

Exhibit B  
Recommended FY 2020 - 2024 Capital Improvement Program

**ATTACHMENT C**

		Total Estimated Costs	Recommended FY 2020	Funding Detail	
<b>Municipal Buildings and Facilities</b>					
1	Fire Stations Renovations and Improvements	3,000,000	1,500,000	1,500,000	General Fund
2	Construction of New Facility - Fire Station #37	21,300,000	1,500,000	1,500,000	General Fund
3	Citywide Facility Improvements - Jackie Robinson Center and La Pintoresca Library	1,000,000	1,000,000	1,000,000	General Fund
4	Building Maintenance FY 2016 - 2020 (71902)	6,017,498	1,000,000	1,000,000	Building Preventive Maintenance Fund
5	Central Library - Installation and Upgrade of Sprinkler and Fire Alarm System - Design Phase	1,050,000	500,000	500,000	General Fund
7	Parking Lot Improvements at City Facilities (71909)	7,000,000	150,000	150,000	Residential Impact Fee
<b>Municipal Buildings and Facilities Total Appropriations:</b>			<b>5,650,000</b>		
<b>Streets and Streetscapes</b>					
1	Annual Citywide Street Resurfacing and ADA Improvement Program - FY 2020	41,389,000	5,389,000	1,100,000	Gas Tax
				650,000	Sewer Maintenance and Construction Fund
				2,300,000	Road Maintenance and Rehabilitation Account (SB 1)
				1,339,000	Surface Transportation Program (STP)
2	Annual ADA Sidewalk Improvement Program - FY 2020 (73913)	13,587,271	2,000,000	1,500,000	General Fund
				500,000	Community Development Block Grant
4	Colorado Street Bridge - Suicide Mitigation Enhancements (73324)	3,150,000	750,000	750,000	General Fund
5	Bridge Improvement Program (73929)	250,000	50,000	50,000	Gas Tax
<b>Streets and Streetscapes Total Appropriations:</b>			<b>8,189,000</b>		

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<b>Street Lighting</b>				
1	In-Fill Street Lighting and Repair and/or Replacement of Existing Street Lighting Systems FY 2016 - 2020 (74413)	555,151	100,000	100,000 Gas Tax
2	High Voltage Series Street Light Conversion - Phase I (74415)	3,500,000	800,000	800,000 General Fund
3	High Voltage Series Street Light Conversion - Phase II (74417)	8,000,000	200,000	200,000 General Fund
6	Concrete Traffic Signal/Street Lighting Pole Replacements (74416)	1,250,000	250,000	250,000 Street Occupancy Rental Fees
7	Street Lighting Master Plan	300,000	300,000	300,000 Street Occupancy Rental Fees
<b>Street Lighting Total Appropriations:</b>			<b>1,650,000</b>	

**Transportation**

**Active Transportation**

1	Pasadena Bicycle Program FY 2016 - 2020 (75075)	578,190	200,000	200,000 TDA Article 3
2	Pedestrian Safety Enhancements at Signalized Intersections (75047)	956,300	501,000	185,000 Traffic Reduction Fee 316,000 Measure R Transportation Fund
4	Pedestrian Crossing Enhancements Program FY 2016-2020 (75083)	1,006,500	275,000	275,000 Traffic Reduction Fee

**Complete Streets**

2	Arterials Speed Management Program FY 2016-2020 (75605)	892,000	100,000	100,000 Gas Tax
3	Complete Streets Project - Union Street Cycle Track (75087)	6,878,877	5,076,114	1,334,114 ATP Cycle 3 3,742,000 ATP Augmented (SCAG)
4	Complete Streets Project - Cordova St. from Hill Ave. to Arroyo Pkwy. (75052)	3,076,342	349,729	349,729 Federal Transportation Earmark Exchange
5	Lake Ave. Traffic and Pedestrian Safety Enhancements from Mountain St. to Maple Ave. – Concept Study	200,000	200,000	200,000 Traffic Reduction Fee
8	South Lake Ave. Pedestrian Access Improvements to Gold Line Station	2,887,000	430,000	86,000 South Lake Parking Meters Fund 344,000 MTA Grant
9	Complete Streets Project - Mountain St. at Sierra Bonita Ave. and Sinaloa Ave. - Design Phase	200,000	200,000	200,000 Traffic Reduction Fee

