Item 4
Enclosure

APPENDIX A: SAFETY

The project team examined the number of collision reports near the Upper Great Highway and District 4 overall during the pandemic and in the years prior (January 2016 to December 2020). The source of this data is Transbase, the collision database managed by the Department of Public Health that consolidates police and hospital records. These represent any reported collision between any modes whether it be between two vehicles, vehicles/pedestrians, vehicles/bicyclists, or bicyclists/pedestrians.

GREAT HIGHWAY PRE-COVID COLLISION DATA (JANUARY 2016 – FEBRUARY 2020)

Table 1: Collisions on Upper Great Highway , Lower Great Highway, and La Playa

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Monthly Avg
2016	1			1	2		2	3	1		2	1	13	1.1
2017	1	1			1		1	1		1			6	0.5
2018	1	1		1				2	1				6	0.5
2019	2				1			1	2			1	7	0.6
2020	1	1											2	1.0
													34	

Table 2: Collisions by Pedestrian Involvement

	Collisions
Crossing in Crosswalk at Intersection	3
Crossing Not in Crosswalk	1
In Road, Including Shoulder	3
No Pedestrian Involved	27
Total	**34**

Most incidents did not involve pedestrians.

GREAT HIGHWAY COVID DATA (MARCH – DECEMBER 2020)

Table 3: Collisions on Upper and Lower Great Highway + La Playa

	Mar	Apr	May	June	Jul	Aug	Sep	Oct	Nov	Dec	Total	Monthly Avg
2020			2		1	1			1		5	0.5

During the pandemic, collision data shows similar rates of incidents on Upper and Lower Great Highway + La Playa as prior to the pandemic (about 1 every other month).

Even when excluding the early months of the pandemic when there was less traffic, the monthly average was still 0.5 from July – December.

Table 4: COVID Collisions by Pedestrian Involvement

	Collisions
Crossing Not in Crosswalk	1
In Road, Including Shoulder	1
No Pedestrian Involved	3
Total	**5**

Similar to pre-COVID, most incidents did not involve pedestrians.

OTHER DISTRICT 4 STREETS PRE-COVID COLLISION DATA (JANUARY 2016 – FEBRUARY 2020)

Table 5: Collisions on all other D4 streets (excludes Upper and Lower Great Highway + La Playa)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Monthly Avg
2016	10	12	11	9	8	6	5	7	14	18	11	18	129	10.8
2017	8	15	13	10	12	11	11	7	9	14	7	13	130	10.8
2018	11	13	12	8	11	10	7	9	10	16	14	14	135	11.3
2019	15	8	13	16	12	13	4	7	10	16	9	7	130	10.8
2020	5	11											16	8.0
													540	

OTHER DISTRICT 4 STREETS COVID DATA (MARCH – DECEMBER 2020)

Table 6: Collisions on all other D4 streets (excludes Upper and Lower Great Highway + La Playa)

	Mar	Apr	May	June	Jul	Aug	Sep	Oct	Nov	Dec	Total	Monthly Avg
2020	7	3	4	4	7	6	5	11	6	14	67	6.7

Elsewhere in the district, rates of collisions were lower than the monthly averages of recent years at 6.7 collisions per month. This could be attributed to a number of factors such as a decrease in traffic due to the pandemic or the presence of Slow Streets.

When excluding the early months of the pandemic when there was less traffic, the monthly collision average from July – December was still lower than past averages at 8.2 collisions per month.

APPENDIX B: TRAFFIC ANALYSIS

The project team conducted a microsimulation traffic analysis of the study area using Transmodeler. Each simulation included 10 model runs to account for normal variation in traffic levels and behaviors.

Complete data for three metrics is provided in this appendix:

- Average delay per intersection (Table 1) – these results include results from a Highway Capacity Model (HCM) approach that does not consider the interaction between intersections and the Transmodeler (TSM) Simulation.
- TSM Simulation delay estimates for each intersection approach (Table 2). Not all intersections have every approach, so some cells are hatched out in the tables that follow.
- Average longest queue by intersection approach (Table 3). For available approaches, this shows the average of the longest queue across the 10 simulations runs. The longest queue is applied because intersections sometimes have multiple lanes.

Data are provided for eight distinct model runs:

A. Existing Conditions – Great Highway Extension Open – this was used to validate the model.
B. Baseline - Great Highway Extension Closed. All other scenarios are compared to this baseline for analysis purposes.
C. Concept 3. Upper Great Highway Full Closure.
D. Concept 3 - Variant 1 - Full Closure + More Traffic Diverted to Sunset. For this scenario, 95 percent of the traffic that was diverted to local streets under Concept 3 was reassigned to the Sunset to evaluate any additional impact on Sunset Blvd.
E. Concept 3 - Variant 2 - Full Closure + MLK Jr Dr also Closed. For this scenario, MLK Jr Dr was closed from Sunset Blvd to Lincoln Way.
F. Concept 3 with Improvements - Upper Great Highway Closed. Improvements in this scenario included
    - Signalizing intersections at Lincoln Way and Chain of Lakes, MLK Jr Dr and Chain of Lakes, and MLK Jr Dr and Sunset Blvd
    - Restricting left turns from Lincoln Way to Chain of Lakes or 41st Ave.
    - Consolidating the intersection at Lake Merced Blvd and Skyline Blvd and adding an additional turn lane
G. Concept 3 - Variant 2, with Improvements - Full Closure + MLK Jr Dr also closed. Improvements in this scenario included:
    - Signalizing intersections at Lincoln Way and Chain of Lakes
    - Increasing signal time at 36th Ave and Lincoln and striping an additional left turn lane
    - Consolidating the intersection at Lake Merced Blvd and Skyline Blvd and adding an additional turn lane
H. Concept 5 - One Way Closure

For all scenarios, traffic volumes were derived from SF-CHAMP highway assignments that redistributed vehicles to the network based on removals of network links, specifically the Great Highway Extension (for baseline), the Upper Great Highway (for most Concept 3 scenarios), MLK Jr Dr (for the Concept 3 variants that also remove MLK Jr. Dr), and just the northbound direction of the Upper Great Highway (for Concept 5)

