

## City Council Work Session Handouts

March 15, 2021

- I. Review and Discuss Streets, Alleys, and Sidewalks Needs for Consideration in a Future Bond Program
- II. Review and Discuss Redevelopment Project Needs for Consideration in a Future Bond Program

# **2021 BOND PROGRAM PLANNING STREETS, ALLEYS, & SIDEWALKS BOND PROGRAM CONSIDERATIONS**

**City Council Briefing: March 15, 2021**

# INTRODUCTION

- Purpose of tonight's briefings is to...
  - Present a list of candidate projects for street, alley and sidewalk reconstruction
  - Present a list of candidate redevelopment projects in the CORE District and Richardson Innovation Quarter

# INTRODUCTION

- The Pavement Condition Index (PCI) assessment provides a snapshot of the overall condition of the network using a widely accepted inspection and review process
- You will see shortly that while we have fallen slightly in our overall score the network remains within the *Satisfactory* category
  - Preventative maintenance has helped us safeguard our *Good* streets
  - Annual maintenance programs have helped us preserve out *Satisfactory* streets
  - *Fair* and *Poor* streets are deteriorating, however, at a rate that is exceeding our current reconstruction resources. This is due, in part, to the intensive surge of their initial development in a relatively short period of time\*



# INTRODUCTION

- \*Fair and Poor Street Considerations
  - Result of Richardson's Growth story
    - Expected Useful Life of a street is 25 years
      - 73% of our streets are 40+ years old
  - Generally, tend to be in areas that have not been the focus of prior bond programs and/or annual maintenance strategies
  - These projects must be prioritized when considering capital project needs as the required funding is too significant for any other single strategy

# INTRODUCTION

- Approach to Streets, Alleys & Sidewalks
  1. Present inventory of those streets and alleys that scored >25 or *Poor* on the CPI
    - From that grouping, highlight priority projects that have surfaced because of the condition of the street / alley as well as numerous other factors
      - Traffic volumes, water and sewer conditions, drainage improvement needs, etc.
      - The priority projects identified also tend not to be slated for replacement/repair by another strategy in the next five years

# INTRODUCTION

- Approach to Streets, Alleys & Sidewalks – Continued
  2. Present options for the next phase of the residential sidewalk replacement program and the possible creation of a commercial sidewalk program
  3. Pause specific project considerations until we have the initial proposition “fitting discussion” in April
    - Staff will take Council’s feedback about all of the areas of needs presented and develop proposition blocking scenarios for your consideration
    - As orders of magnitude become clear for each proposition, the collection of projects within each can be determined

# INTRODUCTION

- There are more priority projects than this bond program will be able to accommodate
- As such, there will be worthwhile projects that will not be included in the final proposition composition
- There are numerous other ways these projects might be funded in the coming years
  - Special Funds
  - Certificates of Obligation
  - Annual Maintenance Programs
  - *Federal stimulus funding for infrastructure projects*
  - Dallas/Collin County Grants
  - NCTCOG Grants
  - Future Bond Program

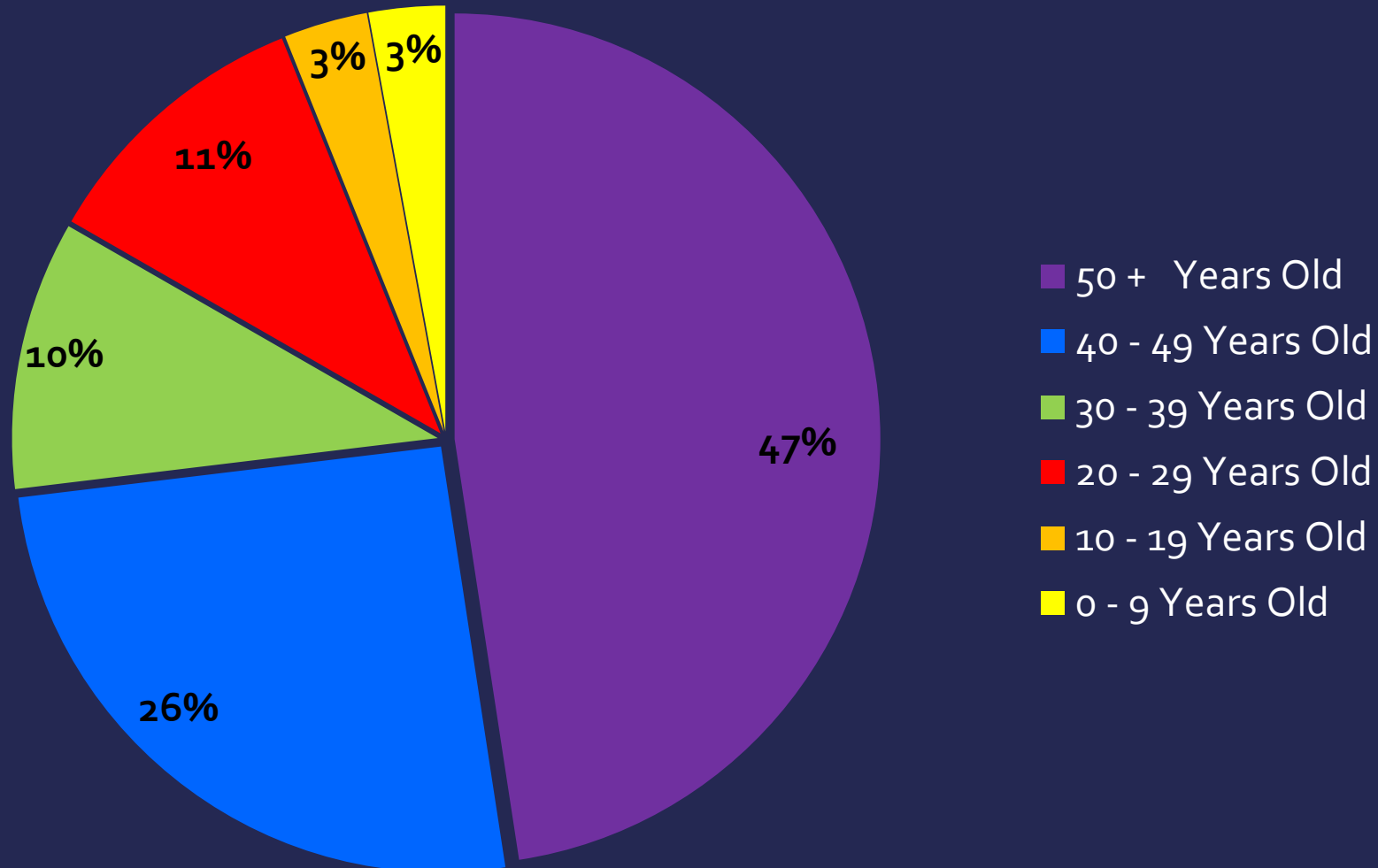
# INTRODUCTION

- Likewise, there are also worthwhile projects that do not qualify for inclusion in the bond program because of the nature of the project
  - Branding strategies in the CORE and IQ (pole banners, sign toppers)
  - Open Space in the CORE (property is licensed from DART)
  - Median landscaping (not being planted in conjunction with a street rehab project)
- Many of these projects will be considered during the budget development process in this and in future years
- Others will be considered in future TIF planning, public-private partnerships, grants, etc.
- Regardless of the reason, projects that do not make this bond program will not be forgotten; as we have done in the past, we will evaluate all possible funding strategies to keep them moving forward as well

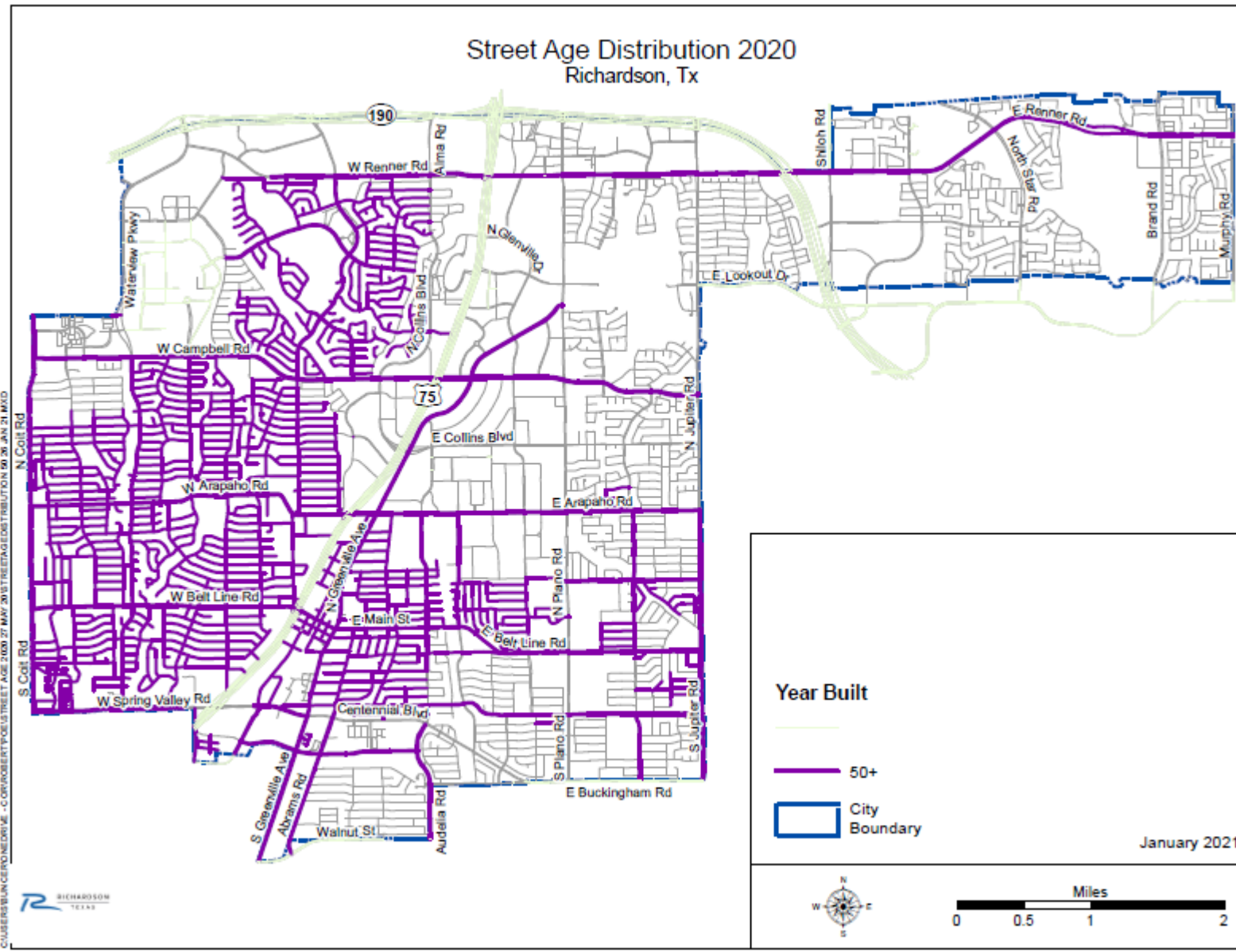
# PRESENTATION OVERVIEW

- Streets and Alleys Background
- Streets – Reconstruction
- Alleys – Reconstruction
- Sidewalks

