California High Speed Rail Ridership and Revenue Forecast Model Run Summary

Scenario: 11-035

Scenario Description: High Speed Rail (HSR) between San Francisco and LA Basin (DRAFT)

Phase: PH1 Year: 2030

HSR Fare Policy: 83% of San Francisco-Los Angeles airfare with lower rates for shorter distances

AIR Fare Policy: Actual 2009 airfares

CVR Fare Policy: Actual 2011 fares

Parking Costs: High (Oct-09)

Motor Fuel: 25 cents/mile (2005\$)

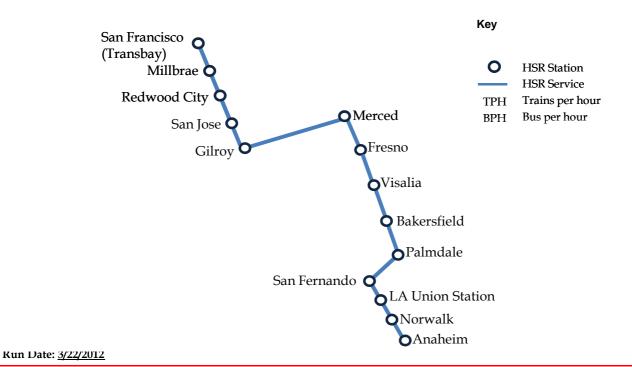
Socioeconomic: Based on comparison of 2008 to 2011 Woods and Poole Forecast

Trip Rate: 2005 Survey, by region

Service Summary: (See next page for details)

1 peak TPH from San Francisco (Transbay) to Los Angeles Union Station (1 in offpeak)
1 peak TPH from San Francisco (4th & King) to Los Angeles Union Station (0 in offpeak)

3 peak TPH from San Francisco (Transbay) to Anaheim (3 in offpeak)
1 peak TPH from San Francisco (Transbay) to Merced (1 in offpeak)
1 peak TPH from Merced to Los Angeles Union Station (1 in offpeak)



Disclaimer

Scenario 11-035 High Speed Rail (HSR) between San Francisco and LA Basin (DRAFT)

Operating Plan:

HSR Patterns

	10	20	30	40*	50	60	70
Fre quency	60	60	60	60	60	60	60
	F	un times	from start	in minute	25		
San Francisco	0	0	0	0	0	0	
Millbrae	10	11	18	9	18	18	
Redwood City	15	17	33	21	24	24	
San Jose	25	35	51	39	42	35	
Gilroy	36	50	69	54	63	53	
Merce d			108				0
Fresno	72	94		92	107	91	25
Visalia	81	104		102	117	110	35
Bakersfield	105	135		133	142	141	66
Palmdale	134	166		170	179	172	103
San Fernando	153	186		196	199	198	129
Los Angeles	160	201		211	214	213	144
		716	l	l	229	228	
Norwalk		216					
		229			242	241	
Norwalk Anaheim # of Trains	in patten	5 rancisco s ns for 10	off-peak y	hours, or	6 g Station ne-way y	241 6	6
Norwalk Anaheim # of Trains Phase 1 Test tra	* San Frin pattern y 15	6 rancisco s	top at 4th off-peak y 35	hours, or	6 g Station ne-way y 65	241 6 y 75	6
Norwalk Anaheim # of Trains	* San Frin pattern y 15 60	229 6 rancisco s ns for 10 y 25 60	off-peak y 35	hours, or	6 g Station ne-way y	241 6	6
Norwalk Anaheim # of Trains Phase 1 Test tra Frequency	* San Frin pattern y 15 60 Run ti	229 6 rancisco s ns for 10 (y 25 60 mes from	off-peak y 35 60 start in n	hours, or y 55 60	6 g Station ne-way y 65 60	241 6 y 75	6
Norwalk Anaheim # of Trains Phase 1 Test tra Frequency San Francisco	* San Frin pattern y 15 60 Run ti	229 6 rancisco s ns for 10 7 25 60 mes from 0	off-peak y 35 60 start in n	hours, or y 55 60 ninutes	6 g Station ne-way y 65 60	241 6 y 75	6
Norwalk Anaheim # of Trains Phase 1 Test tra Frequency San Francisco Millbrae	* San Frin pattern y 15 60 Run ti 0	229 6 rancisco s ns for 10 y 25 60 mes from 0 11	off-peak y 35 60 start in n 0 21	hours, or y 55 60 ninutes 0	6 g Station ne-way y 65 60	241 6 y 75	6
Norwalk Anaheim # of Trains Phase 1 Test tra Frequency San Francisco	* San Frin pattern y 15 60 Run ti	229 6 rancisco s ns for 10 7 25 60 mes from 0	off-peak y 35 60 start in n	hours, or y 55 60 ninutes	6 g Station ne-way y 65 60	241 6 y 75	6
Norwalk Anahelm # of Trains Phase 1 Test tra Frequency San Francisco Millbrae Redwood City San Jose	* San Fr in patten y 15 60 Run ti 0 11 17	229 6 rancisco s ns for 10 y 25 60 mes fom 0 11 17	off-peak y 35 60 start in n 0 21 33 51	hours, or y 55 60 ninutes 0 18	6 g Station ne-way y 65 60 0 11	241 6 y 75	6
Norwalk Anahelm # of Trains Phase 1 Test tra Frequency San Francisco Millbrae Redwood City San Jose Gilroy	* San Friin pattern y 15 60 Run ti 0 11 17 28	229 6 rancisco s ns for 10 y 25 60 mes fom 0 11 17	off-peak y 35 60 start in n 0 21	hours, or y 55 60 ninutes 0 18 30 48	6 g Station ne-way y 65 60 0 11 17	241 6 y 75	6
Norwalk Anahelm # of Trains Phase 1 Test tra Frequency San Francisco Millbrae Redwood City San Jose	* San Friin pattern y 15 60 Run ti 0 11 17 28	229 6 rancisco s ns for 10 y 25 60 mes fom 0 11 17	off-peak y 35 60 start in n 0 21 33 51 69	hours, or y 55 60 ninutes 0 18 30 48	6 g Station ne-way y 65 60 0 11 17	241 6 y 75 60	6
Norwalk Anaheim # of Trains Phase 1 Test tra Frequency San Francisco Millbrae Redwood City San Jose Gilroy Merced	* San Fr in patten y 15 60 Run ti 0 11 17 28 43	229 6 rancisco s ns for 10 (y 25 60 mes from 0 11 17 35	off-peak y 35 60 start in n 0 21 33 51 69	hours, or y 55 60 ninutes 0 18 30 48 66	6 g Station ne -way y 65 60 0 11 17	241 6 7 75 60	6
Norwalk Anaheim # of Trains Phase 1 Test tra Frequency San Francisco Millbrae Redwood City San Jose Gilroy Merced Fresno	* San Fr in patten y 15 60 Run ti 0 11 17 28 43	229 6 rancisco s ns for 10 c y 25 60 mes from 0 11 17 35 50	off-peak y 35 60 start in n 0 21 33 51 69	hours, or y 55 60 ninutes 0 18 30 48 66	6 g Station ne-way y 65 60 0 11 17 35 50	241 6 7 75 60 0 25	6
Norwalk Anaheim # of Trains Phase 1 Test tra Frequency San Francisco Millbrae Redwood City San Jose Gilroy Merced Fresno Visalia	* San Fr in patten y 15 60 Run ti 0 11 17 28 43 87	229 6 rancisco s ns for 10 r y 25 60 mes from 0 11 17 35 50	off-peak y 35 60 start in n 0 21 33 51 69	hours, or y 55 60 ninutes 0 18 30 48 66	6 g Station ne-way y 65 60 0 11 17 35 50 94	241 6 7 75 60 0 25 35	6
Norwalk Anaheim # of Trains Phase 1 Test tra Frequency San Francisco Millbrae Red wood City San Jose Gilroy Merced Fresno Visalia Bakersfield	* San Fr in patten y 15 60 Run ti 0 11 17 28 43 87 97	229 6 rancisco s ns for 10 ry 25 60 mes from 0 11 17 35 50 94 104	off-peak y 35 60 start in n 0 21 33 51 69	hours, or y 55 60 ninutes 0 18 30 48 66 104 114 139	6 g Station ne-way y 65 60 0 11 17 35 50 94 113 144	241 6 7 75 60 0 25 35 66	6
Norwalk Anaheim # of Trains Phase 1 Test tra Frequency San Francisco Millbrae Red wood City San Jose Gilroy Merced Fresno Visalia Bakersfield Palmdale	* San Frin pattern y 15 60 Run ti 0 11 17 28 43 87 97 128 159	229 6 rancisco s ns for 10 ry 25 60 mes from 0 11 17 35 50 94 104 135	off-peak y 35 60 start in n 0 21 33 51 69	hours, or y 55 60 inutes 0 18 30 48 66 104 114 139 170	6 g Station ne-way y 65 60 0 11 17 35 50 94 113 144 181	241 6 7 75 60 0 25 35 66 103	6
Norwalk Anaheim # of Trains Phase 1 Test tra Frequency San Francisco Millbrae Red wood City San Jose Gilroy Merced Fresno Visalia Bakersfield Palmdale San Fernando	* San Frin pattern y 15 60 Run ti 0 11 17 28 43 87 97 128 159 179	229 6 rancisco s ns for 10 r y 25 60 res from 0 11 17 35 50 94 104 135 166 186 201 216	off-peak y 35 60 start in n 0 21 33 51 69	hours, or y 55 60 inutes 0 18 30 48 66 104 114 139 170 190 205 220	6 g Station ne-way y 65 60 0 11 17 35 50 94 113 144 181 207 222 237	241 6 y 75 60 0 25 35 66 103 129	6
Norwalk Anaheim # of Trains Phase 1 Test tra Frequency San Francisco Millbrae Redwood City San Jose Gilroy Merced Fresno Visalia Bakersfield Palmdale San Fernando Los Angeles	* San Frin pattern y 15 60 Run ti 0 11 17 28 43 87 97 128 159 179	229 6 rancisco s ns for 10 c y 25 60 mes fom 0 11 17 35 50 94 104 135 166 186 201	off-peak y 35 60 start in n 0 21 33 51 69	hours, or y 55 60 inutes 0 18 30 48 66 104 114 139 170 190 205	6 g Station ne-way y 65 60 11 17 35 50 94 113 144 181 207 222	241 6 y 75 60 0 25 35 66 103 129	6

Note: "Frequency" refers to "Headway" in these pattern charts.