Table 1 – Level of Service Results – Intersection Level

Corridor @ Intersection Overall Intersection LOS		Existing Condition Great Highway Extension Open				Baseline Great Highway Extension Closed				Concept 3 Upper Great Highway Full Closure				Concept 3 - Variant 1 Full Closure + More Traffic on Sunset				Concept 3 - Variant 2 Full Closure + MLK Jr Dr Closed			
		HCM		TSM Simulation		HCM		TSM Simulation		HCM		TSM Simulation		HCM		TSM Simulation		HCM		TSM Simulation	
		LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
Lincoln @ Upper Great Highway	Signalized	B	15.3	B	13.1	B	14.8	B	12.6												
Lincoln @ MLK	AWSC	A	9.6	B	12.1	A	9.3	B	11.8	A	9.5	B	10.9	A	9.6	B	11.5	B	12.4	B	14.2
Sloat @ Upper Great Highway	Signalized	D	38.4	C	24.8																
Sloat @ Skyline	AWSC**	B	12.9	C	22.5	C	21.5	B	18.7	C	20.4	B	11.9	C	29.0	B	12.3	C	20.4	B	11.9
Sloat @ 36th Sunset NB Entrance	TWSC			A	0.3			A	0.3			A	0.2			A	0.2			A	0.2
Sloat @ 37th Sunset SB Exit	TWSC			A	2.7			A	3.0			A	6.6			A	5.5			A	5.5
Yorba @ 37th	Partial AWSC			A	2.5			A	2.6			A	2.6			A	2.6			A	2.6
Yorba @ Sunset	Signalized	A	7.1	A	5.7	A	7.3	A	6.2	A	8.5	A	8.0	A	9.1	D	41.0*	A	8.5	A	7.8
Yorba @ 36th	Partial AWSC			A	6.0			A	6.2			A	7.2			A	6.8			A	7.1
Skyline @ Great Highway Extention	AWSC***	C	18.0	F	75.6*																
Skyline @ Lake Merced (South)	Signalized^									C	34.7	E	63.9*	C	34.2	F	103.1*	C	34.7	E	73.7*
MLK @ Chain of Lakes	AWSC	C	24.7	F	111.5*	F	63.4	F	120.3*	*F*	*N/A^^*	F	231.1*	*F*	*N/A^^*	F	250.9*				
Lincoln @ 41st Chain of Lakes	AWSC	B	12.3	C	19.5	B	12.7	C	20.0	C	23.0	F	68.1*	C	23.0	F	114.3*	E	48.6	F	297.0*
Lincoln @ 37th	Signalized	A	6.8	A	5.9	A	7.2	A	6.2	A	10.0	A	6.0	C	20.1	A	5.8	C	27.4	A	6.2
Lincoln @ 36th	Signalized	A	7.3	A	4.3	A	7.9	A	4.7	A	9.9	A	5.7	B	16.6	D	51.0*	D	43.6	F	196.4*
MLK @ Sunset	AWSC	B	11.1	C	19.4	B	11.4	C	17.1	C	18.7	F	163.5*	C	18.7	F	185.2*				
MLK @ Crossover/19th	Signalized	B	18.6	C	29.2	B	19.4	D	45.5*	C	20.4	E	78.7*	C	20.4	E	76.4*	C	20.0	F	87.8*
Lincoln @ 19th	Signalized	D	40.9	B	18.0	D	43.0	B	19.2	D	45.9	C	27.5	D	45.9	C	26.5	D	47.0	C	25.9
Sloat @ 19th	Signalized	D	44.0	D	44.4	D	45.4	D	53.0	D	46.2	D	53.9	D	46.2	D	49.9	D	46.2	D	53.4

Delay reported in seconds/vehicle

All TransModeler LOS results are an average of 10 unique simulation runs

* TransModeler LOS results impacted by intersection queue spillback

** Sloat @ Skyline is signalized in No Project and All Alternatives Analyses

*** Skyline @ Great Highway Ext is TWSC in No Project and All Alternatives Analyses

^ Insurficient volume for accurate analysis in Existing Condition and No Project

^^ V/C exceed 1.0 on all approaches in HCM Analysis

Table 1 – Level of Service Results – Interse

Corridor @ Intersection Overall Intersection LOS		Concept 3 + Improvements Upper Great Highway Closed				Concept 3 - Variant 2 + Improvements Full Closure + MLK Jr Dr Closed				Concept 5 One Way Closure			
		HCM		TSM Simulation		HCM		TSM Simulation		HCM		TSM Simulation	
		LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
Lincoln @ Upper Great Highway	Signalized									B	13.1	A	9.5
Lincoln @ MLK	AWSC	B	12.5	C	18.4	A	9.6	B	13.7	A	9.5	B	11.3
Sloat @ Upper Great Highway	Signalized												
Sloat @ Skyline	AWSC**	C	20.6	B	13.9	B	14.9	B	15.9	C	21.0	B	16.7
Sloat @ 36th Sunset NB Entrance	TWSC			A	0.2			A	0.2			A	0.2
Sloat @ 37th Sunset SB Exit	TWSC			A	9.1			A	3.3			B	12.4
Yorba @ 37th	Partial AWSC			A	2.6			A	2.6			A	2.5
Yorba @ Sunset	Signalized	A	8.5	A	8.1	A	9.1	A	9.1	A	7.7	A	7.8
Yorba @ 36th	Partial AWSC			A	6.6			A	7.2			A	6.9
Skyline @ Great Highway Extention	AWSC***												
Skyline @ Lake Merced (South)	Signalized^	C	29.3	C	22.5	D	38.4	D	35.8				
MLK @ Chain of Lakes	AWSC					D	47.7	C	44.4	F	N/A^^	F	183.8*
Lincoln @ 41st Chain of Lakes	AWSC	C	22.9	B	12.2	D	47.7	C	24.0	B	14.4	F	64.1*
Lincoln @ 37th	Signalized	B	13.9	A	5.9	C	20.1	B	11.5	A	6.7	A	5.2
Lincoln @ 36th	Signalized	B	16.0	A	9.7	B	16.6	A	6.4	A	9.9	A	5.5
MLK @ Sunset	AWSC					C	21.1	B	19.7	C	15.5	F	142.2*
MLK @ Crossover/19th	Signalized	C	20.0	F	83.9*	C	20.4	F	83.7	B	19.7	E	73.4*
Lincoln @ 19th	Signalized	D	47.0	C	27.8	D	45.9	C	25.8	D	43.5	C	27.0
Sloat @ 19th	Signalized	D	46.2	E	56.6	D	46.2	E	57.0	D	45.8	D	50.4

