



Public Works Commission

## ACTION CALENDAR

November 18, 2014

To: Honorable Mayor and Members of the City Council  
 From: Public Works Commission  
 Submitted by: Ray Yep, Chair, Public Works Commission  
 Subject: Update of the 5-Year Street Paving Plan for FY 2016

### RECOMMENDATION

Adopt a Resolution updating the City's 5-Year Street Paving Plan for FY 2016, including two new areas of green infrastructure.

### FISCAL IMPACTS OF RECOMMENDATION

The FY 2016 update for the 5-Year Street Paving Plan (Exhibit A) is based on an estimated funding level of \$11,500,000.

The [Public Works Commission report to Council in June 2014](#)<sup>1</sup> specified \$11,000,000 of funding. The increase of \$500,000 is needed to design and construct the two additional green infrastructure locations requested by the Public Works Commission and included in the updated FY 2016 Plan.

### CURRENT SITUATION AND ITS EFFECTS

At the June 3, 2014 City Council meeting, the Public Works Commission (PWC) reported that Public Works staff has taken a 2 year + 3 year approach to developing a 5-Year Street Paving Plan. The first two years are for FY 2015 and FY 2016. The PWC recommended, and the City Council adopted Resolution No. 66,619-N.S. updating the City's 5-Year Street Paving Plan for FY 2015 and the Woolsey Street green infrastructure improvements in FY 2016. The PWC requested additional time to review the FY 2016 paving plan and is returning at this time to report on its recommendations.

### PUBLIC WORKS COMMISSION'S REVIEW

Consistent with the collaborative process to date, the PWC and Public Works staff promoted participation by other commissions and community input. A PWC subcommittee and commissioners from the Transportation, Parks & Waterfront, and Community Environmental Advisory Commissions met with Public Works staff to review the FY 2016 plan.

---

<sup>1</sup> PWC Report on June 3, 2014: [www.cityofberkeley.info/Clerk/City\\_Council/2014/06\\_Jun/Documents/2014-06-03\\_Item\\_30a\\_Update\\_of\\_the\\_5-Year\\_Street.aspx](http://www.cityofberkeley.info/Clerk/City_Council/2014/06_Jun/Documents/2014-06-03_Item_30a_Update_of_the_5-Year_Street.aspx)

**September 4, 2014 PWC Meeting**

The Public Works Department, with PWC assistance, sent an invitation to a broad cross-section of the community to attend the September 4, 2014 PWC meeting. About a dozen community members attended and provided helpful comments.

Public Works staff recommended the addition of two Green Infrastructure projects to the FY 2016 plan:

1. Install permeable pavers in the bus stop on Shattuck and University (northwest corner) as a trial to test their durability with bus traffic.
2. Install permeable pavers on Hopkins uphill from the intersection with Rose to slow storm waters, and put in bio-swales in what are now concrete traffic dividers.

Public Works staff also presented the results of the street-by-street review of treatment methods originally planned for the FY 2015 paving. That refinement resulted in an estimated savings of approximately \$1.5 to \$2 million. This will result in more streets being paved with traditional asphalt solutions and extending the life of marginal streets. That process will be continued into the future to provide the most appropriate and economic solutions to paving requirements. Public Works staff, in cooperation with the PWC, is evaluating new methods, including those that recycle materials in place.

Nichols Engineering, the City's consultant for street evaluation, presented the need to consider paving lifecycle costs, including economic externalities and tradeoffs, to better evaluate the long run costs of traditional asphalt paving and alternative paving strategies.

The Measure M-funded program is ramping up: 17.6 miles of streets will be improved in FY 2016, which is about 4 times the historical level. In addition, there are now 3 projects of green infrastructure included in the FY 2016 plan.

The PWC concurred with the recommendations presented by staff and passed a motion to: Approve and recommend the FY 2016 paving plan as proposed by staff and amended with the addition of the two green infrastructure projects at Shattuck/University and Rose/Hopkins (see Exhibit A). (M/S/C: Swift/Schueler; Yes: Swift, Schueler, Abramson, Elgstrand, Kelley, Henry, Neal, Yep; No: None; Abstain: None; Absent: None)

**BACKGROUND**

The City's street improvements are historically supported by Gas Tax, County Sales Tax, and General Fund monies, which average \$3 million per year, as well as the addition of Measure M bond funds. Measure M has funded the following for FY 2014 and FY 2015:

