

APPENDIX F - TRAFFIC ANALYSIS



INTRODUCTION

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). Recommendations were developed with a focus on all road users, including pedestrians, cyclists, and transit users, not just motorists. This technical memorandum focuses on the analysis of signalized intersections along the corridor.

The improvements recommended 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. They are generally, though not always, confined to the existing right-of-way and include projects which can be constructed relatively quickly. In some instances however right-of-way corner clips may be required to implement short-term recommendations. Long-term improvements (10 or more years) require more implementation time with more extensive engineering, acquisition of right-of-way, negotiation with property owners, funding, and investment from other entities.

ANALYSIS METHODOLOGY

Synchro, a traffic analysis software tool, was used to develop a traffic operations model for Burnet Road and North Lamar Boulevard to assist in the evaluation of the traffic impacts of identified transportation improvements. Model inputs included vehicle speed profiles, vehicle types and characteristics, traffic composition, lane geometries, traffic volumes, and signal control timing plans.

Intersections were analyzed in the traffic model for the AM and PM peak hours for the following scenarios.

- 2011 Existing Conditions (2011 traffic volumes on the existing roadway network)
- 2011 Short-Term Improvements (2011 traffic volumes assuming short-term improvements)
- 2030 Future Conditions (2030 projected traffic volumes assuming the existing roadway network)
- 2030 Long-Term Improvements (2030 projected traffic volumes assuming short-term and long-term improvements)

For the 2030 analysis year, each of the existing peak hour traffic volume was increased by 20% to account for the target traffic growth within the study area as discussed in the report.

EXISTING CONDITIONS

Daily traffic volume and peak hour intersection turning movement counts were conducted along Burnet Road and North Lamar Boulevard in October 2011 as part of this project. AM peak period (7:00 AM to 9:00 AM) and PM peak period (4:00 PM to 6:00 PM) traffic counts are summarized in the **Figure F-1 to F-4**.

Daily traffic volumes on Burnet Road rang 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 volumes 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. Vehicle classification traffic counts were also conducted along the both corridors. Heavy trucks comprise 11 percent of daily traffic volumes along Burnet Road, and 10 percent along North Lamar Boulevard.