Table 2 - Delay Estimate by Intersection Approach

Corridor @ Intersection TSM LOS by Movement		Existing Condition Great Highway Extension Open								Baseline Great Highway Extension Closed								Concept 3 Upper Great Highway Full Closure								Concept 3 - Variant 1 Full Closure + More Traffic on Sunset							
		EB		NB		SB		WB		EB		NB		SB		WB		EB		NB		SB		WB		EB		NB		SB		WB	
Lincoln @ Upper Great Highway	Signalized			B	12.6	B	12.6	B	16.2			B	11.9	B	12.1	B	16.5																
Lincoln @ MLK	AWSC	B	10.5	A	8.7	A	9.4	C	17.9	B	10.6	A	8.7	A	9.2	C	18.0	A	9	A	8.8	A	9.1	C	17.6	A	9.5	B	10.7	A	9.2	C	17.9
Sloat @ Upper Great Highway	Signalized	D	50.4	C	26.4	C	24.5	B	18.6																								
Sloat @ Skyline	AWSC**	C	17.7	C	18.4			D	33.9	C	27.3	A	8.3			C	31.2	C	24.9	A	1.9			C	30.9	C	30.3	A	1.4			C	30.9
Sloat @ 36th Sunset NB Entrance	TWSC					A	8.9							A	8.2							A	7.9							A	7.8		
Sloat @ 37th Sunset SB Exit	TWSC			A	9.5	B	13.3					C	19.2	B	11.4					F	65.0	B	10.9					F	55.5	B	12.4		
Yorba @ 37th	Partial AWSC	A	6.8	A	7.1	A	6.7			A	7.0	A	7.2	A	7.1			A	7.0	A	7.1	A	6.6			A	6.7	A	6.7	A	6.7		
Yorba @ Sunset	Signalized	B	19.4	A	5.9	A	3.8	C	21.3	B	17.9	A	6.8	A	4.1	C	23.8	C	23.1	A	9.4	A	5.6	C	25.5	C	24.6	B	14.9	F	67.7	C	26.1
Yorba @ 36th	Partial AWSC			A	9.8	A	7.2	A	7.0			A	9.7	A	6.5	A	6.9			B	10.8	A	5.7	A	8.3			B	10.2	A	6.6	A	7.8
Skyline @ Great Highway Extention	AWSC***	A	0.6	F	135.5	F	330			C	14.8	C	21.6					C	16.5	C	25.0					C	15.5	C	22.2				
Skyline @ Lake Merced (South)	Signalized^																			F	108.5	A	8.2	B	17.1			F	189.2	A	5.0	B^^	13.0
MLK @ Chain of Lakes	AWSC	B	14.5	B	11.6	F	284	D	28.9	C	18.0	B	12.7	F	309.0	F	52.3	F	233	C	23.3	F	456	F	291.7	F	318	C	18.3	F	518	F	282.9
Lincoln @ 41st Chain of Lakes	AWSC	C	16.1	B	11.7	D	25.6	C	20.1	C	16.5	B	12.2	D	27.2	C	20.3	C	19.3	C	21.6	D	31.2	F	130.9	D	33.5	C	17.3	D	33.5	F	246.1
Lincoln @ 37th	Signalized	A	8.2					A	4.3	A	8.3					A	4.9	A	9.0					A	4.1	B	18.1					A	3.1
Lincoln @ 36th	Signalized	A	0.9	A	6.5			A	5.7	A	1.0	A	6.5			A	6.0	A	1.0	A	7.9			A	6.4	A	1.1	D	35.2			F	81.1
MLK @ Sunset	AWSC	B	11.2	C	15.8			D	28.4	B	11.5	C	15.6			C	22.7	C	15.3	F	206.2			F	213.7	B	10.9	F	201.1			F	268.4
MLK @ Crossover/19th	Signalized	D	54.2	A	2.4	D	36.5	F	145.4	D	48.8	A	2.4	E	61.6	F	344.2	D	47.9	A	2.2	F	138	F	308.8	D	50.2	A	2.3	F	137	F	259.6
Lincoln @ 19th	Signalized	C	29.4	C	20.0	A	6.4	C	32.5	C	29.1	C	22.8	A	7.5	C	31.5	C	30.6	C	28.1	A	8.0	E	69.0	C	29	C	25.8	A	7.7	E	70.7
Sloat @ 19th	Signalized	F	116	C	30.6	C	28.0	D	45.9	F	157	C	31.9	C	29.4	D	47.9	F	164	C	32.2	C	31.2	D	46.4	F	140	C	32.2	C	30.8	D	47.1

Delay reported in seconds/vehicle

All TransModeler LOS results are an average of 10 unique simulation runs

** Sloat @ Skyline is signalized in No Project and All Alternatives Analyses

*** Skyline @ Great Highway Ext is TWSC in No Project and All Alternatives Analyses

^ Insurficient volume for accurate analysis in Existing Condition and No Project

^^ WB LOS is not captured accurately due to upstream TWSC intersection

Table 2 - Delay Estimate by Intersection Approach

Corridor @ Intersection TSM LOS by Movement		Concept 3 - Variant 2 Full Closure + MLK Jr Dr Closed				Concept 3 with Improvements Upper Great Highway Closed				Concept 3 - Variant 2, with Improvements Full Closure + MLK Jr Dr Closed				Concept 5 One Way Closure			
		EB	NB	SB	WB	EB	NB	SB	WB	EB	NB	SB	WB	EB	NB	SB	WB
Lincoln @ Upper Great Highway	Signalized															A 8.9	B 11.6
Lincoln @ MLK	AWSC	B 12.8	B 14.4	C 17	C 16.0	A 9.5	A 8.8	B 12	C 24.6	C 15.0	C 16.9		C 24.4	A 9.6	A 9.2	A 9.1	C 18.0
Sloat @ Upper Great Highway	Signalized																
Sloat @ Skyline	AWSC**	C 25	A 1.9		C 30.7	***D 38.4***	A 9.6		B 16.8	C 21.3	A 6.0		***D 35.7***	C 27.5	A 3.7		C 30.6
Sloat @ 36th Sunset NB Entrance	TWSC			A 7.8				A 8.0				A 7.9				A 8.2	
Sloat @ 37th Sunset SB Exit	TWSC		***F 52.0***	B 10.8			***D 27.9***	B 10.9			***F 99.7***	B 11.1			***F 147.9***	B 10.7	
Yorba @ 37th	Partial AWSC	A 6.6	A 7.2	A 7.1		A 6.8	A 7.2	A 6.6		A 6.3	A 7.2	A 7.1		A 6.8	A 6.9	A 6.9	
Yorba @ Sunset	Signalized	C 23.4	A 9.1	***C 25.9***	A 5.4	C 26.0	B 11.1	A 6.2	C 25.6	C 22.4	A 9.7	A 5.6	C 24.7	B 19	A 9.6	C 24.4	A 4.2
Yorba @ 36th	Partial AWSC		B 10.6	A 5.8	A 7.6		B 10.7	A 6.4	A 7.7		A 10.0	A 5.9	A 8.1		B 10.4	A 6.3	A 7.9
Skyline @ Great Highway Extention	AWSC***	C 16	C 24.2			C 15.5	C 24.7			C 15.7	C 24.2			C 17.8	C 18.1		
Skyline @ Lake Merced (South)	Signalized^		***F 127.5***	A 8.1	B 17.0		C 27.4	C 24.9	***D 53.4***		C 24.7	B 14.5	C 25.3				
MLK @ Chain of Lakes	AWSC					***F 83.8***	A 8.8	***D 49.3***	C 23.6					B 13	C 23.6	***F 316.4***	***F 273.8***
Lincoln @ 41st Chain of Lakes	AWSC	***F 449***	B 13.2	***F 51.8***	***F 332.2***	***D 38.8***		A 4.5	***D 40.1***	B 13.4		B 10.3	B 12.5	C 17.6	C 21.3	C 24.6	***F 123.8***
Lincoln @ 37th	Signalized	B 10.4			A 2.5	C 20.5			A 3.0	A 9.0			A 3.1	A 8.3			A 3.4
Lincoln @ 36th	Signalized	A 1.3	***E 74.0***		***F 376.1***	A 1.9	A 10.0		A 6.3	A 2.0	B 11.9		B 12.2	A 1	A 8.7		A 6.0
MLK @ Sunset	AWSC					B 12.6	C 28.0		B 14.1					B 13.3	***F 196.7***		***F 122.7***
MLK @ Crossover/19th	Signalized	***F 273***	A 2.1	***F 140***	***F 370.2***	***E 68.2***	A 2.2	***F 149.8***	***F 361.1***	***D 39.1***	A 2.2	***F 155.1***	***F 383.8***	***D 52.9***	A 2.2	***F 127.1***	***F 417.3***
Lincoln @ 19th	Signalized	C 28.9	C 25.8	A 8	***E 69.6***	C 29.7	C 29.2	A 8.3	***D 53.8***	C 29.3	C 34.6	A 8.8	***D 52.6***	C 30.9	C 28.9	A 8.3	***E 62.2***
Sloat @ 19th	Signalized	***F 164***	C 32.3	C 30.5	***D 45.7***	***F 180.0***	C 32.2	C 31.7	***D 46.2***	***F 182***	C 32.1	C 30.6	***D 46.5***	***F 141.7***	C 32.2	C 29.5	***D 46.4***