**Traffic Operations, Traffic Signals, and ITS**

1	Traffic Signal System Master Plan	150,000	150,000	150,000 Street Occupancy Rental Fees
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5	Intelligent Transportation System Phase I - Traffic Management Center and Transit Vehicle Arrival Information System (75701)	3,859,350	700,000	700,000 Traffic Reduction Fee
6	Intelligent Transportation System Phase I - Paking Guidance	798,711	250,000	250,000 Traffic Reduction Fee
7	Intelligent Transportation System Phase I - Video Detection System and Fiber Optic Communication	710,900	220,000	220,000 Traffic Reduction Fee
9	Transportation System Safety Enhancements Project (75089)	1,275,000	125,000	125,000 Traffic Reduction Fee
11	Old Pasadena Traffic Improvement - FY 2016 - 2020 (75080)	150,000	30,000	30,000 Parking Meter Revenue - Old Pasadena
12	Mobility Corridor Improvements FY 2016 - 2020 (75079)	421,861	50,000	50,000 Gas Tax
15	Intelligent Transportation System (ITS) Equipment Upgrades/Replacement - FY 2016 - 2020 (75078)	236,682	100,000	100,000 Gas Tax
16	Implementation of Citywide Transportation Performance Monitoring Network (75602)	3,132,428	150,000	150,000 Traffic Reduction Fee
17	Traffic Signal at Fair Oaks Ave. and Bellevue Dr. (75098)	774,000	699,000	699,000 Traffic Reduction Fee
18	Traffic Signal Safety Enhancements at the Intersections of Lake Ave. at Corson St. and Maple St.	125,000	125,000	125,000 Traffic Reduction Fee
19	Left Turn Phasing at San Gabriel Blvd. and California Blvd.	125,000	125,000	125,000 Traffic Reduction Fee
20	Left Turn Phasing at Fair Oaks Ave. and Bellefontaine St.	90,000	90,000	90,000 Traffic Reduction Fee
<b>Transportation Total Appropriations:</b>			<b>10,145,843</b>	

**Sewers and Storm Drains**

1	Sewer Master Plan (76912)	3,500,000	100,000	100,000 Sewer Maintenance and Construction Fund
2	NPDES - Storm Drain and Watershed Master Plan (76914)	800,000	460,000	460,000 Sewer Maintenance and Construction Fund
3	Annual Sewer System Improvements and Capacity Upgrades - FY 2020	5,000,000	1,000,000	1,000,000 Sewer Facility Charge
4	Annual Storm Drain System Repair & Improvements - FY 2020 (76913)	1,460,000	50,000	50,000 Sewer Maintenance and Construction Fund
5	NPDES Arroyo Seco Bacteria Load Reduction - Preliminary Design (76291)	250,000	100,000	100,000 Sewer Maintenance and Construction Fund
6	NPDES Rio Hondo Bacteria Load Reduction - Design Phase (76292)	1,200,000	600,000	600,000 Sewer Maintenance and Construction Fund
<b>Sewers and Storm Drains Total Appropriations:</b>			<b>2,310,000</b>	

