

A Resolution

NO. _____

A RESOLUTION IN SUPPORT OF THE REVISED EASTSIDE TRANSPORTATION PLAN LOCALLY PREFERRED ALTERNATIVE: TRANSIT ROUTE 89 MODE AND EXTENSION AND CROSS-SECTIONS FOR EAST LANCASTER AVENUE, BRIDGE STREET, AND BRENTWOOD STAIR ROAD

WHEREAS, as part of the Eastside Transportation Plan, a Locally Preferred Alternative was supported by City Council on January 23, 2024 through the adoption of Resolution No. 5876-01-2024; and

WHEREAS, a Locally Preferred Alternative (LPA) is defined as an alternative evaluated through the local planning process and will be used in Texas Department of Transportation's (TxDOT) National Environmental Policy Act (NEPA) process for East Lancaster Avenue - State Highway 180 (SH-180) and Interstate 30; and

WHEREAS, East Lancaster Avenue (SH-180) is owned and managed by TxDOT and the North Central Texas Council of Governments (NCTCOG) coordinates regional planning needs and will decide the final configuration and design of East Lancaster Avenue, Interstate 30, and Fort Worth to Houston High-Speed Rail; and

WHEREAS, the LPA recommended an extension of Trinity Metro's Route 89 transit service to connect into the future Eastchase Parkway and IH 30 retail area for a connection to Arlington's VIA On-Demand Service; and

WHEREAS, the LPA-recommended transit mode for Route 89 (Exhibit A) is Tech-Based Rapid Transit with premium amenities; and

WHEREAS, the recommended LPA cross-sections for East Lancaster Avenue is a technology-managed corridor consistent with the NCTCOG Metropolitan Transportation Plan; and

WHEREAS, the recommended LPA cross-sections for East Lancaster Street by Handley Drive includes a four-lane, two-way road with the existing on-street parking; and

WHEREAS, the LPA was presented for feedback through a series of public open houses on October 17, 18, and 19, 2023, and displayed in a virtual open house on the project website for review and comment from October 16 to November 20, 2023; and

WHEREAS, The LPA is being updated to provide more clarity on the East Lancaster cross sections requested by the public East of Interstate 820

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE

CITY OF FORT WORTH, THAT:

The City of Fort Worth supports the revised Locally Preferred Alternatives in the attached Exhibit A as follows:

1. East Lancaster Avenue as a managed technology corridor consistent with the NCTCOG Metropolitan Transportation Plan.
2. Bridge Street and Brentwood Stair Road, which include a four-lane, two-way and a two-lane, two-way road.
3. For Route 89, the Red Route transit alignment extension along East Lancaster Avenue and Dottie Lynn/Eastchase Parkway; and Tech-Based Rapid Transit with premium transit features.
4. East Lancaster Avenue east of IH 820 cross section includes a four-lane roadway with existing on street parking lane.

Adopted this _____ day of _____ 2025.

ATTEST

Jannette S. Goodall, City Secretary



Executive Summary of the Alternatives Analysis

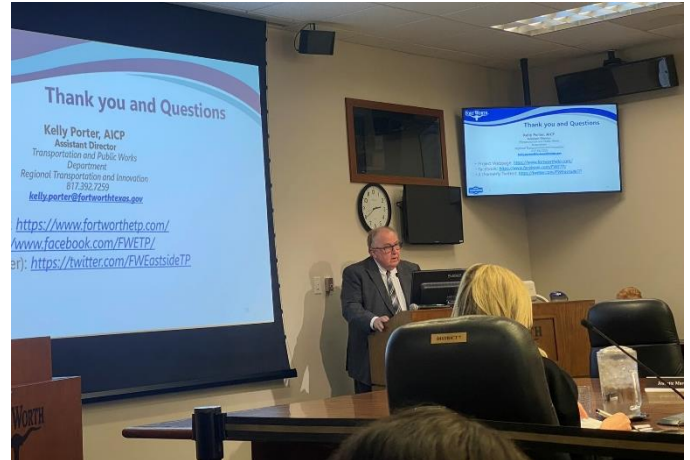
April 24, 2024

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Alternatives Analysis

After two rounds of extensive community outreach and analysis, the Fort Worth City Council adopted the locally preferred alternative (LPA) cross-sections for East Lancaster Avenue, Bridge Street, and Brentwood Stair Road, and the LPA transit mode for Route 89 on January 23, 2024.

