

Office of the City Manager

ACTION CALENDAR  
September 10, 2019

To: Honorable Mayor and Members of the City Council  
From: Dee Williams-Ridley, City Manager  
Submitted by: Phillip L. Harrington, Director, Department of Public Works  
Subject: Funding for Street Rehabilitation Capital Improvement Program in Berkeley

RECOMMENDATION

In response to Council comments at the December 11, 2018 Council Meeting, this report provides information on current and future funding sources for street rehabilitation. Staff is requesting feedback on the funding available, including current expenditures, projected expenses, and plans, for the City's current and future Street Rehabilitation Capital Improvement Program (CIP).

FISCAL IMPACTS OF RECOMMENDATION

Funds for street rehabilitation projects are also required to support other eligible funding requests needed for other City projects, programs, and staffing as they align with the Department's complete streets vision. All funding allocations provided or proposed for street rehabilitation were determined when balancing the Public Works Department budget requests. Additional funding sources are required to increase street rehabilitation construction to more than what was proposed in the City FY 2020 to 2024 5-year Street Rehabilitation Plan.

CURRENT SITUATION AND ITS EFFECTS

The current street rehabilitation program in the CIP is based on the adopted biennial budget for Fiscal Years 2020 and 2021, and the estimated available funding levels from State Transportation (Gas) Taxes, Measure B, Measure BB, County Measure F, bonds, one time grants, and the General Fund. Similarly, the street rehabilitation programs for future years are based on projected budgets and estimated available funding levels. The funding allocations for street rehabilitation in FY 2019 and the next five fiscal years FY 2020 - 2024 are provided in the Table 1 below.

Table1: Current Year and Five-Year Paving Program Funding Source Allocations by Year, in \$						
Fund Description	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
State Transportation Tax	495,303	495,303	495,303	495,303	495,303	495,303
Measure B - Local Streets & Roads	724,000	700,000	1,000,000	700,000	0	0
Measure BB – Local Streets & Roads	1,600,000	2,200,000	1,700,000	2,000,000	2,700,000	2,700,000
Measure F Vehicle - Registration Fee	N/A	155,000	155,000	155,000	155,000	155,000
Capital Improvement Fund	1,925,000	1,925,000	1,925,000	1,925,000	1,925,000	1,925,000
Road Repair and Accountability Act of 2017 (SB1)	2,150,000	1,500,000	1,700,000	1,700,000	2,000,000	2,000,000
<b>TOTAL</b>	<b>6,894,303</b>	<b>6,975,303</b>	<b>6,975,303</b>	<b>6,975,303</b>	<b>7,275,303</b>	<b>7,275,303</b>

The baseline funding sources eligible to be used for street rehabilitation as shown in column 1 of Table 2 below include State Transportation (Gas) Tax, Measure B- Local Streets and Roads, Measure BB- Local Streets and Road, County Measure F (Vehicle Registration Fee), Capital Improvement Fund (General Fund), and Road Repair and Accountability Act of 2017 (SB1). The total estimated funding levels from the listed fund sources are provided in column 2 in Table 2 below.

Table 2: Revenue versus Street Rehab. Allocation			
1 Fund Description	2 Revenue Avg. FY 2020-24 (in \$)	3 Street Rehab. Fund Allocation Avg. FY 2020-24 (in \$)	4 Average Amt. of Revenue Dedicated to Street Rehab. (%)
State Transportation Tax	3,032,753	495,303	16%
Measure B - Local Streets & Roads	1,962,498	480,000	24%
Measure BB – Local Streets & Roads	3,078,338	2,260,000	73%
Measure F Vehicle -Registration Fee	452,361	155,000	34%
Capital Improvement Fund*	2,670,000	1,925,000	72%
Road Repair and Accountability Act of 2017 (SB1)	2,404,232	1,780,000	74%

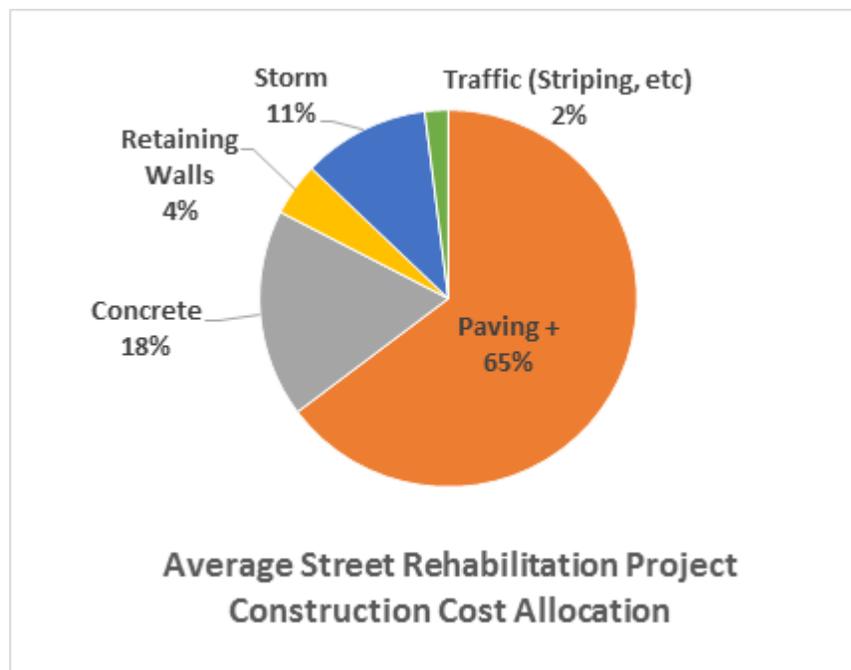
\* Baseline funding allocation to Streets/ Sidewalks/ Traffic

The total revenue shown in column 2 of Table 2 is expended on Engineering and Transportation personnel working on various projects and programs; design and construction of various capital projects; and Public Works maintenance personnel, equipment and improvement costs.

The revenue amounts (shown in column 2 of Table 2) are not only being spent on street rehabilitation, they are also being spent on transportation improvements, traffic calming, complete streets projects, signal maintenance and improvements, transit area improvements, sidewalk maintenance and capital improvements, and storm drainage and green infrastructure improvements.