# STREETS AGE DISTRIBUTION 2020

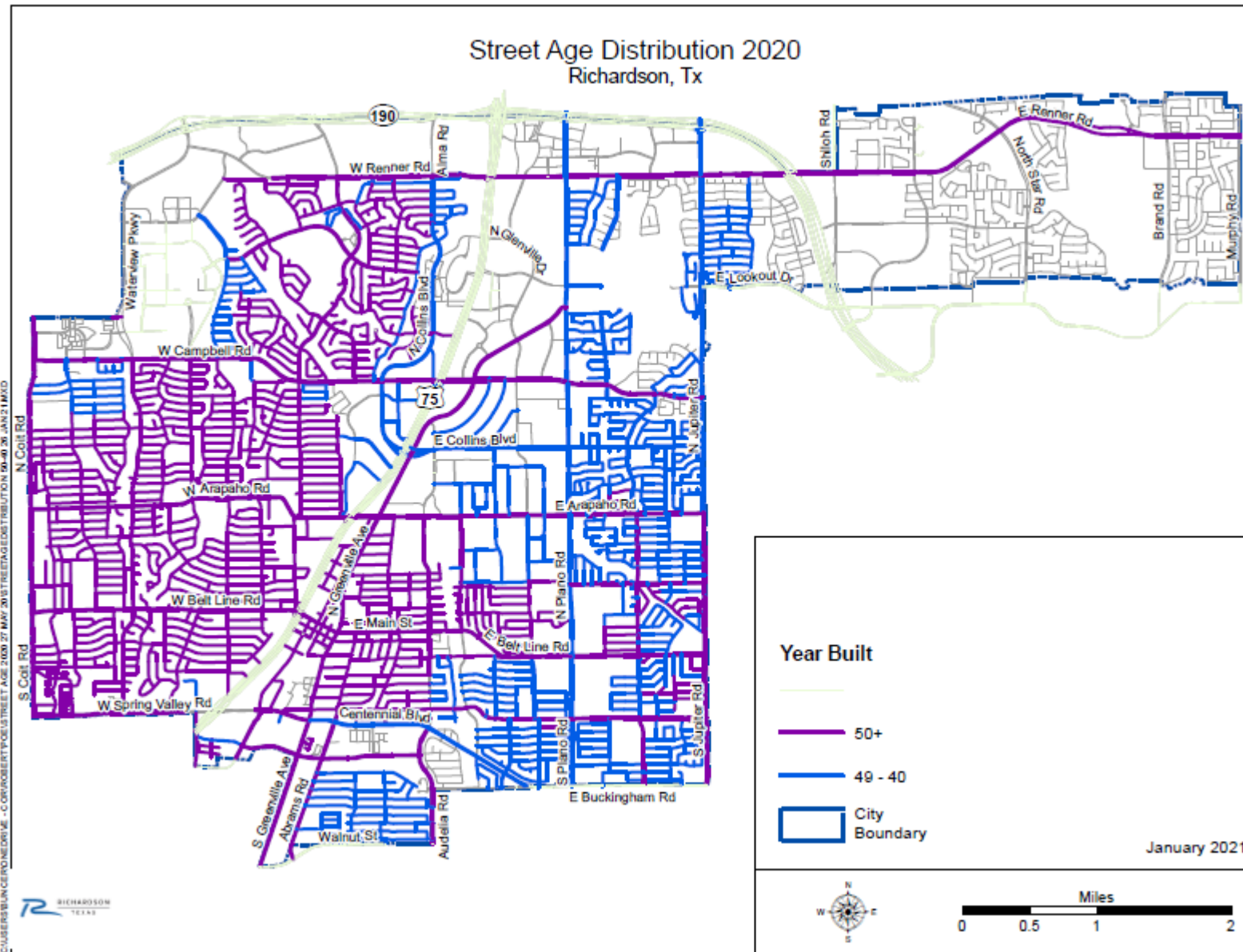


# STREETS AGE DISTRIBUTION 2020

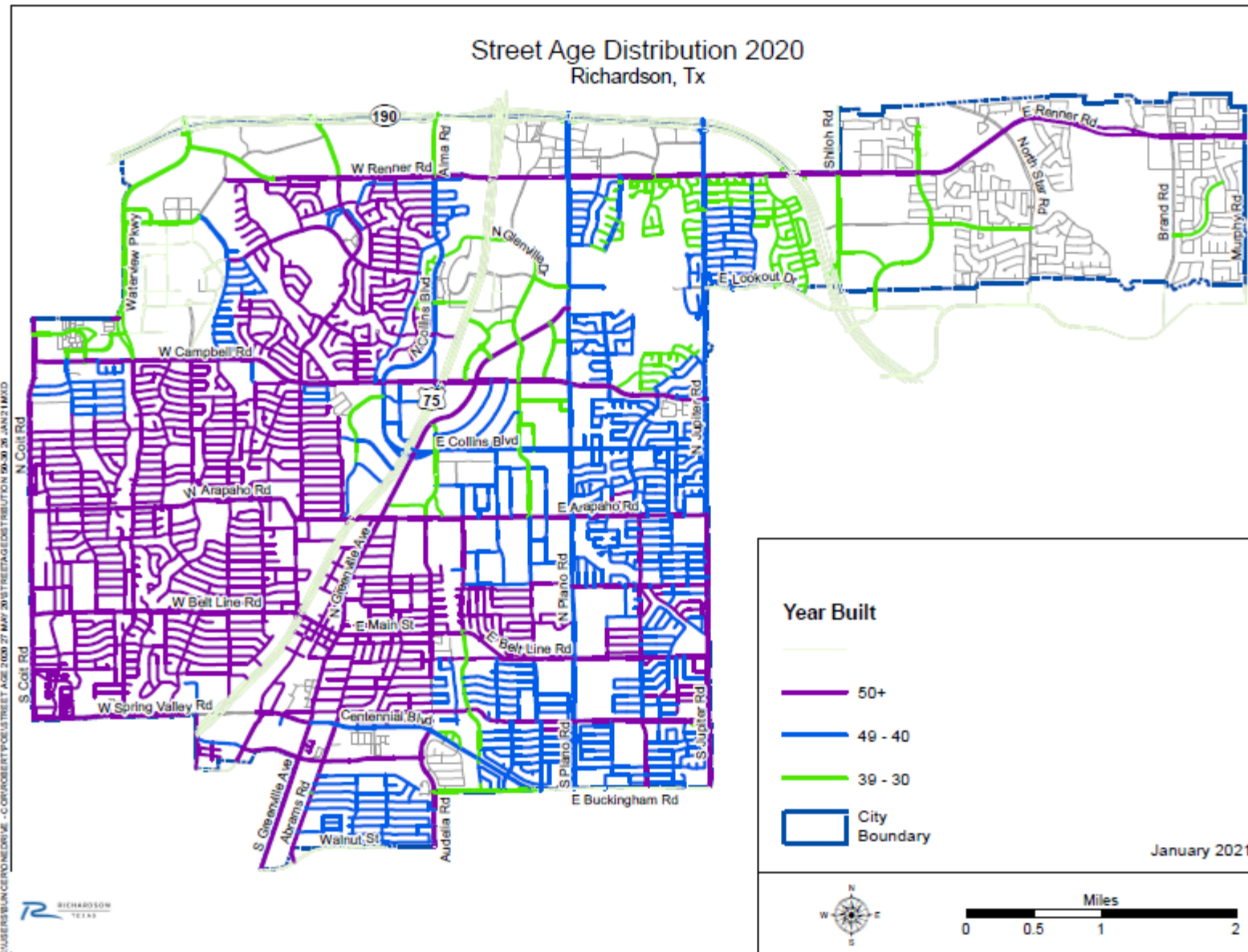




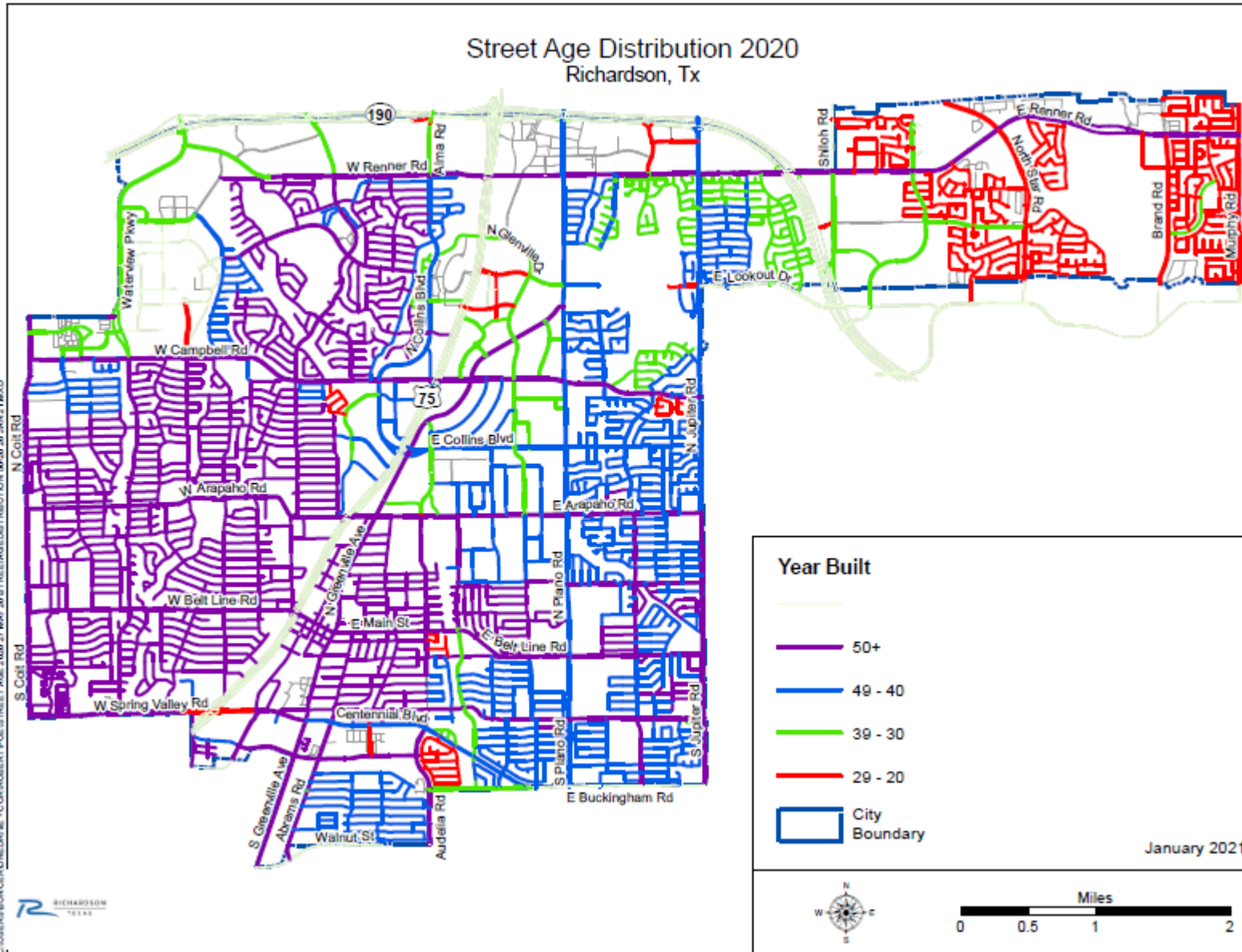
# STREETS AGE DISTRIBUTION 2020



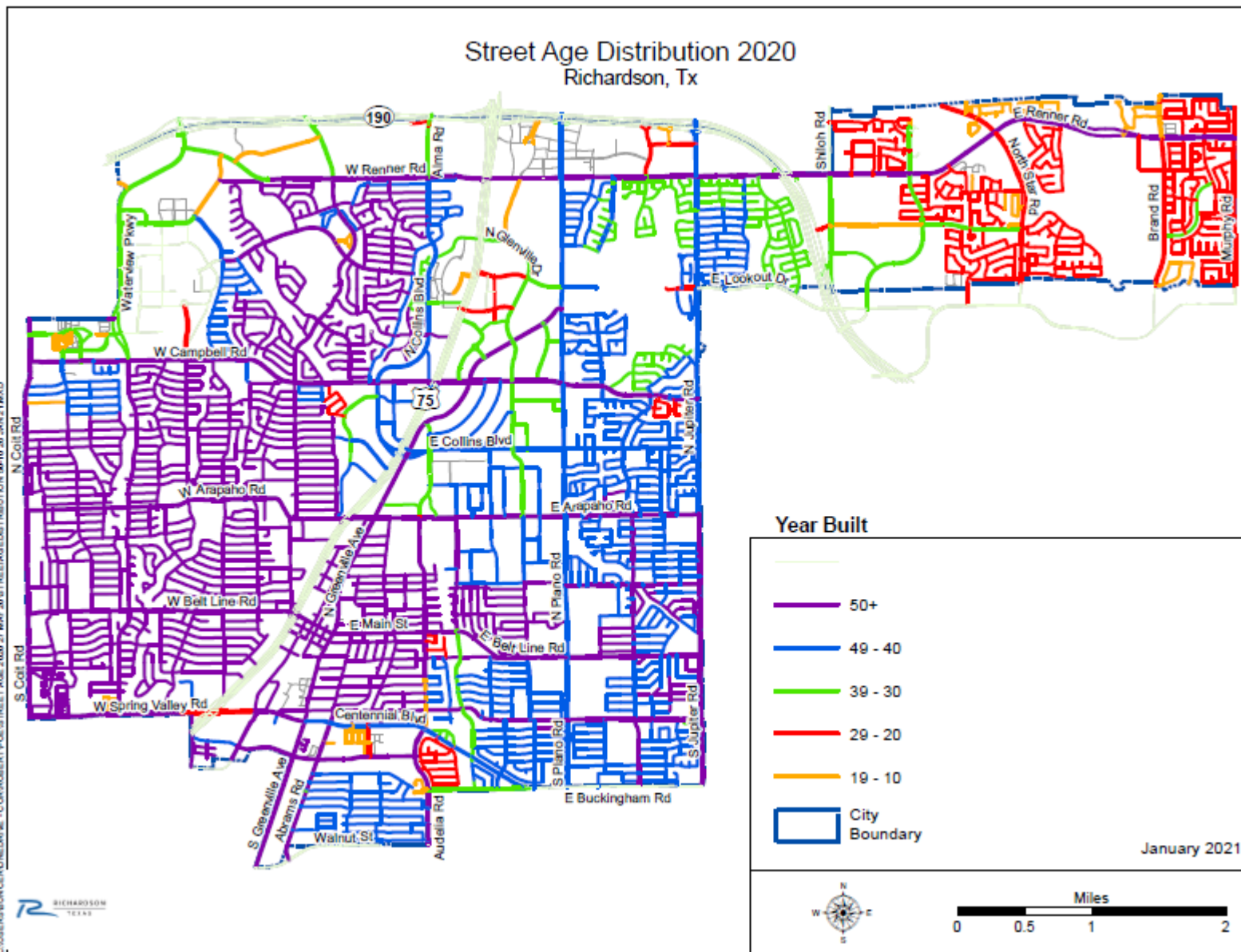
# STREETS AGE DISTRIBUTION 2020



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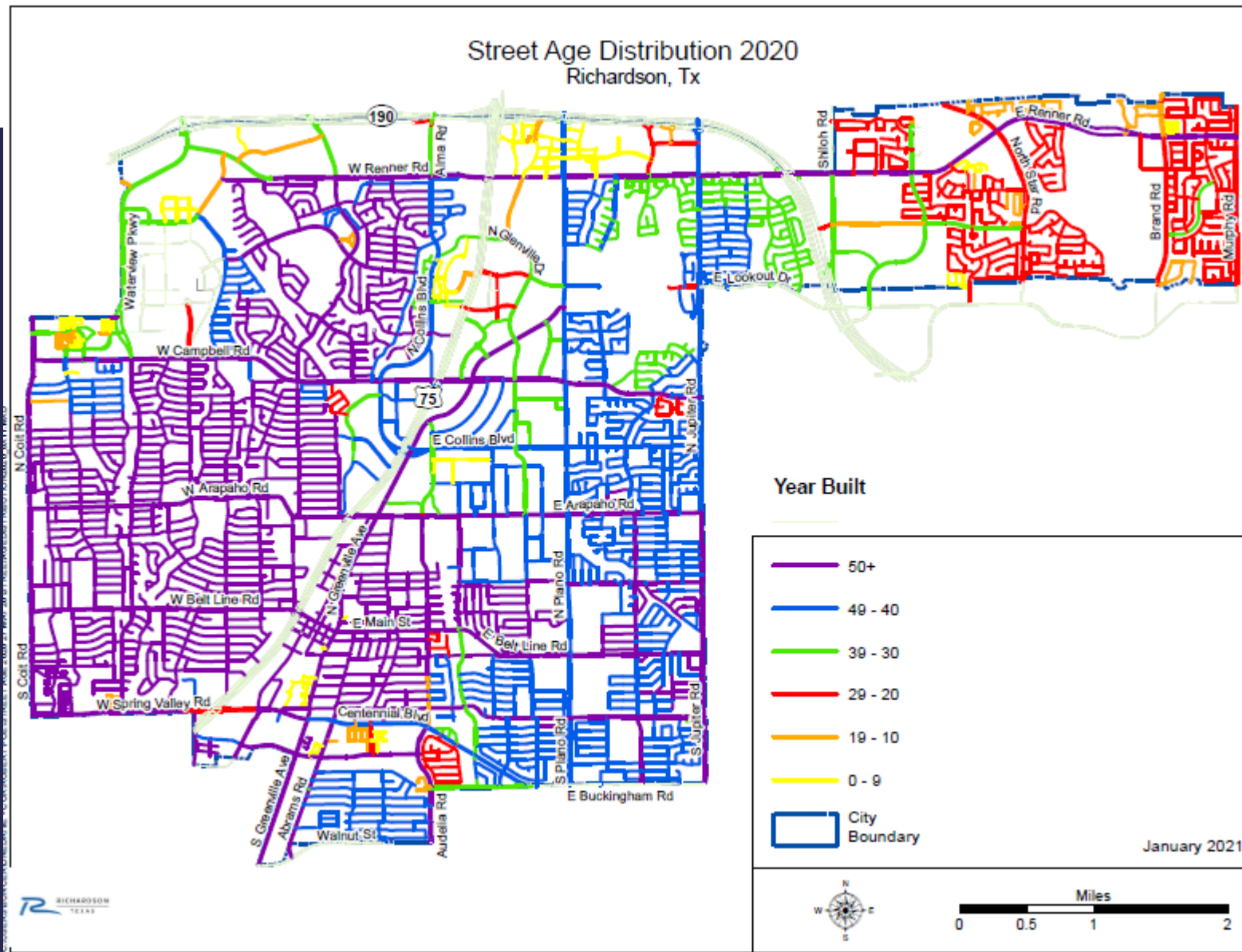


# STREETS AGE DISTRIBUTION 2020





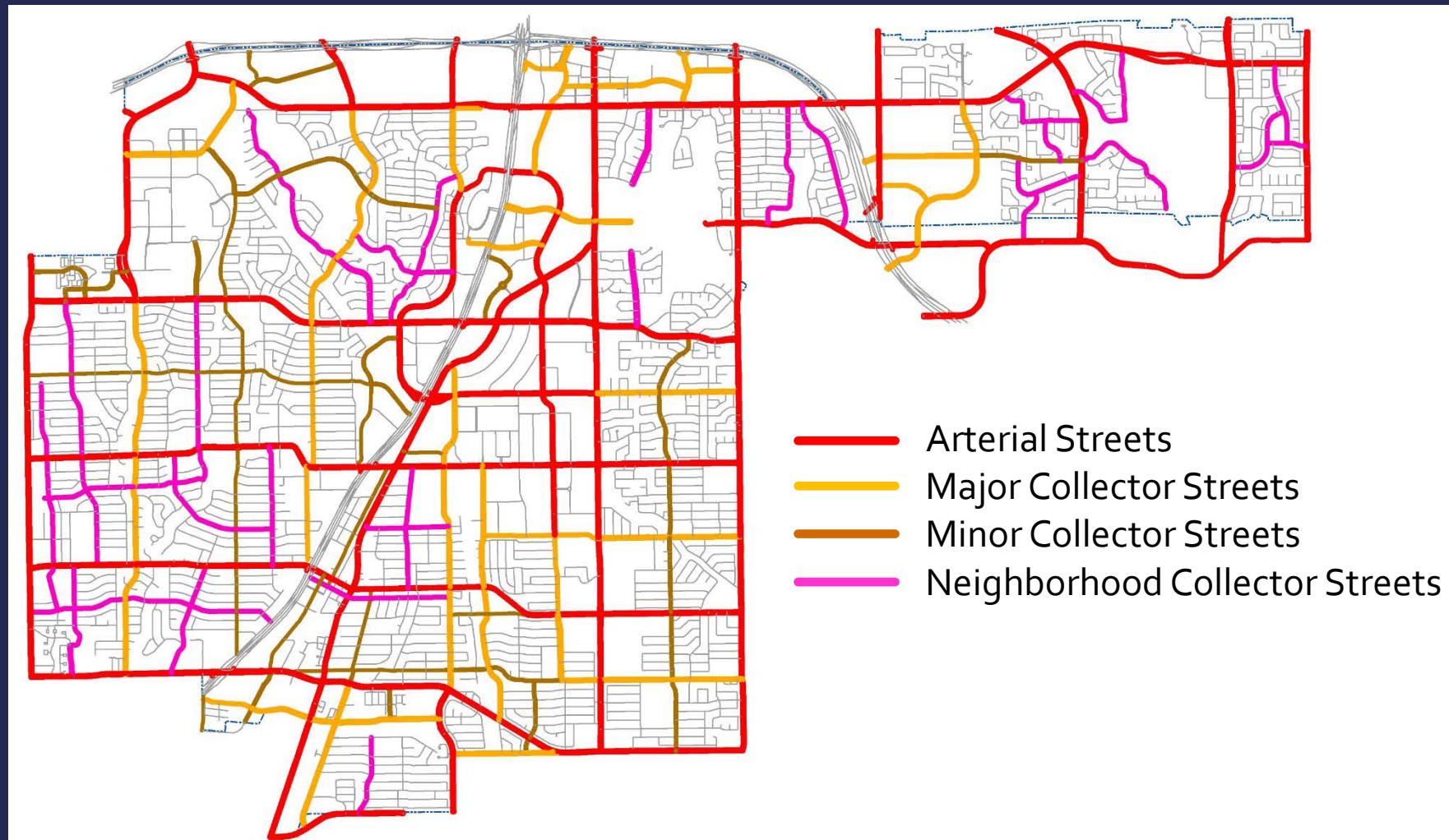
# STREET'S CLASSIFICATION



# STREET'S THOROUGHFARE FUNCTIONAL CLASS

- Arterials - 57 Miles
- Major Collectors - 36 Miles
- Minor Collectors - 25 Miles
- Neighborhood Collectors - 31 Miles
- Residential – 228 Miles
- Alleys - 223 miles
- **Total – 600 miles**

# STREET'S THOROUGHFARE FUNCTIONAL CLASS



# STREET TYPES

- Concrete – 311 miles



La Salle Drive



# STREET TYPES

- Concrete – 311 miles
- Asphalt Overlaid Concrete – 60 miles



Bowser Road

# STREET TYPES

- Concrete – 311 miles
- Asphalt Overlaid Concrete – 60 miles
- Full Depth Asphalt – 6 miles



