

**COUNTY OF SAN DIEGO**

**HIGHWAY BRIDGE PREVENTATIVE MAINTENANCE PLAN**

**Final Bridge Preventative Maintenance Priority List**

Priority (Lowest Number Is Top Priority)	County Location	Implementing Agency	Bridge number from Inspection Report	Local Agency Bridge ID	Facility Carried	Feature Intersected	Location	Sufficiency Rating	SD/FO Status	Work Description	Deck Area (ft <sup>2</sup> )	Total Particip. Cost (see notes)	Unit Cost (\$/ft <sup>2</sup> )	Federal Share	Running Fed Summary	Local Share	Running Local Share
1			Develop next year's BPMP								1	\$100,000	\$100,000	\$88,530	\$88,530	\$11,470	\$11,470
2	San Diego	County of San Diego	57C-0002	F47-B1	Los Terrinetos Rd	Sweetwater River	s/o Pine Valley Creek Rd	72.9		Columns: Clean and patch spalls on south side of south-west column Columns: Seal cracks at base of columns and spandrel columns Arch: Clean and patch spalls at spring line and crown Arch: Clean out spring line joints and refill with mastic material Beams: Seal full height vertical crack in arch cross beam Girder: Seal large diagonal cracks and spalling in the flared girder Railing: Clean and patch small spalls along length of railing Deck: Repair large spalls in AC overlay Joint: Repair damaged joint seal (Type A)	3,312	\$39,720	\$12	\$35,164	\$123,694	\$4,556	\$16,026
3	San Diego	County of San Diego	57C-0227	J42-B2	Old Highway 80	Boundary Creek	0.1 mi w/o SR79	68.3		Approaches: Remove damaged AC overly and replace Railing: Patch minor cracks and spalls through-out Deck: Clean and place concrete overlay Diaphragm: At SW most diaphragm repair spall Slopes: Removal of concrete slope protection for the following item Slopes: West abutment - Replace highly damaged concrete slope protection with grouted rock slope protection Scour: Bent 4 - Grout loose rip-rap at upstream edge. Add additional rock and grout as required	5,376	\$123,843	\$23.04	\$109,638	\$233,332	\$14,205	\$30,231
4	San Diego	County of San Diego	57C-0358	440-6504-B1	Sycamore Drive	San Marcos Creek N Fork	0.19 mi e/o Twin Oaks Valley Rd	75.1		Approach: Repair settlement in AC at South approach Abutment Backfill: Grout backfill behind Southwest wingwall & approach Railing: Clean & Paint TMBR Railing Railing: Install connection angles on West posts Culvert Floor: Remove & Replace rotted wood beneath pier wall main posts on west side of culvert Culvert Timber: Inspection of culvert timbers by a pest control specialist for termites and other pests Culvert Timber: Treat culvert timbers for termites and other pests	912	\$40,447	\$44.35	\$35,808	\$269,140	\$4,639	\$34,870

