

## Infrastructure & Development Committee Agenda

Wednesday, August 21, 2024 1:00 PM

City Hall - 141 W. Renfro Burleson, TX 76028

## 1. CALL TO ORDER

### 2. <u>CITIZEN APPEARANCES</u>

Each person in attendance who desires to speak to the Committee on an item NOT posted on the agenda, shall speak during this section. A speaker card must be filled out and turned in to the City Secretary prior to addressing the Committee. Each speaker will be allowed three minutes to speak.

Each person in attendance who desires to speak on an item posted on the agenda shall speak when the item is called forward for consideration.

## 3. REPORTS AND DISCUSSION ITEMS

- A. Consider approval of the minutes from the April 3, 2024 Infrastructure & Development committee meeting. (Staff Contact: Amanda Campos, City Secretary)
- B. Receive a report, hold a discussion, and provide direction regarding the Pavement Management Program and Pavement Maintenance Scenarios. (Staff Contact: Janalea Hembree, Assistant to the City Manager)
- C. Receive a report, hold a discussion, and provide staff feedback regarding Pavement Maintenance. (Staff Presenter: Justin Scharnhorst, Deputy Director of Public Works)

#### 4. BOARD REQUESTS FOR FUTURE AGENDA ITEMS OR REPORTS

#### 5. EXECUTIVE SESSION

In accordance with Chapter 551 of the Texas Government Code, the Committee may convene in Executive Session in the City Council Workroom at City Hall to conduct a closed meeting to discuss any item listed on this agenda.

A. Pending or Contemplated Litigation or to Seek the Advice of the City Attorney Pursuant to Section 551.071

#### 6. ADJOURN

#### **CERTIFICATE**

I hereby certify that the above agenda was posted on this the 14th of August 2024, by 5:30 p.m., on the official bulletin board at the Burleson City Hall, 141 W. Renfro, Burleson, Texas.



## Amanda Campos

City Secretary

## **ACCESSIBILITY STATEMENT**

The Burleson City Hall is wheelchair accessible. The entry ramp is located in the front of the building, accessible from Warren St. Accessible parking spaces are also available in the Warren St. parking lot. Sign interpretative services for meetings must be made 48 hours in advance of the meeting. Call the A.D.A. Coordinator at 817-426-9600, or TDD 1-800-735-2989.





## **Infrastructure & Development Committee**

**DEPARTMENT:** City Secretary's Office

FROM: Amanda Campos, City Secretary

MEETING: August 21, 2024

## **SUBJECT:**

Consider approval of the minutes from the April 3, 2024 Infrastructure & Development committee meeting. (Staff Contact: Amanda Campos, City Secretary)

## **SUMMARY:**

The Infrastructure & Development committee duly and legally met on April 3, 2024 for a regular meeting.

## **OPTIONS:**

Committee may approve the minutes as presented or approve with amendments.

## **RECOMMENDATION:**

Approve.

## **STAFF CONTACT:**

Amanda Campos City Secretary acampos@burlesontx.com 817-426-9665

## INFRASTRUCTURE & DEVELOPMENT COUNCIL COMMITTEE APRIL 3, 2024

DRAFT MINUTES

Council Present:
Dan McClendon, Chair
Chris Fletcher
Phil Anderson

Council Absent:

## Staff:

Tommy Ludwig, City Manager
Harlan Jefferson, Deputy City Manager
Eric Oscarson, Deputy City Manager
Amanda Campos, City Secretary
Monica Solko, Deputy City Secretary
Errick Thompson, Director of Public Works & Engineering

1. <u>CALL TO ORDER</u> – 11:00 a.m.

Chair Dan McClendon called the meeting to order. Time: 11:05 a.m.

## 2. CITIZEN APPEARANCES

No speakers.

## 3. REPORTS AND DISCUSSION ITEMS

A. Minutes from the January 10, 2024 Infrastructure & Development committee meeting. (Staff Contact: Amanda Campos, City Secretary)

Motion made by Phil Anderson and seconded by Chris Fletcher to approve.

Motion passed 3-0.

B. Receive a report, hold a discussion, and provide direction regarding the options for temporary closures of the 100 Block of W. Ellison Street. (Staff Contact: Errick Thompson, Director of Public Works & Engineering)

Errick Thompson, Director of Public Works and Engineering, presented options for temporary closures of the 100 Block of W. Ellison Street to the committee.

#### Discussion included:

- Existing conditions such as outdoor seating by agreement and curbside "To Go Parking" by agreement.
- Five different building owners and seven tenants
- 28 parking spaces and 2 handicap spaces
- Food and beverage deliveries

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## Options:

- Ad-hoc closures by individual special events permits
- Calendar-based closure (examples: First Fridays, Second Saturdays, weekends April-September, or other)

Committee discussed closing Ellison Street during special events, for staff to engage current business owners and main street businesses of the idea. Staff will come back to the committee with findings.

