



Street Preventative Maintenance Program (SPMP) Update & Year 3 (2016) Work Plan



**Council Presentation
January 26, 2016**

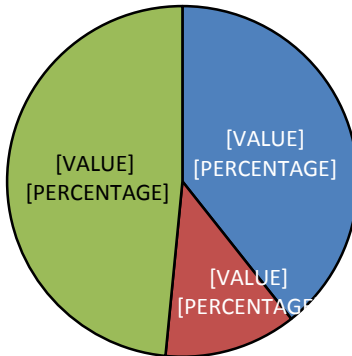


SPMP Year 1 (2014) Summary



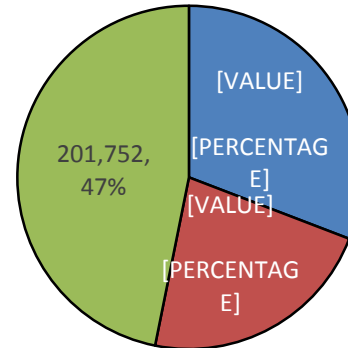
➤ 142 Streets treated

- Overlays (Contracted)
 - 289,903 Total Square Yards
 - Total length – 91,566 ft. / 17.34 miles
 - Notice to Proceed (NTP) – Feb. 2014
 - Completed February 2015



■ Arterial ■ Collector ■ Res./Local

- Seal Coats (Contracted)
 - 430,775 Total Square Yards
 - Total length – 135,484 ft. / 25.7 miles
 - NTP – Feb. 2014
 - Completed October 2015



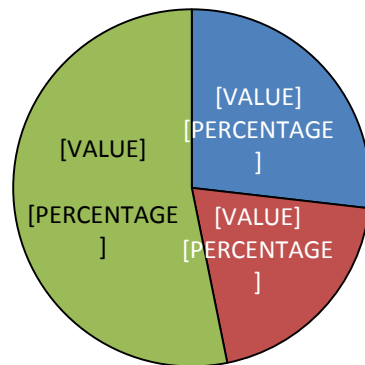
■ Arterial ■ Collector ■ Res./Local



City Seal Coats – Year 1 (2014)



- **64 Streets maintained by City Staff**
- **Seal Coats**
 - 350,028 Total Square Yards
 - Total length – 112,633 ft. / 21.3 miles
 - NTP – May 2014
 - Completed September 2014



■ Arterial ■ Collector ■ Res./Local

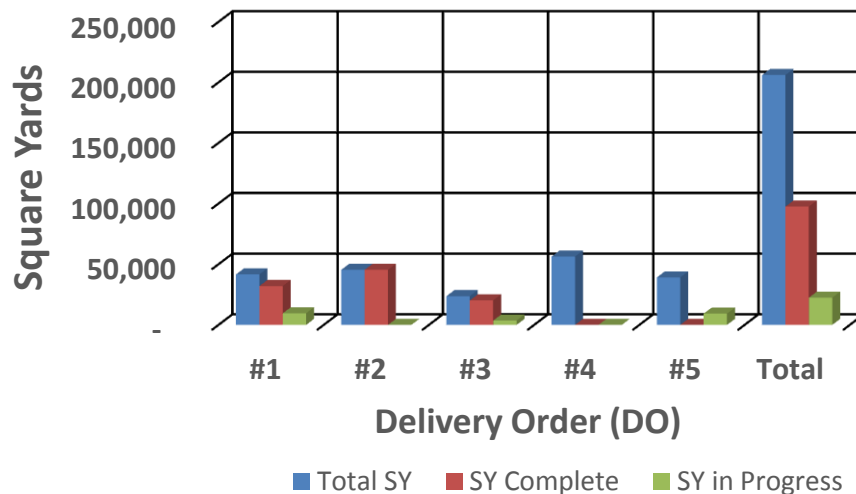


SPMP Year 2 (2015) Update OVERLAYS



➤ 58 Streets maintained

- 206,109 Total Square Yards (SY)
- Total length – 63,731 ft / 12 miles
- NTP – March 2015



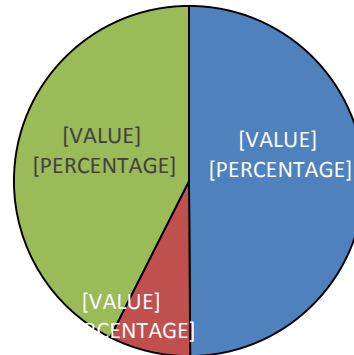
| OVERLAY | | | | |
|---------|----------|-------------|----------------|------------|
| DO | Total SY | SY Complete | SY in Progress | % Complete |
| #1 | 41,604 | 32,021 | 9,584 | 77% |
| #2 | 45,338 | 45,338 | 0 | 100% |
| #3 | 23,722 | 20,160 | 3,562 | 85% |
| #4 | 56,320 | - | 0 | 0% |
| #5 | 39,124 | - | 9,260 | 0% |
| Total | 206,109 | 97,518 | 22,406 | 47% |



City Seal Coats – Year 2 (2015)



