

Regional Mobility & the US 380 Bypass Concept

*Informational Meeting
February 9, 2017*



- MONEY MAGAZINE 2014 -

Purpose and Agenda

Purpose:

- Regional Mobility Issues, Priorities, and Pressures
- US 380 as a Limited Access Facility (freeway)
- US 380 Bypass Concept and potential alignment

Agenda:

- Welcome
- Presentation
- Breakout / Open House Discussions

McKinney at a Glance

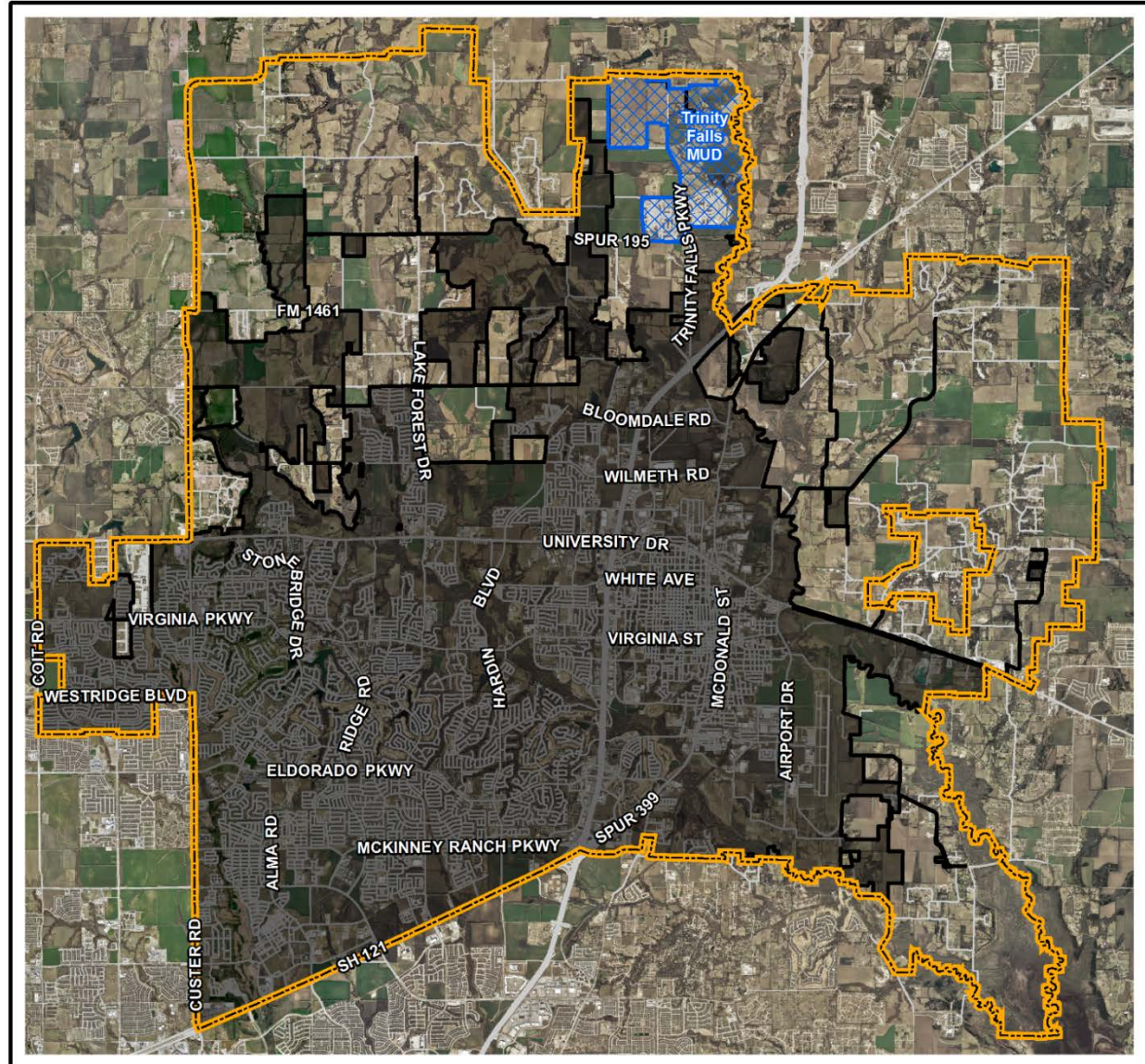
Current City Limits:
~ 68 sq. mi.

Ultimate City Limits:
116 sq. mi.

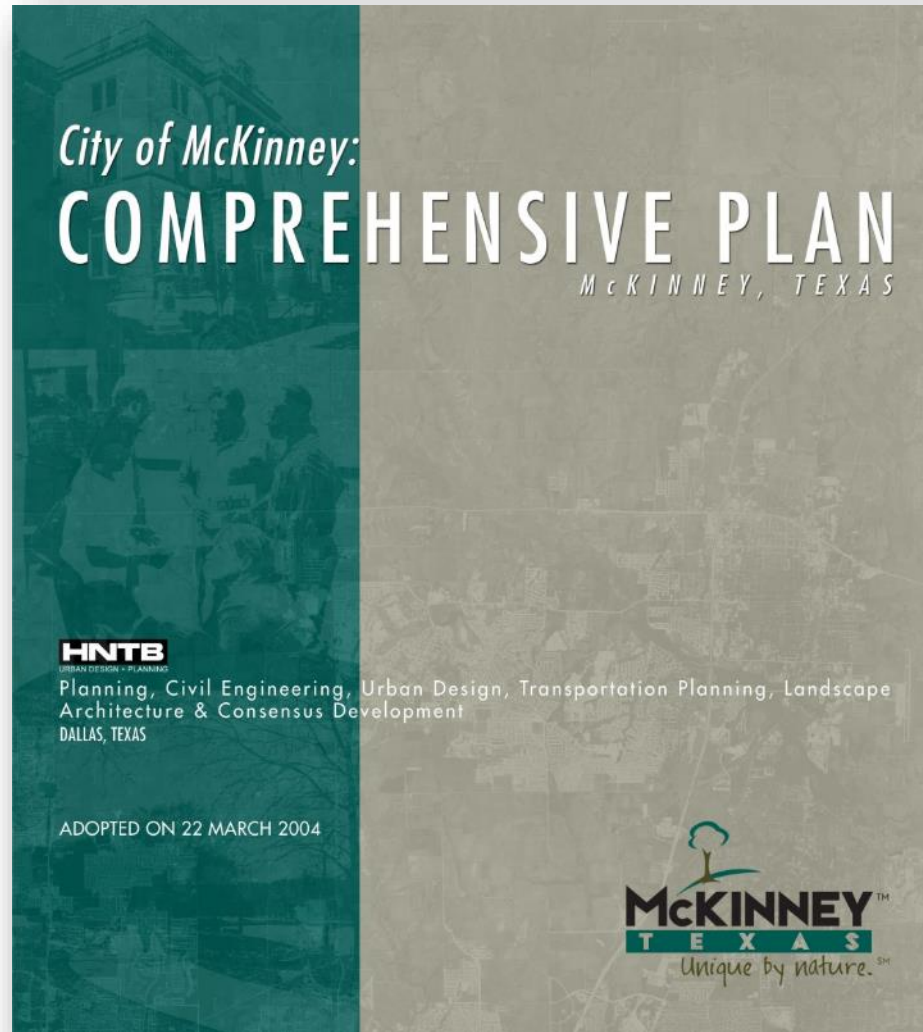
Current Population (2017):
168,358

Est. Population at 2040:
284,000

Est. Population at BO:
350,000 – 400,000

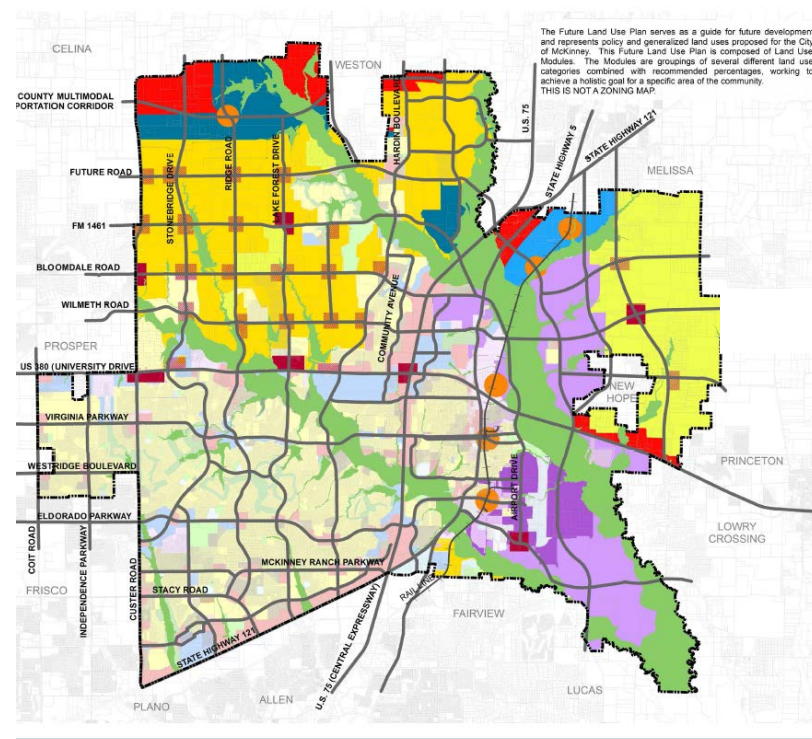


The Comprehensive Plan

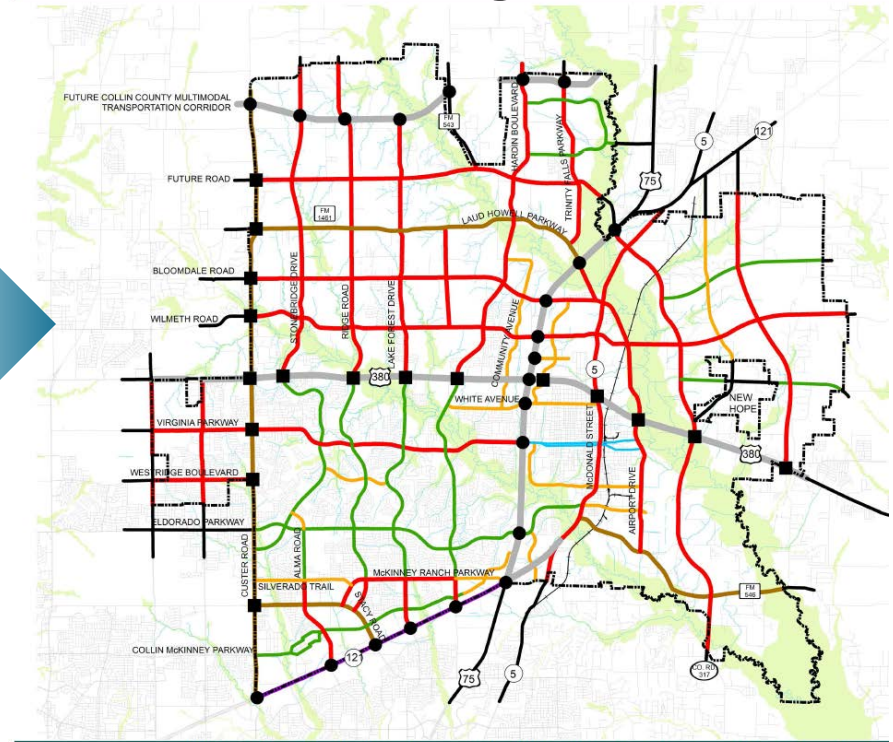


How do we plan for future roadways?

