

Memorandum

ARUP

To Barrow Emerson, SamTrans Date April 20, 2014

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Subject Stop Selection for Truncated Rapid Service Options

Background

This memo briefly describes how stops were selected for the Truncated Rapid service options as part of SamTrans's El Camino Real Bus Rapid Transit (BRT) Phasing Study. This memo builds on the *January 27, 2014 SamTrans ECR BRT Phasing Plan – Rapid Station Selection Memo*.

Full Rapid Stop Selection

From the *January 27, 2014 SamTrans ECR BRT Phasing Plan – Rapid Station Selection Memo*, a stop selection methodology was developed to identify potential Rapid stations along the El Camino Real Corridor. This methodology consisted of a multi-step process integrating factors such as current demand, land use, transit connections, and coverage aspects into the analysis framework. A total of 37 stops was recommended for consideration as Rapid stops for the Full Rapid scenario.

Truncated Rapid Concept

In assessing existing ridership at ECR stops along the corridor, it was observed that some segments of the corridor experienced low ridership – particularly in the very north of the corridor (for instance through Colma) and in the south of the corridor (between Redwood City and Palo Alto). As such, an alternate service plan was developed to assess benefits of “truncating” the corridor to minimize these lower ridership segments at the ends of the corridor. Two concepts were developed as alternates to the Full Rapid concept:

Table 1: Truncated Rapid Concepts

Truncated Rapid Concepts	Rationale
Truncated Rapid – Daly City BART to Redwood City Caltrain	Rapid would operate from Daly City BART to Redwood City Caltrain, thereby skipping low demand stops south of Redwood City.
Truncated Rapid – San Bruno BART to Redwood City Caltrain	Rapid would operate from San Bruno BART to Redwood City Caltrain, thereby skipping low demand stops south of Redwood City and north of San Bruno BART (principally Colma).

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Truncated Rapid Stop Selection

The Truncated Rapid concepts are assumed to serve the same stops as those proposed for the Full Rapid, although the shorter operating segments for both Truncated Rapid concepts means that the number of stops is correspondingly reduced as follows (as depicted in Table 2):

- Truncated Rapid – Daly City BART to Redwood City Caltrain: 32 stops
- Truncated Rapid – San Bruno BART to Redwood City Caltrain: 23 stops

Table 2: Proposed Truncated Rapid Stops

SB #	Southbound Stop	NB #	Northbound Stop	SB Ons/ Offs	NB Ons/ Offs	Avg. NB & SB Ons/ Offs	Full Rapid Stop	Truncated Rapid (DC-RC)	Truncated Rapid (SB-RC)
1	Daly City BART	76	Daly City BART	208	128	168	X	X	
2	Mission St. & San Jose St.	75	Mission St. & San Jose St.	473	0	237	X	X	
3	Mission St & School St	74	Mission St & Price St	217	216	216	X	X	
4	Mission St & San Pedro Rd.	73	Mission St. & East Market	151	99	125	X	X	
5	Colma BART	72	Colma BART	363	368	365	X	X	
6	South San Francisco BART (El Camino & McClellan Drive)	71	South San Francisco BART (El Camion & McClellan Drive)	59	154	106	X	X	
7	El Camino Real & Arroyo Dr/SSF	70	El Camino Real & Arroyo Dr/SSF	187	156	172	X	X	
8	El Camino Real & W Orange Ave	69	El Camino Real & W Orange Ave	151	171	161	X	X	
9	El Camino Real & Brentwood Dr	68	El Camino Real & Spruce Ave	163	144	154	X	X	
10	El Camino Real & Sneath Lane	67	El Camino Real & Sneath Lane	388	405	396	X	X	X
11	El Camino Real & Hwy 380	66	El Camino Real & Hwy 380	53	0	27			
12	El Camino Real & San Bruno Ave W	65	El Camino Real & San Bruno Ave W	203	220	212	X	X	X
13	El Camino Real & Angus Ave W	64	El Camino Real & Angus Ave W	79	76	77			
14	El Camino Real & Jenevein Ave	63	El Camino Real & Jenevein Ave	116	132	124	X	X	X
15	El Camino Real & Crystal Springs Rd	62	El Camino Real & Taylor Ave	94	83	88			
16	El Camino Real & San Felipe Ave	61	El Camino Real & San Felipe Ave	76	56	66			
17	El Camino Real & Park Pl	60	El Camino Real & Santa Inez Ave	149	149	149	X	X	X
18	El Camino Real & Capuchino Dr	59	El Camino Real & Millwood Dr	56	67	61			
19	El Camino Real & Center St/Millbrae	58	El Camino Real & Center St/Millbrae	68	46	57			