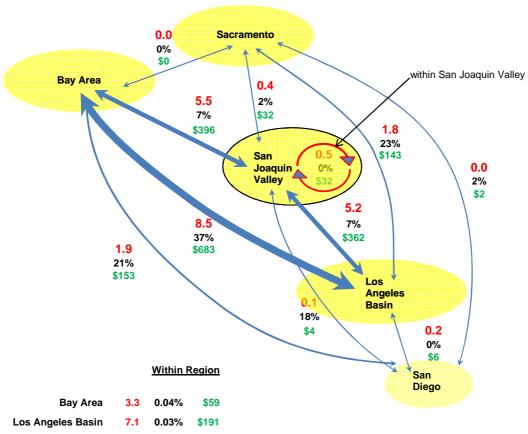
Run Date: 3/22/2012

Scenario11-035

High Speed Rail (HSR) between San Francisco and LA Basin (DRAFT)

Major Market Forecast: 2030

Annual Ridership, HSR Mode Share, and Annual Revenue



San Diego 0.00% 0.0 \$0

KEY: X.X = Annual HSR Ridership (in millions)

X% = HSR Mode Share

\$X = Annual Revenue (in millions - yr 2010 dollars)

Total between Region	28.6	2.61%	\$2,107
Total within Region	10.4	0.02%	\$251
Total System	39.0	0.08%	\$2,357

Run Date: 3/22/2012

Disclaimer

Scenario 11-035

High Speed Rail (HSR) between San Francisco and LA Basin (DRAFT)

Annual Region to Region Forecasts by Mode, Year 2030

Riders in millions per year, shown by trip O&D

				Ridership				Mode	Share		Average F	are (2010\$)	HSR
	Market	Air	Conv. Rail	HSR	Auto	Total	Air	Conv. Rail	HSR	Auto	HSR	Air	Revenue (2010\$)
1	LA basin - Sacramento	2.3	0.0	1.8	3.6	7.7	30.0%	0.0%	23.0%	47.0%	\$81	\$162	\$143
2	LA basin - San Diego	0.0	7.9	0.2	131.2	139.4	0.0%	6.0%	0.0%	94.0%	\$33	-	\$6
3	LA basin- Bay Area	7.7	0.0	8.5	6.5	22.6	34.0%	0.0%	37.0%	29.0%	\$81	\$165	\$683
4	Sacramento - Bay Area	0.0	4.1	0.0	70.0	74.1	0.0%	5.0%	0.0%	95.0%	\$21	\$274	\$0
5	San Diego- Sacramento	1.7	0.0	0.0	0.0	1.8	96.0%	0.0%	2.0%	2.0%	\$81	\$107	\$2
6	San Diego- Bay Area	6.2	0.0	1.9	0.8	8.9	70.0%	0.0%	21.0%	9.0%	\$81	\$99	\$153
7	Bay Area - San Joaquin Valley	0.6	0.9	5.5	66.6	73.6	1.0%	2.0%	7.0%	90.0%	\$73	\$352	\$396
8	San Joaquin Valley - LA basin	1.2	0.0	5.2	63.4	69.9	2.0%	0.0%	7.0%	91.0%	\$69	\$710	\$362
9	Sacramento - San Joaquin Valley	0.3	0.1	0.4	21.7	22.6	1.0%	1.0%	2.0%	96.0%	\$78	\$102	\$32
10	San Diego - San Joaquin Valley	0.1	0.0	0.1	0.2	0.3	26.0%	0.0%	18.0%	56.0%	\$72	\$420	\$4
11	within Bay Area Peninsula*	0.0	168.0	3.3	7,594.8	7,766.0	0.0%	2.0%	0.0%	98.0%	\$18	-	\$59
12	within North LA basin*	0.0	3.1	3.1	8,430.2	8,436.5	0.0%	0.0%	0.0%	100.0%	\$27	-	\$85
14	within South LA basin*	0.0	1.1	1.2	10,464.1	10,466.3	0.0%	0.0%	0.0%	100.0%	\$24	-	\$28
15	North LA - South LA*	0.0	2.6	2.8	2,855.1	2,860.5	0.0%	0.0%	0.0%	100.0%	\$27	-	\$78
18	within San Diego region	0.0	0.0	0.0	8,277.5	8,277.5	0.0%	0.0%	0.0%	100.0%	-	-	\$0
19	within San Joaquin Valley	0.0	1.5	0.5	6,265.6	6,267.7	0.0%	0.0%	0.0%	100.0%	\$60	\$580	\$32
20	Other	3.6	0.5	4.6	7,326.7	7,335.4	0.0%	0.0%	0.0%	100.0%	\$63	\$386	\$293
	Total	23.8	189.7	39.0	51,578.1	51,830.6	0.0%	0.4%	0.1%	99.5%	\$60	0.0%	\$2,357
	within San Diego region	0.0	0.0	0.0	8,277.5	8,277.5	0.0%	0.0%	0.0%	100.0%	-	\$0	\$0
	within entire LA basin	0.0	6.7	7.1	21,749.4	21,763.3	0.0%	0.0%	0.0%	99.9%	\$27	\$0	\$191
	within entire MTC	0.0	168.0	3.3	7,594.8	7,766.0	0.0%	2.2%	0.0%	97.8%	\$18	\$0	\$59
	within other regions	0.0	0.0	0.0	13,112.2	13,112.2	0.0%	0.0%	0.0%	100.0%	-	\$0	\$0
	Total between regions	23.8	15.0	28.6	844.2	911.6	2.6%	1.6%	3.1%	92.6%	\$74	\$0	\$2,107

NOTE: Conventional rail includes Metrolink and Surfliner within the LA Basin, and BART, Caltrain, ACE and Capitol Corridor within the Bay Area.

Auto Operating Cost = 17 cents per mile per person (2005\$\$)

Consumer price change 2005-2010 1.12 http://www.dir.ca.gov/dlsr/CPI/EntireCCPI.PDF; all urban consumers

Consumer price change 2010-2011 1.03

Disclaimer

Scenario11-035: High Speed Rail (HSR) between San Francisco and LA Basin (DRAFT)

Forecast of Daily Station Boardings: 2030

Origin Station		Boardin	gs	
	Inter-regional	SCAG	MTC	Total
San Francisco (Transbay)	21,200	-	4,800	26,000
San Francisco (4th & King)	200	-	500	700
Millbrae	800	-	2,000	2,800
Redwood City	1,400	-	1,400	2,800
San Jose	5,600	-	1,800	7,400
Gilroy	3,800	-	600	4,400
Merced	4,600	-	-	4,600
Fresno	3,200	-	-	3,200
Visalia	1,400	-	-	1,400
Bakersfield	5,400	-	-	5,400
Palmdale	3,800	5,100	-	8,900
San Fernando Valley	3,300	4,200	-	7,500
Los Angeles Union Station	4,200	9,300	-	13,500
Norwalk	2,600	3,600	-	6,200
Anaheim	17,000	3,700	-	20,700
Daily	78,500	25,900	11,100	115,500
Annual (millions)	28.6	7.1	3.3	39.0
Annualization Factor	364	275	296	338

Disclaimer

Scenario11-035: High Speed Rail (HSR) between San Francisco and LA Basin (DRAFT)

Source of Annual Interregional HSR Trips by Region Pair, Mode and Trip Purpose

Year 2030

	Alliadi Illor		Annual HSR Trips	ogioni i an,		ed from Each Com	Mode - E		% Diverte	d from Each N	lode - Rec	reation Other
Origin Region	Destination Region	Business/ Commute	Recreation/ Other	Total	Auto	Conv. Rail	Air	Induced	Auto	Conv. Rail	Air	Induced
3 3	SCAG	-	-	-	0%	0%	0%	0%	0%	0%	0%	0%
	SANDAG	13,000	70,000	83,000	85%	14%	1%	0%	97%	3%	0%	0%
Co	MTC	1,477,000	2,751,000	4,228,000	50%	0%	45%	4%	46%	0%	50%	4%
\$\$ \$\psi_0	SACOG	318,000	564,000	882,000	88%	0%	8%	4%	74%	0%	21%	5%
\mathcal{S}	SJV	1,614,000	991,000	2,605,000	91%	0%	7%	2%	90%	0%	6%	4%
	CC/AMBAG	490,000	270,000	760,000	63%	0%	37%	0%	63%	0%	37%	0%
	OTHER	165,000	77,000	242,000	93%	0%	7%	0%	90%	0%	8%	2%
	SCAG	13,000	70,000	83,000	85%	14%	1%	0%	97%	3%	0%	0%
	SANDAG	· -	-	-	0%	0%	0%	0%	0%	0%	0%	0%
SMOAG	MTC	187,000	762,000	949,000	6%	0%	91%	3%	23%	0%	76%	2%
Q.	SACOG	2,000	12,000	14,000	2%	0%	98%	0%	7%	0%	93%	0%
Æ	SJV	28,000	-	28,000	87%	0%	7%	6%	100%	0%	0%	0%
9)	CC/AMBAG	6,000	-	6,000	60%	0%	35%	5%	0%	0%	0%	0%
	OTHER	3,000	-	3,000	81%	0%	13%	6%	0%	0%	0%	0%
	SCAG	1,477,000	2,751,000	4,228,000	50%	0%	45%	4%	46%	0%	50%	4%
	SANDAG	187,000	762,000	949,000	6%	0%	91%	3%	23%	0%	76%	2%
	MTC	-	-	-	0%	0%	0%	0%	0%	0%	0%	0%
M	SACOG	4,000	1,000	5,000	90%	10%	0%	0%	97%	3%	0%	0%
2	SJV	877,000	1,848,000	2,725,000	84%	6%	9%	1%	89%	4%	5%	2%
	CC/AMBAG	375,000	678,000	1,053,000	94%	1%	3%	2%	99%	0%	1%	0%
	OTHER	7,000	34,000	41,000	94%	5%	1%	0%	98%	1%	1%	0%
	SCAG	318,000	564,000	882,000	88%	0%	8%	4%	74%	0%	21%	5%
	SANDAG	2,000	12,000	14,000	2%	0%	98%	0%	7%	0%	93%	0%
Co	MTC	4,000	1,000	5,000	90%	10%	0%	0%	97%	3%	0%	0%
SACOG	SACOG	-	-	-	0%	0%	0%	0%	0%	0%	0%	0%
Š	SJV	206,000	1,000	207,000	84%	7%	9%	0%	97%	0%	3%	0%
-	CC/AMBAG	50,000	1,000	51,000	94%	2%	5%	0%	98%	0%	2%	0%
	OTHER	-	-	-	99%	1%	0%	0%	0%	0%	0%	0%
	SCAG	1,614,000	991,000	2,605,000	91%	0%	7%	2%	90%	0%	6%	4%
	SANDAG	28,000	-	28,000	87%	0%	7%	6%	100%	0%	0%	0%
	MTC	877,000	1,848,000	2,725,000	84%	6%	9%	1%	89%	4%	5%	2%
3	SACOG	206,000	1,000	207,000	84%	7%	9%	0%	97%	0%	3%	0%
S	SJV	446,000	84,000	530,000	80%	17%	3%	0%	99%	1%	0%	0%
	CC/AMBAG	132,000	3,000	135,000	93%	1%	7%	0%	100%	0%	0%	0%
	OTHER	12,000	-	12,000	94%	4%	3%	0%	100%	0%	0%	0%
	SCAG	490,000	270,000	760,000	63%	0%	37%	0%	63%	0%	37%	0%
6 -	SANDAG	6,000	· <u>-</u>	6,000	60%	0%	35%	5%	0%	0%	0%	0%
× 6	MTC	375,000	678,000	1,053,000	94%	1%	3%	2%	99%	0%	1%	0%
180	SACOG	50,000	1,000	51,000	94%	2%	5%	0%	98%	0%	2%	0%
ST	SJV	132,000	3,000	135,000	93%	1%	7%	0%	100%	0%	0%	0%
CCAMBAG	CC/AMBAG	8,000	-	8,000	98%	0%	2%	0%	100%	0%	0%	0%
	OTHER	6,000	-	6,000	98%	1%	1%	0%	100%	0%	0%	0%
	SCAG	165,000	77,000	242,000	93%	0%	7%	0%	90%	0%	8%	2%
	SANDAG	3,000	· <u>-</u>	3,000	81%	0%	13%	6%	0%	0%	0%	0%
OTHER	MTC	7,000	34,000	41,000	94%	5%	1%	0%	98%	1%	1%	0%
Ž.	SACOG	-	-	-	99%	1%	0%	0%	0%	0%	0%	0%
6	SJV	12,000	-	12,000	94%	4%	3%	0%	100%	0%	0%	0%
	CC/AMBAG	6,000	-	6,000	98%	1%	1%	0%	100%	0%	0%	0%
	OTHER	-	-	-	100%	0%	0%	0%	0%	0%	0%	0%
TO	TAL	12,398,000	16,210,000	28,608,000	75%	2%	21%	2%	67%	1%	29%	3%