The alternatives analysis process used to determine the LPA is summarized in this memo. It is important to note that the final roadway configuration is subject to NCTCOG and TxDOT design and environmental review. Long-term capacity improvements and needs will be determined by TxDOT.



Purpose and Need

East Lancaster Avenue has been identified as a corridor for high-capacity frequent and reliable transit due to current ridership along existing routes, the connectivity the corridor would provide, existing pedestrian activity and potential for implementation with minimal ROW acquisitions (corner clips at intersections). The project is needed to provide solutions for increased safety for passenger vehicles and vulnerable road users as well as create a walkable environment for short trips by providing adequate space to increase pedestrian comfort.

Relocation of franchise utilities to multi-use duct banks may be required to achieve the space needed to accommodate safe, high comfort pedestrian elements, and fiber optic cables. This project is needed to make transit more desirable through improved efficiencies in transit service and by creating opportunities for a more economically desirable corridor for equitable transit-oriented development that alleviates barriers to social and economic opportunities.

Alternatives Analysis Process

The alternatives analysis in this plan was driven by the objective to select a Locally Preferred Alternative (LPA) for the following three components:

1. Route 89
2. East Lancaster Avenue
3. Bridge Street and Brentwood Stair Road

For each component, the alternatives analysis followed a five-step process to identify an LPA.

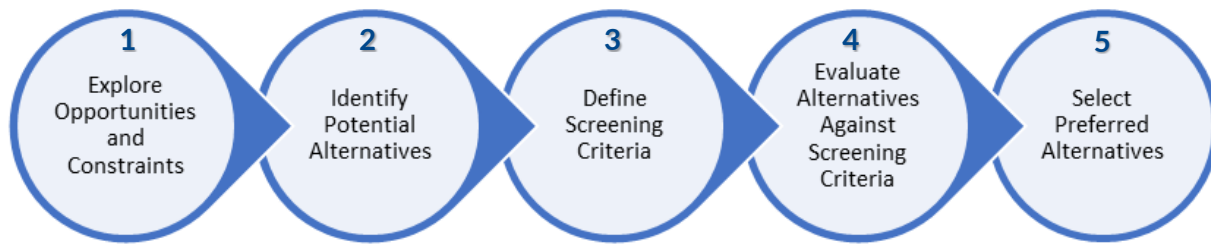






























Figure 1: Alternatives Analysis Process

Route 89

Mode

A screening analysis was completed to select the optimum mode to provide high-capacity transit within the framework of the purpose and need to the plan. The mode screening analysis compared the attributes of local bus service, high-capacity bus, Light Rail (LTR), and Streetcar against the mode alternatives screening criteria to determine the optimum transit mode for the corridor.

Screening Criteria	Existing Service	High-Capacity Bus	Light Rail	Streetcar
Service Justified by Future Ridership Demand & Density				
Can Efficiently Accommodate Future Ridership Demand				
Cost Effectiveness				
Flexibility to Implement Incrementally ("Future Proofing")				
Increases Safety Along the Corridor				
Accommodates Regional and Local Trips				
Performance Against Criteria	 High  Medium  Low  Not Viable			

Locally Preferred Alternative: Tech-Based Rapid Transit

Based on the mode screening, high-capacity bus provides the greatest benefits for Route 89. In keeping with the goals of the plan to provide a reliable, safe, and comfortable transit service, it is envisioned that technology can be leveraged to implement high-capacity bus in the form of a **Tech-Based Rapid Transit** solution along Route 89 which utilizes managed lanes and transit signal priority to provide high frequency and higher speed transit service. The service will also include upgraded shelters and other premium amenities.