<b>FY 2014</b>	
Total Measure M expenditures	\$2,600,000
<b>Capital expenditures for pavement:</b>	
Reconstruction	\$1,100,000
Overlay	\$300,000
<b>Maintenance expenditures for pavement:</b>	
Seals	\$0
Rubberized Cape Seal	\$0
<b>Green infrastructure:</b>	\$1,200,000

<b>FY 2015</b>	
Total Measure M expenditures	\$8,100,000
<b>Capital expenditures for pavement:</b>	
Reconstruction	\$2,100,000
Overlay	\$3,200,000
<b>Maintenance expenditures for pavement:</b>	
Seals	\$300,000
Rubberized Cape Seal	\$1,500,000
<b>Green infrastructure:</b>	\$1,000,000

All figures are approximate and FY 2015 figures are projections. The high amount projected to be spent on maintenance in FY 2015 is primarily because the amount projected to be spent on reconstruction was reduced by \$5 million, from \$7.1 million to \$2.1 million, by Nichols Engineering, the City's consultant for street evaluation. The changes resulted in overall cost savings to the City of \$1 to \$2 million.

#### ENVIRONMENTAL SUSTAINABILITY

The 5-Year Street Paving Plan incorporates green infrastructure, which will reduce the volume of storm water entering City storm drains, provide opportunities for stormwater catchment, improve the quality of urban runoff from the roadways, and reduce greenhouse gas emissions by using newer technologies for street rehabilitation.

#### RATIONALE FOR RECOMMENDATION

This FY 2016 Paving Plan is consistent with Berkeley's Street Rehabilitation and Repair Policy.

#### ALTERNATIVE ACTIONS CONSIDERED

None.

#### CITY MANAGER

The City Manager concurs with the content and recommendations of the Commission's Report.

#### CONTACT PERSON

Ray Yep, Chair, Public Works Commission  
Andrew Clough, Director, Public Works, 981-6300  
Sean Rose, Secretary, Public Works Commission, 981-6435

#### Attachments:

1: Resolution

Exhibit A: FY 2016 Paving and Green Infrastructure Plan

RESOLUTION NO. ##,###-N.S.

UPDATE OF THE 5-YEAR STREET PAVING PLAN FOR FY 2016

WHEREAS, the Street Rehabilitation Policy, Resolution No. 55,384-N.S. approved on May 22, 1990, requires that a 5-Year Street Paving Plan for the entire City be adopted by the City Council, and reviewed and updated annually by the City Council, with the advice of the Public Works Commission; and

WHEREAS, on June 3, 2014 the City Council adopted Resolution No. 66,619-N.S. updating the City's 5-Year Street Paving Plan for FY 2015 and the Woolsey Street green infrastructure improvements in FY 2016; and

WHEREAS, as of June, the Public Works Commission required additional time to review the FY 2016 portion of the paving plan prepared by staff; and

WHEREAS, on September 4, 2014 the Public Works Commission voted unanimously to approve and recommend the FY 2016 paving plan as proposed by staff and amended with the addition of the two green infrastructure projects at Shattuck/University and Rose/Hopkins, attached as Exhibit A.

NOW THEREFORE, BE IT RESOLVED by the Council of the City of Berkeley that the FY 2016 Street Paving Plan and green infrastructure improvements, attached as Exhibit A hereof, is hereby adopted.