Percent of Total Statewide Interregional HSR Trips that are Induced

Acronyms List:

SCAG Southern California Association of Governments

SANDAG San Diego Association of Governments
MTC Metropolitan Transportation Commission
SACOG Sacramento Area Council of Governments

SJV San Joaquin Valley

CC/AMBAG Central Coast/Association of Monterey Bay Area Governments

Disclaimer

California High Speed Rail Ridership and Revenue Forecast Model Run Summary

Scenario: 12-048: Phase 1

Scenario Description: High Speed Rail (HSR) between San Francisco and LA Basin. Two peak HSR lines (and

one offpeak) were truncated at the San Jose stop (DRAFT)

Phase: PH1
Year: 2030

HSR Fare Policy: 83% of San Francisco-Los Angeles airfare with lower rates for shorter distances

AIR Fare Policy: Actual 2009 airfares

CVR Fare Policy: Actual 2011 fares

Parking Costs: High (Oct-09)

Motor Fuel: 25 cents/mile (2005\$)

Socioeconomic: Based on comparison of 2008 to 2011 Woods and Poole Forecast

Trip Rate: 2005 Survey, by region

Service Summary: • 1 peak TPH from San Francisco (Transbay) to Los Angeles Union Station (1 in offpeak)

(See next page for details) • 1 peak TPH from San Francisco (4th & King) to Los Angeles Union Station (0 in

offpeak)

• 1 peak TPH from San Francisco (Transbay) to Anaheim (2 in offpeak)

• 2 peak TPH from San Jose to Anaheim (1 in offpeak)

• 1 peak TPH from San Francisco (Transbay) to Merced (1 in offpeak)

• 1 peak TPH from Merced to Los Angeles Union Station (1 in offpeak)



Run Date: 3/22/2012

Disclaimer

Scenario 12-048: Phase 1

High Speed Rail (HSR) between San Francisco and LA Basin. Two peak HSR lines (and one offpeak) were truncated at the San Jose stop (DRAFT)

Operating Plan:

HSR Patterns

Phase 1 Test train patterns at 6 peak hours, one-way

	10	20	30	40	50	60	70
Frequency	60	60	60	60	60	60	60
	Run tiı	mes from	start in min	utes			
San Francisco	0		0	0		0	
Millbrae			18	9		18	
Redwood City			33	21			
San Jose		0	51	39	0		
Gilroy		17	69		21	53	
Merced			108				0
Fresno		59			65		25
Visalia		17				110	
Bakersfield		100		133		141	66
Palmdale		17		170	137		103
San Fernando		17		196		198	129
Los Angeles	160	166		211	172	213	144
Norwalk		181			187	228	
Anaheim		194			200	241	

[#] of Trains

Phase 1 Test train patterns at 10 off-peak hours, one-way

	1 4-	0.5	0.5		0.5	7-	
	15	25	35	55	65	75	
Frequency	60	60	60	60	60	60	
	Run tir	mes from	start in mini	utes			
San Francisco	0		0	0	0		
Millbrae			21	18			
Redwood City			33	30			
San Jose		0	51	48	35		
Gilroy			69	66			
Merced			108			0	
Fresno	87	59			94	25	
Visalia					113		
Bakersfield	128	100			144	66	
Palmdale					181	103	
San Fernando					207	129	
Los Angeles	194	166		205	222	144	
Norwalk		181		220	237		
Anaheim		194		233	250		

Run Date: 3/22/2012

Note: "Frequency" refers to "Headway" in these pattern charts.

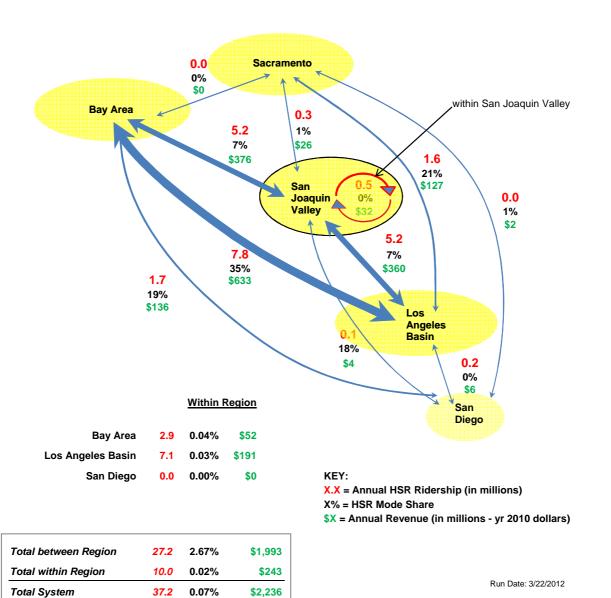
[#] of Trains

Scenario12-048: Phase 1

High Speed Rail (HSR) between San Francisco and LA Basin. Two peak HSR lines (and one offpeak) were truncated at the San Jose stop (DRAFT)

Major Market Forecast: 2030

Annual Ridership, HSR Mode Share, and Annual Revenue



Disclaimer

Scenario 12-048: Phase 1-High Speed Rail (HSR) between San Francisco and LA Basin. Two peak HSR lines (and one offpeak) were truncated at the San Jose stop (DRAFT)

Annual Region to Region Forecasts by Mode, Year 2030

Riders in millions per year, shown by trip O&D

				Ridership				Mode	Share		Average	Fare (2010\$)	HSR
	Market	Air	Conv. Rail	HSR	Auto	Total	Air	Conv. Rail	HSR	Auto	HSR	Air	Revenue (2010\$)
1	LA basin - Sacramento	2.3	0.0	1.6	3.8	7.7	30.1%	0.0%	20.6%	49.3%	\$81	\$162	\$127
2	LA basin - San Diego	0.0	7.9	0.2	131.2	139.4	0.0%	5.7%	0.1%	94.2%	\$33	-	\$6
3	LA basin- Bay Area	8.0	0.0	7.8	6.8	22.6	35.4%	0.0%	34.6%	30.0%	\$81	\$166	\$633
4	Sacramento - Bay Area	0.0	4.1	0.0	70.0	74.1	0.0%	5.5%	0.0%	94.5%	\$29	\$274	\$0
5	San Diego- Sacramento	1.7	0.0	0.0	0.0	1.8	96.4%	0.0%	1.3%	2.3%	\$81	\$106	\$2
6	San Diego- Bay Area	6.3	0.0	1.7	0.8	8.9	71.7%	0.0%	19.0%	9.3%	\$81	\$99	\$136
7	Bay Area - San Joaquin Valley	0.6	1.0	5.2	66.9	73.6	0.8%	1.3%	7.0%	90.9%	\$73	\$362	\$376
8	San Joaquin Valley - LA basin	1.2	0.0	5.2	63.4	69.9	1.8%	0.0%	7.4%	90.8%	\$69	\$711	\$360
9	Sacramento - San Joaquin Valley	0.3	0.1	0.3	21.8	22.6	1.3%	0.6%	1.5%	96.6%	\$79	\$102	\$26
10	San Diego - San Joaquin Valley	0.1	0.0	0.1	0.2	0.3	26.2%	0.1%	17.7%	56.0%	\$72	\$420	\$4
11	within Bay Area Peninsula*	0.0	168.1	2.9	7,595.0	7,766.0	0.0%	2.2%	0.0%	97.8%	\$18	-	\$52
12	within North LA basin*	0.0	3.1	3.1	8,430.2	8,436.4	0.0%	0.0%	0.0%	99.9%	\$27	-	\$85
14	within South LA basin*	0.0	1.1	1.2	10,464.1	10,466.3	0.0%	0.0%	0.0%	100.0%	\$24	-	\$28
15	North LA - South LA*	0.0	2.6	2.8	2,855.1	2,860.5	0.0%	0.1%	0.1%	99.8%	\$27	-	\$78
18	within San Diego region	0.0	0.0	0.0	8,277.5	8,277.5	0.0%	0.0%	0.0%	100.0%		-	\$0
19	within San Joaquin Valley	0.0	1.5	0.5	6,265.6	6,267.7	0.0%	0.0%	0.0%	100.0%	\$60	\$580	\$32
20	Other	3.6	0.5	4.6	7,326.8	7,335.4	0.0%	0.0%	0.1%	99.9%	\$64	\$386	\$292
	Total	24.3	189.8	37.2	51,579.2	51,830.6	0.0%	0.4%	0.1%	99.5%	\$60	-	\$2,236
	within San Diego region	0.0	0.0	0.0	8,277.5	8,277.5	0.0%	0.0%	0.0%	100.0%	-	-	\$0
	within entire LA basin	0.0	6.7	7.1	21,749.4	21,763.2	0.0%	0.0%	0.0%	99.9%	\$27	-	\$191
	within entire MTC	0.0	168.1	2.9	7,595.0	7,766.0	0.0%	2.2%	0.0%	97.8%	\$18	-	\$52
	within other regions	0.0	0.0	0.0	13,112.2	13,112.2	0.0%	0.0%	0.0%	100.0%	-	-	\$0
	Total between regions	24.3	15.0	27.2	845.1	911.6	2.7%	1.6%	3.0%	92.7%	\$73	-	\$1,993

NOTE: Conventional rail includes Metrolink and Surfliner within the LA Basin, and BART, Caltrain, ACE and Capitol Corridor within the Bay Area.

Auto Operating Cost = 25 cents per mile per person (2005\$\$)

Consumer price change 2005-2010 1.12 http://www.dir.ca.gov/dlsr/CPI/EntireCCPI.PDF; all urban consumers

Consumer price change 2010-2011 1.03

Disclaimer

Scenario 12-048: Phase 1-High Speed Rail (HSR) between San Francisco and LA Basin. Two peak HSR lines (and one offpeak) were truncated at the San Jose stop (DRAFT)

Forecast of Daily Station Boardings: 2030

Station	Between	Within		
	Regions	SCAG	Within MTC	Total
San Francisco (Transbay)	18,600	-	4,100	22,700
San Francisco (4th & King)	800	-	600	1,400
Millbrae	700	-	1,900	2,600
Redwood City	1,400	-	1,400	2,800
San Jose	5,700	-	1,300	7,000
Gilroy	3,800	-	600	4,400
Merced	4,600	-	-	4,600
Fresno	3,000	-	-	3,000
Visalia	1,400	-	-	1,400
Bakersfield	5,000	-	-	5,000
Palmdale	3,800	5,100	-	8,900
San Fernando Valley	3,300	4,200	-	7,500
Los Angeles Union Station	4,200	9,300	-	13,500
Norwalk	2,400	3,600	-	6,000
Anaheim	15,800	3,700	-	19,500
Daily	74,500	25,900	9,900	110,300
Annual (millions)	27.2	7.1	2.9	37.2
Annualization Factor	364	275	293	337

Disclaimer

Scenario 12-048: Phase 1-High Speed Rail (HSR) between San Francisco and LA Basin. Two peak HSR lines (and one offpeak) were truncated at the San Jose stop (DRAFT)

