

Sidewalk Gap Program



January 8, 2024

Public Works Committee Meeting

Erin Ralovo, PE, PTOE

Senior Staff Engineer

Yours Truly

Discussion Agenda

- ❖ Sidewalk Gap Program Review
- ❖ Confirm Previous Prioritization Guidance
- ❖ FY24 Program Proposal

CIP included \$500K to \$1 million per year for 5 years

\$3.5M in 2017 CIP Sales Tax Renewal for Sidewalk Gap Program

\$5.0M in 2023 No-Tax Increase Bond Issue

Over \$20M in Sidewalk Gaps Exist

Defining a Sidewalk Gap

- ❖ A sidewalk gap considered for program purposes:
 - ❖ Break in continuous sidewalk.
 - ❖ Missing sidewalk in an area that generally has sidewalk.
 - ❖ The absence of sidewalk where required by standards except as provided below.

- ❖ Not a sidewalk gap considered for program purposes:
 - ❖ Developing Residential Lot pending sidewalk
 - ❖ Funded Projects in the Capital Improvement Plan pending sidewalk
 - ❖ Unimproved and Interim Standard Arterial Roads pending future Urban Standard
 - ❖ Corridors requiring reconstruction/storm sewer system installation.
 - ❖ An apparent capital improvement project of much larger scale and scope.

Sidewalk Gap Program (Review)

❖ Sidewalk Gaps Inventory

- ❖ Previous Inventory Updated 2021 (Continuously thereafter)
- ❖ Gaps exist in the absence of Standard Locations based on requirements (UDO)
- ❖ Limited to Public Streets (excluding Private Streets)
- ❖ Citizen reported gaps and requests
- ❖ New construction assumed to comply with Standard Locations (no new gaps)

❖ Quantities of Priority Sidewalk Gap Identified

- ❖ 37,117 Linear feet (7.03 miles)
- ❖ 196,137 square yards (assumes 5-foot wide sidewalks)
- ❖ Estimate 150 ADA curb ramps

Sidewalk Gap Program (Review)

