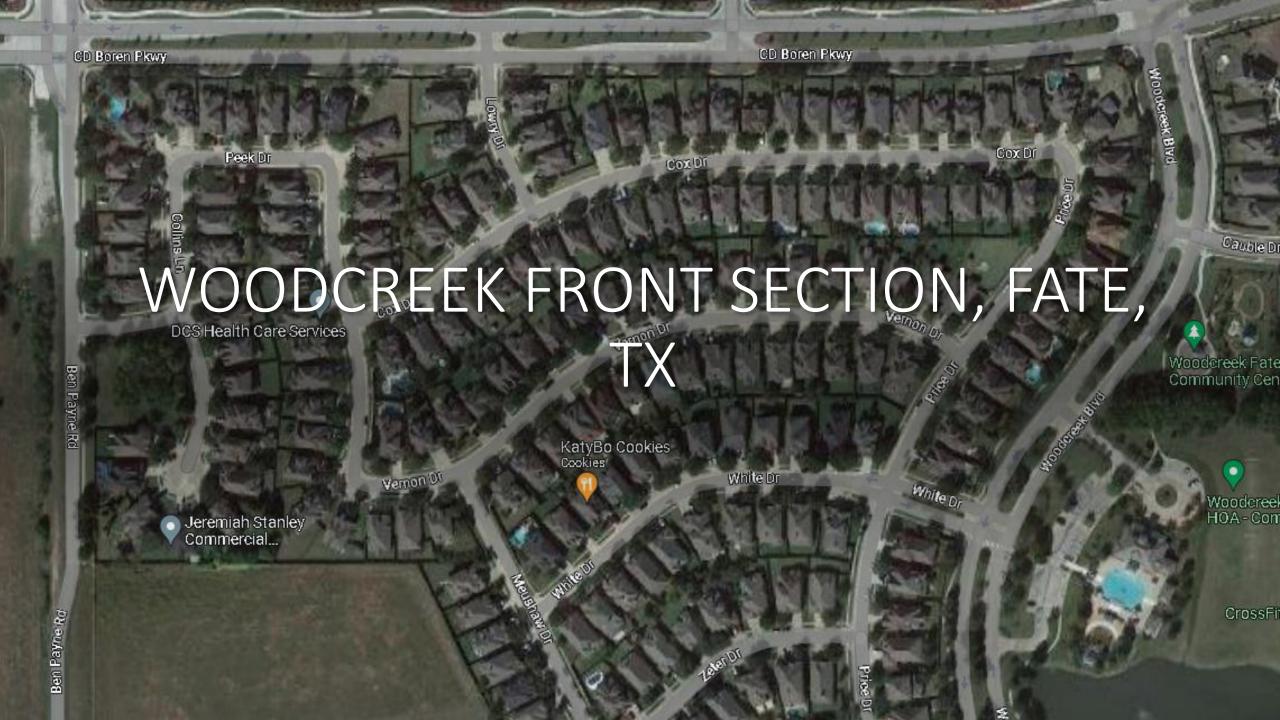


Who is talking today?

- City Manager Fate Texas, Michael Kovacs
 - Cities Texas: Corpus Christi, Presidio, Port Aransas, Galveston, Fate, South Carolina: Surfside Beach (near Myrtle Beach), Utah: Park City! • Emergency Management 1 year, & Police Management Intern • Texas A&M University – Corpus Christi, BA2, MPA
 - https://www.linkedin.com/in/michael-kovacs-a757281b8/
- Assistant City Manager Lewisville Texas, Jim Proce, ICMA-CM
 - Agencies in Florida and Texas Palm Bay, Melbourne Tillman Water Control District, Rowlett, Anna, Lewisville City Manager, Assistant City Manager Public Works Director, Transportation Manager, Vice President, Street Superintendent, Supervisor, Inspector, Survey Worker, Drafter BS Rollins College, Winter Park FL MBA University of Central Florida, Orlando FL Harvard University, Cambridge MA (State & Local Government Executive Training Program)
 - https://www.linkedin.com/in/jimproce/