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**ROADWAY BRIDGE PREVENTATIVE MAINTENANCE PLAN**

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5	San Diego	County of San Diego	57C-0335	J42-B8	Old Highway 80	Pine Valley Creek	0.4 mi s/o Fuerte Dr	79.5		Approaches, North end: Patch spalling and cracks in AC Approaches, South end: Seal minor transverse and longitudinal cracks and cracks along shoulder joint Joint, Center interior: Repair edge of joint spalls where steel armor is missing Railing: Clean and patch spalling lower concrete curb Railing: Seal weathered surfaces with minor cracks and spalling of church windows for length of railing Deck: Patch minor cracked and spalled areas through-out deck Deck: Clean deck and seal entire surface with methacrylate Pier, southern: Seal and repair extensive cracking and spalling Pier, center: Patch minor 4" square spall about 3 ft above creek bed Pier, center: Seal vertical cracks propagating through drain pipes Pier, southern: Repair several locations of horizontal spalls w/ exposed rebar Scour: Bolster scour protection at front edge of center pier with additional large rock	9317	\$110,951	\$11.91	\$98,225	\$367,365	\$12,726	\$47,596
6	San Diego	County of San Diego	57C-0574	270-590-B1	Riverford Road	San Diego River	0.2 mi s/o Willow Glen	89.2	SD	Barrier: Along Eastern barrier, Clean exposed rebar, remove unsound concrete & patch spalls Sidewalk: Seal Crack in Sidewalk near South Pier Deck: Clean deck surface and seal with methacrylate Approach: Remove unsound AC at North approach and replace Slopes: Fill eroded slope at South abutment Slopes: Replace missing Rip-Rap on South abutment slope Slopes: Grout Rip-Rap at South abutment	19736	\$879,512	\$44.56	\$778,632	\$1,145,996	\$100,880	\$148,476
7	San Diego	County of San Diego	57C-0120	E28-B1	Willows Road	Viejas Creek	2.65 mi w/o Carrizo Gorge Rd	89.7		Approaches: Patch concrete edge spalls both edges of open joint Bearings: Paint steel rocker and slide plate bearings Deck: Clean, patch light spalls, and seal entire surface with methacrylate Deck Overhang: Clean and patch large 6" x 6" spalls Diaphragms: Seal cracks in concrete build-up over steel diaphragm Girders & Diaphragms: Spot blast clean and paint Work Area monitoring (for above) Slopes: Place & grout rock slope protection around existing concrete steps	15276	\$445,681	\$29.18	\$394,561	\$1,540,558	\$51,120	\$199,596
8	San Diego	County of San Diego	57C-0363	C6-B2	Mesa Grande Rd	Santa Ysabel Creek N Fk	2 mi e/o Valley Center Rd	78.2		Approach: Seal AC crack at settled area & at Eastern edge of bridge Decking: Inspection of timber decking by a pest control specialist for termites and other pests Decking: Treat timber decking for termites and other pests Girders: Clean & apply touch-up paint to peeling & flaking areas on beams Work Area monitoring (for above) Slopes: Grout rock slope protection at SE & NE corner of bridge Slopes: Repair erosion at NE corner of bridge with rock	1125	\$167,388	\$148.79	\$148,189	\$1,688,747	\$19,199	\$218,795

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9	San Diego	County of San Diego	57C-0344	F16-B1	Lawson Valley Rd	Lawson Creek	2.6 mile e/o SR94	99.7		Railing: Some posts slightly loose (tighten anchor bolts) Railing: Seal heavily checked posts Railing: Paint or seal kick plate (4" x 8" timber, not PT) Deck: Repair large, approximately 3ft x 3ft at one side, highly cracked, area at north-west section of deck Deck: Seal several transverse AC cracks Decking: Replace timber deck boards, which have evidence of decay and/or termite damage, with pressure treated (PT) boards Decking: Treat remaining (original) decking to prevent future decay and termites	564.2	\$13,730	\$24.34	\$12,155	\$1,700,902	\$1,575	\$220,370
10	San Diego	County of San Diego	57C-0375	F20B-B1	Honey Springs Rd	Dulzura Creek Tributary	0.9 mi ne/o I-8	74.4		Approaches: Patch spalled AC and build up to compensate for backfill settlement of about 1/2" at both abutments Joints: Patch spalled concrete edge of bridge joint Deck: Clean deck and seal entire surface with methacrylate Slopes: Repair slope protection	3456.25	\$61,733	\$17.86	\$54,652	\$1,755,554	\$7,081	\$227,451
11	San Diego	County of San Diego	57C-0371	E11-B1	Riverside Drive	Sweetwater River	2 mi w/o Carrizo Gorge Rd	73.5		Approach: Patch spalled AC and build up to compensate for backfill settlement of about 1/2" Railing: Repair damage at SE corner from vehicle impact Deck: Clean deck and seal entire surface with methacrylate Girders (slab): Patch large spall at south soffit edge at west corner of center joint Abutment: Fill gap between bottom of abutment diaphragms and soil (void in slope fill) with flowable (low strength concrete) backfill material	4912.8	\$40,030	\$8.15	\$35,438	\$1,790,993	\$4,591	\$232,042
12	San Diego	County of San Diego	57C-0158	B8-1-B1	Little Gopher Cyn Rd	Gopher Canyon Creek	3.5 mi s/o I-8	54.9		Railing: Clean & paint timber railing Approach: Repair settlement at South approach w/AC	1093.47	\$3,499	\$3.20	\$3,098	\$1,794,090	\$401	\$232,443
13	San Diego	County of San Diego	57C-0553	F12-B1	Steel Cyn Rd	Sweetwater River	0.2 mi ne/o SR67	98.5		Approaches: Seal transverse cracks and spalling in AC at both abutments Railing: Repair concrete spalls with exposed and rusted vertical bars at base Railing: Clean and paint metal pipe railing at localized areas of rusting where galvanizing has worn off Deck: Clean deck, patch light spalls, and seal entire surface with methacrylate Girders: Repair transverse soffit crack where initiation of delamination and spalling has begun	19800	\$141,107	\$7.13	\$124,922	\$1,919,013	\$16,185	\$248,628
14	San Diego	County of San Diego	57C-0258	F8-1-B3	Japatul Road	Sweetwater River	200' e/o Sloane Cyn Rd, Near MP 3.5, 3.4 mi e/o Skyline Truck Trail	40.9		Approaches: Patch spalled AC and build up to compensate for backfill settlement of about 1/2" Abutment Fill: Fill holes in east and west abutment backfills Joints: Repair pourable type A seal at north ends of both joints Deck: Clean deck and place concrete overlay	13395	\$96,915	\$7.24	\$85,799	\$2,004,812	\$11,116	\$259,745
15	San Diego	County of San Diego	57C-0144	C2-B1	Lake Wohlford Rd	Escondido Creek	0.15 mi e/o I-15	77		Approach: Remove & replace North approach AC Railing: Clean & paint steel railing Deck: Clean deck surface & seal with methacrylate	6355.78	\$49,761	\$7.83	\$44,053	\$2,048,865	\$5,708	\$265,452

