TRACY HILLS SPECIFIC PLAN

DRAFT SUBSEQUENT ENVIRONMENTAL IMPACT REPORT

VOLUME II

DECEMBER 2014

APPENDIX H-3a

HIGHWAY SEGMENT ANALYSIS (HCS) – TRACY, DATED FALL 2014

Phone: Fax: E-mail: ______Operational Analysis______ Analyst: Kimley-Horn & Assc., Inc. Agency or Company: Date Performed: 02/11/14 Date Performed:

Analysis Time Period:

Freeway/Direction:

I-580 EB

From/To:

I-205 Junction/Mtn House Pkwy From/To:
Jurisdiction: Caltrans Existing Analysis Year: Description: ______Flow Inputs and Adjustments_____ 252 veh/h Volume, V Peak-hour factor, PHF 0.92 Peak 15-min volume, v15 68 V Trucks and buses 18 Recreational vehicles Terrain type: Level Grade Segment length mi Trucks and buses PCE, ET 1.5 Recreational vehicle PCE, ER 1.2 Heavy vehicle adjustment, fHV 0.917 Driver population factor, fp 1.00 pc/h/ln Flow rate, vp 149 ______Speed Inputs and Adjustments_____ Lane width ft Right-side lateral clearance ft Total ramp density, TRD ramps/mi Number of lanes, N Free-flow speed: Measured 70.0 FFS or BFFS mi/h Lane width adjustment, fLW mi/h Lateral clearance adjustment, fLC mi/h TRD adjustment mi/h Free-flow speed, FFS 70.0 mi/h _____LOS and Performance Measures_____ Flow rate, vp 149 pc/h/ln Free-flow speed, FFS 70.0 mi/h Average passenger-car speed, S 70.0 mi/h Number of lanes, N Density, D 2.1 pc/mi/ln

Α

Phone: Fax: E-mail: ______Operational Analysis______ Analyst: Kimley-Horn & Assc., Inc. Agency or Company: Date Performed: 02/11/14 Analysis Time Period: AM Peak Hour Freeway/Direction: I-580 WB From/To: Mtn House Pkwy/I-205 Junction From/To:
Jurisdiction: Mcn ... Caltrans Existing Analysis Year: Description: _____Flow Inputs and Adjustments_____ veh/h 1897 Volume, V Peak-hour factor, PHF 0.92 Peak 15-min volume, v15 515 V Trucks and buses 18 Recreational vehicles Level Terrain type: Grade Segment length тi Trucks and buses PCE, ET 1.5 Heavy vehicle adjustment, fHV Recreational vehicle PCE, ER 1.2 0.917 Driver population factor, fp 1.00 pc/h/ln Flow rate, vp 1124 ______Speed Inputs and Adjustments_____ Lane width ft Right-side lateral clearance ft Total ramp density, TRD ramps/mi Number of lanes, N Free-flow speed: Measured 70.0 FFS or BFFS mi/h Lane width adjustment, fLW mi/h Lateral clearance adjustment, fLC mi/h TRD adjustment mi/h Free-flow speed, FFS 70.0 mi/h _____LOS and Performance Measures_____ pc/h/ln Flow rate, vp 1124 Free-flow speed, FFS 70.0 mi/h mi/h Average passenger-car speed, S 70.0 Number of lanes, N Density, D 16.1 pc/mi/ln

В

Phone: Fax: E-mail: ______Operational Analysis______ Analyst: Kimley-Horn & Assc., Inc. Agency or Company: Date Performed: 02/11/14 Analysis Time Period: AM Peak Hour Freeway/Direction: I-580 EB From/To: Mtn House Pkwy/Corral Hollw R From/To:
Jurisdiction: Caltrans Existing Analysis Year: Description: ______Flow Inputs and Adjustments_____ 236 veh/h Volume, V Peak-hour factor, PHF 0.92 Peak 15-min volume, v15 64 V Trucks and buses 18 Recreational vehicles Terrain type: Level Grade Segment length тi Trucks and buses PCE, ET 1.5 Recreational vehicle PCE, ER 1.2 Heavy vehicle adjustment, fHV 0.917 Driver population factor, fp 1.00 pc/h/ln Flow rate, vp 140 ______Speed Inputs and Adjustments_____ Lane width ft Right-side lateral clearance ft Total ramp density, TRD ramps/mi Number of lanes, N Free-flow speed: Measured 70.0 FFS or BFFS mi/h Lane width adjustment, fLW mi/h Lateral clearance adjustment, fLC mi/h TRD adjustment mi/h Free-flow speed, FFS 70.0 mi/h _____LOS and Performance Measures_____ Flow rate, vp 140 pc/h/ln Free-flow speed, FFS 70.0 mi/h Average passenger-car speed, S 70.0 mi/h Number of lanes, N Density, D 2.0 pc/mi/ln

Α

Phone: Fax: E-mail: ______Operational Analysis______ Analyst: Kimley-Horn & Assc., Inc. Agency or Company: Date Performed: 02/11/14 Date Performed:

Analysis Time Period: AM Peak Hour

Freeway/Direction: I-580 WB

From/To: Corral Hollow Rd/Mtn House Pkw From/To:
Jurisdiction: Caltrans Existing Analysis Year: Description: _____Flow Inputs and Adjustments_____ veh/h 1774 Volume, V Peak-hour factor, PHF 0.92 Peak 15-min volume, v15 482 V 18 Trucks and buses Recreational vehicles Level Terrain type: Grade Segment length mi Trucks and buses PCE, ET 1.5 Heavy vehicle adjustment, fHV Recreational vehicle PCE, ER 1.2 0.917 Driver population factor, fp 1.00 pc/h/ln 1051 Flow rate, vp ______Speed Inputs and Adjustments_____ Lane width ft Right-side lateral clearance ft Total ramp density, TRD ramps/mi Number of lanes, N Free-flow speed: Measured 70.0 FFS or BFFS mi/h Lane width adjustment, fLW mi/h Lateral clearance adjustment, fLC mi/h TRD adjustment mi/h Free-flow speed, FFS 70.0 mi/h _____LOS and Performance Measures_____ Flow rate, vp pc/h/ln 1051 Free-flow speed, FFS 70.0 mi/h mi/h Average passenger-car speed, S 70.0 Number of lanes, N Density, D 15.0 pc/mi/ln

В

Phone: E-mail:		Fax:	
	Operational Ana	lysis	
Analyst: Agency or Company:	Kimley-Horn & As	sc., Inc.	
From/To:	I-580 EB Corral Hollow Rd/Rte 132 Caltrans		
	Flow Inputs and	Adjustments	
Volume, V		244 0.92	veh/h
Peak-hour factor, PHF Peak 15-min volume, v15	_	66	V
Trucks and buses	,	18	00
Recreational vehicles		0	%
Terrain type:		Level	Ü
Grade		_	olo
Segment length		_	mi
Trucks and buses PCE, E	r.T	1.5	
Recreational vehicle PCE, ER		1.2	
Heavy vehicle adjustment, fHV Driver population factor, fp		0.917	
		1.00	
Flow rate, vp	, - , - ₋ - ₋	145	pc/h/ln
	Speed Inputs an	d Adjustments	
Lane width		_	ft
Right-side lateral clearance		_	ft
Total ramp density, TRI		_	ramps/mi
Number of lanes, N		2	rampo, mr
Free-flow speed:		Measured	
FFS or BFFS		70.0	mi/h
Lane width adjustment,	fLW	=	mi/h
Lateral clearance adjus		_	mi/h
TRD adjustment		_	mi/h
Free-flow speed, FFS		70.0	mi/h
	LOS and Perform	ance Measures	
Flow rate, vp		145	pc/h/ln
Free-flow speed, FFS		70.0	mi/h
Average passenger-car s	speed, S	70.0	mi/h
Number of lanes, N	<u>.</u>	2	
Density, D		2.1	pc/mi/ln
Level of service, LOS		А	

Phone: E-mail:		Fax:	
	Operational An	alysis	
Analyst: Agency or Company:	Kimley-Horn & A	ssc., Inc.	
Date Performed: Analysis Time Period: Freeway/Direction: From/To:	I-580 WB Rte 132/Corral Caltrans		
	Flow Inputs an	d Adjustments	
Volume, V Peak-hour factor, PHF		1836 0.92	veh/h
Peak 15-min volume, v15 Trucks and buses Recreational vehicles	5	499 18 0	V % %
Terrain type: Grade Segment length		Level -	% mi
Trucks and buses PCE, I Recreational vehicle PC Heavy vehicle adjustment Driver population factor	CE, ER nt, fhV	1.5 1.2 0.917 1.00	шт
Flow rate, vp	,	1088	pc/h/ln
	Speed Inputs a	nd Adjustments	
Lane width Right-side lateral clea Total ramp density, TRI Number of lanes, N Free-flow speed:		- - - 2	ft ft ramps/mi
FFS or BFFS Lane width adjustment,	fLW	Measured 70.0 -	mi/h mi/h
Lateral clearance adjustment Free-flow speed, FFS		- - 70.0	mi/h mi/h mi/h
	LOS and Perfor	mance Measures	
Flow rate, vp Free-flow speed, FFS Average passenger-car s Number of lanes, N Density, D	speed, S	1088 70.0 70.0 2 15.5	<pre>pc/h/ln mi/h mi/h pc/mi/ln</pre>
TOVET OF SETATOE, TOS	Level of service, LOS		

Phone: Fax: E-mail: ______Operational Analysis______ Analyst: Kimley-Horn & Assc., Inc. Agency or Company: Date Performed: 02/11/14 Date Performed:

Analysis Time Period: PM Peak Hour

Freeway/Direction: I-580 EB

From/To: I-205 Junction/Mtn House Pkwy From/To:
Jurisdiction: Caltrans Existing Analysis Year: Description: _____Flow Inputs and Adjustments_____ veh/h 1813 Volume, V Peak-hour factor, PHF 0.92 Peak 15-min volume, v15 493 V Trucks and buses 18 Recreational vehicles Level Terrain type: Grade Segment length mi Trucks and buses PCE, ET 1.5 Heavy vehicle adjustment, fHV Recreational vehicle PCE, ER 1.2 0.917 Driver population factor, fp 1.00 pc/h/ln Flow rate, vp 1074 ______Speed Inputs and Adjustments_____ Lane width ft Right-side lateral clearance ft Total ramp density, TRD ramps/mi Number of lanes, N Free-flow speed: Measured 70.0 FFS or BFFS mi/h Lane width adjustment, fLW mi/h Lateral clearance adjustment, fLC mi/h TRD adjustment mi/h Free-flow speed, FFS 70.0 mi/h _____LOS and Performance Measures_____ Flow rate, vp 1074 pc/h/ln Free-flow speed, FFS 70.0 mi/h mi/h Average passenger-car speed, S 70.0 Number of lanes, N Density, D 15.3 pc/mi/ln

В

Phone: Fax: E-mail: ______Operational Analysis______ Analyst: Kimley-Horn & Assc., Inc. Agency or Company: Date Performed: 02/11/14 Date Performed:

Analysis Time Period: PM Peak Hour

Freeway/Direction: I-580 WB

From/To: Mtn House Pkwy/I-205 Junction From/To:
Jurisdiction: Caltrans Existing Analysis Year: Description: _____Flow Inputs and Adjustments_____ veh/h 1053 Volume, V Peak-hour factor, PHF 0.92 Peak 15-min volume, v15 286 V Trucks and buses 18 Recreational vehicles Level Terrain type: Grade Segment length тi Trucks and buses PCE, ET 1.5 Recreational vehicle PCE, ER 1.2 Heavy vehicle adjustment, fHV 0.917 Driver population factor, fp 1.00 pc/h/ln Flow rate, vp 624 ______Speed Inputs and Adjustments_____ Lane width ft Right-side lateral clearance ft Total ramp density, TRD ramps/mi Number of lanes, N Free-flow speed: Measured 70.0 FFS or BFFS mi/h Lane width adjustment, fLW mi/h Lateral clearance adjustment, fLC mi/h TRD adjustment mi/h Free-flow speed, FFS 70.0 mi/h _____LOS and Performance Measures_____ Flow rate, vp 624 pc/h/ln Free-flow speed, FFS 70.0 mi/h mi/h Average passenger-car speed, S 70.0 Number of lanes, N Density, D 8.9 pc/mi/ln

Α

Phone: Fax: E-mail: ______Operational Analysis______ Analyst: Kimley-Horn & Assc., Inc. Agency or Company: Date Performed: 02/11/14 Analysis Time Period: PM Peak Hour Freeway/Direction: I-580 EB From/To: Mtn House Pkwy/Corral Hollw R From/To:
Jurisdiction: Mcn ... Caltrans Existing Analysis Year: Description: _____Flow Inputs and Adjustments_____ veh/h 1696 Volume, V Peak-hour factor, PHF 0.92 Peak 15-min volume, v15 461 V Trucks and buses 18 Recreational vehicles Level Terrain type: Grade Segment length mi Trucks and buses PCE, ET 1.5 Recreational vehicle PCE, ER 1.2 Heavy vehicle adjustment, fHV 0.917 Driver population factor, fp 1.00 pc/h/ln Flow rate, vp 1005 ______Speed Inputs and Adjustments_____ Lane width ft Right-side lateral clearance ft Total ramp density, TRD ramps/mi Number of lanes, N Free-flow speed: Measured 70.0 FFS or BFFS mi/h Lane width adjustment, fLW mi/h Lateral clearance adjustment, fLC mi/h TRD adjustment mi/h Free-flow speed, FFS 70.0 mi/h _____LOS and Performance Measures_____ Flow rate, vp 1005 pc/h/ln Free-flow speed, FFS 70.0 mi/h mi/h Average passenger-car speed, S 70.0 Number of lanes, N Density, D 14.4 pc/mi/ln

В

Phone: Fax: E-mail: ______Operational Analysis______ Analyst: Kimley-Horn & Assc., Inc. Agency or Company: Date Performed: 02/11/14 Date Performed:

Analysis Time Period: PM Peak Hour

Freeway/Direction: I-580 WB

From/To: Corral Hollow Rd/Mtn House Pkw From/To:
Jurisdiction: Caltrans Existing Analysis Year: Description: _____Flow Inputs and Adjustments_____ 985 veh/h Volume, V Peak-hour factor, PHF 0.92 Peak 15-min volume, v15 268 V Trucks and buses 18 Recreational vehicles Level Terrain type: Grade Segment length mi Trucks and buses PCE, ET 1.5 Recreational vehicle PCE, ER 1.2 Heavy vehicle adjustment, fHV 0.917 Driver population factor, fp 1.00 pc/h/ln Flow rate, vp 584 ______Speed Inputs and Adjustments_____ Lane width ft Right-side lateral clearance ft Total ramp density, TRD ramps/mi Number of lanes, N Free-flow speed: Measured 70.0 FFS or BFFS mi/h Lane width adjustment, fLW mi/h Lateral clearance adjustment, fLC mi/h TRD adjustment mi/h Free-flow speed, FFS 70.0 mi/h _____LOS and Performance Measures_____ Flow rate, vp 584 pc/h/ln Free-flow speed, FFS 70.0 mi/h Average passenger-car speed, S 70.0 mi/h Number of lanes, N Density, D 8.3 pc/mi/ln

Α

Phone: E-mail:		Fax:	
	Operational An	alysis	
Analyst: Agency or Company:	Kimley-Horn & A	ssc., Inc.	
Date Performed: Analysis Time Period: Freeway/Direction: From/To: Jurisdiction: Analysis Year: Description:	I-580 EB Corral Hollow R Caltrans		
	Flow Inputs an	d Adjustments	
Volume, V Peak-hour factor, PHF		1754 0.92	veh/h
Peak 15-min volume, v15	5	477	V
Trucks and buses Recreational vehicles		18 0	ଚ୍ଚ ଚ୍ଚ
Terrain type:		Level	6
Grade		-	%
Segment length		_	mi
Trucks and buses PCE, E		1.5	
Recreational vehicle PCE, ER Heavy vehicle adjustment, fHV		1.2	
		0.917	
Driver population factor Flow rate, vp	or, ip	1.00 1039	pc/h/ln
riow lace, vp		1039	pc/11/111
	Speed Inputs a	nd Adjustments	
Lane width		_	ft
Right-side lateral clearance		_	ft
Total ramp density, TRI		_	ramps/mi
Number of lanes, N		2	
Free-flow speed:		Measured	/ -
FFS or BFFS		70.0	mi/h
Lane width adjustment, fLW		_	mi/h
Lateral clearance adjustment, fLC		-	mi/h mi/h
TRD adjustment Free-flow speed, FFS		70.0	mi/h
rice from Speed, fro		70.0	111111111111111111111111111111111111111
	LOS and Perfor	mance Measures	
Flow rate, vp		1039	pc/h/ln
Free-flow speed, FFS		70.0	mi/h
Average passenger-car s	speed, S	70.0	mi/h
Number of lanes, N		2	
Density, D		14.8	pc/mi/ln
Level of service, LOS		В	

Phone: E-mail:		Fax:	
	Operational Ana	alysis	
Analyst:	Kimley-Horn & As	ssc., Inc.	
From/To:	I-580 WB Rte 132/Corral F Caltrans		
	Flow Inputs and	d Adjustments	
Volume, V Peak-hour factor, PHF		1019 0.92	veh/h
Peak 15-min volume, v15 Trucks and buses Recreational vehicles	5	277 18 0	∨ % %
Terrain type: Grade Segment length		Level	% mi
Trucks and buses PCE, I Recreational vehicle PC Heavy vehicle adjustment Driver population factor	CE, ER nt, fHV	1.5 1.2 0.917 1.00	M.L.
Flow rate, vp	, - _F	604	pc/h/ln
	Speed Inputs ar	nd Adjustments	
Lane width Right-side lateral clea Total ramp density, TRI Number of lanes, N Free-flow speed:		- - 2	ft ft ramps/mi
FFS or BFFS Lane width adjustment,	fLW	Measured 70.0 -	mi/h mi/h
Lateral clearance adjustment Free-flow speed, FFS	stment, fLC	- - 70.0	mi/h mi/h mi/h
	LOS and Perform	nance Measures	
Flow rate, vp Free-flow speed, FFS Average passenger-car s Number of lanes, N Density, D	speed, S	604 70.0 70.0 2 8.6	<pre>pc/h/ln mi/h mi/h pc/mi/ln</pre>
Level of service, LOS		A	

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Operational And	alysis	
	ssc., Inc.	
KIMIEA MOIN		
02/20/14		
AM Peak Hour		
- 500 ED	, - I - i - House	
I-205 Junction/	Mountain house	
Caltrans	(2035)	
Existing+Projec	JC (2033)	
	a mainstments	
Flow Inputs a	na Adjustmento	
	419	veh/h
	0.92	
_	114	V
)	18	8
	0	8
	Level	96
	-	mi.
	-	1102
ET		
CE, EX		
IIL, LIIV		
or, fp	248	pc/h/ln
Speed Inputs	and Adjustments	
	<u> </u>	ft
	_	ft
earance _	_	ramps/mi
RD	2	
	Measured	± /16
	70.0	mi/h mi/h
fT₩	-	mi/h
ustment, fLC	_	mi/h
, d. D	-	mi/h
	70.0	•
	formance Measures	
LOS and Per	TOTHOTIOG TIONS	
	248	pc/h/ln mi/h
	70.0	mi/h mi/h
	70.0	111 T / 11
r speed, S		
r speed, S	2	pc/mi/ln
r speed, S		pc/mi/ln
	Kimley-Horn & A 02/20/14 AM Peak Hour I-580 EB I-205 Junction/ Caltrans Existing+Project Flow Inputs and CET CCE, ER ent, fHV cor, fp Speed Inputs earance RD LOS and Per LOS and Per	AM Peak Hour I-580 EB I-205 Junction/Mountain House Caltrans Existing+Project (2035) Flow Inputs and Adjustments 419 0.92 114 18 0 Level

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Phone:		Fax:	
E-mail:			
	Operational Ana	alysis	
	Kimley-Horn & As	ssc., Inc.	
Analyst: Agency or Company:			
Data Darformed:	02/20/14		
Analysis Time Period:	AM Peak Hour I-580 WB		
Freeway/Direction:	I-580 WB I-205 Junction/	Mountain House	
From/To:	a-l+rang		
Jurisdiction:	Existing+Projec	t (2035)	
Analysis Year:			
Description:		a adioatments	
	Flow Inputs ar	nd Adjustments	
		2896	veh/h
Volume, V		0.92	
n-al hour factor, Phr		787	V
Peak 15-min volume, vi	5	18	96 8.
mrucks and buses		0	8
Recreational vehicles		Level	%
Terrain type:		-	mi
Grade		- 1 E	
Segment length Trucks and buses PCE,	ET	1.5 1.2	
Liamal Webicle	PCE, Dr.	0.917	
	CITO!	1.00	
Driver population fac	tor, fp	1716	pc/h/ln
Flow rate, VP			
F 10 W 2 s	speed Inputs	and Adjustments	
			ft
: 3+ h		-	ft
Lane width Right-side lateral c	learance	-	ramps/mi
Total ramp density,	rrd	2.	
Number of lanes, N		Measured	. (1.
Free-flow speed:		70.0	mi/h
and or BEES	, ET W	-	mi/h mi/h
1tmc1	t, ILW	-	mi/h
Lateral Clearance do	Juscineiro,	-	mi/h
mpn adiustment		70.0	
Free-flow speed, FFS	,	rformance Measures_	
	LOS and Per	formance Measures_	
		1716	pc/h/ln
Flow rate, vp		70.0	mi/h
57 apped Pf	S mood S	66.9	mi/h
Average passenger-c	ar speed, b	2	pc/mi/ln
Number of lanes, N		25.6	pc//
Dancity D	os	C	
Level of service, I			

