



Gearsy Corridor Bus Rapid Transit Project

APPENDIX A: ERRATA SUMMARY

FINAL ENVIRONMENTAL IMPACT REPORT (EIR)



SAN FRANCISCO COUNTY TRANSPORTATION AUTHORITY

IN PARTNERSHIP WITH



November 2016

APPENDIX A

Errata Summary

APPENDIX A ERRATA SUMMARY

A.1 Introduction

Chapters 2, 3, and 4 of this Final EIR provide updated information to Chapters 2, 3, and 4 of the Draft EIS/EIR. This errata summary catalogs minor text changes needed to Chapters 1-11 of the Draft EIS/EIR and Draft EIS/EIR appendices.

Text Changes to Chapter 1, Project Need and Purpose

No changes were made to Chapter 1, Project Need and Purpose, as a result of the staff-initiated modifications or in response to a comment received on the Draft EIS/EIR.

Text Changes to Chapter 5, Cumulative Impacts

Page 5-5, staff-initiated modifications

Pedestrian and Bicycle Transportation

The pedestrian and bicycle conditions cumulative analysis area encompasses the entire Geary Transportation study area (study area).

Several portions of the Geary corridor see relatively high volumes of pedestrian activity, particularly in proximity to commercial areas and other activity centers. Many intersections within the Geary corridor have relatively long pedestrian crossing distances or include signals that do not have pedestrian countdown signals. Two existing pedestrian bridges (over Geary at Webster and Steiner Streets) do not comply with the Americans with Disabilities Act (ADA) and are otherwise considered substandard. The Geary corridor does not have separated bicycle lanes; bicyclists must share mixed-use lanes with general traffic.

All of the build alternatives would improve multimodal travel by providing pedestrians with more reliable facilities, such as new crossings/new pedestrian crossing bulbs, countdown signals, sidewalks, and removal of the non-compliant Steiner Street pedestrian bridge over crossings (bridges). Alternatives 2, 3, and 3-Consolidated would also remove the Webster Street pedestrian bridge, whereas the Hybrid Alternative would leave the bridge in place. Additionally, the build alternatives would include plans to construct a Class II bikeway connection across one block of Geary Boulevard (between Masonic and Presidio Avenues). Collectively, these build alternative improvements would enhance pedestrian conditions along the Geary corridor, as well as bicycle conditions between Masonic and Presidio Avenues and are thus projected to increase pedestrian use and modestly increase bicycle use relative to levels without the proposed improvements. Such improvements would help offset projected increases in average walking distances to bus stops associated with the consolidation of bus service contemplated by the build alternatives. As any of the build alternatives would require implementation of a project construction plan (PCP) that minimizes overlapping construction schedules between the project and other foreseeable planned projects within the Geary corridor, any adverse impacts associated with pedestrian and bicycle traffic would not be elevated to a cumulatively considerable level.

Page 5-6, text edit

Neither NEPA, the State CEQA Guidelines nor the guidance of the Environmental Planning Major Environmental Analysis Division of the San Francisco Planning Department expressly or explicitly require that an environmental document disclose whether a project would merely result in the loss of any number of parking spaces.

Text Changes to Chapter 6, Section 4(f) and Section 6(f) Evaluation

No changes were made to Chapter 6, Section 4(f) and Section 6(f) Evaluation, as a result of the staff-initiated modifications or in response to a comment received on the Draft EIS/EIR.

Text Changes to Chapter 7, CEQA Evaluation

Page 7-9, text edits

All of the build alternatives were developed to help better meet existing and projected future growth in travel demand. As discussed in Section 3.3.4.1 and illustrated in Figure 3.3-10, with or without the addition of BRT improvements (*i.e.* No Build Alternative), daily transit ridership in the Geary corridor is expected to increase from about 50,000 riders per day (as of 2012) to about 64,000 ~~70,000~~ in 2020 and about 77,000 ~~84,000~~ by 2035. In 2020, the build alternatives would result in up to 82,000 daily transit boardings (28 percent higher than in the No Build Alternative). In 2035, the build alternatives would serve between 92,000 and 99,000 daily transit riders (20 percent to 28 percent higher than in the No Build Alternative). Each build alternative is intended to help meet this projected increase in transit demand while at the same time reduce transit travel times (see discussion at Section 3.3.4.4) and improving transit time reliability (see section 3.3.4.5). Therefore, the build alternatives would each result in a less-than-significant effect; no mitigation would be required.

