

TO: Supplemental Tax Oversight Committee
FROM: Doug Monn, Public Works Director
SUBJECT: **Street Maintenance Plan**
DATE: July 10, 2013

NEEDS: For the Committee to receive and file the road repair plan for maintenance/rehabilitation over the next four years.

- FACTS:**
1. A temporary half percent Supplemental Sales Tax was approved by voters for implementation April 1, 2013.
 2. On March 5, 2013, City Council identified 28 street segments as Phase I roads for repair.
 3. Selected roads are primarily arterials and collectors. Three residential streets are included because they function as collectors.
 4. Road deflection and core sample testing is complete. Options for maintenance treatments are identified (attached).
 5. In addition to the cost for maintenance, estimated costs include work specific to each street segment. Examples include completion of missing sidewalks, disabled ramp upgrades, tree root removal, drainage, and bike lanes. Some street segments include costs to improve aging water and sewer infrastructure (costs for water and sewer will be funded from the Water and Sewer Funds).
 6. The attached chart summarizes these costs. Additional pages detailing each road segment are also attached.

ANALYSIS & CONCLUSION:

The majority of maintenance treatments being recommended would remove and replace limited areas where the road base has failed and overlay the entire road segment surface.

The 28 street segments identified by City Council as Phase I road repairs include approximately 16.3 miles of road surface. Over the next three to four years Supplemental Sales Tax revenue can fund 15, or approximately 9.1 miles, of the selected roads.

The following street segments are suggested for the initial effort:

<i>road</i>	<i>span</i>
Airport Road	Scott to Pioneer Trail
Country Club Drive	Niblick to parking lot
Jackson	Union to Shannon Hill
Rolling Hills	Golden Hill to Creston
Shannon Hill	Creston to Jackson
South River Road	Navajo to Niblick
Walnut	Creston to Union
12th	Fresno to Vine

Creston	Oak Meadow to Golden Hill
Scott	Creston to Airport
Spring Street	1st to 36th
Union Road	Golden Hill to Highway 46
Creston	South River Road to Rolling Hills

POLICY

REFERENCE: Resolution No. 13-031 adopting the Phase I road repair list

FISCAL

IMPACT: Revenue and Expenditure Plan in the next four years is as follows:

	Projected Revenue Half Cent Supplemental Sales Tax	Projected Expense
FY 13/14	\$3,500,000	\$1,765,000 plus \$500,000 for Union Road
FY 14/15	\$3,650,000	\$7,880,000
FY 15/16	\$3,800,000	\$4,855,000
FY 16/17	\$3,950,000	
TOTAL	\$14,900,000	\$15,000,000

OPTIONS:

- a. Receive and file reports; or
- b. Amend, modify, or reject the above option.

Prepared by: Ditas Esperanza, P.E., Capital Projects Engineer

- Attachments:
- (1) Exhibit A: Recommended Plan ("Supplemental Sales Tax Estimates")
 - (2) Maintenance Treatment Options
 - (3) Detail sheets

SUPPLEMENTAL SALES TAX ESTIMATES — FIVE YEAR SUMMARY

	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17	5 YR TOTAL
REVENUE	\$0	\$3,500,000	\$3,650,000	\$3,800,000	\$3,950,000	\$14,900,000

TIER 1 STREETS

These are streets that can be ready for construction in 6 to 8 months

Airport Road	from Scott to Pioneer Trail
Country Club	from Niblick to parking lot
Jackson	from Union to Shannon Hill
Rolling Hills	from Golden Hill to Creston
Shannon Hill	from Creston to Jackson
South River Rd	from Navajo to Niblick
Walnut	from Creston to Union

Note: need to reserve \$500,000 to supplement budget for Union Road – Kleck to Montebello project

= staff recommendation (\$ 1,765,000 total)