Source of Annual Interregional HSR Trips by Region Pair, Mode and Trip Purpose

Year 2030

			Annual HSR Trips		% Diverto	ed from Each Com		Business and	% Diverte	d from Each N	lode - Rec	reation Other
Origin Region	Destination Region	Business/ Commute	Recreation/ Other	Total	Auto	Conv. Rail	Air	Induced	Auto	Conv. Rail	Air	Induced
	SCAG	-	-	-	0%	0%	0%	0%	0%	0%	0%	0%
	SANDAG	13,000	70,000	83,000	85%	15%	1%	0%	97%	3%	0%	0%
Co	MTC	1,238,000	2,676,000	3,915,000	51%	0%	45%	4%	46%	0%	50%	4%
Š	SACOG	245,000	543,000	788,000	89%	0%	8%	3%	75%	0%	21%	4%
S. S	SJV	1,602,000	993,000	2,595,000	91%	0%	7%	3%	90%	0%	6%	4%
	CC/AMBAG	491,000	270,000	761,000	63%	0%	37%	0%	63%	0%	37%	0%
	OTHER	162,000	77,000	238,000	92%	0%	7%	1%	90%	0%	8%	2%
	SCAG	13,000	70,000	83,000	85%	15%	1%	0%	97%	3%	0%	0%
	SANDAG	-	-	-	0%	0%	0%	0%	0%	0%	0%	0%
SAMOAG	MTC	118,000	723,000	842,000	6%	0%	92%	2%	23%	0%	76%	1%
Ó.	SACOG	1,000	11,000	12,000	2%	0%	98%	0%	7%	0%	93%	0%
Ž	SJV	28,000	-	28,000	87%	0%	7%	6%	100%	0%	0%	0%
• 5	CC/AMBAG	6,000	-	6,000	60%	0%	35%	6%	0%	0%	0%	0%
	OTHER	3,000	-	3,000	81%	0%	12%	7%	0%	0%	0%	0%
	SCAG	1,238,000	2,676,000	3,915,000	51%	0%	45%	4%	46%	0%	50%	4%
	SANDAG	118,000	723,000	842,000	6%	0%	92%	2%	23%	0%	76%	1%
_	MTC	-	-	-	0%	0%	0%	0%	0%	0%	0%	0%
MC	SACOG	4,000	1,000	4,000	90%	10%	0%	0%	97%	3%	0%	0%
\$	SJV	772,000	1,815,000	2,587,000	83%	6%	11%	0%	88%	4%	5%	2%
	CC/AMBAG	355,000	681,000	1,036,000	94%	1%	3%	2%	99%	0%	1%	0%
	OTHER	7,000	34,000	41,000	94%	5%	1%	0%	98%	1%	1%	0%
	SCAG	245,000	543,000	788,000	89%	0%	8%	3%	75%	0%	21%	4%
	SANDAG	1,000	11,000	12,000	2%	0%	98%	0%	7%	0%	93%	0%
S	MTC	4,000	1,000	4,000	90%	10%	0%	0%	97%	3%	0%	0%
800g	SACOG	-	-	-	0%	0%	0%	0%	0%	0%	0%	0%
S	SJV	166,000	1,000	167,000	82%	7%	11%	0%	97%	0%	3%	0%
	CC/AMBAG	49,000	1,000	49,000	94%	2%	5%	0%	98%	0%	2%	0%
	OTHER	-	-	-	99%	1%	0%	0%	0%	0%	0%	0%
	SCAG	1,602,000	993,000	2,595,000	91%	0%	7%	3%	90%	0%	6%	4%
	SANDAG	28,000	-	28,000	87%	0%	7%	6%	100%	0%	0%	0%
	MTC	772,000	1,815,000	2,587,000	83%	6%	11%	0%	88%	4%	5%	2%
3	SACOG	166,000	1,000	167,000	82%	7%	11%	0%	97%	0%	3%	0%
-3	SJV	446,000	84,000	530,000	80%	17%	3%	0%	99%	1%	0%	0%
	CC/AMBAG	132,000	3,000	135,000	93%	1%	7%	0%	100%	0%	0%	0%
	OTHER	12,000	-	12,000	94%	4%	3%	0%	100%	0%	0%	0%
	SCAG	491,000	270,000	761,000	63%	0%	37%	0%	63%	0%	37%	0%
CCAMBAG	SANDAG	6,000	-	6,000	60%	0%	35%	6%	0%	0%	0%	0%
Ø.	MTC	355,000	681,000	1,036,000	94%	1%	3%	2%	99%	0%	1%	0%
Z.	SACOG	49,000	1,000	49,000	94%	2%	5%	0%	98%	0%	2%	0%
چ/۲	SJV	132,000	3,000	135,000	93%	1%	7%	0%	100%	0%	0%	0%
O	CC/AMBAG	8,000	-	8,000	98%	0%	2%	0%	100%	0%	0%	0%
	OTHER	6,000	-	6,000	98%	1%	1%	0%	100%	0%	0%	0%
	SCAG	162,000	77,000	238,000	92%	0%	7%	1%	90%	0%	8%	2%
	SANDAG	3,000	-	3,000	81%	0%	12%	7%	0%	0%	0%	0%
Q:	MTC	7,000	34,000	41,000	94%	5%	1%	0%	98%	1%	1%	0%
Ž	SACOG	-	-	-	99%	1%	0%	0%	0%	0%	0%	0%
OTHER	SJV	12,000	-	12,000	94%	4%	3%	0%	100%	0%	0%	0%
	CC/AMBAG	6,000	-	6,000	98%	1%	1%	0%	100%	0%	0%	0%
	OTHER	-	-	-	100%	0%	0%	0%	0%	0%	0%	0%
TC	TAL	11,274,000	15,882,000	27,154,000	76%	2%	20%	2%	67%	1%	29%	3%

Percent of Total Statewide Interregional HSR Trips that are Induced

2.44%

Acronyms List:

SCAG Southern California Association of Governments

SANDAG San Diego Association of Governments
MTC Metropolitan Transportation Commission
SACOG Sacramento Area Council of Governments

SJV San Joaquin Valley

CC/AMBAG Central Coast/Association of Monterey Bay Area Governments

Disclaime

California High Speed Rail Ridership and Revenue Forecast Model Run Summary

Scenario: 12-049:

Scenario Description: High Speed Rail (HSR) between San Francisco and LA Basin (50mpg) (DRAFT)

Phase: PH1
Year: 2030

HSR Fare Policy: 83% of San Francisco-Los Angeles airfare with lower rates for shorter distances

AIR Fare Policy: Actual 2009 airfares

CVR Fare Policy: Actual 2011 fares

Parking Costs: High (Oct-09)

Motor Fuel: 17 cents/mile (2005\$)

Socioeconomic: Based on comparison of 2008 to 2011 Woods and Poole Forecast

Trip Rate: 2005 Survey, by region

Service Summary: (See next page for details)

1 peak TPH from San Francisco (Transbay) to Los Angeles Union Station (1 in offpeak)
1 peak TPH from San Francisco (4th & King) to Los Angeles Union Station (0 in offpeak)

3 peak TPH from San Francisco (Transbay) to Anaheim (3 in offpeak)
1 peak TPH from San Francisco (Transbay) to Merced (1 in offpeak)
1 peak TPH from Merced to Los Angeles Union Station (1 in offpeak)



Disclaime

Scenario 12-049: High Speed Rail (HSR) between San Francisco and LA Basin (50mpg) (DRAFT)

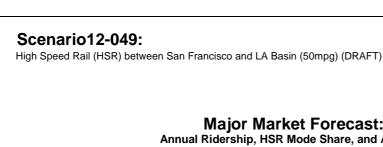
Operating Plan:

HSR Patterns

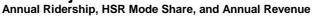
	10	20	30	40*	50	60	70
Frequency	60	60	60	60	60	60	60
· · ·	R	un times	from star	t in minu	tes	•	
San Francisco	0	0	0	0	0	0	
Millbrae	10	11	18	9	18	18	
Redwood City	15	17	33	21	24	24	
San Jose	25	35	51	39	42	35	
Gilroy	36	50	69	54	63	53	
Merced			108				0
Fresno	72	94		92	107	91	25
Visalia	81	104		102	117	110	35
Bakersfield	105	135		133	142	141	66
Palmdale	134	166		170	179	172	103
San Fernando	153	186		196	199	198	129
Los Angeles	160	201		211	214	213	144
Norwalk		216			229	228	
Anaheim		229			242	241	
# of Trains	6	6	6	6	6	6	6
Phase 1 Test tr		rns for 1	0 off-				
Phase 1 Test tr peak hours, one	ain patte	У	у	у 55	у 65	у 75	1
peak hours, one	ain patte			y 55 60	y 65 60	y 75 60]
	ain patter e-way 15	y 25 60	у 35	55 60	65	75]
peak hours, one	ain patter e-way 15	y 25 60	y 35 60	55 60	65	75]
peak hours, one	ain patter e-way 15 60 Run ti	y 25 60 mes from	35 60 start in r	55 60 ninutes	65 60	75]
Frequency San Francisco	ain patter e-way 15 60 Run ti	y 25 60 mes from	y 35 60 start in r	55 60 minutes	65 60 0	75	
Frequency San Francisco Millbrae	ain patter e-way 15 60 Run ti 0	y 25 60 mes from 0	y 35 60 start in r 0	55 60 ninutes 0 18	65 60 0 11	75	
Frequency San Francisco Millbrae Redwood City	ain patter e-way 15 60 Run ti 0 11 17	y 25 60 mes from 0 11 17	y 35 60 start in r 0 21 33	55 60 ninutes 0 18 30	65 60 0 11 17	75	
Frequency San Francisco Millbrae Redwood City San Jose	ain patter e-way 15 60 Run ti 0 11 17 28	y 25 60 mes from 0 11 17 35	y 35 60 start in r 0 21 33 51	55 60 ninutes 0 18 30 48	65 60 0 11 17 35	75	
Frequency San Francisco Millbrae Redwood City San Jose Gilroy Merced Fresno	ain patter e-way 15 60 Run ti 0 11 17 28 43	y 25 60 mes from 0 11 17 35 50 94	y 35 60 start in r 0 21 33 51 69	55 60 minutes 0 18 30 48 66	65 60 0 11 17 35 50	75 60 0 25	
Frequency San Francisco Millbrae Redwood City San Jose Gilroy Merced Fresno Visalia	ain patter e-way 15 60 Run ti 0 11 17 28 43 87 97	y 25 60 mes from 0 11 17 35 50	y 35 60 start in r 0 21 33 51 69	55 60 minutes 0 18 30 48 66	65 60 0 11 17 35 50 94 113	75 60 0 25 35	
Frequency San Francisco Millbrae Redwood City San Jose Gilroy Merced Fresno Visalia Bakersfield	ain patter e-way 15 60 Run ti 0 11 17 28 43 87 97 128	y 25 60 mes from 0 11 17 35 50 94 104 135	y 35 60 start in r 0 21 33 51 69	55 60 minutes 0 18 30 48 66	65 60 0 11 17 35 50 94 113 144	75 60 0 25 35 66	
Frequency San Francisco Millbrae Redwood City San Jose Gilroy Merced Fresno Visalia Bakersfield Palmdale	ain patter e-way 15 60 Run ti 0 11 17 28 43 87 97 128 159	y 25 60 mes from 0 11 17 35 50 94 104 135 166	y 35 60 start in r 0 21 33 51 69	55 60 minutes 0 18 30 48 66 104 114 139 170	65 60 0 11 17 35 50 94 113 144 181	75 60 0 25 35 66 103	
Frequency San Francisco Millbrae Redwood City San Jose Gilroy Merced Fresno Visalia Bakersfield Palmdale San Fernando	ain patter e-way 15 60 Run ti 0 11 17 28 43 87 97 128 159 179	y 25 60 mes from 0 11 17 35 50 94 104 135 166 186	y 35 60 start in r 0 21 33 51 69	55 60 ninutes 0 18 30 48 66 104 114 139 170 190	65 60 0 11 17 35 50 94 113 144 181 207	75 60 0 25 35 66 103 129	
Frequency San Francisco Millbrae Redwood City San Jose Gilroy Merced Fresno Visalia Bakersfield Palmdale San Fernando Los Angeles	ain patter e-way 15 60 Run ti 0 11 17 28 43 87 97 128 159	y 25 60 mes from 0 11 17 35 50 94 104 135 166 201	y 35 60 start in r 0 21 33 51 69	55 60 ninutes 0 18 30 48 66 104 114 139 170 190	65 60 0 11 17 35 50 94 113 144 181 207 222	75 60 0 25 35 66 103	
Frequency San Francisco Millbrae Redwood City San Jose Gilroy Merced Fresno Visalia Bakersfield Palmdale San Fernando Los Angeles Norwalk	ain patter e-way 15 60 Run ti 0 11 17 28 43 87 97 128 159 179	y 25 60 mes from 0 11 17 35 50 94 104 135 166 186 201 216	y 35 60 start in r 0 21 33 51 69	55 60 minutes 0 18 30 48 66 104 114 139 170 190 205 220	65 60 0 11 17 35 50 94 113 144 181 207 222 237	75 60 0 25 35 66 103 129	
Frequency San Francisco Millbrae Redwood City San Jose Gilroy Merced Fresno Visalia Bakersfield Palmdale San Fernando Los Angeles Norwalk Anaheim	ain patter e-way 15 60 Run ti 0 11 17 28 43 87 97 128 159 179 194	y 25 60 mes from 0 11 17 35 50 94 104 135 166 186 201 216 229	y 35 60 start in r 0 21 33 51 69 108	55 60 minutes 0 18 30 48 66 104 114 139 170 190 205 220 233	65 60 0 11 17 35 50 94 113 144 181 207 222 237 250	75 60 0 25 35 66 103 129 144	
Frequency San Francisco Millbrae Redwood City San Jose Gilroy Merced Fresno Visalia Bakersfield Palmdale San Fernando Los Angeles Norwalk	ain patter e-way 15 60 Run ti 0 11 17 28 43 87 97 128 159 179	y 25 60 mes from 0 11 17 35 50 94 104 135 166 186 201 216	y 35 60 start in r 0 21 33 51 69	55 60 minutes 0 18 30 48 66 104 114 139 170 190 205 220	65 60 0 11 17 35 50 94 113 144 181 207 222 237	75 60 0 25 35 66 103 129	