Edgehill Drive

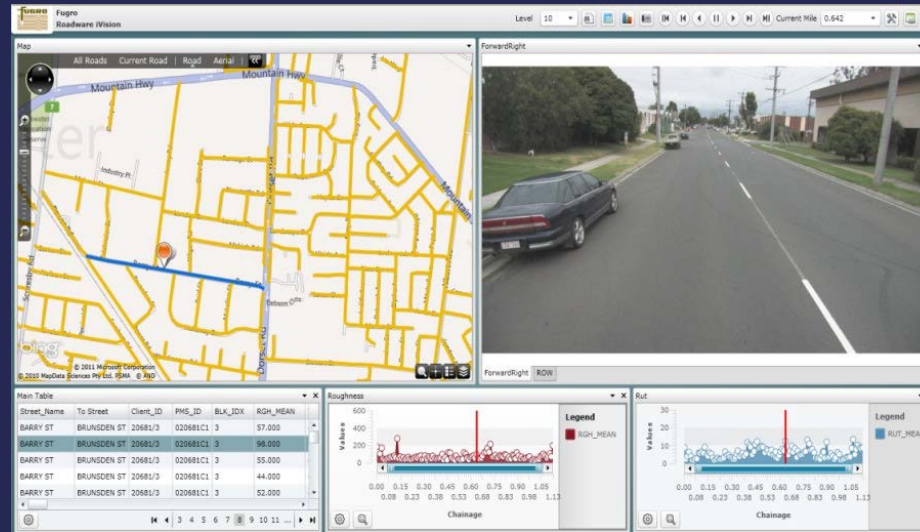
# STREET & ALLEY MAINTENANCE CYCLE





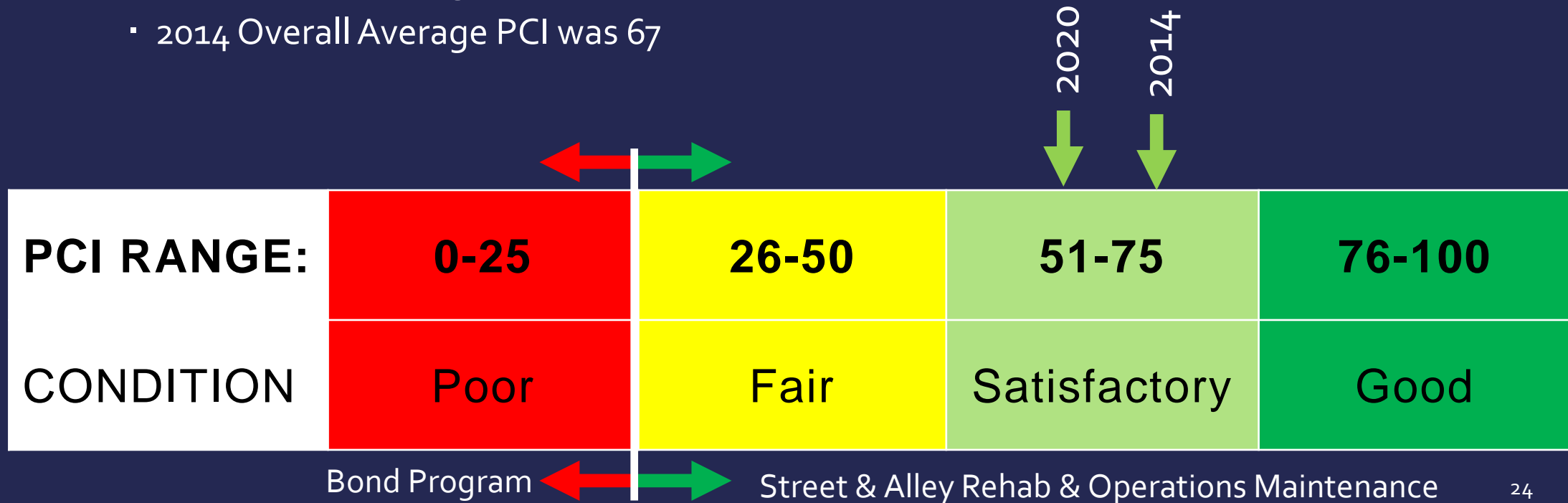
# INTRODUCTION TO STREET & ALLEY ASSESSMENT

- Citywide pavement condition assessment by Fugro USA Land, Inc.
  - Arterials, Collectors, Locals and Alleys
- Data collected Spring of 2020 using laser and photometric equipment to assess surface distress and roughness
- Data collected using Fugro's Automatic Road Analyzer (ARAN)
  - Collected street sign data
  - Pavement marking condition data



# STREET & ALLEY ASSESSMENT SUMMARY

- Pavement Management Condition Inventory Study Completed in 2020
  - Determined Pavement Condition Index (PCI) for all streets
  - Assessment is a Snapshot of overall network condition using National Standards
  - 2020 Overall Average PCI is 59
  - 2014 Overall Average PCI was 67





# STREET & ALLEY ASSESSMENT SUMMARY



100 PCI



80 PCI



60 PCI



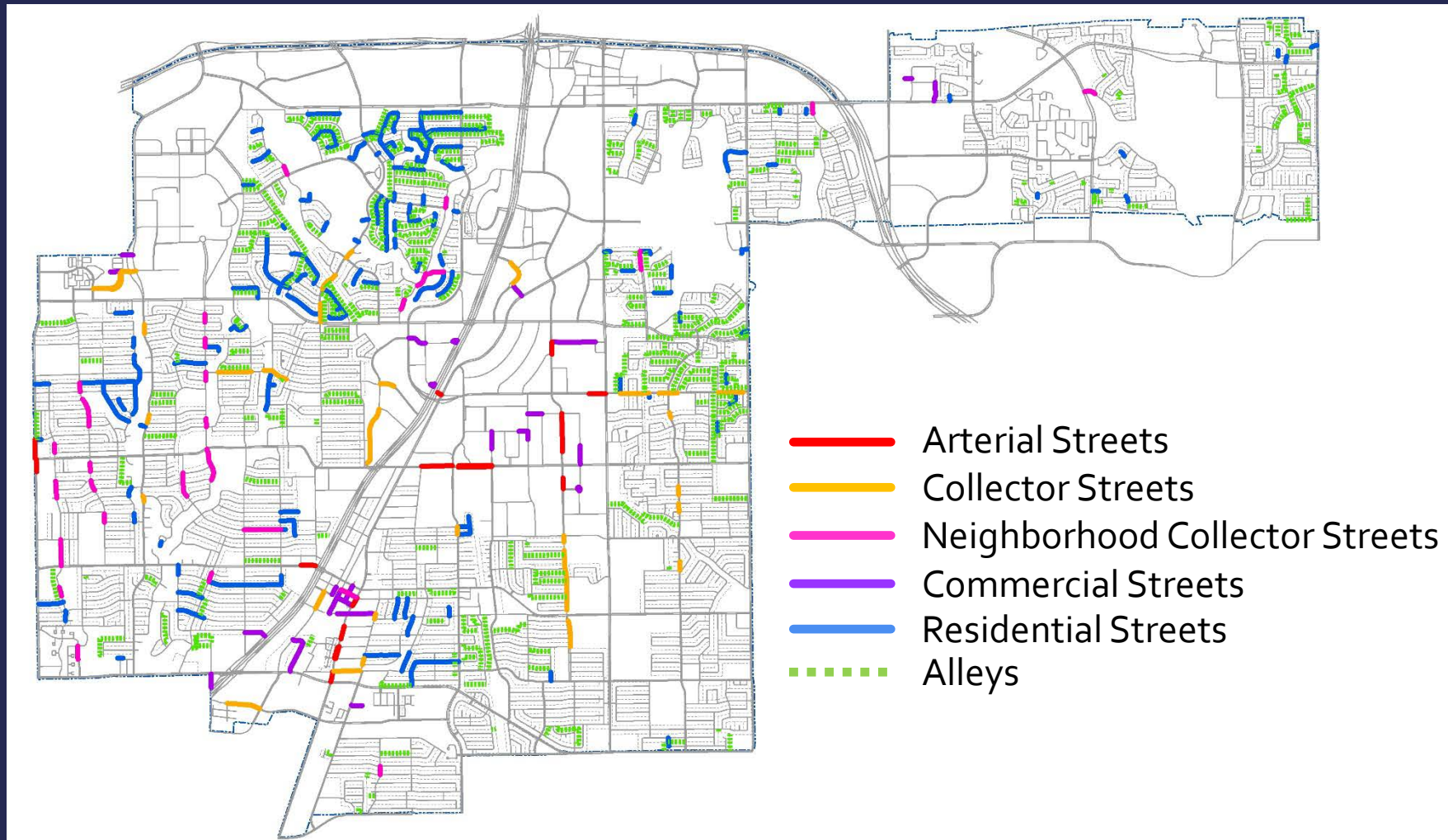
40 PCI



20 PCI



# ALL CLASSIFICATIONS WITH PCI $\leq 25$ AND UNDER



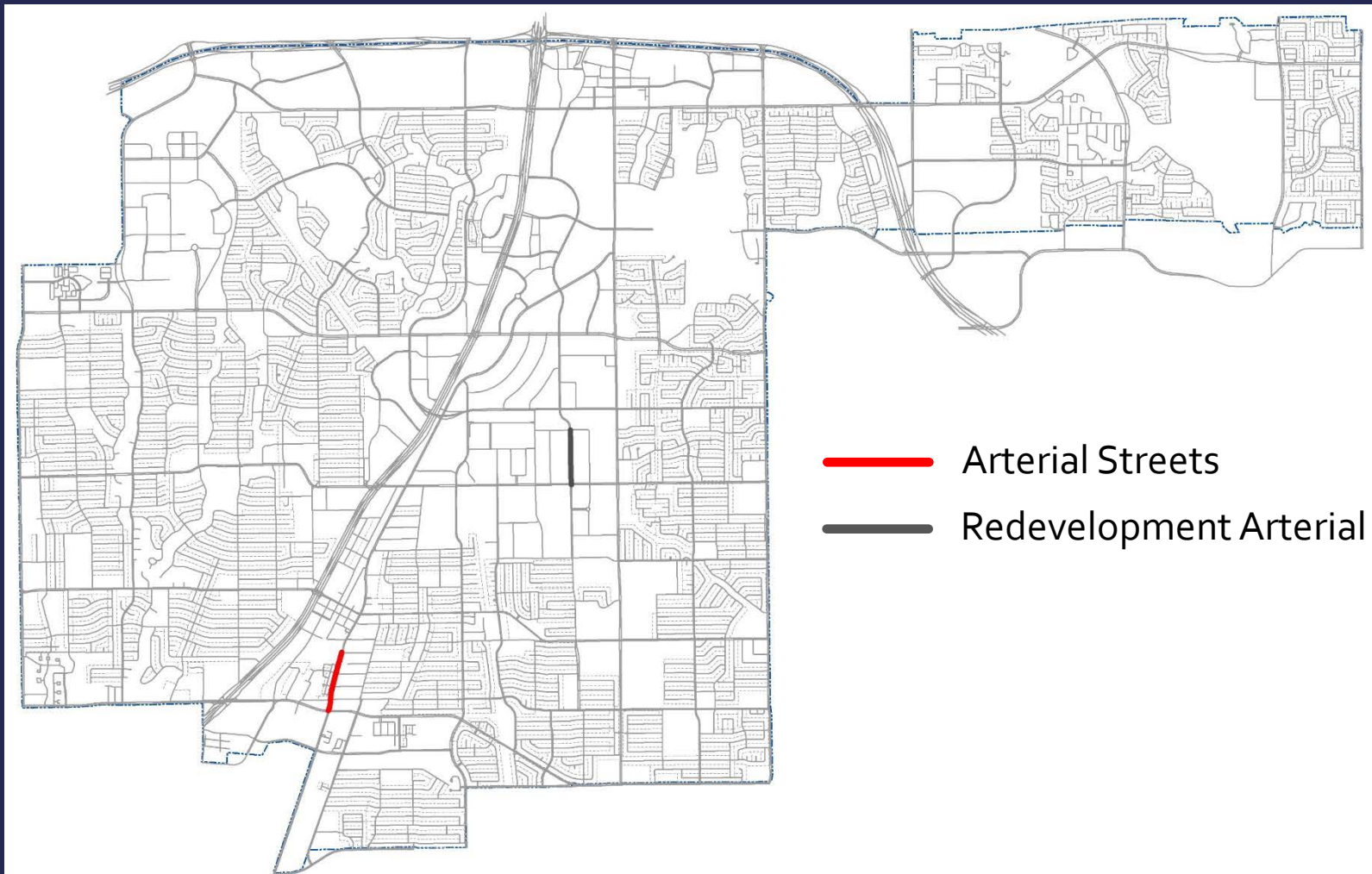
# STREET & ALLEY CONDITION CONSIDERATIONS

- Pavement Condition Assessment
- Traffic volume
- Project size / limits
- Water and sewer condition
- Drainage improvement need
- Grants and other funding assistance
- Development/Redevelopment timing considerations
- Pavement markings/bike lane
- Alley width
- Primary garage access or not
- Solid waste operational concerns