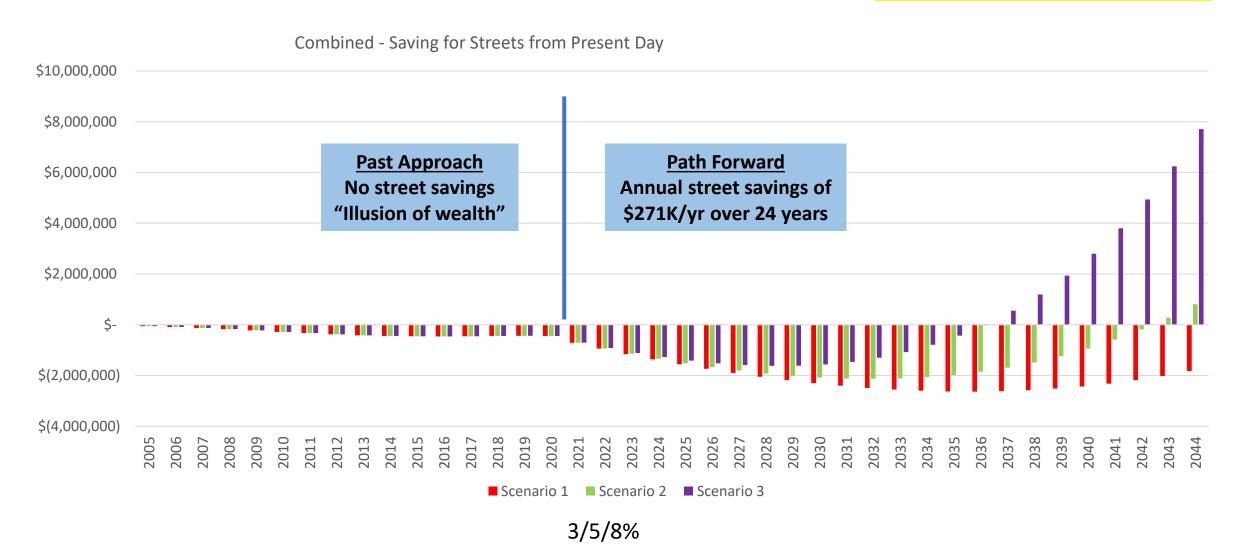




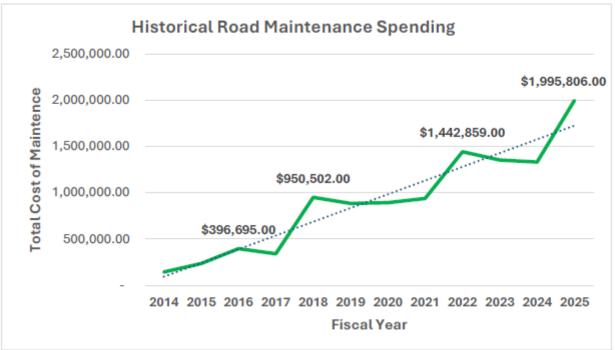


WOODCREEK FRONT SECTION ANALYSIS AND RESULTS

SAVING FROM THE PRESENT FORWARD (\$271K/YR, 24 YRS) \$1,342 /HOME/YR.



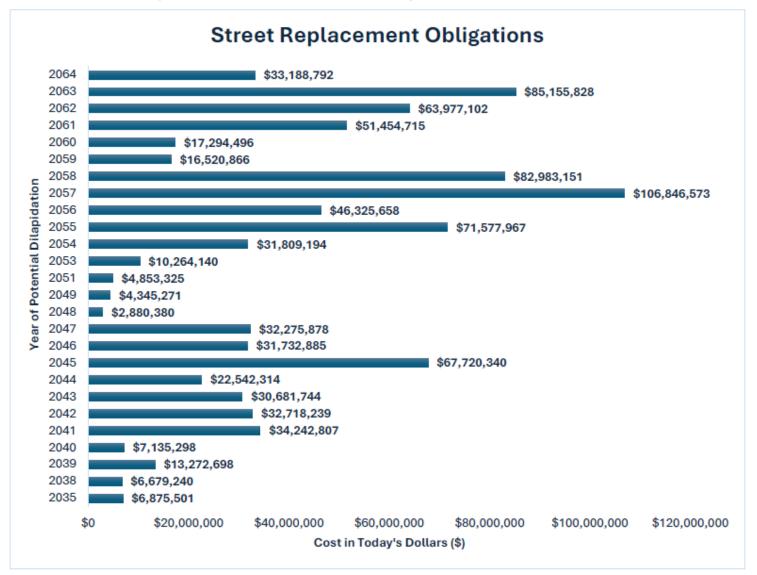
Street Replacement Plan - Maintenance







The total cost to replace all 103 road miles of road in City of Fate would be \$ 973,584,729.







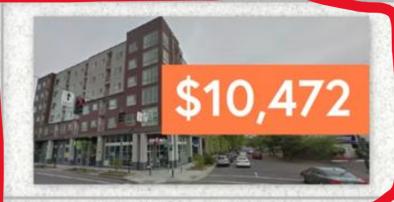


















Tough (but necessary) Infrastructure Questions

- Do we really think all of this infrastructure is a good idea? Why?
- Who is going to maintain all this stuff once the developers are long gone?
- When these roads fall apart, where is the money coming from to pay for all of this?
- Has anyone costed or value engineered this to see if all this infrastructure is really necessary?
- Does the revenue this development generates pay for the ALL of the services that will be required to maintain and rebuild when needed?
- Are we putting away funds for when all this stuff falls apart?
- Are you having these conversations with your community or are you just piecemealing your CIP?



