Street Maintenance Update

Potholes, Street Resurfacing, Street Excavation Policy



TI&O Committee • March 3, 2021

Big Idea : Street Maintenance Strategy

A combination of in-house maintenance crews + contractors + street resurfacing program + better street excavation policy will:

- Keep up with demand
- Provide basic street maintenance services to our residents
- Improve our overall street rating using better indicators and innovative data collection
- Generate additional funds/cost savings to street maintenance



- Pothole Update
- Street Resurfacing Program
- Street Excavation Policy (Utility Coordination)



Pothole Summary



Current Status

- Total Pothole Cases Open as of 3/2/21: 669 (filtered for duplicates)
- FY2020: 87,176 potholes filled (May 1, 2019-April 30, 2020)
- Total 311 Cases closed in FY2020: 19,462
- Crews actually fill nearly 5x the number potholes reported to 311
- May 1, 2020-Jan. 2021: 43,447 potholes filled



Pothole Plan







Current capacity:

- Pothole crews: 16 (~60+ employees)
- Hotbox Asphalt Trucks: 10
- Asphalt Trailers: 3
- Additional dump trucks available: 3
- Contractor crews as needed
- Roughly \$1.3M available for pothole patching efforts \$825K for three pothole contracts \$460K for asphalt to be used by in-house crews Proposed FY22: \$200K for asphalt due to budget reductions

Pothole Plan



()





D Camera

Using new technology:

- Rubicon z: a camera device attached to city vehicles that takes photos of the road surface and identifies locations of cracks and potholes
- Crews can then create work orders faster and more efficiently
- 6 month pilot test on 11 city trucks (trash trucks and dump trucks)

Photo source: Rubicon Technologies, LLC

Street Preservation Program (Street Resurfacing)



2020-2021 Program Overview

- Total Budget: \$17M
- Total Streets: 51 streets
- Still need to be completed: 18 streets
- For current program year, work will resume in late March & wrap up by May 1, 2021



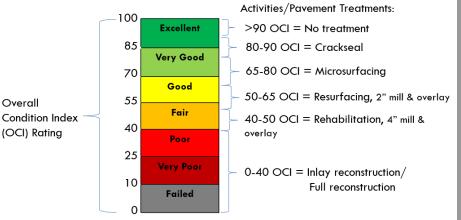
Street Preservation Program

2020-2021 Program Overview

Type of Contract	<u>Project Number</u>	Title	<u>Contract Value</u>	Completed Work	Remaining Work
Resurfacing	89008841	View High Drive Rehabilitation - I-470 to 109th	\$2,272,175.25	\$1,678,314.29	\$593,860.96
Resurfacing	89008843(20-1)	Missouri River to Northern City Limits	\$3,926,433.85	\$3,356,766.77	\$569,667.08
Resurfacing	89008855 (20-2)	Missouri River to 63rd Street	\$3,942,781.20	\$1,029,037.00	\$2,913,744.20
Resurfacing	89008856 (20-3)	63rd Street to Southern City Limits	\$3,930,384.80	\$1,366,915.26	\$2,563,469.54
Crack Sealing	89008858 (20-CS)	Citywide Crack Sealing	\$464,400.00	\$0.00	\$464,400.00
Microsurfacing	89008859 (20-MS)	Citywide Misrosurfacing	\$641,243.16	\$390,472.71	\$250,770.45
Pothole	89008868 (20PH-1)	Missouri River to Northern City Limits	\$275,000.00	\$0.00	\$275,000.00
Pothole	89008869 (20PH-2)	Missouri River to 63rd Street	\$275,000.00	\$0.00	\$275,000.00
Pothole	89008870 (20PH-3)	63rd Street to Southern City Limits	\$275,000.00	\$0.00	\$275,000.00
Total	, <i>,</i> ,		\$16,002,418.26	\$7,821,506.03	\$8,180,912.23

Street Preservation Program

Street Condition Rating System



The overall condition of our road system^{*} is 47 or in "Fair" condition *Asphalt or concrete streets that have a classification

of arterial, collector, or residential.



