.00 0.95 0.85 0.92 1.00 0.85 1.00 1.00 1.00
Lanes: 0.36 2.64 0.00 0.00 2.00 1.00 2.00 0.00 1.00 0.00 0.00 0.00
Final Sat.: 395 2883 0 0 3610 1615 3502 0 1615 0 0 0

Capacity Analysis Module:

Vol/Sat: 0.67 0.67 0.00 0.00 0.41 0.13 0.07 0.00 0.20 0.00 0.00 0.00
Crit Moves: 0.73 0.73 0.00 0.00 0.73 0.73 0.21 0.00 0.21 0.00 0.00 0.00
Green/Cycle: 0.92 0.92 0.00 0.00 0.56 0.18 0.32 0.00 0.92 0.00 0.00 0.00
Volume/Cap: 18.2 18.2 0.0 0.0 6.6 4.4 33.4 0.0 68.1 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: 18.2 18.2 0.0 0.0 6.6 4.4 33.4 0.0 68.1 0.0 0.0 0.0
DesignQueue: 5 33 0 0 25 3 11 0 15 0 0 0

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

AM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #40 Stanford / MLK Jr Wy

Cycle (sec): 100 Critical Vol./Cap. (X): 0.924
Loss Time (sec): 6 (Y+R = 4 sec) Average Delay (sec/veh): 18.2
Optimal Cycle: 109 Level Of Service: B

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

Control: Permitted Include Protected Include Protected Include
Rights: 8 10 10 0 15 15 20 0 0 20 0 0 0 0 0
Min. Green: 0 1 2 0 0 0 2 0 1 2 0 0 1 2 0 0 0 0 0

Volume Module:

Base Vol: 265 1932 0 0 1465 207 242 0 320 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: 265 1932 0 0 1465 207 242 0 320 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 265 1932 0 0 1465 196 240 0 320 0 0 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 265 1932 0 0 1465 196 240 0 320 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
Final Vol.: 265 1932 0 0 1465 196 240 0 320 0 0 0

Saturation Flow Module:

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.58 0.58 1.00 1.00 0.95 0.85 0.92 1.00 0.85 1.00 1.00 1.00
Lanes: 0.36 2.64 0.00 0.00 2.00 1.00 2.00 0.00 1.00 0.00 0.00 0.00
Final Sat.: 395 2883 0 0 3610 1615 3502 0 1615 0 0 0

Capacity Analysis Module:

Vol/Sat: 0.67 0.67 0.00 0.00 0.41 0.12 0.07 0.00 0.20 0.00 0.00 0.00
Crit Moves: 0.73 0.73 0.00 0.00 0.73 0.73 0.21 0.00 0.21 0.00 0.00 0.00
Green/Cycle: 0.92 0.92 0.00 0.00 0.56 0.17 0.32 0.00 0.92 0.00 0.00 0.00
Volume/Cap: 18.2 18.2 0.0 0.0 6.6 4.4 33.4 0.0 68.1 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: 18.2 18.2 0.0 0.0 6.6 4.4 33.4 0.0 68.1 0.0 0.0 0.0
DesignQueue: 5 33 0 0 25 3 11 0 15 0 0 0

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

AM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report
1997 HCM Operations Method (Base Volume Alternative)

Intersection #41 Ashby / 7th

Cycle (sec): 100 Critical Vol./Cap. (X): 0.774
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 36.6
Optimal Cycle: 71 Level Of Service: D

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

Control: Split Phase Split Phase Protected Protected
Rights: Include Include Include Include
Min. Green: 8 15 15 8 15 15 8 12 12 8 12 12
Lanes: 0 1 0 1 0 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 48 209 74 64 267 139 458 796 282 124 584 103
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: 48 209 74 64 267 139 458 796 282 124 584 103
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 48 209 74 64 267 139 458 796 282 124 584 103
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 48 209 74 64 267 139 458 796 282 124 584 103
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 48 209 74 64 267 139 458 796 282 124 584 103

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.91 0.91 0.91 0.90 0.90 0.91 0.91 0.91 0.91 0.91 0.91 0.91
Lanes: 0.29 1.26 0.45 0.27 1.14 0.59 1.00 1.48 0.52 1.00 1.70 0.30
Final Sat.: 502 2187 774 467 1947 1014 1805 2562 908 1805 3001 529

Capacity Analysis Module:
Vol/Sat: 0.10 0.10 0.10 0.14 0.14 0.14 0.25 0.31 0.31 0.07 0.19 0.19
Crit Moves: ****
Green/Cycle: 0.15 0.15 0.15 0.17 0.17 0.17 0.32 0.48 0.48 0.08 0.24 0.24
Volume/Cap: 0.64 0.64 0.64 0.80 0.80 0.80 0.80 0.65 0.65 0.86 0.80 0.80
Delay/Veh: 42.6 42.6 42.6 47.6 47.6 47.6 39.3 20.6 20.6 82.5 41.1 41.1
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: 42.6 42.6 42.6 47.6 47.6 47.6 39.3 20.6 20.6 82.5 41.1 41.1
DesignQueue: 2 10 4 3 13 7 19 25 9 6 26 5

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

AM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)

Intersection #41 Ashby / 7th

Cycle (sec): 100 Critical Vol./Cap. (X): 0.747
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 35.8
Optimal Cycle: 67 Level Of Service: D

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

Control: Split Phase Split Phase Protected Protected
Rights: Include Include Include Include
Min. Green: 8 15 15 8 15 15 8 12 12 8 12 12
Lanes: 0 1 0 1 0 0 1 0 1 0 1 0 1 0 1 0

Volume Module:
Base Vol: 48 209 74 64 267 139 458 796 282 124 584 103
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: 48 209 74 64 267 139 458 796 282 124 584 103
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 48 209 74 64 267 139 458 796 282 124 584 103
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 48 209 74 64 267 139 458 796 282 124 584 103
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 48 209 74 64 267 139 458 796 282 124 584 103

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.91 0.91 0.91 0.90 0.90 0.91 0.91 0.91 0.91 0.91 0.91 0.91
Lanes: 0.29 1.26 0.45 0.27 1.14 0.59 1.00 1.47 0.53 1.00 1.66 0.34
Final Sat.: 502 2187 774 467 1947 1014 1805 2544 921 1805 2914 603

Capacity Analysis Module:
Vol/Sat: 0.10 0.10 0.10 0.14 0.14 0.14 0.25 0.31 0.31 0.07 0.17 0.17
Crit Moves: ****
Green/Cycle: 0.15 0.15 0.15 0.18 0.18 0.18 0.33 0.47 0.47 0.08 0.22 0.22
Volume/Cap: 0.64 0.64 0.64 0.77 0.77 0.77 0.77 0.65 0.65 0.86 0.77 0.77
Delay/Veh: 42.6 42.6 42.6 45.1 45.1 45.1 36.2 21.0 21.0 82.5 41.2 41.2
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: 42.6 42.6 42.6 45.1 45.1 45.1 36.2 21.0 21.0 82.5 41.2 41.2
DesignQueue: 2 10 4 3 13 7 18 25 9 6 22 5