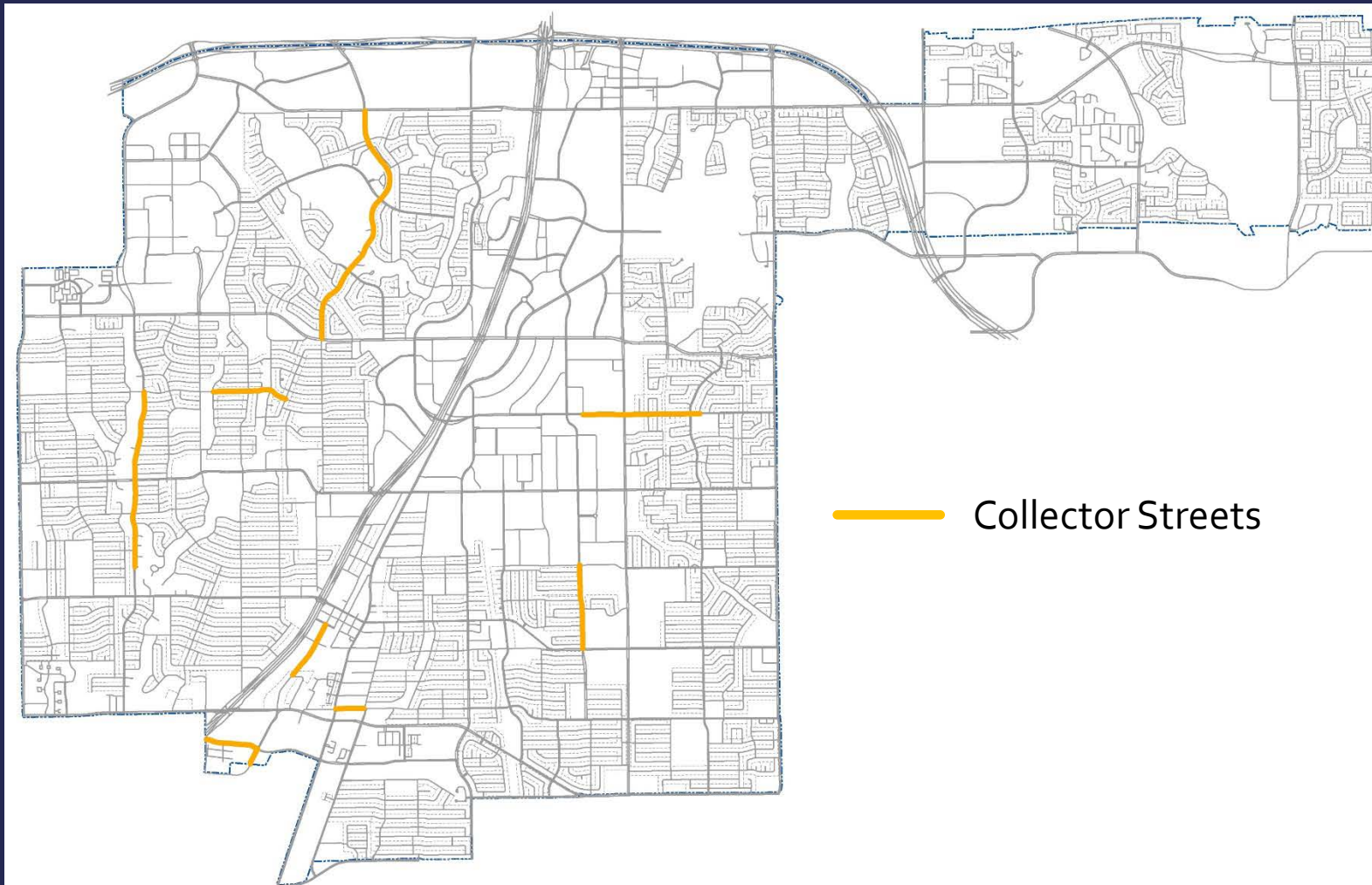


# **STREET & ALLEY RECONSTRUCTION CANDIDATES**

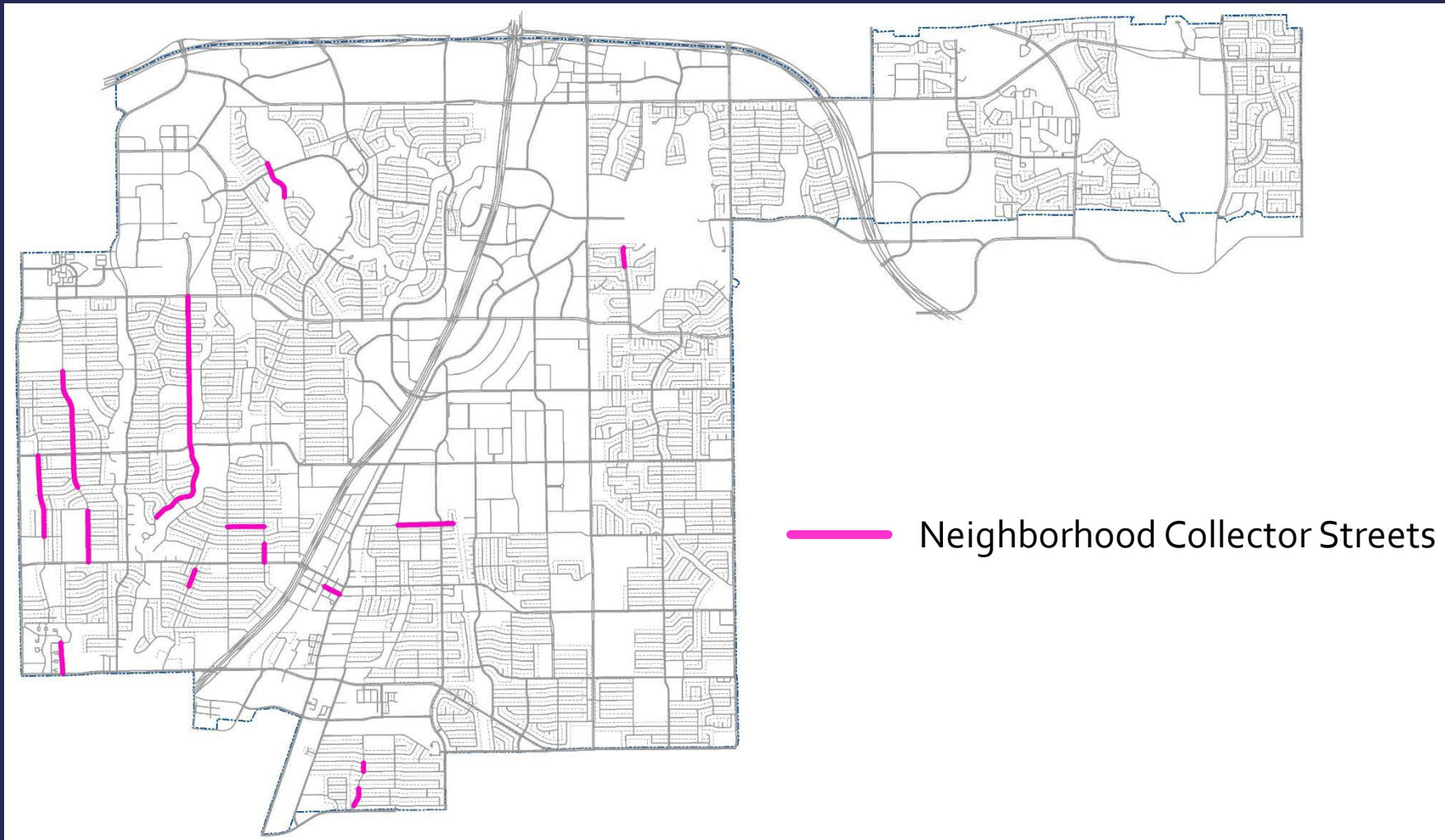
# ARTERIAL STREET CANDIDATES



# COLLECTOR STREET CANDIDATES

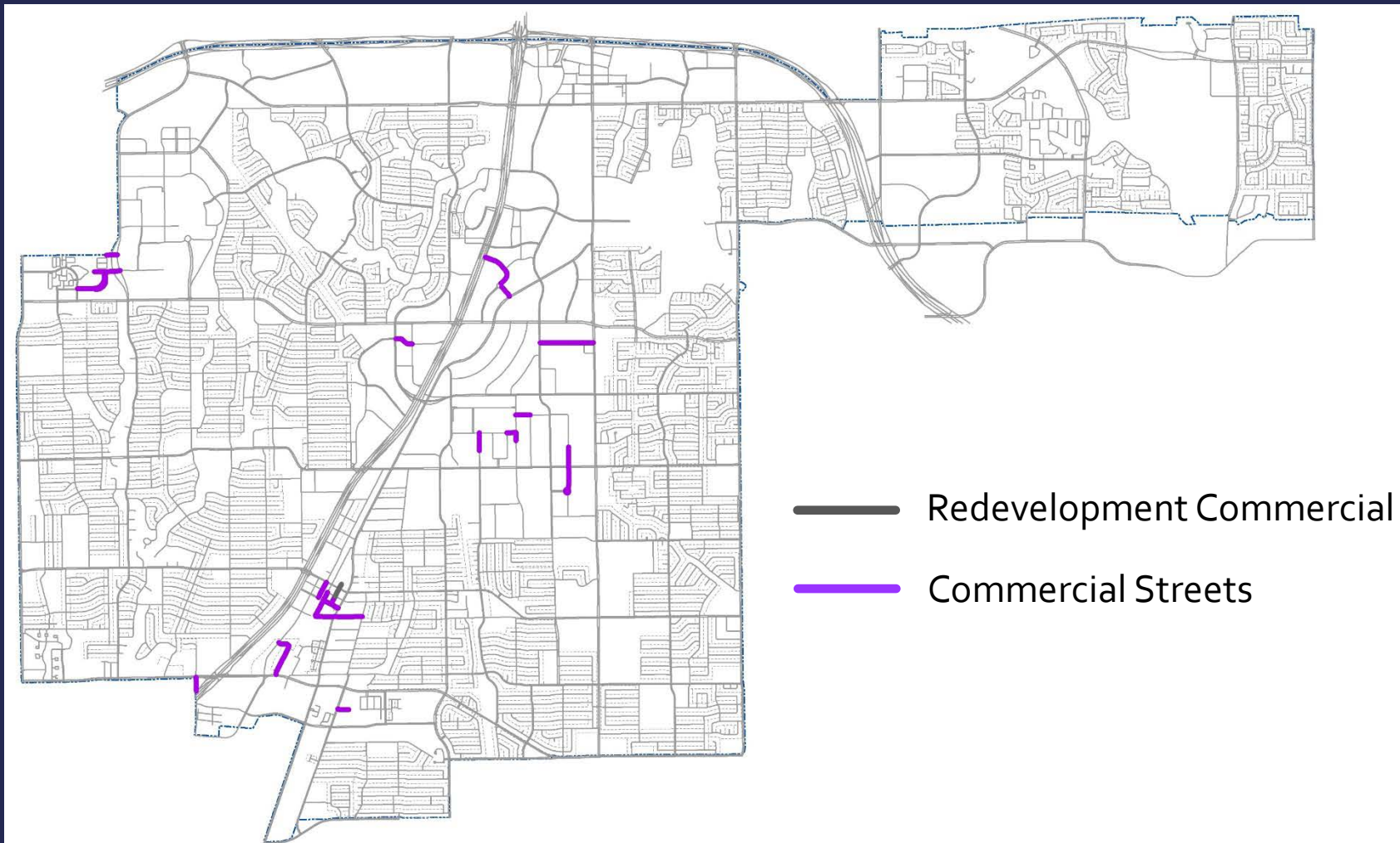


# NEIGHBORHOOD COLLECTOR STREET CANDIDATES

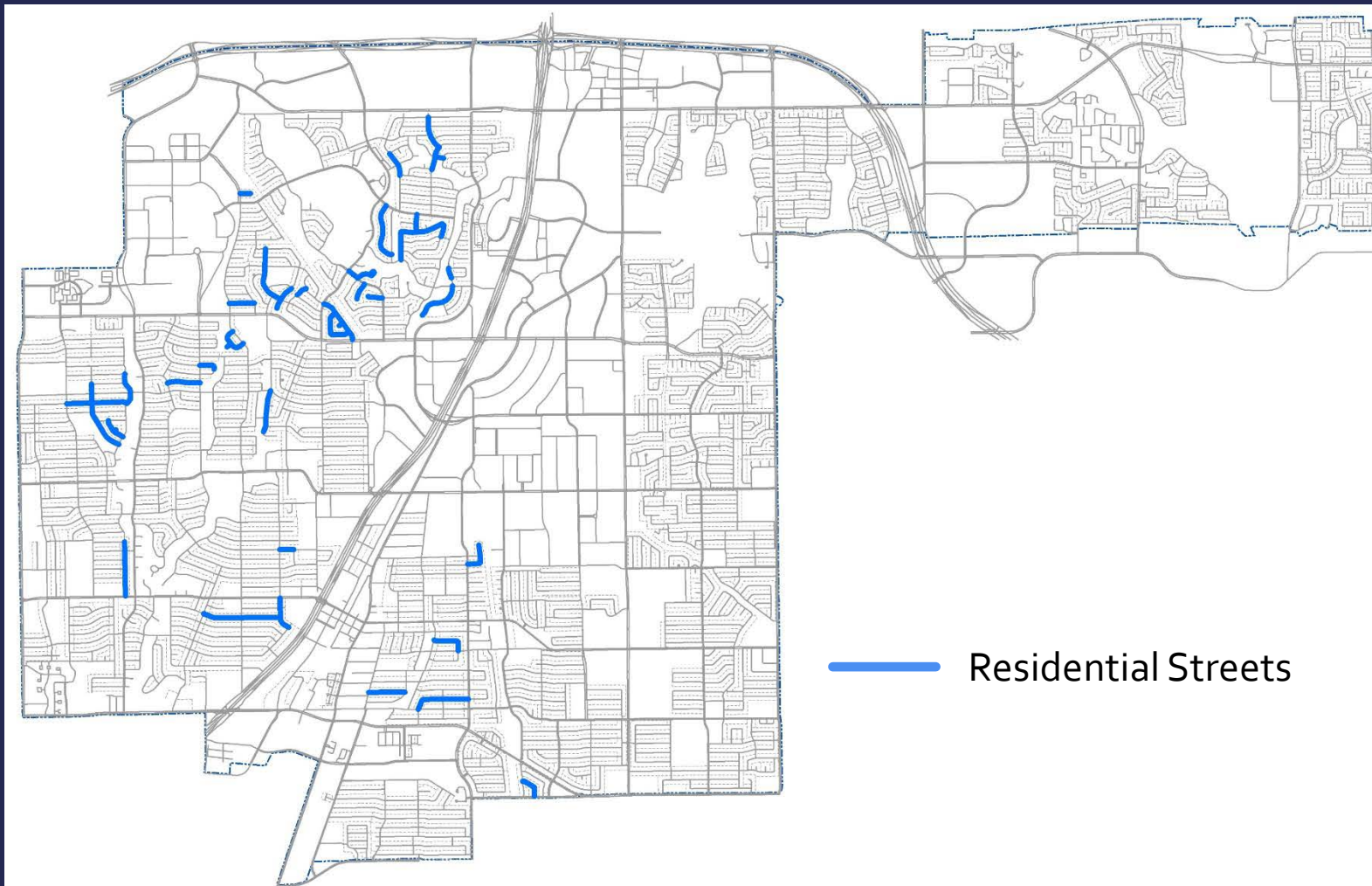




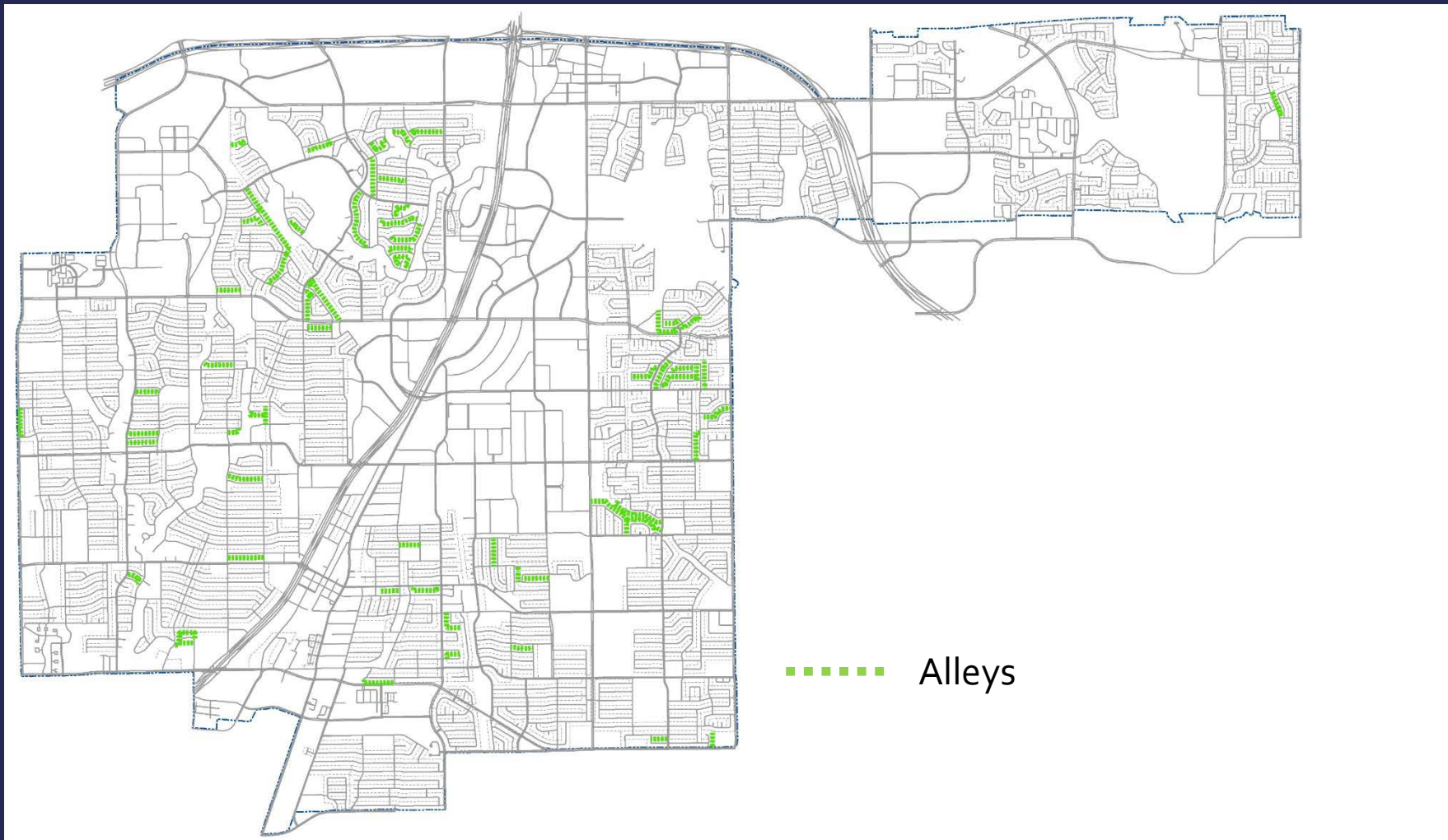
# COMMERCIAL STREET CANDIDATES



# RESIDENTIAL STREET CANDIDATES

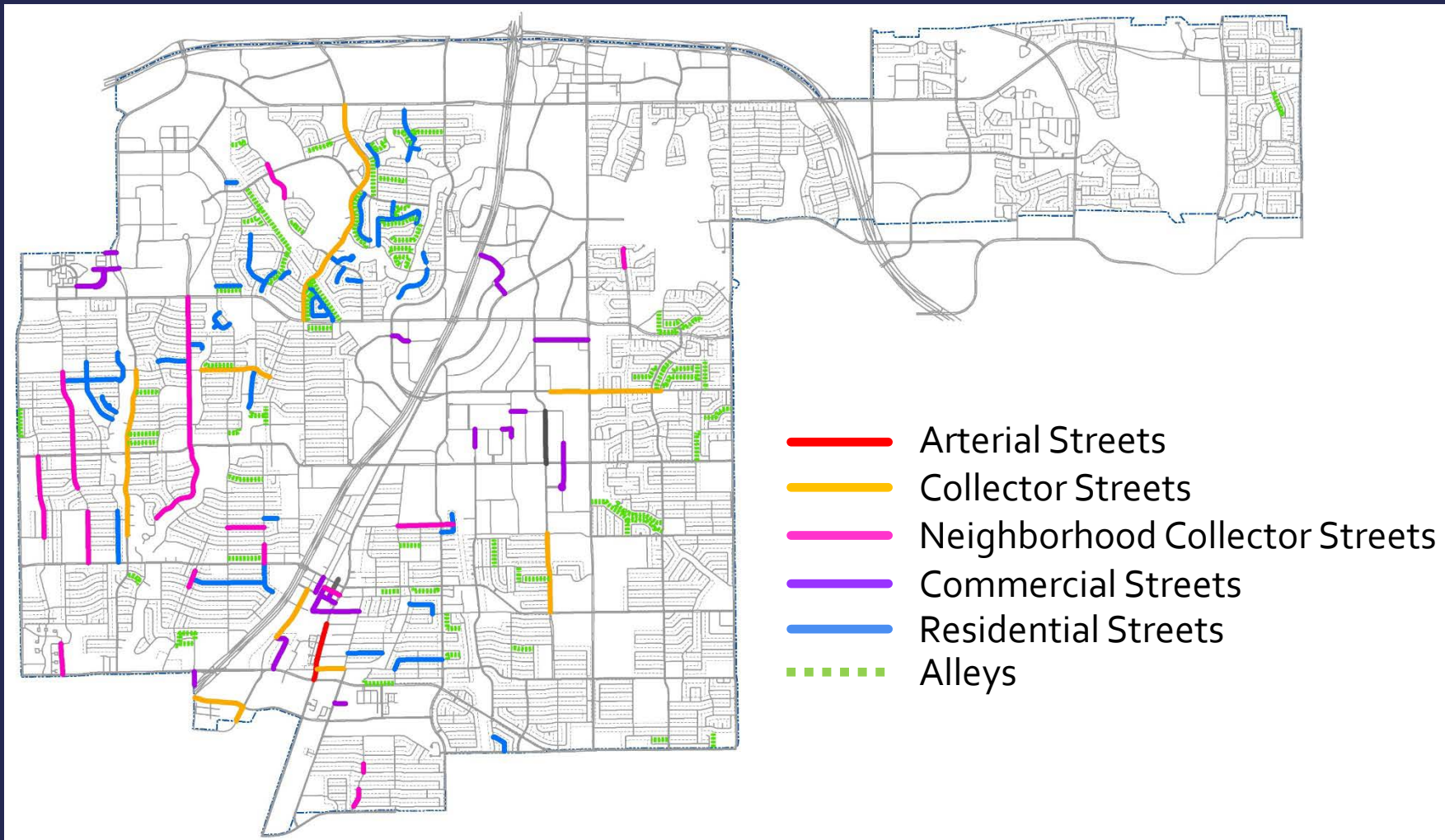


# ALLEY CANDIDATES





# COMBINED ALL CANDIDATES



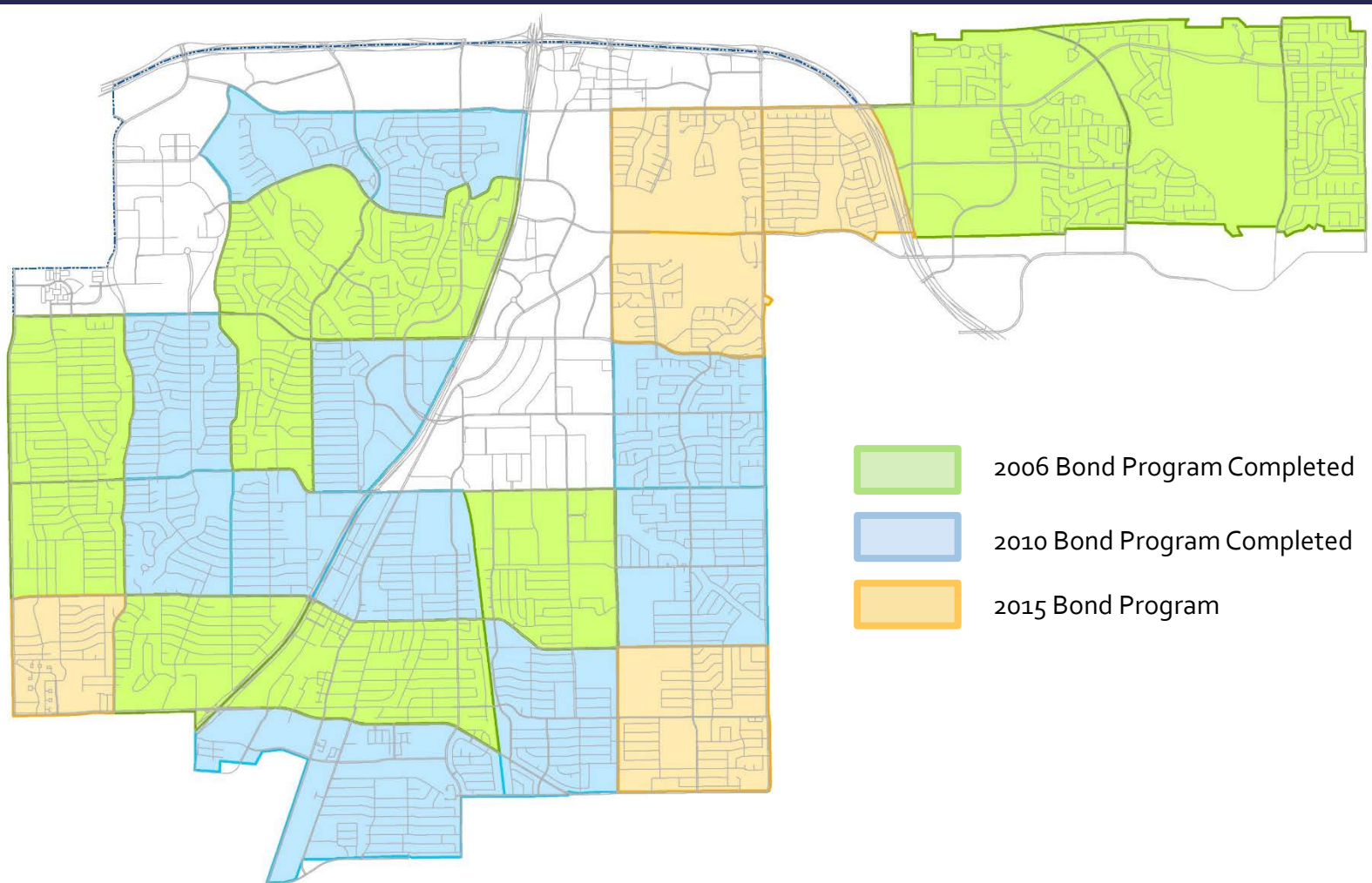


# STREET & ALLEY PROJECT CANDIDATES SUMMARY

Street Classification	Priority Project Cost	Total Proposed Cost
Arterial	\$8,810,000	\$15,980,000
Collector	\$26,240,000	\$75,220,000
Neighborhood Collector	\$20,870,000	\$59,680,000
Commercial	\$16,160,000	\$38,940,000
Residential	\$15,310,000	\$58,410,000
Alley	\$10,280,000	\$21,070,000
<b>TOTAL</b>	<b>\$97,670,000</b>	<b>\$269,300,000</b>

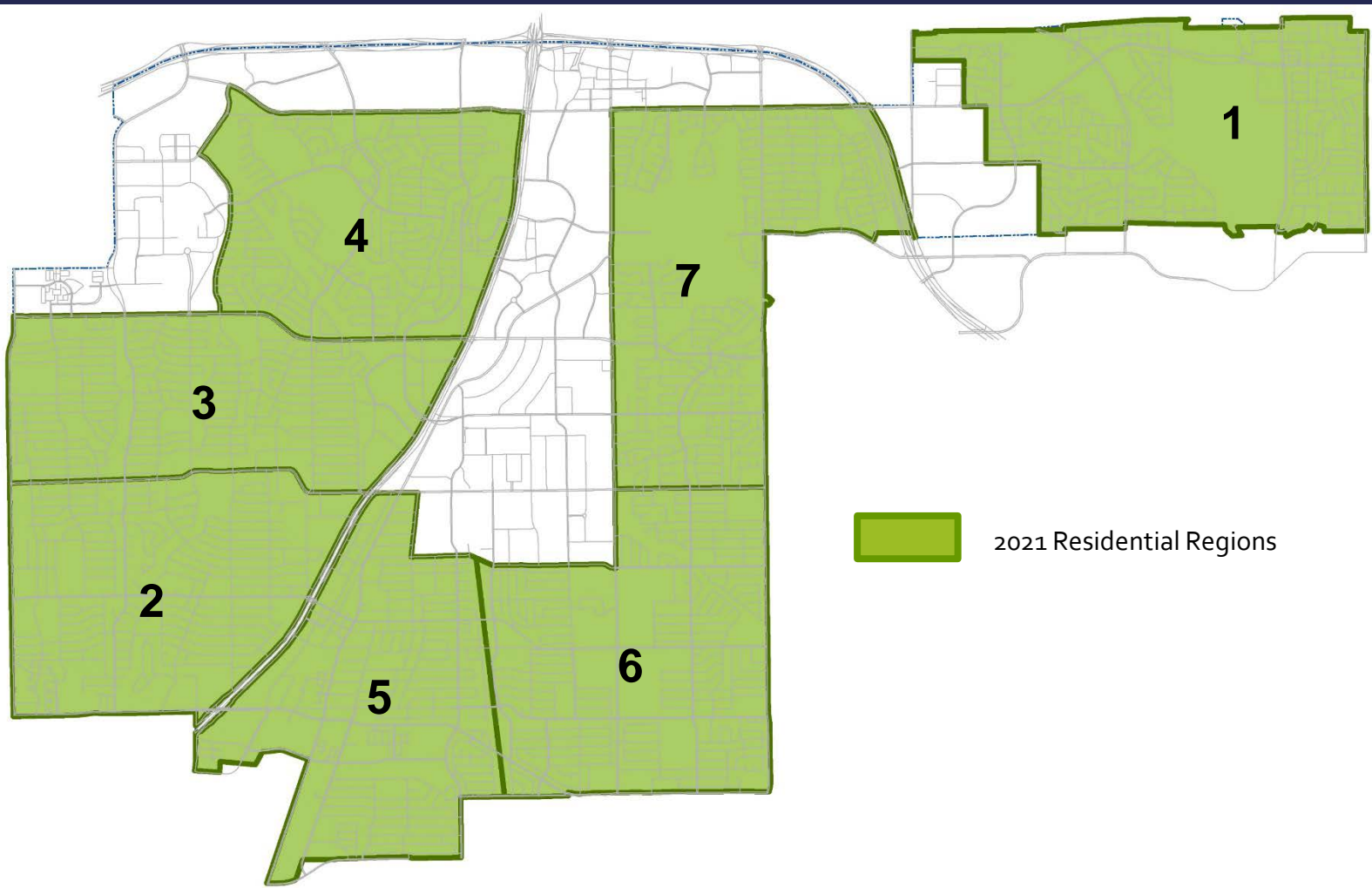
# **RESIDENTIAL AND COMMERCIAL SIDEWALKS**

# SIDEWALKS – RESIDENTIAL REPAIR PROGRAM



- 27 Residential Sidewalk Regions funded in 2006, 2010 & 2015 Bond Programs
- All but one region are now complete.
- Last region will start construction April 2021 and be complete early 2022
- Repairs focused on trip hazards greater than 1" in vertical separation
- Installed Barrier Free Ramps where no ramps existed or where existing ramps were damaged
- 100% City Cost requiring no owner participation.
- Commercial Sidewalks were excluded

# SIDEWALKS – RESIDENTIAL REPAIR PROGRAM



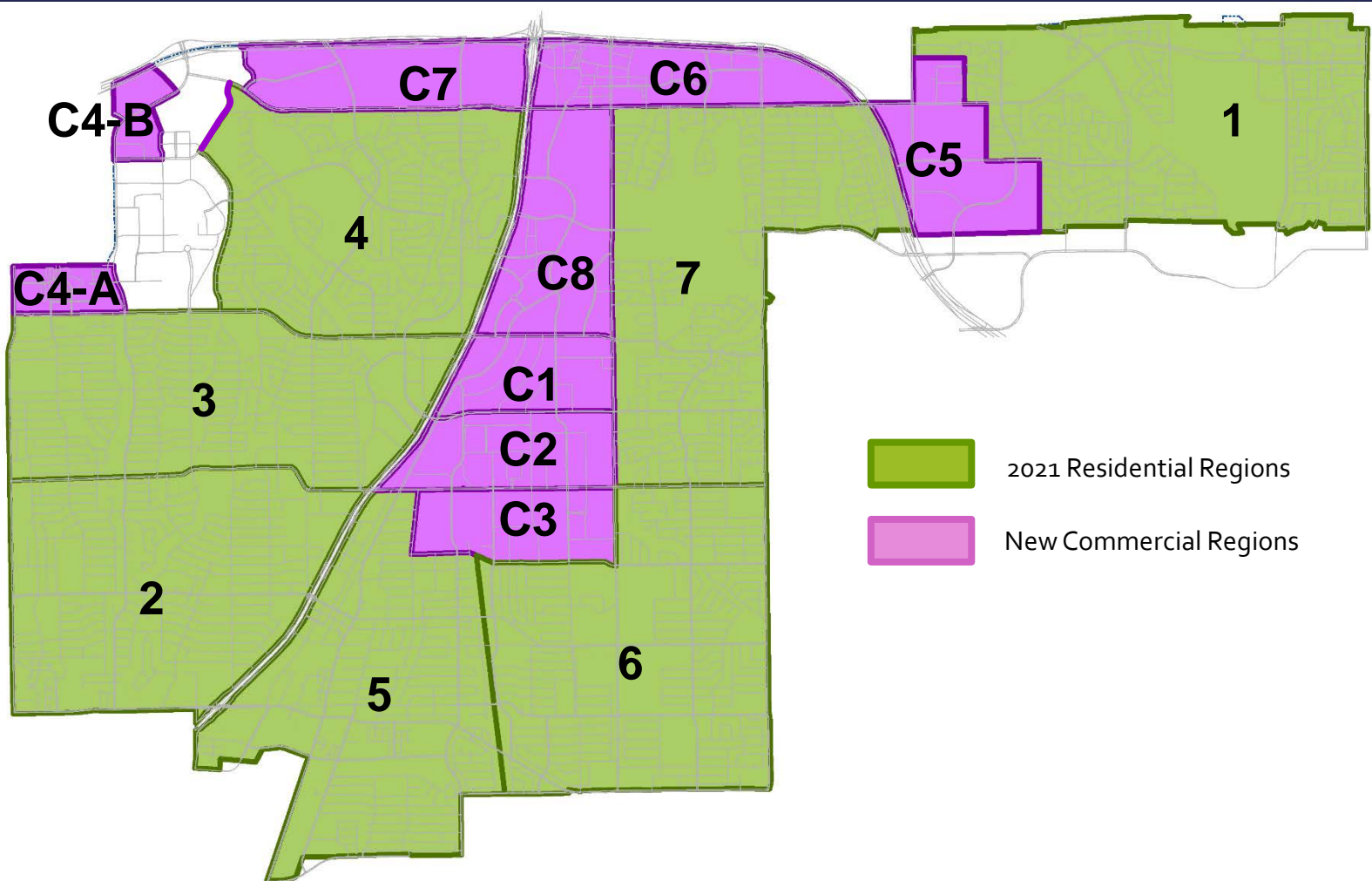
- Propose maintaining successful regional approach strategy but recommend combining regions to simplify programming
- New prioritization is based on Barrier Free Ramp and Accessibility needs.
- Initial Sidewalk Program Focused on Residential Sidewalks
- Commercial Sidewalks and Missing Gaps within these regions will be addressed where warranted.
- Further consideration to improve pedestrian access to businesses and public transportation in commercial areas is warranted







# SIDEWALKS – COMMERCIAL REPAIR PROGRAM



- Propose adding commercial sidewalk repair regions C1 through C8 in an effort to complete the first City Wide Sidewalk Repair Program effort.
- Prioritization is based on Barrier Free Ramp and Accessibility needs.
- Commercial Sidewalks and Missing Gaps within these regions will be addressed where warranted.