Exhibit A: Street Paving Plan for FY 2016

5-YEAR STREET PAVING PLAN

FISCAL YEAR	STREET NAME	FROM	TO	CLASS	TREATMENT	ESTIMATED COST	GREEN INFRA	DISTRICT	P	MILEAGE	SCORECARD	PCI	LAST PAVED	LAST TYPE
2016	ADELINE ST	DERBY ST	STUART ST	A	OVERLAY	130499		3	B	0.14		51	1984	O
2016	ADELINE ST	STUART ST	ASHBY AVE	A	RECONSTRUCT	1218888		3	B	0.28	6	42	1988	O
2016	DERBY ST	WARRING ST	BELROSE & TANGLEWOOD	A	RECONSTRUCT	378003		8	B	0.23	6	12	1996	O
2016	OXFORD ST	CEDAR ST	161' N/O HEARST AVE	A	OVERLAY	252		4	C	0.25		74		
2016	OXFORD ST	HEARST AVE	HEARST AVE	A	OVERLAY	13074		4	C	0.03		49		
2016	SHATTUCK AVE	ROSE ST	VINE ST	A	RECONSTRUCT	315926		5	C	0.13	11	23	1996	R
2016	SHATTUCK AVE	VINE ST	CEDAR ST	A	RECONSTRUCT	389323		4	C	0.13	11	21	1996	O
2016	SHATTUCK PL	HENRY ST & ROSE ST	SHATTUCK AVE	A	RECONSTRUCT	273743		5	C	0.10	11	27	1996	R
2016	SHATTUCK AVE	CEDAR ST	HEARST AVE	A	RECONSTRUCT	873514		4	C	0.32	6	30	1996	O
2016	SHATTUCK AVE	HEARST AVE	UNIVERSITY AVE	A	OVERLAY	61802	*	4	C	0.12		41	1996	R
2016	THE ALAMEDA	SOLANO AVE	MARIN AVE	A	SLURRY	21381		5	B	0.18		59	1996	R
2016	THE ALAMEDA	MARIN AVE	HOPKINS ST	A	OVERLAY	156555		5	B	0.26		44	1995	O
2016	THE ALAMEDA	HOPKINS ST	YOLO AVE	A	SLURRY	5283		5	C	0.04		53	1995	O
2016	THE CIRCLE	INTERSECTION MARIN AVE, ETC	INTERSECTION ARLINGTON AVE	A	SLURRY	1235		5	C	0.01		77	1992	R
2016	BANCROFT WAY	MILVIA WAY	SHATTUCK AVE	C	OVERLAY	49871		4	D	0.13		63	1989	O
2016	BELROSE AVE	DERBY ST	CLAREMONT BLVD	C	RECONSTRUCT	207914		8	C	0.12	5	22	1996	O
2016	CLAREMONT BLVD	BELROSE AVE	CLAREMONT AVE	C	RECONSTRUCT	266659		8	C	0.17	11	35	1996	O
2016	DELAWARE ST	6TH ST	SAN PABLO AVE	C	SLURRY	29304		1	B	0.31		71	1992	R
2016	SOLANO AVE	THE ALAMEDA	CONTRA COSTA AVE	C	SLURRY	6882		5	C	0.10		89	2005	O
2016	NORTHBRAE TUNNEL	CONTRA COSTA AVE	DEL NORTE ST	C	SLURRY	12521		5	C	0.27		80	1988	O
2016	PIEDMONT CRESCENT	DWIGHT WAY	WARRING ST	C	RECONSTRUCT	139462		8	B	0.05	6	32	1996	O
2016	WARRING ST	DWIGHT WAY	DERBY ST	C	RECONSTRUCT	531259		8	B	0.29	6	18	1996	O
2016	2ND ST	DELAWARE ST	HEARST AVE	R	RECONSTRUCT	124932		1	D	0.09	12	6		
2016	2ND ST	HEARST AVE	UNIVERSITY AVE	R	OVERLAY	31469		1	D	0.09		37		
2016	2ND ST	UNIVERSITY AVE	ADDISON ST	R	OVERLAY	24464		2	D	0.09		47	1997	O
2016	8TH ST	NORTH CITY LIMIT	GILMAN ST	R	OVERLAY	49512		1	B	0.22		78	2001	R
2016	9TH ST	JOG JUST NORTH OF ANTHONY POTTER ST	OVERLAY	R	OVERLAY	19652		2	B	0.06		36		
2016	9TH ST	POTTER ST	MURRAY ST	R	OVERLAY	22061		2	B	0.06		43		
2016	ALLSTON WAY	STRAWBERRY CK PARK	ACTON ST	R	OVERLAY	32415		2	B	0.10		77	1997	O
2016	ALLSTON WAY	ACTON ST	SACRAMENTO ST	R	RECONSTRUCT	162391		23	B	0.12	8	65	1997	O
2016	ARCADE AVE	GRIZZLY PEAK BLVD	FAIRLAWN DR	R	RECONSTRUCT	54466		6	D	0.06		15	1995	O
2016	AVENIDA DR	CAMPUS DR	OLYMPUS AVE	R	RECONSTRUCT	47217		6	C	0.06	13	19	1993	O
2016	AVENIDA DR	QUEENS RD	QUEENS RD	R	SLURRY	1012		6	C	0.03		72	1993	O
2016	AVENIDA DR	QUEENS RD	GRIZZLY PEAK BLVD	R	RECONSTRUCT	171836		6	C	0.25	13	63	1993	R
2016	BERRYMAN ST	MARTIN LUTHER KING JR HI SCH	MARTIN LUTHER KING JR WAY	R	SLURRY	2010		5	B	0.03		69	1989	O
2016	BERRYMAN ST	MARTIN LUTHER KING JR WAY	MILVIA ST	R	SLURRY	12560		5	B	0.19		71	1989	O
2016	BONAR ST	UNIVERSITY AVE	ADDISON ST	R	OVERLAY	19205		2	B	0.06		23	1992	O
2016	BONAR ST	ALLSTON WAY	DWIGHT WAY	R	OVERLAY	121220		2	B	0.38		37	1991	O
2016	BRET HARTE RD	KEITH AVE	CRAGMONT AVE	R	OVERLAY	10115		6	D	0.06	44	44	1996	R
2016	BRET HARTE RD	CRAGMONT AVE	KEELER RD	R	SLURRY	4449		6	D	0.14		65	1996	R
2016	CAMPUS DR	GLENDALE AVE	DELMAR AVE	R	OVERLAY	41962		6	C	0.21		49	1991	O
2016	CAMPUS DR	DELMAR AVE	AVENIDA DRIVE	R	SLURRY	3847		6	C	0.10		59	1994	R
2016	CAMPUS DR	AVENIDA DR	PARNAUSSUS RD	R	RECONSTRUCT	74396		6	D	0.10	13	12		
2016	CAMPUS DR	PARNAUSSUS RD	DEAD END, UC PLOT	R	RECONSTRUCT	90427		6	D	0.14		0		
2016	CONTRA COSTA AVE	SOLANO AVE	LOS ANGELES AVE	R	OVERLAY	7460		5	D	0.03		40		
2016	CORNELL AVE	GILMAN ST	PAGE ST	R	SLURRY	10467		1	B	0.19		68	1988	O
2016	CORNELL AVE	HOPKINS ST	CEDAR ST	R	SLURRY	7275		1	B	0.13		58	1995	O
2016	CORNELL AVE	HOPKINS ST	CEDAR ST	R	SLURRY	3491		1	B	0.07		35	1992	O
2016	CORNELL AVE	CEDAR ST	VIRGINIA ST	R	OVERLAY	33638		1	B	0.13		29	1992	O
2016	CRAGMONT AVE	MARIN AVE	SANTA BARBARA RD	R	OVERLAY	40890		6	D	0.21		40	1992	R
2016	CRAGMONT AVE	SANTA BARBARA RD	EUCOLID AVE	R	SLURRY	6371		6	D	0.16		74	1996	R
2016	CRAGMONT AVE	EUCOLID AVE	BRET HARTE RD	R	SLURRY	9909		6	B	0.27		64	1996	R
2016	CRAGMONT AVE	BRET HARTE RD	SHASTA RD	R	SLURRY	11906		6	B	0.31		71	1996	R

