

#### **PROGRAM GOALS**

The purpose of this corridor development program was to develop a set of recommendations to improve safety, mobility, and quality of life along Burnet Road (from Koenig Lane to MoPac) and North Lamar Boulevard (from US 183 to IH 35). Both Burnet Road and North Lamar Boulevard have unique drainage issues. Their street storm drain systems consist of various combinations of open ditches and some curb and gutter. This results in issues for pedestrian access in most areas, as well as some flooding. A significant portion of residents along Burnet and North Lamar corridors are dependent on transportation modes such walking, biking, and transit. Recommendations were therefore developed with a focus on all road users, including pedestrians, cyclists, and transit users, not just motorists.

### PROJECT PURPOSE AND PROCESS

The North Lamar/Burnet Corridor Program was initiated in late June 2011. Data was collected in order to assess current corridor conditions and needs, as well as the outcomes and recommendations identified in some previous studies. The first set of public meetings were held in September 2011 to introduce the project to the public and obtain input on corridor issues and concerns. Stakeholder and Business Open House meetings were then held in October 2011 to obtain input from smaller groups of corridor users and public agencies. Existing conditions analysis and public input were incorporated into the development and evaluation of improvements designed to mitigate identified mobility issues. The second public meeting was held in January 2012 to obtain feedback on proposed recommendations.

For developing the North Lamar/Burnet Corridor Program it is crucial to understand the community and stakeholders within the corridors, review the existing conditions, and propose recommendations for implementation. An evaluation of existing conditions identifies current issues such as safety, mobility, and drainage system, and recommendations that take into account potential future conditions and feasibility, are given to address these issues. This program serves as a framework to guide the next steps in the whole project delivery process. Benefits of improvements and the estimated costs for implementation are given. For the implementation of some improvements in some phases, there will need to be additional efforts for coordination with land owners, local businesses, and local residents along the corridors to realize the recommended improvements.

## **EXISTING CONDITIONS**

The Burnet Road corridor is the 5-mile north-south section from Koenig Lane to Loop 1 (MoPac). The section between Koenig Lane and US 183 is currently maintained by the City of Austin. The section north of US 183 up to MoPac is owned and maintained by TxDOT. Right-of-way (ROW) along this corridor varies from 110 feet to 135 feet. There are a variety of land uses along the corridor including residential, institutional, commercial, and industrial. Major developments include the Northcross Mall on the south end of the corridor, and the Domain and IBM office complex on the north end.



The North Lamar Boulevard corridor is the 6-mile north-south section from US 183 to IH 35. Within the study area, this roadway is owned and maintained in its entirety by the Texas Department of Transportation (TxDOT). Major parallel roadways include IH 35 on the east and Metric Boulevard on the west. ROW along the North Lamar Boulevard corridor generally varies from 95 feet to 120 feet. There are a variety of land uses along the corridor including residential, institutional, commercial, and industrial. Major developments include H-E-B and the Chinatown Shopping Center on the south end of the corridor, and Wal-Mart and Lowe's on the north end.

## Traffic

Existing daily traffic volume on Burnet Road ranges from a low of 23,000 vehicles per day (vpd) south of MoPac to a high of 37,000 vpd south of US 183. Daily traffic volume on North Lamar Boulevard ranges from a low of 6,000 vpd south of Howard Lane to a high of 36,000 vpd north of US 183.

### Safety

From 2009 to August 2011, there were a total of 404 and 771 crashes along Burnet Road and North Lamar Boulevard, respectively. More than half of the total crashes on both corridors over the 32-month period resulted in some type of injury, with one fatal crash on Burnet Road and two fatalities on North Lamar Boulevard. The 31 crashes involving pedestrians along North Lamar Boulevard are more than double than the 14 pedestrian-related crashes along Burnet Road. The majority of crashes along both corridors were right angle and rear-end crashes due to driver inattentiveness, intoxication, speeding, red light running, and failure to yield right-of-way at stop signs and driveways.

### Transit

Burnet Road is served by a number of Capital Metropolitan Transportation Authority (CapMetro) bus routes. However, within the project area, no single route traverses the entire corridor. Transit service along North Lamar Boulevard is more heavily utilized than along Burnet Road. This higher level of transit activity can be attributed to a higher transit-dependent population along the corridor, as well as the fact that, unlike Burnet Road, North Lamar Boulevard has a route that serves the entire corridor.