Table 3 - Queues by Intersection Approach

Corridor @ Intersection Queue Lengths	Existing Condition Great Highway Extension Open				Baseline Great Highway Extension Closed				Concept 3 Upper Great Highway Full Closure				Concept 3 - Variant 1 Full Closure + More Traffic on Sunset				Concept 3 - Variant 2 Full Closure + MLK Jr Dr Closed			
	Avg. Queue (Longest Spillback) (ft)				Avg. Queue (Longest Spillback) (ft)				Avg. Queue (Longest Spillback) (ft)				Avg. Queue (Longest Spillback) (ft)				Avg. Queue (Longest Spillback) (ft)			
	EB	NB	SB	WB	EB	NB	SB	WB	EB	NB	SB	WB	EB	NB	SB	WB	EB	NB	SB	WB
Lincoln @ Upper Great Highway		23.1	36.8	19.7		22.6	35.3	17.2												
Lincoln @ MLK	15.1	5.4	5.8	8.4	14.6	7.1	6.2	7.6	8.4	12.2	3.9	5.3	15.0	10.2	4.6	6.2	38.7	36.1		8.8
Sloat @ Upper Great Highway	12.5	35.6	75.8	19.2																
Sloat @ Skyline	23.6	207.2		60.0	49.4	59.7		45.8	40.8	10.5		46.0	44.3	7.0		42.6	41.9	10.1		43.4
Sloat @ 36th Sunset NB Entrance			2.2				2.0				1.7				1.8				1.7	
Sloat @ 37th Sunset SB Exit		13.9	19.0			27.2	15.1			111.3	12.4			79.7	17.6			86.0	15	
Yorba @ 37th	0.5	2.3	0.6		0.6	2.3	0.6		0.5	1.7	0.5		0.6	1.7	0.4		0.4	1.8	0.4	
Yorba @ Sunset	2.4	22.5	14.8	24.1	1.8	26.1	16.0	23.3	2.8	45.4	25.5	31.2	3	56.3	654.3	26.7	2.7	33.3	24.7	27.6
Yorba @ 36th		8.4	0.1	0.4		7.7	0.2	0.2		8.8	0.1	0.0		8.2	0.1	0.3		10.2	0.1	0.3
Skyline @ Great Highway Extention	3.2	534.2	674.0																	
Skyline @ Lake Merced (South)^										899.8	14.8	136.3		1552.6	5.3	148.7		1059.1	15.4	145.7
MLK @ Chain of Lakes	8.7	13.9	1081.9	103.2	13.0	19.0	1123.2	206.7	1130.6	152.6	1200.8	1326.2	1372.3	112.6	1202.7	1346.4				
Lincoln @ 41st Chain of Lakes	21.7	8.5	133.1	37.5	25.0	9.8	143.6	40.1	30.6	17.7	236	559.6	94.9	13.5	294.9	1082.2	1492.6	9.2	730.3	1517.4
Lincoln @ 37th	18.5			18.7	20.5			29.4	25.7			28.6	27.3			214.1	40.1			553.2
Lincoln @ 36th	3.0	6.5		15.4	2.8	9.3		16.1	1.9	22.3		18.4	2	303.4		426.1	2.7	620.6		2276.4
MLK @ Sunset	11.9	20.7		88.6	11.9	21.2		67.1	28.8	746.9		799.4	12.4	684.3		1028.8				
MLK @ Crossover/19th	64.7	21.9	110.4	98.1	52.2	21.8	191.5	197.3	57.3	24.1	437.2	128.1	58.8	24.2	423	126.3	248.2	24.5	496	145

Table 3 - Queues by Intersection Approach

Corridor @ Intersection Queue Lengths	Grea	Concept 3 + Improvements Upper Great Highway Closed				Concept 3 - Variant 2 + Improvements Full Closure + MLK Jr Dr Closed				Concept 5 One Way Closure			
	Avg. Q	Avg. Queue (Longest Spillback) (ft)				Avg. Queue (Longest Spillback) (ft)				Avg. Queue (Longest Spillback) (ft)			
	EB	EB	NB	SB	WB	EB	NB	SB	WB	EB	NB	SB	WB
Lincoln @ Upper Great Highway													
Lincoln @ MLK	15.1	50.1	44.3		42.2	15	8	10	23	11	13	4	7
Sloat @ Upper Great Highway	12.5												
Sloat @ Skyline	23.6	36.1	44.3		50.8	49	45		21	51	27		
Sloat @ 36th Sunset NB Entrance				2.0				2				3	
Sloat @ 37th Sunset SB Exit			184.1	16.5			41	15			287	14	
Yorba @ 37th	0.5	0.5	1.5	0.7		0	2	0		0	2	0	
Yorba @ Sunset	2.4	3.1	44.4	29.3	25.1	4	53	27	34	3	40	17	27
Yorba @ 36th			8.6	0.1	0.4		10	0	0		10	0	0
Skyline @ Great Highway Extention	3.2												
Skyline @ Lake Merced (South)^			136.3	53.4	116.6		152	43	152				
MLK @ Chain of Lakes	8.7					289	53	184	68	9	149	1136	1273
Lincoln @ 41st Chain of Lakes	21.7	37.2		71.1	49.2	82		34	127	29	19	154	568
Lincoln @ 37th	18.5	44.8			33.0	128			23	17			26
Lincoln @ 36th	3.0	4.9	54.0		40.3	5	38		18	3	23		13
MLK @ Sunset	11.9					25	77		31	14	677		377
MLK @ Crossover/19th	64.7	40.0	26.4	573.8	165.3	107	23	405	165	68	26	495	124

APPENDIX C: COST ESTIMATES FOR BASELINE AND UPPER GREAT HIGHWAY IMPROVEMENTS

This appendix provides more detail on the estimated order of magnitude costs for capital costs and operating/maintenance costs of each concept being considered in the Great Highway Evaluation. The capital costs covered in this appendix are related to baseline improvements that are needed regardless of any future change to the Upper Great Highway and Upper Great Highway improvements needed on the roadway itself, immediately adjacent streets and streets on the approach to the Upper Great Highway.

COST ASSUMPTIONS

To compare costs across alternative concepts, staff first identified the necessary capital investments that each would necessitate. As the purpose of this cost assessment is to estimate order of magnitude costs for the purposes of comparisons across alternatives, such capital improvements were identified at a fairly high level.

Capital costs

- Traffic signal replacements
- Roadway reconstruction (Concept 2 only)
- Intersection upgrade at Sloat & Upper Great Highway
- Intersection change at Lincoln & Upper Great Highway
- Traffic Management tools (traffic diverters, delineators, safe hit posts, speed tables, speed cushions, stop signs etc.)

These capital improvements, such as new traffic signals, would require maintenance over time, as would existing elements of the Great Highway, such as the road surface. In addition, due to the location and unique nature of the Great Highway, there are particular operational costs that likely vary across concepts. *Italicized costs with an asterisk* (*) are required costs whose amounts do not vary for each of the concepts. They are included in each of the concept cost tables to show that they are actual costs, but they are colored with a gray background to show that they are static across concepts.