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		Total Estimated Costs	Recommended FY 2020	Funding Detail
<b>Rose Bowl Improvements</b>				
1	Brookside Golf Course - Fairway Improvements	1,538,789	210,000	210,000 Golf Course Fund
2	Brookside Clubhouse Upgrades - FY 2017 - 2020	2,926,211	1,700,000	200,000 Golf Course Fund 1,500,000 Levy Capital Improvements Fund
3	Rose Bowl - Preventative Maintenance FY 2017 - 2020	2,999,000	795,000	795,000 Legacy Connections - Rose Bowl Legacy Campaign
4	Rose Bowl Major Improvement Projects - FY 2017 - 2020	13,109,006	2,618,500	500,000 Legacy Connections - Rose Bowl Legacy Campaign 2,043,500 RBOC Unrestricted Reserve Funds 75,000 Levy Capital Improvements Fund
<b>Rose Bowl Improvements Total Appropriations:</b>			<b>5,323,500</b>	
<b>Parks and Landscaping - Park Projects</b>				
1	Villa Parke Community Center Improvements (78061)	3,500,000	2,500,000	2,500,000 Residential Impact Fee
2	La Pintoresca Park Improvements	750,000	750,000	750,000 Residential Impact Fee
4	Washington Park Community House and Restroom - Design Phase	1,000,000	1,000,000	1,000,000 Residential Impact Fee
5	Restroom Bldgs (Replace or Construct) - Jefferson, McDonald, Allendale, Victory, Grant, Villa, Singer, Eaton-Blanche, Memorial, Hamilton Parks (78038)	7,822,123	300,000	300,000 Residential Impact Fee
9	Central Park Improvements (78461)	2,820,600	75,000	75,000 Residential Impact Fee
10	Hamilton Park - Various Projects (78069)	1,336,000	550,000	550,000 Residential Impact Fee
12	Lamanda Park Library Pocket Park - Construction (78078)	400,000	300,000	300,000 Residential Impact Fee
<b>Parks and Landscaping - Park Projects Total Appropriations:</b>			<b>5,475,000</b>	
<b>Parks and Landscaping - Landscape Projects</b>				
1	Tree Replacement/Planting Citywide - FY 2017 - 2021 (78958)	1,097,000	216,000	216,000 Street Tree Replacement Deposit
<b>Parks and Landscaping - Landscape Projects Total Appropriations:</b>			<b>216,000</b>	

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<b>Arroyo Projects</b>				
1	Implement Master Plan - Hahamongna Watershed Park - Berkshire Creek Area Improvements (77509)	1,800,000	1,021,590	821,590 Proposition A (Parks) 1996 200,000 Residential Impact Fee
2	Lower Arroyo Seco - Habitat Restoration	650,000	650,000	470,000 Proposition A (Parks) 1992 180,000 Residential Impact Fee
4	Hahamongna - Implement Master Plan - Oak Grove Area Improvements (77506)	1,964,348	100,000	100,000 Residential Impact Fee
5	Jackie Robinson Baseball Field - Foul Ball Netting Improvements	300,000	300,000	300,000 Residential Impact Fee
6	One Arroyo Project – Woodlands Loop and Streamside Walk – Design Phase (77381)	500,000	460,000	135,000 Residential Impact Fee 125,000 Proposition A (Parks) - Cities Excess Funds 200,000 One Arroyo Fund
7	One Arroyo Project – Woodlands Loop and Streamside Walk – Construction Phase	4,500,000	375,000	375,000 Proposition A (Parks) - Cities Excess Funds
<b>Arroyo Projects Total Appropriations:</b>			<b>2,906,590</b>	
<b>Pasadena Center Improvements</b>				
1	Restoration, Upgrades, and Repairs of the Civic Auditorium, Convention Center and Ice Rink	4,950,000	1,200,000	800,000 Pasadena Center Operating Company 400,000 Pasadena Center Operating Co - Facility Restoration Fund
2	Ballroom/Pre-function Carpet Replacement	600,000	600,000	600,000 Pasadena Center Operating Company
<b>Pasadena Center Improvements Total Appropriations:</b>			<b>1,800,000</b>	

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<b>Water System</b>				
1	Distribution Mains (1001)	61,573,314	4,070,000	4,070,000 Water Fund
2	Distribution Mains (FY 2020-2024)	17,330,000	520,000	520,000 Water Fund
3	Customer Information System (1011)	7,277,887	1,371,000	1,371,000 Water Fund
4	Meters and Services (FY 2020 - 2024)	9,700,000	1,800,000	1,800,000 CIC Funding
6	Well Improvements (1074)	4,649,000	139,000	139,000 CIC Funding
8	Customer Driven Meters and Services (1003)	20,949,986	1,000,000	1,000,000 Aid to Construction (Water)
9	Customer Driven - Mains, Meters, and Service (FY 2020 - 2024)	10,063,000	863,000	863,000 Aid to Construction (Water)
10	Sunset Reservoir Improvements (1075)	26,149,000	444,000	444,000 CIC Funding
13	Management Information Systems (FY 2020 - 2024)	394,500	132,000	132,000 Water Fund
14	Geographic Information System (FY 2020 - 2024)	389,500	85,000	85,000 Water Fund
15	New Clean Water Well	1,700,000	100,000	100,000 Water Fund
16	Interactive Voice Response System (IVR) (FY2020 - 2024)	72,250	18,000	18,000 Water Fund
17	Radio Equipment Replacement (FY 2020 - 2024)	125,000	25,000	25,000 Water Fund
18	Computerized Maintenance Management System	450,000	450,000	450,000 Water Fund
19	Water Operations/Meter Shop	505,000	355,000	355,000 Water Fund
21	Water and Power Warehouse Modernization (1056)	2,753,046	234,000	234,000 Water Fund
22	Nitrate Treatment	750,000	150,000	150,000 Water Fund
23	Emergency Generator - Water (1079)	1,025,000	500,000	500,000 Water Fund
25	Water SCADA Improvements (FY 2020 - 2024)	225,000	25,000	25,000 CIC Funding
26	Water Facilities Improvement Initiative	225,000	25,000	25,000 Water Fund
<b>Water System Total Appropriations:</b>			<b>12,306,000</b>	