SUMMER 2014 CONSTRUCTION

	5 – 7 yrs	10 – 15 yrs	20 yrs
Airport Rd, Scott to Pioneer Trail	N/A	\$180,000	\$440,000
Country Club, Niblick to parking lot	N/A	\$210,000	\$800,000
Rolling Hills, Golden Hill to Creston	N/A	\$650,000	\$2,279,000
So River, Navajo to Niblick	\$120,000	\$330,000	\$670,000
TOTAL	\$120,000	\$1,370,000	\$4,189,000

SUMMER 2015 CONSTRUCTION

	5 – 7 yrs	10 – 15 yrs	20 yrs
Jackson, Union to Shannon Hill	\$70,000	\$95,000	\$370,000
Shannon Hill, Creston to Jackson	N/A	\$160,000	\$618,000
Walnut, Creston to Union	N/A	\$350,000	\$1,312,000
TOTAL	\$70,000	\$605,000	\$2,300,000

NOTE: Highlighted are those recommended for repair in the next four years

TIER 2 STREETS

These are streets that require 12 to 18 months to be ready for construction

12th	from Fresno to Vine
Creston	from Oak Meadow to Golden Hill
Lana	from Melody to Creston
Scott	from Creston to Via Ramona
Scott	from Via Ramona to Airport
Sherwood	from Creston to Fontana
Spring St	from 1st to 12th
Spring St	from 12th to 24th
Spring St	from 24th to 36th
Vine	from 1st to 12th
Vine	from 12th to 24th
Vine	from 24th to 36th

= staff recommendation (\$ 7,880,000 total)

BEGIN DESIGN 2013 – CONSTRUCTION 2016

	5 – 7 yrs	10 – 15 yrs	20 yrs
12th St, Fresno to Vine	N/A	\$1,030,000	\$1,410,000
Creston, Oak Meadow to Golden Hill	N/A	\$675,000	\$1,170,000
Spring St, 1st to 12th	N/A	\$1,650,000	\$4,300,000
Spring St, 12th to 24th	N/A	\$1,235,000	\$4,600,000
Spring St, 24th to 36th	N/A	\$1,500,000	\$4,200,000
Scott, Creston to Via Ramona	N/A	\$350,000	\$600,000
Scott, Via Ramona to Airport	\$320,000	\$1,440,000	\$2,796,000
TOTAL	\$320,000	\$7,880,000	\$19,076,000

TIER 3 STREETS

These are streets that require 18 to 24 months to be ready for construction

6th	from Olive to Spring
13th	from Chestnut to Vine
24th	from Nacimiento to Hwy 101
Creston	from Sherwood to Scott
Olive	from south end to 6th
Union Rd	from Golden Hill to Hwy 46
Creston	from South River to Rolling Hills
Meadowlark	from Creston to east end
Oak	from 23rd to 24th

= staff recommendation (\$ 4,855,000 total)

BEGIN DESIGN 2013 – CONSTRUCTION 2017

	5 – 7 yrs	10 – 15 yrs	20 yrs
Union Rd, Golden Hill to Hwy 46	N/A	\$555,000	\$1,650,000
Creston, South River to Rolling Hills	N/A	\$4,300,000	\$6,900,000
TOTAL	N/A	\$4,855,000	\$8,550,000

STREET MAINTENANCE LIST No. 1
(aka Alternate B)
MAINTENANCE TREATMENT OPTIONS, DPW 12-12
 June 13, 2013

