

2025

CONGESTION MANAGEMENT PROCESS



ADOPTED

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CONGESTION MANAGEMENT PROCESS

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Overview

Traffic congestion continues to challenge the national and regional transportation system, as traffic delays are costly in both time and fuel lost in a given time frame, e.g. annually. Efforts to address congestion in urban areas are one of the primary demands on transportation planning and implementation.

Congestion management is the application of strategies to improve transportation system performance and reliability by reducing the adverse impacts of congestion on the movement of people and goods. A **Congestion Management Process (CMP)** is a systematic and regionally accepted approach for managing congestion that provides accurate, up-to-date information on transportation system performance and assesses alternative strategies for congestion management that meet state and local needs. The CMP is intended to move these congestion management strategies into the funding and implementation stages.

Benefits

A successful CMP offers many benefits to the regional transportation system. Congestion is inevitably tied into community objectives regarding transit use, livability, and land use. When identifying goals and actions to address regional congestion, other planning goals should be considered as well in order to create one unified and efficient approach, thereby helping to ensure that regional transportation investments support the desired vision of the community. The CMP is not intended to be a standalone process, but instead an integral part of the larger metropolitan transportation planning process. The CMP offers the following benefits:

- A structured process for analyzing congestion issues
- An objectives-driven, performance-based approach
- Increased collaboration and coordination
- More effective resource allocation
- Linkage to project development and environmental review

Requirements

The CMP, as defined in federal regulation, is intended to serve as a systematic process that provides for safe and effective integrated management and operation of the multimodal transportation system. The process includes:

- Development of congestion management objectives
- Establishment of measures of multimodal transportation system performance
- Collection of data and system performance monitoring to define the extent and duration of congestion and determine the causes of congestion
- Identification of congestion management strategies
- Implementation activities
- Evaluation framework of the effectiveness of strategies



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A CMP is required in metropolitan areas with population exceeding 200,000, known as Transportation Management Areas (TMAs). The Laredo and Webb County Area Metropolitan Planning Organization (LWCAMPO) is defined as a TMA. Federal requirements also state that in all TMAs, the CMP shall be developed and implemented as an integrated part of the metropolitan transportation planning process.

While not applicable to the LWCAMPO, for TMAs designated as ozone or carbon monoxide non-attainment areas, the CMP takes on a greater significance. Federal law prohibits projects that result in a significant increase in carrying capacity for single-occupant vehicles (SOVs) from being programmed in these areas unless the project is addressed in the regional CMP. The CMP must provide an analysis of reasonable travel demand reduction and operational management strategies; if the analysis demonstrates that these strategies cannot fully satisfy the need for additional capacity and additional SOV capacity is warranted, then the CMP must identify strategies to manage the SOV facility safely and effectively, along with other travel demand reduction and operational management strategies appropriate for the corridor.

Although a CMP is required in every TMA, federal regulations are not prescriptive regarding the methods and approaches that must be used to implement a CMP. This flexibility has been provided in recognition that different metropolitan areas may face different conditions regarding traffic congestion and may have different visions of how to deal with congestion. As a result, TMAs across the country have demonstrated compliance with the regulations in different ways.

For many MPOs, the CMP has become an important tool for addressing persistent congestion problems and for prioritizing investments. The flexibility in the development of the CMP allows MPOs to design their own approaches and processes to fit their individual needs. The CMP is an on-going process, continuously progressing and adjusting over time as goals and objectives change, new congestion issues arise, new information sources become available, and new strategies are identified and evaluated.

The transportation planning process in a TMA shall address congestion management through a process that provides for safe and effective integrated management and operation of the multimodal transportation system, based on a cooperatively developed and implemented metropolitan-wide strategy, of new and existing transportation facilities... through the use of travel demand reduction and operational management strategies. The development of a congestion management process should result in multimodal system performance measures and strategies that can be reflected in the metropolitan transportation plan and TIP."

23 CFR 450.322
Metropolitan Transportation
Planning and Programming



Integration with the Metropolitan Planning Process

Transportation planning within a metropolitan region represents a **comprehensive, continuing, and cooperative (3C) process** to support the needs, vision, and goals of the region. The individual aspects of MPO planning, including the development of the Metropolitan Transportation Plan (MTP), the Transportation Improvement Program (TIP), the Unified Planning Work Program (UPWP), and the CMP, represent the tools that policy makers use to implement their adopted vision and goals. Integration of these elements is a key feature of a **comprehensive** planning process. Regardless of how an individual MPO structures its CMP, the process is both supportive of and supported by the other activities.

A **continuing** planning process requires that each of the required products (MTP, TIP, UPWP, CMP) undergoes review and update on a periodic basis. Federal regulations establish minimum update schedules for both the MTP and the TIP; however, there is flexibility within the requirements that allow state DOTs and MPOs to coordinate their plans and programs. The MTP cycle is different for areas that are in attainment (every five years) and those that are non-attainment with respect to air quality (every four years). The required update deadline of the MTP is specific to the individual MPO and is based on the date designated as a TMA. The TIP is required to be updated at least every four years. Texas has adopted an annual update schedule for the State Transportation Improvement Program (STIP), and the MPOs coordinate their TIP updates accordingly. As a result, the cycle for the MTP update may be unrelated to the TIP cycle.