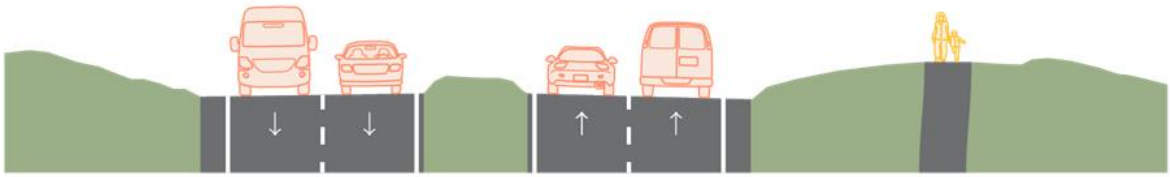
Operating & maintenance costs

- Signal maintenance
- Roadway maintenance
- Structural maintenance*
- Street sweeping*
- Sand clearing*
- Trash removal*
- Gardening & litter clean-up
- Median landscaping
- Restroom maintenance
- Security

PROFILES OF CONCEPTS

In order to itemize and compare costs across concepts for the Great Highway, these capital and maintenance costs are profiled below in snapshots. An infographic accompanies each concept to showcase the differences in a cross-section, and a summary of highlights the distinguishing costs of each.

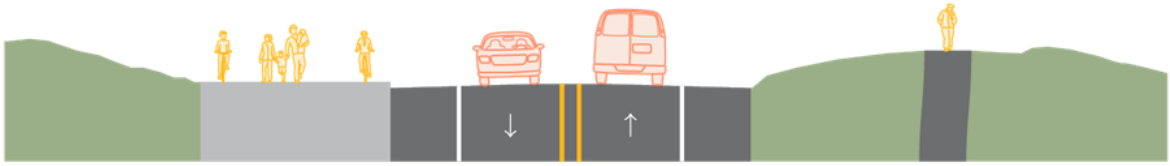
Concept 1: Four-Lane Roadway



This concept returns the Upper Great Highway to its pre-COVID-19 state in 2019, when all lanes of the highway were open to vehicular traffic. There are no additional operational costs as found in other concepts. The significant capital costs are the planned replacement of 8 traffic signals from Vicente to Lincoln, and an intersection upgrade at Sloat/Upper Great Highway as part of the South Ocean Beach Climate Adaptation Project. The maintenance costs of Concept 1 reflect conditions prior to COVID-19.

ITEM	DESCRIPTION	COST
CAPITAL (one time)		
Traffic signal replacements	8 deteriorating signals replaced with new signals along Upper Great Highway from Vicente to Lincoln	$2.5M
Intersection upgrade @ Sloat/Upper Great Highway	Signal upgrade and civil work at Sloat/ Upper Great Highway previously planned for all lanes open to vehicular traffic	$2M
Intersection change @Lincoln/ Upper Great Highway	Not necessary for this concept – uses not changing	N/A
Roadway reconstruction	Not necessary for this concept – uses not changing	N/A
2021 Traffic Calming Strategy	2021 package approved for installation: 24 speed cushions, 1 speed table, 12 stop signs, 6 changeable message signs	$0.5M
	TOTAL CAPITAL	$5M
OPERATING AND MAINTENANCE (annualized)		
Roadway maintenance	Order of magnitude estimate for 15-block length of roadway maintenance – involving grinding & paving and necessary repairs – on annual basis x 2 roadway segments	$200k
Signal maintenance	Estimated annual signal maintenance cost x 9 signals	$45k
Structural maintenance	Assorted task orders to maintain parks infrastructure	$93k
Street sweeping	Nightly cost to street sweep this length of Great Highway x 260 weeknights a year	$255k
Sand clearing	Recommended annual cost projection for DPW to remove sand from street and promenade through BSSR unit	$230k
Median landscaping	DPW estimated annual cost cutting back ice plant	$29k
Restrooms/custodial	2019 costs to Rec & Parks to maintain restrooms by Upper Great Highway	$103k
Recology trash removal	Regular collection of trash bins by Recology	$100k
Gardening/litter removal	2019 collection of additional litter beyond regular garbage collection by Rec & Parks plus gardening, in staffing time	$446k
Security	No need for park rangers	N/A
	TOTAL OPERATING AND MAINTENANCE (annualized)	$1.5M

Concept 2: Promenade/Two-way Roadway



This concept reflects the most drastic transformation of the roadway, requiring significant civil engineering work across the full extent of the Upper Great Highway. That roadway reconstruction as estimated adds millions in capital costs – making Concept 2 the most expensive. The gateway intersections at Lincoln and at Sloat will also need to change, and traffic signals will need to be replaced. Though the annual roadway repair costs should be reduced as only half the lanes will be used by vehicles (and landscaping costs will be eliminated with the removal of the median), there are likely increases in the costs of restroom maintenance, litter removal, and security due to increased recreational use.

ITEM	DESCRIPTION	COST
CAPITAL (one-time)		
Traffic signal replacements	8 deteriorating signals replaced with new signals along Upper Great Highway from Vincente to Lincoln	$2.5M
Intersection upgrade @ Sloat/Upper Great Highway	Signal upgrade, with signals aligned to new lane uses, and civil work	$2M
Intersection change @ Lincoln/Upper Great Highway	Civil changes to curb and bike/ped path accommodation	$2M
Roadway reconstruction	Civil engineering work to widen roadway, reduce median, reconstruct curbs to create new travel lanes and divider	$15.6M
2021 Traffic Calming Strategy	2021 package approved for installation: 24 speed cushions, 1 speed table, 12 stop signs, 6 changeable message signs	$0.5M
Additional Traffic Mitigation Measures	5 Guidance signs, 2 Changeable Messages Signs, 6 speed humps/tables, 2 turn restrictions, 2 Painted Safety Zones	$0.156M
	TOTAL CAPITAL	$22.8M
OPERATING AND MAINTENANCE (annualized)		
Roadway maintenance	Order of magnitude estimate for 15-block length of roadway maintenance – involving grinding & paving and necessary repairs – on annual basis for 1 roadway segment	$100k
Signal maintenance	Estimated annual signal maintenance cost x 9 signals	$45k
Structural maintenance	Assorted task orders to maintain parks infrastructure	$93k
Street sweeping	Nightly cost to street sweep this length of Great Highway x 260 weeknights a year	$255k
Sand clearing	Recommended annual cost projection for DPW to remove sand from street and promenade through BSSR unit	$230k
Median landscaping	No longer median to maintain	N/A
Restrooms/custodial	Projected costs to Rec & Parks to maintain restrooms	$120k
Recology trash removal	Regular collection of trash bins by Recology	$100k
Gardening/litter removal	Projected costs of additional litter removal beyond regular garbage collection by Rec & Parks staff plus gardening	$530k
Security	Park Ranger presence, between 2019 and 2020 levels	$22k
	TOTAL OPERATING AND MAINTENANCE (annualized)	$1.5M

Concept 3: Full Promenade

This concept represents a condition where all lanes allow bicyclists and pedestrians full access to all lanes of the roadway in a car-free environment. Capital costs include civil work at both the intersections at Sloat and Lincoln, which would probably still require traffic signals. The seven traffic signals between these intersections could be removed, however, which represents a one-time cost but is less than full replacement and reduces the ongoing maintenance costs. Concept 3 also nearly eliminates the need for near-term roadway repair due to the absence of vehicles. The Full Promenade is expected would lead to the highest volumes of bicycle and pedestrian use, and this would result in higher security, litter, and restroom operational costs.