Route

A transit route analysis was also conducted to determine the optimum route for a transit connection between the existing Route 89 and the future express line along IH-30 and Eastchase Retail Area. The two routes examined include the following:

- Handley Route (**Green**)
- Dottie Lynn Route (**Red**)



Figure 2: Route 89 Alternatives

Locally Preferred Alternative: Dottie Lynn Route (**Red**)

Based the route analysis, the Dottie Lynn Route is favored due to the ability to provide a more direct connection to IH-30, available ROW for improvements, and higher development potential along the route.

East Lancaster Avenue

Upon selection of an LPA for the mode and route for transit service along Route 89, a screening analysis was conducted to determine the optimal cross section and roadway operations for East Lancaster Avenue from Main Street to Dottie Lynn Parkway.

Corridor Segments

Like most corridors, East Lancaster Avenue varies in width, cross-section, and ROW. It also has different land uses developed at different intensities throughout the corridor. The existing land use and roadway contexts create logical ways to organize the analysis and recommendations. When considering East Lancaster Avenue, four unique context segments were identified for individual analysis:

- Main Street to Riverside Drive
- Riverside Drive to IH-820
- Historic Handley
- Chilton Street to Dottie Lynn Parkway



Figure 3: East Lancaster Avenue – Corridor Segments

Alternative Development and Screening

The alternatives development process generated 158 options across the four corridor segments. These options were screened for feasibility and reasonableness using ROW and constructability constraints and performance metrics that align with the goals of the plan. The expectation for a safe, multi-modal corridor required viable options to accommodate all forms of travel including walking, biking, driving, freight, and transit. The following elements were among those evaluated in the alternatives analysis:

- Number of Lanes (4 or 6)
- Transit Lane Dedication (Full, Partial, or Shared)
- Type of Bicycle Facility (On or Off-Street)
- On-Street Parking
- Pedestrian Space
- Medians