- All Sidewalk Repair Project Budget Information is provided in the handout



# SIDEWALK SUMMARY

- Second orbit for residential are grouped into larger regions and reprioritized according to number of corners remaining that require new barrier free ramps
- Commercial Regions and Arterial Sidewalks Warrant Consideration after completion of First Round of Residential Sidewalk Regions
- Residential and Commercial Sidewalk Region boundaries and scopes can be adjusted and brought back for further consideration to fit available funding opportunities

# **2021 BOND PROGRAM PLANNING - REDEVELOPMENT AREA CANDIDATE PROJECTS**

**City Council Briefing: March 15, 2021**

# CANDIDATE PROJECT CRITERIA

- Vision studies for the redevelopment areas
  - W. Spring Valley Corridor
  - Main Street/Central Expressway
  - Collins/Arapaho TOD and Innovation District
- Project that have the potential to be catalytic
- Projects that build on recent infrastructure projects
- Recommendations from the District Place Branding Strategy (*currently in draft phase*)
- Projects with matching Dallas County funds



# CORE DISTRICT CANDIDATE PROJECTS

1. Belt Line Road/Main Street & US 75 Portal and Intersection Improvements
2. Polk Alley Pedestrian Improvements
3. McKinney Street Reconstruction
4. Main Street Center Turn Lane – Greenville to Abrams







- Completed/Ongoing Road Reconstruction Projects
- New On-Street Parking Installed
- Completed/Ongoing Public Facility Projects
- Ongoing Public Plaza/Public Art Projects
- Completed/Ongoing Private Sector Investment
- Future Road Reconstruction Project (funded)
- Potential Bond Projects



1

# BELT LINE/MAIN & US 75 PORTAL & INTERSECTION IMPROVEMENTS





# 1

## BELT LINE/MAIN & US 75 PORTAL & INTERSECTION IMPROVEMENTS

**Goal:** Enhance the pedestrian connection between Downtown and Lockwood/Richardson Heights



Facing East from Ruth Young Park



Facing West from NE corner of US75 & Main



Facing West Under US75 at Beltline



# 1

## BELT LINE/MAIN & US 75 PORTAL & INTERSECTION IMPROVEMENTS

### Project Benefits

- Improved pedestrian connection that is comfortable and safe
  - Greater visibility and use of Ruth Young Park to establish a pedestrian greenway link to the Lockwood District
- Portal features will help establish a sense of place and arrival
  - Potential to incorporate the CORE District branding to increase the district's visibility
- Increased lighting for vehicles and pedestrians
- Ability to incorporate public art



