

OFFICE OF THE CIT T CLE AGENDA REPORT

TO: HENRY L. GARDNER OCT - 2 PM 4: 24 FROM: Brooke A. Levin INTERIM CITY ADMINISTRATOR

SUBJECT: Pavement Prioritization Plan DATE: July 31, 2014

City Administrator Date:

Approval $O(\alpha/4)$

COUNCIL DISTRICT: City-Wide

RECOMMENDATION

Staff recommends that City Council accept this report and approve the resolution establishing a prioritization plan for the City of Oakland's street pavement rehabilitation program.

OUTCOME

Adoption of the attached five year paving plan will allow Oakland to optimize resources to the greatest extent possible. The plan continues the City Council adopted policy of dedicating 80 percent (80%) of available resurfacing funds to resurfacing those streets identified to be cost-effective by the Pavement Management Program (PMP), and the remaining 20 percent (20%) to rehabilitating selected "worst streets." The Plan leverages paving funds to continue implementation of the City's Bicycle Master Plan. Finally, the Plan allows for methodical coordination of paving projects with planned work by other utilities such as Pacific Gas & Electric (PG&E) and East Bay Municipal Utility District (EBMUD). In summary, this report highlights the following:

- As a result of our current policy, the street network Pavement Condition Index (PCI) has stabilized.
- The proposed 5-year pavement priority plan with current funding levels will rehabilitate approximately 39 miles of roadways, install 23 miles of bike routes, and improve 206 blocks of additional "worst streets."
- The pavement priority plan with Measure BB (if the ballot measure passes in November 2014) will add approximately 49 miles of roadway resurfacing, 50 miles of bike routes, and 259 blocks of "worst streets."

EXECUTIVE SUMMARY

All pavement surfaces deteriorate over time due to the weight and repetition of vehicle traffic and rainwater penetration eroding the sub-base of the roadway. A successful pavement management program recognizes this simple principle and utilizes pavement preservation techniques to distribute available funding on preventive maintenance treatments before significant pavement deterioration occurs, and thus extends the useful life of the pavement for the roadways. Pavement deterioration due to lack of preventative maintenance may require

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rehabilitation treatments that costs up to 5 times as much. In the worst cases, failed pavement requires reconstruction treatments which can cost up to 12 times the cost of preventive maintenance.

Due to the success of the City Council approved prioritization plan since 2007, Oakland's current numeric grading for pavement conditions known as Pavement Condition Index (PCI) has improved from 57 to 60 as measured by the Metropolitan Transportation Commission (MTC) sponsored studies. Based on this improvement, staff recommends continuation of that policy to optimize resources to the greatest extent possible by dedicating 80 percent (80%) of available pavement program funds to streets identified to be cost-effective. The remaining 20 percent (20%) will be dedicated to rehabilitating selected "worst streets". The "worst streets" will be selected based on input from City Council, staff recommendations based on citizen complaints, and street condition assessment. *Attachment A* is a list of cost-effective streets within current budget. *Attachment B* is a list of cost-effective streets within an increased Measure BB funding (proposed as a Referendum Measure in the November 2014 elections).

BACKGROUND

Oakland's pavement conditions has improved due to the success of the 2007, City Council adopted Pavement Prioritization Plan. This improvement is quantified by Oakland's Current PCI of 60 compared to 57 in 2011. This number represents a 3-year average. In this system, 100 represents brand new pavement and 0 represents a completely failed pavement. Cities use a 3-year average to provide a good picture of how pavement condition is performing over time. This method has been adopted by the MTC and is used by all jurisdictions within the MTC Planning Area so that comparisons over time and across jurisdictions are consistent.

The focus of pavement preservation varies based on the overall PCI in a community and available resources. A city with an overall PCI of 80, for example, would expend most of its resources on low-cost preventive maintenance and less on more expensive reconstruction and rehabilitation. With Oakland's PCI of 60, which is the result of years of deferred investment in pavement rehabilitation, the approach requires a blend of many tools in order to achieve the goal of preventing continued deterioration.

MTC's recommended pavement preservation strategy for an individual pavement segment can be summarized as follows:

- Perform a preventive maintenance treatment (e.g., crack seals, slurry seals, microsurfacing, and/or cape seals) about seven years after initial construction;
- 2) Perform an additional preventive maintenance treatment about seven years later; and
- 3) Perform a rehabilitation (pavement resurfacing) treatment (e.g., grind 2 inches of the existing pavement and replace with a 2 inches of asphalt pavement overlay) about 15 years later. Also, use the old asphalt that has been ground up as part of the asphalt overlay resurfacing to recycle that used material to the greatest extent practicable.

Additionally, in compliance with our Complete Streets policy adopted by the City Council, Oakland restores or constructs Americans with Disabilities Act (ADA) compliant curb ramps

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where needed as a part of all pavement projects and implements the City's Bicycle Master Plan on streets planned for resurfacing.

Because of declining revenues (state and federal gas taxes) the City's Pavement Management Program (PMP) continues to be under funded. Until additional resources for pavement rehabilitation can be identified, it is critical that the limited funding available be strategically utilized. The following tables show funding for the past five years, projected funding for the next five years, and projected funding for the next five years with Measure BB funds which is pending the outcome of the November 2014 election in Alameda County.