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Phone: E-mail:			
E-mair:	oremational Anal	ysis	
	<u>-</u>		
2 - 5	Kimley-Horn & Ass	c., Inc.	
Analyst: Agency or Company:			
Data Parformed:	02/20/14 AM Peak Hour		
Analysis Time Period:	TD		
Freeway/Direction:	I-580 EB Mountain House/Co	orral Hollow	
From/To:	caltrans		
Jurisdiction: Analysis Year:	Existing+Project	(2033)	
Description:			
and the first time of the	Flow Inputs and	Adjustments	
			veh/h
77		425 0.92	·
Volume, V Peak-hour factor, PHF		115	V
Peak 15-min volume, vi	L5	18	ે
Trucks and buses		0	%
Recreational vehicles		Level	
Terrain type:		-	%
Grade		-	mi
Segment length	क्रम	1.5	
Trucks and buses PCE,	DCE ER	1.2	
Recreational vehicle	ent. fHV	0.917	
Recreational vehicle Heavy vehicle adjustm Driver population fac	tor, fp	1.00	pc/h/ln
Driver population rate		252	-
Flow rate, vp	d Tabuta i	and Adjustments	
	Speed Inputs	XII.	ft
		-	ft
Lane width	learance	-	ramps/mi
Right-side lateral c	TRD	-	rame - /
Total ramp density,	1111	2 Measured	
Number of lanes, N Free-flow speed:		70.0	mi/h
DEC OF BEES		-	mi/h
	it, fLW	-	mi/h
Lane width adjustment Lateral clearance ad	ljustment, flc		mi/h
mpn adiustment		70.0	mi/h
Free-flow speed, FF	3	- -	
	LOS and Perf	ormance Measures_	
		252	pc/h/ln
Flow rate, vp		70.0	mi/h
caller apped Piti	S	70.0	mi/h
Average passenger-C	ar speed, S	2	- / 11 m
Number of lanes, N		3.6	pc/mi/ln
Donaity D	OG	A	
Level of service, I	dOp		

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hone: -mail:			
- max	operational Ana	lysis	
			
- Jacobs -	Kimley-Horn & As	ssc., Inc.	
Analyst: Agency or Company:			
arta Derformed:	02/20/14		
Analysis Time Period:	AM Peak Hour		
Freeway/Direction:	I-580 WB Mountain House/G	Corral Hollow	
From/To:	daltrans		
Jurisdiction:	Existing+Project	t (2035)	
Analysis Year:	D222-0 - 3		
Description:		a allocatments	
	Flow Inputs an	d Adjustments	
		2876	veh/h
Volume, V		0.92	
peak hour factor, PHF		782	V
Peak 15-min volume, V.	15	18	જે .
mrucks and buses		0	%
Recreational vehicles		Level	%
Terrain type:		-	mi
Grade Segment length		- 1.5	
1-a and huses PCE,	ET	1.2	
- vehicle	PCE, DE	0.917	
adlustu	ICHC, TT	1.00	45 47
Driver population fac	tor, ip	1704	pc/h/ln
Flow rate, vp			
	Speed Inputs	and Adjustments	
			ft
Lane width			ft
niaht-gide lateral C	learance	_	ramps/mi
Total ramp density,	TRD	2	
Number of lanes, N		Measured	! /h
Free-flow speed:		70.0	mi/h mi/h
FFS or BFFS	+ FT.W	-	mi/h
Lane width adjustmer Lateral clearance ac	Hiustment, fLC	-	mi/h
Lateral Clearance at	.,	- 70.0	mi/h
TRD adjustment Free-flow speed, FF:	3	70.0	
Free-110w ppoor,	and a Dom	formance Measure	S
	LOS and Per	LOTHORIOG	
		1704	pc/h/ln mi/h
	a.a	70.0	mi/h
Flow rate, VP	.a	67.1	III.1 +1
- Flow eneed, EE	ar speed, S		
Free-flow speed, FF	ar speed, S	2	pc/mi/ln
- Flow eneed, EE	ar speed, S		pc/mi/ln

Fax: Phone: E-mail: Operational Analysis_____ Kimley-Horn & Assc., Inc. Analyst: Agency or Company: 02/20/14 Date Performed: AM Peak Hour Analysis Time Period: I-580 EB Freeway/Direction: Corral Hollow/Rte132 From/To: Caltrans Existing+Project (2035) Jurisdiction: Analysis Year: Description: ___Flow Inputs and Adjustments_____ veh/h 403 0.92 Volume, V V Peak-hour factor, PHF 110 왕 Peak 15-min volume, v15 18 જ Trucks and buses Recreational vehicles Level 왕 Terrain type: mi Grade Segment length 1.5 Trucks and buses PCE, ET 1.2 Recreational vehicle PCE, ER 0.917 Heavy vehicle adjustment, fHV 1.00 pc/h/ln Driver population factor, fp 239 Flow rate, vp Speed Inputs and Adjustments____ ft £t Lane width ramps/mi Right-side lateral clearance Total ramp density, TRD 2 Number of lanes, N Measured mi/h Free-flow speed: 70.0 mi/h FFS or BFFS Lane width adjustment, fLW mi/h Lateral clearance adjustment, fLC mi/h mi/h TRD adjustment 70.0 Free-flow speed, FFS LOS and Performance Measures_____ pc/h/ln 239 mi/h 70.0 Flow rate, vp mi/h Free-flow speed, FFS 70.0 Average passenger-car speed, S 2 pc/mi/ln Number of lanes, N 3.4Α Density, D Level of service, LOS

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hone:		1 (4)1.	
-mail:			
	Operational Anal	ysis	
			
malyst:	Kimley-Horn & Ass	50., 220	
gency or Company:	02/20/14		
vera parformed:	AM Peak Hour		
Analysis Time Period:	T EON WB		
Freeway/Direction:	Corral Hollow/Rt	e132	
From/To: Jurisdiction:	a 1 France		
Jurisdiction. Analysis Year:	Existing+Project	, (2000)	
Description:			
DCDC=-F	Flow Inputs and	d Adjustments	
		1920	veh/h
77		0.92	
Volume, V Peak-hour factor, PHF		522	V
Peak 15-min volume, v	15	18	%
m-waled and buses		0	0,0
Recreational vehicles		Level	0
Terrain type:		-	% mi
Grade		-	(III
Segment length	ਦ ਾ	1.5	
Trucks and buses PCE,	PCE, ER	1.2	
Recreational vehicle Heavy vehicle adjust	(ICIIO) -	0.917 1.00	
Heavy Venicle dayaste Driver population fa	ctor, fp	1137	pc/h/ln
Flow rate, VP		_	
FIOW Posts, P	speed Inputs	and Adjustments	
	Speca = 1		ft
. 7. 1-		-	ft
Lane width Right-side lateral o	clearance		ramps/mi
Total ramp density,	TRD	2	
Number of lanes, N		Measured	. /25
Free-flow speed:		70.0	mi/h mi/h
and or Brits	. FIW	-	mi/h
1a+ma	nt, IDW Aduatment, fLC	-	mi/h
Lateral clearance a	ajabemes. ,	- 70.0	mi/h
TRD adjustment	'S		
Free-flow speed, FF	- a Dord	formance Measure	s
	LOS and Peri		pc/h/ln
		1137	mi/h
-1 mate VO	_{ದ್} ರ	70.0 70.0	mi/h
Flow rate, vp	57 - 00000 PFJ		- ,
67 - CTOOCO P	car speed, S	0	
Free-flow speed, f.	car br	2 16 2	pc/mi/ln
67 - CTOOCO P	car br	2 16.2 B	pc/mi/ln

		_		
Phone:		Fax:		
E-mail:				
	Operational Anal	ysis		
	Kimley-Horn & Ass	sc., Inc.		
Analyst:				
Agency or Company: Date Performed:	02/20/14			
Analysis Time Period:	PM Peak Hour			
Freeway/Direction:	I-580 EB I-205 Junction/M	ountain House		
From/To:	I-205 Junction/	0411041-		
Jurisdiction:	Caltrans Existing+Project	(2035)		
Analysis Year:	Existing+F10)	,		
Description:			_	
	Flow Inputs and	d Adjustments		
			veh/h	
		2667	V 32-7	
Volume, V		0.92	V	
Peak-hour factor, PHF	_5	725	ક	
Peak 15-min volume, v1		18 0	%	
Trucks and buses Recreational vehicles		Level		
Terrain type:			%	
Grade		_	mi	
gorment length		1.5		
, and huges PCE,	ET	1.2		
	PCH, HI	0.917		
biale adiuStu	ICTIC! THE	1.00	pc/h/ln	
Driver population fac	etor, ip	1580	bc/11/111	
Flow rate, VP				_
	Speed Inputs	and Adjustments_		
		-	ft	
Lane width			ft/mi	
traide lateral C	learance	-	ramps/mi	
Total ramp density,	TRD	2		
Number of lanes, N		Measured	mi/h	
Free-flow speed:		70.0	mi/h	
and or Burs	.+ fi.W	-	mi/h	
Lane width adjustmer	distment, fLC	-	mi/h	
Lateral clearance ac	1)488	- 0	mi/h	
TRD adjustment	S	70.0	,	
Free-flow speed, FF		ormance Measure	S	
	LOS and Peri	Of marice from		
		1580	pc/h/ln	
Flow rate, Vp		70.0	mi/h	
ra aneed ff	'S	68.3	mi/h	
Average passenger-C	ar speed, b	2	pc/mi/ln	
Number of lanes, N		23.1	DC/ #1/ 111	
poncity D	- Od	С		
Level of service, I	70p			

		Fax:	
hone:		•	
-mail:			
_	Operational Anal	ysis	
	Kimley-Horn & Ass	sc., Inc.	
Analyst:	KIMICY 1102-		
Agency or Company:	02/20/14		
Data Performed:	PM Peak Hour		
Analysis Time Period:		· '- House	
Freeway/Direction:	I-205 Junction/M	ountain house	
From/To:	anl+rang		
Jurisdiction:	Existing+Project	(2035)	
Analysis Year: Description:			
Describeron.	-s - Tonnite and	l Adjustments	
	Flow inputs and	<i>-</i>	-1- /h
		1268	veh/h
Volume, V		0.92	37
near hour factor, Phr	F	345	V %
Peak 15-min volume, V	.5	18	60 o
mrucks and buses		0	••
Recreational vehicles		Level	૪
Terrain type:		-	mi.
Grade		- 1.5	
Segment length Trucks and buses PCE,	ET	1.2	
1 TANICIE	FCB,	0.917	
Liala adiliStu	CIIC;	1.00	45 45
Driver population fac	tor, fp	751	pc/h/ln
Flow rate, vp			
	Speed Inputs	and Adjustments_	
			ft
Lane width		_	ft
night_gide lateral C	learance	_	ramps/mi
Total ramp density,	TRD	2	
Number of lanes, N		Measured	. /1-
Free-flow speed:		70.0	mi/h mi/h
nnd or REES	L STW	-	mi/h
Lane width adjustmer	it, ilw	-	mi/h
Lateral clearance at	L) use mozze,	0	mi/h
TRD adjustment	ò	70.0	·
Free-flow speed, FF		amange Measures	5
	LOS and Perf	ormance Measures	
	_	751	pc/h/ln
Flow rate, VP		70.0	mi/h
ra - anodo Br	S	70.0	mi/h
Average passenger-C	ar speed, s	2	pc/mi/ln
Number of lanes, N		10.7	DG/ mr/ +++
Density, D Level of service, I	OG	A	
af corvice.	100 100		

Fax: Phone: E-mail: Operational Analysis_____ Kimley-Horn & Assc., Inc. Analyst: Agency or Company: 02/20/14 Date Performed: Analysis Time Period: PM Peak Hour Freeway/Direction: I-580 EB
Mountain House/Corral Hollow
From/To: Caltrans Existing+Project (2035) Jurisdiction: Analysis Year: Description: Flow Inputs and Adjustments____ veh/h 2662 0.92 Volume, V Peak-hour factor, PHF V 723 Peak 15-min volume, v15 18 Trucks and buses Recreational vehicles Level 왕 Terrain type: mi Grade Segment length 1.5 Trucks and buses PCE, ET 1.2 Recreational vehicle PCE, ER 0.917 Heavy vehicle adjustment, fHV 1.00 Driver population factor, fp pc/h/ln 1577 Flow rate, vp Speed Inputs and Adjustments____ £t ft Lane width Right-side lateral clearance ramps/mi Total ramp density, TRD 2 Number of lanes, N Measured mi/h Free-flow speed: 70.0 mi/h FFS or BFFS Lane width adjustment, fLW mi/h Lateral clearance adjustment, fLC mi/h mi/h TRD adjustment 70.0 Free-flow speed, FFS __LOS and Performance Measures____ pc/h/ln 1577 mi/h70.0 Flow rate, vp Free-flow speed, FFS mi/h 68.4Average passenger-car speed, S 2 pc/mi/ln Number of lanes, N 23.1 C Density, D Level of service, LOS

		Fax:	
hone: -mail:			
- IIId I I :	.∴-mal Ana	lysis	
			
	Kimley-Horn & As	sc., Inc.	
Analyst:			
Agency or Company:	02/20/14		
Date Performed: Analysis Time Period:	PM Peak Hour		
Freeway/Direction:	I-580 WB	orral Hollow	
From/To:	I-580 WB Mountain House/C	01141	
Jurisdiction:	Caltrans Existing+Project	- (2035)	
Analysis Year:	Existing+Project	5 (-)	
Description:			
	Flow Inputs an	d Adjustments	
	ETOM TITE		veh/h
		1273	V C11/
Volume, V		0.92	v
Peak-hour factor, PHF	15	346	\$ \$
Peak 15-min volume, v	10	18	00
Trucks and buses		0	
Recreational vehicles		Level	%
Terrain type:		-	mi
Grade Segment length		1.5	
huges PCE,	ET	1.2	
- Lianal Webicle	PCE, Dr	0.917	
Liala adiliSu	UCIIC; ·	1.00	/3 /3
Driver population fac	ctor, fp	754	pc/h/ln
Flow rate, vp			
	Speed Inputs	and Adjustments_	
			ft
· aub		_	£t
Lane width Right-side lateral o	learance	-	ramps/mi
Total ramp density,	TRD	2	
Number of lanes, N		Measured	
Free-flow speed:		70.0	mi/h
DEC ON REES		-	mi/h
	nt, flw	=	mi/h
Lateral clearance a	djustment, inc	-	mi/h mi/h
mpp addustment		70.0	111.7.11
Free-flow speed, FF	5		
	LOS and Per	formance Measures	
		754	pc/h/ln
		70.0	mi/h
rier rate VO	. S	70.0	mi/h
Flow rate, vp			
Free-flow speed, Fi	Jai becom	2	1 1/1
Free-flow speed, Fi	Jai becom	2 10.8	pc/mi/ln
cally anged Hi	Jal Dpece,		pc/mi/ln

T1 - m 0 -		Fax:	
Phone: E-mail:			_
_	Operational Anal	ysis	
	Kimley-Horn & Ass	sc., Inc.	
Analyst:	1021112 - 1		
Agency or Company:	02/20/14		
Date Performed:	PM Peak Hour		
Analysis Time Period: Freeway/Direction:	I-580 EB	-120	
Freeway/Direction	Corral Hollow/Rt	e134	
From/To: Jurisdiction:	Caltrans	(2035)	
Analysis Year:	Existing+Project	. (2050)	
Description:			
Descriperon	Trouts and	i Adjustments	
	E.TOM TUDGED STEE		veh/h
		1874	veii/ ii
Volume, V		0.92	V
page hour factor, Phr	1 5	509	v %
Peak 15-min volume, v	15	18	ે જ
Trucks and buses		0	0
Recreational vehicles		Level	જ
Terrain type:		-	mi
Grade		- 1 E	
Segment length Trucks and buses PCE,	ET	1.5 1.2	
Lional Webicle	PCE, PE	0.917	
bidle adiusu	HETTO!	1.00	
Driver population fac	ctor, fp	1110	pc/h/ln
Flow rate, VP			
F10W 1400, 1	Speed Inputs	and Adjustments_	
	bpoon 1		ft
		-	ft
Lane width Right-side lateral o	learance	-	ramps/mi
Right-side lateral of Total ramp density,	TRD	-	-
Number of lanes, N		Measured	
Number of fames, Free-flow speed:		70.0	mi/h
THE AN REES		70.0	mi/h
a+mA1	nt, fLW	تند	mi/h
Lane width adjustments Lateral clearance a	djustment, fLC	_	mi/h
TDD adiustment		70.0	mi/h
Free-flow speed, FF	S		
1100	LOS and Perf	ormance Measures	
			pc/h/ln
		1110	mi/h
Flow rate, VP	'S	70.0	mi/h
Free-flow speed, FF Average passenger-	ar speed, S	70.0	
Average passenger of Number of lanes, N	-	2 15.9	pc/mi/ln
Number of faires, in		15.9 B	
Density, D Level of service,	LOS	D	
Tever or portion,			

		Fax:	
Phone: E-mail:			
E- merra	Operational Anal	lysis	
			
Analyst:	Kimley-Horn & As	SC., 11101	
Agency or Company:	02/20/14		
Data Derformed:	PM Peak Hour		
Analysis Time Period:	T.580 WB		
Freeway/Direction:	Corral Hollow/Rt	e132	
From/To: Jurisdiction:	Caltrans	- (2035)	
Analysis Year:	Existing+Project	_ (2033)	
Description:			
Deposit I	Flow Inputs an	d Adjustments	
	FTOW T77F		veh/h
		1191	V 311/
Volume, V		0.92	V
Peak 15-min volume, vi	.5	324 18	%
Trucks and buses		0	ob
Recreational vehicles		Level	_
Terrain type:		-	%
Grade		-	mi
Segment length	דיתי	1.5	
Trucks and buses PCE,	PCE, ER	1.2	
Recreational vehicle Heavy vehicle adjustm	ent, fHV	0.917 1.00	
Driver population fac	tor, fp	706	pc/h/ln
Flow rate, vp			
FIOM TOOL, I	speed Inputs	and Adjustments_	
			ft
1.71.7-		-	ft
Lane width Right-side lateral c	learance	<u>-</u>	ramps/mi
Total ramp density,	TRD	2	
Number of lanes, N		Measured	
Free-flow speed:		70.0	mi/h
DEC OF BUTS	. ET W	-	mi/h mi/h
1-, at man	t, ILW	-	mi/h
Lateral clearance ac	ijusciiierier	0	mi/h
TRD adjustment	1	70.0	 =,
Free-flow speed, FF		formance Measures	
	LOS and Peri	[Of marice Trans.	/1 /1m
		706	pc/h/ln mi/h
Flow rate, vp	a	70.0	mi/h
ci aneed ##	ar speed, S	70.0	m/ **
Amerage passenger-c	OL OFFER	2	pc/mi/ln
Number of lanes, N		10.1 A	<u>+</u>
Density, D Level of service, I	os	A	
Tever or per-			

Phone: Fax: E-mail: Operational Analysis Analyst: Kimley-Horn & Assc., Inc. Agency or Company: Date Performed: 02/20/14 Analysis Time Period: AM Peak Hour Freeway/Direction: I-580 EB From/To: I-205 Junction / Mtn House Pky Jurisdiction: Caltrans Analysis Year: Existing+Buildout Description: Flow Inputs and Adjustments Volume, V 530 veh/h Peak-hour factor, PHF 0.92 Peak 15-min volume, v15 144 v Trucks and buses 18 Recreational vehicles Level Terrain type: Grade Segment length mi Trucks and buses PCE, ET 1.5 Recreational vehicle PCE, ER 1.2 Heavy vehicle adjustment, fHV 0.917 Driver population factor, fp 1.00 pc/h/ln Flow rate, vp 314 Speed Inputs and Adjustments_____ Lane width £t Right-side lateral clearance ft ramps/mi Total ramp density, TRD Number of lanes, N Free-flow speed: Measured mi/h FFS or BFFS 70.0 Lane width adjustment, fLW mi/h Lateral clearance adjustment, fLC mi/h TRD adjustment mi/h Free-flow speed, FFS 70.0 mi/h LOS and Performance Measures____ pc/h/ln Flow rate, vp 314 Free-flow speed, FFS 70.0 mi/h Average passenger-car speed, S 70.0 mi/h Number of lanes, N 4.5 pc/mi/ln Density, D Level of service, LOS Α

Phone: E-mail:		Fax:	
	Operational An	alysis	
Analyst:	Kimley-Horn & A	ssc., Inc.	
Agency or Company:	00/00/14		
Date Performed: Analysis Time Period:	02/20/14		
Freeway/Direction:	I-580 WB		
From/To:	I-205 Junction	/ Mtn House Pkv	
Jurisdiction:	Caltrans	,	
Analysis Year: Description:	Existing+Buildo	ut	
	Flow Inputs an	d Adjustments	
77 - J		0000	arch /h
Volume, V Peak-hour factor, PHF		2882 0.92	veh/h
Peak 15-min volume, v15		783	v
Trucks and buses	'	18	v %
Recreational vehicles		0	્રે
Terrain type:		Level	
Grade		-	ર્જ
Segment length		-	mi
Trucks and buses PCE, E	T	1.5	
Recreational vehicle PCE, ER		1.2	
Heavy vehicle adjustment, fHV		0.917	
Driver population facto	or, fp	1.00	41 42
Flow rate, vp		1707	pc/h/ln
	Speed Inputs a	nd Adjustments	
Lane width		_	ft
Right-side lateral clea	rance		ft
Total ramp density, TRI		-	ramps/mi
Number of lanes, N		2	
Free-flow speed:		Measured	
FFS or BFFS		70.0	mi/h
Lane width adjustment,		-	mi/h
Lateral clearance adjus	stment, fLC	-	mi/h
TRD adjustment		-	mi/h
Free-flow speed, FFS		70.0	mi/h
	LOS and Perfor	mance Measures	
Flow rate, vp		1707	pc/h/ln
Free-flow speed, FFS		70.0	mi/h
Average passenger-car s	speed, S	67.0	mi/h
Number of lanes, N	*	2	
Density, D		25.5	pc/mi/ln
Level of service, LOS		C	