Designation of an MPO as a Transportation Management Area (TMA) invokes the requirement for the CMP. Although the CMP does not have an update cycle established by federal regulations, both the four-year certification review cycle and the five-year MTP update cycle (for MPOs in attainment of air quality standards) for each TMA provide a baseline for a re-evaluation/update cycle in the absence of an identified requirement. The CMP must, at a minimum, be updated often enough to provide relevant, recent information as an input to each MTP update. To establish a routine CMP review, the LWCAMPO has committed to linking CMP updates to the MTP development cycle. This linkage to the MTP allows the update to the CMP to inform the development and selection of projects in the MTP that are inclusive of needed congestion management strategies.

The **cooperative** aspect of the 3C process also can be viewed within the CMP with respect to data collection and analysis. Both the CMP and the MTP are data-driven planning efforts that rely on an understanding of the existing conditions of the transportation system to make projections of future conditions. However, because the CMP identifies areas with significant congestion, it provides an opportunity to consider detailed data on the operation of individual segments and corridors. Along with the use of more detailed data often comes the use of analysis tools and techniques that are not commonly used in long-range planning. The CMP can be greatly enhanced by data sharing among planning partners, as well as supporting resources such as tools and knowledgeable staff.



Framework

The LWCAMPO CMP follows the framework recommended by the United States Department of Transportation (USDOT) Federal Highway Administration (FHWA) in Congestion Management Process: A Guidebook¹. The LWCAMPO followed the 8-step CMP framework:

Step 1 Regional Objectives: Define the regional **CMP objectives** to assess the extent of congestion and support the evaluation of the effectiveness of congestion reduction and mobility enhancement strategies for the movement of people and goods.

Step 2 CMP Network: Update the **CMP network** based on data availability and feasible data collection; the primary data source is the National Performance Management Research Data Set (NPMRDS) with metropolitan planning area.

Step 3 Performance Measures: Align federally mandated **performance measures** with determined CMP Objectives.

Step 4 Data Collection and System Performance: Collect **congestion data** from the National Performance Management Research Data Set, or NPMRDS.

Step 5 Analyze Challenges and Needs: Analyze congestion data to identify **challenges and needs**.

Step 6 Identify Strategies: Identify **strategies** that address identified congestion problems and needs in Step 5.

Step 7 Program and Implementation: Develop and implement a plan to **fund and implement** congestion strategies identified in Step 6.

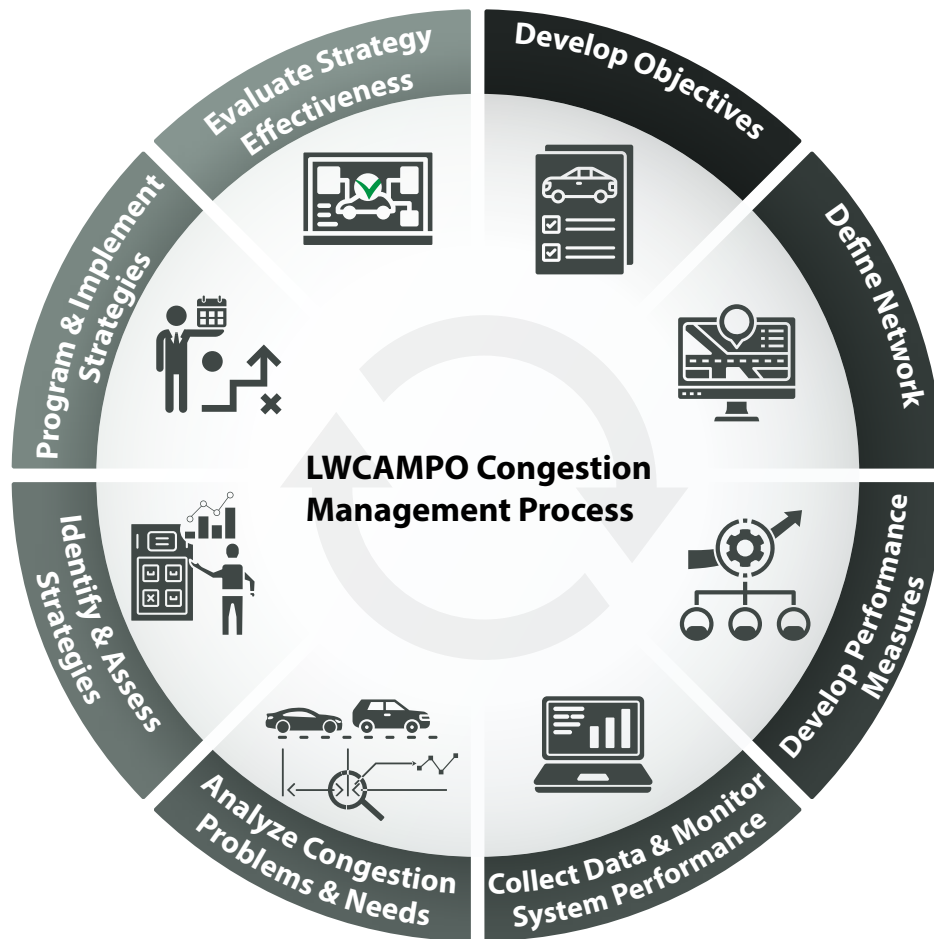
Step 8 Strategy Effectiveness: Establish a regular program for data collection and to **monitor system performance** and evaluate effectiveness of chosen implemented strategies.