	FY	FY	FY	FY	FY
REVENUE SOURCE	9/10	10/11	11/12	12/13	13/14
Proposition 42 - State Sales Tax	1.85	1.70	2.50	2.6	0.00
Proposition 1 B – State Transportation Bond*	0.00	6.20	0.00	0.00	0.00
Federal Surface Transportation					
Program (STP) Fund	0.00	3.60	0.00	3.60	0.00
American Reinvestments					
and Reconstruction ACT (ARRA) Funds*	6.03	0.00	0.00	0.00	0.00
Measure B - Alameda County Transportation					
Improvement Authority (ACTIA)	0.00	0.00	0.00	0.60	3.30
Vehicle Registration Fees	0.00	0.00	1.50	1.50	1.50
TOTAL	7.88	11.50	4.00	7.70	4.80

<u>Table 1 – Historic Street Pavement Rehabilitation Funding (\$Millions)</u>
*One time allocation

	FY	FY	FY	FY	FY
REVENUE SOURCE	14/15	15/16	16/17	17/18	17/18
Measure B - ACTIA	2.59	2.59	2.59	2.59	2.59
Federal STP Fund	3.59	0.00	0.00	3.59	0.00
Vehicle Registration Fees	1.50	1.50	1.50	1.50	1.50
*General Funds	0.90	0.00	0.00	0.00	0.00
TOTAL	8.58	4.09	4.09	7.68	4.09

<u>Table 2 – Projected Street Rehabilitation Funding (in \$Millions)</u>
*One time allocation

REVENUE SOURCE	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 17/18
Measure B - ACTIA	7.59	10.59	10.59	10.59	10.59
Federal STP Fund	3.59	0.00	0.00	3.59	0.00
					1.50
Vehicle Registration Fee	1.50	1.50	1.50	1.50	
*General Funds	0.90	0.00	0.00	0.00	0.00
TOTAL	13.38	12.09	12.09	15.68	12.09

Table 3 - Projected Street Rehabilitation Funding Plus Measure BB if Passes (in \$Millions)

Table 2 above indicates a projected street pavement rehabilitation with current budget funding from approximately \$4.09 million to \$8.58 million per year for the next five years. It is important to note that the Federal Surface Transportation Program (STP) Fund is an estimate and has not been programmed by MTC, but since these amounts are set by established formula they should reflect the amount in the table. A comparison of the current funded projects with what is needed is shown in Chart 1 below.

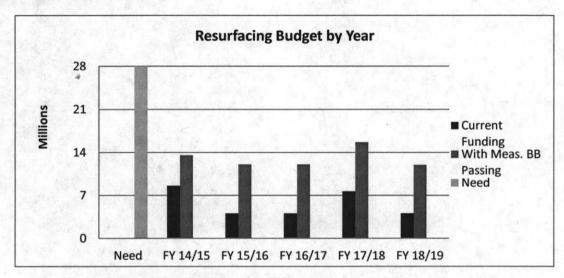


Chart 1 - Resurfacing Funding Comparison by Year

The current backlog of pavement repairs is \$443 million, and growing. The projected funding levels are not enough to keep up with the growing backlog of repairs and continued deterioration of pavement conditions. In order to maintain the overall pavement condition and begin reversing trends, the City needs \$28 million annually.

Table 3 (page 3) and Chart 1 (above) indicates a projected street pavement rehabilitation with Measure BB funding from approximately \$12.09 million to \$15.68 million per year for the next five years. If passed, the Measure will increase paving funds by approximately eight million dollars a year from the current budget shown on Table 2 (page 3).

Pavement Treatment History

Chart 2 below illustrates the various pavement treatments the City has performed over the course of the last five years. Also shown are the typical costs for each treatment. The pavement treatments performed were predominantly cost-effective and preventive treatments. These approaches enhance the overall system condition treating more locations for the dollar and follow the 'best-first' policy¹, adopted through the City Council in 2007. The City has continued to look for cost-effective pavement technologies to manage the underfunded program.

¹ The 'best-first' policy spends 80% of our available dollars optimally by focusing more on pavement preservation rather than reconstruction of failed pavement.

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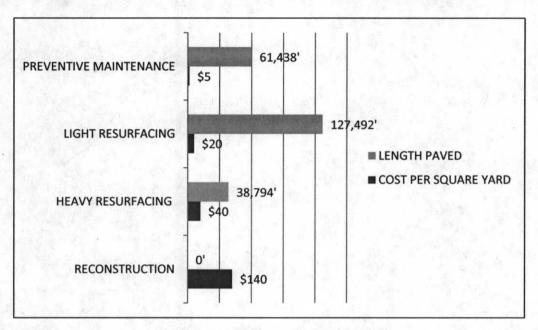


Chart 2 - Pavement Treatment History

Cost-effective preventive treatments included crack seals, slurry seals, microsurfacing, and cape seals. Approximately 19% of the paving utilized preventive maintenance to prolong the life of City streets. The MTC Pavement Management Program recommends spending at a minimum of 9 percent of the budget toward preventive maintenance. Preventive maintenance address most pavement concerns before the pavement condition reaches a poor or failed state costing more to repair.

Pavement Technologies Applied

Microsurfacing

This is the least costly pavement preservation method, sometimes called "slurry seal," where a thin layer of asphalt mix is applied to existing pavement. It is not a substitute for complete rehabilitation, but does prevent further deterioration of the roadway. Cost: \$2 per square yard.

Chip Seal

This is another less costly preservation method that used extensively throughout California, but has only recently been used in Oakland. It is the method used on Campus Drive, Grizzly Peak Boulevard, and surrounding streets. This method applies a very thin layer of fine aggregate (either rock or, in some cases, rubber particles), followed by an application of "microsurfacing" (described above). This method is in the category of "pavement preservation" and is not intended to produce a new pavement section. It is rather intended to prevent further deterioration of the existing pavement condition. The final pavement is granular and coarse. Cost: \$8 per square yard.

Resurfacing

This is the traditional (resource-intensive and expensive) method many are familiar with. In this process, the top layer of existing street pavement is ground down and removed, typically 2 or 3 inches, and a new layer of asphalt is placed on top. The result is a "like new" street. Cost: \$13 per square yard.

Base Repair

Base repairs are done at selected locations when it is clear that the pavement has failed and needs to be repaired. This is expensive work and is only done in limited locations where conditions demand. Typical signs that base repair is needed include "alligator cracking" where the surface takes on the look of alligator skin for an area. Cost: \$45 per square yard.