Street	From	To	Useful Life Expectancy		
			5 to 7 years	10 to 15 years	20 years
6th	Olive	Spring	*	\$565,000	\$950,000
12th	Fresno	Vine	*	\$1,030,000	\$1,410,000
13th	Chestnut	Vine	*	\$300,000	\$380,000
24th	Nacimiento Lake Drive	Highway 101	*	\$4,274,000	\$6,500,000
Airport	Scott	Pioneer Trail Rd	*	\$180,000	\$440,000
Country Club	Niblick	parking lot	*	\$210,000	\$800,000
Creston	Oak Meadow	Golden Hill	*	\$675,000	\$1,170,000
Creston	Sherwood	Scott	\$400,000	\$775,000	\$2,120,000
Creston	South River	Rolling Hills	*	\$4,300,000	\$6,900,000
Jackson	Union	Shannon Hill	\$70,000	\$95,000	\$370,000
Lana	Melody	Creston	*	\$590,000	\$980,000
Meadowlark	Creston	east end	\$185,000	\$750,000	\$1,150,000
Oak	23rd	24th	*	\$200,000	\$250,000
Olive	south end	6th	*	\$930,000	\$1,300,000
Rolling Hills	Golden Hill	Creston	*	\$650,000	\$2,279,000
Scott	Creston	Via Ramona	*	\$350,000	\$600,000
Scott	Via Ramona	Airport	\$320,000	\$1,440,000	\$2,796,000
Shannon Hill	Creston	Jackson	*	\$160,000	\$618,000
Sherwood	Creston	Fontana	\$566,000	\$800,000	\$2,434,000
South River	Navajo	Niblick	\$120,000	\$330,000	\$670,000
Spring	1st	12th	*	\$1,650,000	\$4,300,000
Spring	12th	24th	*	\$1,235,000	\$4,600,000
Spring	24th	36th	*	\$1,500,000	\$4,200,000
Union	Golden Hill	Highway 101	*	\$555,000	\$1,650,000
Vine	1st	12th	*	\$1,568,000	\$2,940,000
Vine	12th	24th	*	\$1,608,000	\$3,712,000
Vine	24th	36th	\$900,000	\$1,221,000	\$2,429,000
Walnut	Creston	Union	*	\$350,000	\$1,312,000
		TOTAL	\$2,561,000	\$28,291,000	\$59,260,000
* Road conditions preclude light surface treatment due to structural deficiencies and/or severe cracking					

6th Street — Olive to Spring

	5 – 7 yr	10 – 15 yr	20 yr
Maintenance treatment	N/A <i>not available because of structural deficiencies and/or pavement cracking</i>	\$165,000 <i>dig-outs of base failure and overlay</i>	\$550,000 <i>reconstruct up to 10-inches depth</i>
Pedestrian path issues: Install missing curb, gutter, sidewalks, and curb ramps	—	\$120,000	\$120,000
Drainage issues: Conventional design to control run-off	—	\$150,000	\$150,000
Water Master Plan: Upgrade waterline 4-inch to 8-inch, Oak to Spring	—	\$130,000	\$130,000
TOTAL	—	\$565,000	\$950,000

Additional Comments

- Tier 3 street

12th Street — Fresno to Vine

	5 – 7 yr	10 – 15 yr	20 yr
Maintenance treatment	N/A <i>not available because of structural deficiencies and/or pavement cracking</i>	\$270,000 <i>dig-outs of base failure and overlay</i>	\$650,000 <i>reconstruct up to 9-inches depth</i>
Pedestrian path issues: Install missing curb, gutter, sidewalks, curb ramps; and paint bike lanes	—	\$300,000	\$300,000
Sewer Master Plan: Upgrade sewer main from 6-inch to 8-inch, between Vine and Olive	—	\$60,000	\$60,000
Drainage issues: Control run-off by decreasing under-utilized pervious surfaces	—	\$400,000	\$400,000
TOTAL	—	\$1,030,000	\$1,410,000

Additional Comments

- Tier 2 street
- This street segment is a candidate for new storm water handling features. Low Impact Development measures similar to 21st Street would cost an additional \$900,000

13th Street — Chestnut to Vine

	5 – 7 yr	10 – 15 yr	20 yr
Maintenance treatment	N/A <i>not available because of structural deficiencies and/or pavement cracking</i>	\$100,000 <i>dig-outs of base failure and overlay</i>	\$180,000 <i>reconstruct up to 4.5-inches depth</i>
Pedestrian path issues: Install missing curb, gutter, sidewalks, and curb ramps	—	\$100,000	\$100,000
Drainage issues: Control run-off and decrease under-utilized pervious surfaces (by reducing asphalt area, less run-off)	—	\$100,000	\$100,000
TOTAL	—	\$300,000	\$380,000

