US 69 Feasibility Study

Welcome

US 69 Feasibility Study Open House

- **Sign in** so we can keep you updated on the study
- **Review** the study background and potential improvements
- **Share** your comments with the City of Tyler, Tyler Area MPO and TxDOT
- **Complete** a brief community survey and leave comments
What is the US 69 Feasibility Study?

The City of Tyler, the Tyler Area Metropolitan Planning Organization (MPO) and the Texas Department of Transportation (TxDOT) have partnered to conduct a study that explores improvements, including innovative intersections, on US 69 (South Broadway Avenue) from Amherst Street to FM 2813.

The feasibility study will identify a recommended option that will address current and future traffic-related delays along the existing corridor. The recommended option will be evaluated further in future phases of project development, should the project advance beyond the current feasibility study.
Why is the US 69 Feasibility Study being conducted?

- Traffic along the corridor is expected to nearly double within the next 25 years.

- South Broadway Avenue, from Loop 323 to Toll 49, is the most congested roadway in Smith County. It was also ranked as Texas’ 67th Most Congested Roadway in 2017 by the Texas A&M Transportation Institute.

- Addressing the traffic related problems between Loop 323 and Toll 49 was identified as the highest ranked project for the TxDOT Tyler District (*TxDOT, 2017*).
Corridor Conditions

**US 69/South Broadway Avenue**
- Provides access to shopping centers, restaurants, banks, schools, hospitals, clinics and other businesses
- 5-mile corridor with 13 signals, or 1 every 1/3 mile
- Serves as a hurricane evacuation route
- Part of the Texas Highway Freight Network and US Highway System

**Economic Drivers**
- Regional medical hub of East Texas
- Expanding retail economy
- Largest employers are medical care, grocery distribution, retail and education

**Planned Development**
- Potential hotel-convention center (US 69/Toll 49)
- Subdivisions (Settler’s Landing)
US 69 Preliminary Traffic Projections
2018 - 2045

- North of Amherst Drive: 25,000 (2018), 40,000 (2045)
- South of Loop 323: 35,000 (2018), 55,000 (2045)
- North of Toll 49: 24,000 (2018), 38,000 (2045)
US 69 Feasibility Study

US 69 Turning Movement Volumes at Rice/Shiloh Roads

Preliminary 2045 PM Peak Hour Forecasts

- Broadway Ave.
- Shiloh Road
- Rice Road

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<tr>
<th>Movement</th>
<th>Forecasts</th>
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US 69 Turning Movement Volumes at Grande Boulevard
Preliminary 2045 PM Peak Hour Forecasts

* Thicker arrow indicates that left-turn movements exceed 500 vehicles per hour.
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US 69 Turning Movement Volumes at Loop 323
Preliminary 2045 PM Peak Hour Forecasts

* Thicker arrow indicates that left-turn movements exceed 500 vehicles per hour.
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A Community Driven Effort

Public input is highly valued and an important part of creating improvements to address transportation needs. The City of Tyler has formed a working group specifically for the US 69 Feasibility Study and is providing opportunities for the public to comment.

The City of Tyler, the Tyler Area Metropolitan Planning Organization (MPO), and the Texas Department of Transportation (TxDOT) will use the public’s input to plan for the city’s future transportation needs.

Working group includes local city, agency and business representatives.

The working group will meet throughout the study to help identify issues and opportunities. They will use public feedback from community open houses, discussions with community members, and surveys to help the project team identify a recommended option.

Two community open houses will be held during the study to encourage public feedback and provide the community with information about the project.
Typical Project Development Process

1. **Feasibility Study**
   - 1-2 Years

2. **Environmental Study and Schematic Design**
   - 1-3 Years

3. **Final Design, Obtain Right of Way, and Adjust Utilities**
   - 2-4 Years

4. **Construction**
   - 2-5 Years

* Advancement from step to step is contingent upon the outcome of the previous step and the availability of funding.

The recommended option identified in this study will serve as the starting point for future phases of the project development process, should the project advance beyond the current feasibility study.
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Goals and Objectives

Accommodate Future Growth
- Identify potential right of way (ROW) needed in the future

Improve Mobility
- Reduce delays
- Improve sidewalks for pedestrian and bicyclist connectivity
- Add transit bus pullouts
- Increase throughput (enables more vehicles to travel the roadway)

Minimize Impacts to Adjacent Property Owners and Businesses
- Maintain access
- Minimize ROW acquisition
- Minimize physical barriers (i.e. medians) that could reduce accessibility to businesses

Enhance Safety
- Add pedestrian islands (medians and right turns) at intersections
- Separate vehicle traffic from bicyclists and pedestrians
- Consolidate driveways
Partial Continuous Flow Intersection (CFI)

- At grade, high-capacity intersection design
- Diverts left turning vehicles from crossing the main intersection for either the north/south or the east/west roadways
- Has a signalized two-way intersection where left-turning vehicles make their turn a few hundred feet before the main intersection at what is called the “left-turn cross-over”

Requirements: Approximately 186 ft. to 210 ft. of ROW (existing ROW is ~ 130 ft).