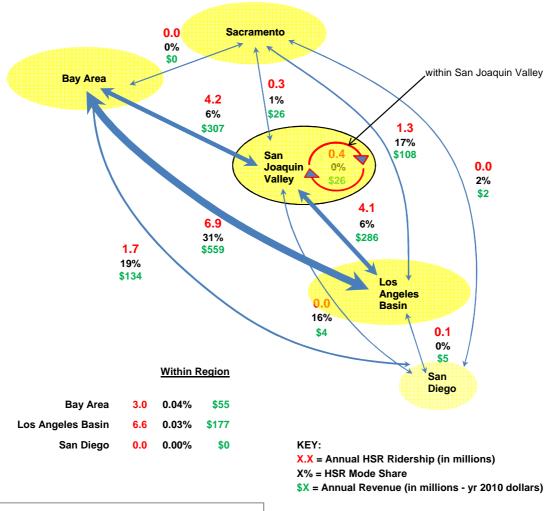
Note: "Frequency" refers to "Headway" in these pattern charts.

Run Date: 3/22/2012



Major Market Forecast: 2030





Total between Region 2.28% \$1,688 22.9 Total within Region 9.7 0.02% \$232 Total System 32.6 0.06% \$1,920

Run Date: 3/22/2012

Disclaimer

Scenario 12-049: -High Speed Rail (HSR) between San Francisco and LA Basin (50mpg) (DRAFT)

Annual Region to Region Forecasts by Mode, Year 2030

Riders in millions per year, shown by trip O&D

				Ridership			Mode Share				Average F	are (2010\$)	HSR
	Market	Air	Conv. Rail	HSR	Auto	Total	Air	Conv. Rail	HSR	Auto	HSR	Air	Revenue (2010\$)
1	LA basin - Sacramento	1.9	0.0	1.3	4.5	7.7	24.9%	0.0%	17.3%	57.8%	\$81	\$163	\$108
2	LA basin - San Diego	0.0	6.6	0.1	133.1	139.9	0.0%	4.7%	0.1%	95.2%	\$33	-	\$5
3	LA basin- Bay Area	6.7	0.0	6.9	9.1	22.6	29.5%	0.0%	30.5%	40.0%	\$81	\$167	\$559
4	Sacramento - Bay Area	0.0	3.2	0.0	71.5	74.8	0.0%	4.3%	0.0%	95.7%	\$21	\$272	\$0
5	San Diego- Sacramento	1.7	0.0	0.0	0.1	1.8	93.2%	0.0%	1.6%	5.2%	\$81	\$107	\$2
6	San Diego- Bay Area	5.6	0.0	1.7	1.5	8.8	63.8%	0.0%	18.7%	17.5%	\$81	\$99	\$134
7	Bay Area - San Joaquin Valley	0.5	0.7	4.2	69.1	74.5	0.7%	0.9%	5.7%	92.7%	\$72	\$335	\$307
8	San Joaquin Valley - LA basin	1.1	0.0	4.1	65.5	70.7	1.5%	0.0%	5.8%	92.7%	\$70	\$721	\$286
9	Sacramento - San Joaquin Valley	0.2	0.1	0.3	21.9	22.6	1.1%	0.5%	1.5%	97.0%	\$78	\$102	\$26
10	San Diego - San Joaquin Valley	0.1	0.0	0.0	0.2	0.3	25.5%	0.1%	15.5%	58.9%	\$72	\$427	\$4
11	within Bay Area Peninsula*	0.0	154.9	3.0	7,740.0	7,898.0	0.0%	2.0%	0.0%	98.0%	\$18	-	\$55
12	within North LA basin*	0.0	2.4	2.9	8,430.4	8,435.8	0.0%	0.0%	0.0%	99.9%	\$27	-	\$79
14	within South LA basin*	0.0	0.8	1.1	10,464.2	10,466.1	0.0%	0.0%	0.0%	100.0%	\$24	-	\$26
15	North LA - South LA*	0.0	1.9	2.6	2,855.3	2,859.8	0.0%	0.1%	0.1%	99.8%	\$27	-	\$72
18	within San Diego region	0.0	0.0	0.0	8,277.5	8,277.5	0.0%	0.0%	0.0%	100.0%	•	-	\$0
19	within San Joaquin Valley	0.0	1.1	0.4	6,266.7	6,268.2	0.0%	0.0%	0.0%	100.0%	\$60	\$542	\$26
20	Other	3.1	0.4	3.7	7,332.6	7,339.8	0.0%	0.0%	0.1%	99.9%	\$62	\$384	\$230
	Total	21.0	172.0	32.6	51,743.2	51,968.9	0.0%	0.3%	0.1%	99.6%	\$59	-	\$1,920
	within San Diego region	0.0	0.0	0.0	8,277.5	8,277.5	0.0%	0.0%	0.0%	100.0%	-	-	\$0
	within entire LA basin	0.0	5.1	6.6	21,749.9	21,761.6	0.0%	0.0%	0.0%	99.9%	\$27	-	\$177
	within entire MTC	0.0	154.9	3.0	7,740.0	7,898.0	0.0%	2.0%	0.0%	98.0%	\$18	-	\$55
	within other regions	0.0	0.0	0.0	13,112.2	13,112.2	0.0%	0.0%	0.0%	100.0%	-	-	\$0
	Total between regions	21.0	12.1	22.9	863.6	919.6	2.3%	1.3%	2.5%	93.9%	\$74	-	\$1,688

NOTE: Conventional rail includes Metrolink and Surfliner within the LA Basin, and BART, Caltrain, ACE and Capitol Corridor within the Bay Area.

Auto Operating Cost = 17 cents per mile per person (2005\$\$)

Consumer price change 2005-2010 1.12 http://www.dir.ca.gov/dlsr/CPI/EntireCCPI.PDF; all urban consumers

Consumer price change 2010-2011 1.03

Disclaimer

Scenario 12-049: -High Speed Rail (HSR) between San Francisco and LA Basin (50mpg) (DRAFT)

Forecast of Daily Station Boardings: 2030

Station	Between	Within		
	Regions	SCAG	Within MTC	Total
San Francisco (Transbay)	17,000	-	4,500	21,500
San Francisco (4th & King)	100	-	400	500
Millbrae	600	-	1,900	2,500
Redwood City	1,100	-	1,300	2,400
San Jose	4,600	-	1,700	6,300
Gilroy	3,100	-	500	3,600
Merced	3,700	-	-	3,700
Fresno	2,600	-	-	2,600
Visalia	1,000	-	-	1,000
Bakersfield	4,200	-	-	4,200
Palmdale	2,900	4,600	-	7,500
San Fernando Valley	2,400	3,900	-	6,300
Los Angeles Union Station	3,300	8,800	-	12,100
Norwalk	2,100	3,500	-	5,600
Anaheim	14,100	3,400	-	17,500
Daily	62,800	24,200	10,300	97,300
Annualization Factor	365	274	295	335
Annual (millions)	22.9	6.6	3.0	32.6

Disclaimer

Scenario 12-049: -High Speed Rail (HSR) between San Francisco and LA Basin (50mpg) (DRAFT)