Compliance Requirements - ADA

In June of 2013, the United States Department of Justice (DOJ) and the Federal Highway Administration (FHWA) released a joint technical assistance guidance (Technical Assistance) clarifying ADA Title II requirements to provide curb ramps when streets, roads, or highways are altered through certain types of resurfacing treatments. This Technical Assistance applies to all State and local government projects. The Technical Assistance provides clarification and addresses past inconsistency of interpretation by FHWA pertaining to a specific type of roadway treatment being considered maintenance (not requiring the installation or upgrade of curb ramps) or alteration (requiring the installation or upgrade of curb ramps) when there is a pedestrian walkway with a prepared surface for pedestrian use and a curb, elevation, or other barrier between the street and the walkway. The City's Pavement Program will continue to comply with the requirements.

The City's Pavement Program will continue to follow the "Complete Street" design standards which was adopted in City Resolution No. 13153 C.M.S dated February 19, 2013. The "Complete Street" serves all users and modes so as to uniformly regulate the design, construction, operation, and maintenance of the street system. Most pavement projects consist of rehabilitation or repair or existing pavement but where possible the pavement program is combined with known locations for street realignment, such as extended sidewalks, bulbouts, implementation of the Bicycle Master Plan.

Green Pavement

As of 2011, green colored pavement is a federally approved treatment for bicycle facilities. In 2013, the Oakland bikeway program installed its first green bicycle lanes on Lake Merritt Boulevard and Lakeshore Avenue, and is currently in the process of developing standard design details to comprehensively incorporate green color into existing and future bikeway projects. As these standards are developed, the paving program will incorporate green pavement markings accordingly into the routine striping that accompanies paving projects. Due to the cost to install and maintain green colored pavement (approximately \$6 per square foot), the primary focus of green pavement treatments in Oakland will be on conflict areas (e.g., driveways, intersections, etc.) where high-visibility demarcation provides the most benefits.

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ANALYSIS

In order to be eligible for regional discretionary funds, MTC requires the City of Oakland to have their pavement management program (software or analysis program) certified. MTC is responsible for verifying the certification status. The City currently uses MTC's Pavement Management System StreetSaver®. StreetSaver® is a software-based tool for analyzing pavement conditions and recommending rehabilitation strategies based on funding levels. The software focuses on providing cost effective recommendations that enhance the overall system Pavement Condition Index (PCI). The City uses the software to help make cost-effective decisions related to the road network, maximizing the City's return on investment from available maintenance and rehabilitation funds; generating a prioritized plan; and identifying specific areas in need of maintenance and rehabilitation.

The proposed pavement prioritization plans are preliminary, and these planning levels represent the general intention of the Pavement Management Program in conjunction with the Bicycle MasterPlan. The actual annual paving list will be refined based on:

- Actual available funding
- Funding source (federal vs. local)
- Coordination and clearance with other city projects (streetscape, sewer and storm drain rehabilitation, new public and private development, the City's Bicycle MasterPlan, the Pedestrian Masterplan, the Curb Ramp Program, and specific projects, etc.)
- Clearance with external utility companies (EBMUD, AT&T, PG&E, Comcast, etc.); and
- Geographic grouping of paving to reduce construction costs.

Attachment A is a proposed pavement prioritization plan with current budget that lists and map those streets generated by StreetSaver® and that are on the City's Bicycle Masterplan for resurfacing. The funding projections are shown on Table 2 (page 3) above.

Attachment B is a proposed pavement prioritization plan with an increased Measure BB² funding (proposed as a Referendum Measure in the November 2014 elections) that lists and map those streets generated by StreetSaver® and that are on the City's Bicycle Masterplan for resurfacing. The funding projections are shown on Table 3 (page 3) above.

Due to the anticipated lack of additional funding in the foreseeable future, staff recommends adoption of a formal policy to optimize resources to the greatest extent possible. In general, staff recommends that 80 percent (80%) of available pavement program funds be dedicated to all the various pavement technologies that were defined on pages 5 & 6 in this report for streets identified by the PMP. The remaining 20 percent (20%) will be dedicated to rehabilitating selected "worst streets". The "worst streets" will be selected based on input from City Council, staff recommendations based on citizen complaints, and street condition assessment.

² Alameda County Sales Tax will be proposed for Measure BB.

COORDINATION

Offices consulted in the preparation of this report are the following:

- Office of the City Attorney
- City Administrator's Budget Office
- · Controller's Bureau

COST SUMMARY/IMPLICATIONS

Fiscal Impact: There is no direct fiscal impact. Long-term fiscal needs and potential funding are discussed in this report.

Revenue Bond

The City may elect to issue revenue bonds to fund an accelerated paving program. In order to bring Oakland's pavement up to a "good" condition and reduce backlog, Oakland would need to increase current funding levels and a revenue bond is one tool that should be considered. A one-time capital out-lay a revenue bond would increase paving and reduce the backlog. Staff will analyze this option further and return to council with that analysis if Measure BB is approved.

SUSTAINABLE OPPORTUNITIES

Economic: All public works contracts require the payment of prevailing wage rates. Prevailing wages offer a livable wage for workers and contribute to an improved quality of life. The street rehabilitation program improves paving conditions, enhancing and protecting the City's infrastructure. Street repair and rehabilitation contracts create job opportunities for local contractors. Streets in good condition reflect well on the community and indirectly improve the business climate. In addition to the direct economic benefits associated with the actual paving activities, there is an overall economic benefit to the City of Oakland in the form of an improved roadway network, which will enhance new business activities, as well as developments and redevelopment of properties.

Environmental: Recyclable materials will be used within the concrete and asphalt concrete construction materials to the extent possible. Grindings from the asphalt paving will be recycled whenever possible.

Social Equity: The street rehabilitation program works to preserve the City's infrastructure, enhance public access and protect the public from hazardous conditions. The Pavement Management Program ensures that street rehabilitation funds are spent in a manner that is cost effective throughout the City.

DISABILITY AND SENIOR CITIZEN ACCESS

Street resurfacing eliminates poor paving conditions and provides a uniform travel surface for all roadway users, including bicyclists, pedestrians using crosswalks and transit vehicles.