Phone: E-mail:		Fax:	
	Operational A	nalysis	
Analyst: Agency or Company:	Kimley-Horn & A		
Date Performed: Analysis Time Period: Freeway/Direction:	I-580 EB		
From/To: Jurisdiction: Analysis Year: Description:	Mtn House Pkwy, Caltrans Existing+Buildo		
	Flow Inputs a	nd Adjustments	
Volume, V		554	veh/h
Peak-hour factor, PHF Peak 15-min volume, v1	,	0.92 151	v
Trucks and buses	,	18	⋄
Recreational vehicles		0	્રે
Terrain type:		Level	
Grade			્ર
Segment length		_	mi
Trucks and buses PCE, ET		1.5	
Recreational vehicle PCE, ER		1.2	
Heavy vehicle adjustment, fHV		0.917	
Driver population facto		1.00	
Flow rate, vp		328	pc/h/ln
	Speed Inputs	and Adjustments_	
Lane width		-	ft
Right-side lateral clea	arance	-	ft
Total ramp density, TR)	=	ramps/mi
Number of lanes, N		2	
Free-flow speed:		Measured	
FFS or BFFS		70.0	mi/h
Lane width adjustment,		-	mi/h
Lateral clearance adjus	stment, fLC		mi/h
TRD adjustment		-	mi/h
Free-flow speed, FFS		70.0	mi/h
	LOS and Perfo	rmance Measures	
Flow rate, vp		328	pc/h/ln
Free-flow speed, FFS		70.0	mi/h
Average passenger-car	speed, S	70.0	mi/h
Number of lanes, N		2	
Density, D		4.7	pc/mi/ln
Level of service, LOS		A	

E-mail:		rax:		
	Operational Ana	lysis		
Analyst:	Kimley-Horn & As	ssc., Inc.		
Agency or Company:	<u>-</u>			
Date Performed:	02/20/14			
Analysis Time Period:	AM Peak Hour			
Freeway/Direction:	I-580 WB	I-580 WB		
From/To:	_	Mtn House Pkwy/Corral Hollow		
Jurisdiction:	Caltrans			
Analysis Year:	Existing+Buildou	ıt		
Description:				
	Flow Inputs and	l Adjustments		
Volume, V		2710	veh/h	
Peak-hour factor, PHF		0.92		
Peak 15-min volume, v1	5	736	V	
Trucks and buses		18	8	
Recreational vehicles		0	ક	
Terrain type:		Level		
Grade		-	જ .	
Segment length		-	mi	
Trucks and buses PCE,		1.5		
Recreational vehicle P		1.2		
Heavy vehicle adjustme		0.917		
Driver population factor, fp		1.00 1605	pc/h/ln	
Flow rate, vp		1603	pc/11/111	
	Speed Inputs ar	nd Adjustments		
Lane width		-	ft	
Right-side lateral cle		=	ft	
Total ramp density, TR	LD	_	ramps/mi	
Number of lanes, N		2		
Free-flow speed:		Measured	1 /1	
FFS or BFFS	E * * * *	70.0	mi/h	
Lane width adjustment,		<u></u>	mi/h	
Lateral clearance adju	istment, ild	-	mi/h mi/h	
TRD adjustment		70.0	mi/h mi/h	
Free-flow speed, FFS		70.0	1117 11	
	LOS and Perform	mance Measures_		
Flow rate, vp		1605	pc/h/ln	
Free-flow speed, FFS		70.0	mi/h	
Average passenger-car	speed, S	68.1	mi/h	
Number of lanes, N		2	, , , , , , ,	
Density, D		23.6	pc/mi/ln	
Level of service, LOS		С		

Phone: E-mail:		rax:		
	Operational Ana	lysis		
Amalyzat .				
Analyst: Agency or Company:	Kimley-Horn & As	sc., inc.		
Date Performed:	02/20/14			
Analysis Time Period:				
Freeway/Direction:	I-580 EB			
From/To:	Corral Hollow/Rt	e 132		
Jurisdiction:	Caltrans			
Analysis Year:	Existing+Buildou	ıt		
Description:	J			
	Flow Inputs and	l Adjustments		
Volume, V		371	veh/h	
Peak-hour factor, PHF		0.92	. 4,	
Peak 15-min volume, v1	5	101	V	
Trucks and buses		18	ે	
Recreational vehicles		0	ક	
Terrain type:		Level		
Grade		***	060	
Segment length			mi	
Trucks and buses PCE,	ET	1.5		
Recreational vehicle P	CE, ER	1.2		
Heavy vehicle adjustme		0.917		
Driver population fact	or, fp	1.00	(- L-	
Flow rate, vp		220	pc/h/ln	
	Speed Inputs an	ıd Adjustments		
Lane width		u.a.	ft	
Right-side lateral cle		-	ft	
Total ramp density, TR	D	-	ramps/mi	
Number of lanes, N		2		
Free-flow speed:		Measured		
FFS or BFFS	-	70.0	mi/h	
Lane width adjustment,		-	mi/h	
Lateral clearance adju	stment, fLC	_	mi/h	
TRD adjustment		-	mi/h	
Free-flow speed, FFS		70.0	mi/h	
	LOS and Perform	nance Measures		
Flow rate, vp		220	pc/h/ln	
Free-flow speed, FFS		70.0	mi/h	
Average passenger-car	speed, S	70.0	mi/h	
Number of lanes, N		2		
Density, D		3.1	pc/mi/ln	
Level of service, LOS		A		

E-mail:			
	Operational Ana	lysis	
Analyst:	Kimley-Horn & As	sc., Inc.	
Agency or Company:	**		
Date Performed:	02/20/14		
Analysis Time Period:	AM Peak Hour		
Freeway/Direction:	I-580 WB		
From/To:	Corral Hollow/Rt	e 132	
Jurisdiction:	Caltrans		
Analysis Year:	Existing+Buildou	.t	
Description:			
·	Flow Inputs and	Adjustments	
Volume, V		2006	veh/h
Peak-hour factor, PHF		0.92	V CII, II
Peak 15-min volume, v1	5	545	V
Trucks and buses		18	ે
Recreational vehicles		0	olo
Terrain type:		Level	Ť
Grade		_	ે
Segment length		_	mi
Trucks and buses PCE, I	ET	1.5	
Recreational vehicle Po		1.2	
Heavy vehicle adjustmen		0.917	
Driver population factor		1.00	
Flow rate, vp	· •	1188	pc/h/ln
	Speed Inputs an	ıd Adjustments_	
Lane width			ft
Right-side lateral clea	arance	=	ft
Total ramp density, TRI		_	ramps/mi
Number of lanes, N		2	L ,
Free-flow speed:		Measured	
FFS or BFFS		70.0	mi/h
Lane width adjustment,	fLW	and .	mi/h
Lateral clearance adjus		-	mi/h
TRD adjustment		_	mi/h
Free-flow speed, FFS		70.0	mi/h
	LOS and Perform	nance Measures_	
Flow rate, vp		1188	pc/h/ln
Free-flow speed, FFS		70.0	mi/h
Average passenger-car	speed. S	70.0	mi/h
Number of lanes, N	-F/	2	
Density, D		17.0	pc/mi/ln
Level of service, LOS		В	± · · · · ·

Phone: Fax: E-mail: Operational Analysis_____ Analyst: Kimley-Horn & Assc., Inc. Agency or Company: Date Performed: 02/20/14 Analysis Time Period: PM Peak Hour Freeway/Direction: I-580 EB From/To: I-205 Junction / Mtn House Pky Caltrans Jurisdiction: Analysis Year: Existing+Buildout Description: Flow Inputs and Adjustments_____ Volume, V veh/h 2636 Peak-hour factor, PHF 0.92 Peak 15-min volume, v15 716 V Trucks and buses 18 왕 Recreational vehicles Level Terrain type: Grade Segment length mi 1.5 Trucks and buses PCE, ET Recreational vehicle PCE, ER 1.2 Heavy vehicle adjustment, fHV 0.917 Driver population factor, fp 1.00 pc/h/ln Flow rate, vp 1562 Speed Inputs and Adjustments_____ ft Lane width Right-side lateral clearance £t ramps/mi Total ramp density, TRD Number of lanes, N Free-flow speed: Measured FFS or BFFS 70.0 mi/h Lane width adjustment, fLW mi/h Lateral clearance adjustment, fLC mi/h mi/h TRD adjustment 70.0 Free-flow speed, FFS mi/h LOS and Performance Measures____ pc/h/ln 1562 Flow rate, vp Free-flow speed, FFS 70.0 mi/h Average passenger-car speed, S mi/h 68.5 Number of lanes, N 2 pc/mi/ln Density, D 22.8 Level of service, LOS

Phone: Fax: E-mail: Operational Analysis_____ Kimley-Horn & Assc., Inc. Analyst: Agency or Company: Date Performed: 02/20/14 Analysis Time Period: PM Peak Hour Freeway/Direction: I-580 WB
From/To: I-205 Junction / Mtn House Pky Jurisdiction: Caltrans Existing+Buildout Analysis Year: Description: Flow Inputs and Adjustments____ Volume, V 1454 veh/h Peak-hour factor, PHF 0.92 Peak 15-min volume, v15 395 V ° Trucks and buses 18 Recreational vehicles Terrain type: Level Grade Segment length mi Trucks and buses PCE, ET 1.5 Recreational vehicle PCE, ER 1.2 Heavy vehicle adjustment, fHV 0.917 Driver population factor, fp 1.00 861 pc/h/ln Flow rate, vp Speed Inputs and Adjustments_____ Lane width ft Right-side lateral clearance ft Total ramp density, TRD ramps/mi Number of lanes, N Free-flow speed: Measured mi/h FFS or BFFS 70.0 Lane width adjustment, fLW mi/h Lateral clearance adjustment, fLC mi/h TRD adjustment mi/h Free-flow speed, FFS 70.0 mi/h LOS and Performance Measures____ pc/h/ln Flow rate, vp 861 Free-flow speed, FFS 70.0 mi/hAverage passenger-car speed, S 70.0 mi/h Number of lanes, N 2 12.3 pc/mi/ln Density, D Level of service, LOS

Phone: E-mail:		Fax:		
	Oporational An	anlwai a		
	Operational An	arysis		
Analyst:	Kimley-Horn & A	ssc., Inc.		
Agency or Company:	-			
Date Performed:	02/20/14	02/20/14		
Analysis Time Period:	PM Peak Hour			
Freeway/Direction:	I-580 EB			
From/To:	Mtn House Pkwy/	Corral Hollow		
Jurisdiction:	Caltrans			
Analysis Year:	Existing+Buildo	out		
Description:				
	Flow Inputs an	d Adjustments		
Volume, V		2566	veh/h	
Peak-hour factor, PHF		0.92	0 011/ 11	
Peak 15-min volume, v1	5	697	V	
Trucks and buses		18	6	
Recreational vehicles		0	ફ	
Terrain type:		Level		
Grade		-	양	
Segment length		-	mi	
Trucks and buses PCE,	ET	1.5		
Recreational vehicle P		1.2		
Heavy vehicle adjustme		0.917		
Driver population fact	or, fp	1.00	o. /1- /1	
Flow rate, vp		1520	pc/h/ln	
1	Speed Inputs a	and Adjustments_		
Lane width		_	ft	
Right-side lateral cle	arance	_	ft	
Total ramp density, TR		_	ramps/mi	
Number of lanes, N		2	<u>-</u>	
Free-flow speed:		Measured		
FFS or BFFS		70.0	mi/h	
Lane width adjustment,		-	mi/h	
Lateral clearance adju	stment, fLC	-	mi/h	
TRD adjustment			mi/h	
Free-flow speed, FFS		70.0	mi/h	
	LOS and Perfor	rmance Measures_		
Flow rate, vp		1520	pc/h/ln	
Free-flow speed, FFS		70.0	mi/h	
Average passenger-car	speed. S	68.8	mi/h	
Number of lanes, N	T. J. T. J.	2	,	
Density, D		22.1	pc/mi/ln	
Level of service, LOS		C		

Phone: E-mail:		Fax:	
	Operational An	alysis	
Analyst:	.nalyst: Kimley-Horn & Assc.,		
Agency or Company:	00/00/14		
Date Performed:	02/20/14 PM Peak Hour		
Analysis Time Period: Freeway/Direction:	I-580 WB		
From/To:	Mtn House Pkwy/	Corral Hollow	
Jurisdiction:	Caltrans		
Analysis Year:	Existing+Buildo	ut	
Description:	_		
	Flow Inputs an	d Adjustments	
Volume, V		1584	veh/h
Peak-hour factor, PHF		0.92	'
Peak 15-min volume, v15		430	v
Trucks and buses		18	ે
Recreational vehicles		0	ે
Terrain type:		Level	
Grade		-in-in-	%
Segment length		- 1.5	mi
Trucks and buses PCE, ET Recreational vehicle PCE, ER		1.2	
Heavy vehicle adjustmen		0.917	
Driver population factor		1.00	
Flow rate, vp		938	pc/h/ln
	Speed Inputs a	nd Adjustments	
Lane width		_	ft
Right-side lateral clea	arance	_	ft
Total ramp density, TRI		_	ramps/mi
Number of lanes, N		2	. ,
Free-flow speed:		Measured	
FFS or BFFS		70.0	mi/h
Lane width adjustment,		-	mi/h
Lateral clearance adjus	stment, fLC	wn	mi/h
TRD adjustment		70.0	mi/h
Free-flow speed, FFS		70.0	mi/h
	LOS and Perfor	mance Measures	
Flow rate, vp		938	pc/h/ln
Free-flow speed, FFS		70.0	mi/h
Average passenger-car	speed, S	70.0	mi/h
Number of lanes, N		2	
Density, D		13.4	pc/mi/ln
Level of service, LOS		В	

E-mail:		rax.	
	Operational Ana	alysis	
Analyst:	Kimley-Horn & A	ssc., Inc.	
Agency or Company:	_		
Date Performed:	02/20/14		
Analysis Time Period:	PM Peak Hour		
Freeway/Direction:	I-580 EB		
From/To:	Corral Hollow/R	te 132	
Jurisdiction:	Caltrans		
Analysis Year:	Existing+Buildo	ut	
Description:			
	Flow Inputs and	d Adjustments	
Volume, V		2047	veh/h
Peak-hour factor, PHF		0.92	·
Peak 15-min volume, v1	5	556	V
Trucks and buses		18	96
Recreational vehicles		0	%
Terrain type:		Level	
Grade		-	ૄ
Segment length		_	mi
Trucks and buses PCE,	ET	1.5	
Recreational vehicle P		1.2	
Heavy vehicle adjustme		0.917	
Driver population fact		1.00	
Flow rate, vp	-	1213	pc/h/ln
	Speed Inputs a	nd Adjustments_	
Lane width		-	ft
Right-side lateral cle	arance	_	ft
Total ramp density, TR		-	ramps/mi
Number of lanes, N		2	
Free-flow speed:		Measured	
FFS or BFFS		70.0	mi/h
Lane width adjustment,	fLW	-	mi/h
Lateral clearance adju	stment, fLC	ww	mi/h
TRD adjustment		-	mi/h
Free-flow speed, FFS		70.0	mi/h
	LOS and Perfor	mance Measures_	
Flow rate, vp		1213	pc/h/ln
Free-flow speed, FFS		70.0	mi/h
Average passenger-car	speed, S	70.0	mi/h
Number of lanes, N		2	•
Density, D		17.3	pc/mi/ln
Level of service, LOS		В	-

Phone: Fax: E-mail: Operational Analysis_____ Analyst: Kimley-Horn & Assc., Inc. Agency or Company: Date Performed: 02/20/14 Analysis Time Period: PM Peak Hour Freeway/Direction: I-580 WB Corral Hollow/Rte 132 From/To: Caltrans Jurisdiction: Analysis Year: Existing+Buildout Description: Flow Inputs and Adjustments_____ Volume, V 1180 veh/h Peak-hour factor, PHF 0.92 321 Peak 15-min volume, v15 v Trucks and buses 18 Recreational vehicles 옿 Level Terrain type: Grade Segment length mi Trucks and buses PCE, ET 1.5 Recreational vehicle PCE, ER 1.2 Heavy vehicle adjustment, fHV 0.917 Driver population factor, fp 1.00 Flow rate, vp 699 pc/h/ln Speed Inputs and Adjustments Lane width ft Right-side lateral clearance ft ramps/mi Total ramp density, TRD Number of lanes, N Free-flow speed: Measured FFS or BFFS 70.0 mi/h Lane width adjustment, fLW mi/h Lateral clearance adjustment, fLC mi/h TRD adjustment mi/h Free-flow speed, FFS 70.0 mi/h LOS and Performance Measures____ 699 pc/h/ln Flow rate, vp Free-flow speed, FFS 70.0 mi/h Average passenger-car speed, S 70.0 mi/h Number of lanes, N 2 pc/mi/ln Density, D 10.0 Level of service, LOS Α

Phone:

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E-mail:		ran.	
	Operational Ana	lysis	
Analyst:	Kimley-Horn & Assc., Inc.		
Agency or Company:			
Date Performed:	02/20/14		
Analysis Time Period:			
Freeway/Direction:	I-580 EB		
From/To:	I-205 Junction/M	ountain House	
Jurisdiction:	Caltrans		
Analysis Year: Description:	Cumulative		
	Flow Inputs and	Adjustments	
Volume, V		252	veh/h
Peak-hour factor, PHF		0.92	,
Peak 15-min volume, vl	5	68	v
Trucks and buses		18	ફ
Recreational vehicles		0	ે
Terrain type:		Level	
Grade		-	%
Segment length		-	mi
Trucks and buses PCE, ET		1.5	
Recreational vehicle PCE, ER		1.2	
Heavy vehicle adjustment, fHV		0.917	
Driver population fact	or, fp	1.00	
Flow rate, vp		149	pc/h/ln
	Speed Inputs an	d Adjustments	
Lane width		A.M.	ft
Right-side lateral cle		-	ft
Total ramp density, TR	LD	-	ramps/mi
Number of lanes, N		2	
Free-flow speed:		Measured	. /2
FFS or BFFS	5 = **	70.0	mi/h
Lane width adjustment,		-	mi/h
Lateral clearance adju	istment, ilC	-	mi/h
TRD adjustment		70.0	mi/h
Free-flow speed, FFS		70.0	mi/h
	LOS and Perform	ance Measures	
Flow rate, vp		149	pc/h/ln
Free-flow speed, FFS		70.0	mi/h
Average passenger-car	speed, S	70.0	mi/h
Number of lanes, N		2	/ 17
Density, D		2.1	pc/mi/ln
Level of service, LOS		A	

Phone: E-mail:		Fax:	
II MOLL	Onerational Ar	nalysis	
	Operacionar Ai	arysis	
Analyst:	Kimley-Horn & A	Assc., Inc.	
Agency or Company: Date Performed: Analysis Time Period: Freeway/Direction: From/To: Jurisdiction: Analysis Year: Description:	02/20/14 d: AM Peak Hour I-580 WB I-205 Junction/Mountain House Caltrans Cumulative		
	Flow Inputs ar	nd Adjustments	
Volume, V Peak-hour factor, PHF		921 0.92	veh/h
Peak 15-min volume, v1	5	250	V
Trucks and buses		18	એ એ
Recreational vehicles		0 Level	6
Terrain type: Grade		TEACT	00
Segment length		_	mi
Trucks and buses PCE, ET		1.5	··· ·
Recreational vehicle P		1.2	
	Heavy vehicle adjustment, fHV		
Driver population factor, fp		1.00	
Flow rate, vp		546	pc/h/ln
	Speed Inputs a	and Adjustments_	
Lane width			ft
Right-side lateral cle	arance	_	ft
Total ramp density, TR		-	ramps/mi
Number of lanes, N		2	• ,
Free-flow speed:		Measured	
FFS or BFFS		70.0	mi/h
Lane width adjustment,	fLW	-	mi/h
Lateral clearance adju	stment, fLC	-	mi/h
TRD adjustment		- 70.0	mi/h
Free-flow speed, FFS	Free-flow speed, FFS		mi/h
	LOS and Perfo	rmance Measures_	
Flow rate, vp		546	pc/h/ln
Free-flow speed, FFS		70.0	mi/h
Average passenger-car	speed, S	70.0	mi/h
Number of lanes, N		2	
Density, D		7.8	pc/mi/ln
Level of service, LOS		A	

Phone: E-mail:		Fax:		
	Operational An	alysis		
_	-			
Analyst:	Kimley-Horn & Assc., Inc.			
Agency or Company:	00/00/14			
Date Performed: Analysis Time Period:	02/20/14 AM Peak Hour			
Freeway/Direction:	I-580 EB			
From/To:	Mountain House/	Lammers		
Jurisdiction:	Caltrans			
Analysis Year:	Cumulative			
Description:				
	Flow Inputs an	d Adjustments		
Volume, V		115	veh/h	
Peak-hour factor, PHF		0.92		
Peak 15-min volume, v1	5 .	31	V	
Trucks and buses		18	ે	
Recreational vehicles		0	o _f o	
Terrain type:		Level		
Grade		-	o 6 .	
Segment length		-	mi	
Trucks and buses PCE, ET		1.5		
Recreational vehicle PCE, ER		1.2		
Heavy vehicle adjustment, fHV		0.917		
Driver population factor, fp		1.00 68	pc/h/ln	
Flow rate, vp		00	pc/11/111	
	Speed Inputs a	and Adjustments		
Lane width		mw	ft	
Right-side lateral cle	arance	-	ft	
Total ramp density, TR		uaa.	ramps/mi	
Number of lanes, N		2		
Free-flow speed:		Measured		
FFS or BFFS		70.0	mi/h	
Lane width adjustment,		-	mi/h	
Lateral clearance adju	stment, fLC	-	mi/h	
TRD adjustment		-	mi/h	
Free-flow speed, FFS		70.0	mi/h	
	LOS and Perfor	rmance Measures_		
Flow rate, vp		68	pc/h/ln	
Free-flow speed, FFS		70.0	mi/h	
Average passenger-car	speed, S	70.0	mi/h	
Number of lanes, N		2		
Density, D		1.0	pc/mi/ln	
Level of service, LOS		A		