Source of Annual Interregional HSR Trips by Region Pair, Mode and Trip Purpose

Year 2030

		_	Annual HSR Trips		% Divert	ed from Each Com		Business and	% Diverte	d from Each N	lode - Rec	reation Other
	Destination	Business/	Recreation/									
Origin Region	Region	Commute	Other	Total	Auto	Conv. Rail	Air	Induced	Auto	Conv. Rail	Air	Induced
	SCAG	-	-	-	0%	0%	0%	0%	0%	0%	0%	0%
	SANDAG	11,000	59,000	70,000	86%	13%	1%	0%	97%	2%	0%	0%
S	MTC	1,315,000	2,142,000	3,457,000	54%	0%	42%	4%	56%	0%	40%	4%
ريّ	SACOG	261,000	410,000	671,000	89%	0%	8%	4%	78%	0%	18%	4%
$S_{C_{\mathcal{A}_G}}$	SJV	1,328,000	726,000	2,055,000	92%	0%	6%	2%	92%	0%	5%	3%
	CC/AMBAG	416,000	201,000	617,000	65%	0%	35%	0%	69%	0%	31%	0%
	OTHER	140,000	55,000	195,000	93%	0%	7%	0%	92%	0%	7%	1%
	SCAG	11,000	59,000	70,000	86%	13%	1%	0%	97%	2%	0%	0%
_	SANDAG	-	-	-	0%	0%	0%	0%	0%	0%	0%	0%
SANDAG	MTC	181,000	645,000	826,000	9%	0%	88%	3%	37%	0%	61%	2%
S)	SACOG	2,000	12,000	14,000	3%	0%	97%	0%	13%	0%	87%	0%
Š	SJV	24,000	-	24,000	88%	0%	6%	6%	100%	0%	0%	0%
	CC/AMBAG	6,000	-	6,000	62%	0%	33%	4%	0%	0%	0%	0%
	OTHER	2,000	-	2,000	84%	0%	11%	5%	0%	0%	0%	0%
	SCAG	1,315,000	2,142,000	3,457,000	54%	0%	42%	4%	56%	0%	40%	4%
	SANDAG	181,000	645,000	826,000	9%	0%	88%	3%	37%	0%	61%	2%
۲,	MTC	-	-	-	0%	0%	0%	0%	0%	0%	0%	0%
MYC	SACOG	3,000	1,000	4,000	91%	9%	0%	0%	97%	3%	0%	0%
4	SJV	743,000	1,378,000	2,121,000	85%	6%	9%	1%	91%	3%	4%	2%
	CC/AMBAG	309,000	513,000	822,000	94%	2%	3%	2%	99%	0%	1%	0%
	OTHER	6,000	28,000	34,000	94%	5%	1%	0%	98%	1%	1%	0%
	SCAG	261,000	410,000	671,000	89%	0%	8%	4%	78%	0%	18%	4%
	SANDAG	2,000	12,000	14,000	3%	0%	97%	0%	13%	0%	87%	0%
ွှ	MTC	3,000	1,000	4,000	91%	9%	0%	0%	97%	3%	0%	0%
Ş	SACOG	-	-	-	0%	0%	0%	0%	0%	0%	0%	0%
00 X	SJV	168,000	1,000	169,000	85%	7%	8%	0%	98%	0%	2%	0%
	CC/AMBAG	39,000	-	39,000	94%	2%	4%	0%	98%	0%	2%	0%
	OTHER	-	-	-	99%	1%	0%	0%	0%	0%	0%	0%
	SCAG	1,328,000	726,000	2,055,000	92%	0%	6%	2%	92%	0%	5%	3%
	SANDAG	24,000	-	24,000	88%	0%	6%	6%	100%	0%	0%	0%
	MTC	743,000	1,378,000	2,121,000	85%	6%	9%	1%	91%	3%	4%	2%
30	SACOG	168,000	1,000	169,000	85%	7%	8%	0%	98%	0%	2%	0%
٠,	SJV	368,000	62,000	429,000	81%	16%	3%	0%	98%	1%	0%	1%
	CC/AMBAG	110,000	2,000	111,000	93%	1%	6%	0%	100%	0%	0%	0%
	OTHER	10,000	-	10,000	94%	3%	3%	0%	100%	0%	0%	0%
	SCAG	416,000	201,000	617,000	65%	0%	35%	0%	69%	0%	31%	0%
Ca	SANDAG	6,000	-	6,000	62%	0%	33%	4%	0%	0%	0%	0%
CC/MBAG	MTC	309,000	513,000	822,000	94%	2%	3%	2%	99%	0%	1%	0%
N.	SACOG	39,000	-	39,000	94%	2%	4%	0%	98%	0%	2%	0%
<i>'</i> ير.	SJV	110,000	2,000	111,000	93%	1%	6%	0%	100%	0%	0%	0%
O	CC/AMBAG	7,000	-	7,000	98%	0%	2%	0%	100%	0%	0%	0%
	OTHER	5,000	-	5,000	98%	1%	1%	0%	100%	0%	0%	0%
	SCAG	140,000	55,000	195,000	93%	0%	7%	0%	92%	0%	7%	1%
	SANDAG	2,000	-	2,000	84%	0%	11%	5%	0%	0%	0%	0%
OTHER	MTC	6,000	28,000	34,000	94%	5%	1%	0%	98%	1%	1%	0%
#	SACOG	-	-	-	99%	1%	0%	0%	0%	0%	0%	0%
0	SJV	10,000	-	10,000	94%	3%	3%	0%	100%	0%	0%	0%
	CC/AMBAG	5,000	-	5,000	98%	1%	1%	0%	100%	0%	0%	0%
	OTHER	-	-	-	100%	0%	0%	0%	0%	0%	0%	0%
TC	TAL	10,533,000	12,408,000	22,940,000	76%	2%	20%	2%	72%	1%	24%	3%

Percent of Total Statewide Interregional HSR Trips that are Induced

Acronyms List:

SCAG Southern California Association of Governments

SANDAG San Diego Association of Governments
MTC Metropolitan Transportation Commission
SACOG Sacramento Area Council of Governments

SJV San Joaquin Valley

CC/AMBAG Central Coast/Association of Monterey Bay Area Governments

Disclaime

California High Speed Rail Ridership and Revenue Forecast Model Run Summary

Scenario: 12-041d: IOS South (Low) with 20 cents/mi in 2011\$ for 2012 Final Business Plan

Scenario Description:

High Speed Rail (HSR) service between Merced and San Fernando with bus connections to the Bay Area and Sacramento at Merced and to LA Basin at San Fernando (DRAFT)

Phase: IOS Year: 2030

HSR Fare Policy: 83% of San Francisco-Los Angeles airfare with lower rates for shorter distances

AIR Fare Policy: Actual 2009 airfares

CVR Fare Policy: Actual 2011 fares

Parking Costs: High (Oct-09)

Motor Fuel: 20 cents/mile (2011\$)

Socioeconomic: Based on 2011 Moody's Analytics Forecast for 2030

Trip Rate: 2011 Survey, by region

Service Summary:

• 4 peak TPH fr

(See next page for details)
• 4 peak BPH fr

4 peak TPH from Merced and San Fernando(2 in offpeak)
4 peak BPH from Merced to Sacramento(2 in offpeak)

4 peak BPH from Merced to Sacramento(2 in offpeak)4 peak BPH from Merced to San Jose (2 in offpeak)

• 4 peak BPH from Merced to San Francisco (2 in offpeak)

• 4 peak BPH from San Fernando to LA Union Station (2 in offpeak)

• 4 peak BPH from San Fernando to West LA (2 in offpeak)

• 4 peak BPH from San Fernando to Santa Anita (4 in offpeak)



Disclaimer

Run Date: 3/20/2012

Scenario 12-041d: IOS South (Low) with 20 cents/mi in 2011\$ for 2012 Final Business Plan High Speed Rail (HSR) service between Merced and San Fernando with bus connections to the Bay Area and Sacramento at Merced and to LA Basin at San Fernando (DRAFT)

Operating Plan:

Dedicated Bus Connections - North

attern#	-1	2	3
Frequency of service (mins)	15	15	15
San Francisco	0		
Oakland	40	ļ.	
Dublin Pleasanton BART	80		
Sacramento		0	ï
Elk Grove		10	
Lodi		35	
Stockton		60	
Modesto		120	
Denair/Turlock		155	
San Jose			.0
Gilroy			40
Merced	200	200	150
# of buses	24	24	24
Transfer Time @ Merced	15	15	15

ttern#	- 1	2	3
Frequency of service (mins)	30	30	30
San Francisco	0		
Oakland	40		
Dublin Pleasanton BART	80		
Sacramento		0	
Elk Grove		10	
Lodi		35	
Stockton		80	
Modesto		120	
Denair/Turlock		155	
San Jose			0.
Gilroy			40
Merced	200	200	150
# of buses	20	20	20

HSR Patterns

6 Peak Hours

	62	70	22	42
Frequency	60	60	60	60
Run times from start in minutes	Ž ÁL	A.L	O.	500
Merced	0	0	0	0
Fresno	. 19	25	25	19
Visalia	38	44	35	29
Bakersfield	69	母	66	60
Palmdale	100	106	97	97
San Fernando	126	132	123	123
# of Trains	6	6	6	6

10 Off Peak Hours

Transfer Time @ Merced

	67	27
Frequency	60	60
Run times from start in mi	nutes	51
Merced	0	0
Fresno	25	25
Visalia	44	35
Bakersfield	75	66
Palmdale	112	. 97
San Fernando	138	123
# of Trains	10	10

Dedicated Bus Connections - South

Transfer Time @ San Fernando	15	15	15
Pattern#	1	2	3
Frequency of service (mins)	15	15	15
San Fernando (bus)	0	.0	0
Burbank Airport (bus)	12		
Los Angeles Union Station (bus)	37.	V.	
Van Nuys (bus)		12	
West Los Angeles (bus)		32	
Santa Anita (bus)			40
# of buses	24	24	24

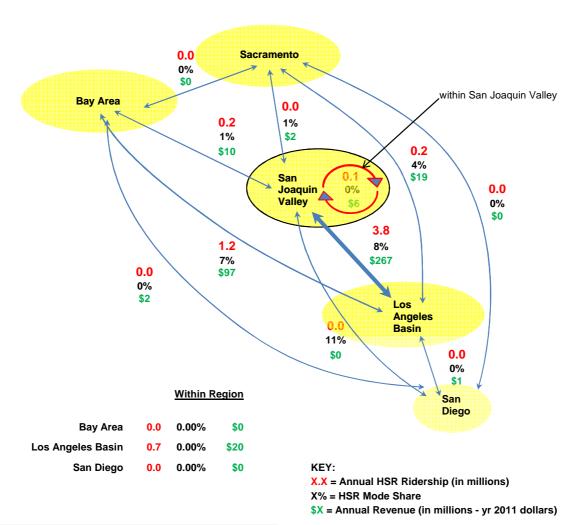
Transfer Time @ San Fernando	15	15	15
Pattern#		2	3
Frequency of service (mins)	30	30	15
San Fernando (bus)	0	0	0
Burbank Airport (bus)	12		
Los Angeles Union Station (bus)	37		E.
Van Nuys (bus)		17	
West Los Angeles (bus)		37	
Santa Anita (bus)			40
# of buses	20	20	-20

Scenario12-041d: IOS South (Low) with 20 cents/mi in 2011\$ for 2012 Final Business Plan

High Speed Rail (HSR) service between Merced and San Fernando with bus connections to the Bay Area and Sacramento at Merced and to LA Basin at San Fernando (DRAFT)

Major Market Forecast: 2030

Annual Ridership, HSR Mode Share, and Annual Revenue



Total between Region	6.4	2.04%	\$466
Total within Region	0.7	0.00%	\$20
Total System	7.1	0.01%	\$486

Run Date: 3/20/2012

Disclaimer

Scenario 12-041d: IOS South (Low) with 20 cents/mi in 2011\$ for 2012 Final Business Plan-High Speed Rail (HSR) service between Merced and San Fernando with bus connections to the Bay Area and Sacramento at Merced and to LA Basin at San Fernando (DRAFT)