❖ Program Funding

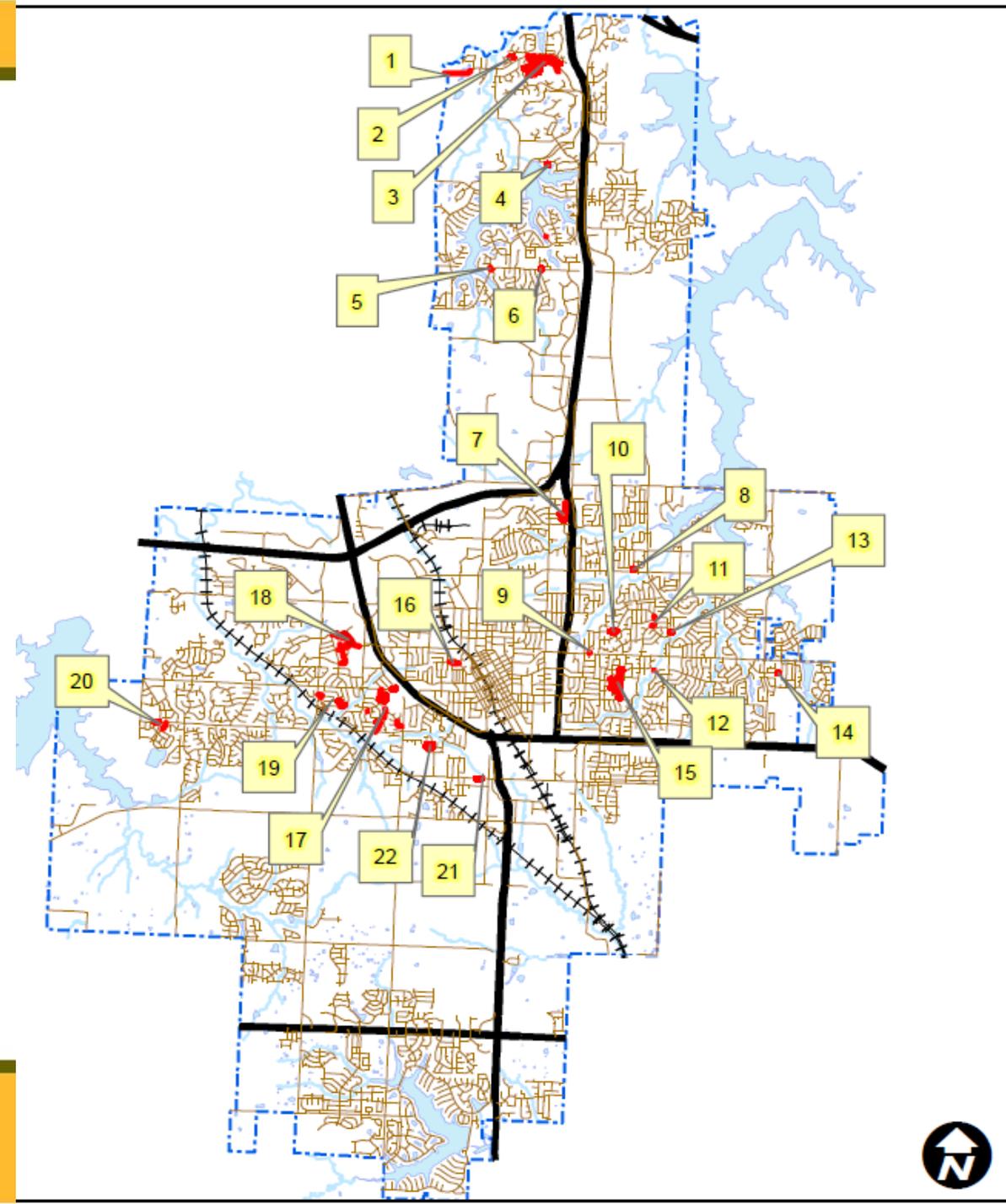
- ❖ Sidewalks included as part of Capital Projects (e.g. Road Reconstruction)
- ❖ Ramp Construction included in Curb Program (about 10% of Curb program budget)
- ❖ Sidewalk Maintenance and Small Gaps installed by PW Operations not in Program
- ❖ 2017 CIP Sales Tax provides \$3.5M in Sidewalk Gap Program funds.
- ❖ 2023 No-Tax Increase Bond Issue provides \$5M in Sidewalk Gap Program funds.

❖ Priority Sidewalk Gap Construction

- ❖ PWC Recommended Staff Priority Factors
- ❖ Staff followed Priority Factors for 1st Program Bid Package
- ❖ Identified Locations easiest to address with minimal conflicts or engineering design
- ❖ Focused mainly on true gaps rather than connected existing sidewalk on both ends
- ❖ FY22-FY23 Construction \$2.05 M (3.7 Miles)
 - ❖ 24% of combined funds completed 53% of the length of gaps that were previously prioritized
 - ❖ Indicates easy work is done; time consuming, difficult, more expensive work remains

FY23 Sidewalk Gap Program

- ❖ 22 locations
- ❖ 3.7 miles which is approximately 53% of identified highest priority gaps to be addressed by available funds
- ❖ \$2.05 million which is 24% of allocated funding
- ❖ Selected “lowest hanging fruit”
 - Significant design effort not required
 - No survey work or utility relocations
 - No changes in sidewalk elevations
 - Rely on field layout and adjustments
- ❖ Lessons Learned
 - Extensive driveway replacement required cooperation from property owners
 - Actual curb replaced almost 8 times amount estimated
 - Sod replacement significantly higher than estimated due to extensive grading
 - More complex work will need survey and design
 - Very staff intensive during construction