The allocation of the total available funding that goes towards street rehabilitation projects such as Panoramic Hill Street Rehabilitation and FY 18 Street Rehabilitation is provided in column 3 of Table 2. The average percent of revenue that is dedicated to street rehabilitation is shown in column 4 of Table 2. As can be seen, only a fraction of the available revenue goes towards street rehabilitation.

Of the fund amounts allocated for the street rehabilitation projects over the past few years, 80 to 85% of the funds have gone towards construction, and 15 to 20% have gone towards personnel and consultant costs (design, construction management, and survey). The construction cost break-down for three paving projects being constructed in summer 2019, is as shown in the below figure where 65% of the construction cost is paving, and 35% of the cost is storm drain/ green infrastructure, traffic related improvements, retaining walls, and concrete (curb, gutter, and sidewalks).



### Funding Sources for Street Rehabilitation

The State Transportation Taxes are a major contributor of revenue for street rehabilitation, and these funds come from gas taxes and vehicle fees. The City receives approximately \$3 million annually in gas tax funds. Approximately \$495,000 of the funds are designated for street rehabilitation every year. Road Repair and Accountability Act of 2017 (SB1) funds is an additional State Transportation Tax. This tax is generated from a gas tax increase, diesel tax increase, new transportation improvement fee, new \$100 annual vehicle registration fee applicable only to certain zero-emission vehicles. Starting 2018, SB1 provides \$26 billion to cities and counties for the next decade. The City will

receive approximately \$2.15 million in FY2019 and is currently budgeting receiving between \$2.15 million and \$2.6 million annually of SB1 funding for FY2020 to FY2024. Approximately, 75% (between \$1.5 to 2.15 million) of the SB1 funding is being appropriated for street rehabilitation.

Measure B- Local Streets and Roads is another contributor of revenue street rehabilitation. Measure B is a half-cent County sales tax authorized in 2000. Measure B will be in effect for 20 years; sales tax collection began on April 1, 2002 and will extend through March 31, 2022. Alameda CTC makes monthly Measure B direct distributions to local jurisdictions and transit agencies. The Measure B Local Streets and Roads funds are to be spent on transportation capital improvements for surface streets and arterial roads, and maintenance of upkeep of local streets and roads, including repaving of streets, filling potholes, and upgrading local transportation infrastructure. The City receives approximately \$3.7 million annually in Measure B- Local Streets and Roads funds. The city allocates between \$700,000 and \$1,000,000 of funds towards street rehabilitation annually.

Measure BB- Local Streets and Roads is an extension and augmentation of the existing transportation sales tax (Measure B). It is a half-cent County sales tax passed by the voters in 2014. Collection of the initial half cent sales tax began on April 1, 2015 and will extend through March 31, 2022. The full one-cent sales tax was authorized by Measure BB will begin in April 2022 and will extend through March 2045. Alameda CTC has been making monthly Measure BB distributions to the City since July 2015. Measure BB funds are required to be spent on capital projects and programs that improve the countywide transportation system. The City receives approximately \$3 million from Measure BB annually. The City allocates \$1.7 million to \$2.7 million of funds towards street rehabilitation annually.

Measure F, Alameda County's Vehicle Registration Fee (VRF) Program was approved by Alameda County voters in November, 2010. The VRF is a \$10 charge per year for each vehicle registered in Alameda County. This is a \$10 fee, which began in May 2011, and will continue to be imposed annually unless repealed. The funds are distributed to cities in the county and to Alameda County to be spent on transportation capital improvements for surface streets and arterial roads, and maintenance and upkeep of local streets and roads. The City receives approximately \$452,361 a year in VRF funds. The City allocates \$155,000 in VRF funds to street rehabilitation annually.

The Capital Improvement Fund is an annual transfer from the General Fund designated to capital improvements. The City allocates \$2.67 million for the Capital Improvement Fund (baseline funding for streets, sidewalks, and traffic improvements) annually, and allocates \$1,925,000 of the funding each year for street rehabilitation.

City Bond Measures have also been sources of funding for the street rehabilitation program, and these funds are not shown in the tables. Measure M was approved in November 2012, and authorized the issuance of \$30 million of general obligation bonds. The funds became available in January 2014. Bond proceeds have been used to construct street improvements, such as street repaving and rehabilitation, which included flood control and water quality measures when appropriate and consistent with the Watershed Management Plan. Measure M is in its final stages, and the City will have

achieved a total of 18.0 miles of street rehabilitation with the funds. City staff will present a Measure M closeout report to the City Council after all the funds have been expended later this fiscal year.

Measure T1, approved in November 2016, authorized the City to sell \$100 million of General Obligation Bonds (GO Bonds). The first phase of T1 provides \$35 million for citywide projects. Phase 1 of T1 bond funds are planned for expenditure on City facility improvements, restrooms, park improvements, street rehabilitation, and green infrastructure and flood control improvements. Approximately \$8.5 million of Phase 1 of T1 bonds funds are being spent or will be spent on street improvements. A community process will identify and vet potential projects to be delivered with Phase 2 of T1 bond funds. Phase 2 of the T1 bond funds will not be available until after Council approves the Phase 2 Measure T1 projects which is anticipated to occur in March 2021.

Staff has been successful in securing grant funds to supplement annual funding for street rehabilitation grants in past years. For instance, staff had secured \$2.78 million of grant funds for the Shattuck Reconfiguration Project, which includes 0.26 centerline miles of street rehabilitation in FY 2020. Staff also secured \$1.21 million of federal grant funds for street rehabilitation in association with the Southside Complete Streets project. Grant are not, however, a guaranteed annual fund source.

Funding for the Street Rehabilitation Program advances the City's strategic goal of providing state-of-the-art, well-maintained infrastructure, amenities, and facilities.

#### BACKGROUND

Berkeley has 216 centerline miles of public streets within the City limit, which is comprised of 22 miles of arterials, 37 miles of collectors, and 156 miles of residential streets.