Figure F-1: Burnet Road Existing Turning Movement Counts AM Peak Hour

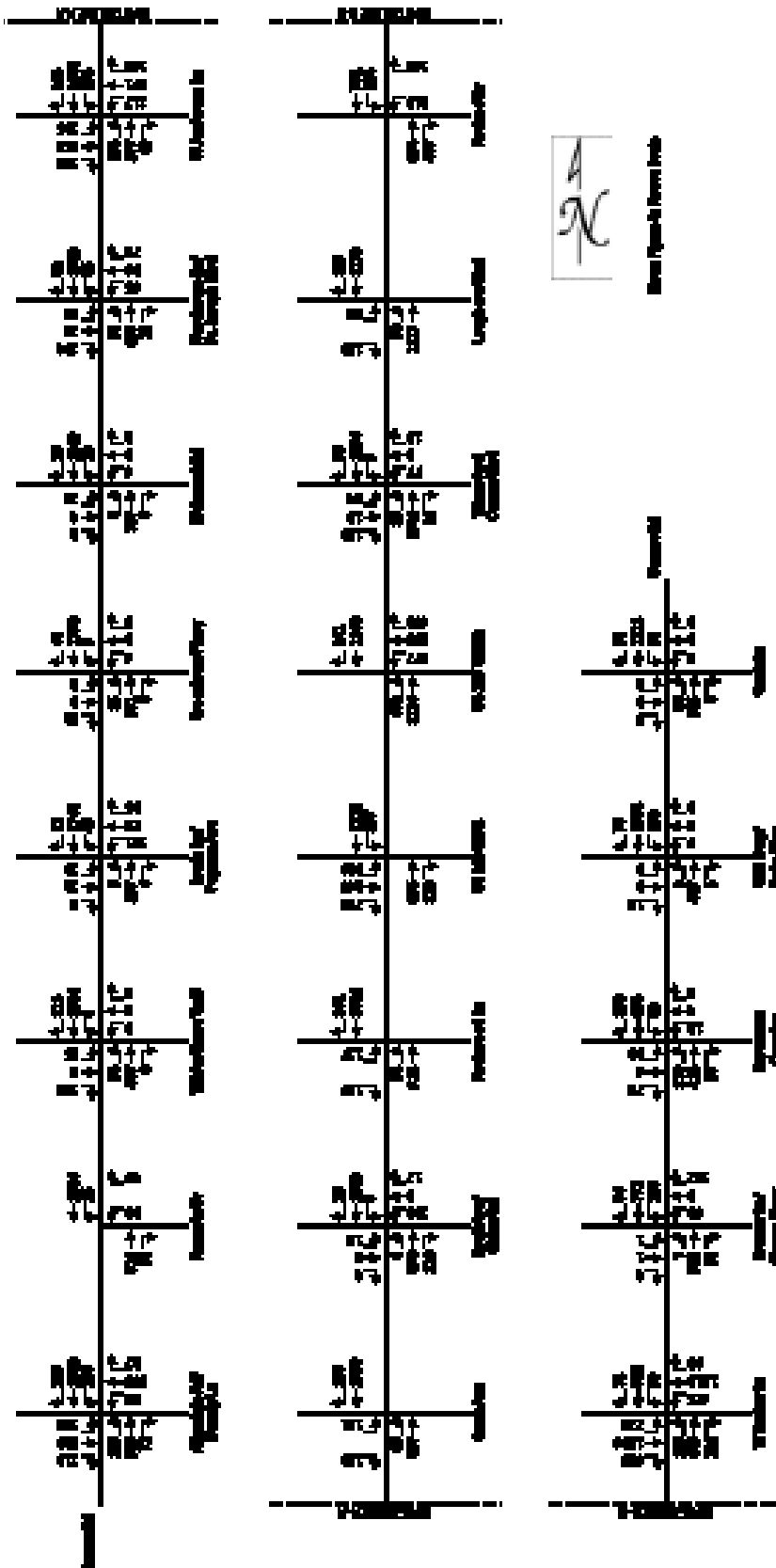


Figure F-2: Burnet Road Existing Turning Movement Counts PM Peak Hour

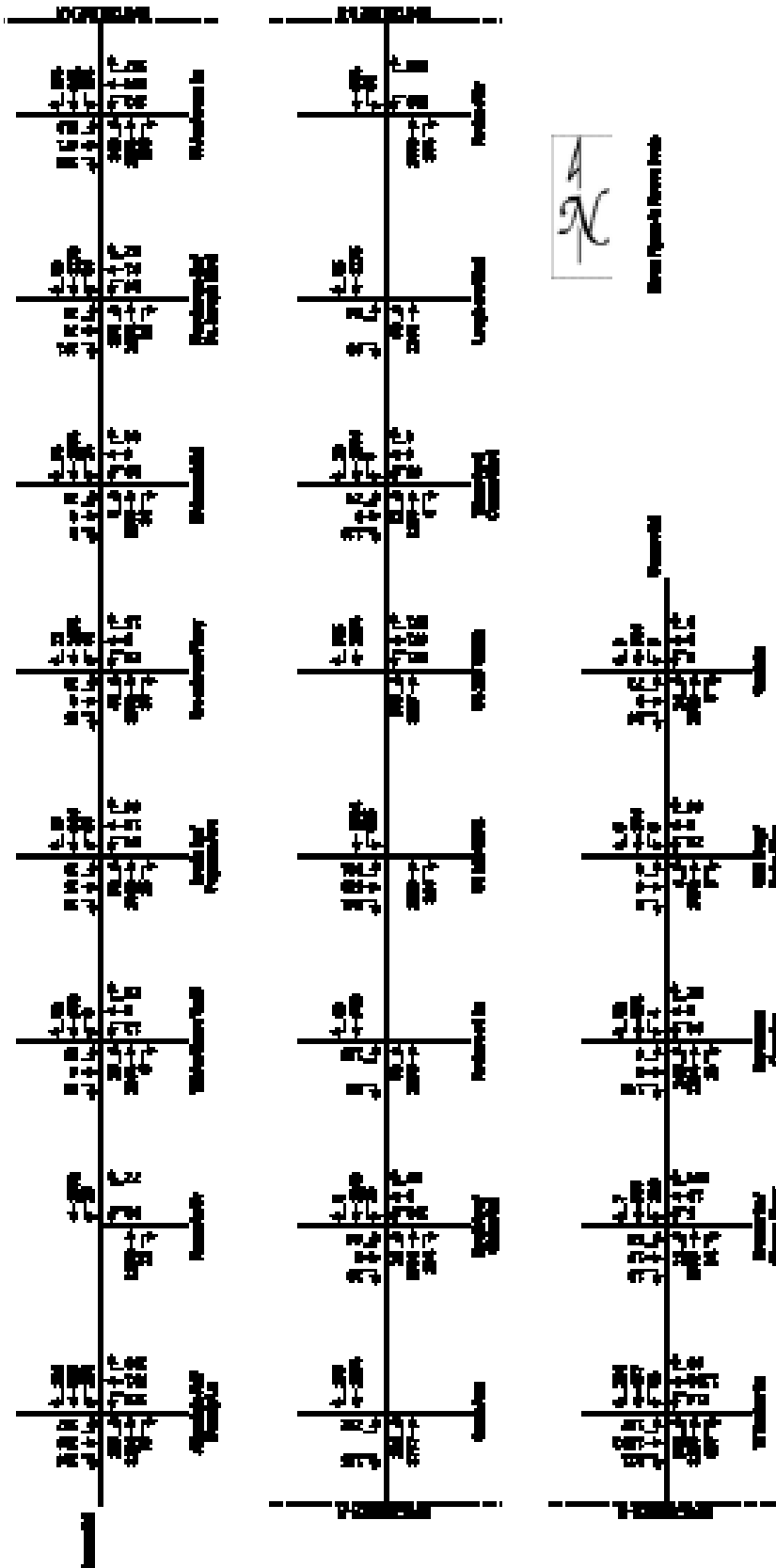


Figure F-3: North Lamar Boulevard Existing Turning Movement Counts AM Peak Hour



Figure F-4: North Lamar Boulevard Existing Turning Movement Counts PM Peak Hour



Existing LOS for Burnet Road and North Lamar are summarized in **Tables F-1** and **F-2** for all the signalized intersections along Burnet Road and North Lamar Boulevard. Along Burnet Road, the intersections with the worst LOS are Koenig Lane, US 183, Braker Lane, and Kramer Lane, which operate at LOS E or F during one or both peak hours. Along North Lamar Boulevard, the intersections at Rundberg Lane, Braker Lane, Parmer Lane and IH 35 operate at LOS E or F during one or both peak hours.