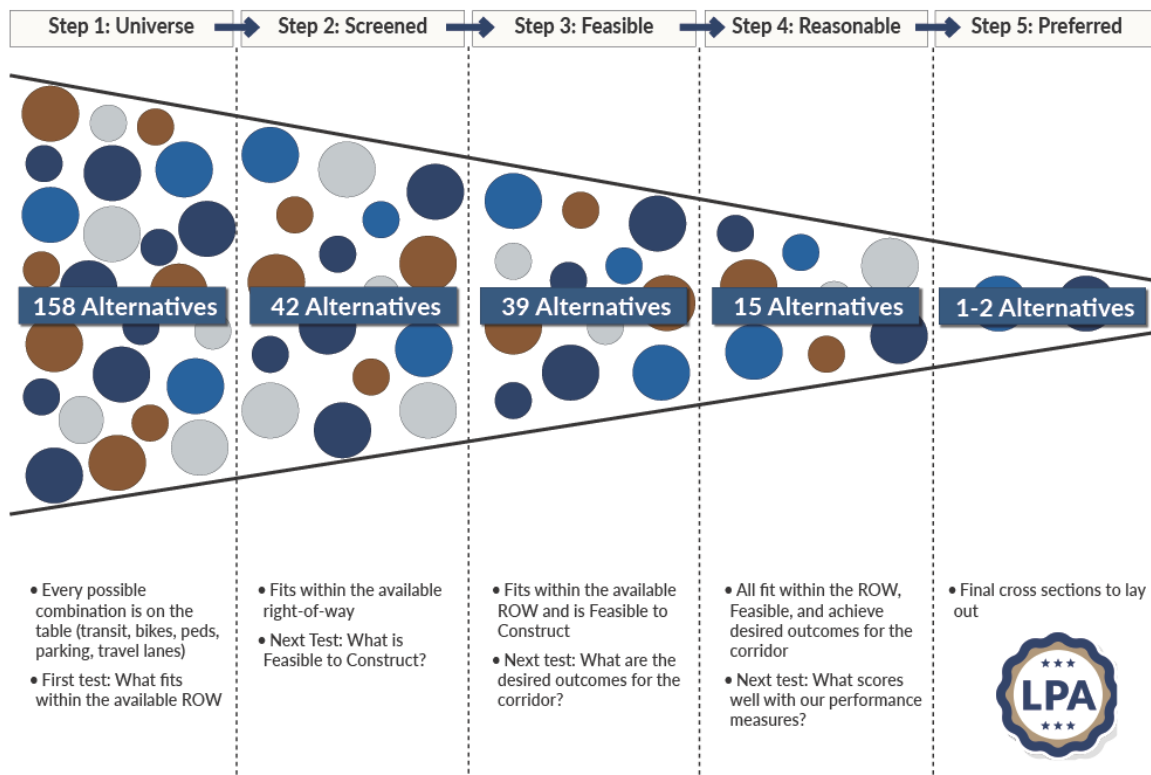














Figure 4: Alternatives Screening

The alternatives screening criteria resulted in 15 reasonable cross section alternatives for East Lancaster Avenue. These alternatives were analyzed as groups based on common characteristics such as number of lanes and lane treatment for transit. The reasonable alternatives were then analyzed as groups and scored based on performance in safety, traffic operations, and transit service.

Alternative Grouping	Safety	Traffic Operations	Transit Service
6 Vehicle Lanes with Shared Transit			
4-6 Lane Managed Technology Corridor (Right-Running Transit)			
4 Vehicle Lanes + 2 Transit Lanes (Center-Running Dedicated)			
Performance Against Criteria	 High	 Medium	 Low

Locally Preferred Alternative: Four to Six-Lane Managed Technology Corridor (Right-Running Transit)

Based on the results of the screening process and input from project partners and stakeholders, the locally preferred alternative for East Lancaster Avenue from Riverside Drive to IH-820 is a six-lane managed technology corridor. Due to ROW constraints, the locally preferred alternative for the segments between Main Street and Riverside Drive and from IH-820 to Dottie Lynn Parkway is four-lanes with shared transit that incorporates all the other elements of Tech-Based Rapid Transit. The locally preferred alternatives were selected due to their ability to reduce crashes, maintain acceptable traffic operations, and accommodate a flexible tech-based rapid transit service. **Please note** that the final roadway configuration is subject to NCTCOG and TxDOT design and environmental review. Long-term capacity improvements and needs will be determined by TxDOT.

Context Segment	Locally Preferred Cross-Section Alternative
<p>Main St to Riverside Dr</p> <ul style="list-style-type: none"> • 4 Lanes • Shared-Use Path • Shared Transit 	<p>This diagram illustrates a cross-section for a 4-lane road. From left to right, it features a 12' Shared Use Path with pedestrians and a dog, a 9' Planting Strip with a tree, a 1' buffer, four 11' Drive Lanes (two for each direction), and a 1' buffer. On the far right is a 9' Transit Shelter and a 12' Shared Use Path with pedestrians.</p>
<p>Riverside Dr to IH- 820</p> <ul style="list-style-type: none"> • 6 Lanes • Shared-Use Path • Managed Technology Corridor 	<p>This diagram illustrates a cross-section for a 6-lane road. From left to right, it features a 12' Shared Use Path with pedestrians and a dog, a 9' Planting Strip with a tree, a 1' buffer, a 12' Tech Lane* with a car, two 11' Drive Lanes, a 1' buffer, an 18' Median (Safe Refuge) with a tree, a 1' buffer, two 11' Drive Lanes, a 12' Tech Lane* with a car, a 1' buffer, a 9' Transit Shelter, and a 12' Shared Use Path with pedestrians.</p>

Please note that the final roadway configuration is subject to TxDOT design and environmental review.