Questions for you to Explore

- "So here's the thing about this article
 - 600 miles of road in poor shape!
- PCI well below 50 which means rebuild everything!
- If you back into the numbers and they want to invest \$5,000,000 and if you just assume a 20-year life cycle... they are a sinking ship.
- So follow this... Invest \$5,000,000 a year X 20 years / 600 miles = \$166,666/mile
- Not enough... So double it... Still not enough...
- Not too scientific but certainly shocking enough to sell your purpose to your City Council



City officials weigh spending for deteriorating streets

By CASSIE L. SMITH csmith@wacotrib.com May 29, 2018 .

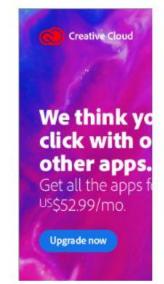
SIMULATOR



With average pavement conditions declining in recent years, as seen in this 2015 pothole on Bosque Boulevard, city council members are considering boosting street spending in the next budget year.



Some City Council members signaled Tuesday that a staff recommendation to spend \$10 million on street work in the upcoming budget year could fall short of meeting the city's needs.



The Latest

- NTSB to investigate in Alaska after deadly plane crash
- Connecticut considers making phone calls free for prisoners
- Alabama Senate heads toward vote on abortion has massive.



Question for you to Explore



Jim Proce, ICMA-CM • You

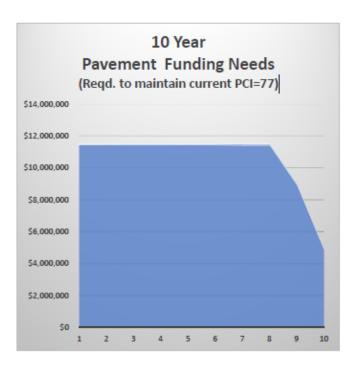
City Manager at City of Anna, Texas

- Make it simple and ask yourself:
- What is total inventory?
- What is total inventory replacement cost?
- How much are you spending annually?
- What is the gap?
- Do the math
- How may years will it take to do it all, assuming the roads you build are so good they will last forever?
- 535 miles = \$800M?
- How ever you break it down it's a huge number!
- What are your numbers?

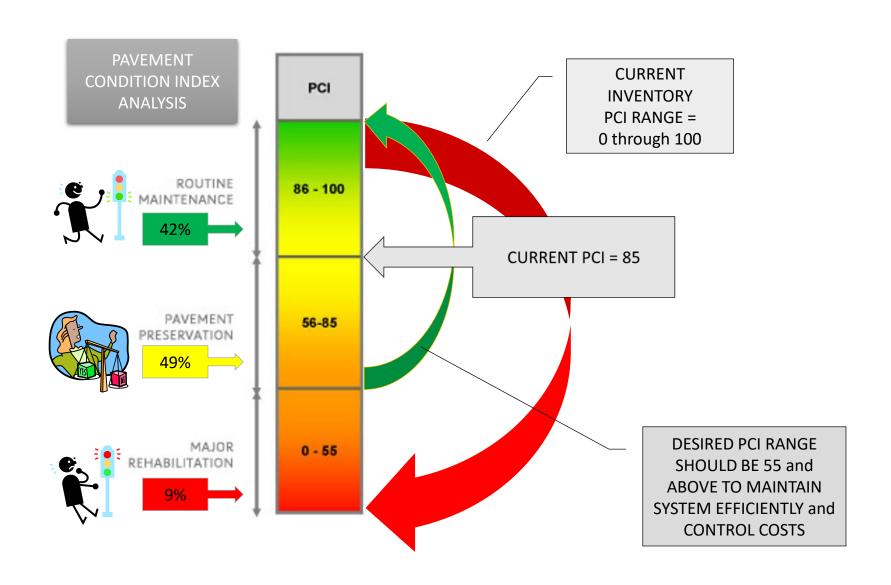
Matt Yager and Kevin Shepherd my experience with the life cycle analysis in every city I have every engaged, reviewed or worked for have not looked closely enough at those long term liabilities. I have told folks (more times than I can count) even if you take the snapshot look at it looking at lanes miles in inventory and total replacement costs for that inventory you'll be very surprised at the replacement value of that asset. Start factoring in exponential deterioration, pavement condition index, rising costs of construction labor/materials and time value of \$ and you will see that these numbers get huge fast. The reinvestment in capital just isn't there and with no one interested in paying more taxes the models for future development and redevelopment have to change. That article has some interesting points (some of which make sense) but when I look at the (tax) revenue generating potential of suburban areas it doesn't look sustainable without other considerations: reducing infrastructure costs up front, more dense and diverse housing stock, going vertical, more sustainable construction standards, and active management of the deterioration curves to maximize maintenance service intervals and avoid the exponential deterioration.