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

AM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level of Service Computation Report
1997 HCM Operations Method (Base Volume Alternative)
Intersection #42 Ashby / San Pablo Av

Cycle (sec): 100
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 36.8
Optimal Cycle: 94
Level of Service: D

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

Control: Protected Protected Protected Permitted Permitted
Rights: Include Include Include Include Include
Min. Green: 8 15 15 8 12 12 12 12 8 12 12 12
Lanes: 1 0 1 1 0 1 0 1 0 1 0 1 0 0 1 0 1 0

Volume Module:
Base Vol: 137 1054 64 140 959 134 125 648 185 110 689 187
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: 137 1054 64 140 959 134 125 648 185 110 689 187
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 137 1054 64 140 959 134 125 648 185 110 689 187
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 137 1054 64 140 959 134 125 648 185 110 689 187
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 137 1054 64 140 959 134 125 648 185 110 689 187

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.95 0.94 0.94 0.95 0.93 0.93 0.18 0.92 0.92 0.62 0.62 0.62
Lanes: 1.00 1.89 0.11 1.00 1.75 0.25 1.00 1.56 0.44 0.22 1.40 0.38
Final Sat.: 1805 3373 205 1805 3110 435 340 2716 775 263 1650 448
Capacity Analysis Module:
Vol/Sat: 0.08 0.31 0.31 0.08 0.31 0.31 0.37 0.24 0.24 0.42 0.42 0.42
Crit Moves: ****

Green/Cycle: 0.09 0.36 0.36 0.08 0.35 0.35 0.47 0.47 0.47 0.47 0.47 0.47
Volume/Cap: 0.88 0.88 0.88 0.97 0.88 0.88 0.78 0.50 0.50 0.88 0.88 0.88
Delay/Veh: 85.0 37.4 37.4 111.3 38.2 38.2 42.6 18.4 18.4 32.1 32.1 32.1
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: 85.0 37.4 37.4 111.3 38.2 38.2 42.6 18.4 18.4 32.1 32.1 32.1
DesignQueue: 7 41 2 7 37 5 4 20 6 3 22 6

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

AM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level of Service Computation Report
1997 HCM Operations Method (Future Volume Alternative)
Intersection #42 Ashby / San Pablo Av

Cycle (sec): 100
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 34.8
Optimal Cycle: 90
Level of Service: C

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

Control: Protected Protected Protected Permitted Permitted
Rights: Include Include Include Include Include
Min. Green: 8 15 15 8 15 15 8 12 12 8 12 12
Lanes: 1 0 1 1 0 1 0 1 0 1 0 1 0 0 1 0 1 0

Volume Module:
Base Vol: 137 1054 64 140 959 134 125 648 185 110 689 187
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: 137 1054 64 140 959 134 125 648 185 110 689 187
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 137 1054 64 140 959 134 125 648 185 110 689 187
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 137 1054 64 140 959 134 125 648 185 110 689 187
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 137 1054 64 140 959 134 125 648 185 110 689 187

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.95 0.94 0.94 0.95 0.94 0.94 0.19 0.92 0.92 0.61 0.61 0.61
Lanes: 1.00 1.89 0.11 1.00 1.83 0.17 1.00 1.55 0.45 0.23 1.37 0.40
Final Sat.: 1805 3373 205 1805 3254 309 361 2704 783 272 1598 462
Capacity Analysis Module:
Vol/Sat: 0.08 0.31 0.31 0.08 0.29 0.29 0.32 0.24 0.24 0.40 0.40 0.40
Crit Moves: ****

Green/Cycle: 0.08 0.36 0.36 0.09 0.37 0.37 0.46 0.46 0.46 0.46 0.46 0.46
Volume/Cap: 0.95 0.87 0.87 0.87 0.80 0.80 0.69 0.51 0.51 0.87 0.87 0.87
Delay/Veh: 105.1 36.8 36.8 82.2 32.1 32.1 33.1 19.1 19.1 32.2 32.2 32.2
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: 105.1 36.8 36.8 82.2 32.1 32.1 33.1 19.1 19.1 32.2 32.2 32.2
DesignQueue: 7 41 2 7 36 3 4 20 6 4 21 6

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

AM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level of Service Computation Report

1997 HCM Operations Method (Base Volume Alternative)

Intersection #43 Marina Village / Constitution

Cycle (sec): 100
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 0.995
Optimal Cycle: 180 Level Of Service: D

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

Control: Protected Protected Split Phase Split Phase
Rights: Include Include Include Include
Min. Green: 0 10 10 8 10 10 0 0 0 0 8 10 10 10
Lanes: 0 0 1 1 0 2 0 1 1 0 0 0 0 0 1 0 0 0 2

Volume Module:

Base Vol: 0 1718 151 630 620 0 0 0 0 125 0 574
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 1718 151 630 620 0 0 0 0 125 0 574
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 1718 151 630 620 0 0 0 0 125 0 574
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 1718 151 630 620 0 0 0 0 125 0 574
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 0 1718 151 630 620 0 0 0 0 125 0 574

Saturation Flow Module:

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 1.00 0.94 0.94 0.92 0.95 0.95 1.00 1.00 1.00 0.95 1.00 0.75
Lanes: 0.00 1.84 0.16 2.00 2.00 0.00 0.00 0.00 0.00 1.00 0.00 2.00
Final Sat.: 0 3279 288 3502 3610 0 0 0 0 1805 0 2842

Capacity Analysis Module:

Vol/Sat: 0.00 0.52 0.52 0.18 0.17 0.00 0.00 0.00 0.00 0.07 0.00 0.20
Crit Moves: ****
Green/Cycle: 0.00 0.53 0.53 0.18 0.71 0.00 0.00 0.00 0.00 0.20 0.00 0.20
Volume/Cap: 0.00 1.00 1.00 1.00 0.24 0.00 0.00 0.00 0.00 0.34 0.00 1.00
Delay/Veh: 0.0 43.2 43.2 75.5 5.2 0.0 0.0 0.0 0.0 34.7 0.0 76.1
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: 0.0 43.2 43.2 75.5 5.2 0.0 0.0 0.0 0.0 34.7 0.0 76.1
DesignQueue: 0 52 5 30 11 0 0 0 0 6 0 26

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

AM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level of Service Computation Report