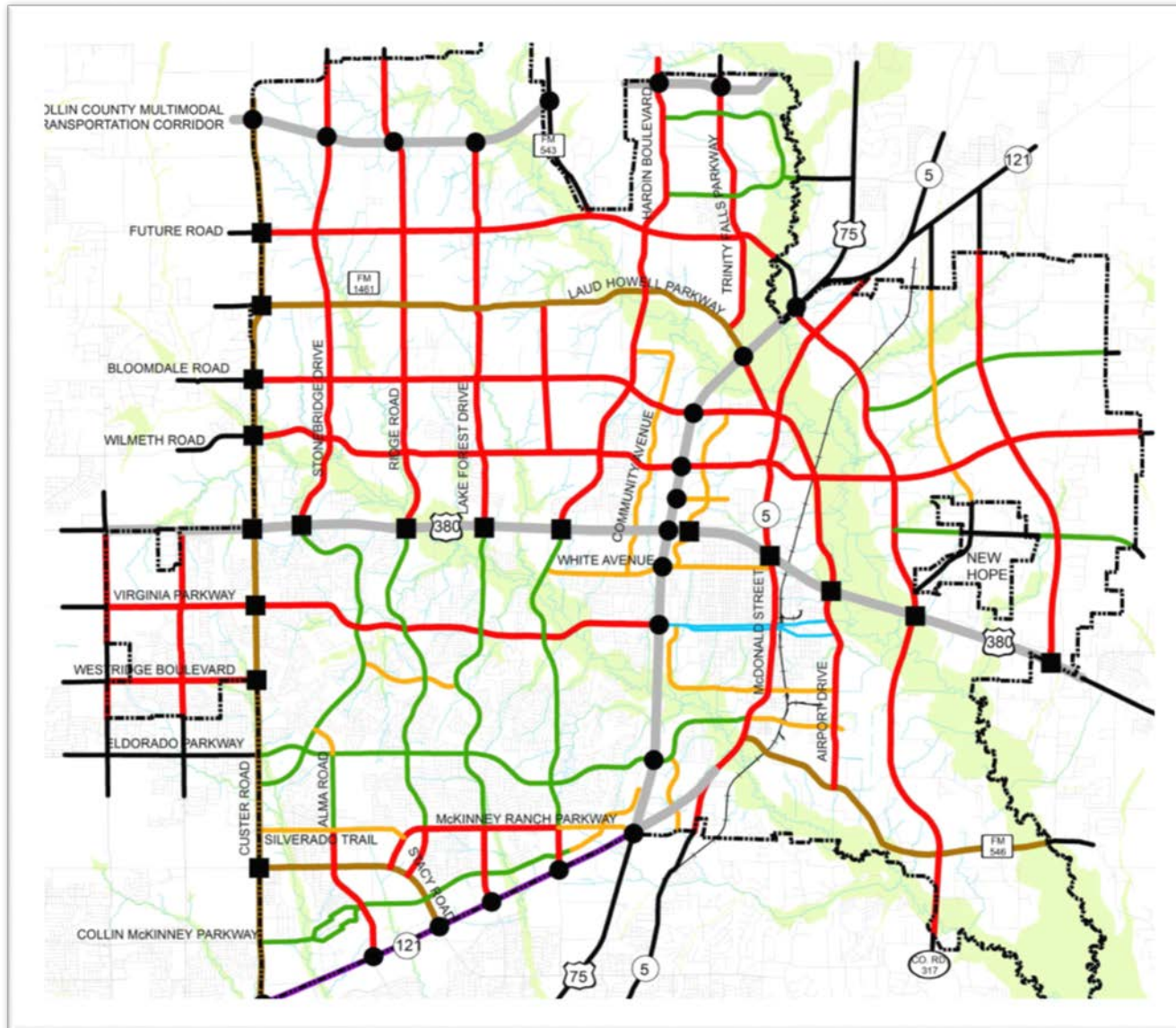
Future Land Use Plan



Master Thoroughfare Plan



2004 Master Thoroughfare Plan (MTP)



Roadway Classifications

- Major Regional Highway / Multi-Modal
- Tollway
- Principal Arterial (6-lane)
- Major Arterial (6-lane)
- Minor Arterial (4-lane)
- Greenway Arterial (4-lane)
- Town Thoroughfare
- Road By Others

Comprehensive Plan Update

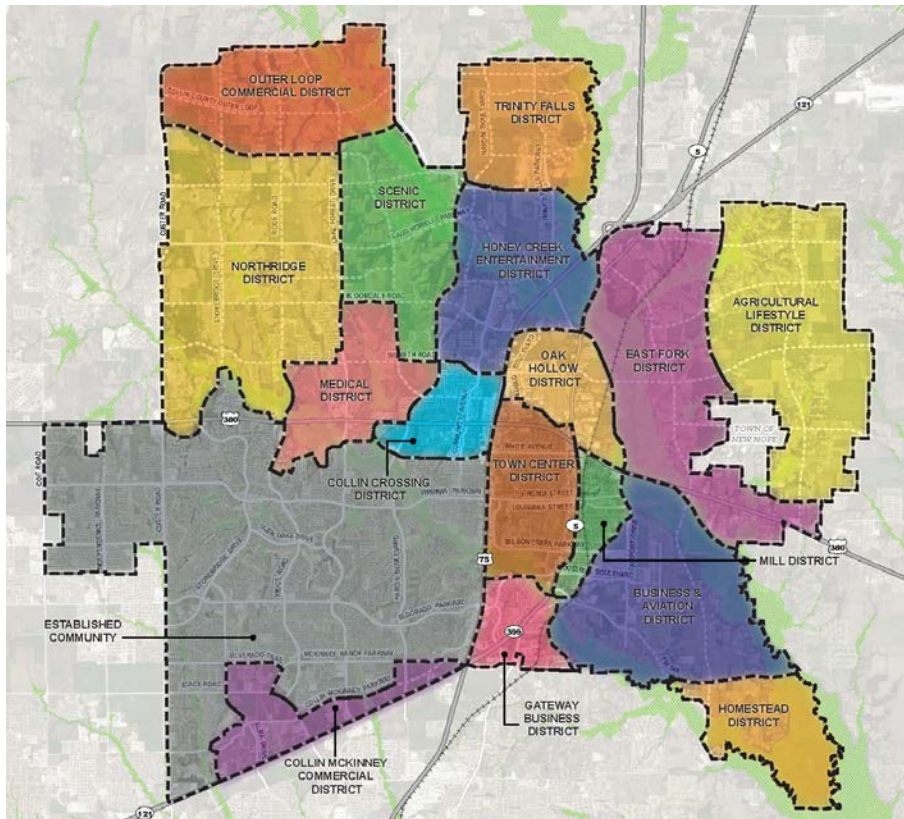
ONE McKINNEY 2040

Why are we updating the Comprehensive Plan?

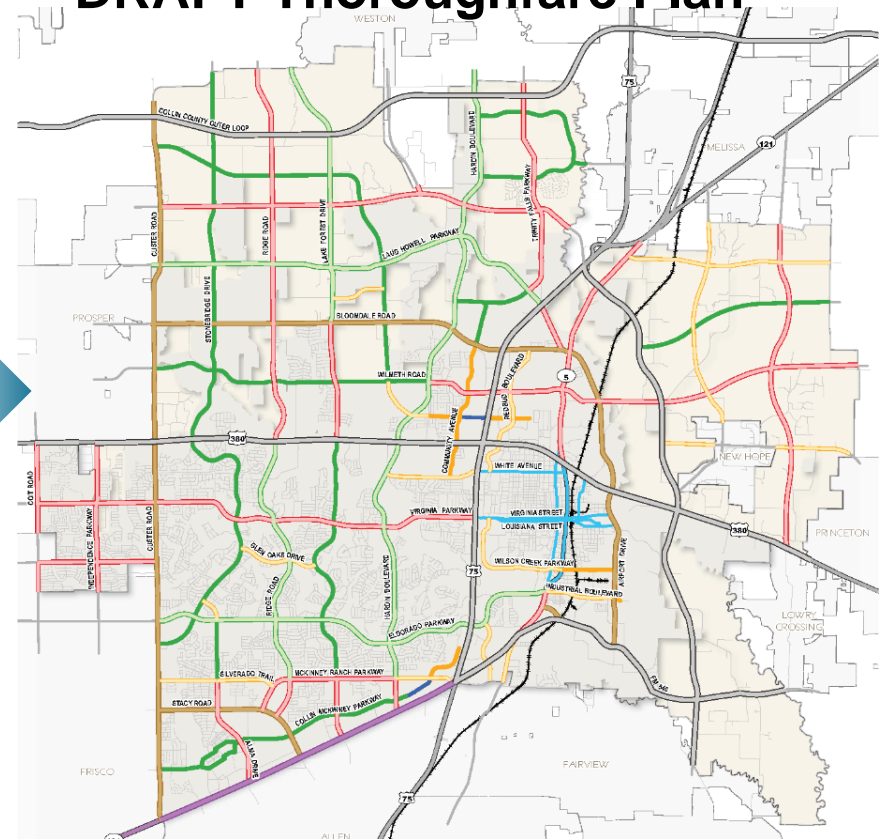
- Current Comprehensive Plan was adopted in 2004; much has changed in the last 12 years
- Population growth to over 160,000 residents
- High level of development has taken place