### Pedestrian

A significant number of households along both corridors do not own an automobile, leaving residents dependent on transit, walking, and bicycling for transportation. While the average percentage of households without a car citywide in Austin is 5%, in the project area as many as 13% of households do not have a car. Both Burnet and North Lamar corridors have inadequate facilities for bicyclists and pedestrians. The majority of the existing sidewalk is in good condition, with ADA-compliant curb ramps and accessible signals at intersections. However, some locations have broken sidewalk that cannot be safely navigated by disabled people. Most sections of sidewalk were built before ADA standards were in place, and are too narrow or have excessive cross slope or steep curb ramps. Approximately half of both corridors need sidewalks.



### Bicycle

Burnet Road and North Lamar Boulevard are high-speed/high-volume roadways with no bicycle infrastructure. Only the most confident cyclists who have no other alternative route use these corridors for bicycling.

#### Drainage

Both Burnet Road and North Lamar Boulevard have unique drainage issues. Their street storm drain systems consist of various combinations of open ditches and some curb and gutter. This results in issues for pedestrian access in most areas, as well as some flooding.

### PROJECT GOALS AND DESIGN CONSIDERATIONS

A common theme that emerged throughout the public meetings and stockholder discussions along the corridors was a desire to adequately facilitate the movement of additional automobile traffic, but not design automobile related improvements to such a degree that it would degrade the pedestrian and bicycle level-of-service to such levels as to make those modes unattractive to the average user.

The Burnet and North Lamar corridors have mobility and safety issues associated with the various transportation modes on the roadways. Existing issues and concerns were identified through the public involvement process as well as a technical evaluation of existing transportation conditions. Primary concerns expressed by members of the public included lack of suitable pedestrian and bicycle infrastructure. Each of the corridors analyzed presented different design considerations, traffic patterns, and existing infrastructure for automobile users, cyclists, and pedestrians.

In determining the appropriate infrastructure revisions for each segment of the corridor, the consultant team utilized various planning level tools that examined the efficiency of the vehicular realm improvements while balancing the needs of the transit patrons, bicyclists, and pedestrians throughout the corridor. Recommendations are classified as short-term or long-term depending on their implementation time frame. Recommendations identified for the Burnet and North Lamar Corridors include corridor-wide improvements as well as improvements specific to the character areas identified along each corridor. Corridor-wide improvements include traffic signal retiming, bus shelters, street lighting, raised medians, bicycle lanes, storm drainage, and shade trees among others.

### FUTURE CORRIDOR CHARACTERISTICS AND RECOMMENDATIONS

The transportation improvements to Burnet and North Lamar corridors are meant to enable safe access for all users, including pedestrians, bicyclists, motorists and transit riders. Recommendations are classified as short-term or long-term depending on their implementation time frame. Short-term recommendations are typically designed for implementation within a 5-year time frame. Funding may not be immediately available for implementation of all short-term improvements and additional prioritization within this category may be necessary. Long-term improvements (10 or more years) require more implementation time with more extensive engineering, acquisition of ROW, negotiation with property owners, funding, and investment from other entities. Cost is a factor in the classification of improvements and as such, roadway reconstruction projects are typically classified as long-term. However, areas of particular need along both the Burnet and North Lamar corridors were identified



for the short term implementation of roadway reconstruction projects. These locations are Koenig Lane to Anderson Lane on Burnet Road, and Rundberg Lane to Braker Lane on North Lamar Boulevard.

### **Corridorwide Improvements**

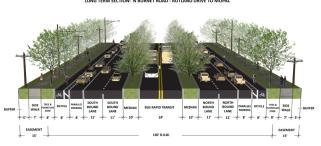
#### Short-Term Recommendations

- Bus Shelters (Locations that meet current CapMetro criteria)
  - Install additional bus shelters at 16 bus stops on North Lamar
  - Install additional bus shelters at 8 bus stops on Burnet
- **Bicycle Lanes** 
  - Implement lane diets where possible to provide bicycle lanes within the existing pavement
- Signal Timing
  - Update signal timings
- **Street Lighting** 
  - Upgrade street lighting to current safety • standards where deficiencies exist
- **Pedestrian Zone** 
  - Clear encroachments from the pedestrian zone

### Long-Term Recommendations

#### **Roadway Reconstruction**

- Install raised median
  - Install wide sidewalks
  - Install tree & furniture zone
  - Install 8-foot cycle tracks
  - Improve storm drainage
- **Bicycles at Intersections** 
  - Add two-stage turn queue boxes or bicycle signal phases
- Signal Timing
  - Update signal timings
- Streetscape Furnishings
  - Install streetscape furnishings •
- Shade Trees
  - Plant trees to provide shade along the corridors
- **Bus Pullouts** 
  - Install bus pullouts for BRT stops •
- **Driveway Consolidation** 
  - Explore opportunities to reduce driveway density