The City Street Rehabilitation Policy indicates that all of Berkeley's Measure B Sales Tax funds allocated for local streets and roads, all gas tax subventions and similar funds shall be used for street rehabilitation as follows: 10% for Arterials, 50% for Collectors, 25% on Residential Streets, and 15% on Discretionary and Demonstration Projects. However, residential streets are in the worst conditions of all City streets. Thus, City staff and the Public Works Commission collectively agreed to spend a larger proportionate share of funds on residential streets the last two years. The street rehabilitation policy will be revised to reflect these current goals.

From Fiscal Years 2019 to 2023, the City will pave 14.70 miles of residential streets, 1.25 miles of arterials, and 4.40 miles of collectors. This is a total of 20.37 miles of streets at a cost of \$42.8 million, from all fund sources, including T1 bond funds and grants. The adopted FY 2019 to 2023 Pavement Rehabilitation Plan is provided in Attachment 1, and the FY 2020 to 2024 Pavement Rehabilitation Plan is currently in the process of being developed.

The City typically allocates spending approximately \$7 million each year on street rehabilitation, not including grants or T1 funds. In addition to street pavement, the street rehabilitation projects incorporate many other improvements to selected streets as part of implementing the City's "complete street" approach which repairs or replaces street

infrastructure such as curb ramps, curbs, gutters, sidewalks, drainage inlets and pipes, street signage, and striping. These non-pavement related costs represent approximately 30% to 40% of the construction costs.

ENVIRONMENTAL SUSTAINABILITY

The City includes environmental sustainability in the development of its street rehabilitation plan. In accordance with the street rehabilitation policy, the City set asides 15% of its funds towards demonstration or discretionary projects such as street rehabilitation which provides environmental benefits. In Fiscal Year 2020, a demonstration project the City plans to construct includes the use of permeable concrete in parking lanes. The Public Works Commission is currently identifying additional green infrastructure projects in FY 2021 to 2024 to be funded by the discretionary and demonstration funds.

In addition, environmentally conscious pavement treatments are incorporated in the paving projects such as Full Depth Reclamation (FDR). FDR is being used as a cost-effective alternative to traditional street reconstruction methods. It recycles much of the existing pavement on site, and incorporates it into the pavement subgrade, thereby reducing truck trips to and from construction sites.

RATIONALE FOR RECOMMENDATION

During discussion of the FY 2019-2023 Five-Year Street Rehabilitation Plan at the December 11, 2018 Council Meeting, the Council requested staff provide a report on the funding sources available for street rehabilitation.

ALTERNATIVE ACTIONS CONSIDERED

No alternative actions were considered.

CONTACT PERSON

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Attachments:

1: Adopted Five-Year Street Rehabilitation Plan for FY 2019 to FY 2023

EXHIBIT A  
5-YEAR STREET REHABILITATION PLAN FOR FY 2019 TO FY 2023

Revised: 11/1/2018

Fiscal Year	Street ID	Section ID	Street Name	From	To	Class	Treatment	Total Cost	District	P	Mileage	Current PCI	Last M&R Date	Last M&R	Last Paved
2019	320212	33	5TH ST	HARRISON ST	CAMELIA ST	R	Surface Seal	\$ 292,320	1	N	0.25	58	4/1/2001	A - AC	RECONSTRUCT STRUCTURE (AC)
2019	932538	55	6TH ST	ALLSTON WAY	DWIGHT WAY	C	Overlay	\$ 857,533	2	N	0.37	45	10/1/1994	O -	MILL AND OVERLAY W/FABRIC
2019	320538	30	6TH ST	NORTH CITY LIMIT	GILMAN ST	R	Surface Seal	\$ 90,440	1	2B	0.22	64	8/31/2004	O -	MILL AND OVERLAY W/FABRIC
2019	933076	42	BURNETT ST	MABEL ST	ACTON ST	R	Surface Seal	\$ 47,872	2	N	0.13	53	7/1/1988	O -	MILL AND OVERLAY W/FABRIC
2019	931077	50	BYRON ST	ADDISON ST	BANCROFT WAY	R	Surface Seal	\$ 89,760	2	N	0.25	68	7/1/1988	O -	THIN OVERLAY w/FABRIC
2019	933095	40	CARLETON ST	SAN PABLO AVE	MATHEWS ST	R	Surface Seal	\$ 112,000	2	N	0.09	65	9/1/1991	O -	MILL AND OVERLAY W/FABRIC
2019	213098	50	CATALINA AVE	COLUSA AVE	THE ALAMEDA	R	Reconstruct	\$ 235,200	1, 5	N	0.19	35	7/1/1993	A - AC	RECONSTRUCT SURFACE (AC)
2019	423142	55	DELAWARE ST	CALIFORNIA ST	MARTIN LUTHER KING JR WAY	R	Surface Seal	\$ 136,000	1	N	0.38	52	12/15/2004	A - AC	RECONSTRUCT SURFACE (AC)
2019	933146	40	DERBY ST	SAN PABLO AVE	MABEL ST	R	Overlay	\$ 259,372	2	N	0.20	56	10/1/1992	O -	MILL AND OVERLAY W/FABRIC
2019	932153	55	DWIGHT CRESCENT	6TH ST	7TH ST	C	Overlay	\$ 168,000	2	N	0.08	47	7/1/1988	O -	MILL AND OVERLAY W/FABRIC
2019	525278	42	HIGHLAND PL	RIDGE RD	HEARST AVE	R	Overlay	\$ 74,827	6	N	0.07	25		C -	
2019	423352	50	LINCOLN ST	SACRAMENTO ST	GRANT ST	R	Surface Seal	\$ 433,440	1	N	0.37	54	10/1/1992	O -	MILL AND THICK OVERLAY
2019	525484	77	RIDGE RD	LA LOMA AVE	HIGHLAND PL	R	Overlay	\$ 82,960	6	N	0.06	0		A - AC	
2019	213553	10	STATION PL	CATALINA AVE	SOUTH DEAD END	R	Reconstruct	\$ 63,467	5	N	0.04	8		O -	
2019	735008	60	ADELIN ST	DERBY ST	STUART ST	A	Overlay	\$ 874,367	3	2A to 2B*	0.14	37			
2019	735008	64	ADELIN ST	STUART ST	ASHBY AVE	A	Overlay	\$ 1,639,867	3	2A to 2B*	0.28	40			
2019	524274	63	HEARST AVE	MILVIA AVE	SHATTUCK AVE	A	Overlay	\$ 295,311	4	2A	0.13	60			
								\$ 5,752,735			3.24				

Note: Column P denotes presence of bike facility type (1 paved path, 2A 2B bike lane, 3A sign-only, 3C Sharrows, 3E bike blvd, 4 cycle track); C for bus route; and N for none.

