

TO: James L. App, City Manager  
FROM: Doug Monn, Public Works Director  
SUBJECT: **Street Maintenance Plan**  
DATE: July 2, 2013

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**NEEDS:** For City Council to consider roads 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:

| <u>road</u>        | <u>span</u>            |
|--------------------|------------------------|
| 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<br>Half Cent Supplemental Sales Tax | Projected Expense                            |
|----------|---|--|
| FY 13/14 | \$3,500,000   | \$1,765,000<br>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. Direct staff to
  - (1) proceed with the repair plan per attached Exhibit A, and
  - (2) engage engineering assistance to prepare plans and specifications.
- 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

## EXHIBIT A

### 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  |
|  |                       | <b>TOTAL</b>     | \$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

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

Additional Comments

- Tier 3 street

## 12th Street — Fresno to Vine

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

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

Additional Comments

- Tier 3 street

24th Street — Nacimiento Lake Drive to US Route 101

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

|   | <b>5 – 7 yr</b>   | <b>10 – 15 yr</b>                                       | <b>20 yr</b>  |
|---|---|---|---|
| <b>Maintenance treatment</b>  | N/A<br><i>not available because of structural deficiencies and/or pavement cracking</i> | \$70,000<br><i>dig-outs of base failure and overlay</i> | \$330,000<br><i>reconstruct up to 12-inches depth</i> |
| <b>Pedestrian path issues:</b><br>Install curb ramps and paint bike lanes   | —   | \$70,000  | \$70,000  |
| <b>Median conversion:</b><br>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

|                              | <b>5 – 7 yr</b>   | <b>10 – 15 yr</b>  | <b>20 yr</b>   |
|------------------------------|---|--|--|
| <b>Maintenance treatment</b> | N/A<br><i>not available because of structural deficiencies and/or pavement cracking</i> | \$210,000<br><i>dig-outs of base failure and overlay</i> | \$800,000<br><i>reconstruct up to 10,75-inches depth</i> |
| <b>TOTAL</b>                 | —   | \$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   |
|--|---|--|---|
| <b>Maintenance treatment</b>   | N/A<br><i>not available because of structural deficiencies and/or pavement cracking</i> | \$375,000<br><i>cold-in-place recycling and placing surface course</i> | \$870,000<br><i>reconstruct up to 10-inches depth</i> |
| <b>Pedestrian path issues:</b><br><ul style="list-style-type: none"> <li>• Revise curb ramps (very steep and no landings) to meet ADA standards;</li> <li>• Extend curbs at Lana intersection to decrease pedestrian distance to cross Lana</li> </ul> | —   | \$300,000  | \$300,000   |
| <b>TOTAL</b>   | —   | \$675,000  | \$1,170,000   |

Additional Comments

- Tier 2 street

## Creston Road — Sherwood to Scott

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

Additional Comments

- Tier 3 street

## Creston Road — South River to Rolling Hills

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

**Additional Comments**

- Tier 3 street

Jackson Drive — Union Road to Shannon Hill

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

Additional Comments

- Tier 1 street

Lana — Melody Drive to Creston

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

Additional Comments

- Tier 2 street

Meadowlark Road — Creston Road to east end

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

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

Additional Comments

- Tier 3 street

Olive Street — south end to 6th

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

Additional Comments

- Tier 3 street

## Rolling Hills Road — Golden Hill to Creston Road

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

Additional Comments

- Tier 1 street

## Scott Street — Creston Road to Via Ramona

|   | <b>5 – 7 yr</b>   | <b>10 – 15 yr</b>   | <b>20 yr</b>   |
|---|---|---|--|
| <b>Maintenance treatment</b>  | N/A<br><i>not available<br/>because of structural<br/>deficiencies and/or<br/>pavement cracking</i> | \$150,000<br><i>base failure<br/>dig-outs and<br/>overlay</i> | \$400,000<br><i>reconstruct up to<br/>8.5-inches depth</i> |
| <b>Pedestrian path issues:</b><br>Install sidewalks and<br>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>  |
|--|--|---|---|
| <b>Maintenance treatment</b>   | \$320,000<br><i>base failure<br/>dig-outs and<br/>place thin overlay</i> | \$440,000<br><i>base failure<br/>dig-outs and<br/>overlay</i> | \$1,796,000<br><i>reconstruct up to<br/>10.5-inches depth</i> |
| <b>Pedestrian path issues:</b><br>Install curb ramps and<br>paint bike lanes                           | —  | \$400,000   | \$400,000   |
| <b>Tree roots:</b><br>Remove tree root<br>intrusions on pavement<br>and curb ramps                     | —  | \$300,000   | \$300,000   |
| <b>Medians:</b><br>Replace trees in<br>medians with drought<br>tolerant plants or<br>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

|                              | <b>5 – 7 yr</b>   | <b>10 – 15 yr</b>                                     | <b>20 yr</b>  |
|------------------------------|---|---|---|
| <b>Maintenance treatment</b> | N/A<br><i>not available because of structural deficiencies and/or pavement cracking</i> | \$160,000<br><i>base failure dig-outs and overlay</i> | \$618,000<br><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

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

Additional Comments

- Tier 2 street

## South River Road — Navajo to Niblick

|  | <b>5 – 7 yr</b>                      | <b>10 – 15 yr</b>   | <b>20 yr</b>   |
|--|--------------------------------------|---|--|
| <b>Maintenance treatment</b>                         | \$ 120,000<br><i>place cape seal</i> | \$160,000<br><i>base failure<br/>dig-outs and<br/>overlay</i> | \$500,000<br><i>reconstruct up to<br/>8-inches depth</i> |
| <b>Pedestrian path issues:</b><br>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

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

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

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

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

Additional Comments

- Tier 3 street

## Vine Street — 1st Street to 12th Street

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

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

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

Additional Comments

- Tier 2 street

## Walnut Drive — Creston Road to Union Road

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

Additional Comments

- Tier 1 street