Table F-1: Burnet Road Existing Intersection Level-Of-Service

| INTERSECTION | AM Peak Hour LOS | | PM Peak Hour LOS | |
|---|------------------|-----|------------------|-----|
| | Delay (sec/veh) | LOS | Delay (sec/veh) | LOS |
| Burnet Road at Allandale Rd/Koenig Ln | 63.0 | E | 59.6 | E |
| Burnet Road at Romeria Dr | 2.5 | A | 4.5 | A |
| Burnet Road at White Horse Trail | 9.7 | A | 8.1 | A |
| Burnet Road at Justin Ln/Pegram Ave | 7.7 | A | 15.4 | B |
| Burnet Road at Greenlawn Pkwy | 3.2 | A | 3.8 | C |
| Burnet Road at Richcreek Rd | 4.5 | A | 3.9 | A |
| Burnet Road at Northcross Dr/St. Joseph Boulevard | 13.1 | B | 11.1 | B |
| Burnet Road at W. Anderson Ln | 37.5 | D | 54.2 | D |
| Burnet Road at Steck Ave | 15.0 | B | 25.3 | C |
| Burnet Road at Buell Ave/Ohlen Rd | 11.0 | B | 18.0 | B |
| Burnet Road at Rockwood Ln | 5.0 | A | 15.2 | B |
| Burnet Road at US 183 EB Frtg Rd | 155.3 | F | 143.9 | F |
| Burnet Road at US 183 WB Frtg Rd | 39.9 | D | 106.1 | F |
| Burnet Road at Waterford Centre Boulevard | 8.1 | A | 8.7 | A |
| Burnet Road at Longhorn Boulevard | 9.1 | A | 12.3 | B |
| Burnet Road at Rutland Dr | 19.0 | B | 34.1 | C |
| Burnet Road at Braker Ln | 87.0 | F | 67.7 | E |
| Burnet Road at Kramer Ln/Alterra Pkwy | 20.3 | C | 24.8 | F |
| Burnet Road at Esperanza Crossing | 6.4 | A | 5.4 | A |
| Burnet Road at IBM Dwy/Palm Way | 2.0 | A | 3.0 | A |
| Burnet Road at Gault Ln | 4.8 | A | 25.4 | C |



Table F-2: North Lamar Boulevard Existing Intersection Level-Of-Service

| INTERSECTION | AM Peak Hour LOS | | PM Peak Hour LOS | |
|---|------------------|-----|------------------|-----|
| | Delay (sec/veh) | LOS | Delay (sec/veh) | LOS |
| North Lamar Boulevard (SB) at US 183 EB Frtg Rd | 35.8 | D | 11.3 | B |
| North Lamar Boulevard (NB) at US 183 EB Frtg Rd | 16.0 | B | 21.1 | C |
| North Lamar Boulevard (NB) at US 183 WB Frtg Rd | 17.0 | B | 13.4 | B |
| North Lamar Boulevard (SB) at US 183 WB Frtg Rd | 11.7 | B | 17.6 | B |
| North Lamar Boulevard at Thurmond St | 6.9 | A | 8.0 | A |
| North Lamar Boulevard at Payton Gin Rd | 19.7 | C | 21.4 | B |
| North Lamar Boulevard at Rundberg Ln | 41.1 | D | 183.0 | F |
| North Lamar Boulevard at Rutland Dr | 20.7 | C | 32.9 | C |
| North Lamar Boulevard at W. Longspur Boulevard | 8.0 | B | 18.8 | B |
| North Lamar Boulevard at Masterson Pass | 31.2 | C | 22.0 | B |
| North Lamar Boulevard at Meadows Dr | 7.1 | A | 8.3 | A |
| North Lamar Boulevard at Kramer Ln | 21.0 | B | 35.7 | C |
| North Lamar Boulevard at Braker Ln | 63.1 | E | 62.1 | E |
| North Lamar Boulevard at Bend Dr | 3.2 | A | 11.3 | A |
| North Lamar Boulevard at Yager Ln | 12.7 | B | 13.3 | C |
| North Lamar Boulevard at Parmer Ln | 65.9 | E | 112.7 | F |
| Howard Ln at IH 35 SB Frtg Rd | 90.5 | F | 71.8 | E |
| Howard Ln at IH 35 NB Frtg Rd | 60.5 | E | 62.1 | E |



SHORT-TERM IMPROVEMENTS

Several short-term intersection improvements were recommended as a result of the intersection analysis and field observations to facilitate better vehicular flow.

VEHICULAR TIMING PARAMETERS

This plan recommends that in the short term, traffic signals along both Burnet Road and North Lamar Boulevard be retimed to provide better vehicular traffic coordination and flow. For example, public input was received about the section of North Lamar Boulevard from Rundberg Lane to Rutland Drive where drivers experience numerous stops due to poor signal coordination. Retiming these signals would improve traffic flow. Traffic signals that are in close proximity to each other benefit from being interconnected so they work together as a coordinated system. Traffic signals such as those along North Lamar Boulevard at Rundberg Lane and Rutland Drive could be interconnected to better facilitate optimized follow of traffic. Based on the analysis conducted for these corridors using Synchro, optimized signal timing without any other improvements could reduce intersection delay by up to 27 percent on Burnet Road during the PM peak hour and up to 11 percent during the AM peak hour. On North Lamar, improvements are as much as 49 percent during the PM peak hour and 48 percent during the AM peak hour. **Tables F-3** and **F-4** summarize average vehicular delay and LOS assuming traffic signal optimization as a stand-alone project.

Traffic signal timing parameters are dependent on factors such as traffic volume and speed. As traffic volumes change along Burnet Road and North Lamar Boulevard due to traffic growth and redistribution, it will be necessary to retime traffic signals regularly to maintain optimum traffic flow and operation.