Phone: E-mail:		Fax:	
	Operational Ana	alysis	
Analyst: Agency or Company: Date Performed: Analysis Time Period: Freeway/Direction: From/To: Jurisdiction: Analysis Year: Description:	Kimley-Horn & As 02/20/14 AM Peak Hour I-580 WB Mountain House/I Caltrans Cumulative	ssc., Inc.	
	Flow Inputs and	d Adjustments	
Volume, V Peak-hour factor, PHF Peak 15-min volume, v1 Trucks and buses Recreational vehicles Terrain type: Grade Segment length Trucks and buses PCE, Recreational vehicle P Heavy vehicle adjustment Driver population fact Flow rate, vp	ET CE, ER nt, fHV	1094 0.92 297 18 0 Level - - 1.5 1.2 0.917 1.00 648	veh/h v % % mi pc/h/ln
	Speed Inputs a:	nd Adjustments_	
Lane width Right-side lateral cle Total ramp density, TR Number of lanes, N Free-flow speed: FFS or BFFS Lane width adjustment, Lateral clearance adju TRD adjustment Free-flow speed, FFS	D flw	- - 2 Measured 70.0 - - 70.0	ft ft ramps/mi mi/h mi/h mi/h mi/h mi/h mi/h
	LOS and Perfor	mance Measures	
Flow rate, vp Free-flow speed, FFS Average passenger-car Number of lanes, N Density, D Level of service, LOS	speed, S	648 70.0 70.0 2 9.3 A	pc/h/ln mi/h mi/h pc/mi/ln

Phone: E-mail:		Fax:	
	Operational Ana	alysis	
Analyst: Agency or Company: Date Performed: Analysis Time Period: Freeway/Direction: From/To: Jurisdiction: Analysis Year: Description:	Kimley-Horn & As 02/20/14 AM Peak Hour I-580 EB Lammers/Corral I Caltrans Cumulative		
Description.	Flow Inputs and	d Adiustments	
	riow inputs and	a Adjustments	
Volume, V Peak-hour factor, PHF Peak 15-min volume, v1	5	101 0.92 27	veh/h v
Trucks and buses Recreational vehicles Terrain type:		18 0 Level	રુ સ્
Grade Segment length Trucks and buses PCE, ET		- - 1.5	% mi
Recreational vehicle PCE, ER Heavy vehicle adjustment, fHV Driver population factor, fp		1.2 0.917 1.00	
Flow rate, vp		60	pc/h/ln
	Speed Inputs a	nd Adjustments	
Lane width		-	ft ft
Right-side lateral clear Total ramp density, TR		- 2	ramps/mi
Number of lanes, N Free-flow speed:		Measured 70.0	mi/h
FFS or BFFS Lane width adjustment, Lateral clearance adju		70.0 - -	mi/h mi/h
TRD adjustment Free-flow speed, FFS		70.0	mi/h mi/h
	LOS and Perfor	mance Measures_	
Flow rate, vp Free-flow speed, FFS Average passenger-car Number of lanes, N Density, D Level of service, LOS	speed, S	60 70.0 70.0 2 0.9 A	pc/h/ln mi/h mi/h pc/mi/ln

Phone: E-mail:		Fax:	
	Operational An	alvsis	
	F		
Analyst:	Kimley-Horn & A	ssc., Inc.	
Agency or Company:			
Date Performed:	02/20/14		
Analysis Time Period:	AM Peak Hour		
Freeway/Direction:	I-580 WB	TT-11	
From/To:	Lammers/Corral Caltrans	HOTTOM	
Jurisdiction: Analysis Year:	Cumulative		
Description:	Cumuracive		
Descripcion.			
	Flow Inputs an	d Adjustments	11-14-14-14-1-1-1-1-1-1-1-1-1-1-1-1-1-1
Volume, V		960	veh/h
Peak-hour factor, PHF	•	0.92	
Peak 15-min volume, v1	5	261	v
Trucks and buses		18	ુ
Recreational vehicles		0	ે
Terrain type:		Level	
Grade		-	8 .
Segment length		-	mi
Trucks and buses PCE,		1.5	
Recreational vehicle P		1.2	
Heavy vehicle adjustment, fHV		0.917	
Driver population fact	or, Ip	1.00	pc/h/ln
Flow rate, vp		569	pe/ ii/ iii
	Speed Inputs a	and Adjustments_	
Lane width		_	ft
Right-side lateral cle	arance	_	ft
Total ramp density, TR			ramps/mi
Number of lanes, N		2	-
Free-flow speed:		Measured	
FFS or BFFS		70.0	mi/h
Lane width adjustment,	fLW	-	mi/h
Lateral clearance adju	stment, fLC	-	mi/h
TRD adjustment			mi/h
Free-flow speed, FFS		70.0	mi/h
	LOS and Perfo	rmance Measures_	
Flow rate, vp		569	pc/h/ln
Free-flow speed, FFS		70.0	mi/h
Average passenger-car	speed. S	70.0	mi/h
Number of lanes, N	-F, ~	2	···, ·
Density, D		8.1	pc/mi/ln
Level of service, LOS		A	-

Phone: E-mail:		Fax:	
	Operational An	alysis	
Analyst:	Kimley-Horn & A	Assc., Inc.	
Agency or Company:	-		
Date Performed:	02/20/14		
Analysis Time Period:			
Freeway/Direction:	I-580 EB	N-130	
From/To:	Corral Hollow/F	tte132	
Jurisdiction: Analysis Year:	Cartrans Cumulative		
Description:	Cumuracive		
	Flow Inputs an	ıd Adjustments	
Volume, V		117	veh/h
Peak-hour factor, PHF	_	0.92	
Peak 15-min volume, v1	5	32	V o-
Trucks and buses		18 0	96 96
Recreational vehicles Terrain type:		Level	**
Grade			%
Segment length			mi
Trucks and buses PCE,	EΤ	1.5	
Recreational vehicle P		1.2	
Heavy vehicle adjustme		0.917	
Driver population factor, fp		1,00	
Flow rate, vp		69	pc/h/ln
	Speed Inputs a	and Adjustments_	
Lane width		-	ft
Right-side lateral cle	arance		ft
Total ramp density, TR		-	ramps/mi
Number of lanes, N		2	
Free-flow speed:		Measured	
FFS or BFFS		70.0	mi/h
Lane width adjustment,		-	mi/h
Lateral clearance adju	stment, ILC	-	mi/h mi/h
TRD adjustment Free-flow speed, FFS		70.0	mi/h
Free-liow speed, FFS		70.0	111.7.11
	LOS and Perfo	rmance Measures_	
Flow rate, vp		69	pc/h/ln
Free-flow speed, FFS		70.0	mi/h
Average passenger-car	speed, S	70.0	mi/h
Number of lanes, N		2	/
Density, D		1.0	pc/mi/ln
Level of service, LOS		A	

Phone: E-mail:		Fax:		
	Operational Ar	nalysis		
Analyst:	Kimley-Horn & A	Assc., Inc.		
Agency or Company:	102207			
Date Performed:	ate Performed: 02/20/14			
Analysis Time Period:	od: PM Peak Hour			
Freeway/Direction:	I-580 WB			
From/To:	Corral Hollow/F	Rte132		
Jurisdiction:	Caltrans			
Analysis Year:	Cumulative			
Description:				
	Flow Inputs ar	nd Adjustments		
Volume, V		1245	veh/h	
Peak-hour factor, PHF		0.92	011, 11	
Peak 15-min volume, vl	5	338	V	
Trucks and buses	. •	18	્ર	
Recreational vehicles		0	o _j o	
Terrain type:		Level		
Grade		-	&	
Segment length		-	mi	
Trucks and buses PCE,	ET	1.5		
Recreational vehicle P		1.2		
Heavy vehicle adjustme		0.917		
Driver population factor, fp		1.00	pc/h/ln	
Flow rate, vp		738	pe/11/111	
	Speed Inputs	and Adjustments_		
Lane width		_	ft	
Right-side lateral cle	earance	-	ft	
Total ramp density, TR		-	ramps/mi	
Number of lanes, N		2		
Free-flow speed:		Measured		
FFS or BFFS		70.0	mi/h	
Lane width adjustment,		-	mi/h	
Lateral clearance adju	istment, fLC	_	mi/h mi/h	
TRD adjustment		70.0	mi/h	
Free-flow speed, FFS		70.0	M1/11	
	LOS and Perfo	rmance Measures_		
Flow rate, vp		738	pc/h/ln	
Free-flow speed, FFS		70.0	mi/h	
Average passenger-car	speed, S	70.0	mi/h	
Number of lanes, N		2		
Density, D		10.5	pc/mi/ln	
Level of service, LOS		A		

Phone: E-mail:		Fax:		
	Operational An	alysis		
Anna Irrat				
Analyst: Agency or Company: Date Performed: Analysis Time Period: Freeway/Direction: From/To: Jurisdiction: Analysis Year: Description:	Kimley-Horn & Assc., Inc. 02/20/14 PM Peak Hour I-580 EB I-205 Junction/Mountain House Caltrans Cumulative			
	Flow Inputs an	d Adjustments		
Volume, V Peak-hour factor, PHF Peak 15-min volume, v1! Trucks and buses Recreational vehicles Terrain type: Grade Segment length Trucks and buses PCE, Recreational vehicle PC	ET CE, ER	1972 0.92 536 18 0 Level - - 1.5 1.2	veh/h v % % % mi	
Heavy vehicle adjustment Driver population factor Flow rate, vp		1.00 1168	pc/h/ln	
Speed Inputs and Adjustments				
Lane width Right-side lateral clea Total ramp density, TRI Number of lanes, N Free-flow speed: FFS or BFFS Lane width adjustment, Lateral clearance adjustment Free-flow speed, FFS	O flw	- - 2 Measured 70.0 - - - 70.0	ft ft ramps/mi mi/h mi/h mi/h mi/h mi/h mi/h	
	LOS and Perfor	mance Measures		
Flow rate, vp Free-flow speed, FFS Average passenger-car Number of lanes, N Density, D Level of service, LOS	speed, S	1168 70.0 70.0 2 16.7 B	pc/h/ln mi/h mi/h pc/mi/ln	

Phone: E-mail:		Fax:		
	Operational An	nalysis		
Analyst:	Kimley-Horn & A	Assc., Inc.		
Agency or Company:	*			
Date Performed:	02/20/14			
Analysis Time Period: Freeway/Direction:	PM Peak Hour I-580 WB			
From/To:	I-205 Junction/	Mountain House		
Jurisdiction:	Caltrans			
Analysis Year: Description:	Cumulative			
	Flow Inputs ar	nd Adjustments		
Volume, V		1318	veh/h	
Peak-hour factor, PHF		0.92	•	
Peak 15-min volume, v1	5	358	V	
Trucks and buses		18	ફ	
Recreational vehicles		0	8	
Terrain type:		Level		
Grade			8	
Segment length			mi	
Trucks and buses PCE,		1.5		
Recreational vehicle PCE, ER		1.2 0.917		
Heavy vehicle adjustment, fHV		1.00		
Driver population factor, fp		781	pc/h/ln	
Flow rate, vp			-	
	Speed Inputs	and Adjustments		
Lane width		-	ft	
Right-side lateral cle	arance	-	ft	
Total ramp density, TR		-	ramps/mi	
Number of lanes, N		2		
Free-flow speed:		Measured		
FFS or BFFS		70.0	mi/h	
Lane width adjustment,			mi/h	
Lateral clearance adju	stment, fLC	_	mi/h	
TRD adjustment		- 70.0	mi/h mi/h	
Free-flow speed, FFS		70.0	111/11	
	LOS and Perfo	rmance Measures_		
Flow rate, vp		781	pc/h/ln	
Free-flow speed, FFS		70.0	mi/h	
Average passenger-car	speed, S	70.0	mi/h	
Number of lanes, N		2	/	
Density, D		11.2	pc/mi/ln	
Level of service, LOS		В		

Phone: E-mail:		Fax:		
	Onerational Ana	lveje		
	Operational Ana	туртр		
Analyst:	Kimley-Horn & As	ssc., Inc.		
Agency or Company:	00/00/74			
Date Performed:	02/20/14 DW Daals Hauss			
Analysis Time Period:	PM Peak Hour			
<pre>Freeway/Direction: From/To:</pre>	I-580 EB Mountain House/Lammers			
Jurisdiction:	Caltrans	idilili C D		
Analysis Year:	Cumulative			
Description:	2 3.	•		
	Flow Inputs and	l Adjustments		
	-			
Volume, V		2118	veh/h	
Peak-hour factor, PHF		0.92		
Peak 15-min volume, v15		576	V a.	
Trucks and buses		18	એ એ	
Recreational vehicles		0 Level	6	
Terrain type:		телет	٥ <u>٠</u>	
Grade		_	mi	
Segment length Trucks and buses PCE, I	יזיק	1.5	MII.	
Recreational vehicle Po		1.2		
Heavy vehicle adjustmen		0.917		
Driver population factor, fp		1.00		
Flow rate, vp		1255	pc/h/ln	
	Speed Inputs an	nd Adjustments		
			6.	
Lane width		-	ft	
Right-side lateral clea			ft	
Total ramp density, TRI)	2	ramps/mi	
Number of lanes, N		Z Measured		
Free-flow speed:		70.0	mi/h	
FFS or BFFS Lane width adjustment,	ft.W	-	mi/h	
Lateral clearance adjustment,		_	mi/h	
TRD adjustment	Jonicito, 1110	_	mi/h	
Free-flow speed, FFS		70.0	mi/h	
	LOS and Perfor	mance Measures		
		 -	(- 1-	
Flow rate, vp		1255	pc/h/ln	
Free-flow speed, FFS		70.0	mi/h	
Average passenger-car	speed, S	70.0	mi/h	
Number of lanes, N		2	pc/mi/ln	
Density, D		17.9 B	ρυ/ m1/ 111	
Level of service, LOS		D		

Phone: E-mail:		Fax:		
	Operational An	alysis		
Analyst:	Kimley-Horn & A	ssc., Inc.		
Agency or Company:	-			
Date Performed:	02/20/14			
Analysis Time Period:				
Freeway/Direction:	I-580 WB Mountain House/	Lammora		
From/To: Jurisdiction:	Caltrans	Lammers		
Analysis Year:	Cumulative			
Description:				
	Flow Inputs an	d Adjustments		
***- 1		1262	veh/h	
Volume, V Peak-hour factor, PHF		0.92	ven/n	
Peak 15-min volume, v1	-	343	v	
Trucks and buses	,	18	ે	
Recreational vehicles		0	ે	
Terrain type:		Level		
Grade		-	용	
Segment length		-	mi	
Trucks and buses PCE, I		1.5		
Recreational vehicle P	**	1.2		
Heavy vehicle adjustment, fHV		0.917		
Driver population factor, fp		1.00	/1- / 7	
Flow rate, vp		748	pc/h/ln	
	Speed Inputs a	ind Adjustments_		
Lane width		-	ft	
Right-side lateral cle	arance	-	ft	
Total ramp density, TR	D	-	ramps/mi	
Number of lanes, N		2		
Free-flow speed:		Measured	. 73	
FFS or BFFS	Car va	70.0	mi/h	
Lane width adjustment,		-	mi/h mi/h	
Lateral clearance adju TRD adjustment	stment, IIC	_	mi/h	
Free-flow speed, FFS		70.0	mi/h	
,	IOS and Darfor	rmance Measures		
	hob and Perior	rmance Measures_		
Flow rate, vp		748	pc/h/ln	
Free-flow speed, FFS		70.0	mi/h	
Average passenger-car	speed, S	70.0	mi/h	
Number of lanes, N		2		
Density, D		10.7	pc/mi/ln	
Level of service, LOS		А		

Phone: E-mail:		Fax:		
	Operational Ar	nalysis		
Analyst:	Kimley-Horn & A	Assc., Inc.		
Agency or Company:				
Date Performed:	02/20/14			
Analysis Time Period:				
Freeway/Direction:	I-580 EB Lammers/Corral	Hollow		
From/To: Jurisdiction:	Caltrans	HOTTOM		
Analysis Year:	Cumulative			
Description:				
	Flow Inputs ar	nd Adjustments		
Volume V		2103	veh/h	
Volume, V Peak-hour factor, PHF		0.92	Ve11/ 11	
Peak 15-min volume, vl	5	571	v	
Trucks and buses	J	18	જ	
Recreational vehicles		0	96	
Terrain type:		Level		
Grade		-	%	
Segment length		-	mi	
Trucks and buses PCE,	ET	1.5		
Recreational vehicle P	CE, ER	1.2		
Heavy vehicle adjustme		0.917		
Driver population fact	or, fp	1.00	17. 17.	
Flow rate, vp		1246	pc/h/ln	
	Speed Inputs	and Adjustments_		
Lane width		_	ft	
Right-side lateral cle	arance	-	ft	
Total ramp density, TR		<u></u>	ramps/mi	
Number of lanes, N		2		
Free-flow speed:		Measured		
FFS or BFFS		70.0	mi/h	
Lane width adjustment,		-	mi/h	
Lateral clearance adju	stment, fLC	•••	mi/h	
TRD adjustment		-	mi/h	
Free-flow speed, FFS		70.0	mi/h	
	LOS and Perfo	rmance Measures_		
Flow rate, vp		1246	pc/h/ln	
Free-flow speed, FFS		70.0	mi/h	
Average passenger-car	speed, S	70.0	mi/h	
Number of lanes, N		2		
Density, D		17.8	pc/mi/ln	
Level of service, LOS		В		

Phone: E-mail:		Fax:	
	Operational An	alysis	
Analyst: Agency or Company: Date Performed: Analysis Time Period: Freeway/Direction: From/To: Jurisdiction: Analysis Year:	Kimley-Horn & A 02/20/14 PM Peak Hour I-580 WB Lammers/Corral Caltrans Cumulative		
Description:			
	Flow Inputs ar	nd Adjustments	
Volume, V Peak-hour factor, PHF Peak 15-min volume, v1	5	1163 0.92 316	veh/h v
Trucks and buses Recreational vehicles Terrain type:		18 0 Level	o)o o o
Grade Segment length Trucks and buses PCE, Recreational vehicle P		- 1.5 1.2	mi
Heavy vehicle adjustme Driver population fact Flow rate, vp		0.917 1.00 689	pc/h/ln
	Speed Inputs	and Adjustments_	
Lane width Right-side lateral cle Total ramp density, TR Number of lanes, N Free-flow speed:		- - - 2 Measured	ft ft ramps/mi
FFS or BFFS Lane width adjustment, Lateral clearance adju TRD adjustment		70.0 - - -	mi/h mi/h mi/h mi/h
Free-flow speed, FFS		70.0	mi/h
	LOS and Perfo	rmance Measures_	
Flow rate, vp Free-flow speed, FFS Average passenger-car Number of lanes, N	speed, S	689 70.0 70.0 2	pc/h/ln mi/h mi/h
Density, D Level of service, LOS		9.8 A	pc/mi/ln

Phone: E-mail:		Fax:	
	Operational An	alysis	
Analyst: Agency or Company: Date Performed: Analysis Time Period: Freeway/Direction: From/To: Jurisdiction: Analysis Year: Description:	Kimley-Horn & A 02/20/14 PM Peak Hour I-580 EB Corral Hollow/R Caltrans Cumulative		
	Flow Inputs an	d Adjustments	
Volume, V Peak-hour factor, PHF Peak 15-min volume, v15 Trucks and buses	5	2537 0.92 689 18	veh/h v %
Recreational vehicles Terrain type: Grade		0 Level	% Mi
Segment length Trucks and buses PCE, I Recreational vehicle PC Heavy vehicle adjustment Driver population factor	CE, ER nt, fHV	1.5 1.2 0.917 1.00	
Flow rate, vp		1503	pc/h/ln
	Speed Inputs a	and Adjustments_	
Lane width Right-side lateral clea Total ramp density, TRI Number of lanes, N Free-flow speed: FFS or BFFS Lane width adjustment,	0	- - 2 Measured 70.0	ft ft ramps/mi mi/h mi/h
Lateral clearance adju- TRD adjustment Free-flow speed, FFS		- - 70.0	mi/h mi/h mi/h
	LOS and Perfor	rmance Measures_	
Flow rate, vp Free-flow speed, FFS Average passenger-car Number of lanes, N Density, D	speed, S	1503 70.0 68.9 2 21.8	pc/h/ln mi/h mi/h pc/mi/ln
Level of service, LOS		C C	Po/ mr/ 111

Phone: E-mail:		Fax:	
	Operational An	alysis	
Analyst: Agency or Company: Date Performed: Analysis Time Period: Freeway/Direction: From/To: Jurisdiction: Analysis Year: Description:	Kimley-Horn & A 02/20/14 AM Peak Hour I-580 WB Corral Hollow/R Caltrans Cumulative	te132	
	Flow Inputs an	d Adjustments	
Volume, V Peak-hour factor, PHF Peak 15-min volume, v1: Trucks and buses Recreational vehicles Terrain type: Grade Segment length Trucks and buses PCE, Recreational vehicle P Heavy vehicle adjustment Driver population fact Flow rate, vp	ET CE, ER nt, fhV	1545 0.92 420 18 0 Level - - 1.5 1.2 0.917 1.00 915	veh/h v % % % mi
	Speed Inputs a	and Adjustments_	
Lane width Right-side lateral cle Total ramp density, TR Number of lanes, N Free-flow speed: FFS or BFFS Lane width adjustment, Lateral clearance adju TRD adjustment Free-flow speed, FFS	fLW stment, fLC		ft ft ramps/mi mi/h mi/h mi/h mi/h mi/h
	LOS and Perior	rmance Measures_	
Flow rate, vp Free-flow speed, FFS Average passenger-car Number of lanes, N Density, D Level of service, LOS	speed, S	915 70.0 70.0 2 13.1 B	pc/h/ln mi/h mi/h pc/mi/ln