Page 7-49, staff-initiated modifications

Construction: Construction of the build alternatives would result in temporary increases in ambient noise levels on an intermittent basis, including potentially during overnight hours.

As shown in Table 4.11-4, all build alternatives may result in noise levels in excess of 80 dBA at 100 feet due to removal of pedestrian bridges at Webster and/or Steiner Streets (Alternatives 2, 3, and 3-Consolidated would remove the Webster and Steiner Street pedestrian bridges, whereas the Hybrid Alternative would only remove the Steiner Street Bridge). However, with adherence to the San Francisco Noise Ordinance, as well as mitigation measures listed below, these temporary construction noise impacts would be less than significant.

Page 7-52, changes in response to comment A-1.3

Build Alternatives: Less-than-significant with mitigation (construction); Less-than-significant impact (operation)

As described in Section 4.11.4.2, construction of the any of the build alternatives would result in temporary increases in ambient noise levels on an intermittent basis. Noise levels would fluctuate depending on the construction phase, equipment type and duration of use, distance between the noise source and receptor, and presence or absence of noise attenuation barriers. As shown on Table 4.11-4 ~~above~~, the expected noise levels from construction equipment may ~~would not~~ exceed 80 dBA at 100 feet. With adherence to the San Francisco Noise Ordinance and mitigation

measures Noise-1 through Noise-4, these temporary construction noise impacts would be less than significant.

Text Changes to Chapter 8, Public Participation

Chapter 5 of this Final EIR updates and supplements Chapter 8 of the Draft EIS/EIR.

Text Changes to Chapter 9, Financial Analysis

Chapter 6 of this Final EIR updates and supplements Chapter 9 of the Draft EIS/EIR.

Text Changes to Chapter 10, Alternatives Analysis

Page 10-15, staff-initiated modification

This would result in delays to the Geary BRT project, which is currently scheduled for completion of the environmental process in 2015 and opening of BRT service in 2020.

Page 10-20, staff-initiated modifications

Table 10-2 Alternatives and Combinations Performance Summary

PERFORMANCE INDICATOR	NO BUILD	ALT. 2 (SIDE-LANE BRT)	ALT 3.2 (CENTER/SIDE, NOT CONSOLIDATED)	ALT 3.2C (HYBRID; CENTER/SIDE, PARTIALLY CONSOLIDATED)
TRANSIT PERFORMANCE				
Vehicle travel time [min]				
Limited/BRT service	53:50	45:00	42:45	44:45
Local service	1:02:30	54:00	51:55	51:55
Reliability, BRT [travel time diff. bet. average and 95th % trip, min]				
Limited/BRT service	4:45	3:15	2:55-3:15	3:35
Local service	5:40	4:05	4:05-4:20	4:10
Ridership [total daily boardings]	69,500 64,000	75,700	75,700-77,600	77,600
CIRCULATION SYSTEM PERFORMANCE				
Person-delay [auto+transit, total delay hours during peak hour]	4,890	4,130 (-16%)	4,130-4,310 (-12-16%)	4,310 (-12%)
Diversions [increase in peak hour traffic on nearby parallel streets at Masonic]	0	4%	7%	7%
ENVIRONMENTAL AND SOCIAL EFFECTS				
Parking opportunities [existing corridor on-street parking removed]	0	460	500	370
Existing trees removed	0	156	195	195
Median landscaping area [acres]	3.1	3.1	3.6	3.5
PEDESTRIAN ACCESS AND SAFETY				
Average stop spacing [feet]				
Limited/BRT stops	1540	2180	2160	4630 1740
Local stops	720	840	920	1190

PERFORMANCE INDICATOR	NO BUILD	ALT. 2 (SIDE-LANE BRT)	ALT 3.2 (CENTER/SIDE, NOT CONSOLIDATED)	ALT 3.2C (HYBRID; CENTER/ SIDE, PARTIALLY CONSOLIDATED)
Pedestrian safety improvements	-	+	+	++
RAIL-READINESS				
Ease of future conversion to rail	•	•	+	++
COST				
Construction cost [2013\$]	\$0	\$170M	\$300M	\$300M
Operations and maintenance costs [2013\$/year and \$/weekday passenger]	\$36.7m	\$49.5m	\$49.2-49.5m	\$49.2m
CONSTRUCTION IMPACTS				
Total duration of construction [weeks]	0	90	100	100

All performance results are for the year 2020.