Table F-3: Burnet Road Existing Intersection Delay and LOS with Signal Optimization

| INTERSECTION | AM Peak Hour LOS | | PM Peak Hour LOS | |
|---|------------------|-----|------------------|-----|
| | Delay (sec/veh) | LOS | Delay (sec/veh) | LOS |
| Burnet Road at Allandale Rd/Koenig Ln | 60.1 | E | 59.9 | E |
| Burnet Road at Romeria Dr | 2.5 | A | 4.5 | A |
| Burnet Road at White Horse Trail | 9.5 | A | 8.9 | A |
| Burnet Road at Justin Ln/Pegram Ave | 7.7 | A | 15.1 | B |
| Burnet Road at Greenlawn Pkwy | 3.2 | A | 4.2 | A |
| Burnet Road at Richcreek Rd | 4.5 | A | 3.6 | A |
| Burnet Road at Northcross Dr/St. Joseph Boulevard | 13.1 | B | 9.8 | A |
| Burnet Road at W. Anderson Ln | 34.3 | C | 53.1 | D |
| Burnet Road at Steck Ave | 14.5 | B | 24.8 | C |
| Burnet Road at Buell Ave/Ohlen Rd | 10.6 | B | 16.8 | B |
| Burnet Road at Rockwood Ln | 4.9 | A | 15.5 | B |
| Burnet Road at US 183 EB Frtg Rd | 138.2 | F | 125.5 | F |
| Burnet Road at US 183 WB Frtg Rd | 36.4 | D | 93 | F |
| Burnet Road at Waterford Centre Boulevard | 7.6 | A | 6.5 | A |
| Burnet Road at Longhorn Boulevard | 9.4 | A | 9.4 | A |
| Burnet Road at Rutland Dr | 19 | B | 30.1 | C |
| Burnet Road at Braker Ln | 78.7 | E | 65.8 | E |
| Burnet Road at Kramer Ln/Alterra Pkwy | 19.3 | B | 18 | B |
| Burnet Road at Esperanza Crossing | 2 | A | 5.6 | A |
| Burnet Road at IBM Dwy/Palm Way | 2 | A | 3.2 | A |
| Burnet Road at Gault Ln | 4.8 | A | 26 | C |



Table F-4: North Lamar Boulevard Existing Intersection Delay and LOS with Signal Optimization

| INTERSECTION | AM Peak Hour LOS | | PM Peak Hour LOS | |
|---|------------------|-----|------------------|-----|
| | Delay (sec/veh) | LOS | Delay (sec/veh) | LOS |
| North Lamar Boulevard (SB) at US 183 EB Frtg Rd | 35.8 | D | 11.3 | B |
| North Lamar Boulevard (NB) at US 183 EB Frtg Rd | 16 | B | 21.1 | C |
| North Lamar Boulevard (NB) at US 183 WB Frtg Rd | 17 | B | 13.4 | B |
| North Lamar Boulevard (SB) at US 183 WB Frtg Rd | 11.7 | B | 17.6 | B |
| North Lamar Boulevard at Thurmond St | 6.9 | A | 6.9 | A |
| North Lamar Boulevard at Payton Gin Rd | 19.8 | B | 19.1 | B |
| North Lamar Boulevard at Rundberg Ln | 34.9 | C | 92.9 | F |
| North Lamar Boulevard at Rutland Dr | 20.7 | C | 32.5 | C |
| North Lamar Boulevard at W. Longspur Boulevard | 8.1 | A | 16.8 | B |
| North Lamar Boulevard at Masterson Pass | 16.3 | B | 13.4 | B |
| North Lamar Boulevard at Meadows Dr | 5.6 | A | 7 | A |
| North Lamar Boulevard at Kramer Ln | 17.2 | B | 29.1 | C |
| North Lamar Boulevard at Braker Ln | 58.2 | E | 56.8 | E |
| North Lamar Boulevard at Bend Dr | 3.2 | A | 10.8 | B |
| North Lamar Boulevard at Yager Ln | 12.8 | B | 11.7 | B |
| North Lamar Boulevard at Parmer Ln | 65.7 | E | 96.4 | F |
| Howard Ln at IH 35 SB Frtg Rd | 53 | D | 45.3 | D |
| Howard Ln at IH 35 NB Frtg Rd | 33.4 | C | 49.7 | D |



INTERSECTION IMPROVEMENTS

The following short-term intersection improvements are recommended to improve traffic operations for vehicles.

Burnet Road and Koenig Lane

- Provide right-turn bays for the eastbound and westbound approaches – Currently, the high right-turning traffic on the eastbound and westbound approaches share a lane with through traffic. The delay experienced by both traffic movements can be mitigated with right-turn bays.

Burnet Road and Braker Lane

- Provide dual left-turn lanes for the eastbound and westbound approaches – Currently the eastbound and westbound approaches have single left-turn lanes which have exceeded their capacity, carrying up to 425 vehicles per hour (vph) during peak hours. The relatively high vehicular delay and queues observed in the field and in the traffic analysis results can be mitigated by additional left-turn capacity.
- Provide a right-turn bay for the eastbound approach – Currently, the high right-turning traffic on the eastbound approach shares a lane with through traffic. The delay experienced by both traffic movements can be mitigated with right-turn bays.

North Lamar Boulevard and US 183 Frontage Road

- Change lane configuration for the eastbound US 183 frontage road approach at North Lamar Boulevard – It is recommended that the eastbound approach at this intersection be re-stripped to provide one through lane, one through/right-turn lane, and one exclusive right-turn lane. The existing lane configuration is one right-turn lane and two through lanes. The additional right-turn capacity better serves the heavy right-turning traffic at the intersection.

North Lamar Boulevard and Rundberg Lane

- Provide dual left-turn lanes for the eastbound and westbound approaches – Currently the eastbound and westbound approaches have single left-turn lanes which have exceeded their capacity, carrying up to 145 vehicles per hour (vph) during peak hours. The relatively high vehicular delay and queues observed in the field and in the traffic analysis results can be mitigated by additional left-turn capacity.

North Lamar Boulevard and Braker Lane

- Provide right-turn bays for the northbound, southbound and westbound approaches – Currently, the high right-turning traffic on these approaches share lanes with the through traffic. The delay experienced by both traffic movements can be mitigated with right-turn bays.
- Provide dual left-turn lanes for the eastbound and westbound approaches – Currently the eastbound and westbound approaches have single left-turn lanes which have exceeded their capacity, carrying up to 273 vehicles per hour (vph) during peak hours. The relatively high vehicular delay and queues observed in the field and in the traffic analysis results can be mitigated by additional left-turn capacity.



