

APPENDIX – A

Travel Time Estimates

Bakersfield to Los Angeles Connection

STATION TO STATION ALIGNMENTS

ALIGNMENT NUMBER	ALIGNMENT ROUTE SEGMENTS	LINE SEGMENTS	TOTAL DISTANCE		TIME VHS (minutes)	TIME MAGLEV (minutes)
			(miles)	(kilometers)		
A7181	S71 Bakersfield Truxton to Grapevine Connection	709, 713, 720	26.460	42.584	9.11	7.98
A7182	S71 Bakersfield Truxton to Comanche Connection	709, 714, 715, 716, 722	32.288	51.962	10.70	9.43
A7183	S71 Bakersfield Truxton to Mojave Connection	724, 704, 705	13.390	21.549	5.55	4.71
A7281	S72 Bakersfield Golden State to Grapevine Connection	706, 709, 713, 720	28.302	45.547	9.62	8.44
A7282	S72 Bakersfield Golden State to Comanche Connection	706, 709, 714, 715, 716, 722	34.129	54.925	11.21	9.89
A7283	S72 Bakersfield Golden State to Mojave Connection	702, 704, 705	14.799	23.816	5.93	5.06
A7381	S73 Bakersfield Airport to Grapevine Connection	701, 706, 709, 713, 720	33.298	53.588	10.98	9.69
A7382	S73 Bakersfield Airport to Comanche Connection	701, 702, 710, 718, 722	40.597	65.335	12.97	11.51
A7383	S73 Bakersfield Airport to Mojave Connection	701, 702, 704, 705	19.795	31.857	7.30	6.31
A7481	S74 Bakersfield West to Grapevine Connection	708, 711, 720	31.883	51.310	10.59	9.33
A7482	S74 Bakersfield West to Comanche Connection	708, 712, 715, 716, 722	38.121	61.350	12.29	10.89
A7483	S74 Bakersfield West to Mojave Connection	Not Applicable				
A7581	S75 Bakersfield East to Grapevine Connection	Not Applicable				
A7582	S75 Bakersfield East to Comanche Connection	Not Applicable				
A7583*	S75 Bakersfield East to Mojave Connection	705	6.976	11.227	3.71	3.11
A7681	S76 Bakersfield Old Amtrak to Grapevine Connection	707, 724, 710, 718, 721	31.236	50.270	10.42	9.17
A7682	S76 Bakersfield Old Amtrak to Comanche Connection	707, 724, 710, 718, 722	35.646	57.366	11.62	10.27
A7683	S76 Bakersfield Old Amtrak to Mojave Connection	Not Applicable				
A7781	S77 Bakersfield South to Grapevine Connection	711, 720	18.388	29.592	6.91	5.96
A7782	S77 Bakersfield South to Comanche Connection	712, 715, 716, 722	24.626	39.632	8.61	7.52
A7783	S77 Bakersfield South to Mojave Connection	Not Applicable				

* For VHS, train is still accelerating towards full speed. Speed at end of segment 705 is: 189.94 mph

ALIGNMENT				LOCAL TRAVEL							DISTANCE KM	
OPTION	DESCRIPTION	APPROACH TIME		STATION	DISTANCE KM	SPEED KM/HR	TRAVEL TIME MIN.					
		MIN.	MAX				Ta	Tv	Td	Tss		Tt
SYLMAR TO UNION STATION SEGMENT												
1	METROLINK/UPRR	4.56	16.17	110FWY								
					1.25	25	0	3	0		3	1.25
					10.00	75.00	0.40	7.47	0.00		7.87	10.00
					3.00	100.00	0.2	1.23	0.79		2.22	3.00
				BURBANK								
				6% Schedule Recovery Allowance							0.79	
	Subtotal				14.25						13.88	14.25
				BURBANK						2.00		
					1.00	100.00	0.79	0.20	0.00		0.99	1.00
					7.40	250.00	1.88	0.40	0.00		2.28	7.40
					12.25	250.00	0.00	0.49	3.50		3.99	12.25
				SYLMAR								
				6% Schedule Recovery Allowance							0.44	
	Subtotal				20.65						7.70	20.65
	TOTAL				34.90						21.57	34.90
2	I-5 FWY	1.85	4.35	110FWY	14.25	200.00	0.00	3.40	1.75		5.15	14.25
				BURBANK						2.00		
				SYLMAR	20.65	300	3.5	0.77	1.75		6.02	20.65
				6% Schedule Recovery Allowance							0.67	
	TOTAL										11.84	
3	COMBINED - I-5/UPRR	1.85	4.35	110FWY	14.25	200.00	0.00	0.98	1.84		2.82	14.25
											0.17	
											0.18	
				6% Schedule Recovery Allowance							3.17	
	TOTAL										3.17	
				BURBANK						2.00		
					1.00	100.00	0.79	0.20	0.00		0.99	1.00
					7.40	250.00	1.88	0.40	0.00		2.28	7.40
					12.25	250.00	0.00	0.49	3.50		3.99	12.25
				6% Schedule Recovery Allowance							0.44	
	TOTAL				20.65						7.70	20.65
				SYLMAR						2.00		