1997 HCM Operations Method (Future Volume Alternative)

Intersection #43 Marina Village / Constitution

Cycle (sec): 100
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 0.970
Optimal Cycle: 158 Level Of Service: D

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

Control: Protected Protected Split Phase Split Phase
Rights: Include Include Include Include
Min. Green: 0 10 10 8 10 10 0 0 0 0 8 10 10 10
Lanes: 0 0 1 1 0 2 0 1 1 0 0 0 0 0 1 0 0 0 2

Volume Module:

Base Vol: 0 1718 151 630 620 0 0 0 0 125 0 574
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 1718 151 630 620 0 0 0 0 125 0 574
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 1632 151 630 603 0 0 0 0 125 0 574
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 1632 151 630 603 0 0 0 0 125 0 574
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 0 1632 151 630 603 0 0 0 0 125 0 574

Saturation Flow Module:

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 1.00 0.94 0.94 0.92 0.95 0.95 1.00 1.00 1.00 0.95 1.00 0.75
Lanes: 0.00 1.83 0.17 2.00 2.00 0.00 0.00 0.00 0.00 1.00 0.00 2.00
Final Sat.: 0 3261 302 3502 3610 0 0 0 0 1805 0 2842

Capacity Analysis Module:

Vol/Sat: 0.00 0.50 0.50 0.18 0.17 0.00 0.00 0.00 0.00 0.07 0.00 0.20
Crit Moves: ****
Green/Cycle: 0.00 0.52 0.52 0.19 0.70 0.00 0.00 0.00 0.00 0.21 0.00 0.21
Volume/Cap: 0.00 0.97 0.97 0.97 0.24 0.00 0.00 0.00 0.00 0.33 0.00 0.97
Delay/Veh: 0.0 37.9 37.9 68.2 5.4 0.0 0.0 0.0 0.0 34.2 0.0 68.6
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: 0.0 37.9 37.9 68.2 5.4 0.0 0.0 0.0 0.0 34.2 0.0 68.6
DesignQueue: 0 50 5 30 10 0 0 0 0 6 0 26

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

AM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level of Service Computation Report

1997 HCM Operations Method (Base Volume Alternative)

Intersection #44 Atlantic / Webster

Cycle (sec): 120
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 1.154
Optimal Cycle: 180 Level Of Service: F

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

Control: Protected Protected Protected Split Phase
Rights: Include Include Include Include
Min. Green: 8 20 20 8 20 20 8 20 20 8 20 20
Lanes: 1 0 1 1 0 1 0 2 0 1 1 1 1 0 1 1 0 1 0

Volume Module:

Table with 14 columns: Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, Final Vol, Sat/Lane, Adjustment, Final Sat. Rows include Volume Module and Saturation Flow Module data.

Saturation Flow Module:

Table with 14 columns: Sat/Lane, Adjustment, Final Sat. Rows include Sat/Lane, Adjustment, Final Sat.

Capacity Analysis Module:

Table with 14 columns: Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, User DelAdj, AdjDel/Veh, DesignQueue. Rows include Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, User DelAdj, AdjDel/Veh, DesignQueue.

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

AM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level of Service Computation Report

1997 HCM Operations Method (Future Volume Alternative)

Intersection #44 Atlantic / Webster

Cycle (sec): 120
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 1.144
Optimal Cycle: 180 Level Of Service: F

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

Control: Protected Protected Protected Split Phase
Rights: Include Include Include Include
Min. Green: 8 20 20 8 20 20 8 20 20 8 20 20
Lanes: 1 0 1 1 0 1 0 2 0 1 1 1 1 0 1 1 0 1 0

Volume Module:

Table with 14 columns: Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, Final Vol, Sat/Lane, Adjustment, Final Sat. Rows include Volume Module and Saturation Flow Module data.

Saturation Flow Module:

Table with 14 columns: Sat/Lane, Adjustment, Final Sat. Rows include Sat/Lane, Adjustment, Final Sat.

Capacity Analysis Module:

Table with 14 columns: Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, User DelAdj, AdjDel/Veh, DesignQueue. Rows include Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, User DelAdj, AdjDel/Veh, DesignQueue.

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

AM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level of Service Computation Report

1997 HCM Operations Method (Base Volume Alternative)

Intersection #45 Atlantic / Constitution
Critical Vol./Cap. (X): 1.053
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 50.6
Optimal Cycle: 180 Level Of Service: D

Approach: North Bound South Bound East Bound West Bound

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

Control: Protected Protected Protected Permitted Permitted

Rights: Include Include Include Include Include

Min. Green: 8 20 20 8 20 20 8 20 20 8 20 20

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

Volume Module:

Base Vol: 221 1204 137 328 342 107 229 406 59 62 455 435

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: 221 1204 137 328 342 107 229 406 59 62 455 435

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

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

PHF Volume: 221 1204 137 328 342 107 229 406 59 62 455 435

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

Reduced Vol: 221 1204 137 328 342 107 229 406 59 62 455 435

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

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

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

Final Vol.: 221 1204 137 328 342 107 229 406 59 62 455 435

Saturation Flow Module:

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

Adjustment: 0.95 0.95 0.85 0.92 0.95 0.85 0.23 0.93 0.93 0.44 0.88 0.88

Lanes: 1.00 2.00 1.00 2.00 2.00 1.00 1.00 1.75 0.25 1.00 1.02 0.98

Final Sat.: 1805 3610 1615 3502 3610 1615 431 3092 449 827 1711 1636

Capacity Analysis Module:

Vol/Sat: 0.12 0.33 0.08 0.09 0.09 0.07 0.53 0.13 0.13 0.08 0.27 0.27

Crit Moves: ****

Green/Cycle: 0.21 0.32 0.32 0.09 0.20 0.20 0.50 0.50 0.50 0.50 0.50 0.50

Volume/Cap: 0.60 1.05 0.27 1.05 0.47 0.33 1.05 0.26 0.26 0.15 0.53 0.53

Delay/Veh: 38.6 75.9 25.8 111.1 35.8 34.9 100.4 14.2 14.2 13.4 17.1 17.1

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: 38.6 75.9 25.8 111.1 35.8 34.9 100.4 14.2 14.2 13.4 17.1 17.1

DesignQueue: 10 50 5 17 16 5 7 12 2 2 13 13

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

AM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level of Service Computation Report

1997 HCM Operations Method (Future Volume Alternative)

Intersection #45 Atlantic / Constitution
Critical Vol./Cap. (X): 1.017
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 45.5
Optimal Cycle: 180 Level Of Service: D

Approach: North Bound South Bound East Bound West Bound

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

Control: Protected Protected Protected Permitted Permitted

Rights: Include Include Include Include Include

Min. Green: 8 20 20 8 20 20 8 20 20 8 20 20

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

Volume Module:

Base Vol: 221 1204 137 328 342 107 229 406 59 62 455 435

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: 221 1204 137 328 342 107 229 406 59 62 455 435

User Adj: 0 -86 0 0 0 0 0 0 0 0 0 0

PHF Adj: 0 0 0 0 0 0 0 0 0 0 0 0

PHF Volume: 221 1118 137 328 325 107 229 406 59 62 455 435

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

Reduced Vol: 221 1118 137 328 325 107 229 406 59 62 455 435

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

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

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

Final Vol.: 221 1118 137 328 325 107 229 406 59 62 455 435

Saturation Flow Module:

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

Adjustment: 0.95 0.95 0.85 0.92 0.95 0.85 0.23 0.93 0.93 0.44 0.88 0.88

Lanes: 1.00 2.00 1.00 2.00 2.00 1.00 1.00 1.75 0.25 1.00 1.02 0.98

Final Sat.: 1805 3610 1615 3502 3610 1615 439 3092 449 832 1711 1636

Capacity Analysis Module:

Vol/Sat: 0.12 0.31 0.08 0.09 0.09 0.07 0.52 0.13 0.13 0.07 0.27 0.27

Crit Moves: ****

Green/Cycle: 0.20 0.30 0.30 0.09 0.20 0.20 0.51 0.51 0.51 0.51 0.51 0.51

Volume/Cap: 0.62 1.02 0.28 1.02 0.45 0.33 1.02 0.26 0.26 0.15 0.52 0.52

Delay/Veh: 40.2 66.1 26.7 99.8 35.6 34.9 88.7 13.7 13.7 13.0 16.4 16.4

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: 40.2 66.1 26.7 99.8 35.6 34.9 88.7 13.7 13.7 13.0 16.4 16.4

DesignQueue: 10 47 5 17 15 5 6 11 2 2 13 13

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

AM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report

1997 HCM Operations Method (Base Volume Alternative)
Intersection #46 Loop Rd / GDA Spine

Cycle (sec): 100 Critical Vol./Cap. (X): 0.368
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 18.1
Optimal Cycle: 44 Level Of Service: B

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

Control: Protected Protected Protected Protected Protected
Rights: Include Include Include Include Include
Min. Green: 10 15 0 0 15 0 10 0 10 0 0 0 0 0 0 0 0 0 0 0 0

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

Volume Module:
Base Vol: 379 259 0 0 256 0 0 87 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Growth Adj: 1.00

Initial Bse: 379 259 0 0 256 0 0 87 0 0 0 0 0 0 0 0 0 0 0 0 0 0
User Adj: 1.00
PHF Adj: 1.00

PHF Volume: 379 259 0 0 256 0 0 87 0 0 0 0 0 0 0 0 0 0 0 0 0 0
PHF Vol: 0
Reduced Vol: 379 259 0 0 256 0 0 87 0 0 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00
MLF Adj: 1.00
Final Vol.: 379 259 0 0 256 0 0 87 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Saturation Flow Module:
Sat/Lane: 1900
Adjustment: 0.95 0.95 1.00 1.00 0.95 0.95 1.00 1.00 0.85 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 2.00 0.00 0.00 2.00 0.00 1.00 0.00 1.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
Final Sat.: 1805 3610 0 0 3610 0 1615 0 1615 0 0 0 0 0 0 0 0 0 0 0 0 0

Capacity Analysis Module:
Vol/Sat: 0.21 0.07 0.00 0.00 0.07 0.00 0.00 0.00 0.05 0.00 0.00 0.00 0.05 0.00 0.00 0.00 0.05 0.00 0.00 0.00 0.00
Crit Moves: ****
Green/Cycle: 0.57 0.76 0.00 0.00 0.19 0.00 0.00 0.00 0.15 0.00 0.00 0.00 0.15 0.00 0.00 0.00 0.15 0.00 0.00 0.00 0.00
Volume/Cap: 0.37 0.09 0.00 0.00 0.37 0.00 0.00 0.00 0.37 0.00 0.00 0.00 0.37 0.00 0.00 0.00 0.37 0.00 0.00 0.00 0.00
Delay/Veh: 11.9 3.0 0.0 0.0 35.4 0.0 0.0 0.0 39.5 0.0 0.0 0.0 39.5 0.0 0.0 0.0 39.5 0.0 0.0 0.0 0.0
User DelAdj: 1.00
AdjDel/Veh: 11.9 3.0 0.0 0.0 35.4 0.0 0.0 0.0 39.5 0.0 0.0 0.0 39.5 0.0 0.0 0.0 39.5 0.0 0.0 0.0 0.0
DesignQueue: 10 3 0 0 12 0 0 4 0 0 0 0 4 0 0 0 4 0 0 0 0 0

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

AM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Level Of Service Computation Report

1997 HCM Operations Method (Future Volume Alternative)
Intersection #46 Loop Rd / GDA Spine

Cycle (sec): 100 Critical Vol./Cap. (X): 0.058
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 0.4
Optimal Cycle: 24 Level Of Service: A

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

Control: Protected Protected Protected Protected Protected
Rights: Include Include Include Include Include
Min. Green: 10 15 0 0 15 0 10 0 10 0 0 0 0 0 0 0 0 0 0 0 0 0

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

Volume Module:
Base Vol: 379 259 0 0 256 0 0 87 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Growth Adj: 1.00
Initial Bse: 379 259 0 0 256 0 0 87 0 0 0 0 0 0 0 0 0 0 0 0 0 0
User Adj: 1.00
PHF Adj: 1.00
PHF Volume: 379 259 0 0 256 0 0 87 0 0 0 0 0 0 0 0 0 0 0 0 0 0
PHF Vol: 0
Reduced Vol: 379 259 0 0 256 0 0 87 0 0 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00
MLF Adj: 1.00
Final Vol.: 379 259 0 0 256 0 0 87 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Saturation Flow Module:
Sat/Lane: 1900
Adjustment: 1.00 0.95 1.00 1.00 0.95 0.95 1.00 1.00 0.95 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 2.00 0.00 0.00 2.00 0.00 1.00 0.00 1.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
Final Sat.: 1900 3610 0 0 3610 0 1900 0 1900 0 0 0 0 0 0 0 0 0 0 0 0 0

Capacity Analysis Module:
Vol/Sat: 0.00 0.05 0.00 0.00 0.05 0.00 0.00 0.00 0.05 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
Crit Moves: ****
Green/Cycle: 0.00 0.91 0.00 0.00 0.91 0.00 0.00 0.00 0.91 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
Volume/Cap: 0.00 0.06 0.00 0.00 0.06 0.00 0.00 0.00 0.06 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
Delay/Veh: 0.0 0.4 0.0 0.0 0.4 0.0 0.0 0.0 0.4 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
User DelAdj: 1.00
AdjDel/Veh: 0.0 0.4 0.0 0.0 0.4 0.0 0.0 0.0 0.4 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
DesignQueue: 0 1 0 0 1 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