North Lamar Boulevard and Parmer Lane

- Provide dual left-turn lanes for all approaches – Currently all the approaches have single left-turn lanes which have exceeded their capacity, carrying up to 700 vehicles per hour (vph) during peak hours. The relatively high vehicular delay and queues observed in the field and in the traffic analysis results can be mitigated by additional left-turn capacity.

TRAFFIC ANALYSIS RESULTS

Based on the analysis conducted for these corridors using Synchro, optimized signal timing, along with the other recommended improvements, could reduce intersection delay by up to 30 percent on Burnet road during the PM peak hour and up to 49 percent during the AM peak hour. Similarly on North Lamar Boulevard, intersection delays could be reduced by as much as 51 percent during the PM peak hour and 60 percent during the AM peak hour. **Tables F-5** and **F-6** summarize average delay and LOS assuming the implementation of all recommended short-term transportation improvements.



Table F-5: Burnet Road Existing Intersection Delay and LOS with Short-Term Improvements

| INTERSECTION | AM Peak Hour LOS | | PM Peak Hour LOS | |
|---|------------------|-----|------------------|-----|
| | Delay (sec/veh) | LOS | Delay (sec/veh) | LOS |
| Burnet Road at Allandale Rd/Koenig Ln | 50.0 | D | 50.1 | D |
| Burnet Road at Romeria Dr | 2.5 | A | 4.7 | A |
| Burnet Road at White Horse Trail | 9.6 | A | 9.3 | A |
| Burnet Road at Justin Ln/Pegram Ave | 8.0 | A | 16.9 | B |
| Burnet Road at Greenlawn Pkwy | 3.1 | A | 4.2 | A |
| Burnet Road at Richcreek Rd | 4.5 | A | 3.6 | A |
| Burnet Road at Northcross Dr/St. Joseph Boulevard | 13.3 | B | 10.3 | B |
| Burnet Road at W. Anderson Ln | 37.4 | D | 53.1 | D |
| Burnet Road at Steck Ave | 16.6 | B | 27.8 | C |
| Burnet Road at Buell Ave/Ohlen Rd | 12.6 | B | 15.9 | B |
| Burnet Road at Rockwood Ln | 5.1 | A | 14.8 | B |
| Burnet Road at US 183 EB Frtg Rd | 155.6 | F | 143.7 | F |
| Burnet Road at US 183 WB Frtg Rd | 41.7 | D | 105.4 | F |
| Burnet Road at Waterford Centre Boulevard | 7.5 | A | 6.2 | A |
| Burnet Road at Longhorn Boulevard | 8.5 | A | 8.6 | A |
| Burnet Road at Rutland Dr | 19.2 | B | 29.9 | C |
| Burnet Road at Braker Ln | 44.0 | D | 54.6 | D |
| Burnet Road at Kramer Ln/Alterra Pkwy | 20.4 | C | 17.6 | B |
| Burnet Road at Esperanza Crossing | 7.0 | A | 5.4 | A |
| Burnet Road at IBM Dwy/Palm Way | 2.0 | A | 3.0 | A |
| Burnet Road at Gault Ln | 4.8 | A | 26.0 | C |



Table F-6: North Lamar Boulevard Existing Intersection Delay and LOS with Short-Term Improvements

| INTERSECTION | AM Peak Hour LOS | | PM Peak Hour LOS | |
|---|------------------|-----|------------------|-----|
| | Delay (sec/veh) | LOS | Delay (sec/veh) | LOS |
| North Lamar Boulevard (SB) at US 183 EB Frtg Rd | 14.3 | B | 11.1 | B |
| North Lamar Boulevard (NB) at US 183 EB Frtg Rd | 16.0 | B | 21.1 | C |
| North Lamar Boulevard (NB) at US 183 WB Frtg Rd | 17.0 | B | 13.4 | B |
| North Lamar Boulevard (SB) at US 183 WB Frtg Rd | 11.7 | B | 17.6 | B |
| North Lamar Boulevard at Thurmond St | 6.9 | A | 6.9 | A |
| North Lamar Boulevard at Payton Gin Rd | 19.8 | B | 19.1 | B |
| North Lamar Boulevard at Rundberg Ln | 38.1 | D | 90.3 | F |
| North Lamar Boulevard at Rutland Dr | 21.7 | C | 33.7 | C |
| North Lamar Boulevard at W. Longspur Boulevard | 7.8 | A | 16.8 | B |
| North Lamar Boulevard at Masterson Pass | 32.3 | C | 12.4 | B |
| North Lamar Boulevard at Meadows Dr | 5.4 | A | 7.0 | A |
| North Lamar Boulevard at Kramer Ln | 24.6 | C | 29.7 | C |
| North Lamar Boulevard at Braker Ln | 36.9 | D | 38.9 | D |
| North Lamar Boulevard at Bend Dr | 4.0 | A | 10.8 | B |
| North Lamar Boulevard at Yager Ln | 14.0 | B | 11.8 | B |
| North Lamar Boulevard at Parmer Ln | 48.8 | D | 84.8 | F |
| Howard Ln at IH 35 SB Frtg Rd | 53.0 | D | 45.3 | D |
| Howard Ln at IH 35 NB Frtg Rd | 33.4 | C | 49.7 | D |



LONG-TERM RECOMMENDATIONS

The following long-term intersection improvements are recommended to improve traffic operations for vehicles.

Burnet Road and Braker Lane

- Provide dual left-turn lanes for the northbound and southbound approaches – With the 20% increase in traffic, the existing single left-turn lanes on the northbound and southbound approaches cannot provide acceptable traffic operations in future year 2030. The future deterioration in traffic operations can be mitigated with additional left-turn capacity.