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For questions regarding this report, please contact Gus Amirzehni, P.E., Engineering Design and Right-of-Way Manager at (510) 238-6601.

Respectfully submitted,

BROOKE A. LEVIN

Director, Oakland Public Works

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Attachments:

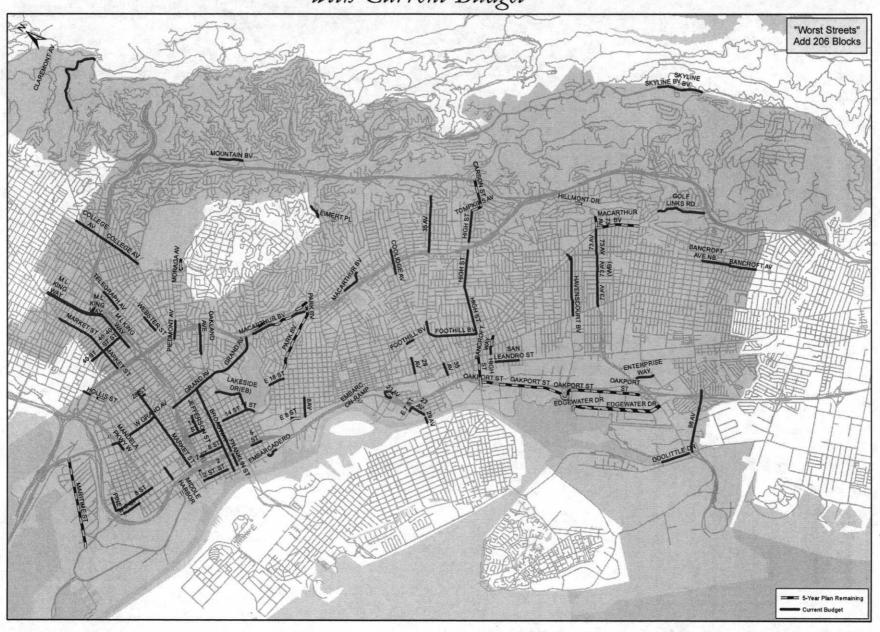
Attachment A – Map and List of Pavement Prioritization Plan with Current Budget Attachment B – Map and List of Pavement Prioritization Plan with Measure BB

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Attachment A

PROPOSED LOCATIONS FOR PAVEMENT PRIORITIZATION PLAN CURRENT BUDGET

ATTACHMENT A - Pavement Prioritization Plan with Current Budget



LIST OF PROPOSED LOCATIONS FOR PAVEMENT PRIORITIZATION PLAN WITH CURRENT BUDGET

STREET NAME	BEGIN LOCATION	END LOCATION	FC	PCI	LENGTH (FT)
14TH ST	CASTRO ST	CLAY ST	Α	64	1138
14TH ST	BROADWAY	FALLON ST	Α	80	3245
23RD AV	E 11 ST	23RD AV OVERPASS	Α	47	380
23RD AV	29 AV	E 7 ST	Α	52	1021
28TH ST	MARKET ST	SAN PABLO AV	С	78	315
29TH AV	E 17 ST	INTERNATIONAL BV	Α	75	1137
29TH AV	23RD AVE	EDGE OF BRIDGE	Α	66	364
2ND ST	BRUSH ST	WASHINGTON ST	С	65	1900
35TH AV	FOOTHILL BV	75 FT E/O HARPER ST	Α	84	864
35TH AV	HWY 580 BRIDGE END	JORDAN RD	Α	80	4041
35TH AV	SAN LEANDRO ST	INTERNATIONAL BV	Α	87	881
40TH ST	M L KING WAY	CITY LIMIT	A	71	2693
52ND ST	DOVER ST	M L KING WAY	A	83	509
5TH ST	JACKSON ST	OAK ST	С	80	759
7TH ST	CASTRO ST	M.L. KING WAY	Α	64	312
7TH ST	WOOD ST	PERALTA ST	A	70	1262
73RD AV	INTERNATIONAL BV	MACARTHUR BV	A	69	5678
73RD AV	MACARTHUR BV	OUTLOOK AV	Α	71	839
8TH AV	E 8 ST	INTERNATIONAL BV	С	81	1373
8TH ST	BROADWAY	M.L. KING WAY	А	70	1811
8TH ST	N/O MANDELA PKWY	S/O PINE ST	Α	74	3092
98TH AV	RT 17 OFF RAMP	WEST END	A	50	4561
ADELINE ST	7 ST	10 ST	A	72	1046
BANCROFT AVE	DURANT AV	98 AVE	A	40	3939
BANCROFT WAY	INTERNATIONAL BV	BANCROFT AV	A	68	716
BROADWAY	EMBARCADERO	6 ST	A	57	1404
BROADWAY	14 ST	GRAND AV	A	58	2911
BRUSH ST	5 ST	3 ST	A	63	560
CALCOT PL	E 11 ST	WEST END	С	71	1256
CAMPBELL ST	24 ST	MANDELA PKWY	С	60	168
CARSON ST	TOMPKINS AV	REINHARDT DR	A	68	1063
CARSON ST	REINHARDT DR	MOUNTAIN BV	A	70	1019
CARSON ST	TOMPKINS AV	FAIR AV	A	68	269
CLAREMONT AV	ALVARADO RD	GRIZZLY PEAK BV	A	74	5564
COLLEGE AV	CITY LIMIT	BROADWAY	A	53	5417
COOLIDGE AV	SCHOOL ST	MACARTHUR BV	C	80	1752
DOOLITTLE DR	HEGENBERGER RD	SWAN RD	A	64	2062
E 18TH ST	4 AV	LAKESHORE AV	A	61	1124
E 7TH ST	KENNEDY ST	23 AV	c	60	329
E 8TH ST	7 AV	5 AV	A	34	1112
EDGEWATER DR	NORTH END	HEGENBERGER RD	A	31	12865
EMBARC. ON-RAMP	E 12 ST	16 AVE OVERPASS	A	51	217
EMBARCADERO	BRIDGE				
		OAK ST	A	78	816
ENTERPRISE WAY	85 AV	EDES AV	C	80	1267
EXCELSIOR AV	FREEWAY ENT	PARK BV	A	54	910
FOOTHILL BLVD	AUSTIN	FRUITVALE	A	70	543