PM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Trip Generation Report

Forecast for GDA 2025 PM

Zone #	Subzone	Amount	Units	Rate		Trips		Trips		Total % Of Trips Total
				In	Out	In	Out			
1	Berth 55-56	-305.00	Emp. Approved	0.00	0.00	0	0	0	0	0.0
1	Berth 55-56	388.00	Emp. Proposed	0.00	0.00	0	0	0	0	0.0
2	Berth 57-59	-373.00	Emp. Approved	0.00	0.00	0	0	0	0	0.0
2	Berth 57-59	473.00	Emp. Proposed	0.00	0.00	0	0	0	0	0.0
3	Middle Harbo	-216.00	Emp. Approved	0.00	0.00	0	0	0	0	0.0
3	Middle Harbo	331.00	Emp. Proposed	0.00	0.00	0	0	0	0	0.0
4	7th St. Harb	-560.00	Emp. Approved	0.00	0.00	0	0	0	0	0.0
4	7th St. Harb	601.00	Emp. Proposed	0.00	0.00	0	0	0	0	0.0
5	Outer Harbor	-593.00	Emp. Approved	0.00	0.00	0	0	0	0	0.0
5	Outer Harbor	618.00	Emp. Proposed	0.00	0.00	0	0	0	0	0.0
6	Berth 21	0.00	Emp. Approved	0.00	0.00	0	0	0	0	0.0
6	Berth 21	189.00	Emp. Proposed	0.00	0.00	0	0	0	0	0.0
7	Proposed JIT	188.00	Emp. Proposed	0.00	0.00	0	0	0	0	0.0
8	W. Oakland Y	-146.00	Emp. Approved	0.00	0.00	0	0	0	0	0.0
8	W. Oakland Y	146.00	Emp. Proposed	0.00	0.00	0	0	0	0	0.0
9	Approved JIT	-208.00	Emp. Approved	0.00	0.00	0	0	0	0	0.0
11	Subaru Site	1.00	300KSF W-house	-40.00	-128.00	-40	-128	-168	3.	
	Zone 11 Subtotal					-40	-128	-168	3.1	
12	Baldwin Yard	1.00	15 Acre Tr Lot	-21.00	-23.00	-21	-23	-44	0.8	
	Zone 12 Subtotal					-21	-23	-44	0.8	
13	Western Area	1.00	29 Acre Park	-8.00	-11.00	-8	-11	-19	0.3	
13	Western Area	1.00	600 KSF Office	-128.00	-624.00	-128	-624	-752	13	
	Zone 13 Subtotal					-136	-635	-771	14.1	
14	Central Area	1.00	577 KSF Office	-123.00	-603.00	-123	-603	-726	13	
14	Central Area	1.00	1995 Employees	0.00	0.00	0	0	0	0.0	
	Zone 14 Subtotal					-123	-603	-726	13.3	
15	Central Area	1.00	50 KSF JATC	-6.00	-43.00	-6	-43	-49	0.9	
15	Central Area	1.00	444 KSF Lt Ind	-57.00	-416.00	-57	-416	-473	8.	
	Zone 15 Subtotal					-63	-459	-522	9.5	
16	Eastern Area	1.00	200 KSF Office	-45.00	-221.00	-45	-221	-266	4.	
	Zone 16 Subtotal					-45	-221	-266	4.9	
17	Eastern Area	1.00	176 KSF Office	-40.00	-195.00	-40	-195	-235	4.	
	Zone 17 Subtotal					-40	-195	-235	4.3	
18	16-Wood Nort	1.00	1 Acre Park	0.00	0.00	0	0	0	0.0	

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions

PM Peak Hour (Base = Cumulative; Future = Cumulative without Project)

Zone #	Subzone	Amount	Units	Rate		Trips		Trips		Total % Of Trips Total
				In	Out	In	Out			
	TOTAL					-468	-2264	-2732	49.9	

S5 Mitigated Conditions

Impact Analysis Report
 Level Of Service

Intersection	Base Del/ LOS	V/ Veh C	Future Del/ LOS	V/ Veh C	Change in			
# 1 W Grand / Maritime	C	30.6	0.318	D	54.4	0.808	+23.766	D/V
# 2 W Grand / Frontage Rd	D	36.1	0.298	D	45.8	0.774	+ 9.672	D/V
# 10 7th / Maritime	C	27.0	0.262	D	53.1	0.788	+26.064	D/V

Level Of Service Computation Report
 1997 HCM Operations Method (Future Volume Alternative)

 Intersection #1 W Grand / Maritime

 Cycle (sec): 124
 Loss time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 0.808
 Optimal Cycle: 84
 Level Of Service: D

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

Control: Split Phase Split Phase Split Phase Split Phase
 Rights: Ovl Include Ignore Include
 Min. Green: 15 20 20 15 15 15 15 15 15 15 15 15 15 15
 Lanes: 1 1 0 0 2 1 0 0 1 1 1 0 2 0 1 1 1 0 1 0 1 0

Volume Module:
 Base Vol: 109 16 36 18 4 16 5 212 232 339 362 17
 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: 109 16 36 18 4 16 5 212 232 339 362 17
 Added Vol: 120 0 141 67 0 51 73 254 910 1003 63 130
 PasserByVol: -109 -11 -36 36 0 109 116 0 -116 -339 0 339
 Initial Fut: 120 5 141 121 4 176 194 466 1026 1003 425 486
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Volume: 120 5 141 121 4 176 194 466 0 1003 425 486
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 120 5 141 121 4 176 194 466 0 1003 425 486
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Final Vol.: 120 5 141 121 4 176 194 466 0 1003 425 486

Saturation Flow Module:
 Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
 Adjustment: 0.79 0.79 0.62 0.79 0.71 0.71 0.79 0.79 1.00 0.74 0.74 0.74
 Lanes: 1.92 0.08 2.00 1.00 0.04 1.96 1.00 2.00 1.00 1.57 0.67 0.76
 Final Sat.: 2899 121 2368 1504 60 2640 1504 3007 1900 2215 938 1073