Burnet Road and Kramer Lane

- Provide dual left-turn lanes for the northbound and southbound approaches – With the 20% increase in traffic volumes by 2030, left-turn capacity will be exceeded and additional capacity will be required for mitigation.

North Lamar Boulevard and Howard Lane

There is currently no connection from northbound North Lamar Boulevard to Howard Lane, near IH 35. A northbound connection would improve mobility for road users. This connection would also allow CapMetro buses to turn around at Howard Lane, which is currently not possible. A potential full North Lamar Boulevard/Howard Lane intersection is complicated by the proximity of IH 35 frontage lanes and intersections. In order to provide a connection that improves mobility and accommodates the various approaches at this rather unique location, a pair of roundabouts is recommended as an innovative solution. Two 2-lane roundabouts with inscribed diameters of 230 feet for the roundabout on west and 150 feet for the roundabout on east would accommodate all traffic movements at these intersections. This roundabout configuration would also provide good future level of service. Implementation of this recommendation would require acquisition of some additional right-of-way, the details of which would be determined in the design phase of recommended improvements.

TRAFFIC ANALYSIS RESULTS

Future 2030 traffic volumes based on the assumed 20 percent growth discussed in the report are summarized in **Figures F-5 to F-8**. **Tables F-7 and F-8** summarize average delay and LOS assuming future 2030 traffic volumes and implementation of all recommended long-term transportation improvements.