Phone: E-mail:		Fax:		
	Operational Ana	lysis		
Analyst:	Kimley-Horn & Assc., Inc.			
Agency or Company:	02/20/14			
Date Performed:	02/20/14 AM Peak Hour			
Analysis Time Period: Freeway/Direction:	I-580 EB			
From/To:	I-205 Junction/M	ountain House		
Jurisdiction:	Caltrans			
Analysis Year:	Cumulative+Proje	ct		
Description:	.			
-	Flow Inputs and	Adjustments		
	<u>*</u>		- (
Volume, V		345	veh/h	
Peak-hour factor, PHF		0.92		
Peak 15-min volume, v15		94	V	
Trucks and buses		18	્રે જ	
Recreational vehicles		0	6	
Terrain type:		Level	ે	
Grade		_	mi	
Segment length	, 	1.5	111.11.	
Trucks and buses PCE, Recreational vehicle PCE		1.2		
Heavy vehicle adjustmen		0.917		
Driver population factor		1.00		
Flow rate, vp	,-, -F	204	pc/h/ln	
-	Speed Inputs an	nd Adjustments		
Lane width		-	ft	
Right-side lateral clea		-	ft , .	
Total ramp density, TR)	_	ramps/mi	
Number of lanes, N		2		
Free-flow speed:		Measured	mi/h	
FFS or BFFS	ETW	70.0	mi/h mi/h	
Lane width adjustment,		<u></u>	mi/h	
Lateral clearance adju	sument, inc	_	mi/h	
TRD adjustment Free-flow speed, FFS		70.0	mi/h	
rice riow bpeca, rio				
	LOS and Perfort	mance Measures		
Flow rate, vp		204	pc/h/ln	
Free-flow speed, FFS		70.0	mi/h	
Average passenger-car	speed, S	70.0	mi/h	
Number of lanes, N		2	/ / / / 2	
Density, D		2.9	pc/mi/ln	
Level of service, LOS		A		

Phone: E-mail:		Fax:	
	Operational An	alysis	
Analyst: Agency or Company: Date Performed: Analysis Time Period: Freeway/Direction: From/To: Jurisdiction: Analysis Year: Description:	I-580 WB I-205 Junction/ Caltrans Cumulative+Proj	Mountain House ect	
	Flow inputs an	d Adjustments	
Volume, V Peak-hour factor, PHF Peak 15-min volume, v15 Trucks and buses Recreational vehicles Terrain type: Grade Segment length Trucks and buses PCE, R Recreational vehicle PC Heavy vehicle adjustment Driver population factor Flow rate, vp	ET EE, ER ht, fhV	1032 0.92 280 18 0 Level - - 1.5 1.2 0.917 1.00 611	veh/h v % % % mi pc/h/ln
	Speed Inputs a	and Adjustments	
Lane width Right-side lateral clea Total ramp density, TRI Number of lanes, N Free-flow speed: FFS or BFFS Lane width adjustment, Lateral clearance adjustment TRD adjustment Free-flow speed, FFS) flw	- - 2 Measured 70.0 - - - 70.0	ft ft ramps/mi mi/h mi/h mi/h mi/h mi/h mi/h
	LOS and Perfo	rmance Measures	
Flow rate, vp Free-flow speed, FFS Average passenger-car Number of lanes, N Density, D Level of service, LOS	speed, S	611 70.0 70.0 2 8.7 A	<pre>pc/h/ln mi/h mi/h pc/mi/ln</pre>

Phone: E-mail:		Fax:	
	Operational Ar	nalysis	
Analyst:	Kimley-Horn & A	Assc., Inc.	
Agency or Company: Date Performed: Analysis Time Period: Freeway/Direction: From/To: Jurisdiction: Analysis Year: Description:	02/20/14 AM Peak Hour I-580 EB Mountain House/ Caltrans Cumulative+Pro		
	Flow Inputs ar	nd Adjustments	
Volume, V Peak-hour factor, PHF Peak 15-min volume, v1! Trucks and buses	5	291 0.92 79 18	veh/h v %
Recreational vehicles Terrain type: Grade		0 Level -	ક mi
Segment length Trucks and buses PCE, Recreational vehicle Poly Heavy vehicle adjustment Driver population factor	CE, ER nt, fHV	1.5 1.2 0.917 1.00	шт
Flow rate, vp	-, - <u>-</u>	172	pc/h/ln
	Speed Inputs	and Adjustments_	
Lane width Right-side lateral cle Total ramp density, TR Number of lanes, N Free-flow speed:		- - - 2 Measured	ft ft ramps/mi
FFS or BFFS Lane width adjustment, Lateral clearance adju TRD adjustment Free-flow speed, FFS		70.0 - - - 70.0	mi/h mi/h mi/h mi/h mi/h
	LOS and Perfo	rmance Measures_	
Flow rate, vp Free-flow speed, FFS Average passenger-car Number of lanes, N Density, D	speed, S	172 70.0 70.0 2 2.5	pc/h/ln mi/h mi/h pc/mi/ln
Level of service, LOS		A	

Phone: E-mail:		Fax:	
is mall.			
	Operational An	alysis	
Analyst:	Kimley-Horn & Assc., Inc.		
Agency or Company:			
Date Performed:	02/20/14		
Analysis Time Period:	AM Peak Hour		
Freeway/Direction:	I-580 WB	<i>!</i>	
From/To:	Mountain House/	Lammers	
Jurisdiction:	Caltrans	inat	
Analysis Year: Description:	Cumulative+Proj	ject	
beset ip of our	77 T	. 3. 7. 3. d	
	Flow inputs ar	nd Adjustments	
Volume, V		1476	veh/h
Peak-hour factor, PHF		0.92	
Peak 15-min volume, v1	5	401	V
Trucks and buses		18	olo
Recreational vehicles		0	٥٥
Terrain type:		Level	
Grade		-	% .
Segment length		-	mi
Trucks and buses PCE,		1.5	
Recreational vehicle P		1.2	
Heavy vehicle adjustme		0.917	
Driver population fact	or, ip	1.00	
Flow rate, vp		874	pc/h/ln
	Speed Inputs a	and Adjustments_	
Lane width		_	ft
Right-side lateral cle	arance	-	ft
Total ramp density, TR		-	ramps/mi
Number of lanes, N		2	
Free-flow speed:		Measured	
FFS or BFFS		70.0	mi/h
Lane width adjustment,	flW	-	mi/h
Lateral clearance adju	stment, fLC		mi/h
TRD adjustment		-	mi/h
Free-flow speed, FFS		70.0	mi/h
	LOS and Perfo	rmance Measures_	
Flow rate, vp		874	pc/h/ln
Free-flow speed, FFS		70.0	mi/h
Average passenger-car	speed, S	70.0	mi/h
Number of lanes, N	-	2	
Density, D		12.5	pc/mi/ln
Level of service, LOS		В	

Phone: E-mail:		Fax:	
	Operational An	alysis	
Analyst: Agency or Company: Date Performed: Analysis Time Period: Freeway/Direction: From/To: Jurisdiction: Analysis Year: Description:	I-580 EB Lammers/Corral Caltrans Cumulative+Proj	Hollow ect	
	Flow Inputs an	d Adjustments	
Volume, V Peak-hour factor, PHF Peak 15-min volume, v1 Trucks and buses Recreational vehicles Terrain type: Grade Segment length Trucks and buses PCE, Recreational vehicle P Heavy vehicle adjustme Driver population fact Flow rate, vp	ET CE, ER nt, fHV	175 0.92 48 18 0 Level - - 1.5 1.2 0.917 1.00	veh/h v % % mi pc/h/ln
	Speed Inputs a	and Adjustments_	
Lane width Right-side lateral cle Total ramp density, TR Number of lanes, N Free-flow speed: FFS or BFFS Lane width adjustment, Lateral clearance adju TRD adjustment Free-flow speed, FFS	D fLW	- - 2 Measured 70.0 - - - 70.0	<pre>ft ft ramps/mi mi/h mi/h mi/h mi/h mi/h mi/h mi/h</pre>
	LOS and Perfor	rmance Measures_	
Flow rate, vp Free-flow speed, FFS Average passenger-car Number of lanes, N Density, D Level of service, LOS	speed, S	104 70.0 70.0 2 1.5 A	pc/h/ln mi/h mi/h pc/mi/ln

Phone: E-mail:		Fax:	
	Operational An	alysis	
Analyst:	Kimley-Horn & A	ssc., Inc.	
Agency or Company: Date Performed: Analysis Time Period: Freeway/Direction: From/To: Jurisdiction: Analysis Year: Description:	02/20/14 AM Peak Hour I-580 WB Lammers/Corral Caltrans Cumulative+Proj	ect	
	Flow Inputs an	d Adjustments	
Volume, V Peak-hour factor, PHF Peak 15-min volume, v15 Trucks and buses Recreational vehicles Terrain type: Grade Segment length Trucks and buses PCE, Recreational vehicle PCE Heavy vehicle adjustment Driver population fact	ET CE, ER nt, fHV	1064 0.92 289 18 0 Level - - 1.5 1.2 0.917 1.00 630	veh/h v % % mi pc/h/ln
Flow rate, vp			-
	Speed Inputs a	and Adjustments_	
Lane width Right-side lateral cle Total ramp density, TR Number of lanes, N Free-flow speed: FFS or BFFS Lane width adjustment, Lateral clearance adju TRD adjustment Free-flow speed, FFS	D flw	- - 2 Measured 70.0 - - - 70.0	ft ft ramps/mi mi/h mi/h mi/h mi/h mi/h
-	LOS and Perfo	rmance Measures_	
Flow rate, vp Free-flow speed, FFS Average passenger-car Number of lanes, N Density, D Level of service, LOS		630 70.0 70.0 2 9.0 A	pc/h/ln mi/h mi/h pc/mi/ln

Phone: E-mail:		Fax:	
	Operational Ana	alysis	
Analyst: Agency or Company: Date Performed: Analysis Time Period: Freeway/Direction: From/To: Jurisdiction: Analysis Year: Description:	Kimley-Horn & As 02/20/14 AM Peak Hour I-580 EB Corral Hollow/R Caltrans Cumulative+Proj Flow Inputs an	te132 ect	
	FIOW INDUCE AN	d Adjustments	
Volume, V Peak-hour factor, PHF Peak 15-min volume, v19 Trucks and buses Recreational vehicles Terrain type: Grade Segment length Trucks and buses PCE, Recreational vehicle PG Heavy vehicle adjustment Driver population factors	ET CE, ER nt, fHV	149 0.92 40 18 0 Level - - 1.5 1.2 0.917 1.00	veh/h v % % % mi pc/h/ln
	Speed Inputs a	nd Adjustments_	
Lane width Right-side lateral cle Total ramp density, TR Number of lanes, N Free-flow speed: FFS or BFFS Lane width adjustment, Lateral clearance adju TRD adjustment Free-flow speed, FFS	D fLW stment, fLC	- - 2 Measured 70.0 - - - 70.0	ft ft ramps/mi mi/h mi/h mi/h mi/h mi/h
	LOS and Perfor	rmance Measures_	
Flow rate, vp Free-flow speed, FFS Average passenger-car Number of lanes, N Density, D Level of service, LOS	speed, S	88 70.0 70.0 2 1.3 A	pc/h/ln mi/h mi/h pc/mi/ln

Phone: E-mail:		Fax:	
	Operational An	alysis	
Analyst: Agency or Company: Date Performed: Analysis Time Period: Freeway/Direction: From/To: Jurisdiction: Analysis Year: Description:	Kimley-Horn & A 02/20/14 AM Peak Hour I-580 WB Corral Hollow/R Caltrans Cumulative+Proj	te132	
	Flow Inputs an	d Adjustments	
Volume, V Peak-hour factor, PHF Peak 15-min volume, v1 Trucks and buses Recreational vehicles Terrain type: Grade Segment length Trucks and buses PCE, Recreational vehicle P Heavy vehicle adjustme Driver population fact Flow rate, vp	ET CE, ER nt, fHV	1611 0.92 438 18 0 Level - 1.5 1.2 0.917 1.00	veh/h v % % % mi pc/h/ln
	Speed Inputs a	and Adjustments_	
Lane width Right-side lateral cle Total ramp density, TR Number of lanes, N Free-flow speed: FFS or BFFS Lane width adjustment, Lateral clearance adju TRD adjustment Free-flow speed, FFS	.D flw	- - - 2 Measured 70.0 - - - 70.0	ft ft ramps/mi mi/h mi/h mi/h mi/h mi/h mi/h
	LOS and Perfo	rmance Measures_	
Flow rate, vp Free-flow speed, FFS Average passenger-car Number of lanes, N Density, D Level of service, LOS	speed, S	954 70.0 70.0 2 13.6 B	pc/h/ln mi/h mi/h pc/mi/ln

Phone: E-mail:		Fax:	
	Operational Ar	nalysis	
Analyst:	Kimley-Horn & A	Assc., Inc.	
Agency or Company:	-		
Date Performed:	02/20/14 PM Peak Hour		
Analysis Time Period: Freeway/Direction:	I-580 EB		
From/To:	I-205 Junction	Mountain House	
Jurisdiction:	Caltrans		
Analysis Year: Description:	Cumulative+Proj	ject	
	Flow Inputs ar	nd Adjustments	
Volume, V		2203	veh/h
Peak-hour factor, PHF		0.92	·
Peak 15-min volume, v1	5	599	V
Trucks and buses		18	ે
Recreational vehicles		0	o _t o
Terrain type:		Level	
Grade		-	%
Segment length		- 1.5	mi
Trucks and buses PCE,		1.5	
Recreational vehicle Personal Recreational Vehicle adjustment		0.917	
Driver population fact		1.00	
Flow rate, vp	01, Ip	1305	pc/h/ln
	Speed Inputs	and Adjustments_	
Lane width		_	ft
Right-side lateral cle	arance		£t
Total ramp density, TR		-	ramps/mi
Number of lanes, N		2	
Free-flow speed:		Measured	
FFS or BFFS	_	70.0	mi/h
Lane width adjustment,		-	mi/h
Lateral clearance adju	stment, ILC	-	mi/h mi/h
TRD adjustment Free-flow speed, FFS		70.0	mi/h
riee-liow speed, rrs			m1/ II
	LOS and Perfo	rmance Measures_	
Flow rate, vp		1305	pc/h/ln
Free-flow speed, FFS		70.0	mi/h
Average passenger-car	speed, S	69.9	mi/h
Number of lanes, N		2	
Density, D		18.7 C	pc/mi/ln
Level of service, LOS			

Phone:		Fax:	
E-mail:	4		
	Operational Ana	alveje	
	Operacional And	x1 y 5 1 5	
Analyst:	Kimley-Horn & As	esc., Inc.	
Agency or Company:	1 1		
Date Performed:	02/20/14		
Analysis Time Period:	PM Peak Hour I-580 WB		
Freeway/Direction: From/To:	I-205 Junction/N	Mountain House	
Jurisdiction:	Caltrans	Journalli House	
Analysis Year:	Cumulative+Proje	ect	
Description:	•		
	Flow Inputs and	d Adjustments	
	_		- 4-
Volume, V		1487	veh/h
Peak-hour factor, PHF		0.92	
Peak 15-min volume, v15)	404	V %
Trucks and buses Recreational vehicles		18 0	ું જે જે
Terrain type:		Level	o
Grade		-	ે
Segment length		-	mi
Trucks and buses PCE, I	CT	1.5	
Recreational vehicle Po		1.2	
Heavy vehicle adjustmen	ıt, fHV	0.917	
Driver population factor	or, fp	1.00	42. 42
Flow rate, vp		881	pc/h/ln
	Speed Inputs a	nd Adjustments	
Lane width		-	ft
Right-side lateral clea	arance	_	ft
Total ramp density, TRI		-	ramps/mi
Number of lanes, N		2	
Free-flow speed:		Measured	
FFS or BFFS		70.0	mi/h
Lane width adjustment,		-	mi/h
Lateral clearance adjus	stment, fLC	_	mi/h
TRD adjustment		70.0	mi/h mi/h
Free-flow speed, FFS		70.0	1117 11
	LOS and Perfor	mance Measures	
Flow rate, vp		881	pc/h/ln
Free-flow speed, FFS		70.0	mi/h
Average passenger-car	speed, S	70.0	mi/h
Number of lanes, N		2	
Density, D		12.6	pc/mi/ln
Level of service, LOS		В	

Phone: E-mail:		Fax:	
	Operational An	alysis	
Freeway/Direction: From/To:	Analyst: Kimley-Horn & Assc., Inc. Agency or Company: Date Performed: 02/20/14 Analysis Time Period: PM Peak Hour Freeway/Direction: I-580 EB		
Jurisdiction: Analysis Year: Description:	Caltrans Cumulative+Proj	ect	
	Flow Inputs an	d Adjustments	
Volume, V Peak-hour factor, PHF Peak 15-min volume, v1	5	2770 0.92 753	veh/h
Trucks and buses Recreational vehicles Terrain type:		18 0 Level	o o o o o o
Grade Segment length Trucks and buses PCE,	ET	- - 1.5	% mi
Recreational vehicle Positive Reavy vehicle adjustment Driver population fact	nt, fHV	1.2 0.917 1.00	
Flow rate, vp		1641	pc/h/ln
	Speed Inputs a	and Adjustments_	
Lane width Right-side lateral cle Total ramp density, TR Number of lanes, N Free-flow speed:		- - - 2 Measured	ft ft ramps/mi
FFS or BFFS Lane width adjustment, Lateral clearance adju TRD adjustment Free-flow speed, FFS		70.0 - - - 70.0	mi/h mi/h mi/h mi/h mi/h
riee-liow speed, rib	LOS and Perfor	cmance Measures	
Flow rate, vp Free-flow speed, FFS Average passenger-car Number of lanes, N Density, D		1641 70.0 67.7 2 24.2	pc/h/ln mi/h mi/h pc/mi/ln
Level of service, LOS		C	