Capacity Analysis Module:
 Vol/Sat: 0.04 0.04 0.06 0.08 0.07 0.07 0.13 0.15 0.00 0.45 0.45 0.45
 Crit Moves: ****
 Green/Cycle: 0.16 0.16 0.62 0.12 0.12 0.12 0.16 0.16 0.00 0.46 0.46 0.46
 Volume/Cap: 0.26 0.26 0.10 0.67 0.55 0.55 0.81 0.98 0.00 0.98 0.98 0.98
 Delay/Veh: 45.8 45.8 9.4 61.1 53.4 53.4 69.5 87.6 0.0 48.3 48.3 48.3
 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: 45.8 45.8 9.4 61.1 53.4 53.4 69.5 87.6 0.0 48.3 48.3 48.3
 DesignQueue: 7 0 4 7 0 11 12 28 0 41 17 20

Oakland Army Base Area Redevelopment Plan EIR
 Existing + Project Conditions - Mitigated
 PM Peak Hour

Impact Analysis Report
 Level Of Service

Intersection	Base Del/V/ LOS Veh C	Future Del/V/ LOS Veh C	Change in
# 1 W Grand / Maritime	38.0 0.539 D	41.5 0.882 D	+ 3.437 D/V
# 2 W Grand / Frontage Rd	33.3 0.525 C	52.3 0.922 D	+18.977 D/V
# 10 7th / Maritime	31.4 0.301 C	31.9 0.513 C	+ 0.507 D/V

Oakland Army Base Area Redevelopment Plan EIR
 Existing + Project Conditions - Mitigated
 PM peak Hour

Level Of Service Computation Report
 1997 HCM Operations Method (Future Volume Alternative)

Intersection #1 W Grand / Maritime
 Cycle (sec): 124
 Loss Time (sec): 12 (YAR = 4 sec)
 Optimal Cycle: 112
 Level Of Service: D
 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R

Control:	Split Phase Include				Split Phase Ignore				Split Phase			
	L	T	R	Ovl	L	T	R	Ovl	L	T	R	Ovl
Min. Green:	15	20	20	15	15	15	15	15	15	15	15	15
Lanes:	1	1	0	0	1	0	0	1	1	0	2	0

Volume Module:

Base Vol:	340	7	178	17	0	7	9	509	66	46	562	9
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:	340	7	178	17	0	7	9	509	66	46	562	9
Added Vol:	824	0	961	100	0	92	24	76	172	183	270	38
PasserByVol:	-340	-2	-178	178	0	340	33	0	-33	-46	0	46
Initial Fut:	824	5	961	295	0	439	66	585	205	183	832	93
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	824	5	961	295	0	439	66	585	0	183	832	93
Reduced Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	824	5	961	295	0	439	66	585	0	183	832	93
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol:	824	5	961	295	0	439	66	585	0	183	832	93

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.79	0.79	0.62	0.79	1.00	0.71	0.79	0.79	1.00	0.77	0.77	0.77
Lanes:	1.99	0.01	2.00	1.00	0.00	2.00	1.00	2.00	1.00	1.80	1.80	0.20
Final Sat:	2998	18	2368	1504	0	2691	1504	3007	1900	1472	2648	296

Capacity Analysis Module:

Vol/Sat:	0.27	0.27	0.41	0.20	0.00	0.16	0.04	0.19	0.00	0.12	0.31	0.31
Crit Moves:	0.32	0.32	0.68	0.22	0.00	0.22	0.22	0.22	0.00	0.36	0.36	0.36
Green/Cycle:	0.86	0.86	0.60	0.88	0.00	0.73	0.20	0.88	0.00	0.35	0.88	0.88
Volume/Cap:	47.6	47.6	11.6	69.4	0.0	49.5	39.7	59.9	0.0	29.4	45.1	45.1
Delay/Veh:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
User DelAdj:	47.6	47.6	11.6	69.4	0.0	49.5	39.7	59.9	0.0	29.4	45.1	45.1
AdjDel/Veh:	41	0	23	16	0	24	4	33	0	8	39	4

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions - Mitigated
AM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Base Volume Alternative)

Intersection #12 7th / I-880 North Ramp
Cycle (sec): 100 Critical Vol./Cap. (X): 0.803
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 39.8
Optimal Cycle: 78 Level Of Service: D

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Split Phase Split Phase Protected Protected
Rights: Include Ovl Include Include
Min. Green: 15 15 15 15 15 20 0 0 20 20
Lanes: 1 1 0 1 0 1 0 0 2 1 0 2 0 0 0 0 1 1 0

Volume Module:
Base Vol: 853 446 164 123 0 565 339 77 0 0 339 230
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: 853 446 164 123 0 565 339 77 0 0 339 230
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 853 446 164 123 0 565 339 77 0 0 339 230
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 853 446 164 123 0 565 339 77 0 0 339 230
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 853 446 164 123 0 565 339 77 0 0 339 230

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.91 0.91 0.91 0.95 1.00 0.75 0.95 0.95 1.00 1.00 0.89 0.89
Lanes: 1.75 0.91 0.34 1.00 0.00 2.00 1.00 2.00 0.00 0.00 1.19 0.81
Final Sat.: 3017 1577 580 1805 0 2842 1805 3610 0 0 2020 1370

Capacity Analysis Module:
Vol/Sat: 0.28 0.28 0.28 0.07 0.00 0.20 0.19 0.02 0.00 0.00 0.17 0.17
Crit Moves: ****
Green/Cycle: 0.32 0.32 0.32 0.15 0.00 0.36 0.21 0.41 0.00 0.00 0.20 0.20
Volume/Cap: 0.89 0.89 0.89 0.45 0.00 0.55 0.89 0.05 0.00 0.00 0.84 0.84
Delay/Veh: 38.7 38.7 38.7 40.0 0.0 26.1 59.8 17.7 0.0 0.0 47.6 47.6
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: 38.7 38.7 38.7 40.0 0.0 26.1 59.8 17.7 0.0 0.0 47.6 47.6
DesignQueue: 35 18 7 6 0 21 16 3 0 0 16 11

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions - Mitigated
AM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Base Volume Alternative)

Intersection #25 3rd / Adeline
Cycle (sec): 100 Critical Vol./Cap. (X): 0.671
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 37.1
Optimal Cycle: 82 Level Of Service: D

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Permitted Protected Protected Split Phase
Rights: Include Include Include Include
Min. Green: 15 20 20 15 20 20 15 15 15 15 15 20 20
Lanes: 0 1 0 1 0 1 0 0 1 0 1 0 1 0 1 0 1 0 1 0 0

Volume Module:
Base Vol: 1 519 121 172 531 45 18 13 8 357 20 79
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: 1 519 121 172 531 45 18 13 8 357 20 79
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 1 519 121 172 531 45 18 13 8 357 20 79
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 1 519 121 172 531 45 18 13 8 357 20 79
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 1 519 121 172 531 45 18 13 8 357 20 79