Symbol key:

- + or ++ indicates performance advantage or strong advantage relative to No Build condition.
- or -- indicates performance disadvantage or strong disadvantage relative to No Build condition.
- indicates minimal or no performance change relative to No Build condition.

Source: SFCA, 2014

Page 10-21, text edits

Ridership. All of the build Alternatives are expected to increase Geary transit ridership compared to the No Build alternative. In 2020 Alternative 2 is projected to increase ridership in the corridor by approximately 9–18 percent relative to the No Build Alternative. Alternative 3.2 and 3.2C are expected to have higher ridership than Alternative 2.

Page 10-22, text edits

Pedestrian safety improvements. All of the build alternatives would include pedestrian safety improvements along the Geary corridor, including installation of new corner bulbs to reduce crossing distances, new pedestrian crossing signals, and traffic signal upgrades. These elements would improve pedestrian safety corridor-wide relative to the No Build. Alternatives 3.2 and 3.2C would provide additional benefits in the Palm to 27th Avenue section of the corridor due to proposed signal upgrades. ~~While the same number of new pedestrian bulbs would be included in all build alternatives, the~~ Alternative 2 and Alternative 3.2 street configurations would not allow bulbs to be placed at many corners with local bus stops. Alternative 3.2C would allow bulbs to be placed at more corners with transit stops, better meeting the project’s transit access and pedestrian safety objectives. Under Alternative 3-Consolidated, pedestrian bulbs could be placed in more optimal locations for transit access and safety objectives than with the other build alternatives.

Text Changes to Chapter 11, References

No changes were made to Chapter 11, References, as a result of the staff-initiated modifications or in response to a comment received on the Draft EIS/EIR. However, the below additional references were used in this Final EIR.

Carry, W., E. Donnell, Z. Rado, M. Hartman, and S. Scalici. 2012. Red bus lane treatment evaluation. Institution for Transportation Engineers.

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San Francisco Municipal Transportation Agency, 2016. Geary Boulevard Bus Rapid Transit: Webster Street Bus Delay Analysis.

San Francisco Planning Department. 2016. , Executive Summary: Resolution Modifying Transportation Impact Analysis. Available: http://commissions.sfplanning.org/cpcpackets/Align-CPC%20exec%20summary_20160303_Final.pdf.