ONE McKinney 2040

DRAFT Preferred Scenario



DRAFT Thoroughfare Plan

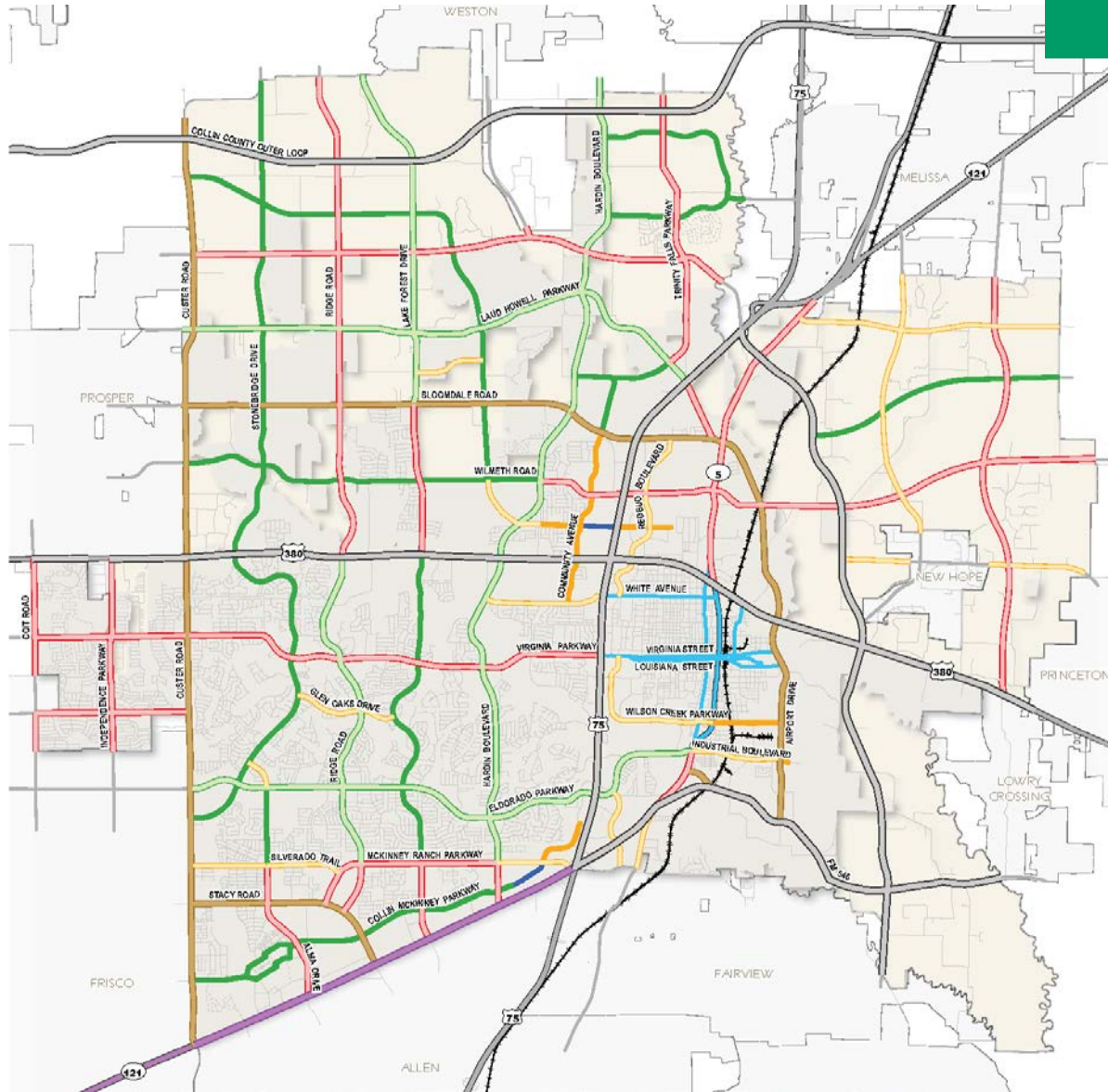


ONE McKinney 2040: Draft MTP*

Roadway Classifications

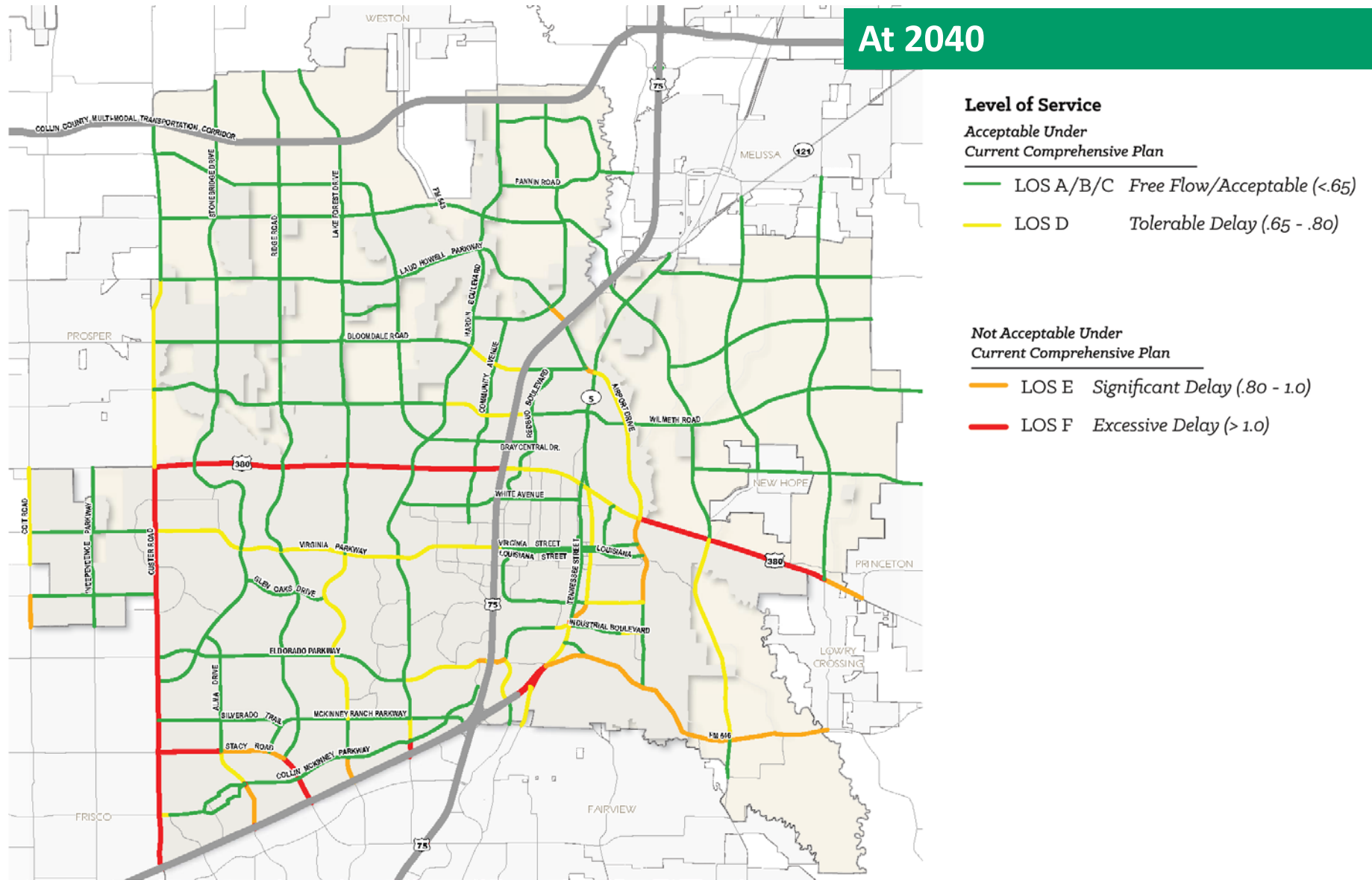
Draft Thoroughfare Plan 2016

- Major Regional Highway / Multi-Modal
- Tollway
- Principal Arterial - 130' ROW (6 Lanes)
- Major Arterial (6 Lanes)
- Greenway Arterial (6 Lanes)
- Greenway Arterial (4 Lanes)
- Minor Arterial (4 Lanes Divided)
- Minor Arterial (4 Lanes Undivided)
- Minor Arterial (3 Lanes)
- Town Thoroughfare
- Road By Others



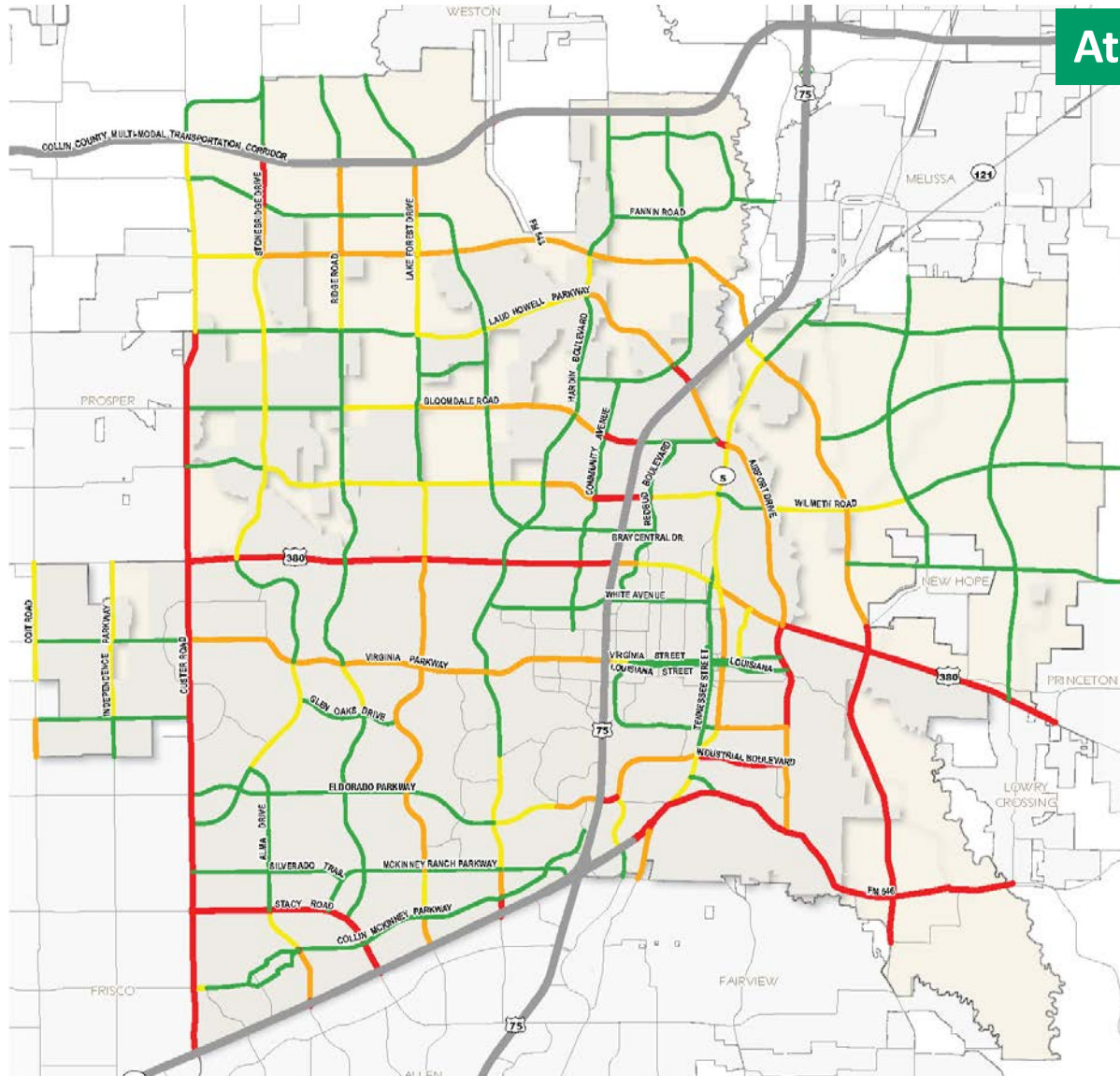
* not yet approved or
adopted by Council