C. Receive a report, hold a discussion, and provide direction regarding the Hulen Street Widening Project. (Staff Contact: Tiana Jackson, Capital Engineering Manager)

Tiana Jackson, Capital Engineering Manager, presented the Hulen Street widening project to the committee.

Discussion included:

- Preliminary design alignment slight meander in vicinity of Candler to avoid pond and approaching SH 174 intersection to avoid bank property.
- Proceed with designing reconstruction of:
  - Full four-lane project
  - Two outer lanes and ultimate storm drainage
  - Two inner lanes with interim storm drainage

Committee requested what modifications (shifts) could be made to the CIP, if staff could run some scenarios. The committee would like to explore the options and bring back at the next meeting with costs and impacts to CIP to fund. The committee would like to compare building one side versus the other side, or building two lanes on one side versus the one and one.

D. Receive a report, hold a discussion, and provide direction regarding the Industrial Pump Station Expansion / Alsbury Pump Station Decommission Project. (Staff Contact: Errick Thompson, Director of Public Works & Engineering)

Errick Thompson, Director of Public Works and Engineering, gave an update on the Industrial Pump Station expansion / Alsbury pump station decommission project to the committee.

Update included conceptual analysis, survey, geotechnical investigation, property appraisal, draft preliminary design overview and project schedule forecast.

E. Receive a report, hold a discussion, and provide direction regarding the Public Works & Engineering Pavement Management Program. (Staff Contact: Clinton Sumerall, Deputy Director - Operations)

Clinton Sumerall, Deputy Director-Operations, gave a pavement assessment update to the committee.

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## Current assessment findings:

- Updated assessment showed that the Burleson streets network had an average score 68, 20% lower than the previous assessment
- Current assessment shows that of the city's 222 total miles of road network, 38 miles have scores below 40 which will require reconstruction
- Freese and Nichols have been working with city staff to push data into Cartegraph for analysis.

## Strategy Options

- Determine "acceptable" average network condition score by road classification type
- Determine acceptable level of backlog or percentage of failed roadway network
- Once maintenance treatment bid items are awarded, determine how long it will take to bring excess backlog into compliance and what is the financial impact of this.

## Consultant Recommendation:

- Maintain an average network condition score of 75.
- Keep the percentage of roadway network in failed condition below 10%.
- Reconstruct failed roadways within 5 years, as budget resources allow.

## Next steps:

- Continue working with Freese and Nichols to push assessment data from "test" data base into production.
- Formalize backlog (rebuilding) vs maintenance funding and expectations as well as where ideal average network score should be.
- Pavement Maintenance bid documents are being prepared for advertising
- Once contracts are finalized, bid amounts can be pushed to Cartegraphs "scenario builder"

## 4. EXECUTIVE SESSION

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A. Pending or Contemplated Litigation or to Seek the Advice of the City Attorney Pursuant to Section 551.071

No executive session needed.

## 5. BOARD REQUESTS FOR FUTURE AGENDA ITEMS OR REPORTS

None.

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## 6. ADJOURN

There being no further discussion Chair Dan McClendon adjourned the meeting.

Time: 12:43 p.m.

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Monica Solko Deputy City Secretary

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## **Infrastructure & Development Committee**

**DEPARTMENT:** City Manager's Office

FROM: Janalea Hembree, Assistant to the City Manager

MEETING: August 21, 2024

#### **SUBJECT:**

Receive a report, hold a discussion, and provide direction regarding the Pavement Management Program and Pavement Maintenance Scenarios. (Staff Contact: Janalea Hembree, Assistant to the City Manager)

## **SUMMARY:**

Staff will present an update to the asset management program and completed pavement assessment, including potential maintenance and rebuilding strategies. The committee's feedback is sought to assist in developing a pavement maintenance plan to present to council.

#### **RECOMMENDATION:**

N/A

#### PRIOR ACTION/INPUT (Council, Boards, Citizens):

March 20, 2023, Council approved a proposal to conduct pavement assessment with Fugro USA Land, Inc. through a cooperative purchasing agreement with the North Central Texas Council of Governments

March 4, 2024, Council adopted City Council Policy 43, City of Burleson Asset Management Policy and Corporate Risk Matrix.