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Text Changes to Appendices

Appendix D, page 99, text edits

Existing and 2020 Travel Time Summary - Geary BRT - *VISSIM Results																										
06/27/14																										
Mode	Description	Existing				2020 No Build				2020 Alt 2: Side Running ³				2020 Alt 3: Center Running				2020 Alt 3C: Center Consolidation				2020 LPA				
		Average ¹	St Dev	Running Time ²	Dwell ²	Average	St Dev	Running Time ¹	Dwell ²	Average	St Dev	Running Time ¹	Dwell ²	Average	St Dev	Running Time ¹	Dwell ²	Average	St Dev	Running Time ¹	Dwell ²	Average	St Dev	Running Time ¹	Dwell ²	
EB 38 Bus	25th to Park Presidio	05:34	00:54	04:25	01:08	06:47	01:06	05:09	01:42	05:09	00:50	03:37	01:31	05:08	01:01	03:45	01:21	-	-	-	-	04:59	00:52	04:06	00:53	
	Park Presidio to Stanyan	07:04	00:58	06:01	01:02	08:37	01:11	07:09	01:34	06:28	00:55	05:07	01:21	06:09	01:04	04:57	01:10	-	-	-	-	05:31	00:46	04:35	00:56	
	Stanyan to Broderick	04:42	00:50	04:03	00:39	05:44	01:02	04:50	00:58	05:15	00:58	04:37	00:38	04:09	00:43	03:25	00:43	-	-	-	-	05:16	01:02	04:44	00:32	
	Broderick to Laguna	05:56	01:32	04:26	01:30	07:14	01:53	05:04	02:14	05:12	01:01	03:31	01:40	04:59	01:03	03:24	01:32	-	-	-	-	05:03	00:57	03:46	01:17	
	Laguna to Polk	04:00	00:48	03:34	00:27	04:54	00:58	04:16	00:40	03:20	00:39	02:44	00:36	03:42	01:01	02:38	01:03	-	-	-	-	03:42	00:53	03:08	00:34	
TOTAL⁵	27:15		22:30	04:46	33:17	02:48	26:27	07:08	25:23	02:00	19:35	05:46	24:06	02:34	18:09	05:50	-	-	-	-	24:31	01:49	20:18	04:12		
WB 38 Bus	Polk to Laguna	03:54	00:50	03:19	00:35	05:02	01:04	03:50	01:24	03:15	00:40	02:34	00:42	03:25	00:40	02:21	01:05	-	-	-	-	03:44	00:46	03:18	00:30	
	Laguna to Broderick	04:50	00:56	03:46	01:04	06:15	01:13	05:00	01:29	05:05	00:56	03:35	01:32	04:01	00:48	03:01	01:02	-	-	-	-	05:03	00:57	03:36	01:32	
	Broderick to Stanyan	06:44	01:26	06:08	00:36	08:43	01:51	07:58	01:04	05:15	01:03	04:17	01:01	04:01	00:51	03:15	00:48	-	-	-	-	05:56	01:49	05:14	00:47	
	Stanyan to Park Presidio	06:32	01:02	05:41	00:51	08:27	01:20	07:17	01:29	05:34	00:55	04:12	01:25	05:22	01:04	04:12	01:13	-	-	-	-	05:32	01:00	04:39	00:58	
	Park Presidio to 25th	04:57	00:52	04:04	00:53	06:24	01:08	05:05	01:33	04:11	00:49	02:46	01:28	04:05	00:45	03:04	01:02	-	-	-	-	04:20	01:01	03:21	01:02	
TOTAL⁵	26:56		22:57	03:59	34:51	02:59	29:10	06:58	23:20	02:14	17:25	06:08	20:54	01:50	15:52	05:11	-	-	-	-	24:35	02:29	20:07	04:49		
EB 38L Bus	25th to Park Presidio	04:53	00:44	03:48	01:05	06:04	01:05	04:33	01:31	03:58	00:42	02:46	01:13	03:14	00:40	02:51	00:23	04:11	00:47	02:33	01:38	04:14	00:49	03:09	01:06	
	Park Presidio to Stanyan	05:54	00:51	05:20	00:34	07:20	01:04	06:32	00:48	05:22	00:48	04:24	00:59	05:43	00:56	04:18	01:26	05:34	00:57	04:55	00:39	05:56	00:57	04:33	01:24	
	Stanyan to Broderick	04:24	00:49	04:01	00:24	05:29	01:01	04:56	00:34	04:13	00:54	03:54	00:19	03:32	00:44	03:07	00:25	04:03	00:49	02:59	01:03	04:51	01:01	04:04	01:04	
	Broderick to Laguna	05:15	01:04	03:58	01:17	06:32	01:19	04:44	01:48	04:25	01:00	03:22	01:04	04:20	00:58	02:57	01:23	04:17	00:47	03:10	01:07	03:58	00:57	02:55	01:04	