FC - FUNCTIONAL CLASSIFICATION

A - ARTERIAL

C - COLLECTOR

* BIKE ROUTE

LIST OF PROPOSED LOCATIONS FOR PAVEMENT PRIORITIZATION PLAN WITH CURRENT BUDGET

STREET NAME	BEGIN LOCATION	END LOCATION	FC	PCI	LENGTH (FT
FOOTHILL BLVD	35 AV	HIGH ST	Α	72	3503
FRANKLIN ST	2 ST	14 ST	Α	83	3059
GOLF LINKS RD	FONTAINE ST	98 AV	Α	83	3464
GRAND AV	BROADWAY	MACARTHUR BV	Α	71	5624
HAVENSCOURT BLVD	INTERNATIONAL BV	FOOTHILL BV	Α	69	4833
HIGH ST	MACARTHUR BV	TOMPKINS AV	Α	64	2276
HIGH ST	FOOTHILL BV	QUIGLEY ST	A	83	6179
HIGH ST	JENSON ST	E 12 ST	Α	46	2137
HILLMONT DR	SUNKIST DR	EDGEMOOR PL	A	24	510
HOLLIS ST	YERBA BUENA AV	500 FT/S YERBA BUENA AV	Α	75	483
HOLLIS ST	34TH ST	PERALTA ST	Α	49	580
JEFFERSON ST	14 ST	SAN PABLO AV	С	72	1277
LAKE PARK AV	GRAND AVE	LAKESHORE AV	A	20	1132
LAKESIDE DR	14 ST	HARRISON ST	A	66	3050
LEIMERT PL	CLEMENS RD	OAKMORE RD	С	44	279
MACARTHUR (NB)	PARK BV	ALMA AV	A	63	1742
MACARTHUR (SB)	LAKE SHORE AV	BEACON ST	A	72	486
MACARTHUR BLVD	CANON AV	ARDLEY AV	A	55	1743
MACARTHUR BLVD	HILLGIRT CL	BEACON ST	A	83	1267
MACARTHUR BLVD	ALMA AV	HILLGIRT CL	A	57	1427
MACARTHUR BLVD	82 AV	73 AV	A	46	3142
MARITIME ST	7 ST	GRAND AV	A	46	6680
MARKET ST	36 ST	57 ST	A	79	4980
MARKET ST	7 ST	SAN PABLO AV	A	80	6647
MARTIN LUTHER KING WAY	MACARTHUR BV	CITY LIMIT	A	83	11793
MIDDLE HARBOR	OVERPASS END (PVMT CHNG)	3 ST	A	70	305
MORAGA AV	PLEASANT VALLEY AV	RAMONA AV	A	36	1009
MOUNTAIN BLVD	THORNHILL DR	FLORENCE TERR	C	80	1685
OAKLAND AVE	ORANGE ST	MACARTHUR BV	A	41	2198
OAKPORT ST	1300 FT E/O EDGEWATER RD	HIGH ST	A	34	11924
PARK BLVD	MACARTHUR BV	CHATHAM RD	A	78	287
PARK BLVD	ESTATES DR	990 FT E/O ESTATES DR	A	58	953
PARK BLVD	CHATHAM RD	PVMT CHNG	A	57	107
PARK BLVD	E 18 ST	MACARTHUR BV		46	4725
PIEDMONT AV	RANDWICK AV	MACARTHUR BV	A	61	1289
PINE ST	10 ST	8 ST	C	80	987
SAN LEANDRO ST	47 AV	53 AV	A	54	1685
SKYLINE BLVD	END FOUR LANE	KELLER AV	A	70	3249
TELEGRAPH AV	46 ST	52 ST	A	25	1627
TOMPKINS AV	CARSON ST	HIGH ST	A	53	701
W GRAND AV	BROADWAY	M L KING WAY	A	73	2154
W GRAND AV	CAMPBELL ST	MANDELA PKWY	A	83	562
W GRAND AV	UNION ST	MARKET ST	A	37	2243
WEBSTER ST	40 ST	MACARTHUR BV	C	75	1238