Figure F-5: Burnet Road Year 2030 Traffic Volume AM Peak Hour

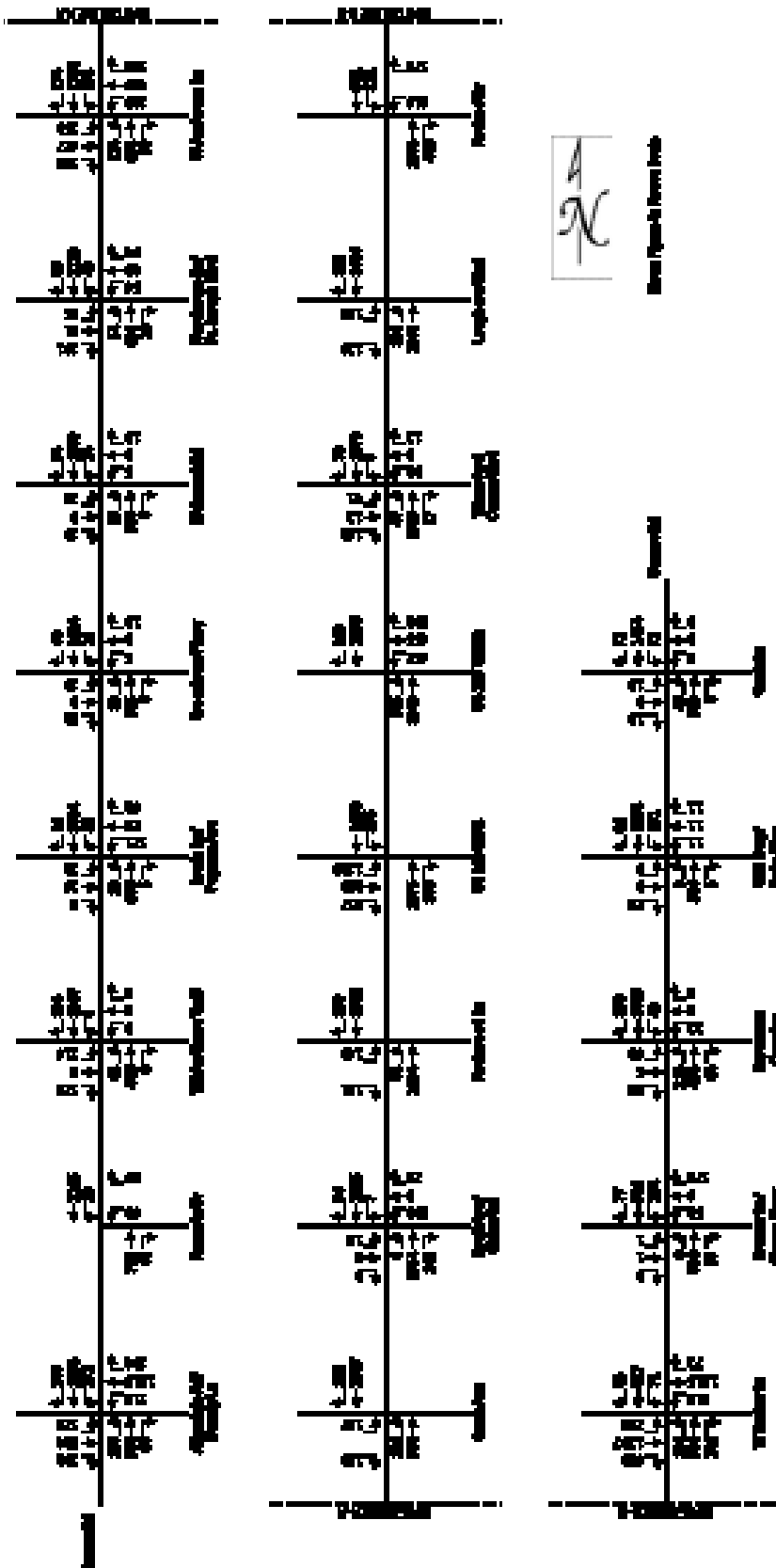


Figure F-6: Burnet Road Year 2030 Traffic Volume PM Peak Hour

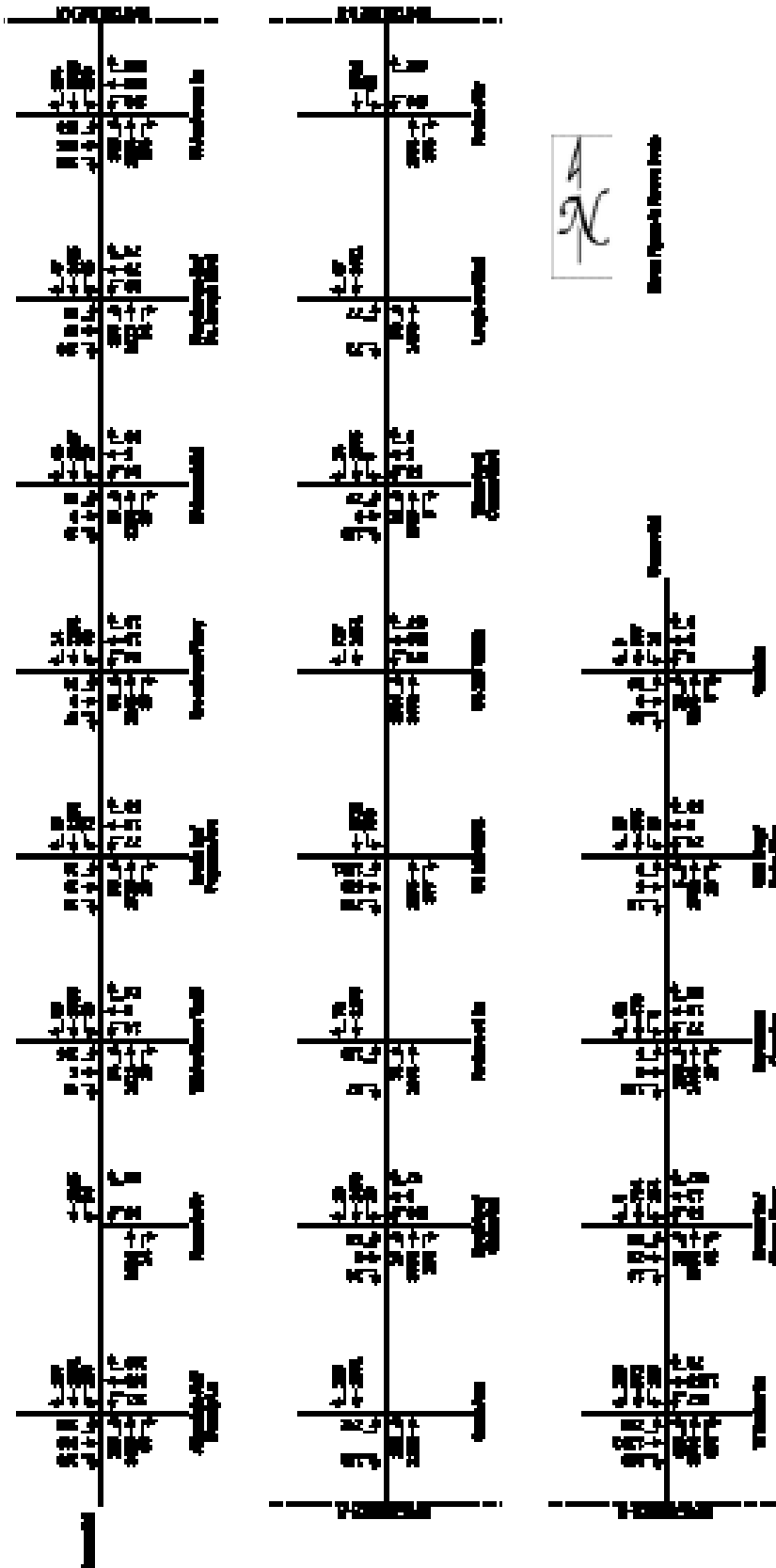


Figure F-7: North Lamar Boulevard 2030 Traffic Volume AM Peak Hour

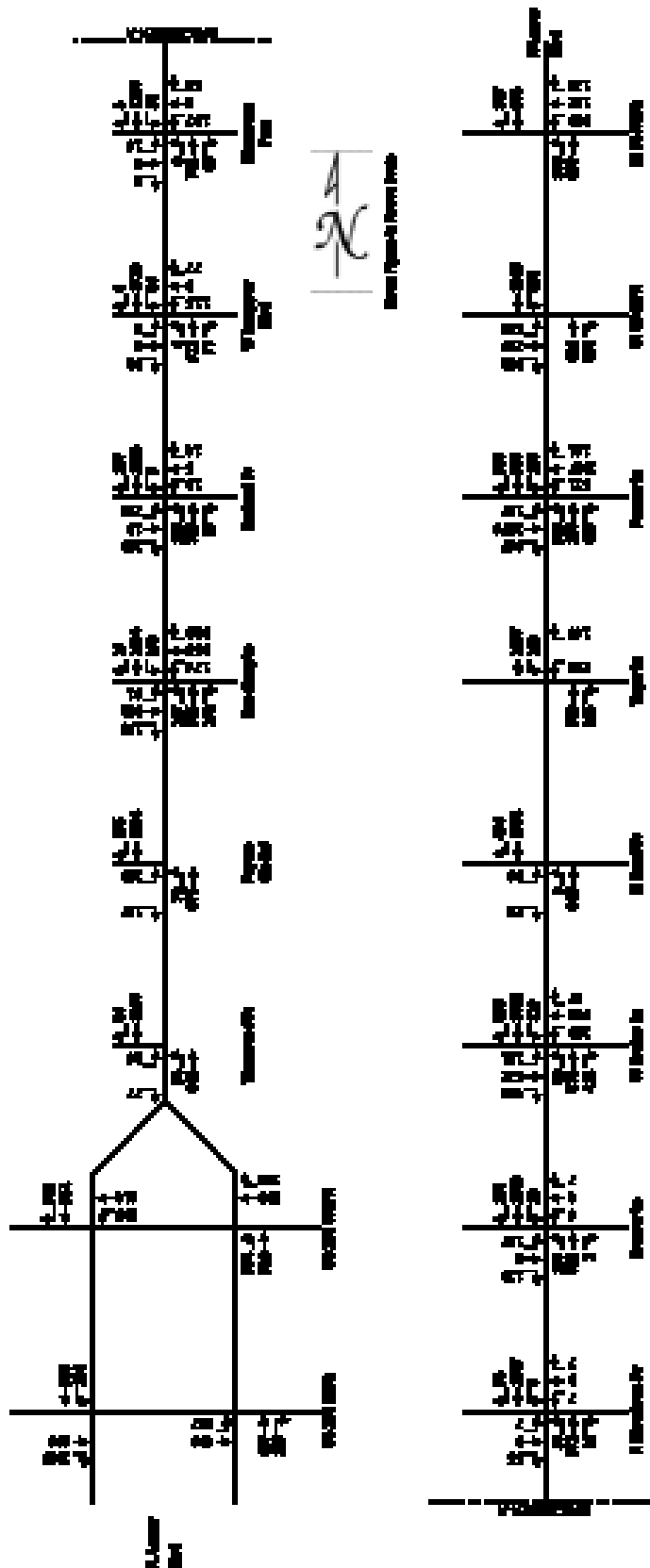


Figure F-8: North Lamar Boulevard Year 2030 Traffic Volume PM Peak Hour



Table F-7: Burnet Road Future Year 2031 Intersection Delay and LOS with Long-Term Improvements

| INTERSECTION | AM Peak Hour LOS | | PM Peak Hour LOS | |
|---|------------------|-----|------------------|-----|
| | Delay (sec/veh) | LOS | Delay (sec/veh) | LOS |
| Burnet Road at Allandale Rd/Koenig Ln | 94.4 | F | 82.8 | F |
| Burnet Road at Romeria Dr | 11.6 | B | 6.3 | A |
| Burnet Road at White Horse Trail | 23.4 | C | 9.5 | A |
| Burnet Road at Justin Ln/Pegram Ave | 19.6 | B | 19.8 | B |
| Burnet Road at Greenlawn Pkwy | 5.9 | A | 11.0 | B |
| Burnet Road at Richcreek Rd | 8.9 | A | 13.7 | B |
| Burnet Road at Northcross Dr/St. Joseph Boulevard | 19.1 | B | 31.6 | C |
| Burnet Road at W. Anderson Ln | 62.9 | E | 96.5 | F |
| Burnet Road at Steck Ave | 46.8 | D | 49.8 | D |
| Burnet Road at Buell Ave/Ohlen Rd | 51.4 | D | 34.5 | C |
| Burnet Road at Rockwood Ln | 9.2 | A | 16.9 | B |
| Burnet Road at US 183 EB Frtg Rd | 246.4 | F | 240.5 | F |
| Burnet Road at US 183 WB Frtg Rd | 72.1 | E | 184.3 | F |
| Burnet Road at Waterford Centre Boulevard | 12.5 | B | 6.6 | A |
| Burnet Road at Longhorn Boulevard | 10.5 | B | 8.4 | A |
| Burnet Road at Rutland Dr | 22.2 | C | 37.6 | D |
| Burnet Road at Braker Ln | 62.0 | E | 66.6 | E |
| Burnet Road at Kramer Ln/Alterra Pkwy | 32.9 | C | 24.9 | C |