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16	San Diego	County of San Diego	57C-0396	A31-B1	Via De Santa Fe	San Digueto River	0.25 mi s/o Viejas Blvd	65.6		Joints: Remove & replace pourable abutment joint seals Deck: Clean & seal cracks over the piers with methacrylate	19440	\$17,663	\$0.91	\$15,637	\$2,064,502	\$2,026	\$267,478
17	San Diego	County of San Diego	57C-0511	515-330-B1	Lawrence Welk Dr	Moosa Creek S Fork	0.7 mi s/o Via De La Valle and 0.1 mi s/o Calzado del Bosque	79		Approach: Remove unsound AC along southern edge of bridge & approach and in transverse & longitudinal cracks, and replace Sidewalk: Seal sidewalk crack Deck: Seal AC cracks Soffit: Remove unsound concrete on soffit & repair Pier Walls: Seal pier wall cracks	8148	\$133,540	\$16.39	\$118,223	\$2,182,725	\$15,317	\$282,795
18	San Diego	County of San Diego	57C-0057	B33-B2	Old River Road	Moosa Canyon Creek	0.1 mi n/o SR67	96.2		Approach: Remove approach AC, re-compact fill & place new AC approach Deck: Repair rebar spall at Southwest corner of bridge deck Deck: Clean deck surface and seal with methacrylate	7497	\$79,914	\$10.66	\$70,748	\$2,253,473	\$9,166	\$291,961
19	San Diego	County of San Diego	57C-0440	E2-B2	Willow Road	San Vicente Creek	e/o Tavern Rd	98.2		Joints: Remove & replace damaged joint seals Deck: Clean deck surface and seal with methacrylate	10027.5	\$69,146	\$6.90	\$61,215	\$2,314,688	\$7,931	\$299,892
20	San Diego	County of San Diego	57C-0385	190-390-B1	Noakes Street East	Harbison Canyon Creek	0.25 mi e/o Manchester Rd	95.6		Pier walls: Patch worn and spalled upstream edge and downstream edges Scour: Place additional rock scour protection throughout bottom of channel both sides of pier wall to protect pierwall and abutment footings	499.1	\$17,479	\$35.02	\$15,475	\$2,330,162	\$2,005	\$301,897
21	San Diego	County of San Diego	57C-0270	F53-B2	Buckman Springs Rd	Cottonwood Creek	0.15 mi s/o SR76	99		Approaches: Fill and patch areas of AC spalls and seal cracks in AC at both abutments Railing: Paint highly weathered timber railing Deck: Clean, patch spalls, and seal entire surface with methacrylate Abutments: Fill gap between bottom of abutment diaphragm and soil	12095	\$120,740	\$9.98	\$106,891	\$2,437,053	\$13,849	\$315,746
22	San Diego	County of San Diego	57C-0226	J42-B1	Old Highway 80	SD & AE Railroad	0.5 mi s/o Rancho Bernardo Rd	92.2		Approaches: Fill and patch spalls and seal cracks in AC Joints: Repair damaged joint seal (Type A) at abutment joint Joints: Patch concrete edge spalls both edges of open joint Railing: Clean and patch small spalls along length of railing Deck: Clean, patch spalls, and seal entire surface with methacrylate Abutment: Seal crack at connection to deck overhang Slope: Rock bolt installation, including geotechnical report & structural design, and grouting adjacent rock joints	3187.2	\$76,632	\$24.04	\$67,842	\$2,504,896	\$8,790	\$324,536
23	San Diego	County of San Diego	57C-0376	108-682-B1	Mount Helix Dr	MHD Overcrossing	250 FT s/o Lake Wohlford Rd	89.4		Approaches: Seal transverse cracks in AC Joints: Replace pourable joint seal (Type A) Railing: Tighten loose anchor bolts for posts Railing: Seal heavily checked posts Railing: Paint or seal kick plate (8" x 8" timber, not PT) Railing: 6. Install missing end post for railing (anchored into ground) Railing: Replace timber extensions where split or missing. Deck: Seal transverse cracks in AC Decking: Seal weathered split ends Abutments: Repair cracks and minor edge spalls in concrete ledge beam for girder seats	888	\$8,740	\$9.84	\$7,737	\$2,512,633	\$1,002	\$325,538