Disadvantages
- Limits access to adjacent properties near the full CFI intersection
- May reduce or eliminate ingress/egress from driveways close to the intersection

Benefits
- Reduces delays and congestion
- Increases intersection capacity
- Enhances safety because of fewer vehicle contact points
- Can be constructed at grade level
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Full Continuous Flow Intersection (CFI)

- At grade, high-capacity intersection design
- Diverts left turning vehicles from crossing the main intersection for all the north/south and the east/west roadways
- Has a signalized two-way intersection where left-turning vehicles make their turn a few hundred feet before the main intersection at what is called the “left-turn cross-over”

Requirements: Approximately 186 ft. to 210 ft. of ROW (existing ROW is ~ 130 ft).

Disadvantages
- Limits access to adjacent properties near the full CFI intersection
- May reduce or eliminate ingress/egress from driveways close to the intersection

Benefits
- Reduces delays and congestion
- Increases intersection capacity
- Enhances safety because of fewer vehicle contact points
- Can be constructed at grade level
Hammerhead Structure

- Grade-separated high-capacity interchange design
- Partial CFI utilized to increase Broadway Avenue capacity

Requirements: Approximately 168 ft. of ROW (existing ROW is ~ 130 ft).

Disadvantages
- Requires grade separation
- Works best with controlled access intersection

Benefits
- Reduces delays and congestion by removing Loop 323 through traffic from signal
- Separates Loop 323 through traffic from local traffic
- Minimizes ROW impact
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Single Point Urban Interchange (SPUI)

- Grade-separated high-capacity interchange design
- Left-turning vehicles use exit ramps opposite of each other to create a single intersection over the main roadway and at the center
- Right turns are separated from the main intersection using ramps without signals, then yield to make the right turn

Requirements: Approximately 210 ft. to 240 ft. of ROW (existing ROW is ~ 130 ft).

Disadvantages
- Requires grade separation and works better with an access controlled intersection
- Access to local business and property is limited at the intersections

Benefits
- Reduces delays and congestion by reducing the number of signal phases needed to service all of the movements through the intersection
- Increases the number of vehicles able to use the interchange by removing through traffic from the intersection
Traditional Interchange

- A grade-separated interchange design
- Right- and left-turn movements use exit ramps and then make turns
- Entry ramps are used to enter the roadway
- Two signals are coordinated to allow right- and left-turn movements

Requirements: Approximately 176 ft. to 210 ft. of ROW (existing ROW is ~ 130 ft).

Disadvantages
- Requires an overpass or grade separation
- Access to local businesses and property is limited at the intersection

Benefits
- Reduces delays and congestion as vehicles driving through the interchange no longer need to stop at a red light
- Increases capacity and removes through traffic from the intersection
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Conceptual Six-Lane Roadway Section

Right of Way

Sidewalk

5'

12'

12'

12'

12'

12'

12'

Sidewalk

5'

136' Desirable
Conceptual Six-Lane Roadway Scenario

Interchanges and Intersections
- Loop 323: Traditional/SPUI (Loop 323 over US 69)
- Rice/Shiloh: Partial CFI (North and South)
- Grande: Full CFI (all directions)

Features
- Three travel lanes in each direction on US 69
- Two left-turn lanes and a dedicated right-turn lane at Loop 323, Rice and Shiloh Roads, Grande Boulevard, and possibly Cumberland Road
- Driveways can be consolidated

Requirements: Approximately 136 ft. of ROW, with 160 ft. needed for conventional intersections (existing ROW is ~ 130 ft).

Disadvantages
- Vehicles use the outside lane to turn in and out of driveways, slowing down through traffic using the outside lane.
- Does not provide ROW for improvements that may be needed beyond 2045.

Benefits
- ROW impacts limited to new intersections
- New intersections improve mobility and reduce delays at signals
- Can have right-turn lanes and transit pullouts
- New intersection at Loop 323 will improve US 69, Loop 323 and Old Bullard Road
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Conceptual Eight-Lane Roadway Section

Proposed Right of Way

Sidewalk

5'

12'

12'

12'

12'

12'

12'

12'

Median

160' Desirable

Proposed Right of Way

Sidewalk

5'
US 69 Feasibility Study

Conceptual Eight-Lane Roadway Scenario

Interchanges and Intersections
- Loop 323: Diamond or SPUI (Loop 323 over US 69)
- Rice/Shiloh: Traditional (signal serving all directions/turns)
- Grande Boulevard: Full CFI (all directions)

Features
- Four travel lanes in each direction on US 69
- Two left-turn lanes and a dedicated right-turn lane at Loop 323, Rice and Shiloh Roads, Grande Boulevard, and possibly Cumberland Road
- Driveways can be consolidated

Requirements: Approximately 160 ft. of ROW, with 184 ft. needed for conventional intersections (existing ROW is ~ 130 ft).

Disadvantages
- Requires additional through and turn lanes at grade level
- Potential safety issues from drivers crossing multiple lanes of traffic
- May require new ROW

Benefits
- Adds capacity, reduces queuing and delays
- Can be developed in phases and allows for grade separations
- ROW can be preserved for improvements beyond 2045
- New intersection at Loop 323 will improve US 69, Loop 323 and Old Bullard Road
HOW CAN I STAY INFORMED?

For questions or comments, please...

- **Visit** the project website at www.TylerAreaMPO.org and follow the link to the US 69 Feasibility Study
- **Call** the project team at 903-600-6402
- **Email** the project team at us69feasibilitystudy@gmail.com
- **Send written mail** by **Aug. 1, 2018**, to: TxDOT Tyler District
  Attn: Advanced Project Development Office
  2709 W. Front St.
  Tyler, TX 75702