Driveways

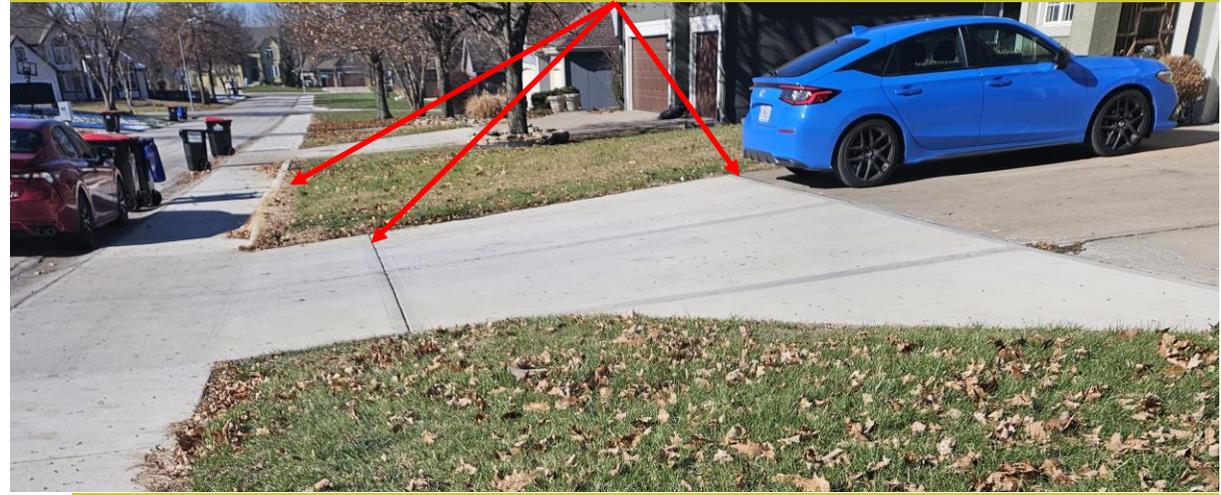
❖ Driveways are steeper than they may seem

- Just because you CAN tie in at Right of Way doesn't mean you SHOULD
- “Do no harm” or “don't create a problem”
- Driveway slopes greater than 4.3% should replacing driveways beyond ROW
- Significantly more driveway replacement than estimated
- Driveways outside ROW are private property, so some property owners refused access, so work meeting minimum standards ended at the ROW

Sharp changes in grade to end work at ROW line



- *Property Owner granted temporary construction easement to extend driveway for smooth transition*
- *Short wall/curb to match grade*



- *Property Owner granted temporary construction easement to extend driveway for smooth transition*
- *Short wall/curb to match grade*