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.68 0.68 0.68 0.73 0.76 0.76 0.73 0.73 0.73 0.73 0.72 0.72
Lanes: 0.01 1.62 0.37 1.00 0.92 0.08 1.00 0.62 0.38 1.65 0.07 0.28
Final Sat.: 4 2086 486 1388 1331 113 1388 853 525 2250 99 390

Capacity Analysis Module:
Vol/Sat: 0.25 0.25 0.25 0.12 0.40 0.40 0.01 0.02 0.02 0.16 0.20 0.20
Crit Moves: ****
Green/Cycle: 0.32 0.32 0.32 0.16 0.47 0.47 0.15 0.15 0.15 0.26 0.26 0.26
Volume/Cap: 0.79 0.79 0.79 0.79 0.84 0.84 0.09 0.10 0.10 0.62 0.79 0.79
Delay/Veh: 36.4 36.4 36.4 57.8 32.6 32.6 36.8 36.9 36.9 34.4 41.7 41.7
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: 36.4 36.4 36.4 57.8 32.6 32.6 36.8 36.9 36.9 34.4 41.7 41.7
DesignQueue: 0 21 5 8 17 1 1 0 15 1 3

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions - Mitigated
PM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Base Volume Alternative)

Intersection #12 7th / I-880 North Ramp
Cycle (sec): 100 Critical Vol./Cap. (X): 0.780
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 36.5
Optimal Cycle: 77 Level Of Service: D

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

Control: Split Phase Split Phase Protected Protected
Rights: Include Include Include Include
Min. Green: 15 15 15 15 15 20 0 0 20 20
Lanes: 1 1 0 1 0 0 2 1 0 2 0 0 0 0 1 1 0

Volume Module:
Base Vol: 407 189 227 265 0 474 365 122 0 0 237 290
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: 407 189 227 265 0 474 365 122 0 0 237 290
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 407 189 227 265 0 474 365 122 0 0 237 290
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 407 189 227 265 0 474 365 122 0 0 237 290
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 407 189 227 265 0 474 365 122 0 0 237 290

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.89 0.89 0.89 0.95 1.00 0.75 0.95 0.95 1.00 1.00 0.87 0.87
Lanes: 1.48 0.69 0.83 1.00 0.00 2.00 1.00 2.00 0.00 0.00 1.00 1.00
Final Sat.: 2506 1164 1398 1805 0 2842 1805 3610 0 0 1657 1657

Capacity Analysis Module:
Vol/Sat: 0.16 0.16 0.16 0.15 0.00 0.17 0.20 0.03 0.00 0.00 0.14 0.18
Crit Moves: ****
Green/Cycle: 0.21 0.21 0.21 0.19 0.00 0.45 0.26 0.48 0.00 0.00 0.22 0.22
Volume/Cap: 0.78 0.78 0.78 0.78 0.00 0.37 0.78 0.07 0.00 0.00 0.64 0.78
Delay/Veh: 41.2 41.2 41.2 49.6 0.0 18.5 42.6 13.8 0.0 0.0 36.8 42.3
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: 41.2 41.2 41.2 49.6 0.0 18.5 42.6 13.8 0.0 0.0 36.8 42.3
DesignQueue: 19 9 10 12 0 15 16 4 0 0 11 13

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions - Mitigated
PM Peak Hour

Level Of Service Computation Report
1994 HCM Operations Method (Base Volume Alternative)

Intersection #25 3rd / Adeline
Cycle (sec): 100 Critical Vol./Cap. (X): 0.712
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 26.2
Optimal Cycle: 82 Level Of Service: D

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

Control: Split Phase Split Phase Split Phase Split Phase
Rights: Include Include Include Include
Min. Green: 15 20 20 15 20 20 15 15 15 15 20 20
Lanes: 0 1 0 1 0 1 0 0 1 0 0 1 0 1 0 1 0 1 0 0

Volume Module:
Base Vol: 11 622 166 99 200 20 47 15 0 143 17 184
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: 11 622 166 99 200 20 47 15 0 143 17 184
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 11 622 166 99 200 20 47 15 0 143 17 184
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 11 622 166 99 200 20 47 15 0 143 17 184
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: 1.05 1.05 1.05 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 12 653 174 99 200 20 47 15 0 150 17 184

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.71 0.71 0.71 0.73 0.76 0.76 0.73 0.77 1.00 0.69 0.69 0.69
Lanes: 0.03 1.56 0.41 1.00 0.91 0.09 1.00 1.00 0.00 1.27 0.06 0.67
Final Sat.: 37 2097 560 1388 1315 132 1388 1462 0 1676 81 878

Capacity Analysis Module:
Vol/Sat: 0.31 0.31 0.31 0.07 0.15 0.15 0.03 0.01 0.00 0.09 0.21 0.21
Crit Moves: ****
Green/Cycle: 0.35 0.35 0.35 0.15 0.50 0.50 0.15 0.15 0.00 0.23 0.23 0.23
Volume/Cap: 0.90 0.90 0.90 0.48 0.31 0.31 0.23 0.07 0.00 0.38 0.90 0.90
Delay/Veh: 28.2 28.2 28.2 26.4 9.7 9.7 24.3 23.6 0.0 21.0 40.1 40.1
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: 28.2 28.2 28.2 26.4 9.7 9.7 24.3 23.6 0.0 21.0 40.1 40.1
DesignQueue: 0 25 7 5 6 1 2 1 0 7 1 8

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions - Mitigated
PM Peak Hour

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions - Mitigated
PM Peak Hour

Level Of Service Computation Report

Level Of Service Computation Report

1997 HCM Operations Method (Base Volume Alternative)

1997 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #28 12th / Brush

Intersection #26 3rd / Market

Cycle (sec): 102 Critical Vol./Cap. (X): 0.620
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 25.8
Optimal Cycle: 48 Level Of Service: C

Cycle (sec): 100 Critical Vol./Cap. (X): 0.982
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 34.8
Optimal Cycle: 0 Level Of Service: D

Approach: North Bound South Bound East Bound West Bound

Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R
Control: Split Phase Split Phase Split Phase Split Phase
Rights: Include Include Include Include
Min. Green: 0 12 12 0 12 12 0 0 0 0 10 8 15 0
Lanes: 0 0 2 1 0 0 0 1 1 0 0 0 0 1 1 0 3 0 0

Movement: L - T - R L - T - R L - T - R L - T - R
Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1
Lanes: 1 0 0 1 0 1 0 1 0 0 1 0 0 0 1 0 0 1

Volume Module:

Volume Module:

Base Vol: 0 371 25 0 1187 21 0 0 0 246 187 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: 0 371 25 0 1187 21 0 0 0 246 187 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 371 25 0 1187 21 0 0 0 246 187 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 371 25 0 1187 21 0 0 0 246 187 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
Final Vol.: 0 371 25 0 1187 21 0 0 0 246 187 0