Concept for discussion purposes only



# BELT LINE/MAIN & US 75 PORTAL & INTERSECTION IMPROVEMENTS

Phased Approach	Total Estimated Costs	Other Funds	Total Bond Consideration
Phase 1 – Infrastructure <ul style="list-style-type: none"><li>Improved Pedestrian Path under US75</li><li>Improved Pedestrian Path from US75 to Lockwood Area</li><li>Improved Lighting</li></ul>	\$3.2M	\$1.0M Dallas County	<b>\$2.2M</b>
Phase 2 – Amenities <ul style="list-style-type: none"><li>Illumination Art</li><li>Bridge Paint (Columns/Beams)</li><li>Public Art</li><li>Wayfinding Markers</li><li>Portal Signage</li><li>Ruth Young Park Enhancements</li></ul>	\$2.8M*	-	-

\*Entire cost may not be bond program eligible



# 2

## POLK ALLEY PEDESTRIAN IMPROVEMENTS

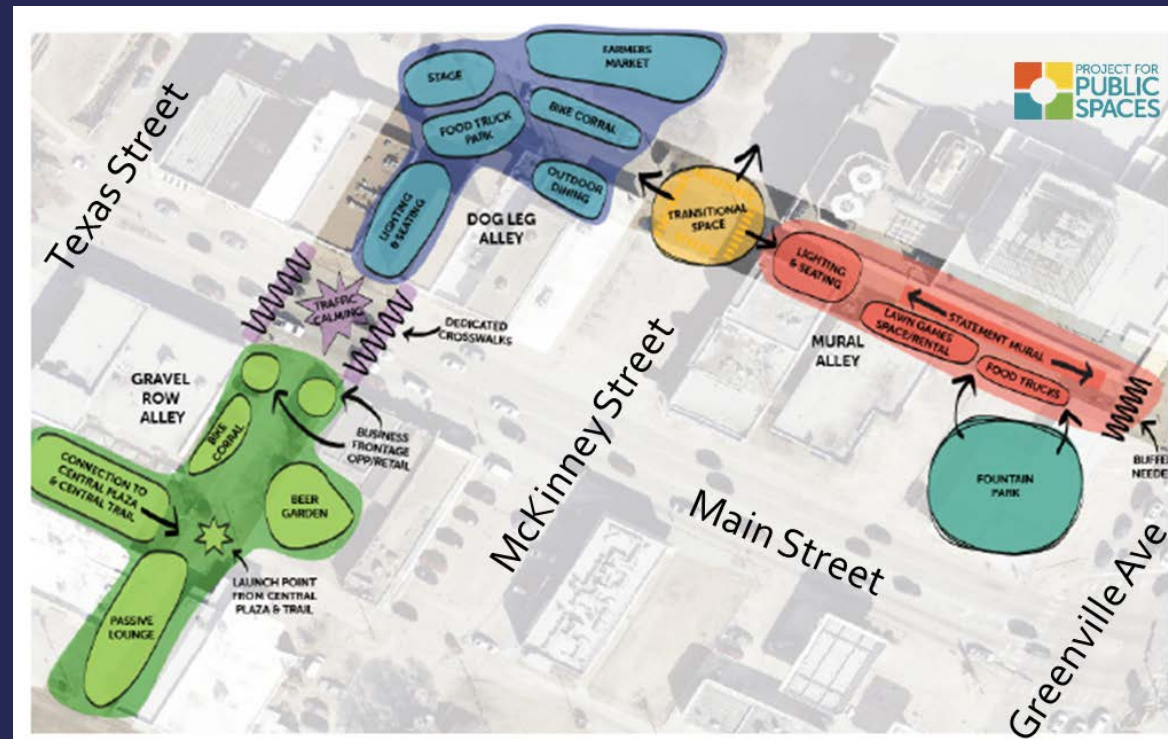




# 2

## POLK ALLEY PEDESTRIAN IMPROVEMENTS

**Goal:** Enhance an underutilized alleyway to create a key pedestrian passageway between Main Street and Polk Street



# 2

## POLK ALLEY PEDESTRIAN IMPROVEMENTS

Alleyway north of Main Street



Before



After

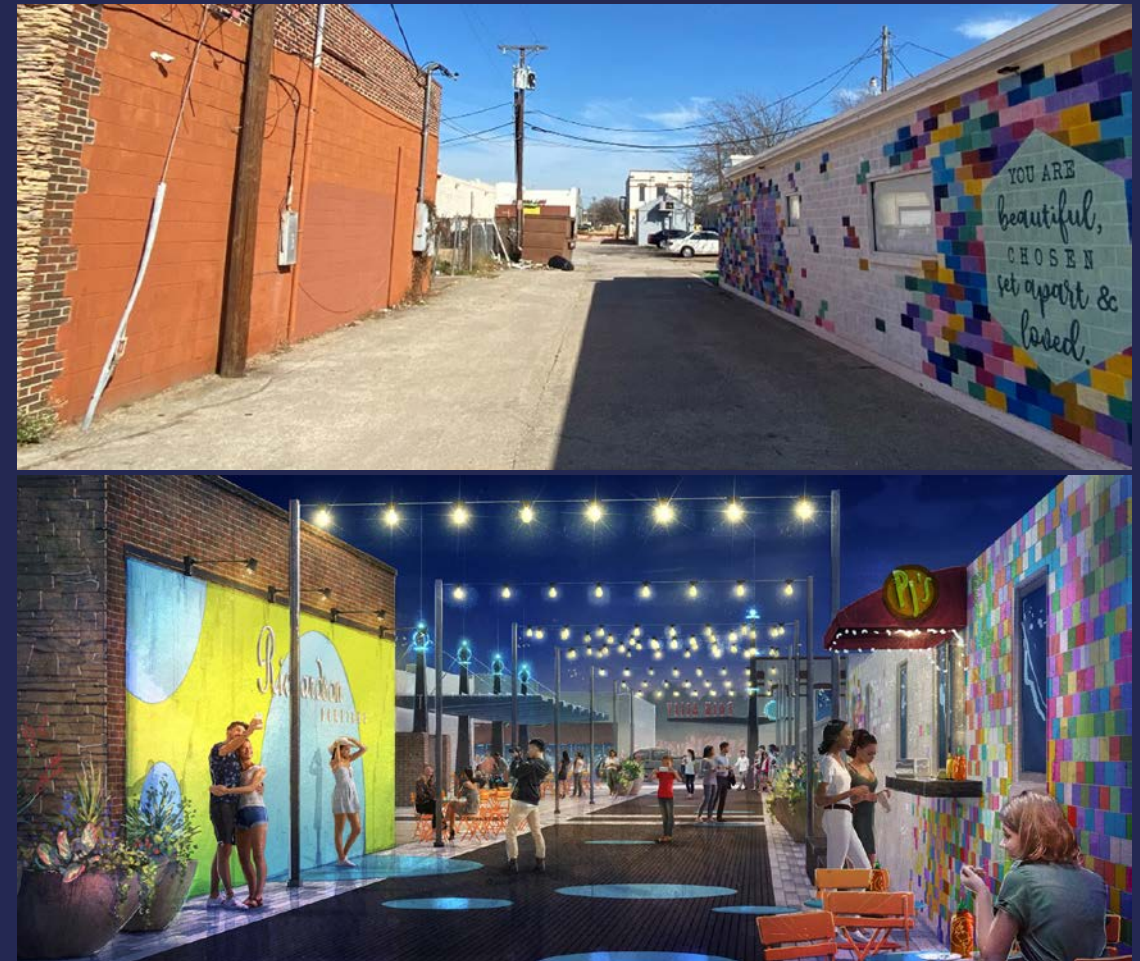


## 2

# POLK ALLEY PEDESTRIAN IMPROVEMENTS

## Project Benefits

- Improved appearance and function of alleyway
- Improved pedestrian connection to Polk Street parking
- Activation of underutilized space
- Increased lighting for pedestrians
- Additional outdoor space for patio seating
- Potential to incorporate the CORE District branding into the alleyway portals
- Ability to incorporate public art



Concept for discussion purposes only

# 2

## POLK ALLEY PEDESTRIAN IMPROVEMENTS

Phased Approach	Total Estimated Costs	Other Funds	Total Bond Consideration
Phase 1 – Infrastructure <ul style="list-style-type: none"> <li>• Demolition</li> <li>• New Concrete/Pavers</li> <li>• Dumpster Enclosure</li> </ul>	\$2.2M	-	<b>\$2.2M</b>
Phase 2 – Amenities <ul style="list-style-type: none"> <li>• Lighting</li> <li>• Benches/Chairs/Tables/Trash Receptacles</li> <li>• Entry Portal</li> <li>• Murals</li> <li>• Planters</li> </ul>	\$2.0M*	-	-

\*Entire cost may not be bond program eligible



3

# MCKINNEY STREET RECONSTRUCTION





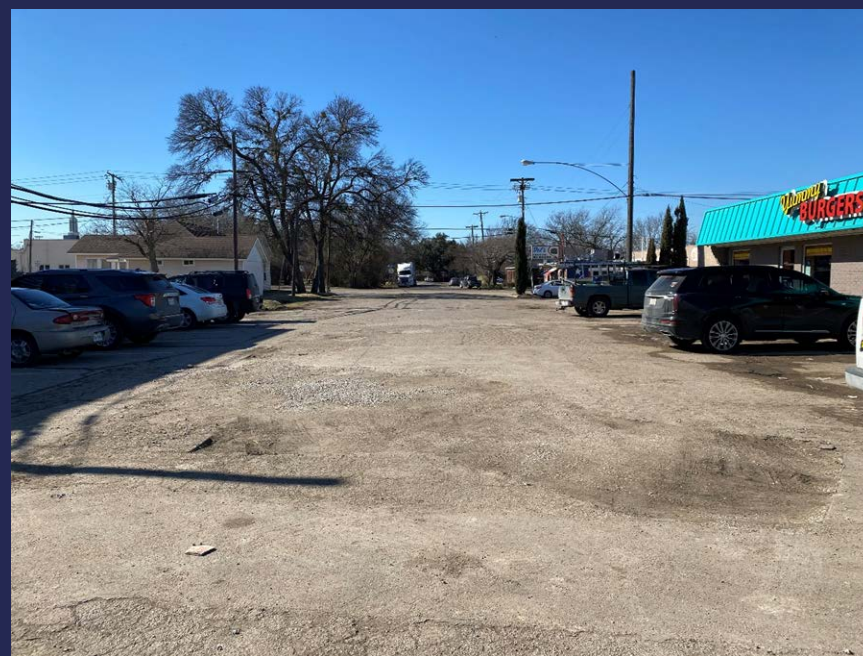
# 3

## MCKINNEY STREET RECONSTRUCTION

**Goal:** Build off the Main Street reconstruction project to update aging infrastructure and enhance the public realm



McKinney facing South



McKinney facing South

# 3

## MCKINNEY STREET RECONSTRUCTION

### Project Benefits

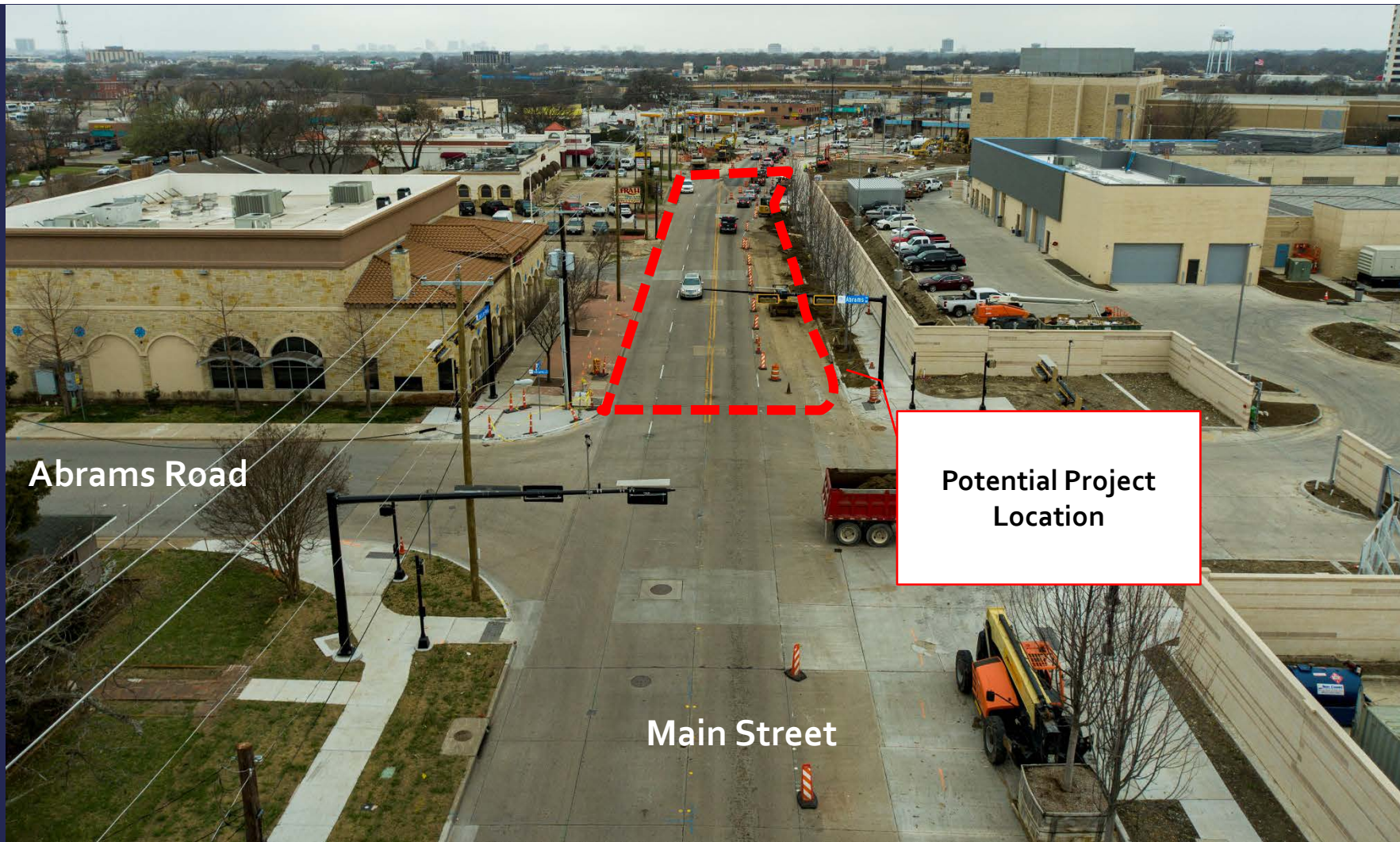
- Improved appearance and function of street
  - Improved pedestrian connection
  - Additional outdoor space for patio seating
  - Reconstructed street and underground utilities
- 
- Total Estimated Costs - \$2.5M
    - Dallas County Funds – \$680,000
  - **Total Bond Consideration - \$1.82M**





4

# MAIN STREET CENTER TURN LANE – GREENVILLE TO ABRAMS



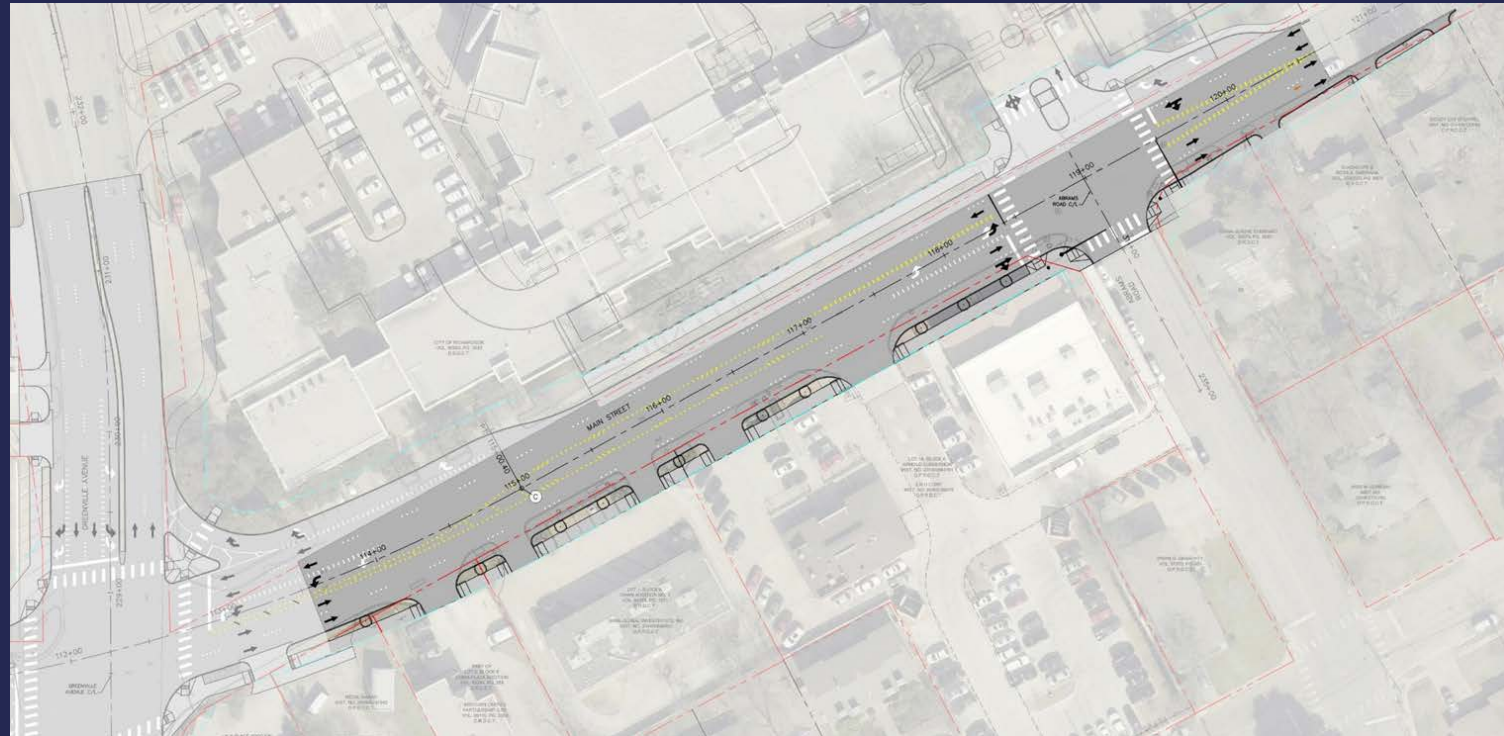
# 4

## MAIN STREET CENTER TURN LANE – GREENVILLE TO ABRAMS

**Goal:** Build off the Main Street reconstruction project to provide a center turn lane from Greenville Avenue to Abrams Road