Additional Comments

- Tier 3 street

24th Street — Nacimiento Lake Drive to US Route 101

	5 – 7 yr	10 – 15 yr	20 yr
Maintenance treatment	N/A <i>not available because of structural deficiencies and/or pavement cracking</i>	\$774,000 <i>cold-in-place recycling and place surface course</i>	\$3,000,000 <i>reconstruction</i>
Pedestrian path issues: Install improvements that would provide the following: <ul style="list-style-type: none"> • Safer pedestrian path around Flamson School and Business Center (Riverside to Highway 101) • Finish sidewalk connections on north side between Vine and Royal Court • Finish sidewalk at SE corner 24th/Park • Complete sidewalk project on Event Center frontage • Stripe bike lanes at 24th Street Bridge • Stripe Class II bike lanes, continuous center turn lane from Nacimiento Lake Drive to Vine Street Note: No pedestrian path at bridge	—	\$3,500,000	\$3,500,000
TOTAL	—	\$4,274,000	\$6,500,000

Additional Comments

- Tier 3 street
- This street section is a candidate for Gateway Entry Treatment for an additional cost of \$800,000

Airport Road — Scott to Pioneer Trail Road

	<i>5 – 7 yr</i>	<i>10 – 15 yr</i>	<i>20 yr</i>
Maintenance treatment	N/A <i>not available because of structural deficiencies and/or pavement cracking</i>	\$70,000 <i>dig-outs of base failure and overlay</i>	\$330,000 <i>reconstruct up to 12-inches depth</i>
Pedestrian path issues: Install curb ramps and paint bike lanes	—	\$70,000	\$70,000
Median conversion: Remove landscaping and replace with drought tolerant landscape consistent with adopted City Standards; install pervious pavers	—	\$40,000	\$40,000
TOTAL	—	\$180,000	\$440,000

Additional Comments

- Tier 1 street

Country Club Drive — Niblick to parking lot

	5 – 7 yr	10 – 15 yr	20 yr
Maintenance treatment	N/A <i>not available because of structural deficiencies and/or pavement cracking</i>	\$210,000 <i>dig-outs of base failure and overlay</i>	\$800,000 <i>reconstruct up to 10,75-inches depth</i>
TOTAL	—	\$210,000	\$800,000

Additional Comments

- Tier 1 street

Creston Road — Oak Meadow Lane to Golden Hill Road

	5 – 7 yr	10 – 15 yr	20 yr
Maintenance treatment	N/A <i>not available because of structural deficiencies and/or pavement cracking</i>	\$375,000 <i>cold-in-place recycling and placing surface course</i>	\$870,000 <i>reconstruct up to 10-inches depth</i>
Pedestrian path issues: <ul style="list-style-type: none"> • Revise curb ramps (very steep and no landings) to meet ADA standards; • Extend curbs at Lana intersection to decrease pedestrian distance to cross Lana 	—	\$300,000	\$300,000
TOTAL	—	\$675,000	\$1,170,000

Additional Comments

- Tier 2 street

Creston Road — Sherwood to Scott

	5 – 7 yr	10 – 15 yr	20 yr
Maintenance treatment	\$400,000 <i>place cape seal</i>	\$455,000 <i>dig-outs of base failure and overlay</i>	\$1,800,000 <i>reconstruct up to 8-inches depth</i>
Pedestrian path issues: Formalize stop sign at Scott Street with a raised median	—	\$170,000	\$170,000
Re-design: Reduce pavement width to two lanes + turn lane to reduce run-off, pavement maintenance, and under-utilized impervious surfaces	—	\$150,000	\$150,000
TOTAL	\$400,000	\$775,000	\$2,120,000