Current plan:

- Primarily focused on arterials, some collectors and pothole patching on residentials
- Currently, we do not overlay a road with a condition lower than 40
- Many factors inform the annual street resurfacing program including: street condition, traffic volumes, complete streets improvements, coordination with utility work and other projects and pothole data
- Current OCI rating in the system is based on data from 3 years ago (plus degradation)



Street Preservation Program

2021-2022 Program Overview

- Proposed budget increase of \$20M (\$39M total)
- Currently narrowing down the candidate list based on utility work & other projects
- Final candidate list available late spring 2021
- Street condition data will be collected this year (3-year inspection cycle)
- Improve/add indicators for street selection; ensuring OCI is accurate to use the right tool at the right time (rideability, traffic counts and cost/benefit analysis)
- \$500K set aside per Council District for priority selection

Street Excavation Policy



Photo: @QuintonLucasKC

- Ordinance #200916
- Increase coordination with utility companies to include on-going meetings, data sharing, project reviews and communicating geographical information on current and future projects
- Update the current fee structure for excavation permits, traffic control permits, steel street-plates, etc. to better reflect the city's actual costs
- Require street plates to be embedded



Street Excavation Policy

Revised Patching and Street Repair Regulations: Restrict excavations on roads that received an asphalt overlay < 1 year Require full-lane width and full-block face length asphalt resurfacing if a pavement cut is done on a road with

pavement surface <7 years old

- Require a full-lane width asphalt resurfacing if more than 20% of that block consists of patches, both old and new
- Combine patches that are less than 3 feet apart
- Require better backfill nonstructural concrete or compacted aggregate





Street Excavation Policy

Intended Outcomes:

- Reduce potholes and maintenance requirements
- Reduce number of utility conflicts and cutting into newly repaved roads
- Preserve lifespan of pavement, ensuring repair lasts 8 years
- Generate additional revenue/cost savings for street resurfacing program

Next Steps:

- Initiate public hearing process for changing SR-1 standards
- Draft ordinance modifications to update fee structure for street excavations
- Export data from CompassKC and track work in Cartegraph to better coordinate with street resurfacing program



Communicating Our Plan



- News release
- Media demonstration events
- KCMOre Magazine Spring/Summer article
- Pothole webpage: <u>www.kcmo.gov/potholes</u>
- Street Preservation webpage:

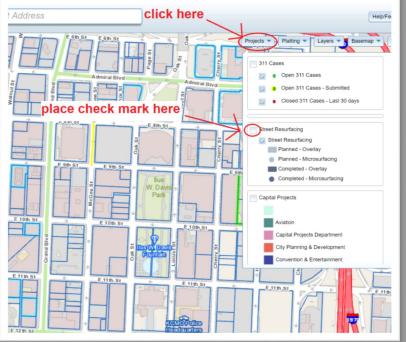
www.kcmo.gov/streetpreservation

• Utility Coordination webpage:

www.kcmo.gov/city-hall/departments/public-works/permitapplications/utility-coordination-efforts



Communicating Your Priorities



PUBLIC WORKS

 Dedicated street resurfacing funding for each Council District (\$500K per district) Collaborate with Councilmembers on identifying priority streets • Residents can use 3-1-1 to report potholes or street maintenance concerns Street Resurfacing map layer on KCMO Parcel Viewer shows where work is planned each program year

Big Idea : Street Maintenance Strategy

A combination of in-house maintenance crews + contractors + street resurfacing program + better street excavation policy will:

- Keep up with demand
- Provide basic street maintenance services to our residents
- Improve our overall street rating using better indicators and innovative data collection
- Generate additional funds/cost savings to street maintenance

- Strategic and intentional deployment of resources
- \$20M more added to street resurfacing
- \$500K per Council District for district priorities
- Improve data collection through better indicators and innovative technology
- Street excavation policy to improve quality of repair



Thank you!





PUBLIC WORKS