**Los Angeles to Bakersfield - High-Speed Train
Bakersfield to LAUS and San Diego Connection Travel Times
Comparison of Los Angeles Union Station Location and Connection Alternatives**

Alignment Options		Los Angeles Union Station Options														
		1 Existing Union Station			2 Union Station South (Thru)			3 Union Station South (Stub)			4 LA River West			5 LA River East		
		Travel Time		Distance	Travel Time		Distance	Travel Time		Distance	Travel Time		Distance	Travel Time		Distance
		min.	mi.	km.	min.	mi.	km.	min.	mi.	km.	min.	mi.	km.	min.	mi.	km.
Bakersfield to Sylmar																
1	I-5 Fwy Sac-Bak Connection Bakersfield to Sylmar	25.8 9.6 16.2	50.0 28.3 21.7	134.6 45.5 89.1	same as left			same as left			same as left			same as left		
1A	I-5/Comanche Pt. Sac-Bak Connection Bakersfield to Sylmar	25.2 9.6 15.6	55.8 34.1 21.7	140.6 54.9 85.7	same as left			same as left			same as left			same as left		
2	Soledad Cyn/SR-58 Sac-Bak Connection Bakersfield to Sylmar	37.1 5.9 31.1	36.5 14.8 21.7	198.5 23.8 174.7	same as left			same as left			same as left			same as left		
2A	SR14/SR-58 Sac-Bak Connection Bakersfield to Sylmar	37.2 5.9 31.2	36.5 14.8 21.7	199.0 23.8 175.2	same as left			same as left			same as left			same as left		
3	Soledad Cyn/SR-138 Sac-Bak Connection Bakersfield to Sylmar	37.5 11.2 26.3	55.8 34.1 21.7	202.9 54.9 148.0	same as left			same as left			same as left			same as left		
3A	SR14/SR-138 Sac-Bak Connection Bakersfield to Sylmar	37.6 11.2 26.4	55.8 34.1 21.7	203.5 54.9 148.6	same as left			same as left			same as left			same as left		
4	Soledad Cyn/Aqueduct Sac-Bak Connection Bakersfield to Sylmar	35.8 11.2 24.6	55.8 34.1 21.7	193.7 54.9 138.8	same as left			same as left			same as left			same as left		
4A	SR14/Aqueduct Sac-Bak Connection Bakersfield to Sylmar	35.9 11.2 24.7	55.8 34.1 21.7	194.3 54.9 139.4	same as left			same as left			same as left			same as left		
Sylmar to LAUS																
1	Metrolink/UPRR To 110 Fwy. 110 Fwy. to Sylmar	27.6 8.4 19.2	23.8 2.1 21.7	38.3 3.4 34.9	31.3 12.1 19.2	24.7 3.0 21.7	39.8 4.9 34.9	31.6 12.4 19.2	24.8 3.1 21.7	39.9 5.0 34.9	26.7 7.5 19.2	23.6 1.9 21.7	37.9 3.0 34.9	27.9 8.7 19.2	23.9 2.2 21.7	38.4 3.5 34.9
2	I-5 Fwy To 110 Fwy. 110 Fwy. to Sylmar	10.6 2.1 8.5	23.8 2.1 21.7	38.3 3.4 34.9	11.2 2.7 8.5	24.7 3.0 21.7	39.8 4.9 34.9	N/A			N/A			N/A		
3	Combined I-5/UPRR To 110 Fwy. 110 Fwy. to Sylmar	12.3 2.1 10.2	23.8 2.1 21.7	38.3 3.4 34.9	12.9 2.7 10.2	24.7 3.0 21.7	39.8 4.9 34.9	N/A			N/A			N/A		
LAUS to San Diego Connection																
1	East UPRR/EI Monte/Colton To Soto St.	14.6	2.9	4.6	13.9	2.3	3.8	10.2	2.5	4.0	14.3	2.3	3.8	18.1	2.6	4.3
1A	East SR-60 To Soto St.	N/A			7.0	1.7	2.8	7.0	1.9	3.0	N/A			N/A		
1B	East I-10 To Soto St.	7.6	1.9	3.0	N/A			N/A			4.8	2.3	3.8	2.9	1.4	2.3
2	West I-101 (LAX Connection) To Alameda St.	N/A			0.2	0.4	0.6	0.2	0.2	0.3	N/A			N/A		
3	South UPRR/Whittier Jct. To Soto St.	10.8	2.6	4.3	34.5	5.0	8.0	36.0	5.1	8.3	5.1	2.5	4.0	4.5	2.2	3.5