\*Proposed bike facilities from 2017 Bike Plan.

EXHIBIT A  
5-YEAR STREET REHABILITATION PLAN FOR FY 2019 TO FY 2023

Revised: 11/1/2018

Fiscal Year	Street ID	Section ID	Street Name	From	To	Class	Treatment	Total Cost	District	P	Mileage	Current PCI	Last M&R Date	Last M&R	Last Paved
2020	940005	70	ACTON ST	ASHBY ST	66TH ST	R	Surface Seal	\$ 83,640	2	N	0.23	60	8/29/2007	A - AC	RECONSTRUCT STRUCTURE (AC)
2020	516020	30	ARCADE AVE	GRIZZLY PEAK BLVD	FAIRLAWN DR	R	Surface Seal	\$ 63,378	6	N	0.06	7	6/1/1995	O -	MILL AND OVERLAY W/FABRIC
2020	321100	30	CEDAR ST	6TH ST	SAN PABLO AVE	C	Overlay	\$ 683,169	1	3C*	0.31	27	10/1/1994	O -	MILL AND OVERLAY W/FABRIC
2020	829102	60	CENTER ST	MARTIN LUTHER KING	MILVIA ST	R	Overlay	\$ 315,644	4		0.13	59	7/1/1991	A - AC	RECONSTRUCT SURFACE (AC)
2020	729102	63	CENTER ST	MILVIA ST	SHATTUCK AVE	R	Overlay	\$ 292,444	4		0.13	72	7/1/1991	A - AC	RECONSTRUCT SURFACE (AC)
2020	739141	70	DEAKIN ST	ASHBY AVE	PRINCE ST	R	Surface Seal	\$ 45,920	3	N	0.16	76	4/3/2008	A - AC	RECONSTRUCT STRUCTURE (AC)
2020	736141	68	DEAKIN ST	RUSSELL ST	ASHBY AVE	R	Surface Seal	\$ 35,700	3	N	0.10	57	7/1/1988	O -	MILL AND OVERLAY W/FABRIC
2020	940148	70	DOHR ST	ASHBY AVE	PRINCE ST	R	Surface Seal	\$ 123,598	2	N	0.14	53	10/1/1992	A - AC	RECONSTRUCT STRUCTURE (AC)
2020	320685	10	MARINA BLVD	SPINNAKER WAY	UNIVERSITY AVE	C	Overlay	\$ 675,000	1	N	0.43	58	9/1/1986	A - AC	OVERLAY
2020	735382	60	MILVIA ST	BLAKE ST	RUSSELL ST	R	Reconstruct	\$ 770,800	3	3E	0.44	28	9/1/1993	A - AC	RECONSTRUCT SURFACE (AC)
2020	830491	58	ROOSEVELT AVE	CHANNING WAY	DWIGHT WAY	R	Surface Seal	\$ 172,480	4	N	0.13	65	12/1/1989	A - AC	RECONSTRUCT SURFACE (AC)
2020	516492	75	ROSE ST	LE ROY AVE	LA LOMA AVE	R	Reconstruct	\$ 100,000	6	N	0.14	0		A - AC	
2020	319525	35	SANTA FE AVE	GILMAN ST	CORNELL AVE & PAGE	R	Overlay	\$ 314,705	1	3C*	0.27	49	7/1/1995	A - AC	RECONSTRUCT STRUCTURE (AC)
2020	319525	30	SANTA FE AVE	NORTH CITY LIMIT	GILMAN ST	R	Surface Seal	\$ 37,355	1	3C*	0.11	60	8/31/2004	O -	MILL AND THIN OVERLAY
2020	115532	77	SHASTA RD	GRIZZLY PEAK BLVD	PARK GATE	C	Reconstruct	\$ 86,667	6	N	0.05	14	11/1/1988	A - AC	RECONSTRUCT SURFACE (AC)
2020	115532	79	SHASTA RD	PARK GATE	EAST CITY LIMIT (GOLF	C	Reconstruct	\$ 150,667	6	N	0.11	10	11/1/1988	A - AC	RECONSTRUCT SURFACE (AC)
2020	320686	10	SPINNAKER WAY	BREAKWATER DR	MARINA BLVD	R	Reconstruct	\$ 1,333,333	1	N	0.28	24	8/1/1991	A - AC	OVERLAY
2020	931657	55	WEST ST	BANCROFT WAY	DWIGHT WAY	R	Surface Seal	\$ 263,822	2	N	0.25	65	10/1/1994	O -	MILL AND OVERLAY W/FABRIC
2020	213386	22	MONTEREY AVE	THE ALAMEDA	HOPKINS ST	C	Overlay	\$ 1,960,667	5	2A	0.57	54	11/30/2011	A - AC	MILL AND OVERLAY
2020	933653	40	WARD ST	SAN PABLO AVE	ACTON ST	R	Reconstruct	\$ 1,328,400	2	N	0.31	20	9/1/1991	A - AC	MILL AND OVERLAY W/FABRIC
2020	320620	15	UNIVERSITY AVE	MARINA BLVD	WEST FRONTAGE RD	C	Reconstruct	\$ 3,520,000	1, 2	N	0.30	0	12/1/1989	A - AC	OVERLAY
2020	729533	55	SHATTUCK AVE	CENTER ST	ALLSTON WAY	A	Reconstruct	\$ 1,533,778	4		0.06	2	7/1/1994	O -	MILL AND OVERLAY W/FABRIC
2020	729533	57	SHATTUCK AVE (SB)	CENTER ST	UNIVERSITY AVE	A	Reconstruct	\$ 2,552,000	4		0.13	12	7/1/1994	O -	MILL AND OVERLAY W/FABRIC
2020	729535	50	SHATTUCK SQUARE	UNIVERSITY AVE	ADDISON	A	Reconstruct	\$ 1,433,889	4		0.07	28	7/1/1994	O -	MILL AND OVERLAY W/FABRIC
								\$ 17,877,057			4.92				

Note: Column P denotes presence of bike facility type (1 paved path, 2A 2B bike lane, 3A sign-only, 3C Sharrows, 3E bike blvd, 4 cycle track); C for bus route; and N for none.