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SB #	Southbound Stop	NB #	Northbound Stop	SB Ons/ Offs	NB Ons/ Offs	Avg. NB & SB Ons/ Offs	Full Rapid Stop	Truncated Rapid (DC-RC)	Truncated Rapid (SB-RC)
20	El Camino Real & Meadow Glen Ave	57	El Camino Real & Meadow Glen Ave	53	55	54			
21	El Camino Real & Silva Ave	56	El Camino Real & Silva Ave	140	158	149	X	X	X
22	El Camino Real & Taylor Ave	55	El Camino Real & Hillcrest Blvd	92	70	81			
23	El Camino Real & Chadbourne Ave	54	El Camino Real & Linden Ave	318	260	289	X	X	X
24	El Camino Real & Murchison Dr	53	El Camino Real & Murchison Dr	132	87	110			
25	El Camino Real & Trousdale Dr	52	El Camino Real & Trousdale Dr	104	102	103	X	X	X
26	El Camino Real & Ray Dr	51	El Camino Real & Rosedale Ave	18	21	19			
27	El Camino Real & Adeline Dr	50	El Camino Real & Adeline Dr	16	16	16			
28	El Camino Real & Hillside Dr	49	El Camino Real & Hillside Dr	38	38	38			
29	El Camino Real & Easton Dr	48	El Camino Real & Easton Dr	21	18	20			
30	El Camino Real & Broadway/Burlingame	47	El Camino Real & Broadway/Burlingame	140	131	135	X	X	X
31	El Camino Real & Sanchez Ave	46	El Camino Real & Sanchez Ave	30	32	31			
32	El Camino Real & Arc Way	45	El Camino Real & Palm Dr	10	15	13			
33	El Camino Real & Oak Grove Ave	44	El Camino Real & Oak Grove Ave	39	33	36			
34	El Camino Real & Bellevue Ave	43	El Camino Real & Bellevue Ave	41	21	31			
35	El Camino Real & Burlingame Ave	42	El Camino Real & Burlingame Ave	120	93	107	X	X	X
36	El Camino Real & Howard Ave	41	El Camino Real & Howard Ave	86	151	118			
37	N El Camino Real & Warren Rd	40	N El Camino Real & State St	67	60	63			
38	N El Camino Real & W Bellevue Ave	39	N El Camino Real & Grand Blvd	60	47	53			
39	N El Camino Real & W Poplar Ave	38	N El Camino Real & W Poplar Ave	124	127	126	X	X	X
40	N El Camino Real & El Cerrito Ave	37	N El Camino Real & Tilton Ave	148	148	148	X	X	X
41	S El Camino Real & W 2nd Ave	36	S El Camino Real & E 2nd Ave	213	222	217	X	X	X
42	S El Camino Real & W 4th Ave	35	S El Camino Real & E 5th Ave	217	250	234	X	X	X
43	S El Camino Real & W 9th Ave	34	S El Camino Real & E 9th Ave	81	69	75			

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44	S El Camino Real & Hobart Ave	33	S El Camino Real & 12th Ave	51	45	48			
45	S El Camino Real & 17th Ave	32	S El Camino Real & 17th Ave	123	137	130	X	X	X
46	S El Camino Real & W 20th Ave	31	S El Camino Real & W 20th Ave	147	163	155	X	X	X
47	S El Camino Real & W 25th Ave	30	S El Camino Real & W 25th Ave	143	132	137	X	X	X
48	S El Camino Real & 27th Ave	29	S El Camino Real & 27th Ave	57	55	56			
49	S El Camino Real & W 31st Ave	28	S El Camino Real & E 31st Ave	236	131	184			
50	S El Camino Real & W Hillsdale Blvd	27	S El Camino Real & W Hillsdale Blvd	318	354	336	X	X	X
51	S El Camino Real & 37th Ave	26	S El Camino Real & 37th Ave	102	120	111			
52	S El Camino Real & W 39th Ave	25	S El Camino Real & W 39th Ave	50	46	48			
53	S El Camino Real & W 41st Ave	24	S El Camino Real & 42nd Ave	87	113	100	X	X	X
54	S El Camino Real & 43rd Ave	23	S El Camino Real & 43rd Ave	38		38			
55	El Camino Real & Davey Glen Rd	22	El Camino Real & Davey Glen Rd	57	55	56			
56	El Camino Real & Ralston Ave	21	El Camino Real & Ralston Ave	256	259	258	X	X	X
57	El Camino Real & Harbor Blvd	20	El Camino Real & Harbor Blvd	83	80	81			
58	El Camino Real & 5th Ave/Belmont	19	El Camino Real & 5th Ave/Belmont	37	52	45			
59	El Camino Real & Hull Dr	18	El Camino Real & Hull Dr	38	30	34			
60	El Camino Real & San Carlos Ave	17	El Camino Real & San Carlos Ave	182	219	201	X	X	X
61	El Camino Real & Arroyo Ave/San Car	16	El Camino Real & Arroyo Ave/San Car	39	41	40			
62	El Camino Real & Brittan Ave	15	El Camino Real & Brittan Ave	86	76	81	X	X	X
63	El Camino Real & Belmont Ave	14	El Camino Real & Belmont Ave	61	55	58			
64	El Camino Real & Eaton Ave	13	El Camino Real & Saint Francis Wy	20	22	21			
65	El Camino Real & Edgewood Rd	12	El Camino Real & Edgewood Rd	54	51	53	X	X	X
66	El Camino Real & Hopkins Ave	11	El Camino Real & Hopkins Ave	29	37	33			
67	El Camino Real & Brewster Ave	10	El Camino Real & Brewster Ave	99	91	95			

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68	El Camino Real & James Ave	9	El Camino Real & James Ave	2	74	38	X	X	X
69	Redwood City Caltrain Station	8	Redwood City Caltrain Station	403	375	389			
70	El Camino Real & Jefferson Ave	7	El Camino Real & Jefferson Ave	85	156	121			
71	El Camino Real & Lincoln Ave	6	El Camino Real & Cedar St	131	181	156	X		
72	El Camino Real & Oak Ave	5	El Camino Real & Main St	145	130	138			
73	El Camino Real & Center St	4	El Camino Real & Charter St	110	114	112	X		
74	El Camino Real & 5th Ave	3	El Camino Real & 5th Ave	89	92	90	X		
75	El Camino Real & Santa Cruz Ave	2	El Camino Real & Ravenswood Ave	76	36	56	X		
76	Palo Alto Caltrain	1	Palo Alto Caltrain	162	362	262	X		
Total Stops							37	32	23

Proposed stops are depicted in corridor maps below.