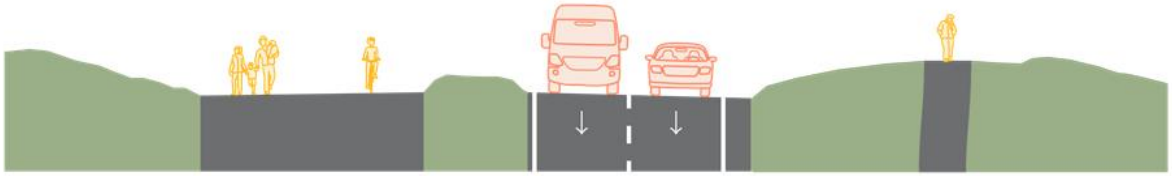
ITEM	DESCRIPTION	COST
CAPITAL (one-time)		
Traffic signal removal	One-time removal of 7 Upper Great Highway signals between Lincoln & Sloat	$1.5M
Intersection upgrade @Sloat/Upper Great Highway	Civil changes and potential signal replacement	$1.9M
Intersection change @Lincoln/Upper Great Highway	Civil improvements	$1.5M
Roadway reconstruction	Not necessary for this concept – roadway not changing	N/A
2021 Traffic Calming Strategy	2021 package approved for installation: 24 speed cushions, 1 speed table, 12 stop signs, 6 changeable message signs	$0.5M
Additional Traffic Mitigation Measures	7 Guidance signs, 4 Changeable Messages Signs, 6 speed humps/tables, 5 turn restrictions, 5 Painted Safety Zones	$0.196M
	TOTAL CAPITAL	$5.6M
OPERATING AND MAINTENANCE (annualized)		
Roadway maintenance	Estimated annual cost for occasional roadway paving and graffiti abatement on roadway signage	$20k
Signal maintenance	Estimated annual signal maintenance cost x 2 signals	$10k
Structural maintenance	Assorted task orders to maintain parks infrastructure	$93k
Street sweeping	Nightly cost to street sweep this length of Great Highway x 260 weeknights a year	$255k
Sand clearing	Recommended annual cost projection for DPW to remove sand from street and promenade through BSSR unit	$230k
Median landscaping	DPW estimated annual cost cutting back ice plant	$29k
Restrooms/custodial	Projected annual costs to Rec & Parks to maintain restrooms based on 2020 staffing figures during full promenade	$145k
Recology trash removal	Regular collection of trash bins by Recology	$100k
Gardening/litter removal	Costs of litter removal beyond regular garbage collection by Rec & Parks staff plus gardening based on 2020 needs	$656k
Security	Park Ranger presence based on 2020 needs	$55k
	TOTAL OPERATING AND MAINTENANCE (annualized)	$1.6M

Concept 4 – Timed Promenade

Concept 4 proposes a car-free promenade on weekends, and 4-lane roadway for vehicles on weekdays. It will still require the previously planned replacement of eight deteriorating traffic signals with new signals, and scoped changes to the Sloat/Upper Great Highway intersection. The maintenance costs are significant, reflecting the need to repair and maintain the entire roadway for vehicle use. The existence of a promenade on weekends will increase recreational activity and therefore increase costs of restroom maintenance, litter removal, and security. Concept 4 has the added staffing costs related to opening and closing the roadway every weekend, as well as enlisting Parking Control Officers (PCOs) to help manage/guide traffic for the initial launch of this scenario.

ITEM	DESCRIPTION	COST
CAPITAL (one-time)		
Traffic signal replacements	8 deteriorating signals replaced with new signals along Upper Great Highway from Vincente to Lincoln	$2.5M
Intersection upgrade @Sloat/Upper Great Highway	Signal upgrade and civil work at Sloat/Upper Great Highway previously planned for all lanes open to vehicular traffic	$2M
Intersection change @Lincoln/Upper Great Highway	Not necessary for this concept – all lanes still used for vehicles	N/A
Roadway reconstruction	Not necessary for this concept – roadway not changing	N/A
2021 Traffic Calming Strategy	2021 package approved for installation: 24 speed cushions, 1 speed table, 12 stop signs, 6 changeable message signs	$0.5M
Additional Traffic Mitigation Measures	7 Guidance signs, 4 Changeable Messages Signs, 6 speed humps/tables, 3 turn restrictions, 3 Painted Safety Zones	$0.175M
	TOTAL CAPITAL	$5.2 M
OPERATIONS & MAINTENANCE (annualized)		
Roadway maintenance	Order of magnitude estimate for 15-block length of roadway maintenance – involving grinding & paving and necessary repairs – on annual basis x 2 roadway segments	$200k
Signal maintenance	Estimated annual signal maintenance cost x 9 signals	$45k
Structural maintenance	Assorted task orders to maintain parks infrastructure	$93k
Intersection opening/closure	Projected staff cost to open & close roadway 52 weekends	$13k
PCO initial oversight	Parking Control Officer staffing closures both days of the weekends	$457.6k
Street sweeping	Nightly cost to street sweep this length of Great Highway x 260 weeknights a year	$255k
Sand clearing	Recommended annual cost projection for DPW to remove sand from street and promenade through BSSR unit	$230k
Median landscaping	DPW estimated annual cost cutting back ice plant	$29k
Restroom maintenance	Estimated costs to Rec & Parks to maintain restrooms	$119k
Recology trash removal	Regular collection of trash bins by Recology	$100k
Gardening + Litter clean up	Gardening and supervisor staff time which also includes removal of additional litter, projection over baseline levels	$526k
Security	Park Ranger presence	$2.1k
	TOTAL OPERATING AND MAINTENANCE (annualized)	$2.1 M

Concept 5 – Promenade/One-way Roadway



Though this concept may operationally differ only slightly from Concept 2, it presents significant cost differences by avoiding reconstruction of the roadway. In addition to new traffic signals and an upgraded Sloat/Upper Great Highway intersection, this concept will require one-time civil work at the Lincoln/Upper Great Highway to address the new uses of the SB lanes. Concept 5 will similarly experience increases in the costs of restroom maintenance, litter removal, and security due to increased recreational use, which might be offset by the reduction in annual roadway repair costs.

ITEM	DESCRIPTION	COST
CAPITAL (one-time)		
Traffic signal replacements	8 deteriorating signals replaced with new signals along Upper Great Highway from Vincente to Lincoln	$2.5M
Intersection upgrade @Sloat/Upper Great Highway	Signal upgrade, with signals aligned to new lane uses, and civil work	$2M
Intersection change @Lincoln/Upper Great Highway	Civil work to align SB approaches to current NB segment	$1.5M
Roadway reconstruction	No roadway re-engineering necessary if maintaining NB as is	N/A
2021 Traffic Calming Strategy	2021 package approved for installation: 24 speed cushions, 1 speed table, 12 stop signs, 6 changeable message signs	$0.5M
Additional Traffic Mitigation Measures	2 Guidance signs, 2 Changeable Messages Signs, 4 speed humps/tables, 1 turn restriction, 2 Painted Safety Zones	$0.114M
	TOTAL CAPITAL	$6.6M
OPERATING AND MAINTENANCE (annualized)		
Roadway maintenance	Order of magnitude estimate for 15-block length of roadway maintenance – involving grinding & paving and necessary repairs – on annual basis for 1 roadway segment	$100k
Signal maintenance	Estimated annual signal maintenance cost x 9 signals	$45k
Structural maintenance	Assorted task orders to maintain parks infrastructure	$93k
Street sweeping	Nightly cost to street sweep this length of Great Highway x 260 weeknights a year	$255k
Sand clearing	Recommended annual cost projection for DPW to remove sand from street and promenade through BSSR unit	$230k
Median landscaping	DPW estimated annual cost cutting back ice plant	$29k
Restrooms/custodial	Projected costs to Rec & Parks to maintain restrooms	$120k
Recology trash removal	Regular collection of trash bins by Recology	$100k
Gardening/litter removal	Projected costs of additional litter removal beyond regular garbage collection by Rec & Parks staff plus gardening	$530k
Security	Park Ranger presence, between 2019 and 2020 levels	$22k
	TOTAL OPERATING AND MAINTENANCE (annualized)	$1.5M

San Francisco County Transportation Authority

APPENDIX D - SUMMARY OF GREAT HIGHWAY PUBLIC SURVEY FINDINGS

This appendix summarizes the responses received from the D4 Mobility Study Great Highway public survey that was open from December 6, 2020 – January 10, 2021. A copy of the survey is attached to this appendix. We received a total of 3,989 responses to the survey. This analyzes the geographic distribution of responses, priorities of respondents, and preferred scenarios. This memo will focus on feedback regarding scenarios 1 and 3, as they received the greatest interest.