FC - FUNCTIONAL CLASSIFICATION

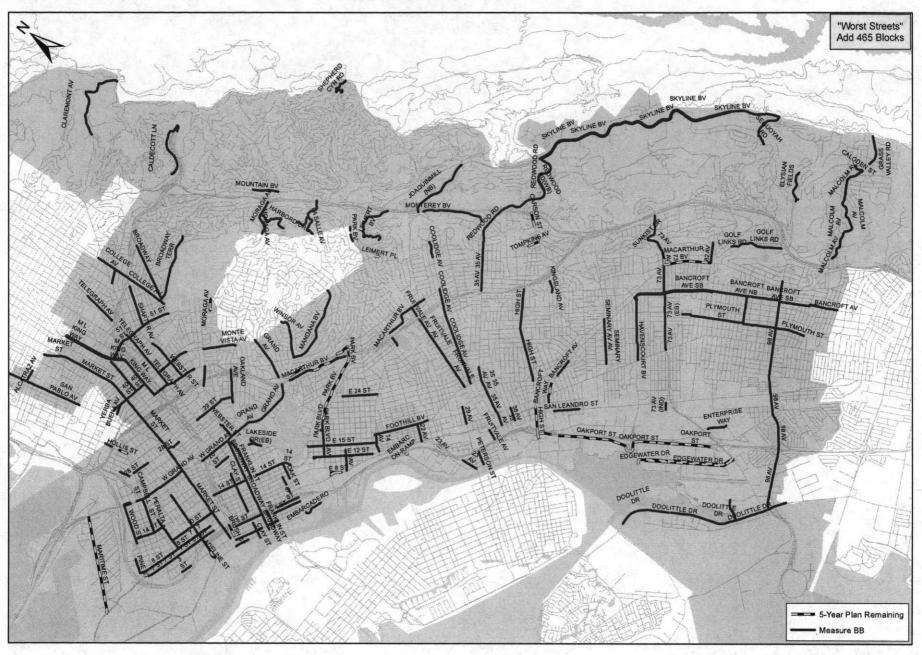
A - ARTERIAL

C - COLLECTOR

Attachment B

PROPOSED LOCATIONS FOR PAVEMENT PRIORITIZATION PLAN INCREASED MEASURE BB

ATTACHMENT B - Pavement Prioritization Plan with Measure BB



LIST OF PROPOSED LOCATIONS FOR PAVEMENT PRIORITIZATION PLAN WITH INCREASED MEASURE BB

STREET NAME	BEGIN LOCATION	END LOCATION	FC	PCI	LENGTH
10TH ST	WEST ST	MANDELA PKWY	С	68	3374
14TH AV	E 12 ST	FOOTHILL BV	Α	39	1180
14TH ST	BRUSH ST	FALLON ST	Α	64	565
14TH ST	WOOD ST	MANDELA PKWY	С	62	2114
20TH ST	SAN PABLO AV	TELEGRAPH AV	Α	86	1047
22ND AV	E 12 ST	FOOTHILL BV	С	87	1180
23RD AV	E 11 ST	23RD AV OVERPASS	A	47	380
23RD AV	29 AV	E 7 ST	Α	52	102:
28TH ST	PERALTA ST	ADELINE ST	С	85	1163
28TH ST	MARKET ST	WEST ST	С	78	852
29TH AV	E 17 ST	INTERNATIONAL BV	Α	75	1137
2ND ST	BRUSH ST	JEFFERSON ST	С	83	1139
2ND ST	BROADWAY	WEBSTER ST	A	60	775
35TH AV	SAN LEANDRO ST	75 FT E/O HARPER ST	Α	84	4196
35TH AV	HWY 580 BRIDGE END	JORDAN RD	A	80	4041
38TH AV	SAN LEANDRO ST	INTERNATIONAL BV	С	75	880
3RD ST	CHESTER ST	MANDELA PKWY	С	83	703
40TH ST	BROADWAY	CITY LIMIT	A	55	6189
46TH AV	E 12 ST	INTERNATIONAL BV	A	83	623
4TH AV	E 12 ST	E 18 ST	A	59	1806
4TH ST	OAK ST	WEBSTER ST	С	83	1904
51ST ST	SHATTUCK AV	BROADWAY	Α	67	598
52ND ST	SHATTUCK AV	M L KING WAY	A	65	1248
5TH ST	OAK ST	JACKSON ST	С	87	1482
5TH ST	CASTRO ST	BROADWAY	A	51	1918
7TH ST	CASTRO ST	M.L. KING WAY	A	64	312
7TH ST	WOOD ST	FILBERT ST	A	70	5258
73 AV	MACARTHUR BV	OUTLOOK AV	A	71	839
73RD AV	INTERNATIONAL BV	MACARTHUR BV	A	69	5679
73RD AV	OUTLOOK AV	SIMSON ST	A	73	1405
73RD AV	SAN LEANDRO ST	WEST END	С	80	456
82ND AV	UTAH ST	MACARTHUR BV	C	78	1377
8TH AV	E 8 ST	INTERNATIONAL BV	C	81	1373
8TH ST	MARKET ST	PINE ST	A	74	5652
90TH AV	BANCROFT AV	PLYMOUTH ST	C	80	1790
98TH AV	THERMAL ST	WEST END	A	55	15428
ADELINE ST	MIDDLE HARBOR	36 ST	A	73	10916
ALCATRAZ AV	CITY LIMIT	SAN PABLO AV	A	61	807
ARDLEY AV	E 31 ST	HWY 580 BRIDGE	A	60	594
BANCROFT AV	HIGH ST	107 AV	A	70	22296
BANCROFT WAY	INTERNATIONAL BV	BANCROFT AV	A	68	716
BROADWAY	BROADWAY TERR	KEITH AV	A	43	3919
BROADWAY	EMBARCADERO	GRAND AV	A	57	6548
BROADWAY TERRACE	BROADWAY	HARBORD DR	A	57	4532
BRUSH ST	6 ST	3 ST	A	61	840
BRUSH ST	5 ST	3 ST	A	63	560
CALDECOTT LN	EAST END	HILLER DR	C	71	4396