Base Vol: 90 430 49 50 126 99 90 237 47 10 142 146
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: 90 430 49 50 126 99 90 237 47 10 142 146
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 90 430 49 50 126 99 90 237 47 10 142 146
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 90 430 49 50 126 99 90 237 47 10 142 146
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 90 430 49 50 126 99 90 237 47 10 142 146

Saturation Flow Module:

Saturation Flow Module:

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 1.00 0.90 0.90 1.00 0.95 0.95 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.00 2.81 0.19 0.00 1.97 0.03 0.00 0.00 0.00 0.00 0.00 0.00
Final Sat.: 0 4816 325 0 3537 63 0 0 0 1900 1615 5187

Sat/Lane: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Adjustment: 1.00 0.90 0.10 1.00 1.12 0.88 0.24 0.63 0.13 0.07 0.93 1.00
Lanes: 448 438 50 377 449 376 110 289 57 28 399 468
Final Sat.: 0.20 0.98 0.98 0.13 0.28 0.26 0.82 0.82 0.82 0.36 0.36 0.31

Capacity Analysis Module:

Capacity Analysis Module:

Vol/Sat: 0.00 0.08 0.08 0.00 0.34 0.34 0.00 0.00 0.00 0.15 0.04 0.00
Crit Moves: ****
Green/Cycle: 0.00 0.12 0.12 0.00 0.54 0.54 0.00 0.00 0.00 0.25 0.25 0.00
Volume/Cap: 0.00 0.62 0.62 0.00 0.62 0.62 0.00 0.00 0.00 0.62 0.15 0.00
Delay/Veh: 0.0 44.2 44.2 0.0 16.7 16.7 0.0 0.0 0.0 37.2 30.1 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: 0.0 44.2 44.2 0.0 16.7 16.7 0.0 0.0 0.0 37.2 30.1 0.0
DesignQueue: 0 19 1 0 34 1 0 0 0 11 8 0

Vol/Sat: 0.20 0.98 0.98 0.13 0.28 0.26 0.82 0.82 0.82 0.36 0.36 0.31
Crit Moves: ****
Delay/Veh: 12.6 62.5 62.5 13.2 14.5 13.5 36.4 36.4 36.4 15.1 15.1 13.3
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 12.6 62.5 62.5 13.2 14.5 13.5 36.4 36.4 36.4 15.1 15.1 13.3
LOS by Move: B F F B B B E E E C C B
ApproachDel: 54.6 13.9 36.4 36.4 14.2
Delay Adj: 1.00 1.00 1.00 1.00 1.00
ApprAdjDel: 54.6 13.9 36.4 14.2
LOS by Appr: F B E B

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions - Mitigated
PM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Base Volume Alternative)

Intersection #35 Powell / I-80 NB Ramps
Cycle (sec): 100 Critical Vol./Cap. (X): 1.055
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 50.4
Optimal Cycle: 180 Level Of Service: D

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 8 10 10 0 0 0 8 10 0 0 10 10
Lanes: 1 0 0 1 0 0 0 0 1 0 3 0 0 0 0 3 0 1

Volume Module:
Base Vol: 635 267 1119 0 0 191 778 0 0 1604 709
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 635 267 1119 0 0 191 778 0 0 1604 709
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 635 267 1119 0 0 191 778 0 0 1604 709
Reduct Vol: 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 635 267 1119 0 0 191 778 0 0 1604 709
PCE Adj: 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
Final Vol.: 635 267 1119 0 0 191 778 0 0 1604 709

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.88 0.88 0.88 1.00 1.00 0.95 0.91 1.00 1.00 0.91 0.85
Lanes: 1.00 0.39 1.61 0.00 0.00 0.00 3.00 0.00 0.00 3.00 1.00
Final Sat.: 1670 643 2697 0 0 1805 5187 0 0 5187 1615

Capacity Analysis Module:
Vol/Sat: 0.38 0.41 0.41 0.00 0.00 0.11 0.15 0.00 0.00 0.31 0.44
Crit Moves: ****
Green/Cycle: 0.39 0.39 0.39 0.00 0.00 0.10 0.52 0.00 0.00 0.42 0.42
Volume/Cap: 0.97 1.05 1.05 0.00 0.00 1.05 0.29 0.00 0.00 0.74 1.05
Delay/Veh: 56.5 70.9 70.9 0.0 0.0 127.1 13.8 0.0 0.0 26.1 79.2
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh: 56.5 70.9 70.9 0.0 0.0 127.1 13.8 0.0 0.0 26.1 79.2
DesignQueue: 23 10 42 0 0 10 22 0 0 56 26

Oakland Army Base Area Redevelopment Plan EIR
2025 Conditions - Mitigated
PM Peak Hour

Level Of Service Computation Report
1997 HCM Operations Method (Base Volume Alternative)

Intersection #44 Atlantic / Webster
Cycle (sec): 120 Critical Vol./Cap. (X): 0.808
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 42.1
Optimal Cycle: 84 Level Of Service: D

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Protected Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 8 20 20 8 20 20 8 20 20 8 20 20
Lanes: 1 0 1 1 0 1 0 1 1 1 1 0 1 1 0 1 1 0

Volume Module:
Base Vol: 97 661 106 64 824 615 798 425 225 224 397 145
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: 97 661 106 64 824 615 798 425 225 224 397 145
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 97 661 106 64 824 615 798 425 225 224 397 145
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 97 661 106 64 824 615 798 425 225 224 397 145
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 97 661 106 64 824 615 798 425 225 224 397 145

Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment: 0.95 0.93 0.93 0.95 0.89 0.89 0.92 0.92 0.85 0.95 0.91 0.91
Lanes: 1.00 1.72 0.28 1.00 1.72 1.28 1.96 1.04 1.00 1.00 1.46 0.54
Final Sat.: 1805 3046 488 1805 2902 2166 3420 1822 1615 1805 2538 927

Capacity Analysis Module:
Vol/Sat: 0.05 0.22 0.22 0.04 0.28 0.28 0.23 0.23 0.14 0.12 0.16 0.16
Crit Moves: ****
Green/Cycle: 0.07 0.35 0.35 0.07 0.35 0.35 0.29 0.29 0.29 0.19 0.19 0.19
Volume/Cap: 0.81 0.62 0.62 0.53 0.81 0.81 0.81 0.81 0.48 0.64 0.81 0.81
Delay/Veh: 86.7 33.2 33.2 58.7 38.1 38.1 43.0 43.0 36.1 48.6 53.5 53.5
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: 86.7 33.2 33.2 58.7 38.1 38.1 43.0 43.0 36.1 48.6 53.5 53.5
DesignQueue: 6 30 5 4 38 29 40 21 11 12 22 8