#### FISCAL IMPACT:

N/A

## **STAFF CONTACT:**

Janalea Hembree Assistant to the City Manager jhembree@burlesontx.com 817.426.9299



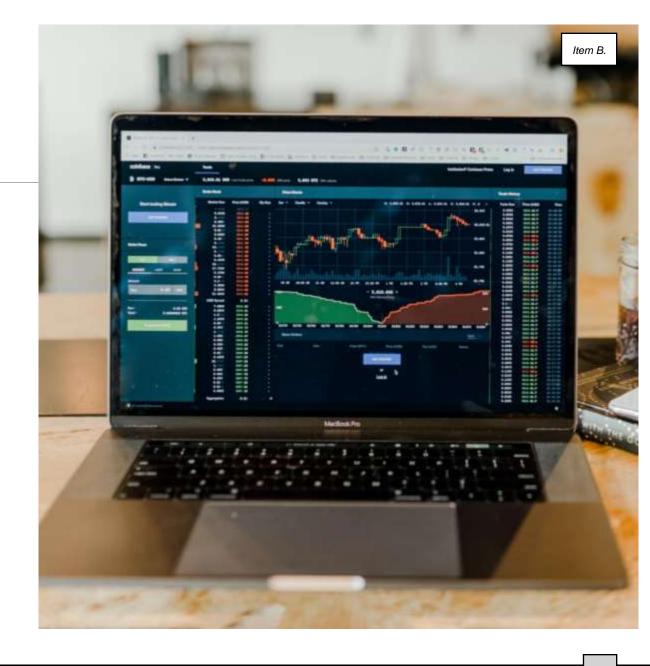


# Asset Management Pavement Improvement Program Update

JANALEA HEMBREE, ASSISTANT TO THE CITY MANAGER AUGUST 21, 2024

## OUTLINE

- History
- Pavement Condition Assessment
- Pavement Management Plan
- Maintenance and Capital Improvement Activities
- Scenario Outline
- Next Steps



Item B.



## HISTORY

ASSESSMENT OF CITY PAVEMENT NETWORK SYSTEM BY FUGRO ADOPTED CITY COUNCIL
POLICY 43, CITY OF
BURLESON ASSET
MANAGEMENT POLICY
AND CORPORATE RISK
MATRIX

FREESE AND NICHOLS
ANALYZED THE DATA
AND COMPLIED
INFORMATION INTO
CARTEGRAPH

APPLIED CITY AM
POLICY AND RISK
MATRIX TO PAVEMENT
DATA

PAVEMENT MAINTENANCE SCENARIOS FOR CONSIDERATIONS

Fall 2023

March 2024

<u>February - May</u> 2024

<u>July</u> 2024 August 2024



## CONDITION ASSESSMENT

## 2023 Assessment

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

Approximately 567 lane miles of roadway

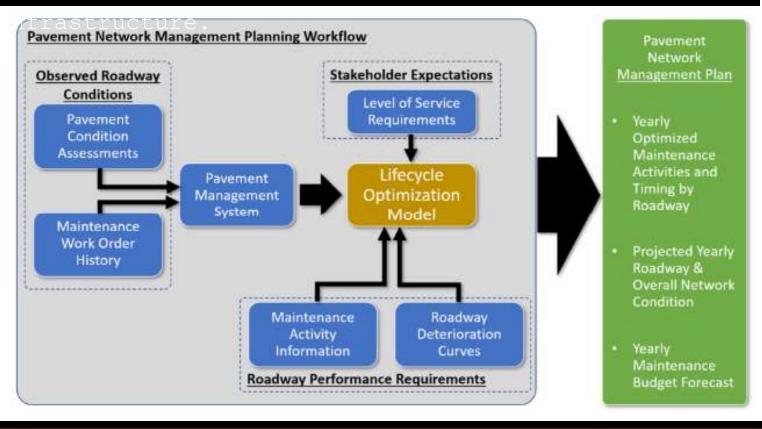
51% Asphalt 49% Concrete

<sup>\*</sup>Some ETJ roads are not included in the above OCI numbers and are still being assessed.

## PAVEMENT MANAGEMENT PLAN



A comprehensive program allowing city staff to provide optimized maintenance recommendations to reduce overall lifecycle cost of the roadway network, and extend the life of the city's roadway



Incorporated completed pavement condition results into Cartegraph

Utilize Cartegraph to evaluate strategies and build an efficient maintenance plan

- Use budgets efficiently for maintenance activities
- Achieve an overall network condition target
- Maintain network conditions longterm

# PAVEMENT MAINTENANCE AND CAPITAL IMPROVEMENT ACTIVITIES



## <u>Asphalt</u>

Maintenance Activity	Applicable Condition Range (PCI)	Condition Impact Type	Condition Impact (PCI)	
Crack Seal	91-100	Modifier	+5 pts	
Rejuvenator Application & Crack Seal	81-90	Modifier	+8 pts	
Microsurface	71-80	Modifier	+15 pts	
Mill & 2" Overlay	51-70	Modifier	+20 pts	
Reconstruction	0-50	Absolute	100	

## Concrete

Maintenance Activity	Applicable Condition Range (PCI)	Condition Impact Type	Condition Impact (PCI)
Joint Sealing	81-90	Modifier	+5 pts
Small Full Depth Repair	71-80	Absolute	90
Medium Full Depth Repair	61-70	Absolute	90
Large Full Depth Repair	41-60	Absolute	90
Reconstruction	0-40	Absolute	100