Additional Comments

- Tier 3 street

Creston Road — South River to Rolling Hills

	5 – 7 yr	10 – 15 yr	20 yr
Maintenance treatment	N/A <i>not available because of structural deficiencies and/or pavement cracking</i>	\$1,300,000 <i>grind and overlay up to 4 inches</i>	\$3,900,000 <i>reconstruct up to 10-inches depth</i>
Extensive design: <ul style="list-style-type: none"> • Pedestrian path around schools, high density residential area, and churches • Paint/install bike lanes Note: Design/construction of pedestrian paths would be within existing right-of-way; no property acquisition	—	\$3,000,000	\$3,000,000
TOTAL	—	\$4,300,000	\$6,900,000

Additional Comments

- Tier 3 street

Jackson Drive — Union Road to Shannon Hill

	5 – 7 yr	10 – 15 yr	20 yr
Maintenance treatment	\$70,000 <i>base failure dig-outs and thin overlay</i>	\$95,000 <i>dig-outs of base failure and overlay</i>	\$370,000 <i>reconstruct up to 10.5-inches depth</i>
TOTAL	\$70,000	\$95,000	\$370,000

Additional Comments

- Tier 1 street

Lana — Melody Drive to Creston

	5 – 7 yr	10 – 15 yr	20 yr
Maintenance treatment	N/A <i>not available because of structural deficiencies and/or pavement cracking</i>	\$240,000 <i>base failure dig-outs and overlay</i>	\$630,000 <i>reconstruct up to 10.5-inches depth</i>
Pedestrian path issues: • Install curb ramps • Add bike lanes	—	\$350,000	\$350,000
TOTAL	—	\$590,000	\$980,000

Additional Comments

- Tier 2 street

Meadowlark Road — Creston Road to east end

	<i>5 – 7 yr</i>	<i>10 – 15 yr</i>	<i>20 yr</i>
Maintenance treatment	\$185,000 <i>place thin overlay</i>	\$500,000 <i>dig-outs of base failure and overlay</i>	\$900,000 <i>reconstruct up to 10-inches depth</i>
Pedestrian path issues: <ul style="list-style-type: none"> • Install curb extensions and LED crosswalk • Stripe for bike lanes 	—	\$250,000	\$250,000
TOTAL	\$185,000	\$750,000	\$1,150,000

Additional Comments

- The Beechwood Specific Plan has shown the elimination of Meadowlark (transform into park trail) from Beechwood to east City limits; no investment should be made in this segment until the Specific Plan is adopted.
- Tier 3 street

Oak Street — 23rd to 24th

	5 – 7 yr	10 – 15 yr	20 yr
Maintenance treatment	N/A	\$110,000 <i>base failure dig-outs and overlay</i>	\$160,000 <i>reconstruct up to 6-inches depth</i>
Pedestrian path issues: Install curb ramps and bike lanes as this is a de facto parking lot for Flamson School sports events	—	\$90,000	\$90,000
TOTAL	—	\$200,000	\$250,000

Additional Comments

- Tier 3 street

Olive Street — south end to 6th

	5 – 7 yr	10 – 15 yr	20 yr
Maintenance treatment	N/A <i>not available because of structural deficiencies and/or pavement cracking</i>	\$130,000 <i>base failure dig-outs and overlay</i>	\$500,000 <i>reconstruct up to 10-inches depth</i>
Pedestrian path issues: Install curb ramps and missing sidewalks	—	\$800,000	\$800,000
TOTAL	—	\$930,000	\$1,300,000

Additional Comments

- Tier 3 street

Rolling Hills Road — Golden Hill to Creston Road

	5 – 7 yr	10 – 15 yr	20 yr
Maintenance treatment	N/A <i>not available because of structural deficiencies and/or pavement cracking</i>	\$500,000 <i>base failure dig-outs and overlay</i>	\$2,129,000 <i>reconstruct up to 11.5-inches depth</i>
Pedestrian path issues: Install curb ramps and paint bike lanes (both sides)	—	\$150,000	\$150,000
TOTAL	—	\$650,000	\$2,279,000