Analyst: Kimley-Horn & Assc., Inc. Agency or Company: Date Performed: 02/20/14 Analysis Time Period: PM Peak Hour Freeway/Direction: 1-580 MB From/To: Mountain House/Lammers Jurisdiction: Caltrans Analysis Year: Cumulative+Project Description: Flow Inputs and Adjustments	Phone: E-mail:		Fax:	
Agency or Company: Date Performed: 02/20/14 Analysis Time Period: PM Peak Hour Freeway/Direction: I-580 WB Prom/To: Mountain House/Lammers Jurisdiction: Caltrans Analysis Year: Cumulative+Project Description: Flow Inputs and Adjustments Volume, V Peak 15-min volume, v15 500 v Trucks and buses 18 % Recreational vehicles 0 % Terrain type: Level % Grade - mi Terrain type: Level % Grade - mi Trucks and buses PCE, ET 1.5 Receptional vehicle PCE, ER 1.2 Heavey vehicle adjustment, fHV 0.917 Driver population factor, fp 1.00 Plow rate, vp 1089 pc/h/ln Speed Inputs and Adjustments Lane width - ft </td <td></td> <td>Operational An</td> <td>alysis</td> <td></td>		Operational An	alysis	
Date Performed: Analysis Time Period: PM Peak Hour Froway/Direction: I-580 WB From/To: Jurisdiction: Caltrams Analysis Year: Description: Flow Inputs and Adjustments Volume, V Peak-hour factor, PHF Peak 15-min volume, v15 Trucks and buses Recreational vehicles Terrain type: Grade Segment length Trucks and buses PCE, ET Recreational vehicle PCE, ER Heavy vehicle adjustment, fHV Diver population factor, fp Flow rate, vp Free-flow speed: FS or BFFS Lane width adjustment, fLW Lateral clearance adjustment, fLC TRD adjustment FLOS and Performance Measures FLOS and Performance FLOS mi/h Average passenger-car speed, 5 Popemin In 5. Recreation beasures FLOS mi/h Pree-flow speed, FFS PO 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Analyst:	Kimley-Horn & A	ssc., Inc.	
### Procedure PM Peak Hour Freeway/Direction: I-580 WB From/To: Mountain House/Lammers Caltrams Calt	-			
Freeway/Direction:				
From/To: Mountain House/Lammers Jurisdiction: Caltrans	· ·			
Jurisdiction: Caltrans Analysis Year: Cumulative+Project	***		T	
### Analysis Year: Cumulative+Project Description:	· · · · · · · · · · · · · · · · · · ·		Lammers	
Plow Inputs and Adjustments			ect	
Plow Inputs and Adjustments		Camaracrycriroj		
Volume, V 1839 veh/h Peak-hour factor, PHF 0.92 veh/h Peak 15-min volume, v15 500 v Trucks and buses 18 % Recreational vehicles 0 % Terrain type: Level Grade - % Segment length - mi mi Trucks and buses PCE, ET 1.5 Recreational vehicle PCE, ER 1.2 Heavy vehicle adjustment, fHW 0.917 Driver population factor, fp 1.00 Plow rate, vp pc/h/ln Province ramps/mi Driver population factor, fp 1.00 Plow rate, vp pc/h/ln Province ramps/mi Province	bobolipelon.			
Peak hour factor, PHF 0.92 Peak 15-min volume, v15 500 v Trucks and buses 18 % Recreational vehicles 0 % Terrain type: Level % Grade - % Segment length - mi Trucks and buses PCE, ET 1.5 Recreational vehicle PCE, ER Heavy vehicle adjustment, fHV 0.917 Op17 Driver population factor, fp 1.00 pc/h/ln Flow rate, vp 1089 pc/h/ln Speed Inputs and Adjustments Lane width - ft Right-side lateral clearance - ft Total ramp density, TRD - ramps/mi Number of lanes, N 2 Free-flow speed: Measured mi/h Free-flow speed: Measured mi/h Los and Performance Measures mi/h Los and Performance Measures Flow rate, vp 1089 pc/h/ln Free-flow speed, FFS 70.0 mi/h <td></td> <td>Flow Inputs an</td> <td>d Adjustments</td> <td></td>		Flow Inputs an	d Adjustments	
Peak hour factor, PHF 0.92 Peak 15-min volume, v15 500 v Trucks and buses 18 % Recreational vehicles 0 % Terrain type: Level % Grade - % Segment length - mi Trucks and buses PCB, ET 1.5 Recreational vehicle PCE, ER Heavy vehicle adjustment, fHV 0.917 Driver population factor, fp 1.00 Flow rate, vp 1089 pc/h/ln Speed Inputs and Adjustments Lane width - ft Right-side lateral clearance - ft Total ramp density, TRD - ramps/mi Number of lanes, N 2 Free-flow speed: Measured mi/h Lane width adjustment, fLW - mi/h Lateral clearance adjustment, fLC - mi/h Tree-flow speed, FFS 70.0 mi/h Tree-flow speed, FFS 70.0 mi/h LOS and Performance Measures T	Volume. V		1839	veh/h
Peak 15-min volume, v15 Trucks and buses 18 Recreational vehicles 0 Terrain type: Grade - 8 Segment length - mi Trucks and buses PCE, ET 1.5 Recreational vehicle PCR, ER 1.2 Heavy vehicle adjustment, fHV 0.917 Driver population factor, fp 1.00 Flow rate, vp 1089 pc/h/ln Speed Inputs and Adjustments Lane width - ft ft ramps/mi Number of lanes, N 2 Free-flow speed: Measured FFS or BFFS 70.0 mi/h Lateral clearance adjustment, fLC - mi/h TRD adjustment - mi/h Free-flow speed, FFS 70.0 mi/h LOS and Performance Measures Flow rate, vp 1089 pc/h/ln LOS and Performance Measures Flow rate, vp 1089 pc/h/ln LOS and Performance Measures Flow rate, vp FFS 70.0 mi/h Average passenger-car speed, S 70.0 mi/h Number of lanes, N 2 Pree-flow speed, FFS 70.0 mi/h Number of lanes, N 2 Flow rate, vp FFS 70.0 mi/h Average passenger-car speed, S 70.0 mi/h Number of lanes, N 2 Density, D 15.6 pc/mi/ln			0.92	·
Recreational vehicles)	500	V
Terrain type: Grade Segment length Trucks and buses PCE, ET Recreational vehicle PCE, ER Heavy vehicle adjustment, fHV Driver population factor, fp Flow rate, vp Speed Inputs and Adjustments Lane width Right-side lateral clearance Total ramp density, TRD Number of lanes, N Speed Inputs and Adjustments Ameasured FFS or BFFS And Measured FFS or BFFS And M	Trucks and buses		18	⁹
Grade - %	Recreational vehicles		0	ૄ
Segment length - mi Trucks and buses PCE, ET			Level	
Trucks and buses PCE, ET Recreational vehicle PCE, ER Heavy vehicle adjustment, fHV Driver population factor, fp Flow rate, vp Lane width Right-side lateral clearance Total ramp density, TRD Free-flow speed: FFS or BFFS Aumidity Lateral clearance adjustment, fLW Lateral clearance adjustment, fLC TOTAL adjustment, fLW Lateral clearance adjustment, fLC TOTAL adjustment Free-flow speed, FFS TOU LOS and Performance Measures Flow rate, vp Flow rate, vp			-	* .
Recreational vehicle PCE, ER 1.2 Heavy vehicle adjustment, fHV 0.917 Driver population factor, fp 1.00 Flow rate, vp 1089 pc/h/ln Speed Inputs and Adjustments Lane width - ft Right-side lateral clearance - ft Total ramp density, TRD - ramps/mi Number of lanes, N 2 Free-flow speed: Measured FFS or BFFS 70.0 mi/h Lane width adjustment, fLW - mi/h Lateral clearance adjustment, fLC - mi/h TRD adjustment - mi/h Free-flow speed, FFS 70.0 mi/h LOS and Performance Measures Flow rate, vp 1089 pc/h/ln Free-flow speed, FFS 70.0 mi/h Average passenger-car speed, S 70.0 mi/h Number of lanes, N 2 Density, D 15.6 pc/mi/ln	-	3 173	- 1 E	m1.
Heavy vehicle adjustment, fHV 0.917 Driver population factor, fp 1.00 Flow rate, vp 1089 pc/h/ln Speed Inputs and Adjustments Lane width Figure 1 1.00 Speed Inputs and Adjustments Lane width Figure 1 1.00 Speed Inputs and Adjustments In the speed 1 1.00 Fit ft 1.00 Fit				
Driver population factor, fp Flow rate, vp Speed Inputs and Adjustments Lane width Right-side lateral clearance Total ramp density, TRD Number of lanes, N Free-flow speed: FFS or BFFS FFS Total ramidation flu Lateral clearance adjustment, fLW Lateral clearance adjustment, fLC TRD adjustment Free-flow speed, FFS Total ramidation flu Lateral clearance mi/h Lateral clearance mi/h TRD adjustment Free-flow speed, FFS Total ramidation flu Los and Performance Measures Flow rate, vp Free-flow speed, FFS Total flu Los and Performance Measures Flow rate, vp Free-flow speed, FFS Total ramidation flu Los and Performance Measures Flow rate, vp Free-flow speed, FFS Total ramps/mi Mi/h TRD adjustment Total ramps/mi Measured Total ramps/mi Measured Total ramps/mi Mi/h Mi/h TRD adjustment Total ramps/mi Measured Total ramps/mi Measured Total ramps/mi Mi/h Mi/h TRD adjustment Total ramps/mi Measured Total ramps/mi Mi/h Mi/h TRD adjustment Total ramps/mi Mi/h Mi/h TRD adjustment Total ramps/mi Mi/h Mi/h TRD adjustment Total ramps/mi Mi/h Mi/h Mi/h Mi/h Mi/h Mi/h Mi/h Mi/				
Flow rate, vp 1089 pc/h/ln Speed Inputs and Adjustments Lane width Right-side lateral clearance - ft Total ramp density, TRD - ramps/mi Number of lanes, N 2 Free-flow speed: Measured FFS or BFFS 70.0 mi/h Lateral clearance adjustment, fLW - mi/h Lateral clearance adjustment, fLC - mi/h TRD adjustment - mi/h Free-flow speed, FFS 70.0 mi/h LOS and Performance Measures Flow rate, vp 1089 pc/h/ln Free-flow speed, FFS 70.0 mi/h Average passenger-car speed, S 70.0 mi/h Number of lanes, N 2 Density, D 15.6 pc/mi/ln				
Lane width Right-side lateral clearance Total ramp density, TRD Number of lanes, N Free-flow speed: FFS or BFFS Ane width adjustment, fLW Lateral clearance adjustment, fLC TRD adjustment Free-flow speed, FFS Flow rate, vp Free-flow speed, FFS Average passenger-car speed, S Number of lanes, N Pensity, D Speed Inputs and Adjustments ft ft ft ft ft ft TRD Adjustment Free-flow speed: Measured Fit Fit Free-flow speed, FFS Flow rate, vp Flow rate, vp Free-flow speed, FFS Flow rate, vp Flow rate, v		-, -F		pc/h/ln
Lane width Right-side lateral clearance - ft Total ramp density, TRD - ramps/mi Number of lanes, N 2 Free-flow speed: Measured FFS or BFFS 70.0 mi/h Lateral clearance adjustment, fLW - mi/h TRD adjustment - mi/h Free-flow speed, FFS 70.0 mi/h LOS and Performance Measures Flow rate, vp 1089 pc/h/ln Free-flow speed, FFS 70.0 mi/h Average passenger-car speed, S 70.0 mi/h Number of lanes, N 2 Density, D 15.6 pc/mi/ln				
Right-side lateral clearance - ft Total ramp density, TRD - ramps/mi Number of lanes, N 2 Free-flow speed: Measured FFS or BFFS 70.0 mi/h Lane width adjustment, fLW - mi/h Lateral clearance adjustment, fLC - mi/h TRD adjustment - mi/h Free-flow speed, FFS 70.0 mi/h LOS and Performance Measures Flow rate, vp 1089 pc/h/ln Free-flow speed, FFS 70.0 mi/h Average passenger-car speed, S 70.0 mi/h Number of lanes, N 2 Density, D 15.6 pc/mi/ln		Speed Inputs a	nd Adjustments	
Total ramp density, TRD - ramps/mi Number of lanes, N 2 Free-flow speed: Measured FFS or BFFS 70.0 mi/h Lane width adjustment, fLW - mi/h Lateral clearance adjustment, fLC - mi/h TRD adjustment - mi/h Free-flow speed, FFS 70.0 mi/h LOS and Performance Measures Flow rate, vp 1089 pc/h/ln Free-flow speed, FFS 70.0 mi/h Average passenger-car speed, S 70.0 mi/h Number of lanes, N 2 Density, D 15.6 pc/mi/ln	Lane width		m	ft
Total ramp density, TRD - ramps/mi Number of lanes, N 2 Free-flow speed: Measured FFS or BFFS 70.0 mi/h Lane width adjustment, fLW - mi/h Lateral clearance adjustment, fLC - mi/h TRD adjustment - mi/h Free-flow speed, FFS 70.0 mi/h LOS and Performance Measures Flow rate, vp 1089 pc/h/ln Free-flow speed, FFS 70.0 mi/h Average passenger-car speed, S 70.0 mi/h Number of lanes, N 2 Density, D 15.6 pc/mi/ln	Right-side lateral clea	arance	-	ft
Free-flow speed: FFS or BFFS 70.0 mi/h Lane width adjustment, fLW Lateral clearance adjustment, fLC TRD adjustment Free-flow speed, FFS LOS and Performance Measures Flow rate, vp Free-flow speed, FFS 70.0 LOS and Performance Measures Flow rate, vp Free-flow speed, FFS 70.0 mi/h Average passenger-car speed, S Number of lanes, N Density, D Measured mi/h mi/h 70.0 mi/h 70.0 mi/h 70.0 pc/mi/ln	Total ramp density, TR)	<u> </u>	ramps/mi
FFS or BFFS 70.0 mi/h Lane width adjustment, fLW - mi/h Lateral clearance adjustment, fLC - mi/h TRD adjustment - mi/h Free-flow speed, FFS 70.0 mi/h LOS and Performance Measures Flow rate, vp 1089 pc/h/ln Free-flow speed, FFS 70.0 mi/h Average passenger-car speed, S 70.0 mi/h Number of lanes, N 2 Density, D 15.6 pc/mi/ln				
Lane width adjustment, fLW - mi/h Lateral clearance adjustment, fLC - mi/h TRD adjustment - mi/h Free-flow speed, FFS 70.0 mi/h LOS and Performance Measures Flow rate, vp 1089 pc/h/ln Free-flow speed, FFS 70.0 mi/h Average passenger-car speed, S 70.0 mi/h Number of lanes, N 2 Density, D 15.6 pc/mi/ln				
Lateral clearance adjustment, fLC - mi/h TRD adjustment - mi/h Free-flow speed, FFS 70.0 mi/h LOS and Performance Measures Flow rate, vp 1089 pc/h/ln Free-flow speed, FFS 70.0 mi/h Average passenger-car speed, S 70.0 mi/h Number of lanes, N 2 Density, D 15.6 pc/mi/ln		54	70.0	
TRD adjustment Free-flow speed, FFS LOS and Performance Measures Flow rate, vp Free-flow speed, FFS 70.0 mi/h pc/h/ln Free-flow speed, FFS 70.0 Average passenger-car speed, S Number of lanes, N Density, D mi/h pc/mi/ln			ALA.	
Free-flow speed, FFS LOS and Performance Measures Flow rate, vp Free-flow speed, FFS Average passenger-car speed, S Number of lanes, N Density, D TO.0 mi/h 70.0 mi/h 70.0 mi/h 70.0 pc/mi/ln		stment, ilc	_	
LOS and Performance Measures Flow rate, vp	-		70 O	-
Flow rate, vp 1089 pc/h/ln Free-flow speed, FFS 70.0 mi/h Average passenger-car speed, S 70.0 mi/h Number of lanes, N 2 Density, D 15.6 pc/mi/ln	riee-liow speed, iis		,	1117 11
Free-flow speed, FFS 70.0 mi/h Average passenger-car speed, S 70.0 mi/h Number of lanes, N 2 Density, D 15.6 pc/mi/ln		LOS and Perfor	mance Measures	
Free-flow speed, FFS 70.0 mi/h Average passenger-car speed, S 70.0 mi/h Number of lanes, N 2 Density, D 15.6 pc/mi/ln	Flow rate un		1089	pc/h/ln
Average passenger-car speed, S 70.0 mi/h Number of lanes, N 2 Density, D 15.6 pc/mi/ln	——————————————————————————————————————			
Number of lanes, N 2 Density, D 15.6 pc/mi/ln	-	speed, S		
Density, D 15.6 pc/mi/ln		<u>-</u> ,		•
			15.6	pc/mi/ln
•	Level of service, LOS		В	

Phone: E-mail:		Fax:	
	Operational Ar	nalysis	
Analyst:	Kimley-Horn & A	Assc., Inc.	
Agency or Company: Date Performed:	02/20/14		
Analysis Time Period:	PM Peak Hour		
Freeway/Direction:	I-580 EB		
From/To:	Lammers/Corral	Hollow	
Jurisdiction:	Caltrans		
Analysis Year: Description:	Cumulative+Pro	ject	
	Flow Inputs an	nd Adjustments	
Volume, V		2350	veh/h
Peak-hour factor, PHF		0.92	,
Peak 15-min volume, v1	5	639	v
Trucks and buses		18	ે
Recreational vehicles		0	8
Terrain type:		Level	n
Grade		-	95
Segment length	nm	- 1.5	mi.
Trucks and buses PCE, Recreational vehicle P		1.2	
Heavy vehicle adjustmen		0.917	
Driver population fact		1.00	
Flow rate, vp	, - <u>-</u> -	1392	pc/h/ln
	Speed Inputs	and Adjustments_	
Lane width		<u>-</u>	ft
Right-side lateral cle	arance	_	ft
Total ramp density, TR		-	ramps/mi
Number of lanes, N		2	
Free-flow speed:		Measured	
FFS or BFFS		70.0	mi/h
Lane width adjustment,		-	mi/h
Lateral clearance adju	stment, fLC	-	mi/h mi/h
TRD adjustment		70.0	mi/h mi/h
Free-flow speed, FFS		70.0	1112/11
	LOS and Perfo	rmance Measures_	
Flow rate, vp		1392	pc/h/ln
Free-flow speed, FFS		70.0	mi/h
Average passenger-car	speed, S	69.6	mi/h
Number of lanes, N		2	4 1 47
Density, D		20.0	pc/mi/ln
Level of service, LOS		С	

Phone: E-mail:		Fax:	
	Operational An	alysis	
Analyst:	Kimley-Horn & A	ssc., Inc.	
Agency or Company: Date Performed: Analysis Time Period: Freeway/Direction: From/To: Jurisdiction: Analysis Year: Description:	02/20/14 PM Peak Hour I-580 WB Lammers/Corral Caltrans Cumulative+Proj		
	Flow Inputs an	d Adjustments	
Volume, V Peak-hour factor, PHF	-	1345 0.92 365	veh/h v
Peak 15-min volume, v1 Trucks and buses Recreational vehicles	5	18 0	\$ \$6 \$6
Terrain type: Grade Segment length		Level - -	% mi
Trucks and buses PCE, Recreational vehicle F Heavy vehicle adjustme	CE, ER ent, fHV	1.5 1.2 0.917 1.00	
Driver population fact Flow rate, vp	or, ip	797	pc/h/ln
	Speed Inputs a	and Adjustments_	
Lane width Right-side lateral cle Total ramp density, TR Number of lanes, N Free-flow speed:		- - 2 Measured	ft ft ramps/mi mi/h
FFS or BFFS Lane width adjustment, Lateral clearance adju TRD adjustment Free-flow speed, FFS	, fLW ıstment, fLC	70.0 - - - 70.0	mi/h mi/h mi/h mi/h
	LOS and Perfo	rmance Measures	
Flow rate, vp Free-flow speed, FFS Average passenger-car Number of lanes, N Density, D Level of service, LOS		797 70.0 70.0 2 11.4 B	pc/h/ln mi/h mi/h pc/mi/ln

Phone: E-mail:		Fax:	
	Operational Ana	alysis	
Analyst: Agency or Company: Date Performed: Analysis Time Period: Freeway/Direction: From/To: Jurisdiction: Analysis Year: Description:	Kimley-Horn & As 02/20/14 PM Peak Hour I-580 EB Corral Hollow/Rs Caltrans Cumulative+Proje	te132 ect	
	Flow Inputs and	d Adjustments	
Volume, V Peak-hour factor, PHF Peak 15-min volume, v15 Trucks and buses Recreational vehicles Terrain type: Grade Segment length		2656 0.92 722 18 0 Level	veh/h v % % % mi
Trucks and buses PCE, E Recreational vehicle PC Heavy vehicle adjustment Driver population factor Flow rate, vp	E, ER t, fHV	1.5 1.2 0.917 1.00 1573	pc/h/ln
	Speed Inputs a	nd Adjustments_	
Lane width Right-side lateral clea Total ramp density, TRI Number of lanes, N Free-flow speed: FFS or BFFS Lane width adjustment, Lateral clearance adjustment	flW	- - 2 Measured 70.0 - -	ft ft ramps/mi mi/h mi/h mi/h mi/h mi/h
Free-flow speed, FFS		70.0	mi/h
	LOS and Perfor	mance Measures_	
Flow rate, vp Free-flow speed, FFS Average passenger-car Number of lanes, N Density, D Level of service, LOS	speed, S	1573 70.0 68.4 2 23.0 C	pc/h/ln mi/h mi/h pc/mi/ln

Phone: E-mail:		Fax:	
	Operational Ar	nalysis	
Analyst: Agency or Company: Date Performed:	Kimley-Horn & <i>F</i>	Assc., Inc.	
Analysis Time Period: Freeway/Direction:	PM Peak Hour I-580 WB		
From/To:	Corral Hollow/F	Rte132	
Jurisdiction: Analysis Year: Description:	Caltrans Cumulative+Pro	ject	
	Flow Inputs ar	nd Adjustments	
Volume, V		1307	veh/h
Peak-hour factor, PHF		0.92	
Peak 15-min volume, v1	.5	355	V
Trucks and buses		18	ક
Recreational vehicles		0	8
Terrain type:		Level	ક
Grade		_	mi
Segment length	ביתי	- 1.5	шт
Trucks and buses PCE, Recreational vehicle F		1.2	
Heavy vehicle adjustme		0.917	
Driver population fact		1.00	
Flow rate, vp	.01, 15	774	pc/h/ln
	Speed Inputs	and Adjustments_	
Lane width		_	ft
Right-side lateral cle	earance	_	ft
Total ramp density, TF		_	ramps/mi
Number of lanes, N		2	,
Free-flow speed:		Measured	
FFS or BFFS		70.0	mi/h
Lane width adjustment,	, flw	-	mi/h
Lateral clearance adju		-	mi/h
TRD adjustment		-	mi/h
Free-flow speed, FFS		70.0	mi/h
	LOS and Perfo	rmance Measures_	
Flow rate, vp		774	pc/h/ln
Free-flow speed, FFS		70.0	mi/h
Average passenger-car	speed, S	70.0	mi/h
Number of lanes, N		2	,
Density, D		11.1	pc/mi/ln
Level of service, LOS		В	

		Fax:	
Phone:			
E-mail:	omentional Ana	lysis	
	 -		
Analyst:	Kimley-Horn & As	sc., Inc.	
Agency or Company:	100/14		
Date Performed:	02/20/14 AM Peak Hour		
Analysis Time Period:	O ED		
Freeway/Direction:	I-205 Junction/M	Mountain House	
From/To: Jurisdiction:	Caltrans		
Analysis Year:	Cumulative+Build	iouc	
Description:			
	Flow Inputs and	d Adjustments	
		410	veh/h
Volume, V		0.92	
peak-hour factor, PHF		111	V
Peak 15-min volume, V.	15	18	96
Trucks and buses		0	%
Recreational vehicles		Level	%
Terrain type:		· -	mi
Grade Segment length		- 1 F	m2
marks and buses PCE,	ET	1.5 1.2	
	PCE, EX	0.917	
	ienc, Liiv	1.00	45 47
Driver population rac	ctor, ip	243	pc/h/ln
Flow rate, vp			
	Speed Inputs	and Adjustments	
	_	-	ft
Lane width		-	ft
night gide lateral C	learance	-	ramps/mi
Total ramp density,	TKD	2	
Number of lanes, N		Measured	mi/h
Free-flow speed: FFS or BFFS		70.0	mi/h
	ıt, fLW	-	mi/h
Lateral clearance ac	ljustment, fLC	-	mi/h
mph adjustment		70.0	mi/h
Free-flow speed, FFS	S		
	LOS and Perf	ormance Measures_	
		243	pc/h/ln
Flow rate, vp		70.0	mi/h
- Flow cheed. FF	S	70.0	mi/h
Average passenger-c	ar speed, s	2	/mi /ln
Number of lanes, N		3.5	pc/mi/ln
nangity. D	.OS	A	
Level of service, I	100		