## SCENARIO ASSUMPTIONS

```
SCENARIO 1: Do Nothing SCENARIO 2: Current Budget SCENARIO 3: Increased O&M
                                O&M Budget - $1.1m Annually O&M Budget - $2.7m Annually
    O&M Budget - $0
    Capital Budget - $0
                               Capital Budget - 5 YR Capital Budget - 5 YR
                                                        Capital Plan
                           Capital Plan
                                Escalation - 3% Maintenance Escalation - 3% Maintenance
                           Cost
                                                          Cost
SCENARIO 4: Increased Capital
    O&M Budget - $1.1m
                           SCENARIO 5: Increased O&M &
Annually
    Capital Budget - $5.0m Capital
                                O&M Budget - $2.7m Annually
Annually
    Escalation - 3%
                                Capital Budget - $5.0m
Maintenance Cost
                           Annually
                                Escalation - 3% Maintenance
                           Cost
SCENARIO 6: OCI 75 in 5 Years
    O&M Budget - ~$5.0m
```

Item B.

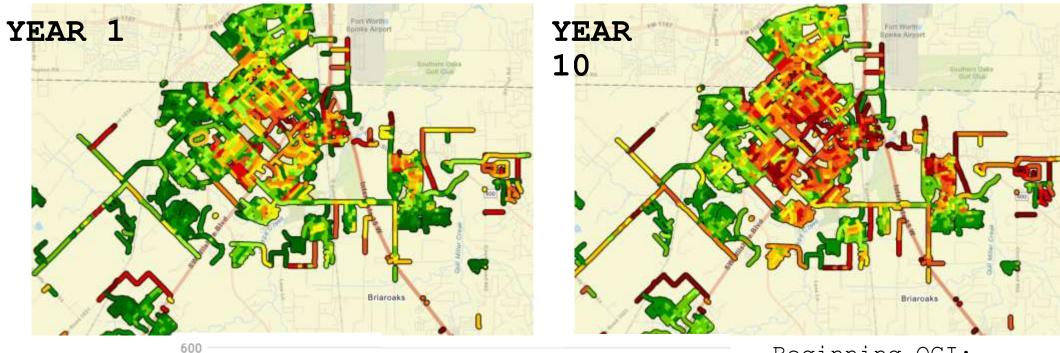
SCENARIO 7: OCI 75 in 10 Years

Annually



# SCENARIO 1

Do Nothing - No Budget



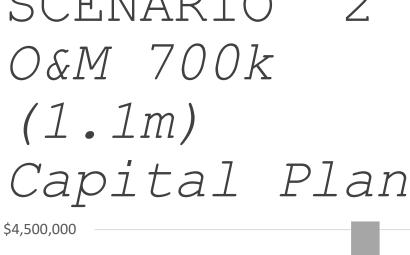


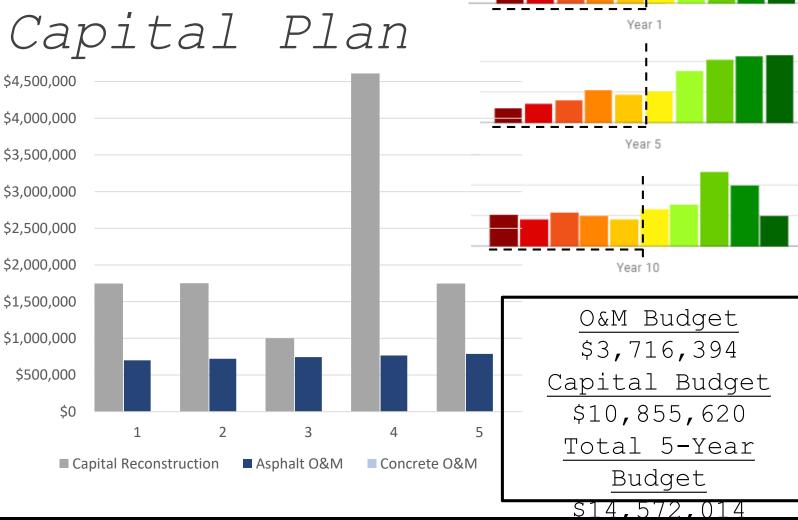
Beginning OCI:

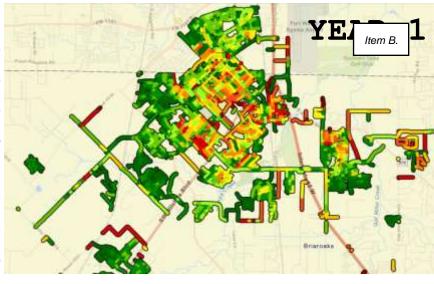
69

5 Year OCI: 60

10 Year OCI: 52



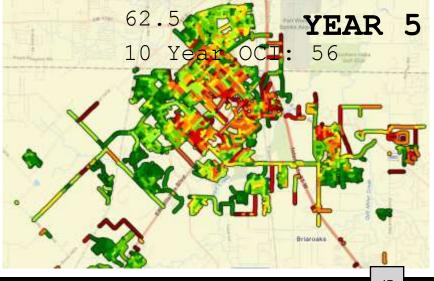


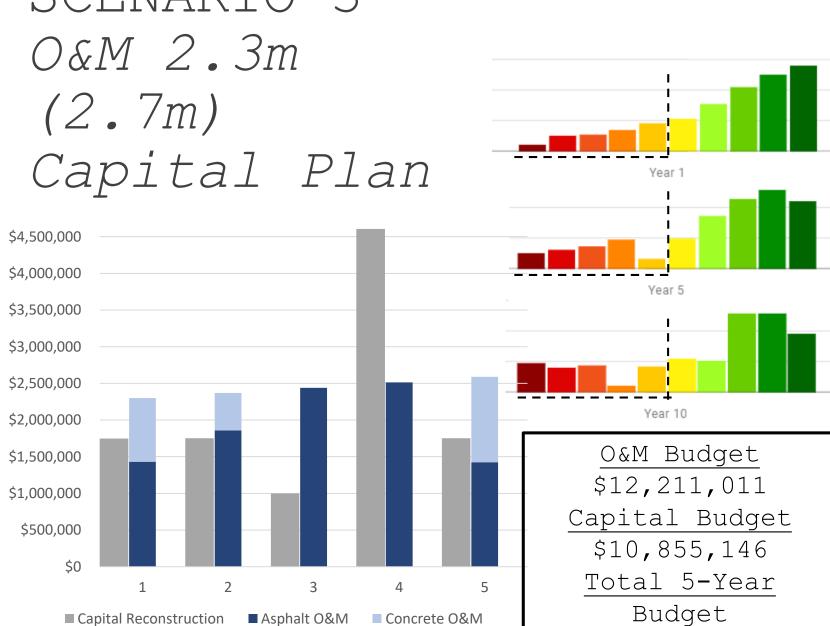


Beginning OCI:

69

5 Year OCI:





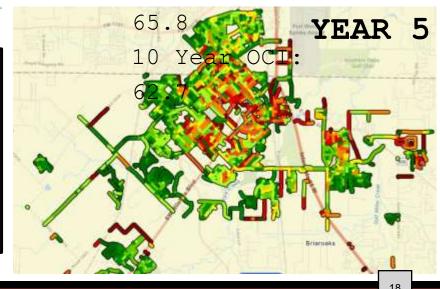
\$23,066,157

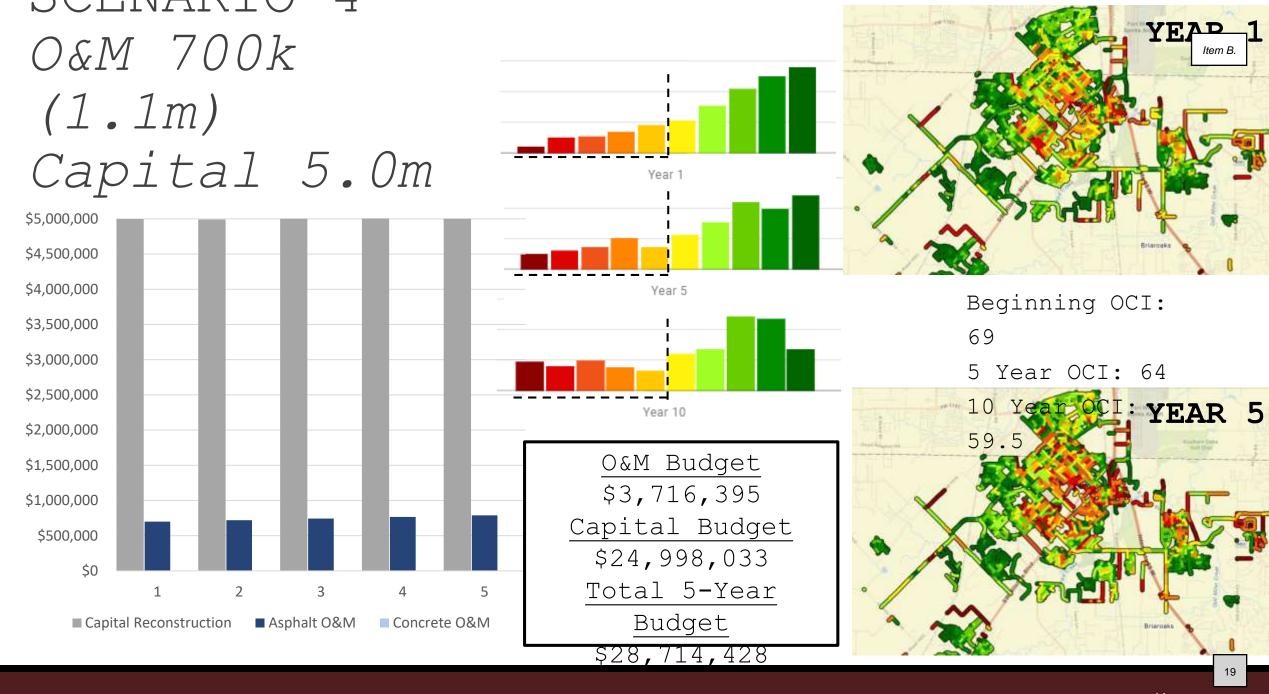


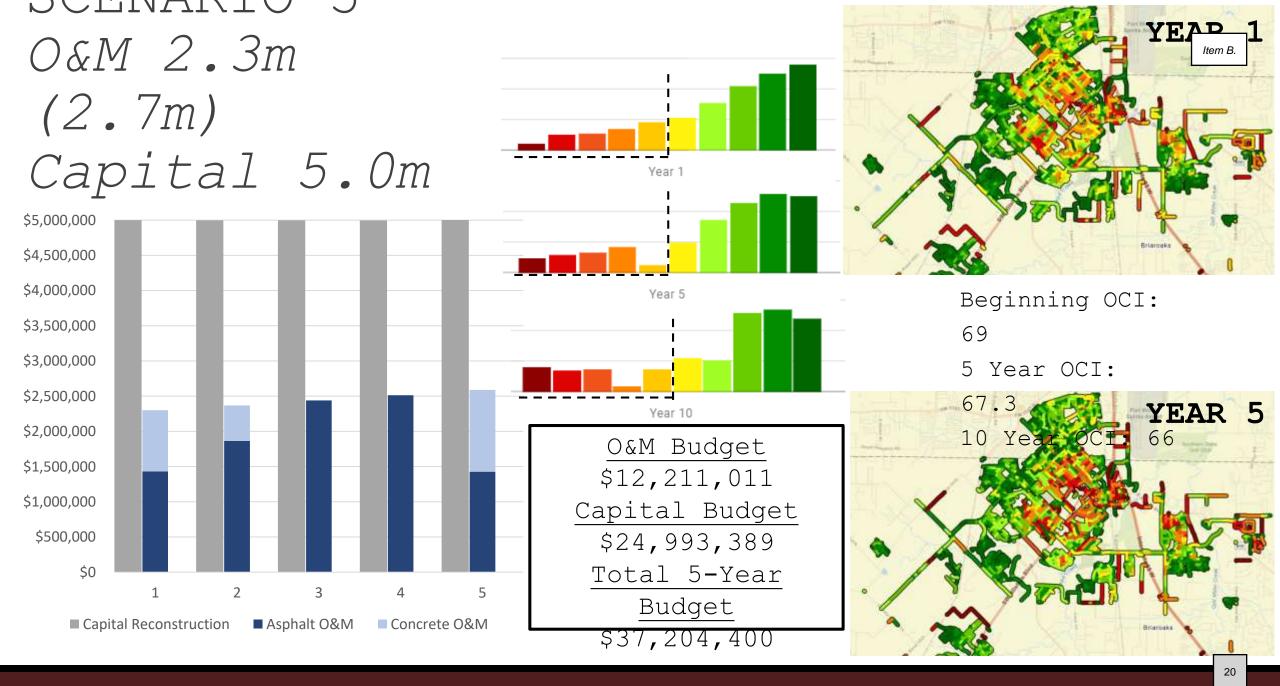
Beginning OCI:

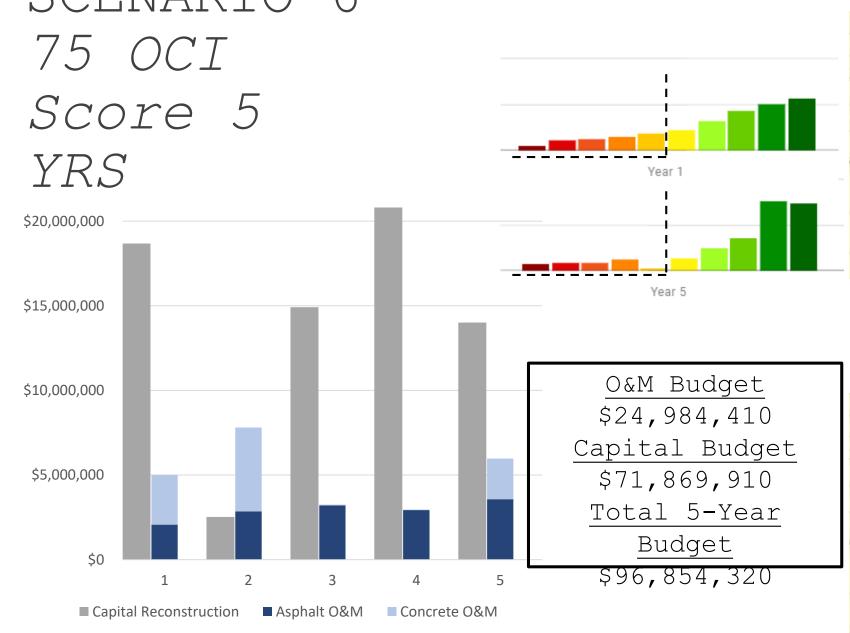
69

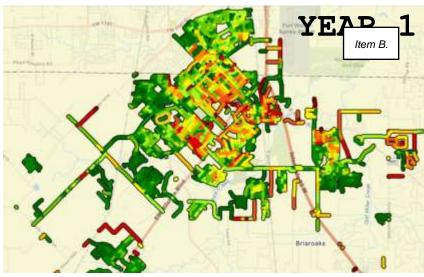
5 Year OCI:







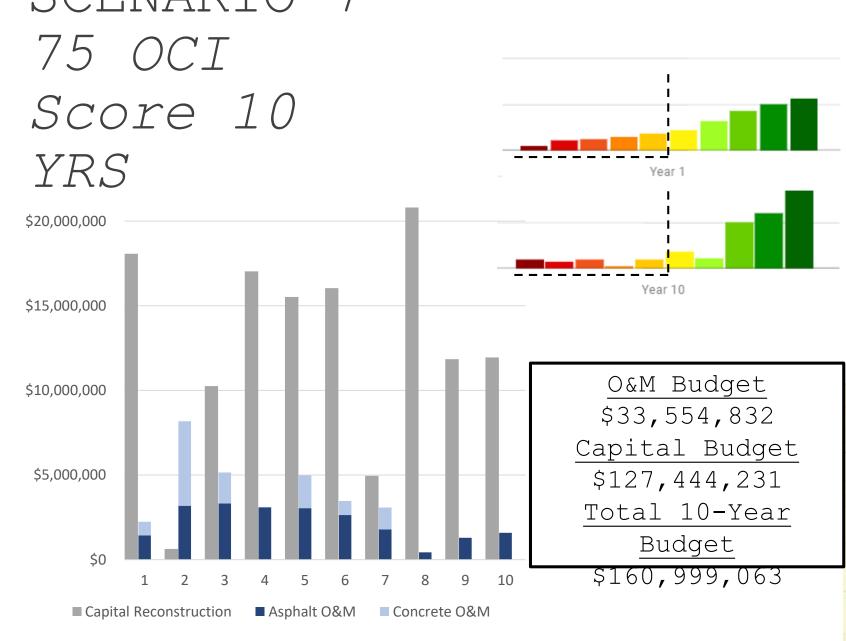


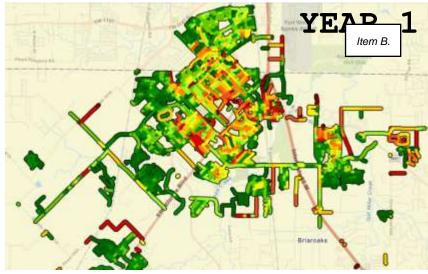


Beginning OCI:

69

5 Year OCI: 75
YEAR 5





10 Year OCI: 75
YEAR 5

Beginning OCI:



# Summary of Scenarios

Scenario	Years	0&N	1 Dollars	Capita	l Dollars	Tot	al Budget	<b>Beginning OCI</b>	5 Year OCI	10 Year OCI
1	10	\$	-	\$	-	\$	-	69.0	60.0	52.0
2	5	\$	3,716,394	\$	10,855,620	\$	14,572,014	69.0	62.5	56.0
3	5	\$	12,211,011	\$	10,855,146	\$	23,066,157	69.0	65.8	62.7
4	5	\$	3,716,395	\$	24,998,033	\$	28,714,428	69.0	64.0	59.5
5	5	\$	12,211,011	\$	24,993,389	\$	37,204,400	69.0	67.3	66.0
6	5	\$	24,984,410	\$	71,869,910	\$	96,854,320	69.0	75.0	
7	10	\$	33,554,832	\$ 1	27,444,231	\$	160,999,063	69.0		75.0



## Next Steps

- Discuss the Optimal level of OCI goal
- Discuss budget options
- •Based on the adopted budget staff will be presenting to council the pavement management plan and pavement maintenance schedule for FY 24/25 in October



# Questions / Comments

Janalea Hembree Assistant to the City Manager <a href="mailto:jhembree@burlesontx.com">jhembree@burlesontx.com</a> 817.426.9299





## **Infrastructure & Development Committee**

**DEPARTMENT: Public Works** 

FROM: Justin Scharnhorst, Deputy Director

MEETING: August 21, 2024

#### **SUBJECT:**

Receive a report, hold a discussion, and provide staff feedback regarding Pavement Maintenance. (Staff Presenter: Justin Scharnhorst, Deputy Director of Public Works)

#### **SUMMARY:**

Staff will present an update on the pavement maintenance strategy. The report will also explore how annual maintenance corresponds to the larger Asset management Plan. Staff is seeking committee feedback to guide interim activities designed to improve driving surfaces prior to larger scale contracts anticipated this fall.