- **60 Streets maintained by City Staff**
- **Seal Coats**
 - 274,083 Total Square Yards
 - Total length – 81,440 ft. / 15.4 miles
 - NTP – July 2015
 - Completed October 2015



■ Arterial ■ Collector ■ Res./Local



SPMP Year 2 (2015) Update – SEAL COATS



➤ 107 Streets maintained

- 451,092 Total Square Yards (SY)
- Total length – 131,570 ft / 25 miles
- NTP – June 2015

| SEAL COATS | | | | |
|------------|----------|-------------|----------------|------------|
| DO | Total SY | SY Complete | SY in Progress | % Complete |
| #1 | 52,772 | 3,790 | 0 | 7% |
| #2 | 98,543 | - | 0 | 0% |
| #3 | 85,446 | - | 0 | 0% |
| #4 | 105,054 | - | 0 | 0% |
| #5 | 109,277 | - | 0 | 0% |
| Total | 451,092 | 3,790 | - | 1% |

PROBLEMS:

- **Weather Issues**
 - ✓ Sensitivity to rain & temperatures
 - ✓ Recovery schedule priority
 - ✓ Rework
- **Contractor Resource Issues**
 - ✓ Insufficient crews
 - ✓ Deficient execution rate
- **Rework Delays**
 - ✓ Work rejection



Plan for Program Improvement



➤ Weather Issues

- Match program execution to seasonal opportunity
 - ✓ Align Work Plan with fiscal year (Oct – Sept) instead of Jan - Dec
 - ✓ Allows for work to start in October instead of April

➤ Contractor Resource Issues

- Rebid Sealcoat - Work Plan Year 2 (2015) & 3 (2016)
 - ✓ Conducted two meetings with local contracting community
 - ✓ Smaller Construction Packages
 - ✓ Multiple contracts (i.e., 3 - \$1M Seal Coat)
- Evaluate penalties



SPMP Year 3 (2016) Work Plan



SPMP Process Improvement



- Automated PCI Data Collection
 - Transmap completed Data Collection
 - PCI analysis underway
 - ✓ First reports in January
 - ✓ Complete in Summer 2016
 - New data incorporated into Year 3 (2016) Work Plan
 - ✓ Prior to issuing first Delivery Order (= "Project Unit")
- Increased Geotech Testing
 - Avoids excessive repairs
- Increased Inspection
 - Additional Inspector added
- Revised Delivery Order Formatting
 - Incorporates individual street tracking



SPMP Street Selection Criteria

(Presented 11/19/2013)



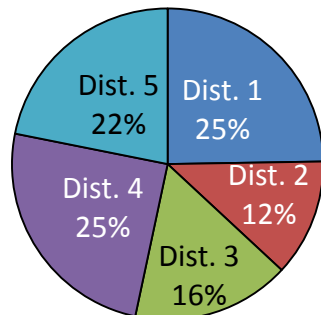
1. Work based on **Pavement Condition Index (PCI)** scores:
 1. Approximately 56 for Overlays and 71 for Seal Coat
 2. Work the ones closest to 56 and 71 first
2. **Distribute by District** based on Capital Assets needing Maintenance (% of Network)
3. **Distribute by Street Classification** (Residential, Collectors & Arterials) based on Capital Assets (% of Network)
4. **Coordinate work** for Residential by Neighborhood and initial subdivision construction dates
5. **Distribute work** by percentage of Overlay and Seal Coats
6. **Prioritize by traffic loads** causing potential premature failure of roadway



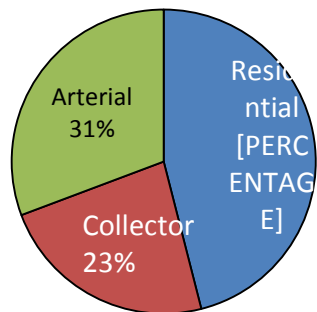
SPMP Requirements & Year 3 (2016) Work Plan Comparison



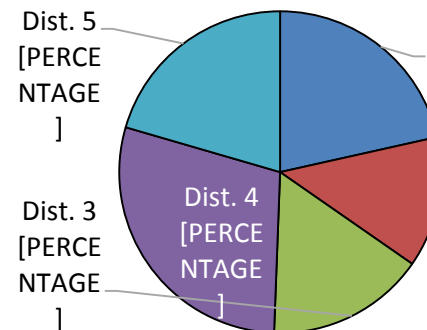
Maintenance Requirements by District



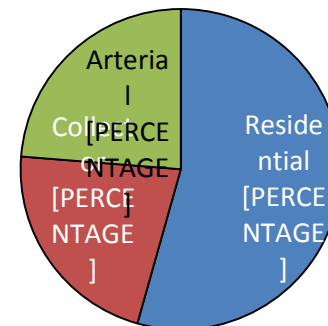
Maintenance Requirements by Road Classification