Phone: E-mail:		Fax:	
	Operational Ana	lysis	
Analyst:	Kimley-Horn & As	sc., Inc.	
Agency or Company: Date Performed: Analysis Time Period:	02/20/14 AM Peak Hour		
Freeway/Direction: From/To:	I-580 WB I-205 Junction/M	ountain House	
Jurisdiction: Analysis Year: Description:	Caltrans Cumulative+Build		
	Flow Inputs and	Adjustments	
		1075	veh/h
Volume, V Peak-hour factor, PHF		0.92 292	V
Peak 15-min volume, vi Trucks and buses	L5	18	એ એ
Recreational vehicles Terrain type:		Level -	%
Grade Segment length Trucks and buses PCE,	ET	- 1.5 1.2	mí
Recreational vehicle	ent, fHV	0.917 1.00	
Driver population factor flow rate, vp	tor, ip	637	pc/h/ln
	Speed Inputs	and Adjustments	
Lane width		-	ft ft
Right-side lateral control Total ramp density,	Learance TRD	- 2	ramps/mi
Number of lanes, N Free-flow speed:		Measured 70.0	mi/h
FFS or BFFS Lane width adjustmen Lateral clearance ad	t, fLW justment, fLC	-	mi/h mi/h
TRD adjustment Free-flow speed, FFS		70.0	mi/h mi/h
1100		ormance Measures	5
77		637	pc/h/ln mi/h
Flow rate, vp Free-flow speed, FFS Average passenger-ca	S ar speed, S	70.0 70.0	mi/h
Number of lanes, N Density, D Level of service, L		2 9.1 A	pc/mi/ln

Phone: E-mail:		Fax:	
	Operational Ar	nalvsis	
			
Analyst:			
Agency or Company: Date Performed:	02/20/14		
Analysis Time Period:			
Freeway/Direction:	I-580 EB		
From/To:	Mountain House/	Lammers	
Jurisdiction:	Caltrans		
Analysis Year:	Cumulative+Buil	Ldout	
Description:			
	Flow Inputs ar	nd Adjustments	
Volume, V		338	veh/h
Peak-hour factor, PHF		0.92	V C11/ 11
Peak 15-min volume, v1	5	92	v
Trucks and buses		18	ે
Recreational vehicles		0	ે
Terrain type:		Level	
Grade		_	%
Segment length		-	mi
Trucks and buses PCE,		1.5	
Recreational vehicle Policy Reavy vehicle adjustment		1.2 0.917	
Driver population factor		1.00	
Flow rate, vp	51, IP	200	pc/h/ln
	Speed Inputs a	and Adjustments	
	+	<u> </u>	
Lane width		-	ft
Right-side lateral cle		-	ft
Total ramp density, TRI Number of lanes, N		- 2	ramps/mi
Free-flow speed:		Measured	
FFS or BFFS		70.0	mi/h
Lane width adjustment,	fLW	***	mi/h
Lateral clearance adju		-	mi/h
TRD adjustment		-	mi/h
Free-flow speed, FFS	•	70.0	mi/h
	LOS and Perfor	rmance Measures_	
Flow rate, vp		200	pc/h/ln
Free-flow speed, FFS		70.0	mi/h
Average passenger-car	speed, S	70.0	mi/h
Number of lanes, N	= '	2	
Density, D		2.9	pc/mi/ln
Level of service, LOS		A	

Phone: E-mail:		Fax:		
	Operational A	nalysis		<u>.</u>
Analyst:	Kimley-Horn &	Assc., Inc.		
Agency or Company:	1	,		
Date Performed:	02/20/14			
Analysis Time Period:				
Freeway/Direction:	I-580 WB			
From/To:	Mountain House	/Lammers		
Jurisdiction:	Caltrans			
Analysis Year:	Cumulative+Bui	ldout		
Description:				
	Flow Inputs a	nd Adjustments		
Volume, V		1349	veh/h	
Peak-hour factor, PHF		0.92	V C11/ 11	
Peak 15-min volume, v1	5	367	v	
Trucks and buses		18	ob	
Recreational vehicles		0	olo	
Terrain type:		Level	·	
Grade		<u> </u>	00	
Segment length		-	mi	
Trucks and buses PCE, I	ΞT	1.5		
Recreational vehicle Po		1.2		
Heavy vehicle adjustmen	**	0.917		
Driver population factor		1.00		
Flow rate, vp		799	pc/h/ln	
	Speed Inputs	and Adjustments_		
Lane width		_	ft	
Right-side lateral clea	arance	•	ft	
Total ramp density, TRI		-	ramps/mi	
Number of lanes, N		2	1 .	
Free-flow speed:		Measured		
FFS or BFFS		70.0	mi/h	
Lane width adjustment,	fLW	_	mi/h	
Lateral clearance adjus	stment, fLC	_	mi/h	
TRD adjustment			mi/h	
Free-flow speed, FFS		70.0	mi/h	
	LOS and Perfo	rmance Measures_		
Flow rate, vp		799	pc/h/ln	
Free-flow speed, FFS		70.0	mi/h	
Average passenger-car	speed. S	70.0	mi/h	
Number of lanes, N	-T-zzi	2	,	
Density, D		11.4	pc/mi/ln	
Level of service, LOS		В		

Phone: E-mail:	Fax:			
	Operational Ar	nalvsis		
	 •	<u> </u>		
Analyst:	Kimley-Horn & A	Assc., Inc.		
Agency or Company:				
Date Performed:	02/20/14			
Analysis Time Period:	AM Peak Hour			
Freeway/Direction:	I-580 EB			
From/To:	Lammers/Corral	Hollow		
Jurisdiction:	Caltrans			
Analysis Year: Description:	Cumulative+Buil	Idout		
	Flow Inputs ar	nd Adjustments		
Wolumo W		257	rrah/h	
Volume, V		256	veh/h	
Peak-hour factor, PHF Peak 15-min volume, v1	F	0.92 70	**	
Trucks and buses	5	18	V ह	
Recreational vehicles		0	0 00	
Terrain type:		Level	3	
Grade		_ 	<u></u>	
Segment length		=	m i.	
Trucks and buses PCE, I	EТ	1.5	ttt d.	
Recreational vehicle Pe		1.2		
Heavy vehicle adjustmen		0.917		
Driver population fact		1.00		
Flow rate, vp	, - <u>-</u> -	152	pc/h/ln	
	Speed Inputs a	and Adjustments_		
Lane width		_	ft	
Right-side lateral clea	arance	-	ft	
Total ramp density, TR		_	ramps/mi	
Number of lanes, N		2	<u>.</u>	
Free-flow speed:		Measured		
FFS or BFFS		70.0	mi/h	
Lane width adjustment,	fLW	-	mi/h	
Lateral clearance adju	stment, fLC	_	mi/h	
TRD adjustment		-	mi/h	
Free-flow speed, FFS		70.0	mi/h	
	LOS and Perfo	rmance Measures_		
Flow rate, vp		152	pc/h/ln	
Free-flow speed, FFS		70.0	mi/h	
Average passenger-car	speed, S	70.0	mi/h	
Number of lanes, N	-	2	-	
Density, D		2.2	pc/mi/ln	
Level of service, LOS		A		

Phone: Fax: E-mail: Operational Analysis Analyst: Kimley-Horn & Assc., Inc. Agency or Company: Date Performed: 02/20/14 Analysis Time Period: AM Peak Hour Freeway/Direction: I-580 WB
From/To: Lammers/Corral Hollow From/To: Jurisdiction: Caltrans Analysis Year: Cumulative+Buildout Description: Flow Inputs and Adjustments____ Volume, V veh/h 1146 Peak-hour factor, PHF 0.92 Peak 15-min volume, v15 311 v Trucks and buses 18 Recreational vehicles Terrain type: Level Grade Segment length mi Trucks and buses PCE, ET 1.5 Recreational vehicle PCE, ER 1.2 Heavy vehicle adjustment, fHV 0.917 Driver population factor, fp 1.00 Flow rate, vp 679 pc/h/ln Speed Inputs and Adjustments Lane width ft Right-side lateral clearance ft Total ramp density, TRD ramps/mi Number of lanes, N 2 Free-flow speed: Measured FFS or BFFS 70.0 mi/h Lane width adjustment, fLW mi/h Lateral clearance adjustment, fLC mi/h TRD adjustment mi/h Free-flow speed, FFS 70.0 mi/h LOS and Performance Measures Flow rate, vp 679 pc/h/ln Free-flow speed, FFS 70.0 mi/h Average passenger-car speed, S 70.0 mi/h Number of lanes, N 2 pc/mi/ln Density, D 9.7 Level of service, LOS Α

Phone: E-mail:		Fax:	
	Operational Anal	ysis	
Analyst: Agency or Company: Date Performed: Analysis Time Period: Freeway/Direction: From/To: Jurisdiction: Analysis Year: Description:	Kimley-Horn & Ass 02/20/14 AM Peak Hour I-580 EB Corral Hollow/Rte Caltrans Cumulative+Builde	e 132	
	Flow Inputs and	Adjustments	
Volume, V Peak-hour factor, PHF Peak 15-min volume, v15		169 0.92 46	veh/h v
Trucks and buses Recreational vehicles Terrain type:		18 0 Level	રું જ
Grade Segment length Trucks and buses PCE, F	.rp	- - 1.5	% mi
Recreational vehicle PC Heavy vehicle adjustment Driver population factor	E, ER t, fhV	1.2 0.917 1.00	
Flow rate, vp		100	pc/h/ln
	Speed Inputs and	d Adjustments	
Lane width Right-side lateral clea Total ramp density, TRI Number of lanes, N Free-flow speed:		- - 2 Measured	ft ft ramps/mi
FFS or BFFS Lane width adjustment, Lateral clearance adjus TRD adjustment Free-flow speed, FFS		70.0 - - - 70.0	mi/h mi/h mi/h mi/h mi/h
-	LOS and Performa	ance Measures	
Flow rate, vp Free-flow speed, FFS Average passenger-car s Number of lanes, N Density, D Level of service, LOS		100 70.0 70.0 2 1.4	pc/h/ln mi/h mi/h pc/mi/ln

Phone: E-mail:		Fax:	
	Operational An	alysis	
2	77	T	
Analyst: Agency or Company:	Kimley-Horn & A	ssc., inc.	
Date Performed:	02/20/14		
Analysis Time Period:	AM Peak Hour		
Freeway/Direction:	I-580 WB		
From/To:	Corral Hollow/R	te 132	
Jurisdiction:	Caltrans		
Analysis Year:	Cumulative+Buil	dout	
Description:			
	Flow Inputs an	d Adjustments	
Volume, V		1671	veh/h
Peak-hour factor, PHF		0.92	•
Peak 15-min volume, v15		454	v
Trucks and buses		18	ે
Recreational vehicles		0	%
Terrain type:		Level	
Grade		-	8
Segment length		_	mi
Trucks and buses PCE, E		1.5	
Recreational vehicle Po		1.2	
Heavy vehicle adjustmer		0.917	
Driver population factor	or, fp	1.00	42. 42
Flow rate, vp		990	pc/h/ln
	Speed Inputs a	nd Adjustments	
Lane width		<u>~</u>	ft
Right-side lateral clea	arance	_	ft
Total ramp density, TRI		-	ramps/mi
Number of lanes, N		2	
Free-flow speed:		Measured	
FFS or BFFS		70.0	mi/h
Lane width adjustment,		-	mi/h
Lateral clearance adjus	stment, fLC	-	mi/h
TRD adjustment		-	mi/h
Free-flow speed, FFS		70.0	mi/h
	LOS and Perfor	mance Measures	
Flow rate, vp		990	pc/h/ln
Free-flow speed, FFS		70.0	mi/h
Average passenger-car s	speed, S	70.0	mi/h
Number of lanes, N		2	
Density, D		14.1	pc/mi/ln
Level of service, LOS		В	

Phone: Fax: E-mail: Operational Analysis Analyst: Kimley-Horn & Assc., Inc. Agency or Company: Date Performed: 02/20/14 Analysis Time Period: PM Peak Hour Freeway/Direction: I-580 EB
From/To: I-205 Junction/Mountain House Jurisdiction: Caltrans Analysis Year: Cumulative+Buildout Description: _____Flow Inputs and Adjustments____ veh/h Volume, V 2299 Peak-hour factor, PHF 0.92 Peak 15-min volume, v15 625 v Trucks and buses 18 왕 Recreational vehicles 9 Terrain type: Level Grade Segment length тi Trucks and buses PCE, ET 1.5 Recreational vehicle PCE, ER 1.2 Heavy vehicle adjustment, fHV 0.917 Driver population factor, fp 1.00 Flow rate, vp 1362 pc/h/ln Speed Inputs and Adjustments Lane width ft. Right-side lateral clearance ft Total ramp density, TRD ramps/mi Number of lanes, N Free-flow speed: Measured FFS or BFFS 70.0 mi/h Lane width adjustment, fLW mi/h Lateral clearance adjustment, fLC mi/h TRD adjustment mi/h Free-flow speed, FFS 70.0 mi/h LOS and Performance Measures____ pc/h/ln Flow rate, vp 1362 Free-flow speed, FFS 70.0 mi/h Average passenger-car speed, S 69.7 mi/h Number of lanes, N 2 19.5 Density, D pc/mi/ln Level of service, LOS C

Phone: E-mail:		Fax:	
	Operational An	alvsis	
	operacionar ini		
Analyst:	Kimley-Horn & A	ssc., Inc.	
Agency or Company:			
Date Performed:	02/20/14		
Analysis Time Period:	PM Peak Hour		
Freeway/Direction:	I-580 WB		
From/To:	I-205 Junction/	Mountain House	
Jurisdiction:	Caltrans		
Analysis Year: Description:	Cumulative+Buil	dout	
	Flow Inputs an	d Adjustments	
Volume, V		1601	veh/h
Peak-hour factor, PHF		0.92	ve11/11
Peak 15-min volume, v15	-	435	V
Trucks and buses	,	18	১ ৪
Recreational vehicles		0	%
Terrain type:		Level	•
Grade		-	ે
Segment length		-	mi
Trucks and buses PCE, I	ΞT	1.5	
Recreational vehicle Po	CE, ER	1.2	
Heavy vehicle adjustmen	nt, fHV	0.917	
Driver population factor	or, fp	1.00	
Flow rate, vp		948	pc/h/ln
	Speed Inputs a	nd Adjustments	
Lane width		-	ft
Right-side lateral clea	arance	_	ft
Total ramp density, TRI)		ramps/mi
Number of lanes, N		2	
Free-flow speed:		Measured	
FFS or BFFS		70.0	mi/h
Lane width adjustment,		-	mi/h
Lateral clearance adjus	stment, fLC	-	mi/h
TRD adjustment		_	mi/h
Free-flow speed, FFS		70.0	mi/h
	LOS and Perfor	mance Measures	
Flow rate, vp		948	pc/h/ln
Free-flow speed, FFS		70.0	mi/h
Average passenger-car	speed, S	70.0	mi/h
Number of lanes, N		2	
Density, D		13.5	pc/mi/ln
Level of service, LOS		В	

Phone: Fax: E-mail: Operational Analysis Analyst: Kimley-Horn & Assc., Inc. Agency or Company: Date Performed: 02/20/14 Analysis Time Period: PM Peak Hour Freeway/Direction: I-580 EB
From/To: Mountain House/Lammers Jurisdiction: Caltrans Analysis Year: Cumulative+Buildout Description: Flow Inputs and Adjustments_____ Volume, V 3056 veh/h Peak-hour factor, PHF 0.92 Peak 15-min volume, v15 830 v Trucks and buses 18 욹 Recreational vehicles Terrain type: Level Grade Segment length mi Trucks and buses PCE, ET 1.5 Recreational vehicle PCE, ER 1.2 Heavy vehicle adjustment, fHV 0.917 Driver population factor, fp 1.00 Flow rate, vp pc/h/ln 1810 Speed Inputs and Adjustments ft Lane width Right-side lateral clearance fţ Total ramp density, TRD ramps/mi Number of lanes, N 2 Free-flow speed: Measured FFS or BFFS mi/h 70.0 Lane width adjustment, fLW mi/h mi/h Lateral clearance adjustment, fLC TRD adjustment mi/h Free-flow speed, FFS 70.0 mi/h LOS and Performance Measures_____ Flow rate, vp 1810 pc/h/ln Free-flow speed, FFS 70.0 mi/h Average passenger-car speed, S 65.7 mi/h Number of lanes, N 2 Density, D 27.6 pc/mi/ln Level of service, LOS D

Phone: E-mail:		Fax:	
	Operational Anal	vsis	
Analyst:	Kimley-Horn & Ass	c., Inc.	
Agency or Company: Date Performed:	02/20/14		
Analysis Time Period:	PM Peak Hour		
Freeway/Direction:	I-580 WB		
From/To:	Mountain House/La	mmers	
Jurisdiction:	Caltrans		
Analysis Year:	Cumulative+Buildo	ut	
Description:			
	Flow Inputs and	Adjustments	
Volume, V		2185	veh/h
Peak-hour factor, PHF		0.92	VCII/ II
Peak 15-min volume, v15	•	594	V
Trucks and buses		18	ૄ
Recreational vehicles		0	%
Terrain type:		Level	
Grade		-	8
Segment length		-	mi
Trucks and buses PCE, E		1.5	
Recreational vehicle PC		1.2	
Heavy vehicle adjustmer		0.917	
Driver population factor, fp		1.00 1294	pc/h/ln
Flow rate, vp		1234	pe/ii/iii
	Speed Inputs and	Adjustments	
Lane width		_	ft
Right-side lateral clea	arance	±	ft
Total ramp density, TRI			ramps/mi
Number of lanes, N		2	
Free-flow speed:		Measured	
FFS or BFFS	_	70.0	mi/h
Lane width adjustment,		-	mi/h
Lateral clearance adjus	stment, fLC	-	mi/h
TRD adjustment Free-flow speed, FFS		70.0	mi/h mi/h
riee-liow speed, rrs		70.0	m1/11
	LOS and Performa	nce Measures	
Flow rate, vp		1294	pc/h/ln
Free-flow speed, FFS		70.0	mi/h
Average passenger-car	speed, S	69.9	mi/h
Number of lanes, N		2	
Density, D		18.5	pc/mi/ln
Level of service, LOS		С	

Phone: E-mail:		Fax:	
ii maxx.			
W	Operational An	alysis	
Analyst:	Kimley-Horn & A	ssc., Inc.	
Agency or Company:	-		
Date Performed:	02/20/14		
Analysis Time Period:	PM Peak Hour		
Freeway/Direction:	I-580 EB		
From/To:	Lammers/Corral	Hollow	
Jurisdiction:	Caltrans		
Analysis Year:	Cumulative+Buil	dout	
Description:			
**************************************	Flow Inputs an	d Adjustments	
Volume, V		2560	veh/h
Peak-hour factor, PHF		0.92	
Peak 15-min volume, v19	5	696	V
Trucks and buses		18	%
Recreational vehicles		0	%
Terrain type:		Level	
Grade		····	ે
Segment length		-	mi
Trucks and buses PCE, I	ET	1.5	
Recreational vehicle Po	CE, ER	1.2	
Heavy vehicle adjustmen		0.917	
Driver population factor	or, fp	1.00	
Flow rate, vp		1517	pc/h/ln
	Speed Inputs a	nd Adjustments_	
Lane width			ft
Right-side lateral clea	arance	-	ft
Total ramp density, TRI		-	ramps/mi
Number of lanes, N		2	<u>-</u>
Free-flow speed:		Measured	
FFS or BFFS		70.0	mi/h
Lane width adjustment,	fLW	-	mi/h
Lateral clearance adjus	stment, fLC	-	mi/h
TRD adjustment		-	mi/h
Free-flow speed, FFS		70.0	mi/h
	LOS and Perfor	mance Measures_	
Flow rate, vp		1517	pc/h/ln
Free-flow speed, FFS		70.0	mi/h
Average passenger-car	speed, S	68.8	mi/h
Number of lanes, N	<u>.</u> ,	2	•
Density, D		22.0	pc/mi/ln
Level of service, LOS		C	

Phone: E-mail:		Fax:	
	Operational Anal	lveie	
	operacional Anal	rysis	
Analyst:	Kimley-Horn & Ass	sc., Inc.	
Agency or Company:	1	•	
Date Performed:	02/20/14		
Analysis Time Period:	PM Peak Hour		
Freeway/Direction:	I-580 WB		
From/To:	Lammers/Corral Ho	ollow	
Jurisdiction:	Caltrans		
Analysis Year:	Cumulative+Buildo	out	
Description:			
	Flow Inputs and	Adjustments	
7		1.00	1 /1
Volume, V		1606	veh/h
Peak-hour factor, PHF		0.92 436	
Peak 15-min volume, v15 Trucks and buses		18	V ۶
Recreational vehicles		0	%
Terrain type:		Level	0
Grade		_	ફ
Segment length		_	mi
Trucks and buses PCE, E	Т	1.5	
Recreational vehicle PC	E, ER	1.2	
Heavy vehicle adjustmen		0.917	
Driver population facto	or, fp	1.00	
Flow rate, vp		951	pc/h/ln
	Speed Inputs and	d Adjustments	
T 34-3-			£ F
Lane width Right-side lateral clea	**************************************	=	ft ft
Total ramp density, TRI		_	ramps/mi
Number of lanes, N	,	2	ramps/ mr
Free-flow speed:		Measured	
FFS or BFFS		70.0	mi/h
Lane width adjustment,	fLW	-	mi/h
Lateral clearance adjus		_	mi/h
TRD adjustment		-	mi/h
Free-flow speed, FFS		70.0	mi/h
	LOS and Performa	ance Measures	
77			/2 /2
Flow rate, vp		951	pc/h/ln
Free-flow speed, FFS	unaad C	70.0	mi/h
Average passenger-car s	speed, S	70.0	mi/h
Number of lanes, N Density, D		2 13.6	pc/mi/ln
Level of service, LOS		13.6 B	be\ut\m
LOVEL OF BOLVICE, HOD		<u> </u>	