\*Proposed bike facilities from 2017 Bike Plan.

EXHIBIT A  
5-YEAR STREET REHABILITATION PLAN FOR FY 2019 TO FY 2023

Revised: 11/1/2018

Fiscal Year	Street ID	Section ID	Street Name	From	To	Class	Treatment	Total Cost	District	P	Mileage	Current PCI	Last M&R Date	Last M&R	Last Paved
2021	628042	78	BANCROFT WAY	BOWDITCH ST	COLLEGE AVE	C	Overlay	\$ 161,036	7	3C*	0.13	62	12/1/1990	O -	MILL AND OVERLAY W/FABRIC
2021	627042	80	BANCROFT WAY	COLLEGE AVE	PIEDMONT AVE	C	Overlay	\$ 178,336	7	3C*	0.13	57	12/1/1990	O -	MILL AND OVERLAY W/FABRIC
2021	111127	10	CRESTON RD	GRIZZLY PEAK BLVD	SUNSET LANE	R	Surface Seal	\$ 140,067	6	N	0.36	67	6/1/1995	A - AC	RECONSTRUCT STRUCTURE (AC)
2021	115127	20	CRESTON RD	SUNSET LANE	GRIZZLY PEAK BLVD	R	Surface Seal	\$ 98,047	6	N	0.36	64	11/1/1988	A - AC	RECONSTRUCT SURFACE (AC)
2021	728140	50	DANA ST	BANCROFT WAY	DWIGHT WAY	R	Overlay	\$ 352,700	7	2A to 2B*	0.25	51	12/1/1989	O -	MILL AND OVERLAY W/FABRIC
2021	728180	50	ELLSWORTH ST	BANCROFT WAY	DWIGHT WAY	R	Reconstruct	\$ 422,400	7		0.25	20	11/1/1992	O -	MILL AND OVERLAY W/FABRIC
2021	736180	60	ELLSWORTH ST	DWIGHT WAY	WARD ST	R	Surface Seal	\$ 129,360	7		0.38	83	5/11/2011	A - AC	RECONSTRUCT SURFACE (AC)
2021	736180	65	ELLSWORTH ST	WARD ST	ASHBY AVE	R	Surface Seal	\$ 99,307	3		0.29	87	5/11/2011	A - AC	RECONSTRUCT SURFACE (AC)
2021	736227	60	FULTON ST	DWIGHT WAY	PARKER ST	R	Overlay	\$ 167,540	3	3E*	0.13	61	6/1/1993	O -	MEDIUM AC OVERLAY (2 INCHES)
2021	736227	63	FULTON ST	PARKER ST	STUART ST	R	Overlay	\$ 334,092	3	3E*	0.25	61	2/1/1992	O -	THIN AC OVERLAY(1.5 INCHES)
2021	115344	80	LATHAM LANE	MILLER AVE	GRIZZLY PEAK	R	Surface Seal	\$ 38,500	6	N	0.10	61	6/1/1994	A - AC	RECONSTRUCT STRUCTURE (AC)
2021	423371	40	MC GEE AVE	CEDAR ST	VIRGINIA ST	R	Surface Seal	\$ 144,480	1	N	0.12	52	6/1/1995	O -	MILL AND OVERLAY W/FABRIC
2021	115380	70	MILLER AVE	HILLDALE AVE	SHASTA RD	R	Surface Seal	\$ 245,700	6	N	0.66	58	6/1/1994	A - AC	RECONSTRUCT STRUCTURE (AC)
2021	835431	65	OTIS ST	RUSSELL ST	ASHBY AVE	R	Surface Seal	\$ 156,800	3	N	0.13	61	4/1/2001	A - AC	RECONSTRUCT STRUCTURE (AC)
2021	321440	35	PAGE ST	10TH ST	SAN PABLO AVE	R	Surface Seal	\$ 62,533	1	N	0.06	56	12/1/1989	A - AC	RECONSTRUCT SURFACE (AC)
2021	319440	40	PAGE ST	SAN PABLO AVE	CORNELL AVE	R	Surface Seal	\$ 171,360	1	N	0.14	48	12/1/1989	A - AC	RECONSTRUCT SURFACE (AC)
2021	517533	30	SHATTUCK AVE	EUNICE ST	ROSE ST	R	Surface Seal	\$ 169,100	5	N	0.25	61	5/17/2006	A - AC	RECONSTRUCT STRUCTURE (AC)
2021	114533	25	SHATTUCK AVE	LOS ANGELES AVE	EUNICE ST	R	Surface Seal	\$ 111,300	5	N	0.30	67	11/6/2003	A - AC	RECONSTRUCT STRUCTURE (AC)
2021	736561	70	STUART ST	FULTON ST	HILLEGASS AVE	R	Surface Seal	\$ 588,000	7	N	0.46	54	11/13/1998	A - AC	RECONSTRUCT STRUCTURE (AC)
2021	728584	50	TELEGRAPH AVE	BANCROFT WAY	DWIGHT WAY	C	Overlay	\$ 299,900	7	3C*	0.25	52	7/1/1988	O - AC/AC	MILL AND OVERLAY W/FABRIC
2021	320528	47	2ND ST	DELAWARE ST	HEARST AVE	R	Reconstruct	\$ 775,833	1	N	0.09	2	NA		
2021	320528	48	2ND ST	HEARST AVE	UNIVERSITY AVE	R	Overlay	\$ 762,222	1	N	0.09	46	NA		
2021	920528	50	2ND ST	UNIVERSITY AVE	ADDISON ST	R	Reconstruct	\$ 560,000	2	N	0.09	0	8/27/1997		MILL AND OVERLAY W/FABRIC
2021	729042	65	BANCROFT WAY	SHATTUCK AVE	FULTON ST	C	Reconstruct	\$ 277,778	4		0.09	32	8/7/1997	O -	MILL AND OVERLAY W/FABRIC
2021	729042	60	BANCROFT WAY	MILVIA WAY	SHATTUCK AVE	C	Reconstruct	\$ 359,836	4	N	0.13	28	12/1/1989		MILL AND OVERLAY W/FABRIC
								\$ 6,806,227			5.51				

Note: Column P denotes presence of bike facility type (1 paved path, 2A 2B bike lane, 3A sign-only, 3C Sharrows, 3E bike blvd, 4 cycle track); C for bus route; and N for none.