	Laguna to Polk	02:51	00:48	02:24	00:28	04:48	00:59	04:09	00:39	02:49	00:39	02:19	00:30	03:02	00:58	02:23	00:39	03:15	00:55	02:23	00:52	03:14	00:54	02:44	00:30	
TOTAL⁵	24:18		20:30	03:48	30:12	02:11	24:55	05:21	20:46	01:35	16:45	04:06	19:50	01:34	15:36	04:17	21:20	01:24	16:00	05:18	22:13	01:58	17:25	04:52		
WB 38L Bus	Polk to Laguna	03:01	00:39	02:34	00:27	03:48	00:49	02:52	01:02	02:44	00:41	02:15	00:30	02:35	00:39	01:54	00:42	02:48	00:38	02:00	00:49	02:44	00:36	02:18	00:30	
	Laguna to Broderick	04:45	00:56	03:40	01:04	05:59	01:11	04:55	01:14	04:09	00:54	03:14	00:57	03:47	00:50	02:30	01:18	03:31	00:44	02:33	00:58	03:57	00:50	03:06	00:57	
	Broderick to Stanyan	06:06	01:23	05:39	00:27	07:42	01:44	07:14	00:41	04:27	01:08	04:08	00:21	03:11	00:49	02:43	00:29	03:50	00:51	02:49	01:02	05:21	01:53	05:01	00:29	
	Stanyan to Park Presidio	05:40	00:54	05:00	00:40	07:09	01:08	06:21	01:00	04:42	00:53	03:31	01:12	04:47	00:57	03:25	01:24	04:46	01:07	03:44	01:03	05:14	00:56	04:26	00:56	
	Park Presidio to 25th	04:29	00:39	03:44	00:45	05:39	00:49	04:42	01:07	02:38	00:39	01:50	00:49	02:33	00:41	02:11	00:23	04:02	00:54	03:05	00:58	03:58	00:55	03:11	00:53	
TOTAL⁵	24:01		20:37	03:24	30:16	02:37	26:04	05:05	18:40	01:41	14:58	03:49	16:53	01:28	12:43	04:16	18:57	01:38	14:12	04:48	21:15	01:43	18:02	03:45		
EB Cars	25th to Park Presidio	02:57	00:23	-	-	05:08	00:41	-	-	03:49	00:29	-	-	03:51	00:34	-	-	03:55	00:35	-	-	03:59	00:35	-	-	
	Park Presidio to Stanyan	03:51	00:40	-	-	06:43	01:11	-	-	05:19	00:38	-	-	05:47	00:44	-	-	05:36	00:47	-	-	05:37	00:47	-	-	
	Stanyan to Broderick	02:09	00:30	-	-	03:46	00:51	-	-	04:20	00:52	-	-	04:40	00:54	-	-	04:34	00:52	-	-	04:10	00:58	-	-	
	Broderick to Laguna	02:25	00:25	-	-	04:13	00:43	-	-	03:26	00:39	-	-	03:37	00:46	-	-	03:28	00:40	-	-	03:20	00:42	-	-	
	Laguna to Polk	02:33	00:36	-	-	04:27	01:02	-	-	03:09	00:58	-	-	03:38	01:10	-	-	03:09	00:51	-	-	04:44	01:29	-	-	
TOTAL	13:55		-	-	24:16	-	-	-	20:03	-	-	-	21:32	-	-	-	20:21	-	-	-	21:50	-	-	-		
WB Cars	Polk to Laguna	01:38	00:26	-	-	02:23	00:38	-	-	03:20	00:48	-	-	03:06	00:46	-	-	02:22	00:42	-	-	03:31	00:47	-	-	
	Laguna to Broderick	03:32	01:02	-	-	05:08	01:30	-	-	03:41	00:56	-	-	04:43	02:15	-	-	02:55	00:42	-	-	03:29	01:13	-	-	
	Broderick to Stanyan	04:18	01:16	-	-	06:15	01:50	-	-	07:26	03:19	-	-	07:58	02:49	-	-	05:30	02:29	-	-	08:42	03:36	-	-	
	Stanyan to Park Presidio	03:51	00:35	-	-	05:35	00:51	-	-	05:28	00:54	-	-	05:56	01:03	-	-	06:25	01:08	-	-	06:29	00:58	-	-	
	Park Presidio to 25th	02:52	00:37	-	-	04:10	00:54	-	-	02:16	00:35	-	-	02:46	00:43	-	-	02:53	00:45	-	-	03:02	00:47	-	-	
TOTAL	16:11		-	-	23:31	-	-	-	22:11	-	-	-	24:28	-	-	-	20:05	-	-	-	25:13	-	-	-		
Transition - EB 38L Bus (centerline to centerline)	Webster to Laguna									00:43		00:16		00:41		00:19							Palm to Stanyan	00:22	00:14	
Transition - WB 38L Bus (centerline to centerline)	Laguna to Webster									00:32		00:17		00:39		00:28							Stanyan to Palm	00:44	00:22	