FC - FUNCTIONAL CLASSIFICATION

A - ARTERIAL

C-COLLECTOR

*BIKE ROUTE

LIST OF PROPOSED LOCATIONS FOR PAVEMENT PRIORITIZATION PLAN WITH INCREASED MEASURE BB

STREET NAME	BEGIN LOCATION	END LOCATION	FC	PCI	LENGTH
CALODEN ST	GOLF LINKS RD	MALCOLM AV	С	87	630
CAMPBELL ST	24 ST	MANDELA PKWY	С	60	168
CARSON ST	REINHARDT DR	MOUNTAIN BV	A	70	1019
CARSON ST	TOMPKINS AV	FAIR AV	Α	68	269
CHABOT RD	COLLEGE AV	CLAREMONT AV	С	87	943
CLAREMONT AV	ALVARADO RD	GRIZZLY PEAK BV	A	74	5564
CLAY ST	4 ST	WATER ST	С	83	1093
CLAY ST	SAN PABLO AV	7 ST	С	52	2768
COLLEGE AV	CITY LIMIT	BROADWAY	A	53	5325
DOOLITTLE DR	CITY LIMIT	BAY FARM ISLAND BRIDGE	A	64	11469
E 12TH ST	13 AV	2 AV	Α	87	5374
E 15TH ST	1 AV	14 AV	A	87	4592
E 8TH ST	7 AV	5 AV	A	34	1112
EDGEWATER DR	NORTH END	HEGENBERGER RD	A	31	12865
EDWARDS AV	SUNKIST DR	OFF RAMP	C	77	1258
ELYSIAN FIELDS	PVMT CHNG	GOLF LINKS RD	С	77	2229
EMBARC. ON-RAMP	E 12 ST	16 AVE OVERPASS	A	51	217
EMBARCADERO	BRIDGE	OAK ST	A	78	1292
EMBARCADERO	M.L. KING WAY	MARKET ST	С	60	932
ENTERPRISE WAY	85 AV	EDES AV	С	80	1267
ETTIE ST	32 ST	28 ST	С	87	682
EXCELSIOR AV	FREEWAY ENT	PARK BV	A	54	910
FOOTHILL BLVD	14 AV	23 AV	A	66	3672
FRANKLIN ST	5 ST	EMBARCADERO	С	87	1111
FRANKLIN ST	14 ST	BROADWAY	A	80	2806
FRUITVALE AV	E 9 ST	INTERNATIONAL	A	55	1614
FRUITVALE AV	FOOTHILL BV	HAROLD ST	A	68	5423
FRUITVALE AV	MONTANA ST	MACARTHUR BV	A	52	651
GOLF LINKS RD	FONTAINE ST	98 AV	A	83	3464
GRAND AV	LAKE PARK AV	CITY LIMIT	A	61	2977
GRAND AV	BROADWAY	MACARTHUR BV	A	71	5624
GRASS VALLEY RD	SKYLINE BV	GOLF LINKS RD	A	82	2015
HARBORD DR	MORAGA AV	WOOD DR	С	87	2569
HAVENSCOURT BLVD	INTERNATIONAL BV	BANCROFT AV	A	66	4541
HIGH ST	FOOTHILL BV	QUIGLEY ST	A	83	6179
HIGH ST	JENSON ST	E 12 ST	A	46	2137
HILLMONT DR	SUNKIST DR	EDGEMOOR PL	A	24	510
HOLLIS ST	YERBA BUENA AV	500 FT/S YERBA BUENA AV	A	75	483
HOLLIS ST	34TH ST	PERALTA ST	A	49	580
JOAQUIN MILLER (NB)	SANBORN DR	MONTEREY BV	A	60	4427
KELLER AV	SEQUOYAH RD	SKYLINE BV	A	63	2131
KINGSLAND AV	BIRDSALL AV	REDDING ST	C	77	767
LA SALLE AV	TYSON CIR	FIRE PLUG	C	83	2893
LAKE PARK AV	PVMT CHNG	LAKESHORE AV	A	20	1132
LAKESIDE DR(EB)	50 FT N/JACKSON ST	HARRISON ST	A	65	848
LAKESIDE DR(WB)	HARRISON ST	50 FT N/JACKSON ST	A	74	936
LEIMERT BLVD	MONTEREY RD	WRENN ST	C	68	4406

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*BIKE ROUTE

LIST OF PROPOSED LOCATIONS FOR PAVEMENT PRIORITIZATION PLAN WITH INCREASED MEASURE BB

STREET NAME	BEGIN LOCATION	END LOCATION	FC	PCI	LENGTH
LEIMERT PL	CLEMENS RD	OAKMORE RD	С	44	279
MACARTHUR (NB)	PARK BV	ALMA AV	Α	63	1026
MACARTHUR (SB)	ALMA AV	PARK BV	A	58	716
MACARTHUR BLVD	LAKE SHORE AV	HILLGIRT CL	Α	72	1763
MACARTHUR BLVD	BOSTON AV	CHAMPION ST	A	57	862
MACARTHUR BLVD	FRUITVALE AV	ARDLEY AV	Α	55	2476
MACARTHUR BV	ALMA AV	HILLGIRT CL	Α	57	1427
MACARTHUR BV	82 AV	73 AV	Α	46	3142
MADISON ST	7 ST	8 ST	A	82	280
MADISON ST	9 ST	11 ST	Α	53	563
MALCOLM AV	SHELDON ST	CALODEN ST	С	85	7475
MANDANA BLVD	LAKESHORE AV	ASHMOUNT AV	С	87	5496
MARITIME ST	7 ST	GRAND AV	Α	46	6680
MARKET ST	3 ST	CITY LIMIT	A	53	17918
MARTIN LUTHER KING WAY	MACARTHUR BV	CITY LIMIT	A	71	11726
MIDDLE HARBOR	OVERPASS END (PVMT CHNG)	3 ST	A	70	305
MONTE VISTA AV	PIEDMONT AV	OAKLAND AV	С	82	2083
MONTEREY BV	BENNET PL	MAIDEN LN	С	69	4170
MORAGA AV	CITY LIMIT	FREEWAY EXIT	A	47	3211
MORAGA AV	PLEASANT VALLEY AV	RAMONA AV	A	36	1009
MOUNTAIN BLVD	THORNHILL DR	FLORENCE TERR	С	80	1685
OAK ST	10 ST	14 ST	Α	47	1121
OAKLAND AVE	ORANGE ST	MACARTHUR BV	A	41	2191
OAKPORT ST	1300 FT E/O EDGEWATER RD	HIGH ST	A	34	11924
PARK BLVD	E 20TH ST	E 18TH ST	A	46	823
PARK BLVD	CHATHAM RD	PVMT CHNG S/0 EXCELSIOR	A	57	107
PARK BLVD	E 18 ST	MACARTHUR BV	A	46	4725
PERALTA ST	MANDELA PKWY	14 ST	С	75	2372
PETERSON ST	EAST END	GLASCOCK ST	С	79	911
PIEDMONT AV	RANDWICK AV	MACARTHUR BV	A	61	1289
PINE ST	10 ST	8 ST	C	80	987
PLYMOUTH ST	104 AV	78 AV	С	55	8285
REDWOOD RD	JORDAN RD	330 FT E/ALISO AV	A	87	9164
SAN LEANDRO ST	47 AV	53 AV	A	54	1685
SAN PABLO AV	CITY LIMIT - BER (67TH ST)	CITY LIMIT - EMRI (53RD ST)	A	86	5146
SEMINARY AV	E 16 ST	FOOTHILL BV	A	45	2994
SEQUOYAH RD	RIDGEMOOR RD	KELLER AV	С	71	697
SHAFTER AV	FOREST ST	51 ST	C	49	2785
SHEPHERD CYN RD	AITKEN DR	SKYLINE BV	С	89	1817
SKYLINE BLVD	REDWOOD RD	KELLER AV	Α	62	32792
SWAN WAY	DOOLITTLE DR	PARDEE DR	С	80	1450
TELEGRAPH AV	52 ST	AILEEN ST	A	59	7969
TOMPKINS AV	CARSON ST	HIGH ST	A	53	703
W GRAND AV	WOOD ST	WILLOW ST	A	68	873
W GRAND AV	SAN PABLO AV	BROADWAY	A	64	2154
W GRAND AV	CAMPBELL ST	MARKET ST	A	37	3713