Preliminary Thoroughfare Plan: TDM Results



Preliminary Thoroughfare Plan: TDM Results

At Buildout



Level of Service

Acceptable Under Current Comprehensive Plan

- LOS A/B/C Free Flow/Acceptable (<.65)
- LOS D Tolerable Delay (.65 - .80)

Not Acceptable Under Current Comprehensive Plan

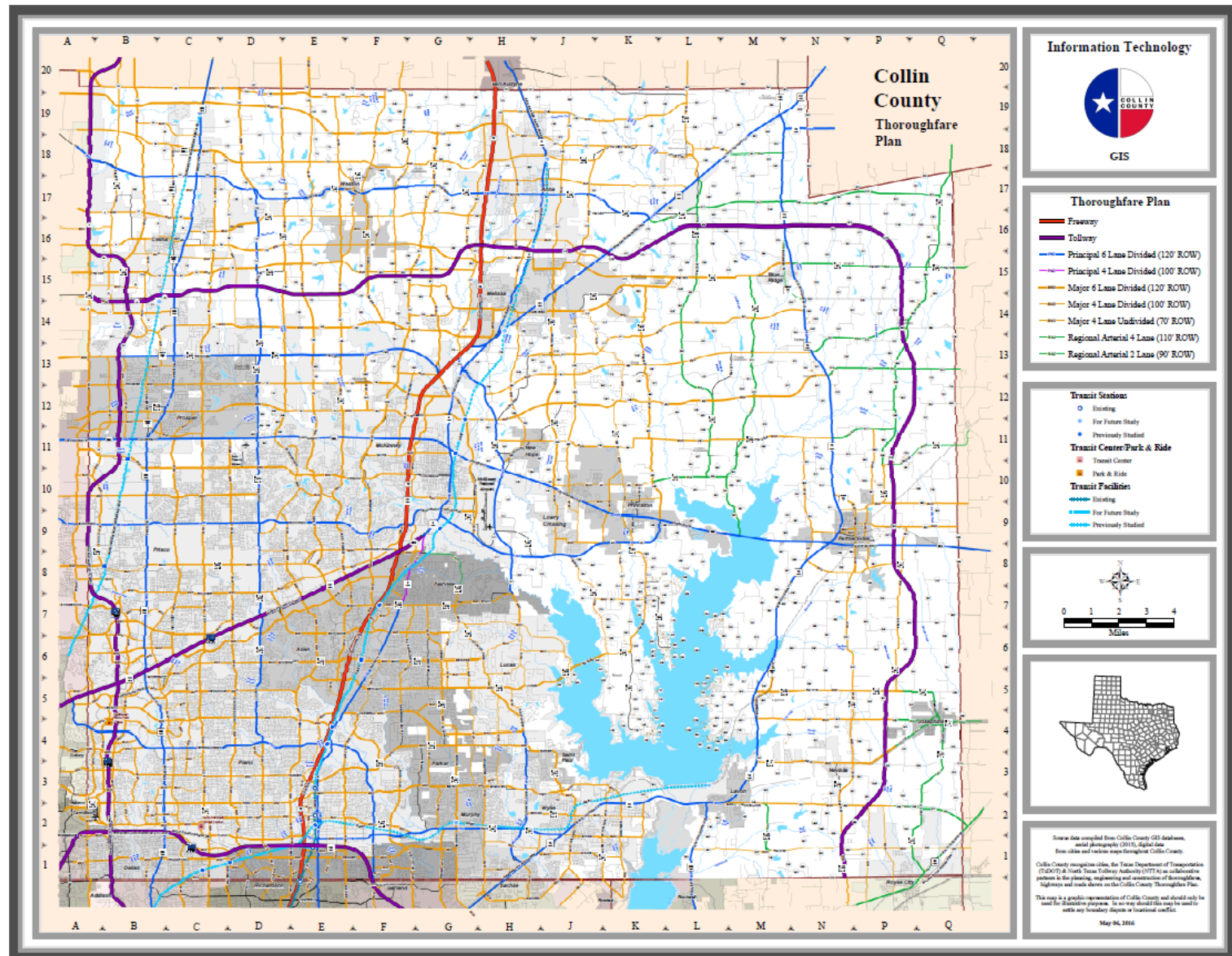
- LOS E Significant Delay (.80 - 1.0)
- LOS F Excessive Delay (> 1.0)

Regional Mobility Considerations

Meanwhile, in the region...

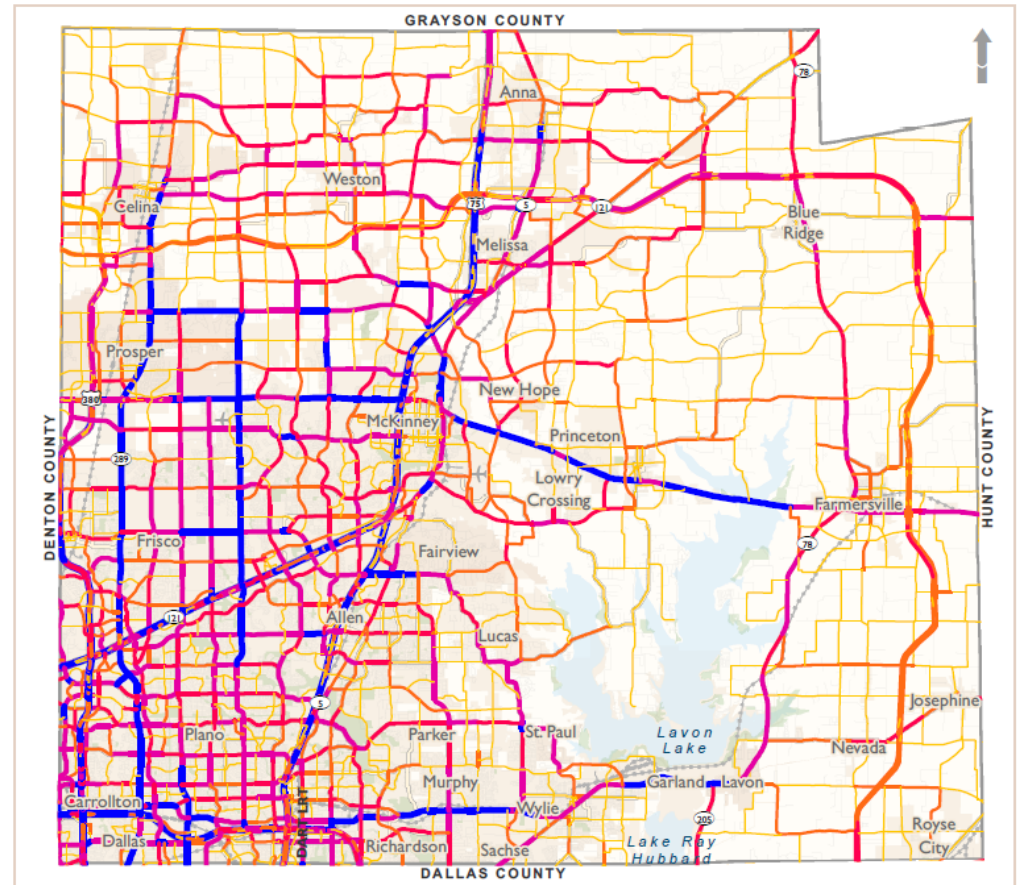
- Collin County updating population and employment projections
- TxDOT conducting US 380 Feasibility Study
- RTC completing Mobility 2040 Plan and seeking to identify priority projects

2016 Collin County Thoroughfare Plan



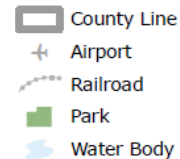
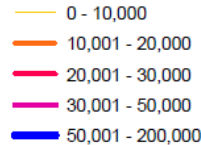
Collin County Growth Projections