Travel Time measured through Masonic tunnel
 Travel Time measured at surface

- Notes:
 1. Running Time equals total bus travel time minus the sum of average dwell times by section.
 2. Dwell Time is the average bus dwell time by section.
 3. Bus-on-street parking interactions are included in these results. It was developed as part of an off-model process.
 4. Existing average travel time eastern extent is Van Ness Avenue.
 5. Total bus average travel time and standard deviation are measured directly from simulation model.

* VISSIM Results do not include any additional adjustments

2035 Travel Time Summary - Geary BRT - *VISSIM Results 6/27/14																					
Mode	Description	2035 No Build				2035 Alt 2: Side Running ¹				2035 Alt 3: Center Running				2035 Alt 3C: Center Consolidation				2035 LPA			
		Average	St Dev	Running Time ¹	Dwell ²	Average	St Dev	Running Time ¹	Dwell ²	Average	St Dev	Running Time ¹	Dwell ²	Average	St Dev	Running Time ¹	Dwell ²	Average	St Dev	Running Time ¹	Dwell ²
EB 38 Bus	25th to Park Presidio	07:03	01:15	05:44	01:42	05:03	00:46	03:33	01:31	05:06	01:03	03:46	01:21	-	-	-	-	04:56	00:49	04:01	00:53
	Park Presidio to Stanyan	11:26	02:54	10:32	01:34	06:26	01:00	05:07	01:21	06:06	00:59	04:57	01:10	-	-	-	-	05:29	00:49	04:31	00:56
	Stanyan to Broderick	06:03	01:07	05:26	00:58	05:18	01:02	04:42	00:38	04:19	00:42	03:37	00:43	-	-	-	-	05:21	00:58	04:47	00:32
	Broderick to Laguna	08:40	02:41	06:55	02:14	05:03	01:00	03:24	01:40	04:56	01:02	03:25	01:32	-	-	-	-	05:06	00:54	03:47	01:17
	Laguna to Polk	05:34	01:26	05:13	00:40	03:28	00:46	02:54	00:36	03:24	00:51	02:22	01:03	-	-	-	-	03:25	00:45	02:50	00:34
	TOTAL³	38:45	03:44	33:50	07:08	25:18	02:15	19:40	05:46	23:50	02:07	18:06	05:50	-	-	-	-	24:17	01:50	19:56	04:12
WB 38 Bus	Polk to Laguna	06:31	02:28	05:30	01:24	03:11	00:40	02:28	00:42	03:31	00:39	02:31	01:05	-	-	-	-	03:38	01:01	03:14	00:30
	Laguna to Broderick	07:56	02:50	06:53	01:29	05:03	00:56	03:31	01:32	04:50	01:07	03:56	01:02	-	-	-	-	05:15	01:08	03:51	01:32
	Broderick to Stanyan	09:22	03:00	08:50	01:04	05:40	01:14	04:40	01:01	03:59	00:52	03:18	00:48	-	-	-	-	07:10	02:36	06:34	00:47
	Stanyan to Park Presidio	08:38	01:26	07:38	01:29	05:41	00:53	04:16	01:25	05:08	00:54	04:04	01:13	-	-	-	-	05:41	01:03	04:51	00:58
	Park Presidio to 25th	06:28	01:09	05:17	01:33	04:08	00:42	02:39	01:28	03:52	00:43	02:57	01:02	-	-	-	-	04:16	00:57	03:20	01:02
	TOTAL³	38:55	03:38	34:09	06:58	23:43	02:02	17:34	06:08	21:22	02:00	16:46	05:11	-	-	-	-	26:01	02:30	21:49	04:49
EB 38L Bus	25th to Park Presidio	06:09	01:05	05:14	01:31	03:57	00:44	02:44	01:13	03:18	00:42	02:55	00:23	04:19	00:51	02:41	01:38	04:14	00:44	03:07	01:06
	Park Presidio to Stanyan	09:31	03:02	09:39	00:48	05:22	00:51	04:24	00:59	05:43	00:56	04:17	01:26	05:35	00:57	04:56	00:39	06:03	00:56	04:38	01:24
	Stanyan to Broderick	05:24	01:00	05:23	00:34	04:24	00:55	04:04	00:19	03:53	00:43	03:08	00:25	04:11	00:53	03:08	01:03	05:04	01:04	04:14	00:48
	Broderick to Laguna	07:31	02:16	06:28	01:48	04:15	00:51	03:11	01:04	04:17	01:02	02:55	01:23	04:08	00:51	03:01	01:07	04:06	00:57	03:01	01:04