NOTE: COLUMN P DENOTES PRESENCE OF (A) BICYCLE BOULEVARD, (B) BICYCLE ROUTE, (C) BUS ROUTE, OR (D) NONE

Revision Date: October 2014

5-YEAR STREET PAVING PLAN

FISCAL YEAR	STREET NAME	FROM	TO	CLASS	TREATMENT	ESTIMATED COST	GREEN INFRA	DISTRICT	P	MILEAGE	SCORECARD	PCI	LAST PAVED	LAST TYPE
2016	EAST PARNASSUS CT	PARNASSUS RD	DEAD END	R	RECONSTRUCT	35292		6	D	0.04		1		
2016	EL DORADO AVE	THE ALAMEDA	SUTTER ST	R	OVERLAY	66278		5	D	0.24		39	1996	O
2016	EUCUID AVE	CRAGMONT AVE	BEG OF DIVIDED ROAD	R	SLURRY	9298		6	B	0.12		80	2001	R
2016	EUCUID AVE (NB)	BEG OF DIVIDED ROAD	END OF DIVIDED ROAD	R	SLURRY	5499		6	B	0.16		73	2001	O
2016	EUCUID AVE (SB)	BEG OF DIVIDED ROAD	END OF DIVIDED ROAD	R	SLURRY	9140		6	B	0.16		80	2001	O
2016	EUCUID AVE	END OF DIVIDED ROAD	EUNICE ST	R	OVERLAY	65025		6	B	0.17		85	2001	R
2016	FAIRLAWN DR	AVENIDA DR	OLYMPUS DR	R	OVERLAY	19749		6	C	0.12		64	1993	R
2016	FLORIDA AVE	BOYNTON AVE	BOYNTON AVE	R	OVERLAY	10437		5	D	0.05		79	1993	O
2016	FLORIDA AVE	FAIRLAWN DR & SENIOR AVE	DEAD END (FLORIDA WALK)	R	RECONSTRUCT	28313		5	D	0.03	13	40	1993	O
2016	HARVARD CIRCLE	FAIRLAWN DR	FAIRLAWN DR	R	RECONSTRUCT	24313		6	D	0.02		31		
2016	HENRY ST	VINE ST	VINE ST	R	OVERLAY	40366		5	C	0.13		19	1995	O
2016	HENRY ST	VINE ST	CEDAR ST	R	OVERLAY	41262		4	D	0.12		23	1992	O
2016	HILGARD AVE	LA VEREDA RD	DEAD END	R	OVERLAY	13495		6	D	0.06		39	1999	R
2016	JONES ST	EASTSHORE HWY	2ND ST	R	SLURRY	3615		1	D	0.05		54		
2016	JONES ST	4TH ST	6TH ST	R	OVERLAY	39593		1	D	0.13		12		
2016	JONES ST	6TH ST	SAN PABLO AVE	R	OVERLAY	100914		1	D	0.31		48	1995	O
2016	JONES ST	SAN PABLO AVE	STANNAGE AVE	R	OVERLAY	30886		1	D	0.10		50	1986	O
2016	JOSEPHINE ST	THE ALAMEDA	HOPKINS ST	R	SLURRY	7222		5	D	0.11		33	1997	O
2016	JOSEPHINE ST	HOPKINS ST	ROSE ST	R	SLURRY	16203		5	B	0.24		64	1997	O
2016	LA VEREDA RD	LA LOMA AVE	CEDAR ST	R	RECONSTRUCT	51664		6	D	0.10	9	17		
2016	LA VEREDA RD	CEDAR ST	DEAD END ABOVE VIRGINIA ST	R	RECONSTRUCT	77026		6	D	0.16	9	0		
2016	MICHIGAN AVE	MARYLAND AVE	SPRUCE ST	R	OVERLAY	57030		5	D	0.28		49	1988	O
2016	MODOC ST	SOLANO AVE	MARIN AVE	R	OVERLAY	32368		5	D	0.11		54	1995	R
2016	PAGE ST	EAST FRONTAGE RD	2ND ST	R	OVERLAY	15606		1	D	0.05		39		
2016	PAGE ST	3RD ST	6TH ST	R	SLURRY	10122		1	D	0.18		69	1989	O
2016	PAGE ST	6TH ST	10TH ST	R	SLURRY	13973		1	D	0.25		73	1989	O