KEY FINDINGS

- The highest number of respondents cited a full promenade as their preferred scenario, with 53% of total respondents.
- Returning to a four-lane highway was second most cited preference, with 21% of responses.
- 95.3% of respondents were residents of San Francisco.
- Residents of San Mateo County and Alameda County had the second highest amount of responses in the region, with 70 and 73 respectively.
- When asked their priorities for the Upper Great Highway, respondents highest priority was bicycle and pedestrian access, followed by community benefit/recreation, vehicle access, and bicycle and pedestrian safety.
- The primary comments and concerns about Concept 1 (Four-lane roadway) were that it was seen as unsafe, asking drivers to share the roadway was an issue, and that it gives too much room for cars.
- For Concept 3 (Full promenade), the main concerns were increased traffic in the area due to closure, safety, and the need for traffic calming on surrounding streets.

Table 1: Total Concept Preferences

	All Participants		Sunset (94116, 94122 zip codes)		Outer Richmond (94121 zip code)		Other San Francisco Residents	
	Total	% of All Participants	Total	% of Sunset Residents	Total	% of Outer Richmond Residents	Total	% of Other SF Residents
Concept 1: Four-Lane Roadway	838	21%	292	22%	328	52%	197	11%
Concept 2: Promenade/Two-way Roadway	380	10%	89	7%	62	10%	202	11%
Concept 3: Full Promenade	2,117	53%	692	52%	141	22%	1172	64%
Concept 4: Timed Promenade	533	13%	200	15%	82	13%	228	12%

None Stated	121	3%	51	4%	23	4%	38	2%
TOTALS	3,989		1,324		636		1,837	

ZIP CODE ANALYSIS

During our survey period we received 3,989 responses from various parts of San Francisco, the Bay Area, and onward. Of the total responses 95.3% were residents of San Francisco. About 33% of the total respondents were residents of the Sunset, while 16% were residents of the Outer Richmond. These two neighborhoods are located nearest to the Upper Great Highway. About 52% of residents of the Sunset expressed support for Concept 3 (Full Promenade), while 52% of Outer Richmond residents support Concept 1 (Four-Lane Roadway).

Figure 1: San Francisco Survey Respondents by Zip Code

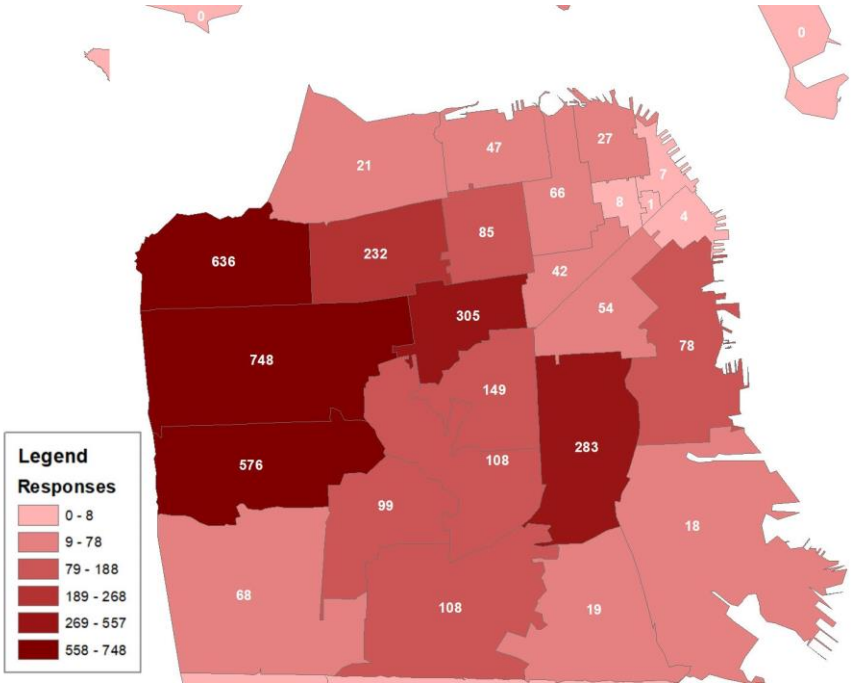
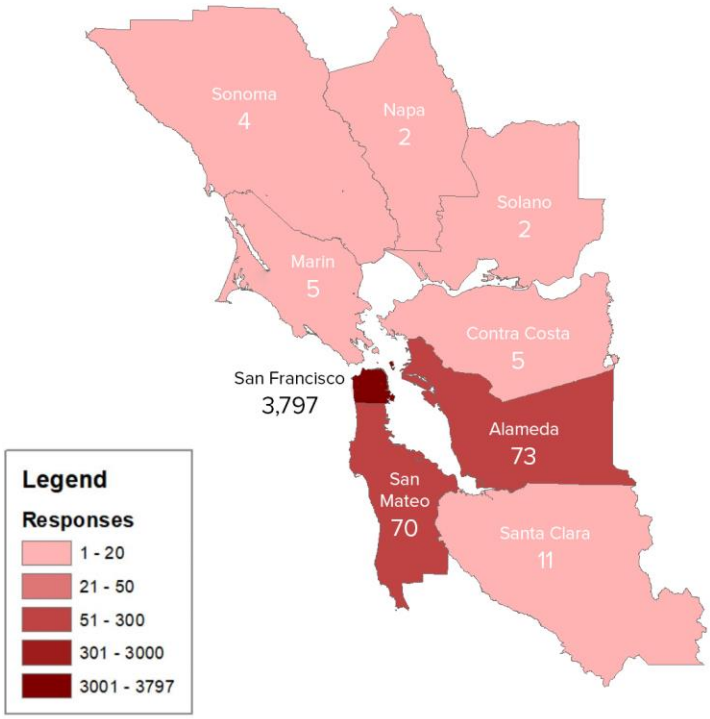