	Laguna to Polk	05:30	02:05	05:24	00:39	02:57	00:47	02:27	00:30	02:49	00:49	02:10	00:39	03:26	00:59	02:34	00:52	02:55	00:44	02:24	00:30
	TOTAL³	34:05	03:22	32:07	05:21	20:54	01:45	16:50	04:06	19:40	01:28	15:25	04:17	21:40	01:36	16:20	05:18	22:21	01:45	17:23	04:52
WB 38L Bus	Polk to Laguna	05:27	01:59	04:26	01:02	02:41	00:35	02:11	00:30	02:41	00:42	02:02	00:42	02:45	00:40	01:56	00:49	02:40	00:35	02:15	00:30
	Laguna to Broderick	07:46	02:41	06:34	01:14	04:13	00:55	03:17	00:57	04:43	01:15	03:30	01:18	03:28	00:45	02:30	00:58	04:00	00:56	03:11	00:57
	Broderick to Stanyan	08:31	02:47	07:53	00:41	04:32	01:15	04:13	00:21	03:09	00:53	02:44	00:29	03:51	00:52	02:51	01:01	06:45	02:53	06:30	00:29
	Stanyan to Park Presidio	07:46	01:24	06:48	01:00	04:45	00:52	03:34	01:12	04:38	01:00	03:18	01:24	04:39	01:00	03:38	01:03	05:23	01:02	04:38	00:56
	Park Presidio to 25th	05:59	00:58	04:54	01:07	02:40	00:35	01:52	00:49	02:28	00:39	02:08	00:23	04:00	00:49	03:03	00:58	03:58	00:55	03:13	00:53
	TOTAL³	35:27	03:23	30:35	05:05	18:50	01:42	15:07	03:49	17:38	01:57	13:41	04:16	18:42	01:27	13:57	04:48	22:46	02:30	19:47	03:45
EB Cars	25th to Park Presidio	05:30	00:53	-	-	03:52	00:31	-	-	03:50	00:34	-	-	03:53	00:36	-	-	04:02	00:36	-	-
	Park Presidio to Stanyan	09:01	02:30	-	-	05:34	00:50	-	-	05:38	00:42	-	-	05:46	00:53	-	-	06:03	00:52	-	-
	Stanyan to Broderick	04:20	01:11	-	-	04:37	00:56	-	-	04:25	00:54	-	-	04:18	00:52	-	-	04:36	01:05	-	-
	Broderick to Laguna	06:11	02:32	-	-	03:21	00:39	-	-	03:03	00:40	-	-	03:28	00:51	-	-	03:55	01:14	-	-
	Laguna to Polk	05:23	01:59	-	-	04:00	01:15	-	-	03:15	01:15	-	-	04:11	01:31	-	-	05:29	01:46	-	-
	TOTAL	30:25	-	-	-	21:24	-	-	-	20:11	-	-	-	21:35	-	-	-	24:06	-	-	-
WB Cars	Polk to Laguna	04:09	02:39	-	-	03:34	01:17	-	-	05:53	03:14	-	-	02:15	00:40	-	-	03:40	00:53	-	-
	Laguna to Broderick	08:10	04:04	-	-	06:23	03:44	-	-	11:35	02:51	-	-	04:32	01:34	-	-	04:39	02:54	-	-
	Broderick to Stanyan	09:50	03:48	-	-	11:00	04:14	-	-	07:17	01:59	-	-	08:04	02:29	-	-	13:23	05:06	-	-
	Stanyan to Park Presidio	06:13	01:08	-	-	05:35	00:53	-	-	05:22	00:57	-	-	06:31	01:14	-	-	06:46	01:02	-	-
	Park Presidio to 25th	04:14	00:57	-	-	02:19	00:36	-	-	02:47	00:43	-	-	02:49	00:45	-	-	03:03	00:46	-	-
	TOTAL	32:36	-	-	-	28:52	-	-	-	32:55	-	-	-	24:11	-	-	-	31:31	-	-	-

Transition - EB 38L Bus (centerline to centerline)	Webster to Laguna	00:40	00:13	00:37	00:17
Transition - WB 38L Bus (centerline to centerline)	Laguna to Webster	00:34	00:17	01:35	00:57

Travel Time measured through Masonic tunnel
 Travel Time measured at surface

- Notes:
1. Running Time equals total bus travel time minus the sum of average dwell times by section.
 2. Dwell Time is the average bus dwell time by section
 3. Bus-on-street parking interactions are included in these results. It was developed as part of an off-model process.
 4. Existing average travel time eastern extent is Van Ness Avenue.
 5. Total bus average travel time and standard deviation are measured directly from simulation model.

* VISSIM Results do not include any additional adjustments