MEMORANDUM

Date: August 6, 2026
To: Mayor Kevin Smith and City Council
From: Thomas Jorgensen, P.E., Public Works Director/City Engineer
Re: Pavement Maintenance Forecast—Treatment Forecasting Method

Purpose. The attached forecast provides a planning-level pavement maintenance program for 2027 through 2036. It is intended to support long-range budgeting and treatment sequencing by applying a consistent forecasting method to each roadway segment. The forecast is not a substitute for field inspection, project design, or annual bid pricing.

Forecast Method

Each street was evaluated using its 2025 Pavement Condition Index (PCI), the type and year of its previous treatment, and the year in which the next treatment is proposed. The model estimates how the pavement condition will decline between the PCI inspection year (2025) and the proposed treatment year. For segments programmed for treatment during the forecast period, the model assigns an estimated post-treatment PCI and projects subsequent deterioration through 2036.

The projected PCI at the treatment year is then compared with treatment-selection criteria. The model considers projected condition, prior treatment history, elapsed treatment age, and expected treatment benefit. It then selects one of the following treatments: HA5, Type 2 Slurry, Cape Seal, and, only where condition warrants a more aggressive response, Mill and Fill. The main variables and assumptions incorporated into the forecast model are summarized below.

1. *Pavement Condition*
    a. *Project the 2025 PCI to the proposed treatment year using an assumed deterioration rate.*
    b. *Assign an estimated post-treatment PCI based on the selected treatment.*
    c. *Apply different deterioration rates based on pavement condition, recognizing that lower-condition pavement generally deteriorates more rapidly.*
2. *Costs of treatment type, including cost escalation each year (HA5 currently costs x per sqft, and that price is likely to increase over time)*
3. *Assuming over the next 10 years, Ivins will add additional streets and trails from new development*
4. *Assuming all existing streets and all trails will receive at a minimum of one treatment application over the forecast period.*
5. *Assuming there are service lives associated with each treatment type (HA5 is anticipated to last x number of years)*
6. *Assuming minimum treatment types based on PCI thresholds (HA5 should only be applied to high PCI rated roads, while mill and fill should be reserved only for very low rated roads)*

Cost Development

For each segment, the selected treatment is assigned a planning unit cost per square foot. The unit cost is escalated to the programmed construction year and multiplied by the roadway area shown in the spreadsheet.

Annual segment costs are then summarized by year and treatment type. The overall forecast also includes allowances for maintenance of anticipated new streets and the City trail system.

Conclusion

The resulting ten-year pavement-maintenance forecast is approximately **$8.68 million**, equivalent to an average annual investment of approximately **$868,000**. This amount should be viewed as a long-range funding target rather than a fixed annual expenditure. Actual treatment timing and costs will be reviewed and adjusted annually based on updated pavement conditions, field observations, construction pricing, development activity, available funding, and coordination with other planned infrastructure work.

Maps

The following link will take you to the short presentation of results from the forecast model.

https://ivins.maps.arcgis.com/apps/instant/exhibit/index.html?appid=668dbfe1a1fd47d9b79b674e6f5e4cf9

The following maps show the forecast treatment year and treatment type for each roadway segment during the 10-year planning period. Use the button in the upper-right corner of each map to display the legend.

Year of Treatment by Segment - https://arcg.is/1rKGjK0
Type of Treatment by Segment - https://arcg.is/PWazG0

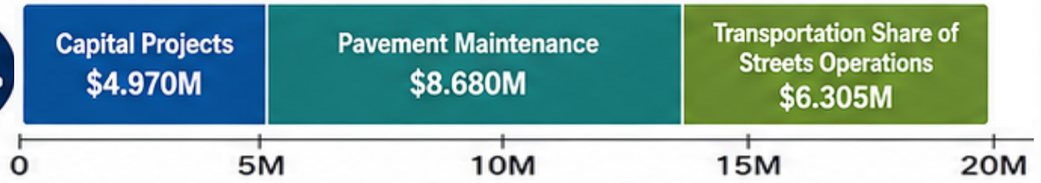
By clicking on a segment in either map you can see other things like previous treatment year and type, the next treatment year and type, and the cost of each segment to treat.

Transportation Utility Fee (TUF)

10-Year Funding Outlook | FY 2027–FY 2036

Projected transportation needs exceed existing transportation revenues by approximately **$0.945 million** over the next 10 years. A TUF of about **$1.13 per REU per month** would close that gap without relying on additional General Fund support.

1 TRANSPORTATION NEEDS



Total Transportation Needs: $19.955M

Capital project costs exclude the share expected to be funded by impact fees.

2 EXISTING TRANSPORTATION REVENUES

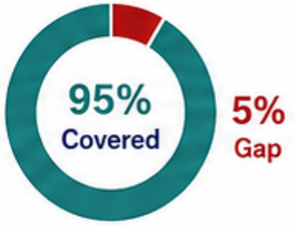


Total Existing Revenues: $19.010M

Grant revenue is included based on historical success, but it is not guaranteed.

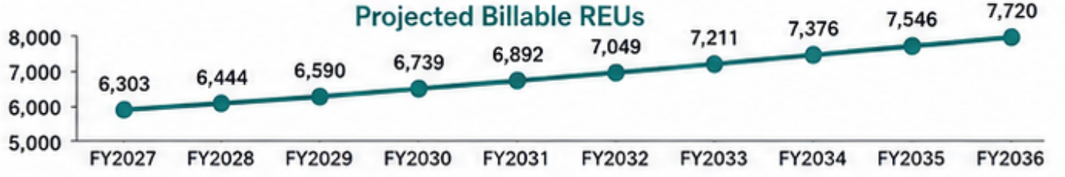
3 FUNDING GAP

$19.955M Transportation Needs − $19.010M Existing Revenues = $0.945M Funding Gap



Existing revenues cover about 95% of projected transportation needs, leaving a gap of about 5%.

4 REU GROWTH AND BILLING BASE



Starting REUs in FY 2027:	10-Year Total Billing Base:	
6,303	69,870 REU-years	838,440 REU-months

Residential REUs assumed to grow 2.97% annually; commercial and public-use REUs assumed to grow 1.0% annually.

5 RESULTING TUF

$0.945M Funding Gap ÷ 838,440 REU-months = $1.127 per REU per month (Exact Result)

Recommended Illustrative TUF: $1.13 per REU per month

Equivalent Annual Amount: $13.56 per REU

This calculation assumes a constant fee over the 10-year period.

KEY ASSUMPTIONS

- No General Fund contribution included
- Beginning transportation fund balance of $450,000 included
- No reserve or contingency included
- All REUs billed; no exemptions assumed
- 100% collection assumed
- Fee billed 12 months per year beginning July 1, 2026
- TUF assumed to remain constant over the 10-year period
- Available revenues assumed usable for transportation purposes