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<b>Electric System</b>					
1	Conductor Replacement Program (FY 2020 - 2024)	18,900,000	3,300,000	3,300,000	Power Fund
2	Fire Threat Mitigation Tier 3 Areas	4,450,000	250,000	250,000	Power Fund
4	4kV to 17kV Distribution System Conversions (FY 2020 - 2024)	13,900,000	2,800,000	2,800,000	Power Fund
5	Customer Information System (3022)	13,648,021	2,422,000	2,422,000	Power Fund
6	Installation of Low Voltage Electrical Services (3221)	16,181,000	1,181,000	1,181,000	Aid to Construction (Power)
7	Installation of High Voltage Electrical Services (3220)	15,701,000	701,000	701,000	Aid to Construction (Power)
8	Distribution System Expansion (FY 2020 - 2024)	6,250,000	1,250,000	1,250,000	Underground Utilities Fund
9	Electrical Vault Replacement and Reinforcement (FY 2020 - 2024)	7,000,000	1,000,000	1,000,000	Power Fund
10	Restraint Systems and Lid Enhancement for Vault Manhole Covers	1,125,000	125,000	125,000	Power Fund
11	Distribution Switch Replacements (FY 2020 - 2024)	12,100,000	2,100,000	2,100,000	Power Fund
12	Transmission System Enhancements (3195)	6,042,000	1,092,000	1,092,000	Power Fund
13	Replacement of Power Plant Instruments and Controls (FY 2020 - 2024)	300,000	60,000	60,000	Power Fund
14	Deteriorated Pole Replacement Program	4,900,000	500,000	500,000	Power Fund
15	Power Supply Facility Security (FY 2020 - 2024)	200,000	100,000	100,000	Power Fund
17	Power Distribution Master Plan (3209)	1,304,000	204,000	204,000	Power Fund
18	4kV Substation Modernization	2,500,000	500,000	500,000	Power Fund
19	Power Transmission Program (3190)	7,523,086	1,269,000	1,269,000	Power Fund
20	Mobile Transformers	7,050,000	50,000	50,000	Power Fund
21	Seismic Upgrade of Power Facilities (3196)	2,450,000	500,000	500,000	Power Fund
23	Emergency Transmission and Distribution System Replacements (3222)	2,750,000	250,000	250,000	Power Fund
24	Power Production Facility Improvements (FY 2020 - 2025)	1,805,000	250,000	250,000	Power Fund
25	Distribution Transformer Replacements (FY 2020 - 2024)	1,480,000	200,000	200,000	Power Fund
26	Distribution System Fault Indicators/Recorders/Digital Relays (FY 2020 - 2024)	400,000	200,000	200,000	Power Fund
27	Distribution System Automation (3192)	4,999,000	263,000	263,000	Power Fund