2016	PARKER ST	SACRAMENTO ST	MARTIN LUTHER KING JR WAY	R	SLURRY	32154		3	B	0.48		78	1989	O
2016	PARKER ST	COLLEGE AVE	ETNA ST	R	OVERLAY	19877		8	B	0.06		43	1996	O
2016	PARKER ST	ETNA ST	WARRING ST	R	OVERLAY	40672		8	B	0.13		36	1996	O
2016	PARNASSUS RD	DEL MAR AVE	CAMPUS RD	R	RECONSTRUCT	209917		6	D	0.22		19		
2016	PIEDMONT AVE	DWIGHT WAY	DERBY ST	R	OVERLAY	76874		8	B	0.25		37	2006	O
2016	POE ST	BONAR ST	DEAD END (BONAR ST)	R	RECONSTRUCT	40105		2	D	0.03		22	1995	O
2016	PRINCE ST	TREMONT ST	TELEGRAPH AVE	R	OVERLAY	105513		37	B	0.45		58	2002	O
2016	ROSE ST	HOPKINS ST	CHESTNUT ST	R	SLURRY	8830	*	1	B	0.13		52	1992	O
2016	ROSE ST	CHESTNUT ST	SACRAMENTO ST	R	OVERLAY	115472		1	B	0.34		62	1992	R
2016	RUGBY AVE	NORTH CITY LIMIT	VERMONT AVE	R	RECONSTRUCT	40105		5	D	0.04		15	1994	O
2016	SAN PEDRO AVE	COLUSA AVE	THE ALAMEDA	R	OVERLAY	43832		5	D	0.20		17	1993	O
2016	SENIOR AVE	FAIRLAWN DR	GRIZZLY PEAK BLVD	R	SLURRY	5862		6	C	0.13		35	1995	O
2016	SOMERSET PL	SOUTHAMPTON AVE	DEAD END (JOHN HINKEL PARK)	R	OVERLAY	15012		5	D	0.08		23	2000	O
2016	SONOMA AVE	WEST CITY LIMIT (TULARE AVE)	JOSEPHINE ST	R	SLURRY	24806		5	B	0.37		60	1990	O
2016	SOUTHAMPTON AVE	ARLINGTON AVE	SAN LUIS RD	R	OVERLAY	62276		5	D	0.39		75	2000	O
2016	SPINNAKER WAY	BREAKWATER DR	MARINA BLVD	R	OVERLAY	101934		1	B	0.28		46	1991	O
2016	SPRUCE ST	ROSE ST	VINE ST	R	RECONSTRUCT	163820		56	B	0.13	10	36	1995	O
2016	THE ALAMEDA	CAPISTRANO AVE	TACOMA AVE	R	SLURRY	3078		5	B	0.05		65	2002	O
2016	THE ALAMEDA	TACOMA AVE	SOLANO AVE	R	OVERLAY	83639		5	B	0.24		48	1996	O
2016	THE UPLANDS	HILLCREST RD	EL CAMINO REAL	R	SLURRY	6963		8	B	0.12		60	1994	O
2016	THE UPLANDS	EL CAMINO REAL	TUNNEL RD	R	SLURRY	9141		8	B	0.20		79	1994	R
2016	TULARE AVE	SOLANO AVE	SONOMA AVE	R	OVERLAY	99127		5	D	0.32		48	1994	O
2016	VASSAR AVE	NORTH CITY LIMIT (KENTUCKY)	KENTUCKY AVE	R	RECONSTRUCT	60791		5	D	0.07	13	38	1999	R
2016	VASSAR AVE	KENTUCKY AVE	SPRUCE ST	R	OVERLAY	44699		5	D	0.22		53	1999	R
2016	VERMONT AVE	DEAD END	MARYLAND AVE	R	RECONSTRUCT	135285		5	D	0.15		4	1994	O
2016	VINCENTE AVE	NORTH END (VINCENTE WALK)	THOUSAND OAKS BLVD	R	OVERLAY	57233		5	D	0.27		59	1999	R
2016	VINCENTE AVE	THOUSAND OAKS BLVD	COLUSA AVE	R	SLURRY	9755		5	D	0.22		57	1999	R
2016	VINCENTE AVE	COLUSA AVE	PERALTA AVE	R	OVERLAY	38634		5	D	0.19		63	1999	R