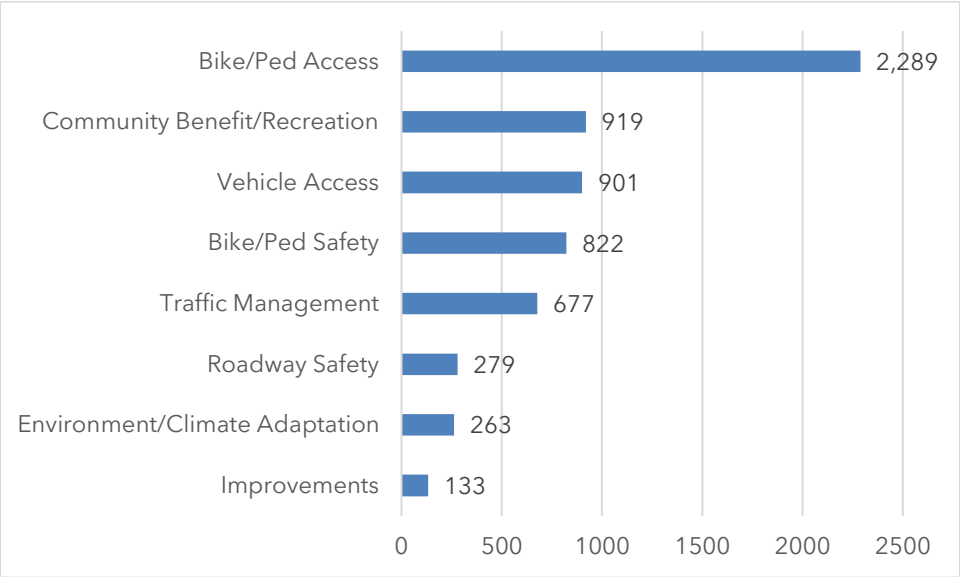
Figure 2: Total Respondents in the Bay Area by County



PRIORITIES

As part of the survey, we asked residents about their priorities for the Upper Great Highway and the surrounding neighborhood. The residents identified a variety of topics including access, safety, parking and enforcement. After coding their feedback, we identified the following themes in order of highest to lowest total mentions. The most common priority shown in the responses was bicycle and pedestrian access, then community benefit and recreation, vehicle access, bike and pedestrian safety, and traffic management. Other topics mentioned include the following: Business/economics, Transit, Parking, Enforcement , ADA, and Wayfinding.

Figure 3: Respondents' Priorities for Upper Great Highway and Surrounding Neighborhood



Note: Many comments were coded as having multiple priorities, while some only mentioned a single priority. The data above contains some overlap where some comments fall into multiple categories.

Bike and Pedestrian Access (2,289)
The most common priority amongst respondents was bicycle and pedestrian access, totaling 2,289 mentions. Overall, the majority of responses were in favor of continuing bicycle and pedestrian access on the Upper Great Highway. Included in these responses were the desire for a partial closer and weekend closure however, the overwhelming sentiment was support for permanent closure of the Upper Great Highway.

Community Benefit/Recreation (919)
The second largest theme that respondents mentioned was community benefit and recreation. This category encompasses all mentions of positive impact of the closure on the community. The most salient themes being the health benefits of the closure, the opportunity for families to recreate openly, and expansion of the city's open space network.

Vehicle Access (901)
The third highest category was vehicle access. The idea shared within these responses remained consistent – advocating for vehicle access for various reasons including traffic overflow onto residential street, convenience of the Upper Great Highway, and general safety on the surrounding streets. The most common concern was the rerouting of traffic through residential neighborhoods, which has increased concerns of safety for those who live in the area.

Bike and Pedestrian Safety (822)

Bicycle and pedestrian safety was also mentioned a total of 822 times. The majority of responses mentioned feeling they had a safe place to walk, bike, and recreate now that the Great Highway is closed. There was also a considerable amount of concern over safety on residential streets now that traffic has been diverted.

Traffic Management (677)
Traffic management was also a key concern in the responses, with a total of 677 mentions. Key concerns mentioned were the need for the Upper Great Highway to be open to vehicles as a means of reducing traffic on nearby streets, highlighting the need for improvements to traffic management if the great highway were to remain closed, and general comments about traffic being a key concern. Respondents specifically cited 19th Avenue, 45th-48th Avenues, and Sunset Boulevard as being primary streets where traffic has worsened during the closure.

Roadway Safety (279)
General roadway safety was also a concern for many respondents. Responses highlighted concerns about safety due to increased traffic on local streets. Many who support the permanent closure of the Upper Great Highway also feel that roadway safety should be a priority.

Environment/Climate Adaptation (263)
Responses mentioned concern for the environment, stating that permanent closure would allow for the city to better achieve its climate goals. Respondents were also aware of the need for climate adaptation, and support long-term closure as a way to align with goals of managed retreat due to sea level rise.

Improvements (133)
A total of 133 responses highlighted the need for improvements in the area to address various issues including traffic congestion, roadway safety, sand removal, and addition of facilities such as restrooms, trash and recycling.

CONCEPT PREFERENCES

The greatest number of respondents cited Concepts 1 and 3 as their preferred scenarios, which represent a full return of vehicles and a full promenade/vehicle closure, respectively. We coded responses to these two concepts and identified key concerns that include safety, roadway configuration and traffic calming. Other notable themes that were not as prominent, but were commonly noted include wayfinding, environmental concerns, and enforcement.

Concept 1

Concept 1 maintains the Great Highway as a four-lane roadway with two vehicle lanes in each direction. No pedestrians are allowed on the roadway. Bicyclists are allowed to share the roadway lanes. People submitted 3,647 comments for Concept 3. Based on the comments, 1,084 people support the concept and 2,359 oppose it.

Considers Concept 1 unsafe (485)
A common concern that 485 people raised is that they consider the Concept 1 design unsafe. Some people consider it unsafe for pedestrians because of the speeding cars and wide road. Others consider it unsafe for bicyclists because of the sand on the road and conflicts with cars.

Asking bicyclists and drivers to share the roadway lanes is an issue (324)
324 stated that they did not like the part of the Concept 1 design that asks drivers and bicyclists to share the roadway. The bicyclists said that they would feel unsafe competing with drivers and that they would prefer to have a proper bike lane, although the bike lanes are also an issue because they are often covered in sand forcing them to swerve into the road. Drivers seem just as uncomfortable with the idea as bicyclists because they believe the bicyclists are too slow to keep up with the cars. Some drivers agree with the idea of having a bike lane while others want bicyclists off the road altogether.

Concept 1 gives too much space for cars and not enough space for other modes (284)
284 people believe that Concept 1 gives too much priority and space for cars. Instead, people would like to see more of the roadway dedicated to other modes like walking and bicycling.

Supports Concept 1: 1,084
Opposes Concept 1: 2,359
Non answer: 204
Considers Concept 1 unsafe: 485
Asking bicyclists and drivers to share the roadway lanes is an issue: 324
Concept 1 gives too much space for cars and not enough space for other modes: 284

Concept 3

Concept 3 closes the Great Highway completely to vehicle traffic. The four lanes would be open for walking, biking, and other non-motorized use. It requires major traffic calming and diversions to address increased traffic on local streets. People submitted 3,597 comments for Concept 3. Based on the comments, 2,349 people support the concept and 1,174 oppose it.

Concerned with Increase in Neighborhood Traffic (575)
A common concern that 575 people raised is that they are afraid that Concept 3 will divert drivers into the surrounding streets of the neighborhood and increase the traffic on those streets.

Safety (201)
201 people believe that Concept 3 would increase overall safety, especially for people walking and biking, because they would avoid conflicts with cars on the Great Highway. On the other hand, 51 people believe that Concept 3 would decrease the safety of the neighborhood because of the traffic diverted through residential streets.

Traffic Calming Needed (163)
Since people are worried about speeding traffic in the neighborhood, another common sentiment shared by 163 people is that they will only support this concept if they feel that it will properly implement extensive traffic calming in the area.

Supports Concept 3: 2,349
Opposed Concept 3: 1,174
Non answer: 74
Concerned with Increase in Neighborhood Traffic: 575
Traffic Calming Needed: 163
Increase in Safety for Walkers and Bikers: 201