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28	Management Information Systems - Power (FY 2020 - 2024)	731,500	244,000	244,000 Power Fund
29	Geographic Information System (GIS) Enhancements	676,500	111,000	111,000 Power Fund
30	Customer Load Research Program (FY 2020 - 2024)	800,000	200,000	200,000 Power Fund
31	Santa Anita 35kV Receiving Station Upgrades	2,229,200	600,000	600,000 Power Fund
32	Santa Anita 17kV Substation Upgrades	880,000	880,000	880,000 Power Fund
33	Interactive Voice Response System (FY 2020 - 2024)	124,000	33,000	33,000 Power Fund
34	Radio Equipment Replacement - Power (FY 2020 - 2024)	125,000	25,000	25,000 Power Fund
35	Emergency Generator - Power (3223)	2,130,000	1,155,000	1,155,000 Power Fund
36	Receiving Station 35kV Upgrades	1,244,800	480,000	480,000 Power Fund
37	Fiber Optic Cable Expansions / Overbuilds (FY 2020 - 2022)	1,205,000	405,000	405,000 Underground Utilities Fund
38	Electric Vehicle Charging Infrastructure (3225)	3,413,000	413,000	413,000 Power Fund
39	Supervisory Control and Data Acquisition (SCADA) System Expansion (FY 2020 - 2024)	1,000,000	200,000	200,000 Power Fund
40	Distribution System GIS Enhancements (FY 2020 - 2024)	1,400,000	200,000	200,000 Power Fund
41	Security Wall at Glenarm Receiving Station and Dispatch Center	2,550,000	50,000	50,000 Power Fund
42	Security, Access Control, and Lighting at Power Facilities	1,750,000	150,000	150,000 Power Fund
43	Power Supply Integrated Resource Planning and Design (FY 2020 - 2025)	1,000,000	50,000	50,000 Power Fund
44	T.M. Goodrich Intertie Transformer Upgrades	16,700,000	300,000	300,000 Power Fund
46	Power Quality Meter Upgrades (FY 2020 - 2024)	548,800	200,000	200,000 Power Fund
48	Power Transmission Program (FY 2020 - 2024)	563,000	163,000	163,000 Power Fund
49	Distribution Volt/Var Enhancements (FY 2020 - 2024)	743,000	143,000	143,000 Power Fund
51	Primary Dispatch Facility Remodel	2,080,000	80,000	80,000 Power Fund
52	Power System Equipment	500,000	100,000	100,000 Power Fund
54	Seismic Retrofit at Santa Anita Receiving Station	3,050,000	50,000	50,000 Power Fund
55	Fire Threat Mitigation Tier 2 Areas	5,000,000	50,000	50,000 Power Fund
56	Substation Capacitor Banks (3015)	4,412,635	100,000	100,000 Power Fund

<b>Electric System Total Appropriations:</b>	<b>26,949,000</b>
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<b>Technology Projects</b>				
1	Enterprise Resource Planning System (Financial and Human Resources) (71149)	5,642,039	146,295	2,362 Fleet Maintenance Fund 109,366 General Fund 1,587 Building Services Fund 4,905 Computing and Communication Fund 5,831 Library Services Fund 1,511 Sewer Maintenance and Construction Fund 189 Telecommunication Fund 4,509 Refuse Fund 4,491 Off-Street Parking Facilities Fund 60 L.A. Impact Fund 88 Foothill Air Support Team Fund 6,194 Public Health Fund 826 Housing and Community Development Fund 1,793 Pasadena Housing Authority Fund 1,414 Other Housing Funds 187 Benefits and Insurance Fund 716 Worker's Compensation Fund 266 General Liability Fund
2	Land Management System (LMS) Replacement (71152)	4,857,589	250,000	250,000 Technology Fee
3	Enterprise Building Security Management (71163)	1,025,000	925,000	625,000 General Fund 300,000 Library Services Fund
4	DoIT Equipment Lifecycle Replacement FY 2020 - FY 2024	6,375,000	1,275,000	1,275,000 Computing and Communication Fund
5	Radio Communication Equipment Upgrade and Replacement	8,000,000	2,000,000	2,000,000 General Fund
6	City Fiber Network Expansion FY 2020 - FY 2024	1,490,000	340,000	100,000 Telecommunication Fund 180,000 Underground Utilities Fund 60,000 Public, Educational and Government (PEG) Funds
7	Police Computer-Aided Dispatch and Records Management System Replacement	4,000,000	125,000	125,000 Public Safety Augmentation Fund
<b>Technology Projects Total Appropriations:</b>			<b>5,061,295</b>	
<b>Grand Total Appropriations:</b>			<b>87,982,228</b>	