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24	San Diego	County of San Diego	57C-0186	E48-1-B1	Alpine Blvd	Viejas Creek	300' n/o Gopher Cyn Rd (Previously Ormsby St)	72.7		Approaches: Fill and patch spalls and seal cracks in AC approaches Deck: Clean, patch light spalls, and seal entire surface with methacrylate Railing: Clean and patch small spalls	4896	\$37,402	\$7.64	\$33,112	\$2,545,744	\$4,290	\$329,828
25	San Diego	County of San Diego	57C-0649	C1B-B1	Guejito Road	Escondido Creek	0.5 mi e/o Alpine Blvd-Willows Rd	96.9	SD	Deck: Seal deck cracks at South end of bridge	3275.2	\$38,500	\$11.76	\$34,084	\$2,579,828	\$4,416	\$334,244
26	San Diego	County of San Diego	57C-0323	335-485-B1	Pankey Road (N)	Horse Ranch Creek	0.03 mi se/o Harbison Canyon Rd	77.6		Deck: Seal deck cracks near South abutment Slope: Fill scour hole at toe of South abutment slope Slope: Extend Rip-Rap to toe of South abutment slope Slope: Grout Rip-Rap	4567.5	\$106,081	\$23.23	\$93,913	\$2,673,742	\$12,167	\$346,412
27	San Diego	County of San Diego	57C-0637	403-150-B1	Camino San Bernardo	Camino Del Norte	0.3 mi s/o Camino del Rey	95.8	SD	Deck: Seal deck cracks at Bent 2 & at deck corners with methacrylate	15498	\$54,346	\$3.51	\$48,113	\$2,721,854	\$6,233	\$352,645
28	San Diego	County of San Diego	57C-0669	B1-B3	Lilac Road	San Luis Rey River	0.4mi s/o SR76	91.4		Deck: Seal AC cracks Deck: 2. Saw cut and remove 1/2"± of AC to either side of the large crack over the pier and replace with a pourable joint seal Abutment: Repair dislodged timber lagging at South Abutment	3000	\$2,436	\$0.81	\$2,156	\$2,724,011	\$279	\$352,924
29	San Diego	County of San Diego	57C-0647	A23-1-B1	Rancho Santa Fe Road	Escondido Creek	0.1 mi w/o SR79	80		Deck: Clean deck surface & seal with methacrylate Approach: Seal cracks in approach slabs	19032	\$118,300	\$6.22	\$104,731	\$2,828,741	\$13,569	\$366,493
30	San Diego	County of San Diego	57C-0531	B39-B4	Camino Del Rey	Moosa Canyon Creek	1.9 mi s/o Buckman Springs Rd	98.9		Deck: Clean deck surface & seal with methacrylate	6741.68	\$43,904	\$6.51	\$38,868	\$2,867,609	\$5,036	\$371,529
31	San Diego	County of San Diego	57C-0666	J42-B9	Old Highway 80	Kitchen Creek	2.1 mi e/o West Lilac Road	97.8		Deck: Clean deck and seal entire surface with methacrylate	9673.75	\$44,078	\$4.56	\$39,022	\$2,906,632	\$5,056	\$376,585

Notes: Total participating cost includes:  
 Sumation of estimated cost for each item under Work Description.  
 Mobilization of 20% to account for small, remote projects.  
 Contingency of 25% to account for higher risk in cost variance for maintenance projects.  
 Preliminary engineering of 10%.  
 Construction management of 10%.