2016 SPMP Work Plan by District



2016 SPMP Work Plan by Road Class

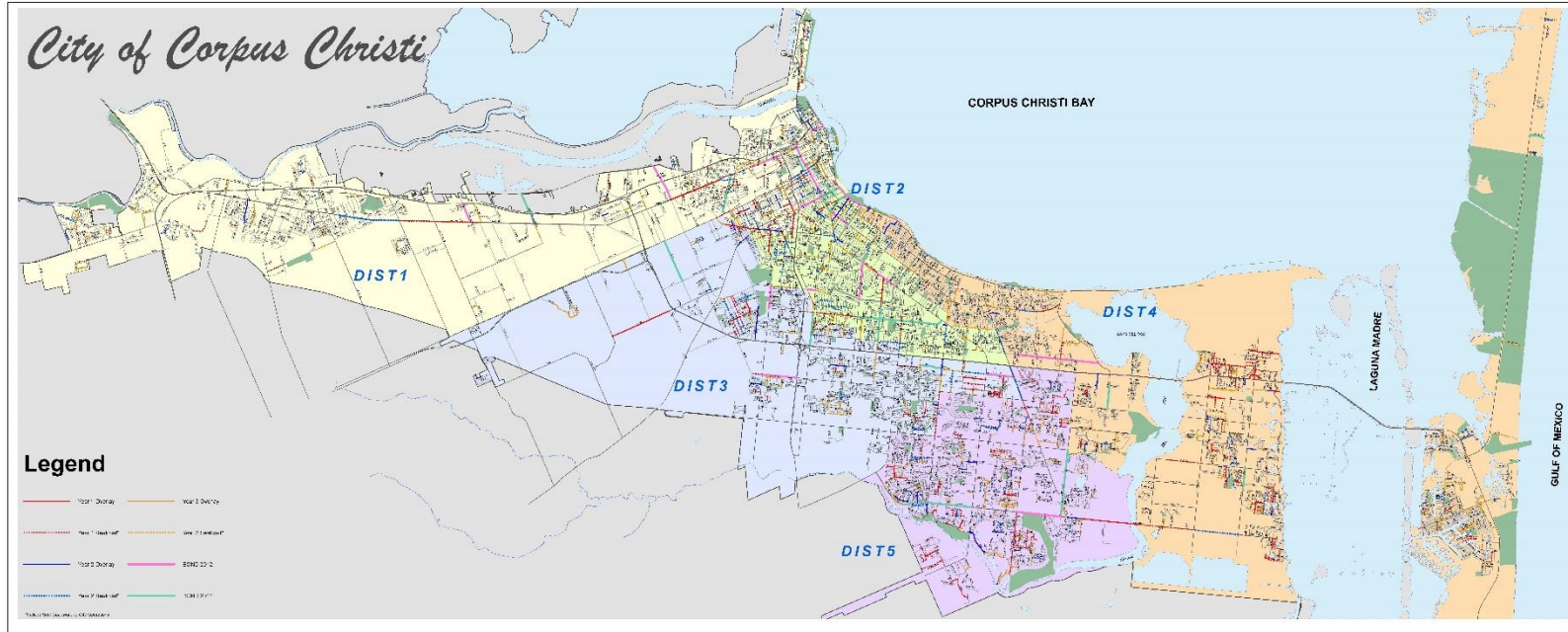




SPMP Year 3 (2016) Work Plan



*SPMP Work Plan (Year 1, Year 2, Year 3)
and BOND Work 2012 - 2014*





3-Year Summary



| | | Year 1 (2014) | Year 2 (2015) | Year 3 (2016) | 3-Year Total |
|-------------------------|--------------|------------------|------------------|------------------|--------------|
| Overlay (Contractor) | # Streets | 58 | 58 | 86 | 202 |
| | Square Yards | 289,903 | 206,109 | 329,486 | 825,498 |
| | Miles | 17.34 | 12 | 18 | 47.34 |
| Seal (Contractor) | # Streets | 84 | 107 | 111 | 302 |
| | Square Yards | 430,775 | 451,092 | 370,062 | 1,251,929 |
| | Miles | 25.7 | 25 | 21.4 | 72.1 |
| Seal (City) | # Streets | 64 | 60 | 90 | 214 |
| | Square Yards | 350,028 | 274,083 | 321,428 | 945,539 |
| | Miles | 21.3 | 15.4 | 18.4 | 55.1 |
| Total | # Streets | 206 | 225 | 287 | 718 |
| | Square Yards | 1,070,706 | 931,284 | 1,020,976 | 3,022,966 |
| | Miles | 64.34 | 52.4 | 57.8 | 174.54 |



Next Steps



- Approve Year 3 Work Plan (Resolution)
- Approve Contract for Delivery Order (DO) development
- Verify PCI w/ Transmap data
- Rebid Seal Coat
- Rebid Overlay at end of fiscal year



Questions?



Extending the life of our streets.





SPMP Overlay



Lake Apache - Before



Lake Apache - After



SPMP Overlay



Skipper - Before



Skipper - After



SPMP Seal Coat



Corinth - Before



Corinth - After



SPMP Seal Coat



Aspenwood - Before



Aspenwood - After



SPMP Update