NOTE: COLUMN P DENOTES PRESENCE OF (A) BICYCLE BOULEVARD, (B) BICYCLE ROUTE, (C) BUS ROUTE, OR (D) NONE

5-YEAR STREET PAVING PLAN

FISCAL YEAR	STREET NAME	FROM	TO	CLASS	TREATMENT	ESTIMATED COST	GREEN INFRA	DISTRICT	P	MILEAGE	SCORECARD	PCI	LAST PAVED	LAST TYPE
2016	WEST PARNASSUS CT	PARNASSUS RD	DEAD END	R	RECONSTRUCT	38653		6	D	0.04		13		
2016	WHITNEY ST	WOOLSEY ST	SOUTH CITY LIMIT	R	OVERLAY	7015		3	D	0.02		62		
2016	WOOLSEY ST	ADELINE ST	TREMONT ST	R	SLURRY	8792	*	3	B	0.11		64	1995	O
2016	WOOLSEY ST	TREMONT ST	TELEGRAPH AVE	R	OVERLAY	157979	*	37	B	0.43		62	1995	O

FISCAL YEAR 2016 TOTALS

Total Estimated Cost and Miles

\$9,021,709

17.64 miles

	MILEAGE	ESTIMATED COST	% COST	% MILEAGE
ARTERIALS	2.20	\$3,832,278	42%	13%
COLLECTORS	1.44	\$1,243,972	14%	8%
RESIDENTIALS	13.99	\$3,945,459	44%	79%
SLURRY SEALS	5.62	\$334,456		
OVERLAYS	8.37	\$2,468,813		
RECONSTRUCTS	3.65	\$6,218,440		
PCC STREETS	0.00	\$0		
BIKE ROUTES	8.70	\$4,180,472	46%	