#### **RECOMMENDATION:**

N/A

#### PRIOR ACTION/INPUT (Council, Boards, Citizens):

March 4, 2024 – Council adopted Policy 43, the Asset Management Policy and Corporate Risk Matrix

#### **REFERENCE:**

N/A

## **FISCAL IMPACT:**

N/A

## **STAFF CONTACT:**

Justin Scharnhorst
Deputy Director of Public Works
<a href="mailto:jscharnhorst@burlesontx.com">jscharnhorst@burlesontx.com</a>
817-426-9646

Item C.



# **Pavement Maintenance Update**

# Agenda





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

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# Background



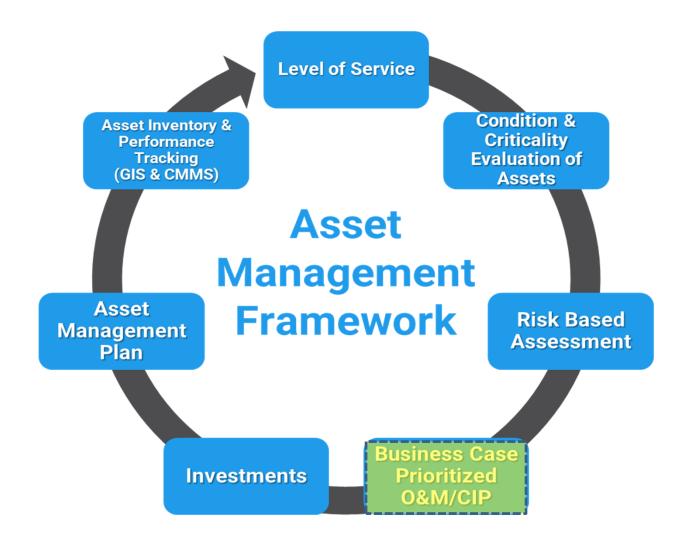
- March 2023: City contracted with Fugro USA Land, Inc. to perform condition assessment of the city's street network (\$151k)
- June 2023: City contracted with Freese and Nichols, Inc. to develop an asset management policy and risk matrix (\$149k)
- March 2024: City Council adopted Policy 43, the Asset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

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# Background – Asset Management Overview [1607]



# Roadway (Pavement) Asset Management



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Item C.

## Findings from Latest Street Assessment

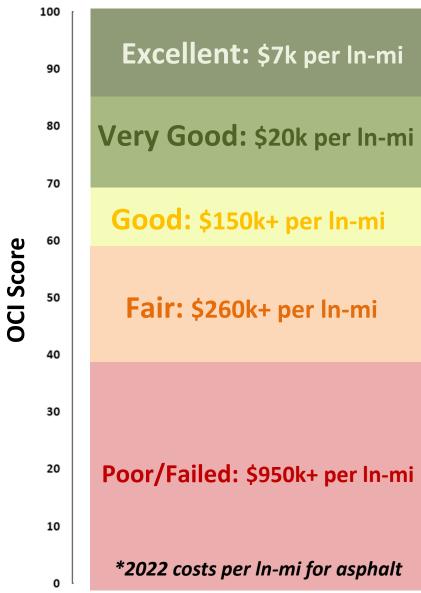
2023 assessment graded the overall Burleson street network at 69 (on a scale of 1-100, excluding ETJ)

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

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## Typical Maintenance Activities

Item C.



## **Surface Treatment**

Crack Seal
Micro Surfacing

## **Rehabilitation Maintenance**

Mill & Overlay
Panel Replacement

Reconstruction (Bond-eligible)

## Preventive Maintenance (PM) Planning

Item C.

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





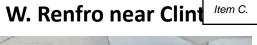




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## **Enhanced Asphalt Patching Candidates**







**SW Alsbury near Newton** 



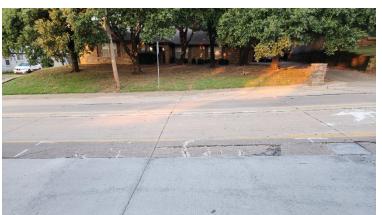




E. Hidden Creek near Cardinal Ridge







## 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

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# Questions / Discussion

Justin Scharnhorst
Deputy Director of Public Works
<u>ischarnhorst@burlesontx.com</u>
817-426-9646