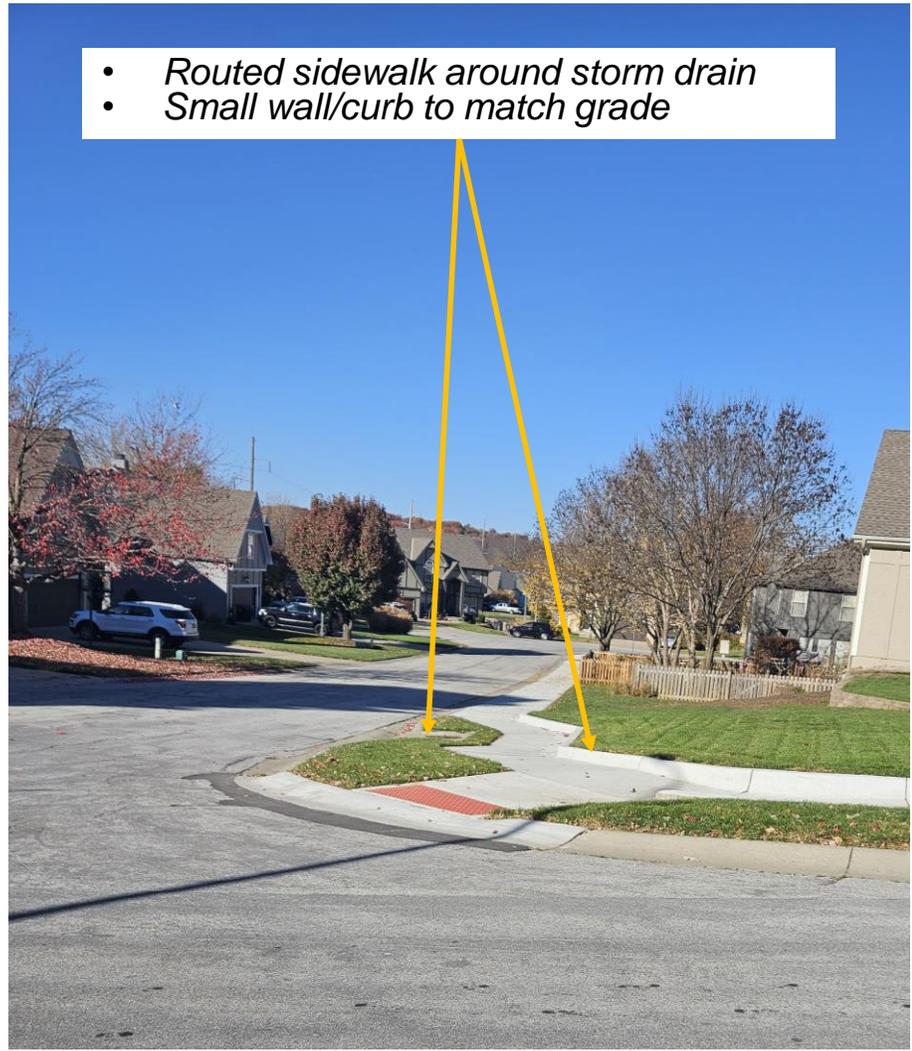


Utilities

- *Routed sidewalk around pole & sign*
- *Small wall/curb to match grade*



- *Routed sidewalk around storm drain*
- *Small wall/curb to match grade*



Yard Grades

- Most yards without sidewalks graded to match back of curb
- Installing sidewalk moves the bottom of slope 6 to 11 feet away from the curb
- Employed several methods to mitigate these changes
 - 6” Curb at the back of the sidewalk
 - Retaining Walls at the back of sidewalk
 - Adjusting the height of the sidewalk

Examples of installing curb along back of sidewalk to reduce extents of grading



Examples of small retaining walls less than 30 inches in height

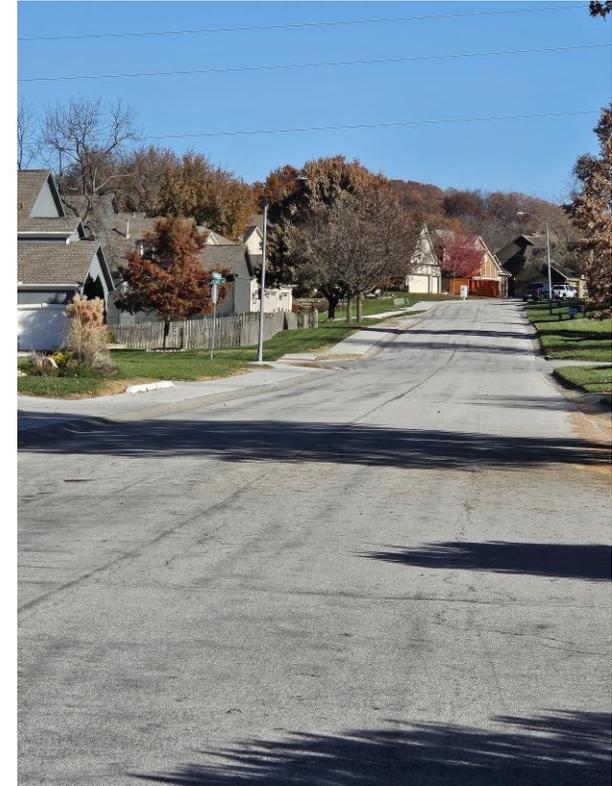


Increased Community Connection



SE 3rd Terrace connecting to
Miller J. Fields Park

NE Anderson Dr connecting to
Lees Summit Road and access to
the Little Blue Trace Trail



