

Pavement Maintenance Update

Agenda





- Background
- Street Condition Assessment Results
- Interim Activities
- Feedback & Discussion

Background

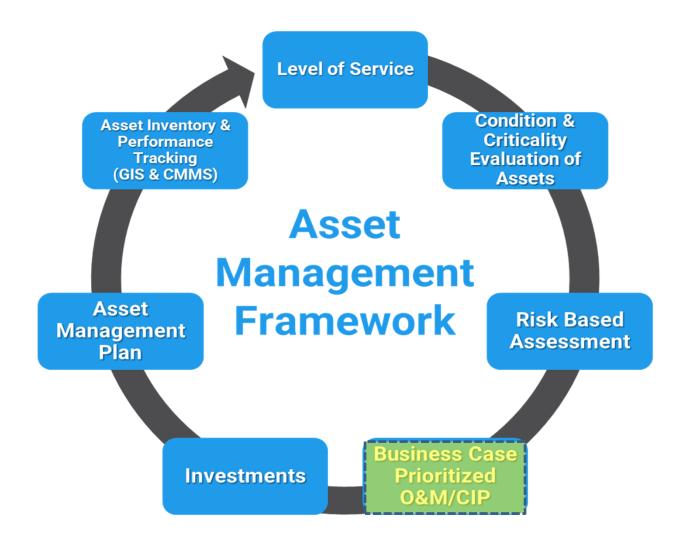


- March 2023: City contracted with Fugro USA Land, Inc. to perform condition assessment of the city's street network (\$151k)
- June 2023: City contracted with Freese and Nichols, Inc. to develop an asset management policy and risk matrix (\$149k)
- March 2024: City Council adopted Policy 43, the Asset Management Policy and Corporate Risk Matrix for Burleson

Background – Asset Management Overview



Roadway (Pavement) Asset Management



Findings from Latest Street Assessment

2023 assessment graded the overall Burleson street network at 69 (on a scale of 1-100, excluding ETJ)

2023 Assessment			
Overall Network OCI	Group	Description	OCI
69	Pavement Type	Asphalt	51
		Concrete	83
	Functional Class	Arterial	71
		Collector	65
		Local	68

Typical Maintenance Activities



Surface Treatment

Crack Seal
Micro Surfacing

Rehabilitation Maintenance

Mill & Overlay
Panel Replacement

Reconstruction (Bond-eligible)

Preventive Maintenance (PM) Planning

Balanced programs typically include a combination of treatments varying in function, duration, unit cost, etc.

- Low unit cost treatments such as minor pavement improvements are not intended to increase street
 condition ratings or improve driving surfaces, but are intended to prevent or slow the onset on more
 severe (and much more costly) distress by reducing the amount of water allowed to get into the
 pavement structure
- Moderate unit cost treatments such as various forms of pavement sealing are intended to increase street condition grades and improve driving surfaces
- High unit cost treatments such as mill & overlay, panel replacement / partial reconstruction, and
 pavement lifting are intended to address severe distress and result in increased street condition ratings

Optimized PM programs include a combination of low, moderate, and high unit cost treatments – as such, \$400,000 of the annual O&M street maintenance budget is proposed to be spent on interim measures that do not increase ratings but provide relief to the drivers as part of the broader street maintenance strategy

Interim Relief - Enhanced Asphalt Patching

Large scale pavement improvements are approximately three months away pending finalizing list of streets, bidding, and awarding contracts — in the interim, staff proposes strategic patching along Alsbury, Hidden Creek, and Renfro to provide noticeable ride improvement for the driving public until the Five-year Asset Management Plan is presented and implemented (Oct)

- Used increasingly across the region
- Targeted patches using asphalt address only damaged sections of concrete to provide noticeable ride improvement (allows more specific areas of need to be addressed)

Since this is relatively new to Burleson, staff anticipates quick (over the next few weeks) pilot patches in lower profile areas before moving on to the three higher profile roadways mentioned above

- Allows staff ability to refine procedures in the field and planning
- Provides some time for feedback
- Allows time for refining process for proactive monitoring post-patching

Patches anticipated to last at least 6-8 months (largely dependent upon traffic, weather, etc.) but because they are asphalt, the monitoring allows them to be scheduled for refreshing as necessary









Enhanced Asphalt Patching Candidates

W. Renfro near Clinton



SW Alsbury near Newton



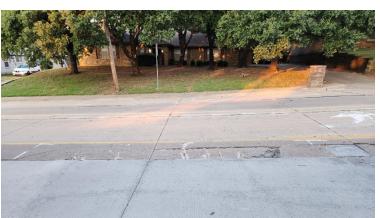




E. Hidden Creek near Cardinal Ridge







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Next Steps



- Committee Feedback how much of the O&M budget is the committee comfortable with spending on interim activities?
- Provide interim relief via
 - Enhanced asphalt patching by staff
 - ☐ Limited panel replacements by contract
 - ☐ Panel lifting by contract
- Five-year Asset Management Plan presentation in October



Questions / Discussion

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