### Project Benefits

- Dedicated turn lanes off Main Street
- Increased vehicle capacity
- Improved appearance and function of roadway and public realm
- Total Estimated Costs - \$7.0M
  - Dallas County Funds – \$2.96M
- **Total Bond Consideration - \$4.04M**





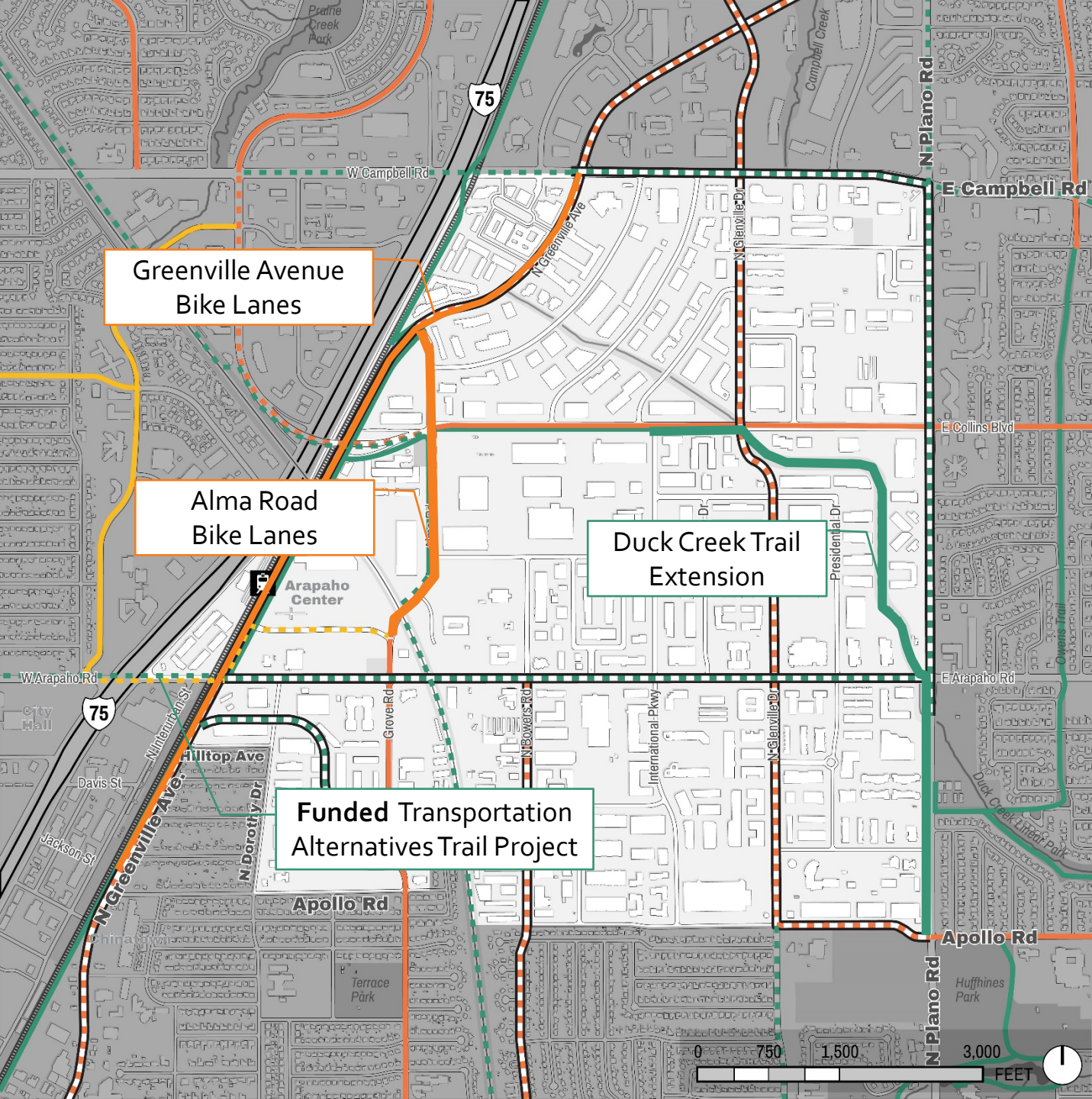
# CORE DISTRICT CANDIDATE PROJECTS

Phased Approach	Total Estimated Costs	Other Funds	Total Bond Consideration
1. Belt Line Road/Main Street & US 75 Portal and Intersection Improvements – Phase 1 Only	\$3.2M	\$1.0M Dallas County	<b>\$2.2M</b>
2. Polk Alley Pedestrian Improvements – Phase 1 Only	\$2.2M	-	<b>\$2.2M</b>
3. McKinney Street Rebuild	\$2.5M	\$680K Dallas County	<b>\$1.82M</b>
4. Main Street Center Turn Lane – Greenville to Abrams	\$7.0M	\$2.96M Dallas County	<b>\$4.04M</b>
<b>TOTAL CORE DISTRICT PROJECTS</b>	<b>\$14.9M</b>	<b>\$4.64M</b> Dallas County	<b>\$10.26M</b>

# RICHARDSON IQ® CANDIDATE PROJECTS

1. Glenville Drive Reconstruction
2. Arapaho Road & US75 Intersection Improvements
3. Collins Boulevard Bridge Portal and Mobility Improvements
4. Duck Creek Trail Enhancements





## Proposed Mobility Network

- STUDY AREA
- DART RAIL SYSTEM
- OTHER RAIL
- EXISTING MULTIUSE TRAIL
- FUTURE MULTIUSE TRAIL
- EXISTING BIKE LANE
- POTENTIAL BIKE LANE
- EXISTING SIGNED ROUTE
- FUTURE SIGNED ROUTE

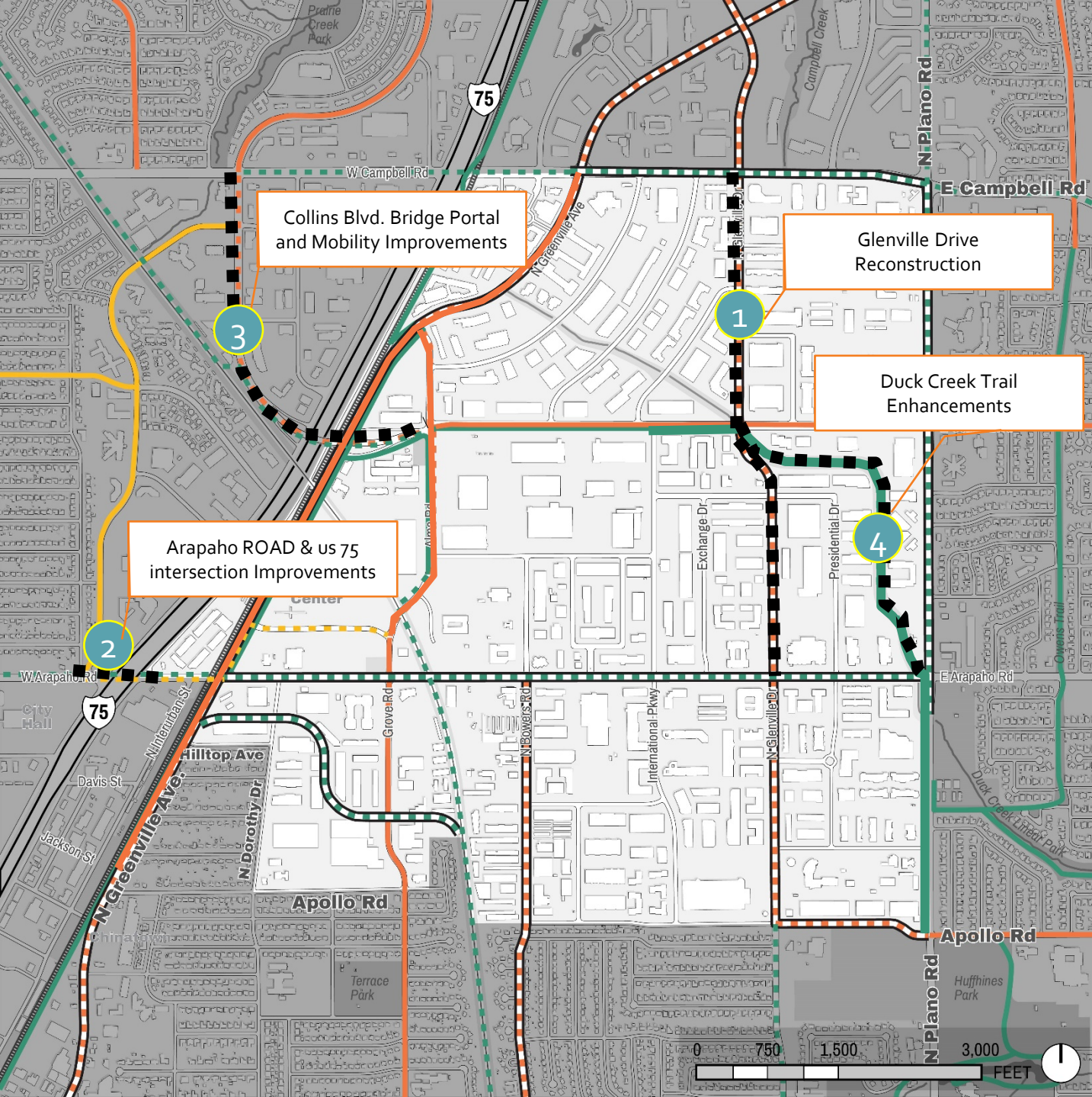
### PROPOSED ADDITIONAL NETWORK

- PROPOSED MULTIUSE TRAIL
- PROPOSED BIKE LANE



Completed trail and mobility improvements since 2018 Collins/Arapaho TOD and Innovation District Study





## Proposed Mobility Network

- STUDY AREA
  - DART RAIL SYSTEM
  - OTHER RAIL
  - EXISTING MULTIUSE TRAIL
  - FUTURE MULTIUSE TRAIL
  - EXISTING BIKE LANE
  - POTENTIAL BIKE LANE
  - EXISTING SIGNED ROUTE
  - FUTURE SIGNED ROUTE
- PROPOSED ADDITIONAL NETWORK
- PROPOSED MULTIUSE TRAIL
  - PROPOSED BIKE LANE



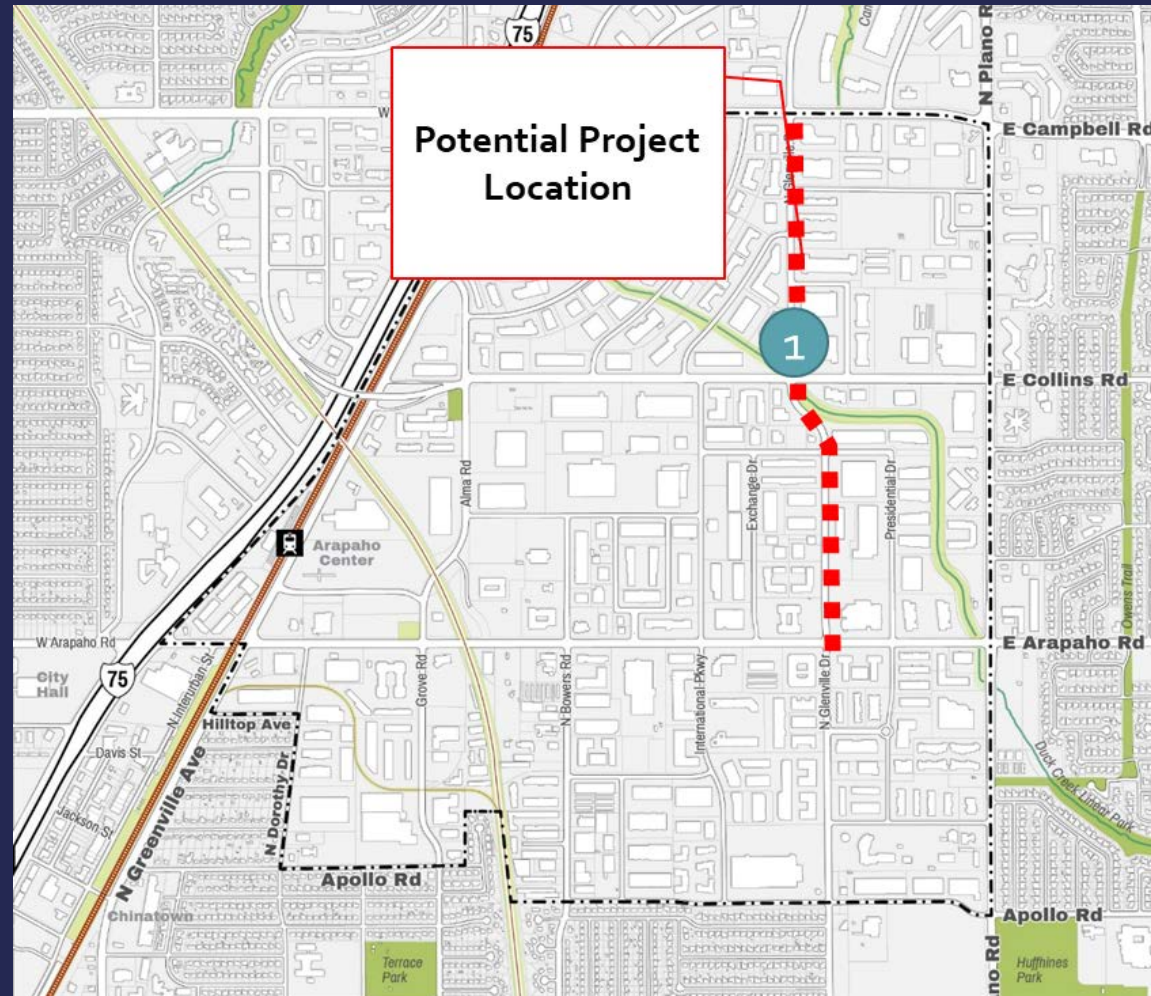
## Potential Bond Projects





1

# GLENVILLE DRIVE RECONSTRUCTION



# 1

# GLENVILLE DRIVE RECONSTRUCTION

**Goal:** Rebuild Glenville Drive, replacing aging infrastructure while adding pedestrian and mobility improvements



Glenville Drive



Glenville Drive



Glenville Drive

1

# GLENVILLE DRIVE RECONSTRUCTION: POTENTIAL CROSS SECTION



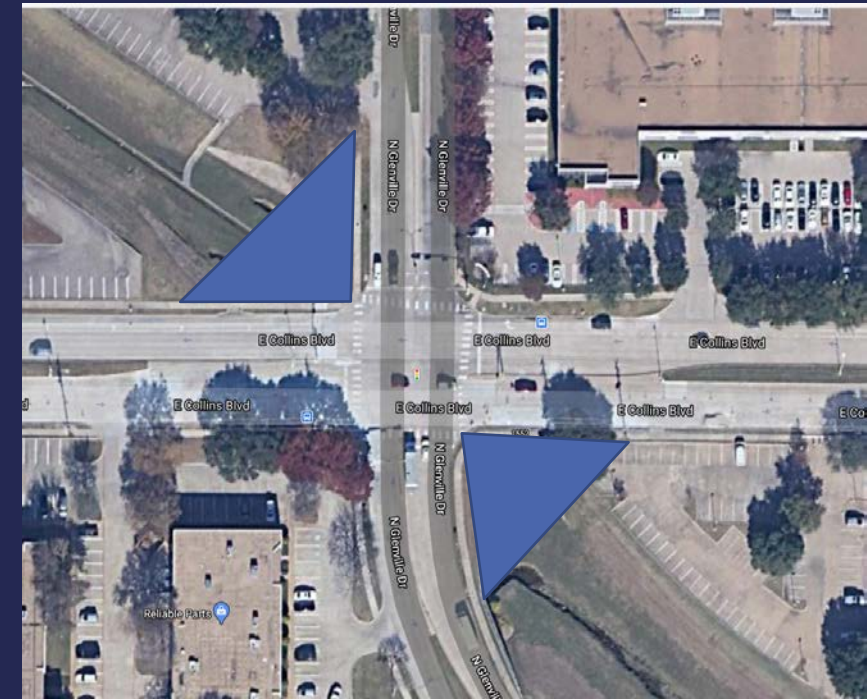


# 1

## GLENVILLE DRIVE RECONSTRUCTION

### Project Benefits

- Proposed cross-section and improvements conform to the Collins/Arapaho Zoning
- Improved appearance and function of street
- Improved bike and pedestrian connections and safety within the IQ® and beyond the district boundaries
- Opportunities for new mobility technology (autonomous vehicles, bots, etc.)
- Potential to incorporate the IQ® branding to increase the district's visibility
- Extend the Duck Creek culverts and enhance the northwest and southeast corners of the intersection