NE Emerald Dr connecting to
Voy Spears Elementary School

Example of Future Challenges



Complex ADA Issues

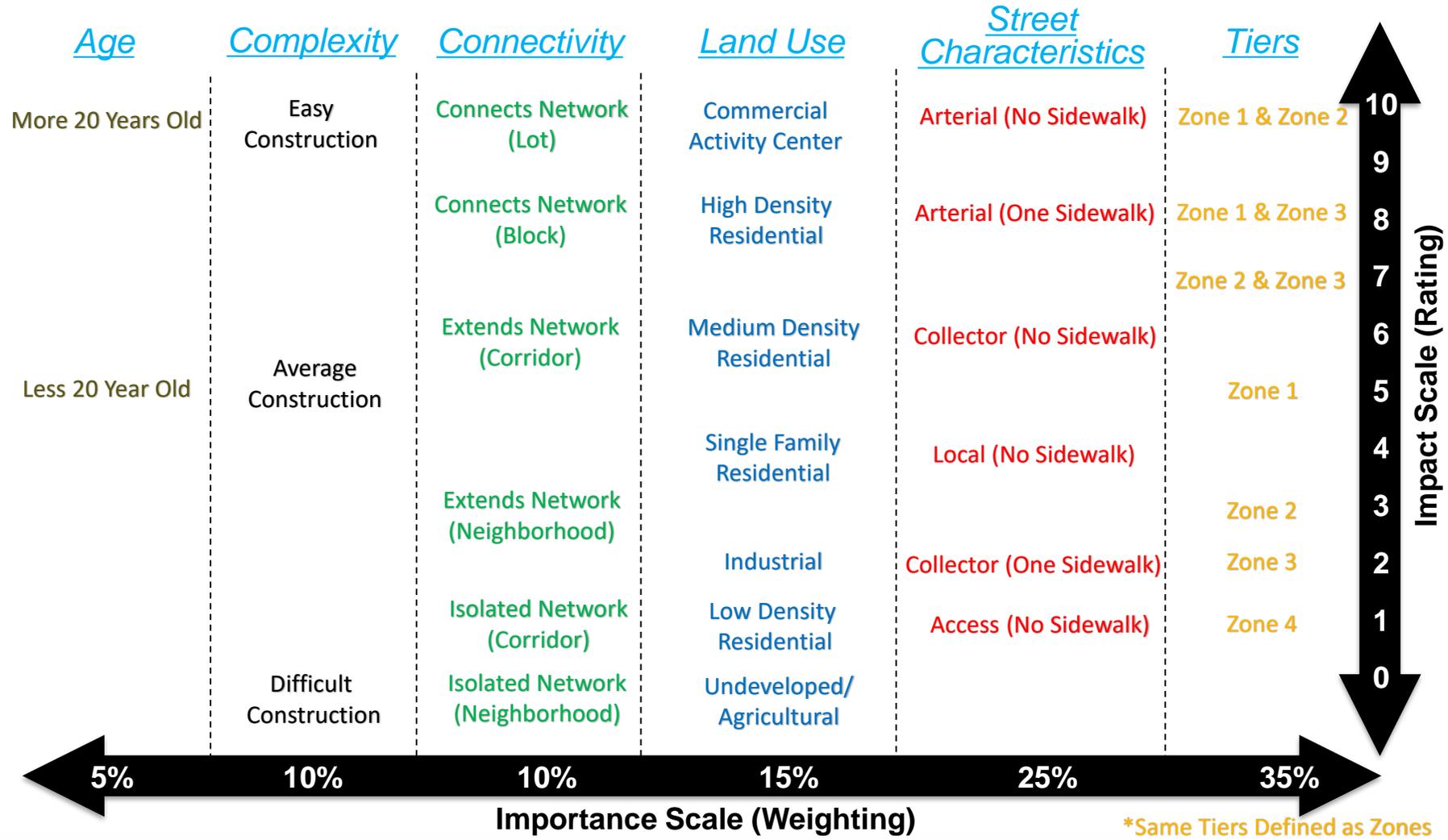
- ❖ Removing steps requires:
- ❖ 100 to 200 feet of sidewalk
- ❖ 6 foot tall retaining wall
- ❖ Relocate and or coordinate utilities
 - Electric
 - Lower water mains
 - Relocate/adjust water valves
 - Reset water meters
 - Sanitary Sewer laterals
 - Gas service lines (usually unmarked)



Sidewalk Gap Program (Priorities)