FC - FUNCTIONAL CLASSIFICATION

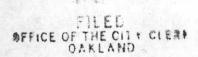
A - ARTERIAL

C - COLLECTOR

^{*}BIKE ROUTE

LIST OF PROPOSED LOCATIONS FOR PAVEMENT PRIORITIZATION PLAN WITH INCREASED MEASURE BB

STREET NAME	BEGIN LOCATION	END LOCATION	FC	PCI	LENGTH
W MACARTHUR BV	BROADWAY	FREEWAY ENT	A	86	5276
WEBSTER ST	45 ST	MACARTHUR BV	С	74	2996
WEBSTER ST	BROADWAY	GRAND AV	C	67	1091
WINSOR AV	LAKESHORE AV	CITY LIMIT	С	77	706
WOOD ST	13 ST	W GRAND AV	C	76	2716
YERBA BUENA AV	40 ST	CITY LIMIT	A	37	667



2014 OCT -2 PM 4: 25

Approved A Top Trink legality City Attorney

OAKLAND CITY COUNCIL

RESOLUTION No	C.M.S.	
Introduced by Councilmember		

RESOLUTION ESTABLISHING A PRIORITIZATION PLAN FOR THE CITY OF OAKLAND'S STREET PAVEMENT REHABILITATION PROGRAM

WHEREAS, the City of Oakland's street infrastructure is considered a significant asset that impacts the quality of life for those who live and work in Oakland; and

WHEREAS, the City of Oakland continues to use the Pavement Management Program (PMP) to the Metropolitan Transportation Commission (MTC) StreetSaver® pavement management software; and

WHEREAS, the City of Oakland completed a citywide pavement distress survey in the fall of 2012 to update its Pavement Management Program database; and

WHEREAS, the 3-year moving average pavement condition index (PCI) has increased from 57 in 2011 to 60 in 2013; and

WHEREAS, in this system, 100 represents brand new pavement and 0 represents a completely failed pavement; and

WHEREAS, the City of Oakland is required by MTC to maintain and update a Pavement Management Program in order to remain eligible for federal street rehabilitation funding; and

WHEREAS, the Pavement Management Program standardizes the optimization and distribution of available funding for street rehabilitation projects; and

WHEREAS, the City of Oakland has limited financial resources to fund its street rehabilitation program; and

WHEREAS, the anticipated annual funding level for street rehabilitation for the City of Oakland is estimated to be approximately \$5.7 million over the next five years; and

WHEREAS, the anticipated annual funding level for street rehabilitation for the City of Oakland is estimated to be approximately \$13.1 million over the next five years if Measure BB passes; and

WHEREAS, the City will allocate 100% of Measure BB funds towards the Pavement Management Program; and

WHEREAS, the City of Oakland has established criteria to be used to prioritize streets proposed for rehabilitation using the Pavement Management Program based on Pavement Condition Index (PCI), visual inspection, and cost effectiveness; and

WHEREAS, the Pavement Management Program is utilized to prioritize and identify candidate streets for street rehabilitation projects that represents the most optimum use of available funding; and

WHEREAS, the City of Oakland continues to look for emerging cost-effective pavement technologies such as cape seal; and

WHEREAS, the City's Pavement Program will continue to follow the ADA Title II requirements detailed in a joint technical assistance guidance (Technical Assistance) released by the United States Department of Justice (DOJ) and the Federal Highway Administration (FHWA) in June of 2013; and

WHEREAS, the City's Pavement Program will continue to follow the "Complete Street" design standards which is reflected in City Resolution No. 13153 C.M.S dated February 19, 2013; and

WHEREAS, the City of Oakland coordinates and screens all proposed streets for conflicts with sewer, storm drainage, gas, water, electrical, cable, and fiber optic replacement projects to insure that all underground rehabilitation work occurs prior to scheduled street rehabilitation projects; and

WHEREAS, the City Council of the City of Oakland continues to implement the "best-first" policy and the streets selected for the paving priority plan is provided in *Attachment A* and *Attachment B*; now, therefore be it

RESOLVED: That, in order to optimize resources to the extent possible, the City Council of the City of Oakland adopts and will use its PCI based Pavement Management Program to prioritize streets for rehabilitation; and be it

FURTHER RESOLVED: That a target of eighty percent (80%) of available street rehabilitation funds each year will be dedicated to rehabilitating streets that are identified by the Pavement Management Program, and that the remaining twenty percent (20%) of available funds will be dedicated to rehabilitating selected "worst streets" which is reflected in City Resolution No. 81039 C.M.S dated November 6, 2007.

IN COUNCIL, OAKLAND, CALIFORNIA,	, 20
PASSED BY THE FOLLOWING VOTE:	
AYES - BROOKS, GALLO, GIBSON MCELHANEY, KALB, KARKERNIGHAN	PLAN, REID, SCHAAF and PRESIDENT
NOES -	
ABSENT -	
ABSTENTION -	
	ATTEST:LaTonda Simmons
	City Clerk and Clerk of the Council of the City of Oakland, California