Annual Region to Region Forecasts by Mode, Year 2030

Riders in millions per year, shown by trip O&D

	Ridership Mode Share					Average F	are (2011\$)	HSR Revenue					
	Market	Air	Conv. Rail	HSR	Auto	Total	Air	Conv. Rail	HSR	Auto	HSR	Air	(2011\$\$)
1	LA basin - Sacramento	1.7	0.0	0.2	3.7	5.6	30.5%	0.0%	4.3%	65.2%	\$81	\$184	\$19
2	LA basin - San Diego	0.1	7.8	0.0	461.0	468.9	0.0%	1.7%	0.0%	98.3%	\$30	\$0	\$1
3	LA basin- Bay Area	6.8	0.0	1.2	9.4	17.3	39.0%	0.0%	7.0%	54.1%	\$81	\$173	\$97
4	Sacramento - Bay Area	0.0	1.4	0.0	50.2	51.6	0.0%	2.7%	0.0%	97.3%	\$0	\$284	\$0
5	San Diego- Sacramento	1.4	0.0	0.0	0.2	1.5	89.8%	0.0%	0.1%	10.1%	\$81	\$109	\$0
6	San Diego- Bay Area	5.4	0.0	0.0	2.4	7.9	69.1%	0.0%	0.4%	30.5%	\$81	\$101	\$2
7	Bay Area - San Joaquin Valley	0.2	0.1	0.2	27.4	27.8	0.6%	0.4%	0.6%	98.4%	\$59	\$355	\$10
8	San Joaquin Valley - LA basin	0.6	0.0	3.8	44.1	48.5	1.3%	0.0%	7.8%	90.9%	\$70	\$722	\$267
9	Sacramento - San Joaquin Valley	0.0	0.0	0.0	3.6	3.7	0.6%	0.2%	0.8%	98.4%	\$60	\$105	\$2
10	San Diego - San Joaquin Valley	0.0	0.0	0.0	0.0	0.0	35.5%	0.0%	11.5%	52.9%	\$74	\$386	\$0
11	within Bay Area Peninsula*	0.0	116.8	0.0	6,645.0	6,761.9	0.0%	1.7%	0.0%	98.3%	\$0	\$0	\$0
12	within North LA basin*	0.0	2.7	0.7	8,188.6	8,192.0	0.0%	0.0%	0.0%	100.0%	\$30	\$0	\$20
14	within South LA basin*	0.0	1.0	0.0	10,162.8	10,163.8	0.0%	0.0%	0.0%	100.0%	\$0	\$0	\$0
15	North LA - South LA*	0.0	3.1	0.0	2,779.1	2,782.2	0.0%	0.1%	0.0%	99.9%	\$0	\$0	\$0
18	within San Diego region	0.0	0.0	0.0	8,427.5	8,427.5	0.0%	0.0%	0.0%	100.0%	\$0	\$0	\$0
19	within San Joaquin Valley	0.0	0.0	0.1	4,782.3	4,782.4	0.0%	0.0%	0.0%	100.0%	\$50	\$258	\$6
20	Other	2.8	0.1	0.7	6,255.4	6,259.1	0.0%	0.0%	0.0%	99.9%	\$80	\$587	\$59
	Total	19.0	133.1	7.1	47,842.7	48,001.9	0.0%	0.3%	0.0%	99.7%	\$69	\$0	\$486
	within San Diego region	0.0	0.0	0.0	8,427.5	8,427.5	0.0%	0.0%	0.0%	100.0%	\$0	\$0	\$0
	within entire LA basin	0.0	6.8	0.7	21,130.5	21,138.0	0.0%	0.0%	0.0%	100.0%	\$30	\$0	\$20
	within entire MTC	0.0	116.8	0.0	6,645.0	6,761.9	0.0%	1.7%	0.0%	98.3%	\$0	\$0	\$0
	within other regions	0.0	0.0	0.0	10,744.2	10,744.2	0.0%	0.0%	0.0%	100.0%	\$0	\$0	\$0
	Total between regions	19.0	9.5	6.4	895.4	930.3	2.0%	1.0%	0.7%	96.3%	\$73	\$0	\$466

NOTE: Conventional rail includes Metrolink and Surfliner within the LA Basin, and BART, Caltrain, ACE and Capitol Corridor within the Bay Area.

Auto Operating Cost = 17 cents per mile per person (2005\$\$)

Consumer price change 2005-2010 1.12 http://www.dir.ca.gov/dlsr/CPI/EntireCCPI.PDF; all urban consumers

Consumer price change 2010-2011 1.03

Disclaimer

Scenario 12-041d: IOS South (Low) with 20 cents/mi in 2011\$ for 2012 Final Business Plan-High Speed Rail (HSR) service between Merced and San Fernando with bus connections to the Bay Area and Sacramento at Merced and to LA Basin at San Fernando (DRAFT)

Forecast of Daily High Speed Rail Trips by Segment: 2030

SouthBound

			Between Regional	Within Region
Station	Station	Total Trips	Trips	Trips
Merced	Fresno	6,000	6,000	-
Fresno	Visalia	7,100	7,100	-
Visalia	Bakersfield	7,600	7,600	-
Bakersfield	Palmdale	8,200	8,200	-
Palmdale	San Fernando Valley	9,100	7,800	1,300

Scenario 12-041d: IOS South (Low) with 20 cents/mi in 2011\$ for 2012 Final Business Plan-High Speed Rail (HSR) service between Merced and San Fernando with bus connections to the Bay Area and Sacramento at Merced and to LA Basin at San Fernando (DRAFT)

Forecast of Daily Station Boardings: 2030

Station	Between Regions	Within SCAG	Within MTC	Total
Merced	6,000	-	-	6,000
Fresno	1,300	-	-	1,300
Visalia	600	-	-	600
Bakersfield	1,100	-	-	1,100
Palmdale	700	1,300	-	2,000
San Fernando Valley	7,800	1,300	-	9,100
Daily	17,500	2,600	-	20,100
Annual (millions)	6.4	0.7	0.0	7.1
Annualization Factor	365	255	-	351

Disclaimer

Scenario 12-041d: IOS South (Low) with 20 cents/mi in 2011\$ for 2012 Final Business Plan-High Speed Rail (HSR) service between Merced and San Fernando with bus connections to the Bay Area and Sacramento at Merced and to LA Basin at San Fernando (DRAFT)

Source of Annual Interregional HSR Trips by Region Pair, Mode and Trip Purpose

Year 2030

					% Diverted from Each Mode - Business			Business and				
			Annual HSR Trips		Commute				% Diverted from Each Mode - Recreation Other			
	Destination	Business/	Recreation/									
Origin Region		Commute	Other	Total	Auto	Conv. Rail	Air	Induced	Auto	Conv. Rail	Air	Induced
	SCAG	-	-	-	0%	0%	0%	0%	0%	0%	0%	0%
	SANDAG	2,000	21,000	23,000	0%	100%	0%	0%	86%	14%	0%	0%
Co	MTC	535,000	68,000	603,000	53%	0%	45%	2%	55%	0%	44%	1%
SCAG	SACOG	109,000	11,000	120,000	84%	0%	14%	2%	74%	0%	26%	0%
\mathcal{S}	SJV	524,000	1,376,000	1,900,000	90%	0%	9%	1%	94%	0%	4%	2%
	CC/AMBAG	41,000	23,000	65,000	68%	0%	32%	0%	66%	0%	34%	0%
	OTHER	112,000	152,000	264,000	88%	0%	11%	1%	91%	0%	7%	3%
	SCAG	2,000	21,000	23,000	0%	100%	0%	0%	86%	14%	0%	0%
	SANDAG	2,000	21,000	20,000	0%	0%	0%	0%	0%	0%	0%	0%
SANDAG	MTC	13,000	2,000	14,000	6%	0%	94%	1%	39%	0%	61%	0%
8	SACOG	13,000	2,000	14,000	2%	0%	98%	0%	8%	0%	92%	0%
\$	SJV	-	-									
જે		3,000	-	3,000	84%	0%	11%	5%	0%	0%	0%	0%
	CC/AMBAG	-	-	-	69%	0%	30%	2%	0%	0%	0%	0%
	OTHER	-	•	•	79%	0%	14%	7%	0%	0%	0%	0%
	SCAG	535,000	68,000	603,000	53%	0%	45%	2%	55%	0%	44%	1%
	SANDAG	13,000	2,000	14,000	6%	0%	94%	1%	39%	0%	61%	0%
C)	MTC	-	-	-	0%	0%	0%	0%	0%	0%	0%	0%
MZC	SACOG	-	-	-	0%	0%	0%	0%	0%	0%	0%	0%
4	SJV	57,000	31,000	88,000	77%	18%	5%	0%	0%	98%	2%	0%
	CC/AMBAG	11,000	10,000	21,000	83%	6%	11%	0%	93%	4%	2%	0%
	OTHER	-	-	-	0%	0%	0%	0%	0%	0%	0%	0%
	SCAG	109,000	11,000	120,000	84%	0%	14%	2%	74%	0%	26%	0%
	SANDAG	-	-	-	2%	0%	98%	0%	8%	0%	92%	0%
(2)	MTC	-	-	-	0%	0%	0%	0%	0%	0%	0%	0%
SACO _C	SACOG	-	-	-	0%	0%	0%	0%	0%	0%	0%	0%
Ž	SJV	15,000	-	15,000	71%	24%	5%	0%	96%	0%	4%	0%
-5	CC/AMBAG	5,000	-	5,000	90%	5%	5%	0%	100%	0%	0%	0%
	OTHER	-	_	-	0%	0%	0%	0%	0%	0%	0%	0%
	SCAG	524,000	1,376,000	1,900,000	90%	0%	9%	1%	94%	0%	4%	2%
	SANDAG	3,000	1,570,000	3,000	84%	0%	11%	5%	0%	0%	0%	0%
	MTC	57,000	31,000	88,000	77%	18%	5%	0%	0%	98%	2%	0%
3	SACOG		31,000									
S		15,000	-	15,000	71%	24%	5%	0%	96%	0%	4%	0%
	SJV	80,000	46,000	126,000	0%	99%	1%	0%	81%	19%	0%	0%
	CC/AMBAG	10,000	-	10,000	98%	1%	1%	0%	100%	0%	0%	0%
	OTHER	1,000	-	1,000	0%	78%	7%	15%	100%	0%	0%	0%
	SCAG	41,000	23,000	65,000	68%	0%	32%	0%	66%	0%	34%	0%
CC/M84G	SANDAG	-	-	-	69%	0%	30%	2%	0%	0%	0%	0%
Ø,	MTC	11,000	10,000	21,000	83%	6%	11%	0%	93%	4%	2%	0%
S.	SACOG	5,000	-	5,000	90%	5%	5%	0%	100%	0%	0%	0%
<i>چ</i> ′′	SJV	10,000	-	10,000	98%	1%	1%	0%	100%	0%	0%	0%
0	CC/AMBAG	-	-	-	98%	0%	2%	0%	100%	0%	0%	0%
	OTHER	2,000	-	2,000	97%	0%	2%	0%	100%	0%	0%	0%
	SCAG	112,000	152,000	264,000	88%	0%	11%	1%	91%	0%	7%	3%
	SANDAG	-	-	-	79%	0%	14%	7%	0%	0%	0%	0%
OTHER	MTC	-	-	-	0%	0%	0%	0%	0%	0%	0%	0%
¥	SACOG	_	_	-	0%	0%	0%	0%	0%	0%	0%	0%
6	SJV	1,000	_	1,000	0%	78%	7%	15%	100%	0%	0%	0%
ŭ	CC/AMBAG	2,000	_	2,000	97%	0%	2%	0%	100%	0%	0%	0%
	OTHER	2,000	_	_,000	0%	0%	0%	0%	0%	0%	0%	0%
	OTAL	2,960,000	3,434,000	6,394,000	71%	4%	23%	1%	90%	2%	6%	2%
	UIAL	2,900,000	3,434,000	0,394,000	1170	470	23%	170	90%	∠-70	070	∠-70

Percent of Total Statewide Interregional HSR Trips that are Induced 1.64%

Acronyms List:

SCAG Southern California Association of Governments

San Diego Association of Governments SANDAG MTC Metropolitan Transportation Commission SACOG Sacramento Area Council of Governments