Blue roads
exceed capacity
of 6-lane arterial



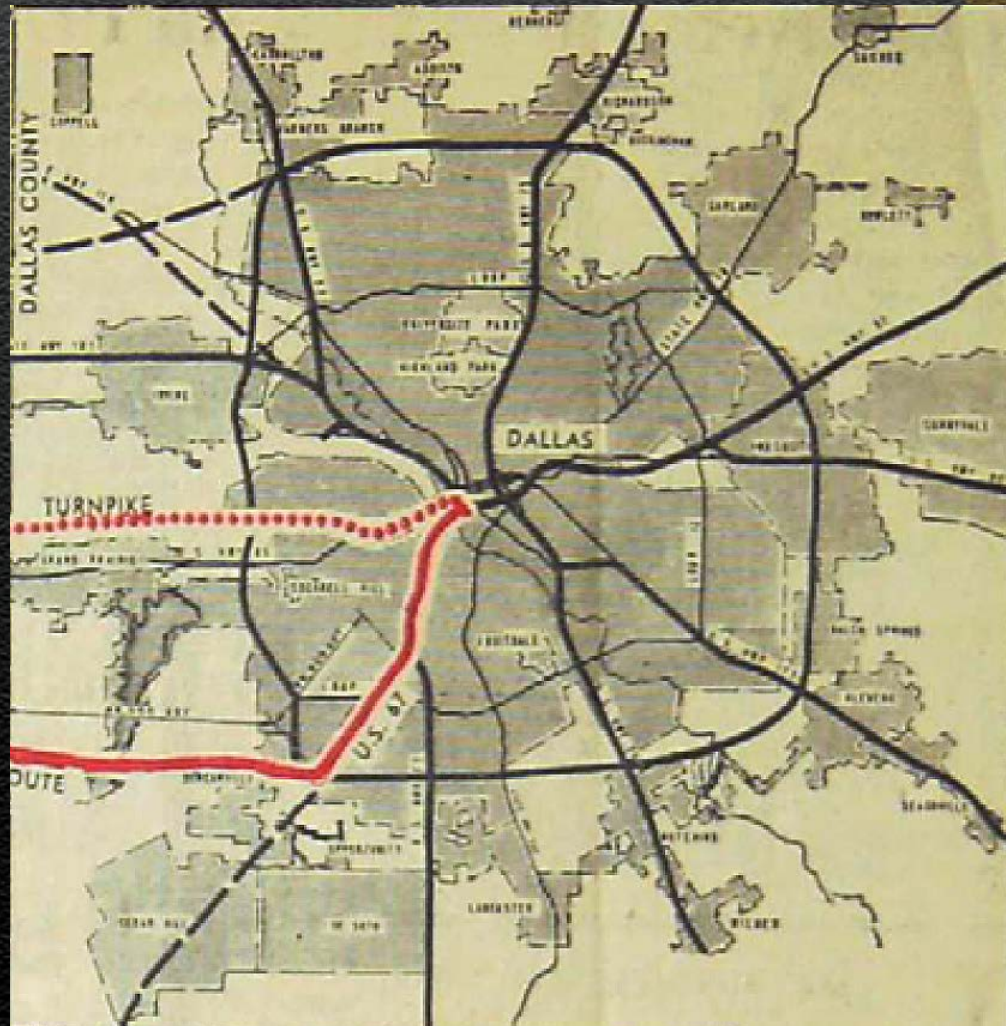
COLLIN COUNTY MOBILITY PLAN
3.4M BUILD-OUT TRAFFIC VOLUME

Average Daily Traffic (ADT)





LARs Network Planning in Dallas Co



*Dallas Morning
News
July 2, 1957*

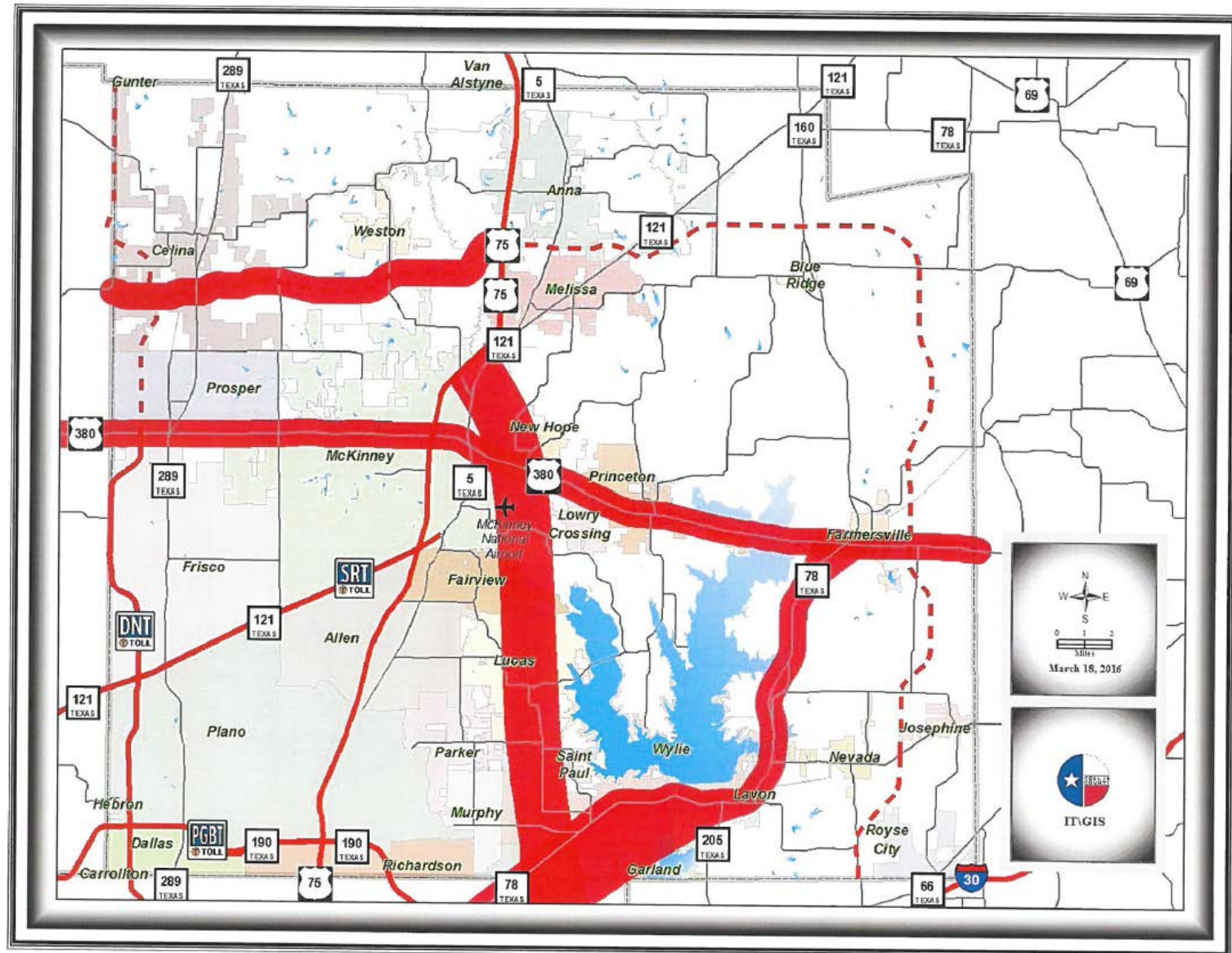
Dallas Co. Population

1950: 614,799

1957: 850,508 est.

1960: 951,527

Collin County Identified Regional Priorities



City of McKinney Identified Regional Priorities

Regional Priorities

- US 75 Alternate Route
- US 75 south of SH 121 – However, include McKinney in the Project Development Process
- Outer Loop
- US 78
- Extension of FM 546 to US 380 in Princeton

Local Priorities

- FM 546 – SH5 to the Airport
- Virginia Parkway – Ridge to US 75
- SH 5 Reconstruction – US 380 to FM 546
- SH 5 Reconstruction – FM 546 to Industrial
- Laud Howell Parkway (FM 1461) – US 75 to the Dallas North Tollway
- Custer Road – US 380 to FM 1461

The City of McKinney does not support the conversion of US 380 to a Limited Access Roadway but does support improvements to the roadway to improve capacity and mobility.

Regional Transportation Council (RTC)

Roadway Action Plan for Collin County

Corridor 1 (Near Term): US 75

- Widening in Allen
- PGBT Interchange Ramp Improvement
- Reconstruct Ridgeview Drive Interchange
- Technology Lane