Collins Blvd/Glenville Drive Intersection

# 1

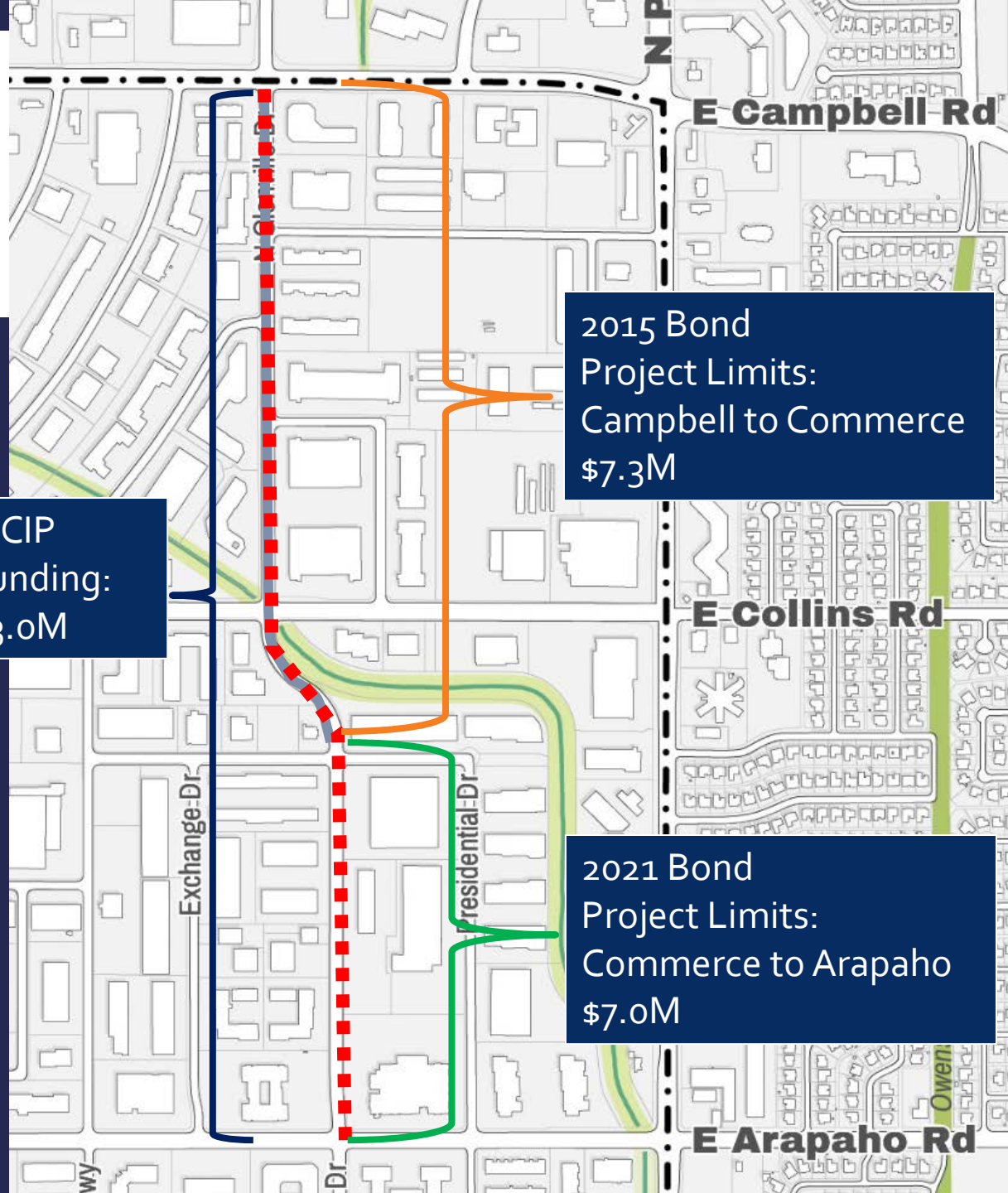
## GLENVILLE DRIVE RECONSTRUCTION

- Total Estimated Costs - \$19.6M
- Reserved 2015 Bond/CO Funding - \$7.3M
- Dallas County MCIP Funds - \$3.0M
- **Total Bond Consideration - \$9.5M**

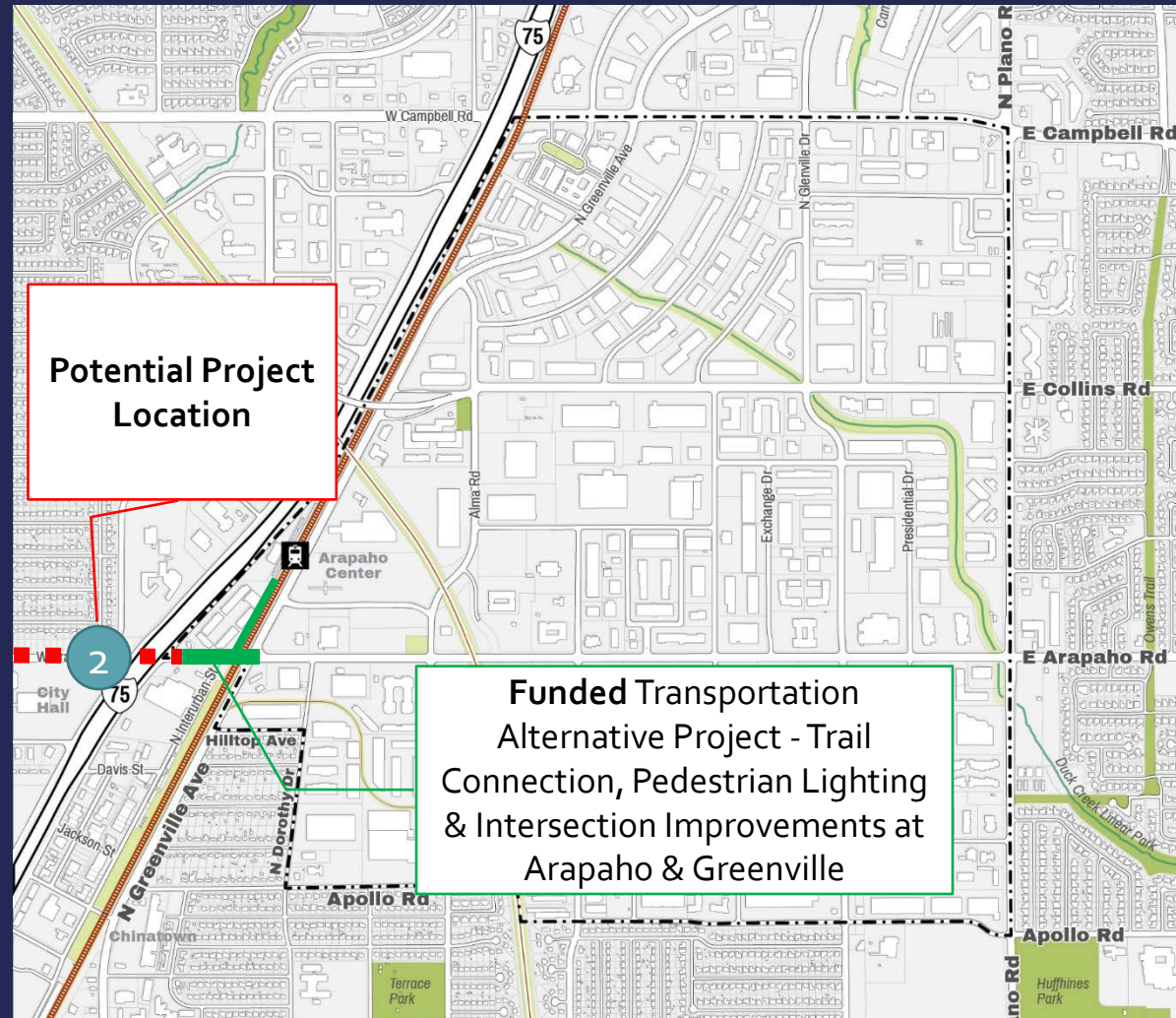
MCIP  
Funding:  
\$3.0M

2015 Bond  
Project Limits:  
Campbell to Commerce  
\$7.3M

2021 Bond  
Project Limits:  
Commerce to Arapaho  
\$7.0M



# ARAPAHO ROAD & US 75 INTERSECTION IMPROVEMENTS





# 2

## ARAPAHO ROAD & US 75 INTERSECTION IMPROVEMENTS

**Goal:** Create an enhanced pedestrian and bicycle connection and incorporate portal features



# 2

## ARAPAHO ROAD & US 75 INTERSECTION IMPROVEMENTS

### Project Benefits

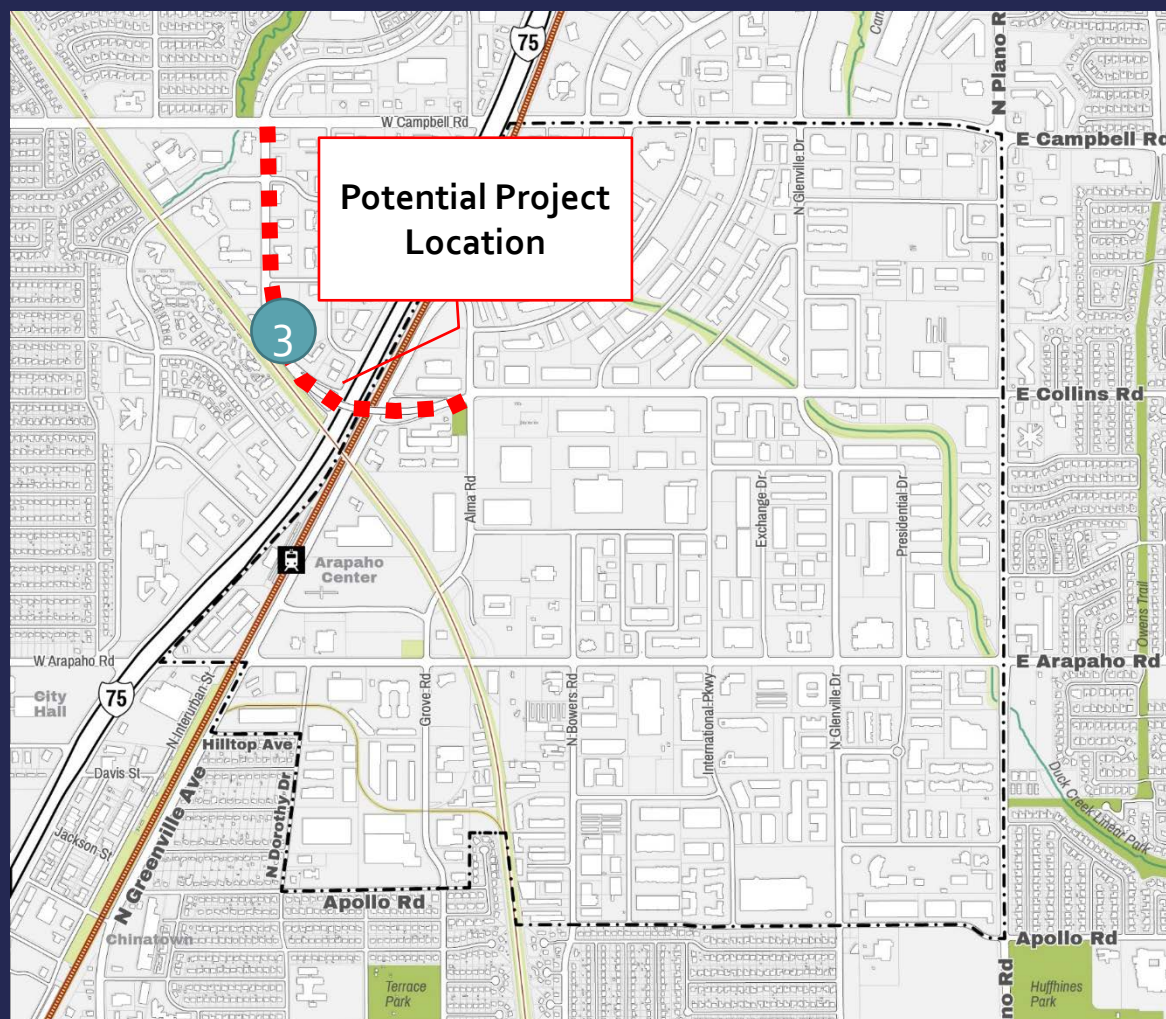
- Improved pedestrian and bike connection that is both comfortable and safe
  - Will connect to separate project at the NE corner of US 75 and Arapaho
  - Portal features will help establish a sense of place/arrival
  - Potential to incorporate the IQ® branding to increase the district's visibility
  - Increased lighting for vehicles, pedestrians, bicyclists
- 
- Total Estimated Costs - \$3.1M
    - Dallas County Funds - \$1.0M
  - **Total Bond Consideration - \$2.1M**





# 3

## COLLINS BLVD BRIDGE PORTAL AND MOBILITY IMPROVEMENTS





# 3

## COLLINS BLVD BRIDGE PORTAL AND MOBILITY IMPROVEMENTS

**Goal:** Create an enhanced pedestrian and bicycle connection to the Richardson IQ® and establish a district portal



# 3

## COLLINS BLVD BRIDGE PORTAL AND MOBILITY IMPROVEMENTS

### Project Benefits:

- Improved bike and pedestrian connection into the IQ<sup>®</sup>; connects two existing bike lanes
- Increased lighting for pedestrians and bicyclists
- Improved safety for pedestrians crossing Collins Boulevard bridge
- Potential to incorporate the IQ<sup>®</sup> branding to increase the district's visibility
- Portal features will help establish a sense of place and arrival
- Increased lighting for vehicles, pedestrians, and bicyclists
- Ability to incorporate public art



# 3

## COLLINS BLVD BRIDGE PORTAL AND MOBILITY IMPROVEMENTS

Phased Approach	Total Estimated Costs	Other Funds	Total Bond Consideration
Phase 1 – Infrastructure <ul style="list-style-type: none"> <li>• Collins Bridge Bike Lane Painting</li> <li>• Collins Bridge Sidewalk Expansion</li> <li>• Collins Bridge Upgraded Combination Rail</li> <li>• Collins Bridge Pedestrian Signals</li> </ul>	\$5.1M	\$750,000 Dallas County	<b>\$4.4M</b>
Phase 2 – Amenities <ul style="list-style-type: none"> <li>• Mural</li> <li>• Collins Bridge Paint (Columns/Beams)</li> <li>• Public Art</li> <li>• Portal Signage</li> <li>• On-ramp Landscaping Areas/O&amp;M Related Costs</li> </ul>	\$3.8M*	-	-

\*Entire cost may not be bond program eligible



## 4

## DUCK CREEK TRAIL ENHANCEMENTS





## 4

# DUCK CREEK TRAIL ENHANCEMENTS

**Goal:** Continue enhancing Duck Creek as a key open space amenity for the Richardson IQ®





# 4

## DUCK CREEK TRAIL ENHANCEMENTS

### Project Benefits

- Improved amenities along the new Duck Creek Trail
- Ability to incorporate public art and partner with adjacent property owners
- Potential to incorporate the IQ® branding throughout the trail to increase the district's visibility
- Portal features will help establish a sense of place and arrival through the IQ®
- Shade structures located outside the floodway will provide refuge for bikers and runners



Concept for discussion purposes only





# 4

## DUCK CREEK TRAIL ENHANCEMENTS

Phased Approach	Total Estimated Costs	Total Bond Consideration
Phase 1 – Infrastructure <ul style="list-style-type: none"> <li>• Lighting</li> <li>• Erosion Control</li> <li>• Rip Rap</li> <li>• Hydraulic Study</li> <li>• Benches/Trash Receptacles</li> </ul>	\$3.6M	\$3.6M
Phase 2 – Amenities <ul style="list-style-type: none"> <li>• Landscaping and Irrigation/O&amp;M Related Costs</li> <li>• Murals</li> <li>• Seating Pad Pavements</li> <li>• Gateway Portals</li> <li>• Shade Structures</li> </ul>	\$6.2M*	-

\*Entire cost may not be bond program eligible

# RICHARDSON IQ® CANDIDATE PROJECTS

Project	Total Estimated Costs	Other Funds	Total Bond Consideration
1. Glenville Drive Reconstruction	\$19.6M	\$3.0M Dallas County \$7.3M 2015 Bond	<b>\$9.5M</b>
2. Arapaho Road & US 75 Intersection Improvements	\$3.1M	\$1.0M Dallas County	<b>\$2.1M</b>
3. Collins BLVD Bridge Portal and Mobility Improvements – Phase 1 Only	\$5.1M	\$750K Dallas County	<b>\$4.4M</b>
4. Duck Creek Trail Enhancements – Phase 1 Only	\$3.6M	-	<b>\$3.6M</b>
<b>TOTAL RICHARDSON IQ PROJECTS</b>	29.1M	\$4.75M Dallas County \$7.3M 2015 Bond	<b>\$19.6M</b>

# NEXT STEPS

- Bond Program Timeline
  - March 22 – Library/City Hall Briefing
  - April – All Project Needs Summary, Capacity and Fitting Discussion, Proposition Development/Refinement Briefings
  - June/July – Proposition Confirmation
  - August – Call Bond Election
  - November – Election
- Summer Briefings
  - Status reports on the CORE District and Richardson Innovation Quarter
    - Overview of District Place Branding Strategy
    - Review of non-bond eligible open space projects