



17-093

**TITLE:** Regional Mobility and its Impact on the Preliminary Thoroughfare Plan and the ONE McKinney 2040 Comprehensive Plan Update

**COUNCIL GOAL:** Direction for Strategic and Economic Growth

**MEETING DATE:** January 23, 2017

**DEPARTMENT:** Development Services - Planning Department  
Development Services - Engineering Department

**CONTACT:** Jennifer Arnold, Planning Manager  
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Michael Quint, Executive Director of Development Services

**RECOMMENDED CITY COUNCIL ACTION:**

- Discuss and provide direction to Staff.

**ITEM SUMMARY:**

- This item is to discuss regional mobility issues specifically related to potential limited access roadways/highways in Collin County and its impact on the ONE McKinney 2040 Comprehensive Plan.
- An important element of the ONE McKinney 2040 Comprehensive Plan is mobility and transportation. This citywide component identifies the transportation system that is consistent with, and can functionally support, the community's long term vision for growth and development (i.e. the Preferred Scenario).
- One of the key components to mobility and transportation is the Master Thoroughfare Plan, which identifies the network of roadways needed to accommodate the future growth plans of the community.
- At the August 15, 2016 City Council Work Session, Staff presented a Preliminary Thoroughfare Plan and associated Travel Demand Model (TDM) results based on growth assumptions of the Preferred Scenario at the year 2040 and at buildout.

- While the Council was generally supportive of the Preliminary Thoroughfare Plan, there was also some concern about the level of service (LOS) expected along some roadways under the build out scenario.
- Concurrent with the development of the Preliminary Thoroughfare Plan for ONE McKinney 2040, the Regional Transportation Council, Collin County, and the Texas Department of Transportation also have/had a number of mobility-related initiatives underway related to the short- and long- term needs of Collin County through 2040 and beyond.
- In light of these discussions, Staff has focused attention over the last several months on re-evaluating the Preliminary Thoroughfare Plan to include transportation connections in support of regional initiatives and acceptable levels of service.
- As such, Staff is now presenting an Updated Preliminary Thoroughfare Plan for discussion with the Council. The key change to the plan is the introduction of a US 380 bypass.
- Staff evaluated a number of potential alignment options for the US 380 bypass. However, as proposed, the bypass would establish a highway cross section through McKinney along the existing Bloomdale Road alignment.
- Other modifications to the plan since it was last discussed with the Council are primarily a result of the US 380 bypass concept.
- Given the significance of this change to the ONE McKinney 2040 Comprehensive Plan and to regional mobility, Staff is requesting Council discussion and consensus related to the Updated Preliminary Thoroughfare Plan.

#### NEXT STEPS

- Should Council be supportive of these changes, Staff will initiate with the Comprehensive Plan consultant team updates the Travel Demand Model (based on the new roadway alignments and County growth projections) as well as any necessary changes to the land use elements of the ONE McKinney 2040 Comprehensive Plan.
- Given the scale of these changes, updates related to the ONE McKinney 2040 Comprehensive Plan initiative will require a modification of the existing scope to include this additional level of work. Staff has had preliminary conversations with the consultant team and is comfortable that any additional cost related to the scope modification can be absorbed using the existing budget for the ONE McKinney 2040 Comprehensive Plan project.

- As well, Staff will host additional public outreach events in February/March specifically to discuss transportation. Staff will also host public outreach events in the spring of 2017 related to all of the key elements of the ONE McKinney 2040 Comprehensive Plan, including land use and mobility.