### **Burnet Road**

#### Short-Term Recommendations

- Crossings with Pedestrian Hybrid Beacons
  - Install pedestrian hybrid beacons at crosswalks in 7 locations
- Bus Stop Relocation
  - Move 4 stops closer to signalized intersections and new crossings with PHB
- Install Right-Turn Lanes
  - Burnet Road at Koenig Lane (EB and WB)
  - Burnet Road at Braker Lane (EB)
- Install Left-Turn Lanes
  - Burnet Road at Koenig Lane (SB) increase storage bay to 250'
  - Burnet Road at Braker Lane (EB and WB dual left-turn)
  - Conduct Intersection Reconfiguration and Pocket Park
    - Burnet Road at Burnet Lane
      - Burnet Road at Cullen Avenue

The estimated total cost for short-term improvements for Burnet Road is \$24.7M.

### Long-Term Recommendations

- Install Left-Turn Lanes
  - Burnet Road at Braker Lane (NB and SB dual left-turn)
  - Burnet Road at Kramer Lane (NB and SB dual left-turn)
  - Conduct Intersection Reconfiguration and Pocket Park
    - Burnet Road at McNeil Drive

The estimated total cost for long-term improvements for Burnet Road is \$52.4M.

### North Lamar Boulevard

### Short-Term Recommendations

- Crossings with Pedestrian Hybrid Beacons
  - Install pedestrian hybrid beacons at the crosswalks in 9 locations
- Bus Stop Relocation
  - Move one stop closer to signalized intersection
- Install Right-Turn lanes
  - North Lamar Boulevard at Braker Lane (NB, SB and WB)
- Install Dual Left-Turn lanes
  - North Lamar Boulevard at Rundberg Lane (EB and WB)
  - North Lamar Boulevard at Braker Lane (EB and WB)
  - North Lamar Boulevard at Parmer Lane (All Approaches)

The estimated total cost for short-term improvements for North Lamar Boulevard is \$22.6M.



## Long-Term Recommendations

- Install Right-Turn Lanes
  - North Lamar Boulevard at Braker Lane (NB and SB)
- Implement Walnut Creek Bridge Reconstruction

The estimated total cost for long-term improvements for North Lamar Boulevard is \$53.2M.

### COST

The total cost for short-term improvements for both corridors is \$47.3M, and the total cost for long-term improvements for both corridors is \$105.6M.

Project Cost Summary			
Corridor	Short Term	Long Term	Ultimate Cost
Burnet Road	24,639,000	52,355,000	76,994,000
North Lamar Boulevard	22,575,000	53,192,000	75,767,000
Total Cost	47,214,000	105,547,000	152,761,000

## FUNDING

The improvements recommended by this program could be funded by several funding sources, including Bonds, State Infrastructure Bank, Traffic Impact Fees, the Livable Communities Initiative, and others.

## CORRIDOR JURISDICTION

TxDOT currently has jurisdiction of Burnet Road from US 183 to MoPac and the entirety of the North Lamar corridor. The TxDOT Commission adopted rules that includes context sensitive design concepts to be included as part of project development. Significant revisions were made to the Project Development Process Manual (6-09) in order to reflect the department's goal of incorporating local and regional planning and policy goals into the project development process as early as possible. These revisions also aim to create ongoing local partnership feedback mechanisms to achieve sustainable urban contexts around roadways and transportation networks for appropriate corridors or projects.

This corridor development program implemented a multi-disciplinary approach to the project development process that is consistent with the TxDOT Project Development Process Manual. However, the roads that TxDOT owns are subject to the design criteria provided in the TxDOT Roadway Design Manual, 2010. The vision for the Burnet and North Lamar corridors expressed by members of the public and through the neighborhood and master plans that have been developed is generally for these corridors to be complete streets that add to the unique character of the area. TxDOT's highway design standards are focused primarily on maximizing vehicular throughput on the corridors and are not necessarily consistent with the community vision for these two corridors. For example, the design criteria for recommended improvements such as lane widths and sidewalks are consistent with City of Austin standards but are not what TxDOT would permit for highways. The City of Austin should attempt to work with TxDOT to obtain a variance for the context sensitive



designs proposed in this plan. If a design variance is not granted by TxDOT, reconstruction of these two corridors to implement the vision will likely require the City to request that TxDOT transfer jurisdiction of the roads to the City of Austin.

# NEXT STEPS

- Coordinate with TxDOT to obtain a variance for the context sensitive designs or request that TxDOT transfer the jurisdiction of the roads.
- Using 2012 bond funding implement the short-term improvements, especially those of pilot projects and/or those related to safety, to make an exemplary case for implementing future projects.
- Look for additional funding sources.
- Implement the long-term improvements when further funding becomes available.