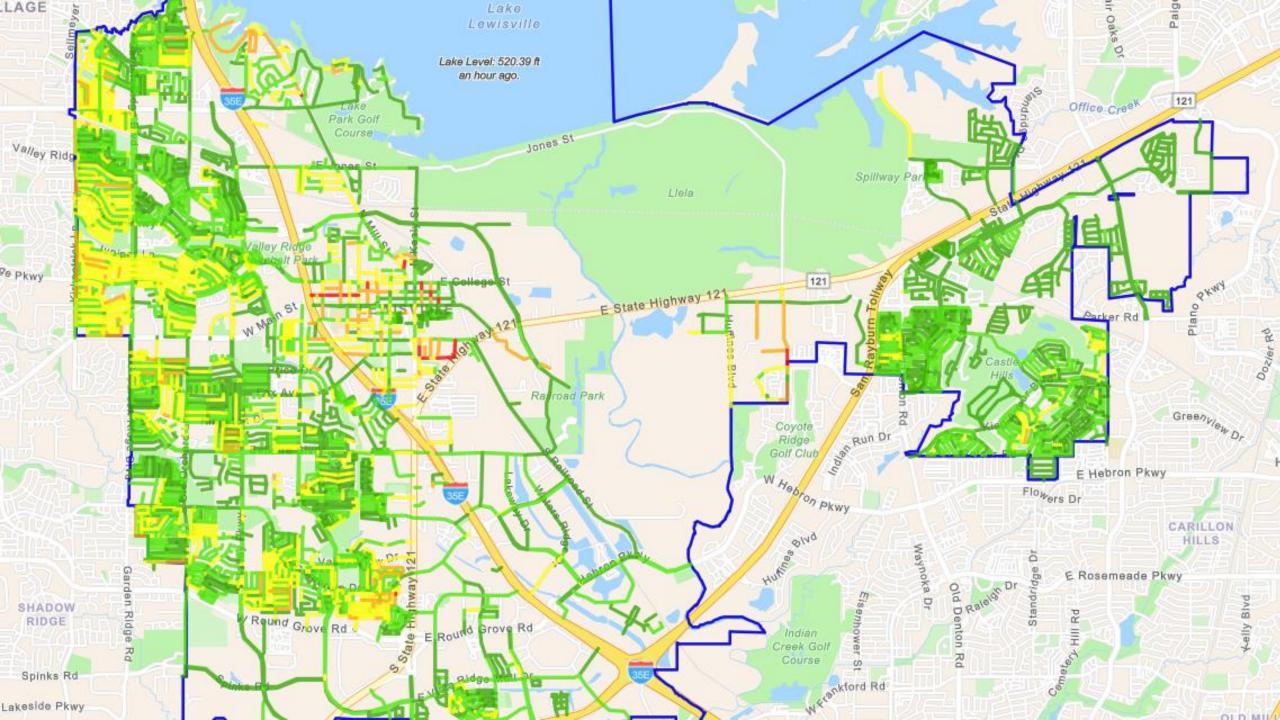
Pavement Infrastructure Needs

- Even with the financial injection of funds, the system will lose ground as the aggregate PCI will decline at current spending levels
- In the Micropaver analysis, the current spending levels resulted in greater liability event after the reinvestment of significant dollars
- This is most evident due to the pavement deterioration
- To remain at the current PCI 77 annual reinvestment should be \$10.5M for approximately 8 to 10 years



Program	Current Needs	Funded	Expected Liability FY2018	Projected Outstanding Liability	Realized Loss
Alleys	\$27.0M	\$2.0M	\$25.0M	\$31.4M	\$8.4M
Roads	\$45.0M	\$13.5M	\$31.5M	\$45.7M	\$27.7M





Current Situation... in Lewisville...

- How many miles of roads? 800 lane miles
- How much are we spending annually? \$11,000,000
- What are we spending it on?
 - For concrete roads: foam injection, crack seal, panel replacement
 - For asphalt: mill & overlay, rejuvenator, crack seal
 - Capital Project Complete rebuilds
- How much are we spending over the next year and half on Capital Projects? over \$40M
- What is our aggregate PCI for entire system? 85 steadily trending up each year
- What was our PCI last year? And the year before? And so on... (rising 2 3 points annually)