\*Proposed bike facilities from 2017 Bike Plan.

Draft 11.9.18 5-Year Street Rehabilitation Plan FY 2019-2023.xlsx

EXHIBIT A  
5-YEAR STREET REHABILITATION PLAN FOR FY 2019 TO FY 2023

Revised: 11/1/2018

Fiscal Year	Street ID	Section ID	Street Name	From	To	Class	Treatment	Total Cost	District	P	Mileage	Current PCI	Last M&R Date	Last M&R	Last Paved
2022	213055	50	BEVERLY PL	WEST CITY LIMIT (MERCED)	HOPKINS ST	R	Surface Seal	\$ 124,440	5	N	0.35	58	12/1/1989	O - AC/AC	MILL AND OVERLAY W/FABRIC
2022	931073	50	BROWNING ST	ADDISON ST	DWIGHT WAY	R	Reconstruct	\$ 911,600	2	N	0.50	63	10/1/1995	O - AC/AC	MILL AND OVERLAY W/FABRIC
2022	729104	63	CHANNING WAY	MILVIA ST	SHATTUCK AVE	R	Reconstruct	\$ 267,640	4	2A to 2B*	0.13	27	9/1/1991	O -	MILL AND OVERLAY W/FABRIC
2022	830104	57	CHANNING WAY	ROOSEVELT AVE	MARTIN LUTHER KING	R	Reconstruct	\$ 353,500	4	3E	0.19	1	9/1/1991	O -	MILL AND OVERLAY W/FABRIC
2022	830104	50	CHANNING WAY	SACRAMENTO ST	ROOSEVELT AVE	R	Reconstruct	\$ 572,780	4	3E	0.31	22	9/1/1991	O -	MILL AND OVERLAY W/FABRIC
2022	638115	70	COLLEGE AVE	ASHBY AVE	SOUTH CITY LIMIT	A	Overlay	\$ 698,220	8	N	0.41	51	8/23/2000	A - AC	RECONSTRUCT STRUCTURE (AC)
2022	213119	25	COLUSA AVE	MONTEREY AVE	HOPKINS ST	C	Reconstruct	\$ 611,632	5		0.34	22	11/1/1990	O - AC/AC	MILL AND OVERLAY W/FABRIC
2022	736140	65	DANA ST	BLAKE ST	WARD ST	R	Reconstruct	\$ 454,080	7		0.25	45	7/30/2008	A - AC	RECONSTRUCT STRUCTURE (AC)
2022	729152	60	DURANT AVE	MILVIA ST	SHATTUCK AVE	C	Reconstruct	\$ 318,869	4		0.13	0	11/1/1992	O - AC/AC	MILL AND OVERLAY W/FABRIC
2022	729152	64	DURANT AVE	SHATTUCK AVE	FULTON ST	C	Reconstruct	\$ 243,093	4		0.10	28	8/12/1997	O - AC/AC	MILL AND OVERLAY W/FABRIC
2022	739186	60	EMERSON ST	ADELINE ST	SHATTUCK AVE	R	Surface Seal	\$ 180,320	3	N	0.15	85	4/1/2001	A - AC	RECONSTRUCT STRUCTURE (AC)
2022	839191	60	ESSEX ST	ADELINE ST	TREMONT ST	R	Surface Seal	\$ 76,160	3	N	0.06	76	4/1/2001	A - AC	RECONSTRUCT STRUCTURE (AC)
2022	739191	62	ESSEX ST	TREMONT ST	SHATTUCK AVE	R	Surface Seal	\$ 129,920	3	N	0.11	62	4/1/2001	A - AC	RECONSTRUCT STRUCTURE (AC)
2022	637217	80	FOREST AVE	COLLEGE AVE	CLAREMONT BLVD	R	Surface Seal	\$ 420,000	8	N	0.36	50	8/1/1996	A - AC	RECONSTRUCT STRUCTURE (AC)
2022	516340	36	LA LOMA AVE	ROSE ST	BUENA VISTA WAY	C	Reconstruct	\$ 230,098	6		0.16	36	6/1/1995	O - AC/AC	MILL AND OVERLAY W/FABRIC
2022	516340	38	LA LOMA AVE	BUENA VISTA WAY	CEDAR ST	C	Reconstruct	\$ 204,680	6		0.14	51	6/1/1995	O - AC/AC	MILL AND OVERLAY W/FABRIC
2022	834371	65	MC GEE AVE	DERBY ST	RUSSELL ST	R	Surface Seal	\$ 461,992	3	N	0.25	60	12/10/1998	A - AC	RECONSTRUCT STRUCTURE (AC)
2022	834371	60	MC GEE AVE	DWIGHT WAY	DERBY ST	R	Surface Seal	\$ 302,400	3	N	0.26	59	7/1/1988	O -	THIN OVERLAY w/FABRIC
								\$ 6,561,424			4.21				

Note: Column P denotes presence of bike facility type (1 paved path, 2A 2B bike lane, 3A sign-only, 3C Sharrows, 3E bike blvd, 4 cycle track); C for bus route; and N for none.

\*Proposed bike facilities from 2017 Bike Plan.