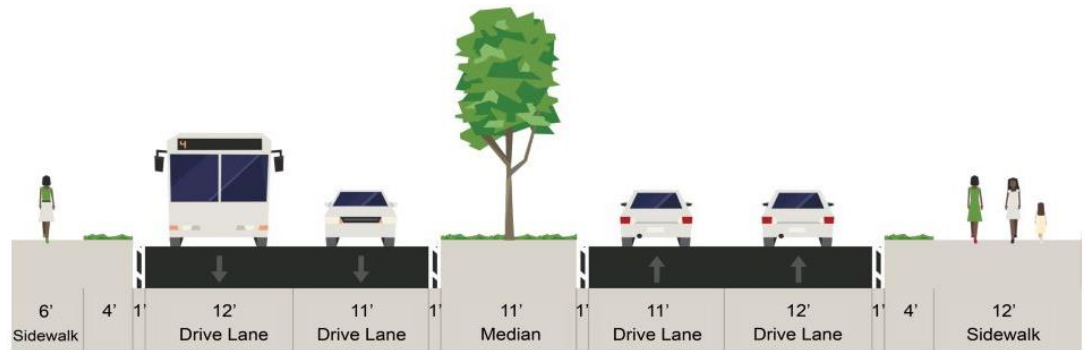
Context Segment

Locally Preferred Cross-Section Alternative

Historic Handley

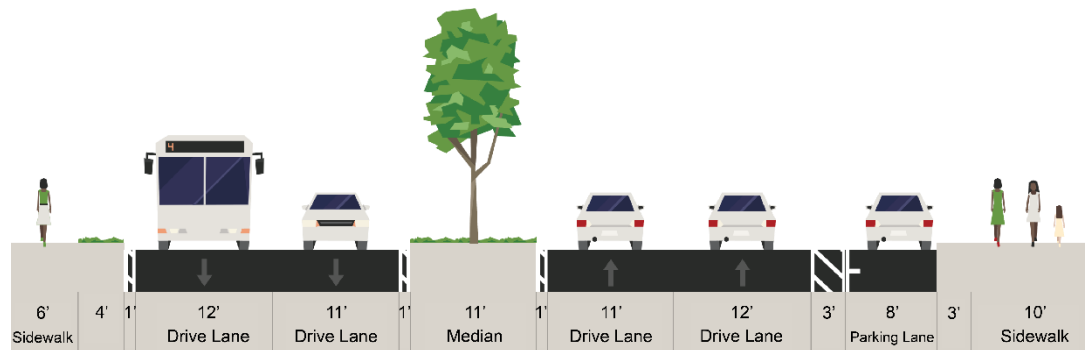
- 4 Lanes
- Shared-Use Path (North Side)
- On-Street Parking (North Side – East of Forest Ave)
- Managed Technology Corridor
- Safety and operational improvements requested by stakeholders
- Cross-Section fits within existing right-of-way.

Malcom St to Forest Ave



Segments east of IH 820 are unfunded and require additional study and design by NCTCOG and TxDOT. The cross-sections are illustrative and meant to demonstrate ideas heard from the public.

Forest Ave to Handley Dr



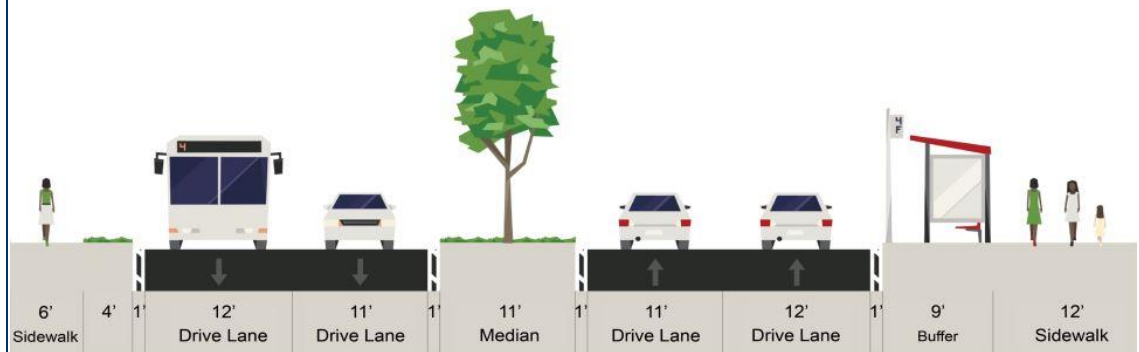
Segments east of IH 820 are unfunded and require additional study and design by NCTCOG and TxDOT. The cross-sections are illustrative and meant to demonstrate ideas heard from the public.