Additional Comments

- Tier 1 street

Scott Street — Creston Road to Via Ramona

	5 – 7 yr	10 – 15 yr	20 yr
Maintenance treatment	N/A <i>not available because of structural deficiencies and/or pavement cracking</i>	\$150,000 <i>base failure dig-outs and overlay</i>	\$400,000 <i>reconstruct up to 8.5-inches depth</i>
Pedestrian path issues: Install sidewalks and paint bike lanes	—	\$200,000	\$200,000
TOTAL	—	\$350,000	\$600,000

Additional Comments

- Tier 2 street

Scott Street — Via Ramona to Airport

	<i>5 – 7 yr</i>	<i>10 – 15 yr</i>	<i>20 yr</i>
Maintenance treatment	\$320,000 <i>base failure dig-outs and place thin overlay</i>	\$440,000 <i>base failure dig-outs and overlay</i>	\$1,796,000 <i>reconstruct up to 10.5-inches depth</i>
Pedestrian path issues: Install curb ramps and paint bike lanes	—	\$400,000	\$400,000
Tree roots: Remove tree root intrusions on pavement and curb ramps	—	\$300,000	\$300,000
Medians: Replace trees in medians with drought tolerant plants or pervious pavement	—	\$300,000	\$300,000
TOTAL	\$320,000	\$1,440,000	\$2,796,000

Additional Comments

- Tier 2 street

Shannon Hill — Creston Road to Jackson

	<i>5 – 7 yr</i>	<i>10 – 15 yr</i>	<i>20 yr</i>
Maintenance treatment	N/A <i>not available because of structural deficiencies and/or pavement cracking</i>	\$160,000 <i>base failure dig-outs and overlay</i>	\$618,000 <i>reconstruct up to 10.5-inches depth</i>
TOTAL	—	\$160,000	\$618,000

Additional Comments

- Tier 1 street

Sherwood Road — Creston Road to Fontana

	<i>5 – 7 yr</i>	<i>10 – 15 yr</i>	<i>20 yr</i>
Maintenance treatment	\$ 566,000 <i>dig-outs of base failure and place thin overlay</i>	\$600,000 <i>dig-outs of base failure and overlay</i>	\$2,234,000 <i>reconstruct up to 12-inches depth</i>
Re-design: Remove north side parking area and establish green median, thereby reducing pavement area and eliminating under-utilized impervious surfaces	—	\$200,000	\$200,000
TOTAL	\$566,000	\$800,000	\$2,434,000

Additional Comments

- Tier 2 street

South River Road — Navajo to Niblick

	5 – 7 yr	10 – 15 yr	20 yr
Maintenance treatment	\$ 120,000 <i>place cape seal</i>	\$160,000 <i>base failure dig-outs and overlay</i>	\$500,000 <i>reconstruct up to 8-inches depth</i>
Pedestrian path issues: Upgrade curb ramps	—	\$170,000	\$170,000
TOTAL	\$120,000	\$330,000	\$670,000

Additional Comments

- Tier 1 street

Spring Street — 1st Street to 12th Street

	5 – 7 yr	10 – 15 yr	20 yr
Maintenance treatment	N/A <i>not available because of structural deficiencies and/or pavement cracking</i>	\$1,350,000 <i>base failure dig-outs and overlay</i>	\$4,000,000 <i>reconstruct up to 12-inches depth</i>
Drainage issues: Upgrade drain inlets	—	\$300,000	\$300,000
TOTAL	—	\$1,650,000	\$4,300,000

Additional Comments

- Last reconstruction was 20 years ago
- All curb ramps have been upgraded
- Tier 2 street