SJV San Joaquin Valley

CC/AMBAG Central Coast/Association of Monterey Bay Area Governments

Disclaimer

California High Speed Rail Ridership and Revenue Forecast Model Run Summary

Scenario: 12-053: IOS with 18 cents/mi in 2011\$

Scenario Description:

High Speed Rail (HSR) service between Merced and San Fernando with bus connections to the Bay Area and Sacramento at Merced and to LA Basin at San Fernando (DRAFT)

Phase: IOS Year: 2030

HSR Fare Policy: 83% of San Francisco-Los Angeles airfare with lower rates for shorter distances

AIR Fare Policy: -10% of Actual 2009 airfares

CVR Fare Policy: Actual 2011 fares
Parking Costs: High (Oct-09)

Motor Fuel: 18 cents/mile (2011\$)

Socioeconomic: Based on 2011 Moody's Analytics Forecast for 2030

Trip Rate: 2011 Survey, by region

Service Summary: (See next page for details)

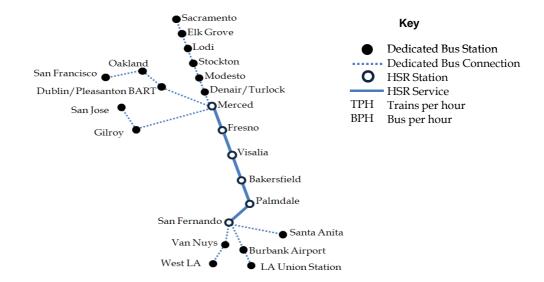
3 peak TPH from Merced to San Fernando (2 in offpeak)3 peak BPH from Merced to Sacramento (2 in offpeak)

• 3 peak BPH from Merced to San Jose (2 in offpeak)

• 3 peak BPH from Merced to San Francisco (2 in offpeak)

• 3 peak BPH from San Fernando to LA Union Station (2 in offpeak)

3 peak BPH from San Fernando to West LA (2 in offpeak)
3 peak BPH from San Fernando to Santa Anita (2 in offpeak)



Run Date: 3/30/2012

Disclaimer

Scenario 12-053: IOS with 18 cents/mi in 2011\$

High Speed Rail (HSR) service between Merced and San Fernando with bus connections to the Bay Area and Sacramento at Merced and to LA Basin at San Fernando (DRAFT)

Operating Plan:

Dedicated Bus Connections - North

6 Peak Hours							
Pattern#	1	2	3				
Frequency of service (mins)	20	20	20				
San Francisco	0						
Oakland	40						
Dublin Pleasanton BART	80						
Sacramento		0					
Elk Grove		10					
Lodi		35					
Stockton		60					
Modesto		120					
Denair/Turlock		155					
San Jose			0				
Gilroy			40				
Merced	200	200	150				
# of buses	18	18	18				

Pattern#	1	2	3
Frequency of service (mins)	30	30	30
San Francisco	0		
Oakland	40		
Dublin Pleas anton BART	8		
Sacramento		0	
Elk Grove		10	
Lodi		35	
Stockton		60	
Modesto		120	
Denair/Turlock		155	
San Jose			0
Gilroy			40
Merced	200	200	150
# of buses	20	20	20

Transfer Time @ Merced 15 15

HSR Patterns

6 Peak Hours

	70	22	42
Frequency	60	60	60
Run times from start in minutes			
Merced	0	0	0
Fresno	29	29	21
Visalia	48	40	32
Bakersfield	76	75	67
Palmdale	118	110	109
San Fernando	145	137	136
# of Trains	6	6	6

10 Off Peak Hours

Transfer Time @ Merced

10 Off Peak Hours

	67	27
Frequency	60	80
Run times from start in minutes		
Merced	0	0
Fresno	29	29
Visalia	48	40
Bakersfield	83	75
Palmdale	125	110
San Fernando	152	137
# of Trains	10	10

Dedicated Bus Connections - South

Transfer Time @ San Fernando

Pattern#	1	2	3
Frequency of service (mins)	20	20	20
San Fernando (bus)	0	0	0
Burbank Airport (bus)	12		
Los Angeles Union Station (bus)	37		
Van Nuys (bus)		12	
West Los Angeles (bus)		82	
Santa Anita (bus)			40
# of buses	18	18	18

Transfer Time @ San Fernando 15 15 15

Pattern#	1	2	3
Frequency of service (mins)	30	30	30
San Fernando (bus)	0	0	0
Burbank Airport (bus)	12		
Los Angeles Union Station (bus)	37		
Van Nuys (bus)		12	
West Los Angeles (bus)		32	
Santa Anita (bus)			40
# of buses	20	20	20

Note: "Frequency" refers to "Headway" in these pattern charts.

Run Date: 3/30/2012

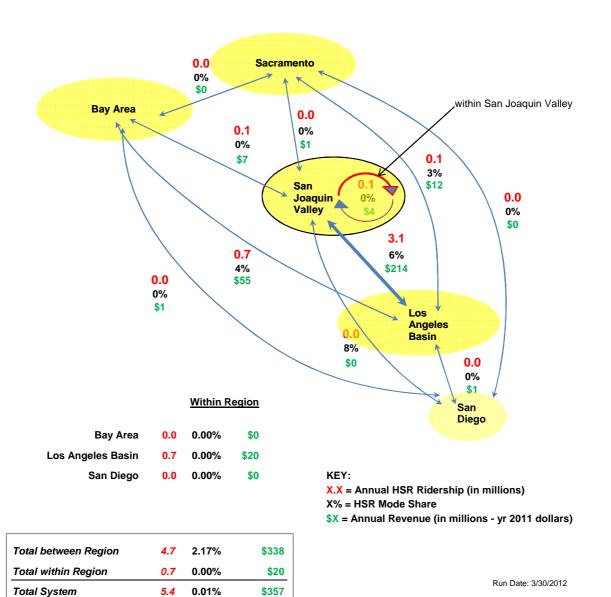
15

Scenario12-053: IOS with 18 cents/mi in 2011\$

High Speed Rail (HSR) service between Merced and San Fernando with bus connections to the Bay Area and Sacramento at Merced and to LA Basin at San Fernando (DRAFT)

Major Market Forecast: 2030

Annual Ridership, HSR Mode Share, and Annual Revenue



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Scenario 12-053: IOS with 18 cents/mi in 2011\$ -High Speed Rail (HSR) service between Merced and San Fernando with bus connections to the Bay Area and Sacramento at Merced and to LA Basin at San Fernando (DRAFT)

Annual Region to Region Forecasts by Mode, Year 2030

Riders in millions per year, shown by trip O&D

				Ridership				Mode Share				Average Fare (2011\$\$)		
	Market	Air	Conv. Rail	HSR	Auto	Total	Air	Conv. Rail	HSR	Auto	HSR	Air	Revenue (2011\$\$)	
1	LA basin - Sacramento	1.8	0.0	0.1	3.7	5.6	32.0%	0.0%	2.6%	65.4%	\$81	\$171	\$12	
2	LA basin - San Diego	0.1	7.6	0.0	461.2	469.1	0.0%	1.6%	0.0%	98.3%	\$30	1	\$1	
3	LA basin- Bay Area	7.3	0.0	0.7	9.4	17.4	42.1%	0.0%	3.9%	54.0%	\$81	\$155	\$55	
4	Sacramento - Bay Area	0.0	1.4	0.0	50.3	51.7	0.0%	2.6%	0.0%	97.4%	-	\$252	\$0	
5	San Diego- Sacramento	1.4	0.0	0.0	0.1	1.5	90.8%	0.0%	0.0%	9.2%	\$81	\$98	\$0	
6	San Diego- Bay Area	5.6	0.0	0.0	2.3	7.9	70.9%	0.0%	0.2%	28.9%	\$81	\$91	\$1	
7	Bay Area - San Joaquin Valley	0.2	0.1	0.1	27.5	27.9	0.6%	0.4%	0.4%	98.5%	\$58	\$326	\$7	
8	San Joaquin Valley - LA basin	0.7	0.0	3.1	44.8	48.6	1.5%	0.0%	6.3%	92.2%	\$70	\$654	\$214	
9	Sacramento - San Joaquin Valley	0.0	0.0	0.0	3.7	3.7	0.6%	0.2%	0.5%	98.7%	\$59	\$94	\$1	
10	San Diego - San Joaquin Valley	0.0	0.0	0.0	0.0	0.0	36.3%	0.0%	8.3%	55.4%	\$75	\$353	\$0	
11	within Bay Area Peninsula*	0.0	115.3	0.0	6,662.4	6,777.7	0.0%	1.7%	0.0%	98.3%	-	-	\$0	
12	within North LA basin*	0.0	2.7	0.7	8,188.6	8,191.9	0.0%	0.0%	0.0%	100.0%	\$30	-	\$20	
14	within South LA basin*	0.0	0.9	0.0	10,162.8	10,163.7	0.0%	0.0%	0.0%	100.0%	-	-	\$0	
15	North LA - South LA*	0.0	3.0	0.0	2,779.1	2,782.1	0.0%	0.1%	0.0%	99.9%	-	-	\$0	
18	within San Diego region	0.0	0.0	0.0	8,427.5	8,427.5	0.0%	0.0%	0.0%	100.0%	-	1	\$0	
19	within San Joaquin Valley	0.0	0.0	0.1	4,782.4	4,782.4	0.0%	0.0%	0.0%	100.0%	\$49	\$236	\$4	
20	Other	3.0	0.1	0.5	6,256.2	6,259.8	0.0%	0.0%	0.0%	99.9%	\$80	\$557	\$43	
	Total	20.2	131.1	5.4	47,862.0	48,018.7	0.0%	0.3%	0.0%	99.7%	\$67	-	\$357	
	within San Diego region	0.0	0.0	0.0	8,427.5	8,427.5	0.0%	0.0%	0.0%	100.0%	-	-	\$0	
	within entire LA basin	0.0	6.6	0.7	21,130.5	21,137.8	0.0%	0.0%	0.0%	100.0%	\$30	-	\$20	
	within entire MTC	0.0	115.3	0.0	6,662.4	6,777.7	0.0%	1.7%	0.0%	98.3%	-	-	\$0	
	within other regions	0.0	0.0	0.0	10,744.2	10,744.2	0.0%	0.0%	0.0%	100.0%	-	-	\$0	
	Total between regions	20.2	9.2	4.7	897.3	931.5	2.2%	1.0%	0.5%	96.3%	\$72	-	\$338	

NOTE: Conventional rail includes Metrolink and Surfliner within the LA Basin, and BART, Caltrain, ACE and Capitol Corridor within the Bay Area.

Auto Operating Cost = 16 cents per mile per person (2005\$\$)

Consumer price change 2005-2010 1.12 http://www.dir.ca.gov/dlsr/CPI/EntireCCPI.PDF; all urban consumers

Consumer price change 2010-2011 1.03

Disclaimer

Scenario 12-053: IOS with 18 cents/mi in 2011\$ -High Speed Rail (HSR) service between Merced and San Fernando with bus connections to the Bay Area and Sacramento at Merced and to LA Basin at San Fernando (DRAFT)

Forecast of Daily Station Boardings: 2030

Station	Between Regions	Within SCAG	Within MTC	Total
Merced	4,100	-	-	4,100
Fresno	1,100	-	-	1,100
Visalia	500	-	-	500
Bakersfield	900	-	-	900
Palmdale	500	1,200	-	1,700
San Fernando Valley	5,700	1,200	-	6,900
Daily	12,800	2,400	-	15,200
Annualization Factor	365	273	-	352
Annual (millions)	4.7	0.7	0.0	5.4

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