Corridor 2 (Near Term): Collin County Outer Loop

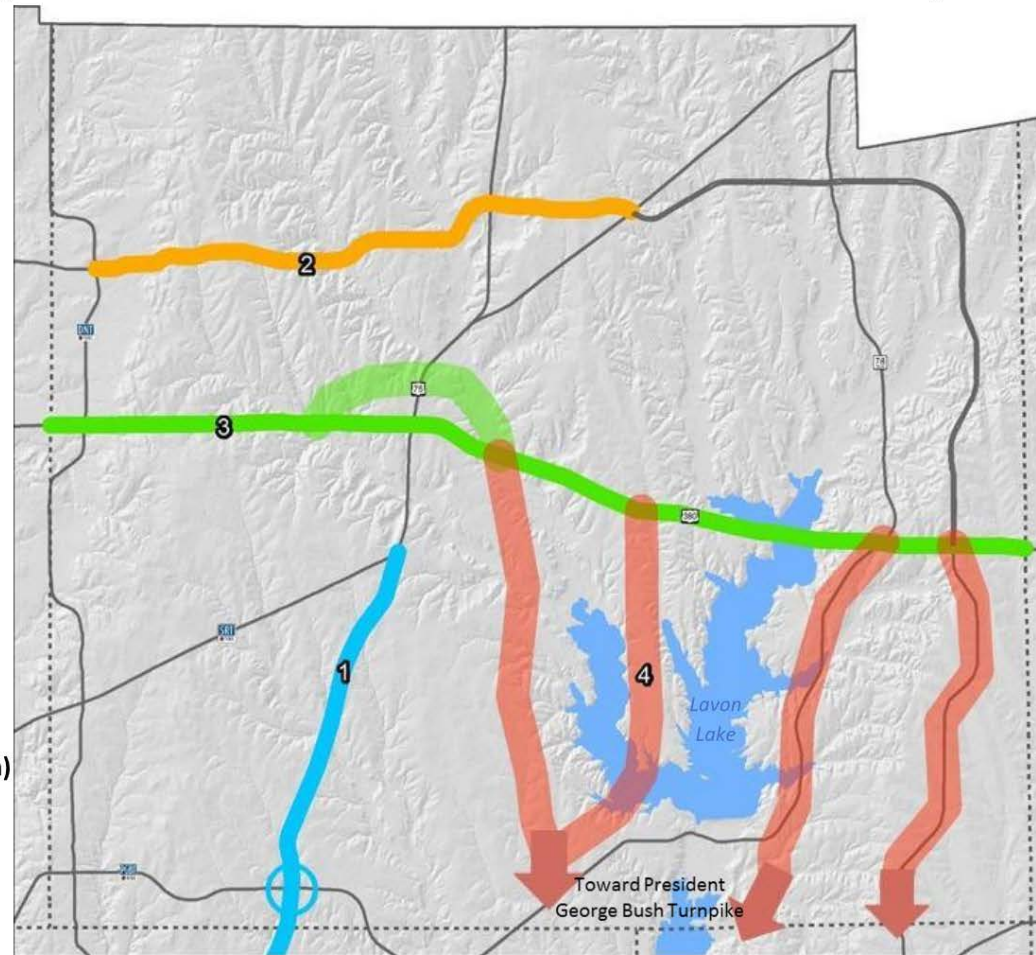
- Staged construction of frontage roads

Corridor 3 (Near Term): US 380

- Countywide Study
- McKinney Bypass

Corridor 4 (Near & Long Term) Collin County Strategic Transportation Initiative

- Study of non-tolled north/south roadway needs and opportunities



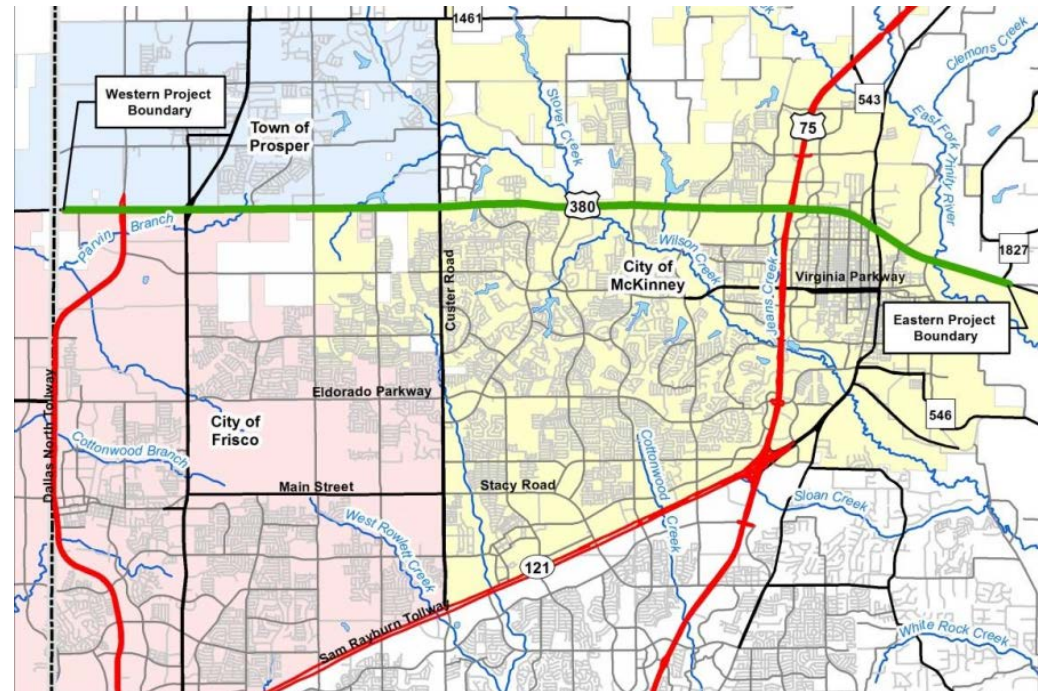
TxDOT US 380 Feasibility Study

PROJECT GOALS:

- ✓ Maintaining and Improving Connectivity and Accessibility
- ✓ Minimizing Congestion
- ✓ Improving Intersection Operations
- ✓ Reducing Travel Time
- ✓ Providing Access to Businesses
- ✓ Providing Connectivity to the North-South Highways that Intersect US 380

PROJECT LIMITS:

approximately 15.3 miles and includes the section of US 380 from west of County Road (CR) 26 in Prosper to Farm-to-Market (FM) 1827 in McKinney as shown.



TxDOT US 380 Feasibility Study

PROJECT FINDINGS:

Design solutions generally within the existing right-of-way of US 380 would not likely improve congestion on the roadway beyond a level of service D/E/F by 2040.

Significant improvements in Level of Service for US 380 would likely require the conversion of the roadway to a highway facility (ranging from 200-400 foot right-of-way).

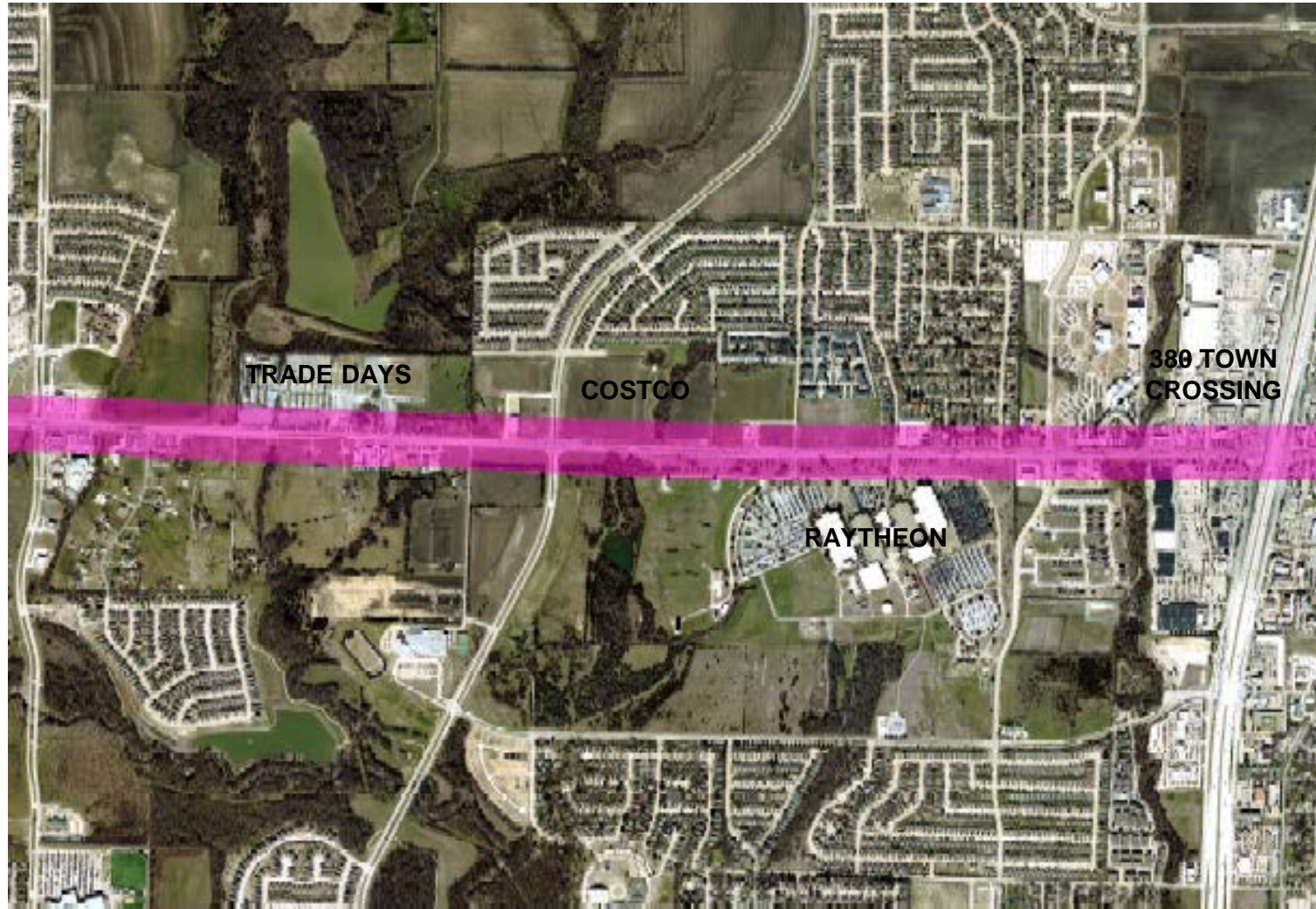
McKinney Regional Choices: US 380 as a Limited Access Roadway