EXHIBIT A  
5-YEAR STREET REHABILITATION PLAN FOR FY 2019 TO FY 2023

Revised: 11/1/2018

Fiscal Year	Street ID	Section ID	Street Name	From	To	Class	Treatment	Total Cost	District	P	Mileage	Current PCI	Last M&R Date	Last M&R	Last Paved
2023	729014	63	ALLSTON WAY	MILVIA ST	SHATTUCK AVE	R	Reconstruct	\$ 228,800	4		0.14	19	11/1/1990	O -	MILL AND THIN OVERLAY
2023	729014	65	ALLSTON WAY	SHATTUCK AVE	OXFORD ST	R	Reconstruct	\$ 167,822	4		0.11	10	11/1/1992	O -	MILL AND OVERLAY W/FABRIC
2023	739285	70	HILLEGASS AVE	ASHBY AVE	CITY LIMIT (WOOLSEY	R	Surface Seal	\$ 68,400	8		0.16	83	7/28/2003	A - AC	RECONSTRUCT STRUCTURE (AC)
2023	736285	60	HILLEGASS AVE	DWIGHT WAY	ASHBY AVE	R	Surface Seal	\$ 256,000	8		0.61	83	5/31/2000	A - AC	RECONSTRUCT STRUCTURE (AC)
2023	213293	55	HOPKINS ST	CARLOTTA AVE	JOSEPHINE ST	C	Overlay	\$ 761,133	5	2A, C	0.35	60	12/1/1989		MILL AND OVERLAY
2023	319293	47	HOPKINS ST	GILMAN ST	SACRAMENTO ST	R	Reconstruct	\$ 203,942	5	3A, C	0.10	0	9/13/2002		MILL AND OVERLAY W/FABRIC
2023	213293	50	HOPKINS ST	HOPKINS CT	MONTEREY AVE	C	Overlay	\$ 75,193	5	3A, C	0.05	54	9/13/2002		MILL AND OVERLAY W/FABRIC
2023	213293	59	HOPKINS ST	JOSEPHINE ST	THE ALAMEDA	C	Overlay	\$ 488,333	5	2A, C	0.05	53	7/1/1991		RECONSTRUCT STRUCTURE (AC)
2023	213293	53	HOPKINS ST	MC GEE AVE	CARLOTTA AVE	C	Overlay	\$ 130,267	5	2A, C	0.06	47	12/1/1989		RECONSTRUCT STRUCTURE (AC)
2023	213293	52	HOPKINS ST	MONTEREY AVE	MC GEE AVE	C	Overlay	\$ 93,444	5	2A, C	0.05	71	12/1/1989		RECONSTRUCT STRUCTURE (AC)
2023	319293	45	HOPKINS ST	NORTHSIDE AVE	PERALTA AVE	R	Overlay	\$ 233,587	1	N	0.10	78	9/13/2002		MILL AND OVERLAY W/FABRIC
2023	319293	46	HOPKINS ST	PERALTA AVE	GILMAN ST	R	Overlay	\$ 433,031	1, 5	N	0.27	64	9/13/2002		MILL AND OVERLAY W/FABRIC
2023	319293	49	HOPKINS ST	SACRAMENTO ST	HOPKINS CT	A	Reconstruct	\$ 74,821	5	3A, C	0.04	30	9/13/2002		MILL AND OVERLAY W/FABRIC
2023	319293	40	HOPKINS ST	SAN PABLO AVE	STANNAGE AVE	R	Overlay	\$ 181,126	1	N	0.09	73	9/13/2002		MILL AND OVERLAY W/FABRIC
2023	319293	42	HOPKINS ST	STANNAGE AVE	NORTHSIDE AVE	R	Overlay	\$ 401,657	1	N	0.17	80	9/13/2002		MILL AND OVERLAY W/FABRIC
2023	829104	60	CHANNING WAY	MARTIN LUTHER KING	MILVIA ST	R	PAVER/Recon.	\$ 2,033,400	4	2A to 2B*	0.13	10	5/1/1995	O -	THIN AC OVERLAY(1.5 INCHES)
								\$ 5,830,957			2.49				

Note: Column P denotes presence of bike facility type (1 paved path, 2A 2B bike lane, 3A sign-only, 3C Sharrows, 3E bike blvd, 4 cycle track); C for bus route; and N for none.

\*Proposed bike facilities from 2017 Bike Plan.

EXHIBIT A  
5-YEAR STREET REHABILITATION PLAN FOR FY 2019 TO FY 2023

Revised: 11/1/2018

FY2019	Total Estimated Cost and Miles				\$ 5,752,735		3.24 miles	
	MILEAGE	ESTIMATED COST	% COST	% MILE	District			
ARTERIALS	0.55	\$2,809,544	49%	17%	1		1.30	
COLLECTORS	0.45	\$1,025,533	18%	14%	2		1.13	
RESIDENTIALS	2.24	\$1,917,657	33%	69%	3		0.42	
	3.24	\$5,752,735			4		0.13	
SURFACE SEALS	1.69	\$1,201,832	21%	52%	5		0.13	
OVERLAYS	1.33	\$4,252,236	74%	41%	6		0.13	
RECONSTRUCTS	0.23	\$298,667	5%	7%	7		0.00	
	3.24	\$5,752,735			8		0.00	
BIKE WAY	0.76	\$118,600					3.24	
PED		\$ 95,000						
BIKE WAY + PED		\$213,600						

13% of Measure BB (\$1.6 Million)

(BIKE costs are interim cost estimated from 2017 Bike Plan. PED costs are curb ramps)

Note: Column P denotes presence of bike facility type (1 paved path, 2A 2B bike lane, 3A sign-only, 3C Sharrows, 3E bike blvd, 4 cycle track); C for bus route; and N for none.

\*Proposed bike facilities from 2017 Bike Plan.

EXHIBIT A  
5-YEAR STREET REHABILITATION PLAN FOR FY 2019 TO FY 2023

Revised: 11/1/2018

FISCAL YEAR 2020 TOTALS

Total Estimated Cost and Miles					\$ 17,877,057	4.92 miles
	MILEAGE	ESTIMATED COST	% COST	% MILE	District	
ARTERIALS	0.26	\$5,519,667	31%	5%	1	1.56
COLLECTORS	1.77	\$7,076,169	40%	36%	2	1.09
RESIDENTIALS	2.90	\$5,281,221	30%	59%	3	0.70
	4.92	\$17,877,057			4	0.64
SURFACE SEALS	1.18	\$825,894	5%	24%	5	0.57
OVERLAYS	1.85	\$4,241,630	24%	38%	6	0.36
RECONSTRUCTS	1.90	\$12,809,533	72%	39%	7	0.00
	4.92	\$17,877,057			8	0.00
BIKE WAY	1.72	\$480,000				4.92
PED		\$ 1,120,600				
BIKE WAY + PED		\$1,600,600				

100% of Measure BB (\$1.6 Million)

(BIKE costs are interim cost estimated from 2017 Bike Plan. PED costs are curb ramps)

Note: Column P denotes presence of bike facility type (1 paved path, 2A 2B bike lane, 3A sign-only, 3C Sharrows, 3E bike blvd, 4 cycle track); C for bus route; and N for none.