## **BACKGROUND INFORMATION:**

### **REGION AND COUNTY BACKGROUND**

- Over the past year, Collin County has been updating its growth projection model in order to identify short- and long-term mobility needs within Collin County.
- As anticipated, the expected growth in Collin County over the next 30 to 50 years will likely put a significant strain on the existing and planned regional transportation network (i.e. the Collin County Thoroughfare Plan). Currently, the Collin County Thoroughfare Plan only has 4 regional highway facilities (freeways or tollways) identified. They are: US 75, the Dallas North Tollway, the Collin County Outer Loop, and the President George Bush Turnpike.
- Given the projected growth and limited network of regional transportation facilities, Collin County has placed significant focus on identifying and prioritizing new facilities capable of meeting the demands of future growth and expected transportation needs.
- Regional and state organizations such as the Regional Transportation Council (RTC) and the Texas Department of Transportation (TxDOT) have also been focused on regional mobility needs in light of expected growth in the region over the next 30 to 50 years.
- Ongoing efforts by TxDOT in consideration of US 380, resulted in the US 380 Feasibility Study, which was completed in August 2016. The Feasibility Study evaluated the 15 mile stretch of US 380 from Prosper to McKinney with the goal of identifying potential design solutions and their expected impacts on congestion levels of the roadway.
- In general, findings from the US 380 Feasibility Study indicated that 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 of D/E/F by 2040. Significant improvements in level of service for US 380 in this section would likely require the conversion of the roadway to a highway facility (or limited access roadway, LARS). Highways and limited access roadways can have a right-of-way width ranging from 200 feet to 400 feet.
- As a result of this regional dialogue, a number of different plans, solutions, and recommendations have been discussed at the regional level. This includes:

- In early 2016, the RTC (in partnership with TxDOT) requested that governing bodies in Collin County each submit their top 3 regional project recommendations in support of Mobility 2040, the regional mobility plan of NCTCOG. In response, the City of McKinney passed Resolution No. 2016-05-064, which identified priority regional and local projects for McKinney. Included in this resolution was the City's opposition to the conversion of US 380 in McKinney to a highway cross section/limited access roadway.
- At the October 2016 meeting of RTC, the Collin County Action Plan was discussed, which identified 4 potential regional projects for Collin County, including a US 380 bypass in McKinney. The US 380 bypass concept would consider a highway cross section/LARS along an alternate route of US 380 in McKinney.
- At the November 2016 meeting of the RTC, the 10-Year Unified Transportation Program was discussed. The 10-year plan identified funding for further evaluation of US 380 from the Denton County line to the Hunt County line, including the US 380 bypass concept.
- Also part of the identified US 380 project in the 10-Year plan, there is a placeholder for other candidate projects for which the City of McKinney has proposed the extension of SH 121 (SRT) from Spur 399 east connecting to US 380 east of Princeton.
- Concurrent to these efforts, Collin County initiated an economic impact study to evaluate the net economic impacts of converting US 380 from a Principal Arterial to a limited access roadway in Collin County. A draft of this report was recently completed and is expected to be presented to the Collin County Commissioners Court in early 2017.
- For more information about the Regional Mobility Plan (Mobility 2040), visit: [www.nctcog.org/mobility2040](http://www.nctcog.org/mobility2040) <<http://www.nctcog.org/mobility2040>>.

#### ONE MCKINNEY 2040 BACKGROUND

- The Mobility and Transportation Element of the ONE McKinney 2040 Comprehensive Plan generally includes the following important components:
  - The Master Thoroughfare Plan
  - Illustrative Cross-Sections
  - Key Mobility Considerations
- The major benefits of providing this information within the Comprehensive Plan includes:

- Identifying right-of-way (ROW) needs in advance of development;
  - Identifying the roadways planned to accommodate anticipated traffic based on the preferred growth scenario; and
  - Providing policy-level guidance for the desired design and context of arterial roadways.
- More information about the ONE McKinney 2040 Comprehensive Plan Update can be found at [www.onemckinney2040.com](http://www.onemckinney2040.com) [<http://www.onemckinney2040.com>](http://www.onemckinney2040.com).

#### **SUPPORTING MATERIALS:**

[Collin County Thoroughfare Plan](#)  
[US 380 Feasibility Study](#)  
[Collin County Major Projects](#)  
[McKinney Resolution 2016-05-064](#)  
[Collin County Action Plan](#)  
[10-Year Unified Transp Program](#)  
[Preferred Scenario](#)  
[Prelim Thoroughfare Plan \(Aug 2016\)](#)  
[US 380 Bypass Corridor](#)  
[US 380 Bypass West Option A](#)  
[US 380 Bypass West Option B](#)  
[Updated Thoroughfare Plan \(2017\)](#)  
[Presentation](#)