| Burnet Road at Esperanza Crossing | 6.1 | A | 5.8 | A |
| Burnet Road at IBM Dwy/Palm Way | 2.2 | A | 3.4 | A |
| Burnet Road at Gault Ln | 6.4 | A | 105.3 | F |



Table F-8: North Lamar Boulevard Future Year 2031 Intersection Delay and LOS with Long-Term Improvements

| INTERSECTION | AM Peak Hour LOS | | PM Peak Hour LOS | |
|---|------------------|-----|------------------|-----|
| | Delay (sec/veh) | LOS | Delay (sec/veh) | LOS |
| North Lamar Boulevard (SB) at US 183 EB Frtg Rd | 18.6 | B | 14.0 | B |
| North Lamar Boulevard (NB) at US 183 EB Frtg Rd | 16.0 | B | 22.4 | C |
| North Lamar Boulevard (NB) at US 183 WB Frtg Rd | 18.0 | B | 15.7 | B |
| North Lamar Boulevard (SB) at US 183 WB Frtg Rd | 13.9 | B | 20.3 | C |
| North Lamar Boulevard at Thurmond St | 4.4 | A | 12.7 | B |
| North Lamar Boulevard at Payton Gin Rd | 25.4 | C | 25.5 | C |
| North Lamar Boulevard at Rundberg Ln | 53.1 | D | 139.8 | F |
| North Lamar Boulevard at Rutland Dr | 56.0 | E | 45.9 | D |
| North Lamar Boulevard at W. Longspur Boulevard | 11.3 | B | 27.0 | C |
| North Lamar Boulevard at Masterson Pass | 31.8 | C | 18.7 | B |
| North Lamar Boulevard at Meadows Dr | 2.5 | A | 9.3 | A |
| North Lamar Boulevard at Kramer Ln | 27.2 | C | 31.5 | C |
| North Lamar Boulevard at Braker Ln | 47.7 | D | 49.4 | D |
| North Lamar Boulevard at Bend Dr | 6.8 | A | 8.8 | A |
| North Lamar Boulevard at Yager Ln | 12.6 | B | 30.2 | C |
| North Lamar Boulevard at Parmer Ln | 76.3 | E | 205.8 | F |
| Howard Ln at IH 35 SB Frtg Rd* | 71.1 | F | 84.0 | F |
| Howard Ln at IH 35 NB Frtg Rd* | 177.5 | F | 39.1 | C |

*Roundabout (Vehicular delay thresholds differ from those for signalized intersections)