300 foot ROW



McKinney Regional Choices: US 380 as a Limited Access Roadway

300 foot ROW

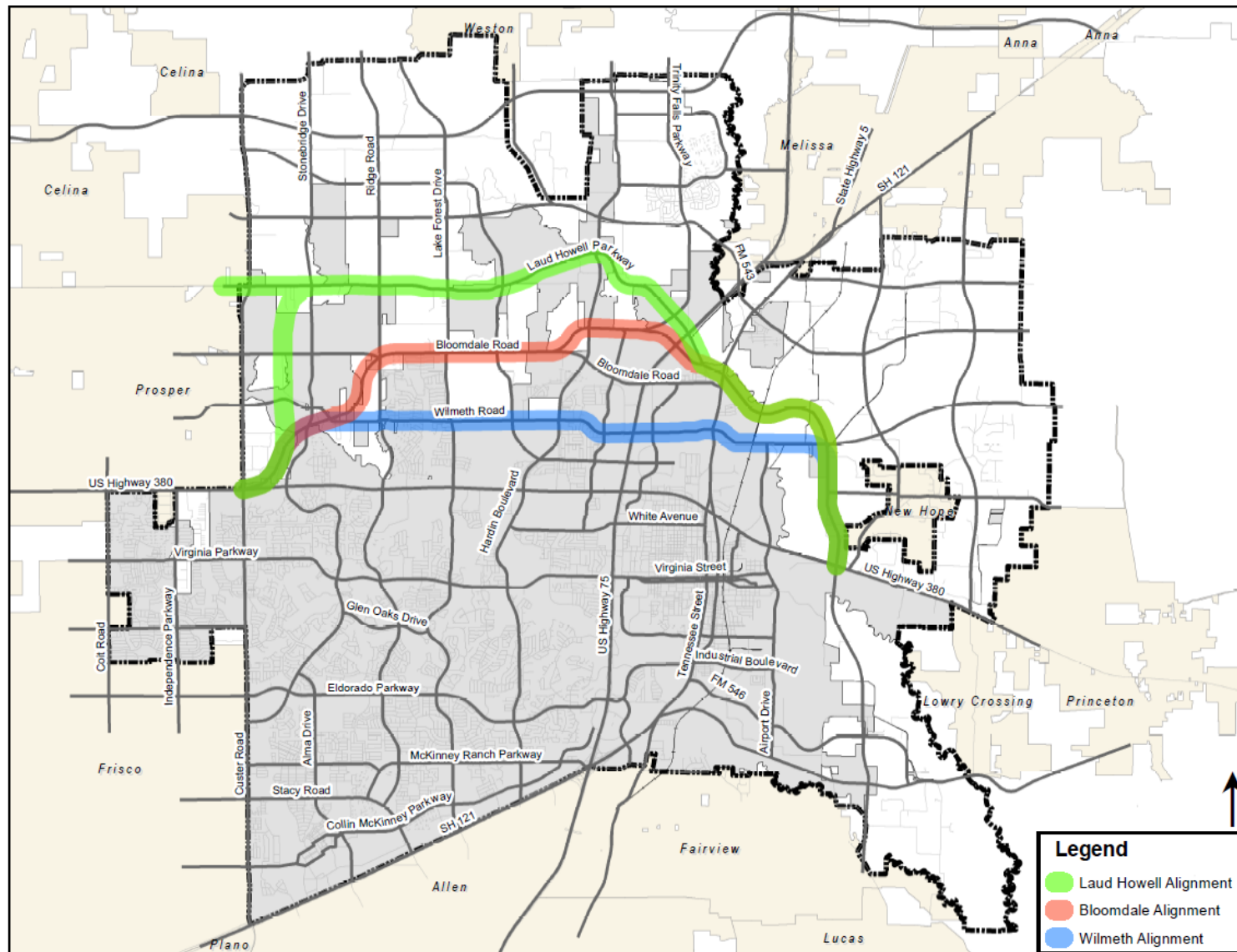


McKinney Regional Choices: US 380 as a Limited Access Roadway

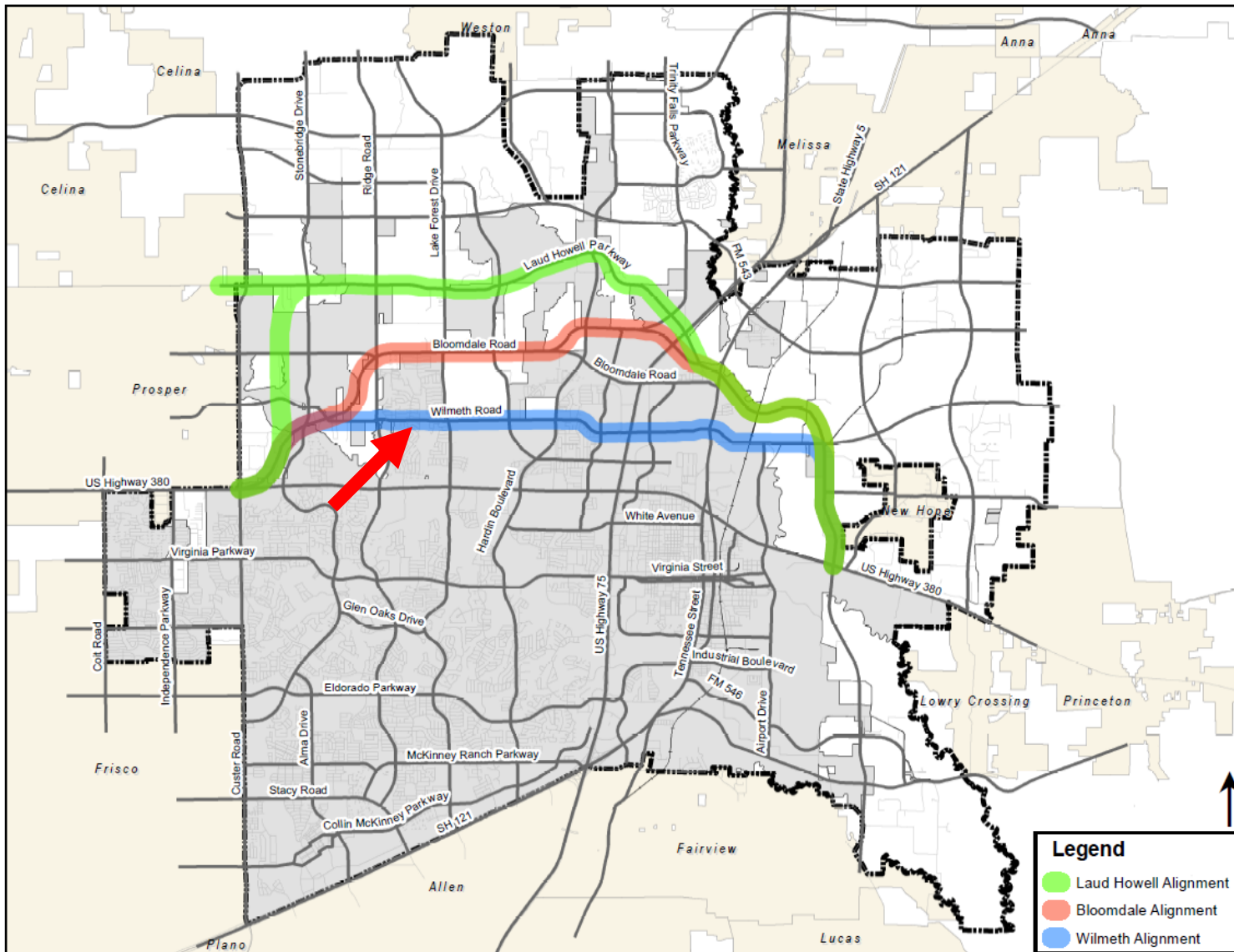
300 foot ROW



McKinney Regional Choices: US 380 Bypass – options



McKinney Regional Choices: US 380 Bypass – future Wilmeth option



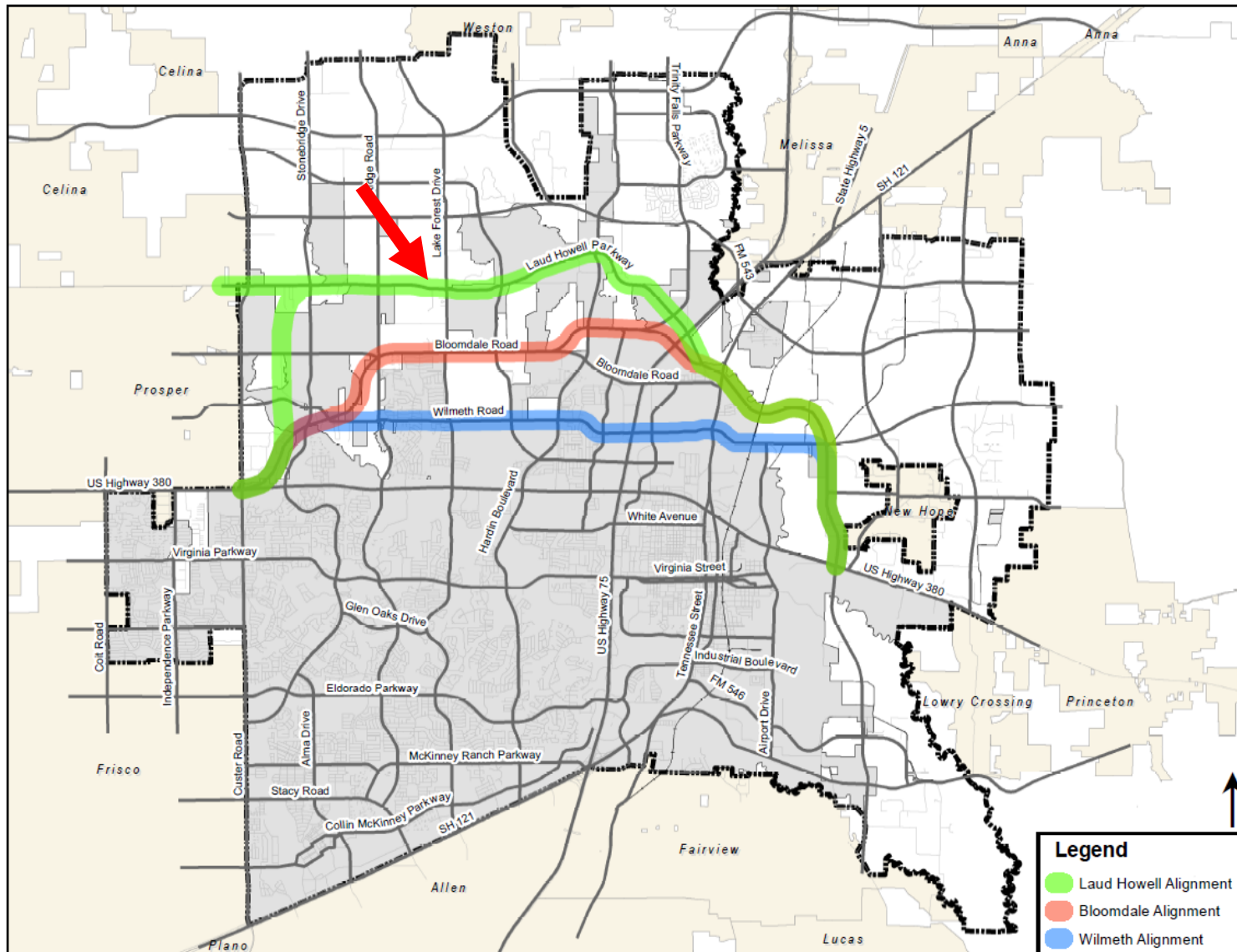
PROS:

- Close proximity to US 380

CONS:

- Existing developments/neighborhoods along both sides of roadway in many locations
- Impacts to existing High School (McKinney North)
- Unlikely support from TxDOT

McKinney Regional Choices: US 380 Bypass – future Laud Howell option



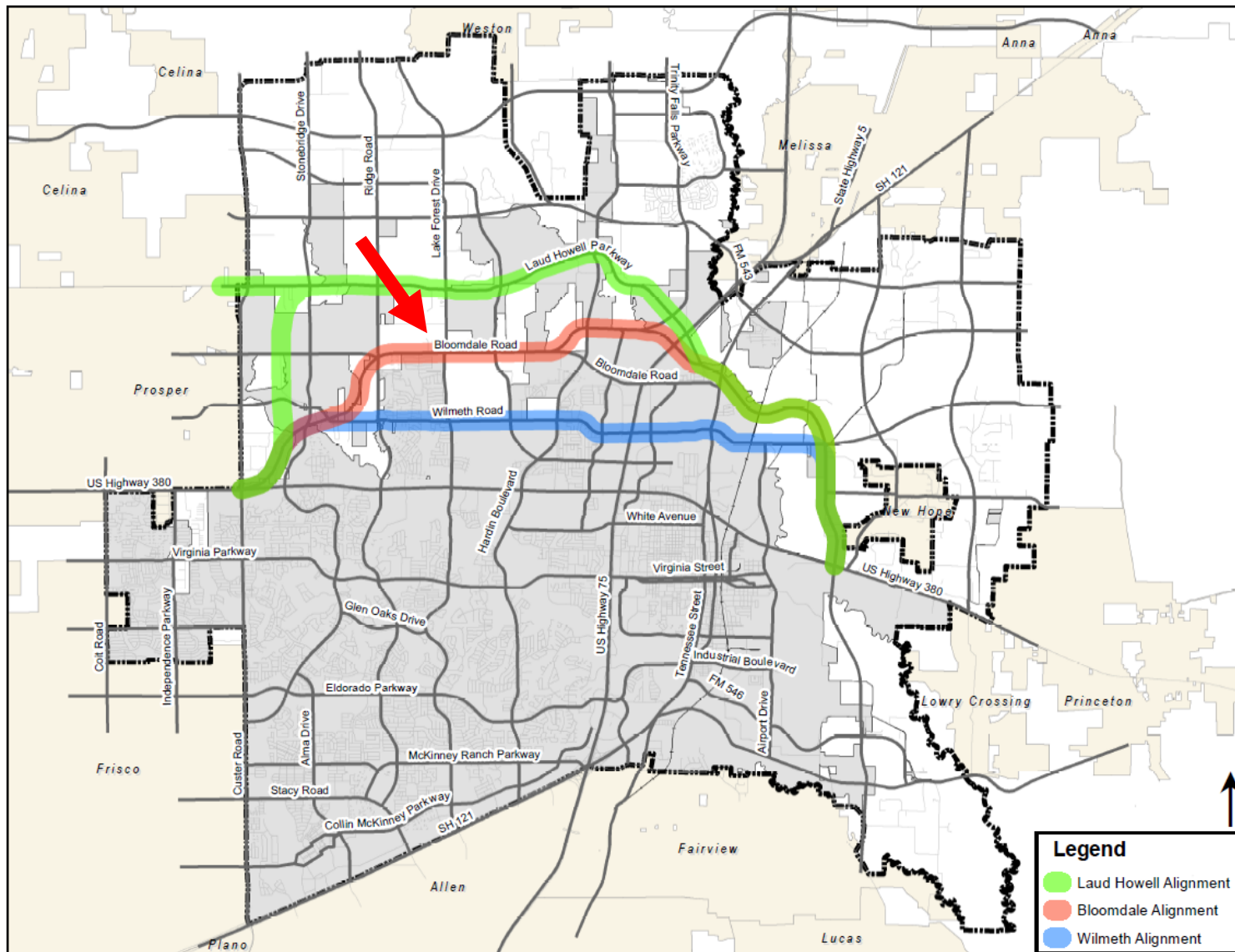
PROS:

- Relatively undeveloped areas

CONS:

- Separation from existing US 380 makes route potentially less desirable for users
- Close proximity to CCOL
- Difficulties tying back to US 380 on west side
- No support from Prosper or Celina
- Existing City investments in design of LHP (~\$1M)

McKinney Regional Choices: US 380 Bypass – future Bloomdale option



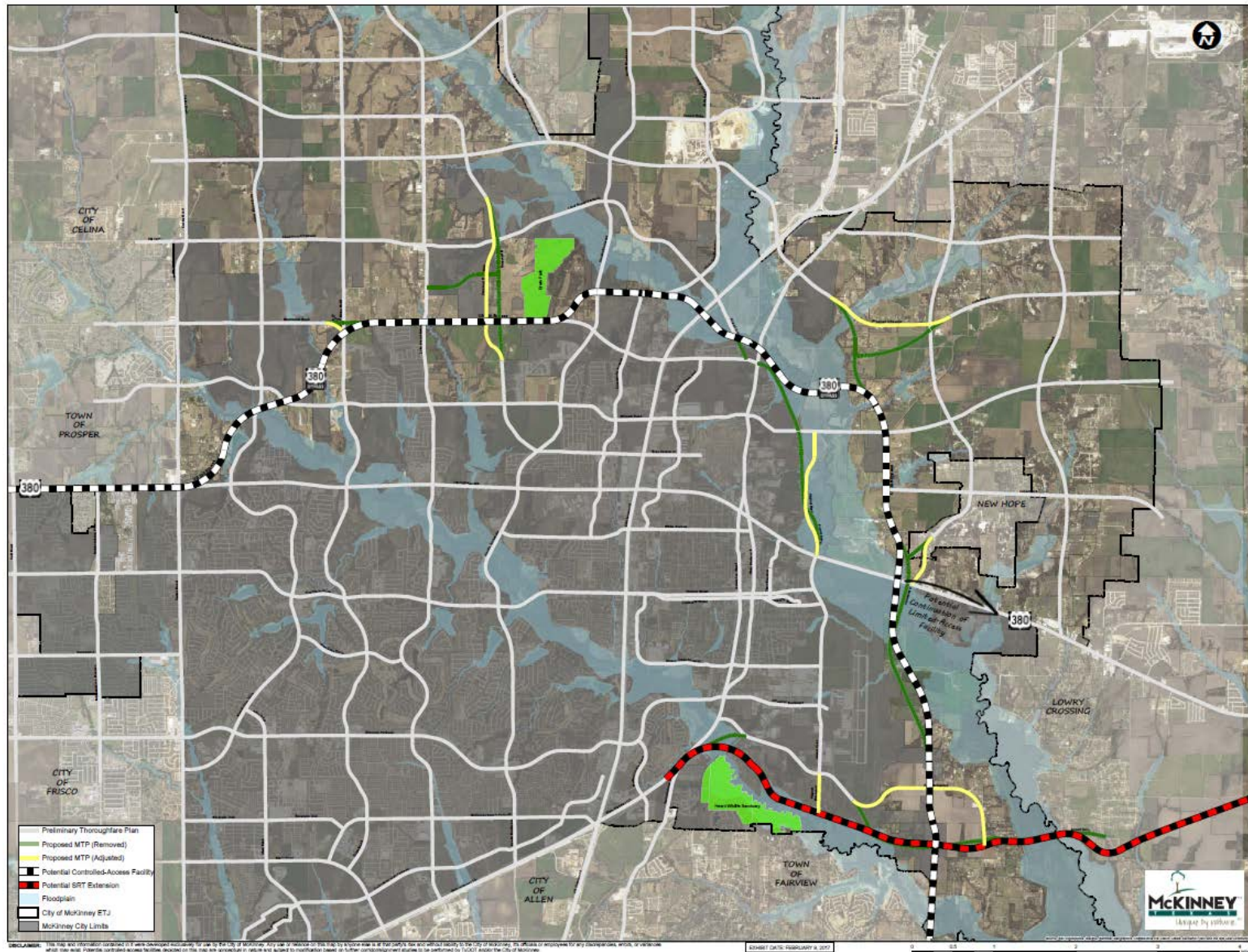
PROS:

- minimizes negative impacts on major existing businesses
- creates new opportunity for economic development
- Creates regional solution without impacting neighboring communities
- Creates much needed capacity near US75/FM543
- Located with good separation from CCOL

CONS:

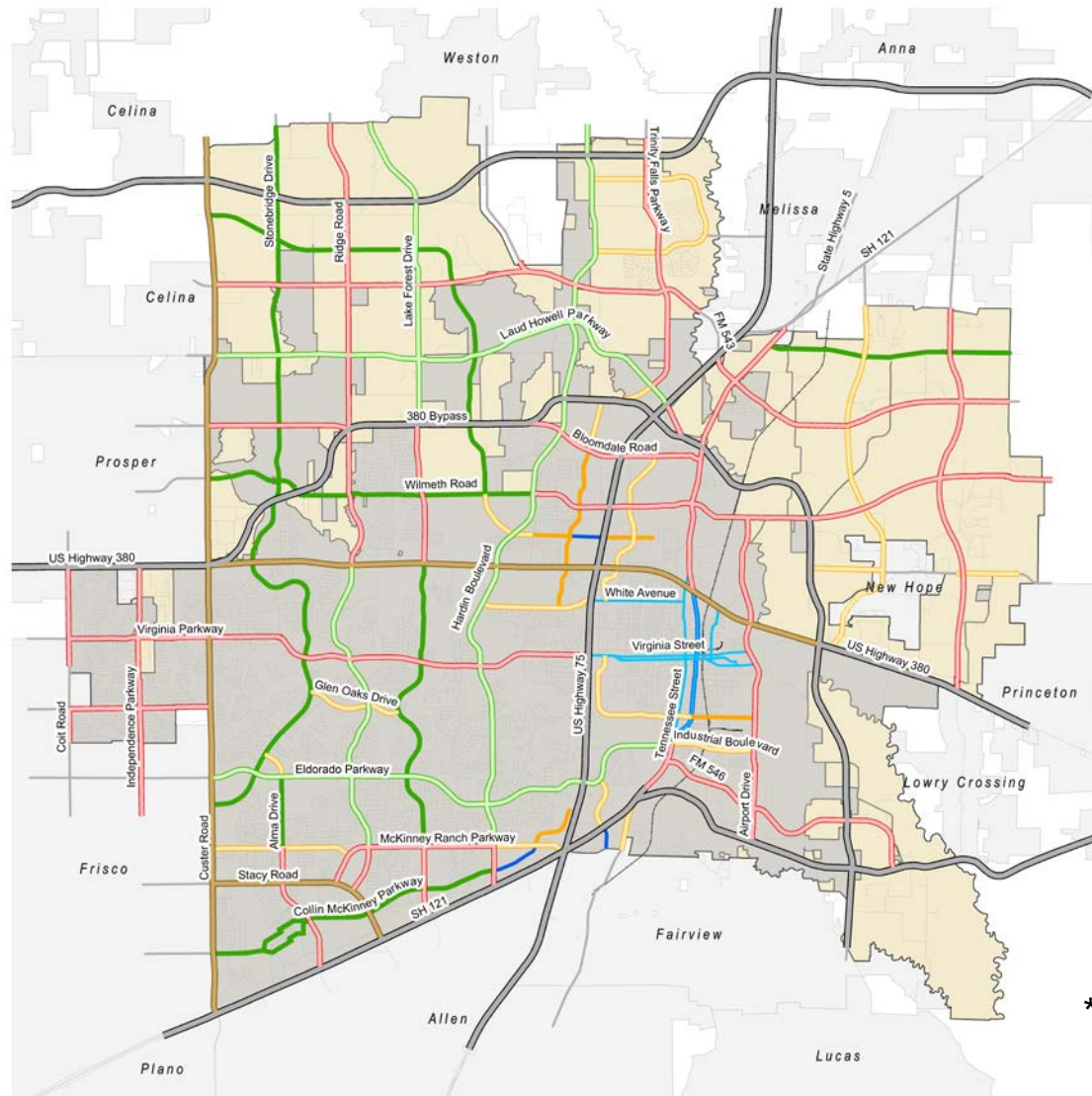
- Impacts on existing/ planned residential developments
- Considerations at Erwin Park
- Significant floodplain crossing(s)
- Impacts tying back to US 380 at Custer

McKinney Regional Choices: US 380 Bypass Corridor (Bloomdale option)



McKinney Regional Choices:

Updated Thoroughfare Plan including Bypass Concept*



** not yet approved or adopted by Council*

What's Next?

- ❑ Perform Travel Demand Modeling on updated draft MTP
- ❑ March 6 City Council Work Session to present and discuss draft MTP
- ❑ Late March: Major Public Outreach Events as part of the ONE McKinney 2040 process
- ❑ Spring: Consideration of ONE McKinney 2040 Plan by City Leaders

If the Plan is approved in the spring, what does that mean?

The process for introducing major freeways to an area requires a tremendous amount of planning and evaluation by a number of different agencies. At this early stage, it is difficult to estimate how long it could take to see a new freeway in Collin County; however, it will likely take many years before any new freeways would be under construction.