Phone: E-mail:		Fax:			
	Operational And	alysis			
Analyst:	Kimley-Horn & Assc., Inc.				
Agency or Company:					
Date Performed:	02/20/14				
Analysis Time Period:	PM Peak Hour				
Freeway/Direction:	I-580 EB				
From/To:	Corral Hollow/R	te 132			
Jurisdiction:	Caltrans Cumulative+Buile	dout			
Analysis Year: Description:	Cumulative+Bull	douc			
	Flow Inputs an	d Adjustments			
Volume, V		2770	veh/h		
Peak-hour factor, PHF		0.92			
Peak 15-min volume, v15	5	753	v		
Trucks and buses		18	ે		
Recreational vehicles		0	8		
Terrain type:		Level	_		
Grade			8		
Segment length			mi		
Trucks and buses PCE, I		1.5			
Recreational vehicle PO		1.2			
Heavy vehicle adjustmen		0.917 1.00			
Flow rate, vp	Driver population factor, fp		pc/h/ln		
riow race, vp		1641	pc, ii, iii		
	Speed Inputs a	nd Adjustments			
Lane width		-	ft		
Right-side lateral clea	arance	-	ft		
Total ramp density, TRI)	-	ramps/mi		
Number of lanes, N		2			
Free-flow speed:		Measured			
FFS or BFFS		70.0	mi/h		
Lane width adjustment,		-	mi/h		
Lateral clearance adjus	stment, ilc	-	mi/h		
TRD adjustment Free-flow speed, FFS		- 70.0	mi/h mi/h		
riee-liow speed, frs		70.0	III 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
	LOS and Perfor	mance Measures			
Flow rate, vp		1641	pc/h/ln		
Free-flow speed, FFS		70.0	mi/h		
Average passenger-car	speed, S	67.7	mi/h		
Number of lanes, N		2			
Density, D		24.2	pc/mi/ln		
Level of service, LOS		С			

Phone: E-mail:		Fax:	
	Operational An	alysis	
Analyst:	 Kimley-Horn & A	aca Tha	
Agency or Company:	KIMIEY-HOLLI & A	issc., inc.	
Date Performed:	02/20/14		
Analysis Time Period:	PM Peak Hour		
Freeway/Direction:	I-580 WB		
From/To:	Corral Hollow/R	te 132	
Jurisdiction:	Caltrans		
Analysis Year:	Cumulative+Buil	.dout	
Description:			
	Flow Inputs an	d Adjustments	
Volume, V		1352	veh/h
Peak-hour factor, PHF		0.92	,
Peak 15-min volume, v1	5	367	V
Trucks and buses		18	%
Recreational vehicles		0	%
Terrain type:		Level	
Grade		-	%
Segment length		-	mi
Trucks and buses PCE, I		1.5	
Recreational vehicle Po		1.2	
Heavy vehicle adjustmen		0.917	
Driver population factor	or, fp	1.00	
Flow rate, vp		801	pc/h/ln
	Speed Inputs a	nd Adjustments	
Lane width		-	ft
Right-side lateral clea	arance	rew .	ft
Total ramp density, TRI)	_	ramps/mi
Number of lanes, N		2	
Free-flow speed:		Measured	
FFS or BFFS	_	70.0	mi/h
Lane width adjustment,			mi/h
Lateral clearance adjus	stment, fLC	·	mi/h
TRD adjustment			mi/h
Free-flow speed, FFS		70.0	mi/h
	LOS and Perfor	mance Measures	
Flow rate, vp		801	pc/h/ln
Free-flow speed, FFS		70.0	mi/h
Average passenger-car	speed, S	70.0	mi/h
Number of lanes, N		2	
Density, D		11.4	pc/mi/ln
Level of service, LOS		В	

Phone: Fax: E-mail: _____Operational Analysis_____ Analyst: Kimley-Horn & Assc., Inc. Agency or Company: Date Performed: 02/11/14 Date Performed: 02,11,11

Analysis Time Period: AM Peak Hour

Freeway/Direction: I-580 EB

From/To: I-205 Junction/Mtn House Pkwy From/To:
Jurisdiction: Caltrans
Existing+Project (Phase I) Analysis Year: Description: _____Flow Inputs and Adjustments_____ 355 veh/h Volume, V Peak-hour factor, PHF 0.92 Peak 15-min volume, v15 96 V Trucks and buses 18 Recreational vehicles Terrain type: Level Grade Segment length mi Trucks and buses PCE, ET 1.5 Recreational vehicle PCE, ER 1.2 Heavy vehicle adjustment, fHV 0.917 Driver population factor, fp 1.00 pc/h/ln 210 Flow rate, vp ______Speed Inputs and Adjustments_____ Lane width ft Right-side lateral clearance ft Total ramp density, TRD ramps/mi Number of lanes, N Free-flow speed: Measured FFS or BFFS 70.0 mi/h Lane width adjustment, fLW mi/h Lateral clearance adjustment, fLC mi/h TRD adjustment mi/h Free-flow speed, FFS 70.0 mi/h _____LOS and Performance Measures_____ pc/h/ln Flow rate, vp 210 Free-flow speed, FFS 70.0 mi/h Average passenger-car speed, S 70.0 mi/h Number of lanes, N Density, D 3.0 pc/mi/ln

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Phone: E-mail:		Fax:	
	Operational An	alysis	
Analyst: Agency or Company: Date Performed: Analysis Time Period: Freeway/Direction: From/To: Jurisdiction: Analysis Year: Description:	I-580 WB Mtn House Pkwy/ Caltrans	I-205 Junction	
	Flow Inputs an	d Adjustments	
Volume, V Peak-hour factor, PHF Peak 15-min volume, v15	5	2230 0.92 606	veh/h v
Trucks and buses Recreational vehicles Terrain type:		18 0 Level	8 8
Grade Segment length Trucks and buses PCE, I Recreational vehicle PC Heavy vehicle adjustment	CE, ER nt, fHV	1.5 1.2 0.917	% mi
Driver population factor Flow rate, vp	or, ip	1.00 1321	pc/h/ln
	Speed Inputs a	nd Adjustments	
Lane width Right-side lateral clea Total ramp density, TRI Number of lanes, N Free-flow speed:		- - - 2 Measured	ft ft ramps/mi
FFS or BFFS Lane width adjustment, Lateral clearance adjustment TRD adjustment		70.0	mi/h mi/h mi/h mi/h
Free-flow speed, FFS		70.0	mi/h
	LOS and Perfor	mance Measures	
Flow rate, vp Free-flow speed, FFS Average passenger-car s Number of lanes, N	speed, S	1321 70.0 69.8 2	pc/h/ln mi/h mi/h
Density, D Level of service, LOS		18.9 C	pc/mi/ln

Phone: Fax: E-mail: _____Operational Analysis_____ Analyst: Kimley-Horn & Assc., Inc. Agency or Company: Date Performed: 02/11/14 Date Performed:

Analysis Time Period: AM Peak Hour

Freeway/Direction: I-580 EB

From/To: Mtn House Pkwy/Corral Hollow R From/To:
Jurisdiction: Caltrans
Existing+Project (Phase I) Analysis Year: Description: _____Flow Inputs and Adjustments_____ 401 veh/h Volume, V Peak-hour factor, PHF 0.92 Peak 15-min volume, v15 109 V Trucks and buses 18 Recreational vehicles Level Terrain type: Grade Segment length тi Trucks and buses PCE, ET 1.5 Recreational vehicle PCE, ER 1.2 Heavy vehicle adjustment, fHV 0.917 Driver population factor, fp 1.00 pc/h/ln 238 Flow rate, vp ______Speed Inputs and Adjustments_____ Lane width ft Right-side lateral clearance ft Total ramp density, TRD ramps/mi Number of lanes, N Free-flow speed: Measured FFS or BFFS 70.0 mi/h Lane width adjustment, fLW mi/h Lateral clearance adjustment, fLC mi/h mi/h TRD adjustment Free-flow speed, FFS 70.0 mi/h _____LOS and Performance Measures_____ pc/h/ln Flow rate, vp 238 Free-flow speed, FFS 70.0 mi/h mi/h Average passenger-car speed, S 70.0 Number of lanes, N Density, D 3.4 pc/mi/ln

Α

Phone: Fax: E-mail: _____Operational Analysis_____ Analyst: Kimley-Horn & Assc., Inc. Agency or Company: Date Performed: 02/11/14 Date Performed: 02,11,11

Analysis Time Period: AM Peak Hour

Freeway/Direction: I-580 WB

From/To: Corral Hollow Road/Mtn House P From/To:
Jurisdiction: Caltrans
Existing+Project (Phase I) Analysis Year: Description: _____Flow Inputs and Adjustments_____ veh/h 2169 Volume, V Peak-hour factor, PHF 0.92 Peak 15-min volume, v15 589 V Trucks and buses 18 Recreational vehicles Level Terrain type: Grade Segment length mi Trucks and buses PCE, ET 1.5 Heavy vehicle adjustment, fHV Recreational vehicle PCE, ER 1.2 0.917 Driver population factor, fp 1.00 pc/h/ln Flow rate, vp 1285 ______Speed Inputs and Adjustments_____ Lane width ft Right-side lateral clearance ft Total ramp density, TRD ramps/mi Number of lanes, N Free-flow speed: Measured 70.0 FFS or BFFS mi/h Lane width adjustment, fLW mi/h Lateral clearance adjustment, fLC mi/h TRD adjustment mi/h Free-flow speed, FFS 70.0 mi/h _____LOS and Performance Measures_____ pc/h/ln Flow rate, vp 1285 Free-flow speed, FFS 70.0 mi/h mi/h Average passenger-car speed, S 69.9 2 Number of lanes, N Density, D 18.4 pc/mi/ln

С

Phone: Fax: E-mail: _____Operational Analysis_____ Analyst: Kimley-Horn & Assc., Inc. Agency or Company: Date Performed: 02/11/14 Date Performed: 02,11,11
Analysis Time Period: AM Peak Hour
Freeway/Direction: I-580 EB
From/To: Corral Hollow Rd/Rte 132 From/To:
Jurisdiction: Caltrans Existing+Project (Phase I) Analysis Year: Description: _____Flow Inputs and Adjustments_____ 277 veh/h Volume, V Peak-hour factor, PHF 0.92 Peak 15-min volume, v15 75 V Trucks and buses 18 용 Recreational vehicles Terrain type: Level Grade Segment length mi Trucks and buses PCE, ET 1.5 Recreational vehicle PCE, ER 1.2 Heavy vehicle adjustment, fHV 0.917 Driver population factor, fp 1.00 pc/h/ln Flow rate, vp 164 ______Speed Inputs and Adjustments_____ Lane width ft Right-side lateral clearance ft Total ramp density, TRD ramps/mi Number of lanes, N Free-flow speed: Measured FFS or BFFS 70.0 mi/h Lane width adjustment, fLW mi/h Lateral clearance adjustment, fLC mi/h TRD adjustment mi/h Free-flow speed, FFS 70.0 mi/h _____LOS and Performance Measures_____ 164 pc/h/ln Flow rate, vp Free-flow speed, FFS 70.0 mi/h Average passenger-car speed, S 70.0 mi/h Number of lanes, N Density, D 2.3 pc/mi/ln

Α

Phone: Fax: E-mail: _____Operational Analysis_____ Analyst: Kimley-Horn & Assc., Inc. Agency or Company: Date Performed: 02/11/14 Date Performed: 02,12,2
Analysis Time Period: AM Peak Hour
Freeway/Direction: I-580 WB
From/To: Rte 132/Corral Hollow Rd Jurisdiction: Caltrans Existing+Project (Phase I) Analysis Year: Description: _____Flow Inputs and Adjustments_____ veh/h 1941 Volume, V Peak-hour factor, PHF 0.92 Peak 15-min volume, v15 527 V Trucks and buses 18 용 Recreational vehicles Level Terrain type: Grade Segment length mi Trucks and buses PCE, ET 1.5 Recreational vehicle PCE, ER 1.2 Heavy vehicle adjustment, fHV 0.917 Driver population factor, fp 1.00 pc/h/ln Flow rate, vp 1150 ______Speed Inputs and Adjustments_____ Lane width ft Right-side lateral clearance ft Total ramp density, TRD ramps/mi Number of lanes, N Free-flow speed: Measured FFS or BFFS 70.0 mi/h Lane width adjustment, fLW mi/h Lateral clearance adjustment, fLC mi/h TRD adjustment mi/h Free-flow speed, FFS 70.0 mi/h _____LOS and Performance Measures_____ pc/h/ln Flow rate, vp 1150 Free-flow speed, FFS 70.0 mi/h mi/h Average passenger-car speed, S 70.0 Number of lanes, N Density, D 16.4 pc/mi/ln

В

Phone: Fax: E-mail: _____Operational Analysis_____ Analyst: Kimley-Horn & Assc., Inc. Agency or Company: Date Performed: 02/11/14 Date Performed: 02,11,11
Analysis Time Period: PM Peak Hour
Freeway/Direction: I-580 EB
From/To: I-205 Junction/Mtn House Pkwy rrom/To:
Jurisdiction: Caltrans
Existing+Project (Phase I) Analysis Year: Description: _____Flow Inputs and Adjustments_____ veh/h 2184 Volume, V Peak-hour factor, PHF 0.92 Peak 15-min volume, v15 593 V Trucks and buses 18 Recreational vehicles Level Terrain type: Grade Segment length mi Trucks and buses PCE, ET 1.5 Heavy vehicle adjustment, fHV Recreational vehicle PCE, ER 1.2 0.917 Driver population factor, fp 1.00 pc/h/ln 1294 Flow rate, vp ______Speed Inputs and Adjustments_____ Lane width ft Right-side lateral clearance ft Total ramp density, TRD ramps/mi Number of lanes, N Free-flow speed: Measured FFS or BFFS 70.0 mi/h Lane width adjustment, fLW mi/h Lateral clearance adjustment, fLC mi/h TRD adjustment mi/h Free-flow speed, FFS 70.0 mi/h _____LOS and Performance Measures_____ 1294 pc/h/ln Flow rate, vp Free-flow speed, FFS 70.0 mi/h mi/h Average passenger-car speed, S 69.9 2 Number of lanes, N Density, D 18.5 pc/mi/ln

С

Phone: E-mail:		Fax:	
	Operational An	alysis	
Analyst: Agency or Company:	Kimley-Horn & A	ssc., Inc.	
Date Performed: Analysis Time Period: Freeway/Direction: From/To: Jurisdiction: Analysis Year: Description:	I-580 WB Mtn House Pkwy/ Caltrans		
	Flow Inputs an	d Adjustments	
Volume, V Peak-hour factor, PHF		1241	veh/h
Peak 15-min volume, v15	5	337	V
Trucks and buses		18	%
Recreational vehicles		0	%
Terrain type: Grade		Level -	00
Segment length		_	mi
Trucks and buses PCE, I	г т	1.5	шт
Recreational vehicle Po		1.2	
Heavy vehicle adjustmen		0.917	
Driver population factor	or, fp	1.00	
Flow rate, vp		735	pc/h/ln
	Speed Inputs a	nd Adjustments	
Lane width		_	ft
Right-side lateral clea	arance	_	ft
Total ramp density, TRI		_	ramps/mi
Number of lanes, N		2	-
Free-flow speed:		Measured	
FFS or BFFS		70.0	mi/h
Lane width adjustment,		_	mi/h
Lateral clearance adjus	stment, fLC	-	mi/h
TRD adjustment		-	mi/h
Free-flow speed, FFS		70.0	mi/h
	LOS and Perfor	mance Measures	
Flow rate, vp		735	pc/h/ln
Free-flow speed, FFS		70.0	mi/h
Average passenger-car s	speed, S	70.0	mi/h
Number of lanes, N		2	
Density, D		10.5	pc/mi/ln
Level of service, LOS		A	

Phone: E-mail:		Fax:			
	Operational An	alysis			
Analyst:	Kimley-Horn & Assc., Inc.				
Agency or Company: Date Performed: Analysis Time Period: Freeway/Direction: From/To: Jurisdiction: Analysis Year: Description:	02/11/14 riod: PM Peak Hour n: I-580 EB Mtn House Pkwy/Corra Caltrans				
Flow Inputs and Adjustments					
Volume, V Peak-hour factor, PHF		2115 0.92	veh/h		
Peak 15-min volume, v15 Trucks and buses		575 18	V % %		
Recreational vehicles Terrain type: Grade		0 Level -	9		
Segment length Trucks and buses PCE, ET Recreational vehicle PCE, ER		- 1.5 1.2	mi		
Heavy vehicle adjustment, fHV Driver population factor, fp		0.917 1.00			
Flow rate, vp		1253	pc/h/ln		
Speed Inputs and Adjustments					
Lane width Right-side lateral clearance Total ramp density, TRD Number of lanes, N		- - - 2	ft ft ramps/mi		
Free-flow speed: FFS or BFFS Lane width adjustment, fLW		Measured 70.0 -	mi/h mi/h		
Lateral clearance adjustment, fLC TRD adjustment Free-flow speed, FFS		- - 70.0	mi/h mi/h mi/h		
LOS and Performance Measures					
Flow rate, vp Free-flow speed, FFS Average passenger-car speed, S Number of lanes, N Density, D Level of service, LOS		1253 70.0 70.0 2 17.9	<pre>pc/h/ln mi/h mi/h pc/mi/ln</pre>		

Phone: Fax: E-mail: _____Operational Analysis_____ Analyst: Kimley-Horn & Assc., Inc. Agency or Company: Date Performed: 02/11/14 Analysis Time Period: PM Peak Hour Freeway/Direction: I-580 WB From/To: Corral Hollow Road/Mtn House P from/To:
Jurisdiction: Caltrans
Existing+Project (Phase I) Analysis Year: Description: _____Flow Inputs and Adjustments_____ veh/h 1218 Volume, V Peak-hour factor, PHF 0.92 Peak 15-min volume, v15 331 V Trucks and buses 18 Recreational vehicles Level Terrain type: Grade Segment length тi Trucks and buses PCE, ET 1.5 Recreational vehicle PCE, ER 1.2 Heavy vehicle adjustment, fHV 0.917 Driver population factor, fp 1.00 pc/h/ln Flow rate, vp 722 ______Speed Inputs and Adjustments_____ Lane width ft Right-side lateral clearance ft Total ramp density, TRD ramps/mi Number of lanes, N Free-flow speed: Measured 70.0 FFS or BFFS mi/h Lane width adjustment, fLW mi/h Lateral clearance adjustment, fLC mi/h TRD adjustment mi/h Free-flow speed, FFS 70.0 mi/h _____LOS and Performance Measures_____ pc/h/ln Flow rate, vp 722 Free-flow speed, FFS 70.0 mi/h Average passenger-car speed, S 70.0 mi/h Number of lanes, N Density, D 10.3 pc/mi/ln

Α

Phone: Fax: E-mail: _____Operational Analysis_____ Analyst: Kimley-Horn & Assc., Inc. Agency or Company: Date Performed: 02/11/14 Date Performed:
Analysis Time Period: PM Peak Hour
Freeway/Direction: I-580 EB
From/To: Corral Hollow Rd/Rte 132 from/To:
Jurisdiction: Caltrans Existing+Project (Phase I) Analysis Year: Description: _____Flow Inputs and Adjustments_____ veh/h 1866 Volume, V Peak-hour factor, PHF 0.92 Peak 15-min volume, v15 507 V Trucks and buses 18 용 Recreational vehicles Terrain type: Level Grade Segment length mi Trucks and buses PCE, ET 1.5 Recreational vehicle PCE, ER 1.2 Heavy vehicle adjustment, fHV 0.917 Driver population factor, fp 1.00 pc/h/ln Flow rate, vp 1105 ______Speed Inputs and Adjustments_____ Lane width ft Right-side lateral clearance ft Total ramp density, TRD ramps/mi Number of lanes, N Free-flow speed: Measured FFS or BFFS 70.0 mi/h Lane width adjustment, fLW mi/h Lateral clearance adjustment, fLC mi/h TRD adjustment mi/h Free-flow speed, FFS 70.0 mi/h _____LOS and Performance Measures_____ pc/h/ln Flow rate, vp 1105 Free-flow speed, FFS 70.0 mi/h mi/h Average passenger-car speed, S 70.0 Number of lanes, N 2 Density, D 15.8 pc/mi/ln

В

Phone: E-mail:		Fax:				
	Operational Ar	alysis				
Analyst:	Kimley-Horn & A	assc., Inc.				
Agency or Company: Date Performed: Analysis Time Period:	02/11/14 PM Peak Hour I-580 WB Rte 132/Corral Hollow Rd Caltrans					
Flow Inputs and Adjustments						
Volume, V Peak-hour factor, PHF Peak 15-min volume, v15 Trucks and buses Recreational vehicles Terrain type:		1121 0.92 305	veh/h			
		18 0 Level	V % %			
Grade Segment length Trucks and buses PCE, ET		- - 1.5	% mi			
Recreational vehicle PCE, ER Heavy vehicle adjustment, fHV Driver population factor, fp		1.2 0.917 1.00				
Flow rate, vp		664	pc/h/ln			
Speed Inputs and Adjustments						
Lane width Right-side lateral clearance Total ramp density, TRD Number of lanes, N Free-flow speed:		- - - 2 Measured	ft ft ramps/mi			
FFS or BFFS Lane width adjustment, fLW Lateral clearance adjustment, fLC		70.0	mi/h mi/h mi/h			
TRD adjustment Free-flow speed, FFS		70.0	mi/h mi/h			
LOS and Performance Measures						
Flow rate, vp Free-flow speed, FFS Average passenger-car speed, S Number of lanes, N Density, D Level of service, LOS		664 70.0 70.0 2 9.5	<pre>pc/h/ln mi/h mi/h pc/mi/ln</pre>			