- ❖ Established Prioritization Tiers (Zones) by Factors to Identify Project Locations
- ❖ Factors were expanded and scaled:
 - ❖ Sidewalk Presence for entire variety of Street Classifications
 - ❖ Added various land use considerations
- ❖ Factors were assigned values of significance (e.g. weight)
 - ❖ Considered impacts and importance of the location
- ❖ Assessment Methods: Funneled, Balanced, Rated/Scored
- ❖ Public Works Committee agreed with the new Sidewalk Gap Prioritization
- ❖ No changes are recommended by Staff

Sidewalk Gap Prioritization (Factors)



Tie Break - Public Demand/Opposition

Not Sidewalk Gap Program

- Street Reconstruction Required
- Unimproved/Interim Arterials
- Active Development/CIP Project



Sidewalk Gap Prioritization (Ratings)

Scaled Categorical Ratings & Weighting System

| Zone (i.e. "Tier") Factor | 35% |
|-----------------------------|-----|
| Combination Zone 1 & Zone 2 | 10 |
| Combination Zone 1 & Zone 3 | 8 |
| Combination Zone 2 & Zone 3 | 7 |
| Zone 1 | 5 |
| Zone 2 | 3 |
| Zone 3 | 2 |
| Zone 4 | 1 |

| Street Characteristic Factor | 25% |
|------------------------------|-----|
| Arterial No Sidewalk | 10 |
| Arterial One Sidewalk | 8 |
| Collector No Sidewalk | 6 |
| Local No Sidewalk | 4 |
| Collector One Sidewalk | 2 |
| Access No Sidewalk | 1 |

| Land Use Factor (1/4 Mile Walk Proximity) | 10% |
|---|-----|
| Commercial Activity Center | 10 |
| High Density Residential | 8 |
| Medium Density Residential | 6 |
| Single Family Residential | 4 |
| Industrial | 2 |
| Low Density Residential | 1 |
| Rural Residential/Agricultural | 0 |

| Connectivity Factor | 15% |
|-------------------------------|-----|
| Connects Network (Lot) | 10 |
| Connects Network (Block) | 8 |
| Extends Arterial Network | 6 |
| Extends Neighborhood Network | 3 |
| Isolated Arterial Network | 1 |
| Isolated Neighborhood Network | 0 |

| Infrastructure Age Factor | 5% |
|---------------------------|----|
| Over 20 Years | 10 |
| Under 20 Years | 5 |
| Active Development | 0 |

| Difficulty of Construction Factor | 10% |
|---------------------------------------|-----|
| No Difficulty (Build Ready) | 10 |
| Medium Difficulty (Site Preparations) | 6 |
| High Difficulty (Driveways/Grading) | 3 |

LOCATION:

| FACTOR | ATTRIBUTE | RATING | WEIGHT | SCORE |
|----------------------------|-------------------------------|--------------|-------------|-----------|
| Trip Attraction (Tier) | Combination Zone 1 & Zone 2 ▼ | 10 | 35% | 3.5 |
| Street Condition | Arterial No Sidewalk ▼ | 10 | 25% | 2.5 |
| Connectivity | Connects Network (Lot) ▼ | 10 | 15% | 1.5 |
| Trip Generation (Land Use) | Commercial Activity Center ▼ | 10 | 10% | 1 |
| Difficulty | No Difficulty (Build Ready) ▼ | 10 | 10% | 1 |
| Age | Over 20 Years ▼ | 10 | 5% | 0.5 |
| Public Demand (Tie-Break) | | TOTAL | 100% | 10 |

Sidewalk Gap Program (Proposal)

- ✓ FY22-FY23 Sidewalk Gap Program Completed
- Public Works Committee Concurrence (or Change) to Prioritization
- Continue with next bid package based on Sidewalk Gap Prioritization

- ❖ Additional Field Investigation/Engineering Required for Next Priorities
- ❖ Funding Remaining \$6,420,000 over the next 5 to 7 Years
- ❖ Summer 2024 Bid