Context Segment

Locally Preferred Cross-Section Alternative

**Handley Dr to
Dottie Lynn
Pkwy**

- 4 Lanes
- Shared-Use Path (North Side)
- Managed Technology Corridor



Segments east of IH 820 are unfunded and require additional study and design by NCTCOG and TxDOT. The cross-sections are illustrative and meant to demonstrate ideas heard from the public.

Please note that the final roadway configuration is subject to TxDOT design and environmental review.

Bridge Street & Brentwood Stair Road

The final component of the Alternatives Analysis was the exploration of options for improvements to Brentwood Stair Road and Bridge Street as it pertains to the future TxDOT widening of IH-30. In order to evaluate the optimal and preferred street configurations, an alternatives analysis was conducted for these road segments.



Figure 5: Bridge St & Brentwood Stair Rd Study Area

The alternatives analysis evaluated the following four scenarios:

- No-Build: No changes to existing lane configuration, intersection control, or ROW.
- Four Lane/Two-Way with Direct Ramps: Existing two-way frontage road configuration with direct ramp improvements.
- One-Way Frontage Roads: Conversion of existing two-way roadways with one-way frontage roads and ramp improvements.
- Two Lane/Two-Way: One-way frontage roads that run parallel to the modified two lane/two-way collectors of Brentwood Stair Road and Bridge Street, with ramp improvements.

Each alternative was given a score from 1-4 based on assumptions, pros and cons, and goal achievement for the study area. 1=Scenario achieves the goal the least and 4=Scenario achieves the goal the most.

Alternative	Goal Achievement Score
No-Build	1.6
Four Lane/Two-Way with Direct Ramps	3.2
One-Way Frontage Road	1.8
Two Lane/Two-Way with Direct Ramps	3.4

Locally Preferred Alternative: Two Lane/Two-Way Road

Based on the results of the Alternatives Analysis, the preferred alternative for Bridge Street & Brentwood Stair Road is the Two Lane/Two-Way Road scenario. This scenario will maintain existing connections to local businesses, improve mobility and safety, and promote commercial growth in the area.

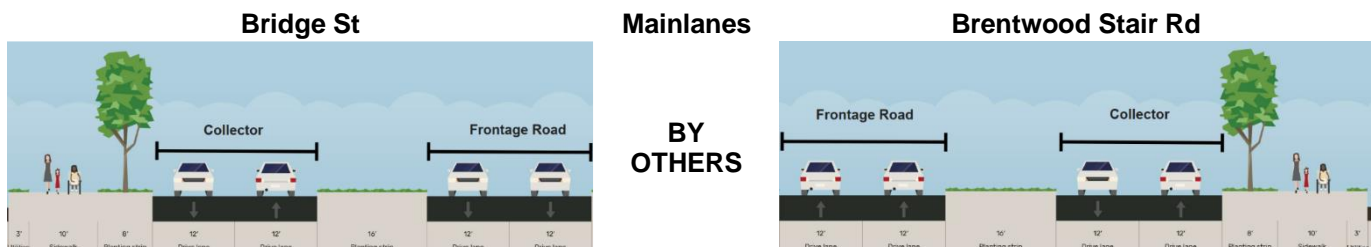


Figure 6: Preferred Alternative - Two Lane/Two-Way