Spring Street — 12th Street to 24th

	5 – 7 yr	10 – 15 yr	20 yr
Maintenance treatment	N/A <i>not available because of structural deficiencies and/or pavement cracking</i>	\$1,035,000 <i>cold-in-place recycling and surface course</i>	\$4,000,000 <i>reconstruct up to 12-inches depth</i>
Drainage issues: Upgrade drain inlets	—	\$200,000	\$200,000
TOTAL	—	\$1,235,000	\$4,600,000

Additional Comments

- Last reconstruction was 20 years ago
- All curb ramps have been upgraded
- Tier 2 street

Spring Street — 24th Street to 36th

	5 – 7 yr	10 – 15 yr	20 yr
Maintenance treatment	N/A <i>not available because of structural deficiencies and/or pavement cracking</i>	\$1,300,000 <i>cold-in-place recycling and surface course</i>	\$4,000,000 <i>reconstruct up to 12-inches depth</i>
Water facilities: Perform maintenance on leaky services and old valves	—	\$200,000	\$200,000
TOTAL	—	\$1,500,000	\$4,200,000

Additional Comments

- Tier 2 street

Union Road — Golden Hill to Highway 46

	5 – 7 yr	10 – 15 yr	20 yr
Maintenance treatment	N/A <i>not available because of structural deficiencies and/or pavement cracking</i>	\$305,000 <i>grind and overlay</i>	\$1,400,000 <i>reconstruct up to 10-inches depth</i>
Pedestrian path issues: Install missing ramps and sidewalk, and paint bike lanes	—	\$250,000	\$250,000
TOTAL	—	\$555,000	\$1,650,000

Additional Comments

- Tier 3 street

Vine Street — 1st Street to 12th Street

	5 – 7 yr	10 – 15 yr	20 yr
Maintenance treatment	N/A <i>not available because of structural deficiencies and/or pavement cracking</i>	\$1,168,000 <i>base failure dig-outs and overlay</i>	\$2,540,000 <i>reconstruct up to 11.5-inches depth</i>
Pedestrian path issues: Upgrade curb ramps	—	\$400,000	\$400,000
TOTAL	—	\$1,568,000	\$2,940,000

Additional Comments

- Last reconstruction was 16 to 18 years ago
- Tier 2 street

Vine Street — 12th Street to 24th

	5 – 7 yr	10 – 15 yr	20 yr
Maintenance treatment	N/A <i>not available because of structural deficiencies and/or pavement cracking</i>	\$1,008,000 <i>base failure dig-outs and overlay</i>	\$3,112,000 <i>reconstruct up to 11.5-inches depth</i>
Pedestrian path issues: Upgrade curb ramps and install missing sidewalks	—	\$600,000	\$600,000
TOTAL	—	\$1,608,000	\$3,712,000

Additional Comments

- Last reconstruction was 16 to 18 years ago
- Tier 2 street

Vine Street — 24th Street to 36th

	5 – 7 yr	10 – 15 yr	20 yr
Maintenance treatment	\$300,000 <i>base failure dig-outs and place thin overlay</i>	\$321,000 <i>base failure dig-outs and overlay</i>	\$1,529,000 <i>reconstruct up to 11.5-inches depth</i>
Pedestrian path issues: Upgrade curb ramps	<i>not needed</i>	\$300,000	\$300,000
Improve gravel section: Pave gravel portion behind Georgia Brown School (curb, gutter and sidewalks)	\$600,000	\$600,000	\$600,000
TOTAL	\$900,000	\$1,221,000	\$2,429,000

Additional Comments

- Tier 2 street

Walnut Drive — Creston Road to Union Road

	5 – 7 yr	10 – 15 yr	20 yr
Maintenance treatment	N/A <i>not available because of structural deficiencies and/or pavement cracking</i>	\$350,000 <i>base failure and dig-outs overlay</i>	\$1,312,000 <i>reconstruct up to 9.5-inches depth</i>
TOTAL	—	\$350,000	\$1,312,000

Additional Comments

- Tier 1 street