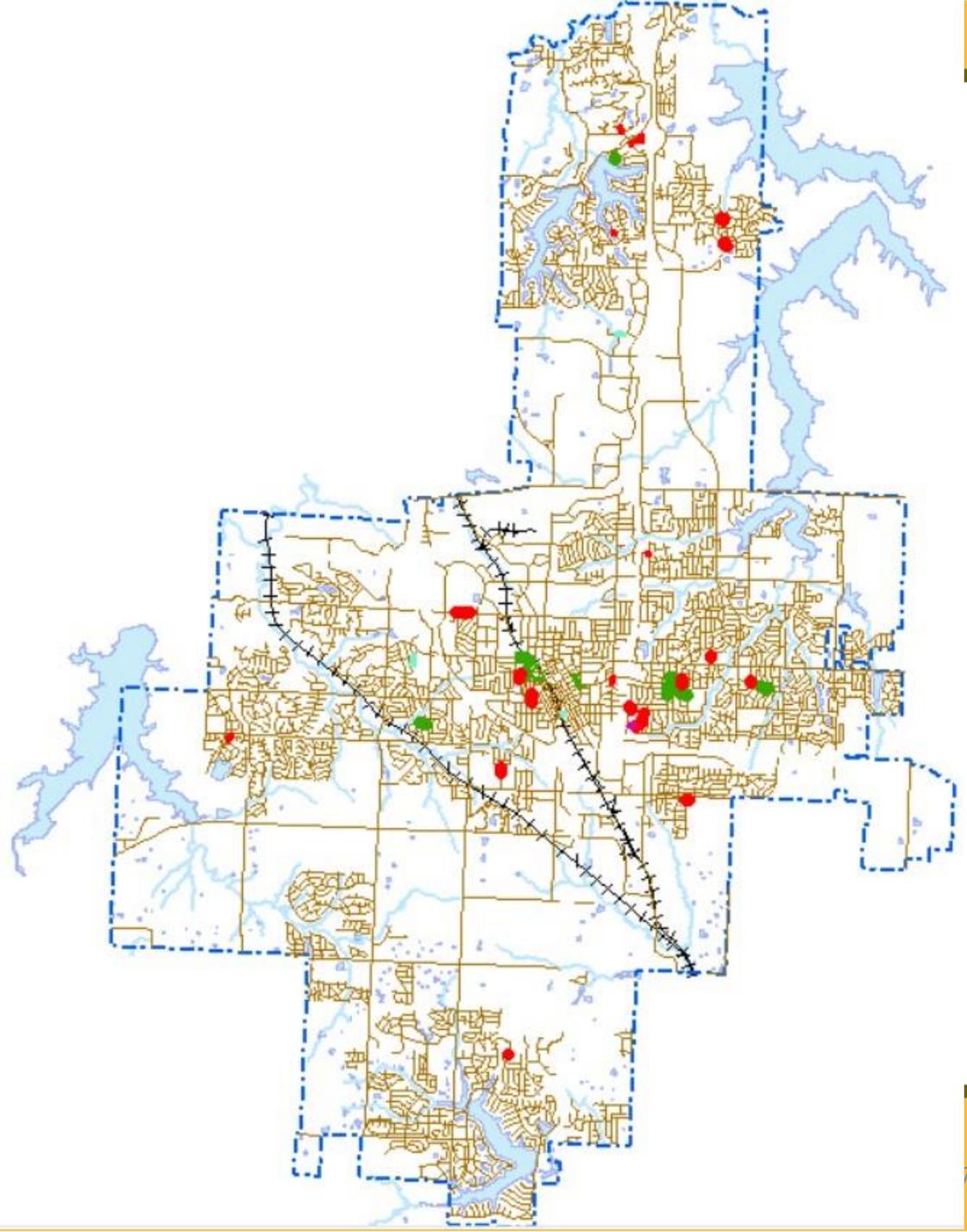
Conceptual Construction Programs:

FY2024/2025

- *Current Engineer's Estimate \$800K*
- *Survey needed and additional field engineering*
- *May be two projects*

Next Phases

- *Need more extensive engineering*
- *More extensive Utility, ROW and Grading Issues*
- *Continue to work to identify additional system gaps*



Erin Ralovo, PE, PTOE

Senior Staff Engineer

Erin.Ralovo@cityofls.net

816.969.1800

