



MEMORANDUM

DATE: January 18, 2022

TO: Honorable Mayor and City Councilmembers
Dave Perrault, City Administrator

FROM: David Swearingen, P.E. Public Works Director / City Engineer

SUBJECT: Pavement Condition Update & Maintenance Plan

Budgeted Amount:
\$

Actual Amount:
\$

Funding Source:

Council Should Consider

Council should consider the presentation from the Public Works Director / City Engineer regarding the current pavement conditions, the proposed street maintenance plan and the proposed PMP projects through 2030.

Background/Discussion

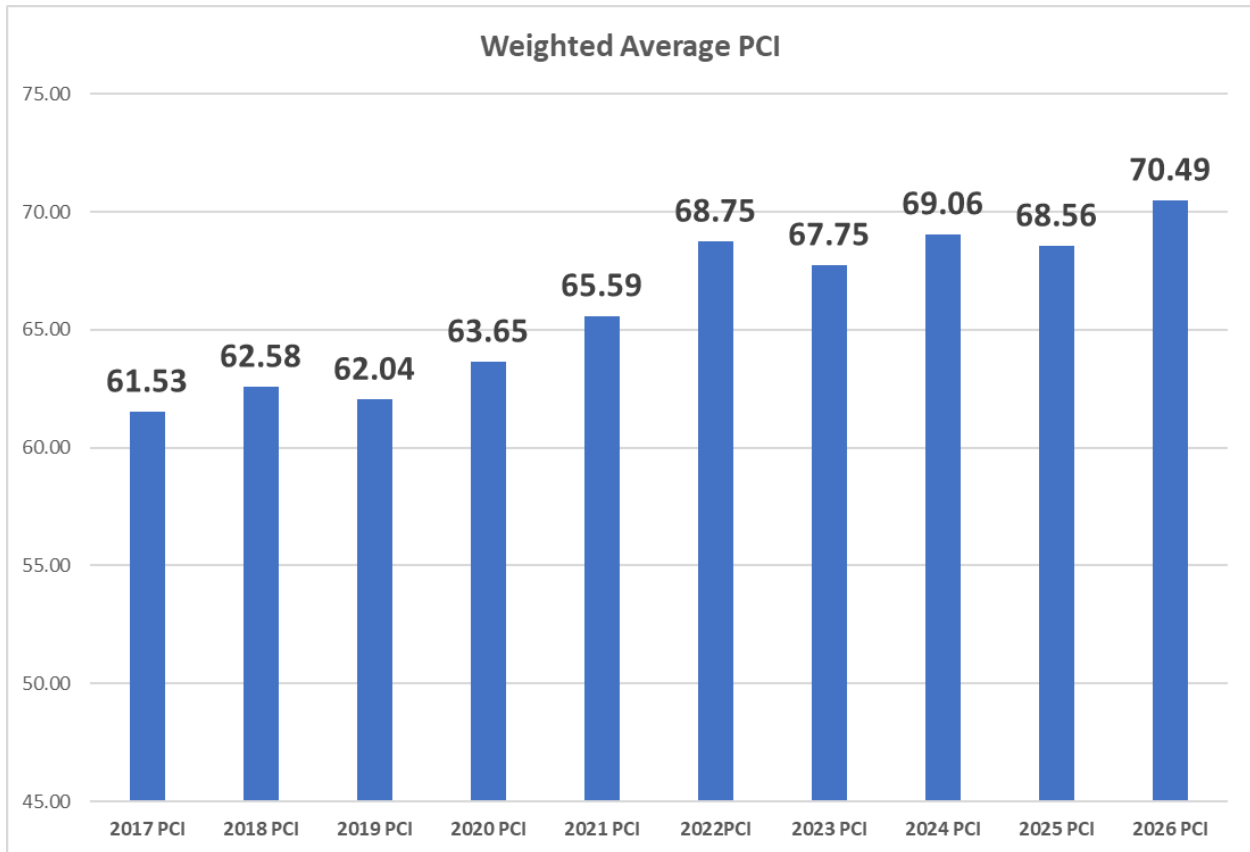
In May of 2021, through a contract with the City, IMS conducted a citywide pavement condition automated survey of all City owned and operated streets. Through this process, each street is surveyed by a consistent method of laser testing and a condition rating is calculated ranging from 100 (excellent) to 0 (Poor). The cities overall network PCI in May of 2021 was calculated at 63, the typical PCI that indicates a healthy street network is 70. The full report can be reviewed in Attachment A and the corresponding map in Attachment B.

Attachment C shows the PCI after the 2021 construction season. 2021 pavement construction and activities included the 2021 PMP street and utility project, PW In-House Paving and the 2021 Sealcoat Project. After the 2021 construction season, the overall network PCI raised to 65.6.

Utilizing the information gathered from the automated survey and reviewing historical data, staff is proposing the next PMP projects along with “desktop” cost estimates which can be seen in Attachment D. The list of PMP projects include:

- 2022 Pavement Management Project – \$2,200,000
 - Snelling Avenue North, Cummings Lane, Arden Oaks Drive, Arden Oaks Court
- 2024 Pavement Management Project – \$1,900,000
 - Colleen Ave, Norma Ave, Briar Knoll, Royal Hills, Arden Vista
- 2026 Pavement Management Project – \$1,500,000
 - Karth Lake Neighborhood streets
- 2028 Pavement Management Project – \$1,500,000
 - Tiller, Dunlap, Benton Way, Bussard, Lametti
- 2030 Pavement Management Project – \$1,600,000
 - Red Fox Rd, Grey Fox Rd, Dunlop St. N, Northwoods Dr, Cummings Park Dr, Stowe Ave

Attachment E shows the proposed 2022 Street Maintenance Plan which includes preservation activities such as seal coat, fog seal, crack seal and large area patching. Most of this work is covered through the JPA with Coon Rapids but the large area patching will be done by our Public Works Maintenance Workers. This approach is different than from previous years where Public Works focused their efforts on full width paving of street segments and will instead perform significant large area patching (i.e. this will be in-lieu of a in-house paving project). The benefit to large area patching is it localizes the repair where it is needed and extends the useful life of the existing road that does not require rehabilitation. Using this approach enables repairs to be applied to dozens of streets instead of just a select few, which results in the PCI raising at a higher rate.



Through this plan, it is projected that the City’s streets could reach an overall network PCI of 70 at the end of the 2026 construction season.

Budget Impact

The proposed PMP projects will be programmed into the City’s Capital Improvement Plan (CIP), the Public Works Director / City Engineer will work closely with the Finance Director.

All elements of the proposed 2022 Street Maintenance plan will be covered by the street maintenance operating budget of \$220,000.

Attachments

- Attachment A – IMS automated survey – full report
- Attachment B – 2021 PCI map (May)
- Attachment C – 2022 PCI map (January)
- Attachment D – Proposed PMP projects map
- Attachment E – Proposed 2022 Street Maintenance map
- Attachment F – PowerPoint presentation