\*Proposed bike facilities from 2017 Bike Plan.

EXHIBIT A  
5-YEAR STREET REHABILITATION PLAN FOR FY 2019 TO FY 2023

Revised: 11/1/2018

FISCAL YEAR 2021 TOTALS

Total Estimated Cost and Miles						\$ 6,806,227	5.51 miles
	MILEAGE	ESTIMATED COST	% COST	% MILE	District		
ARTERIALS	0.00	\$0	0%	0%	1	0.51	
COLLECTORS	0.73	\$1,276,886	19%	13%	2	0.09	
RESIDENTIALS	4.78	\$5,529,341	81%	87%	3	0.80	
	5.51	\$6,806,227			4	0.23	
SURFACE SEALS	3.64	\$2,154,553	32%	66%	5	0.55	
OVERLAYS	1.22	\$2,255,826	33%	22%	6	1.49	
RECONSTRUCTS	0.65	\$2,395,847	35%	11%	7	1.84	
	5.51	\$6,806,227			8	0.00	
BIKE WAY	1.13	\$417,672				5.51	
PED		\$ 137,000					
BIKE WAY + PED		\$554,672					

35% of Measure BB (\$1.6 Million)

(BIKE costs are interim cost estimated from 2017 Bike Plan. PED costs are curb ramps)

Note: Column P denotes presence of bike facility type (1 paved path, 2A 2B bike lane, 3A sign-only, 3C Sharrows, 3E bike blvd, 4 cycle track); C for bus route; and N for none.

\*Proposed bike facilities from 2017 Bike Plan.

EXHIBIT A  
5-YEAR STREET REHABILITATION PLAN FOR FY 2019 TO FY 2023

Revised: 11/1/2018

FISCAL YEAR 2022 TOTALS

Total Estimated Cost and Miles					\$ 6,561,424	4.21 miles
	MILEAGE	ESTIMATED COST	% COST	% MILE	District	
ARTERIALS	0.41	\$698,220	11%	10%	1	0.00
COLLECTORS	0.88	\$1,608,372	25%	21%	2	0.50
RESIDENTIALS	2.92	\$4,254,832	65%	69%	3	0.84
	4.21	\$6,561,424			4	0.87
SURFACE SEALS	1.54	\$1,695,232	26%	37%	5	0.68
OVERLAYS	0.41	\$698,220	11%	10%	6	0.31
RECONSTRUCTS	2.26	\$4,167,972	60%	53%	7	0.25
	4.21	\$6,561,424			8	0.76
BIKE WAY	0.63	\$14,136				4.21
PED		\$ 105,000				
BIKE WAY + PED		\$119,136				

7% of Measure BB (\$1.6 Million)

(BIKE costs are interim cost estimated from 2017 Bike Plan. PED costs are curb ramps)

Note: Column P denotes presence of bike facility type (1 paved path, 2A 2B bike lane, 3A sign-only, 3C Sharrows, 3E bike blvd, 4 cycle track); C for bus route; and N for none.

\*Proposed bike facilities from 2017 Bike Plan.

EXHIBIT A  
5-YEAR STREET REHABILITATION PLAN FOR FY 2019 TO FY 2023

Revised: 11/1/2018

FISCAL YEAR 2023 TOTALS

Total Estimated Cost and Miles					\$ 5,830,957	2.49 miles
	MILEAGE	ESTIMATED COST	% COST	% MILE	District	
ARTERIALS	0.04	\$74,821	1%	2%	1	0.51
COLLECTORS	0.56	\$1,548,371	27%	23%	2	0.00
RESIDENTIALS	1.89	\$4,207,765	72%	76%	3	0.00
	2.49	\$5,830,957			4	0.37
SURFACE SEALS	0.77	\$324,400	6%	31%	5	0.84
OVERLAYS	1.21	\$2,797,772	48%	49%	6	0.00
RECONSTRUCTS	0.51	\$2,708,786	40%	20%	7	0.00
	2.49	\$5,830,957			8	0.77
BIKE WAY	0.83	\$128,000				2.49
PED		\$ 85,000				
BIKE WAY + PED		\$213,000				

13% of Measure BB (\$1.6 Million)

(BIKE costs are interim cost estimated from 2017 Bike Plan. PED costs are curb ramps)

FISCAL YEAR 2019 to 2023 TOTALS

Total Estimated Cost and Miles					\$ 42,828,400	20.37 miles
	MILEAGE	ESTIMATED COST	% COST	% MILE	District	
ARTERIALS	1.25	\$9,102,252	21%	6%	1	3.88
COLLECTORS	4.40	\$12,535,332	29%	22%	2	2.81
RESIDENTIALS	14.73	\$21,190,816	49%	72%	3	2.75
	20.37	\$42,828,400			4	2.24
SURFACE SEALS	8.81	\$6,201,911	14%	43%	5	2.78
OVERLAYS	6.01	\$14,245,684	33%	30%	6	2.29
RECONSTRUCTS	5.55	\$22,380,805	50%	27%	7	2.09
	20.37	\$42,828,400			8	1.53
BIKE WAY	5.07	\$1,158,408				20.37
PED		\$ 1,542,600				
BIKE WAY + PED		\$2,701,008				

169% of Measure BB (\$1.6 Million)

(BIKE costs are interim cost estimated from 2017 Bike Plan. PED costs are curb ramps)

Note: Column P denotes presence of bike facility type (1 paved path, 2A 2B bike lane, 3A sign-only, 3C Sharrows, 3E bike blvd, 4 cycle track); C for bus route; and N for none.

\*Proposed bike facilities from 2017 Bike Plan.