This 8-step framework for the LWCAMPO CMP is graphically demonstrated in Figure 1.

While these steps are presented in a linear form, it is important to recognize that within the transportation planning cycles, some of these actions may be revisited, or occur on an on-going basis, while others may not. For instance, in updating the MTP, the LWCAMPO may revisit or develop new congestion management objectives, which may lead to development of new performance measures, but the MPO might not redefine other aspects of its CMP at the same time. The CMP network might not be updated with each update of the MTP, and data collection activities may occur on an annual basis or some other cycle. Consequently, the CMP framework is not intended to serve as a step-by-step approach but is intended to convey the general flow of the approach, building on regional objectives to implementation of strategies, and evaluation of their effectiveness.

¹ United States Department of Transportation Federal Highway Administration. (2011). *Congestion Management Process: A Guidebook*, accessed at https://ops.fhwa.dot.gov/plan4ops/focus_areas/cmp.htm.

Figure 1: LWCAMPO CMP 8-Step Framework



Step 1: Regional Objectives

The starting point for the CMP is the development of regional objectives for congestion management. The LWCAMPO defined a vision statement, goals and objectives, for the CMP, that align with the regional vision and goals defined in the 2025-2050 Metropolitan Transportation Plan (MTP). Locally defined objectives are based on the local needs and serve as the primary connection between the CMP and this MTP. During the development process for the vision statement, goals, and objectives for the MTP, the vision statement, goals and objectives of the CMP were reviewed to ensure consistency, i.e. ensure the vision statement, goals, and objectives of the CMP are in alignment with those of the MTP.



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Vision Statement

To develop a transportation system that offers safe, efficient, and affordable travel choices for people and goods, while supporting economic development and long-term quality of life.

Goals and Objectives

GOAL 1: PROVIDE A SAFE TRANSPORTATION SYSTEM.

- Objective: Promote policies and projects that reduce the number and severity of vehicle collisions.

GOAL 2: PROVIDE A RELIABLE TRANSPORTATION SYSTEM.

- Objective: Encourage a proactive approach to addressing future transportation needs.
- Objective: Promote policies and projects that reduce travel delay.

Goal 3: Provide affordable travel choices for people and goods.

- Objective: Promote the increase of viable, affordable travel choices for people and goods.
- Objective: Promote policies and programs to increase transit ridership on existing services.
- Objective: Promote awareness of multimodal facilities.

GOAL 4: A TRANSPORTATION SYSTEM THAT PROMOTES ECONOMIC VIGOR AND LONG-TERM QUALITY OF LIFE.

- Objective: Promote the efficient and effective connection of people, jobs, goods, and services.
- Objective: Promote the minimization of environmental impact and improved environmental quality.
- Objective: Promote the unique identities and qualities of neighborhoods, communities, and region as a whole.

The goals and objectives for the 2025-2050 MTP were developed through input from both the MPO Technical Committee and Policy Committee and in turn, furnished the process to align them with those of the CMP.



Step 2: CMP Network

Defining the CMP network involved defining two aspects of the system that is studied as part of the planning process:

- The geographic boundary, or area of application.
- The system components or network of surface transportation facilities.

The geographic boundary for the CMP is the defined Metropolitan Planning Area (MPA) for the LWCAMPO. The MPA is the urbanized area that the MPO is responsible for continuing, comprehensive, and cooperative metropolitan transportation planning.

The network of surface transportation facilities resembling the CMP network were defined based on two tiers.

Tier 1 CMP Network

The Tier 1 CMP network is defined by the National Performance Management Research Data Set (NPMRDS). The NPMRDS provides field-observed travel time and speed data collected anonymously from a fleet of probe vehicles, including cars and trucks equipped with mobile devices. By using time and location information gathered from these probe vehicles, the NPMRDS generates aggregated speed and travel time data in increments of 5 minutes, 15 minutes, or 1 hour. This data is available across the National Highway System (NHS) and is defined by Traffic Message Channel (TMC) location codes.

A TMC represents a unique, directional roadway segment, typically ranging from half of a mile to one mile long in urban and suburban areas, and up to five to ten miles long in rural areas. The LWCAMPO CMP network comprises 341 TMCs, covering freeways and arterial roads within the MPA. The CMP network geodatabase (geographic information system [GIS] file) includes information on functional classification, the number of lanes, annual average daily traffic (AADT), and an urban code that indicates the type of area each TMC falls into. Table 1 provides a summary of road lengths categorized by functional class, while Table 2 summarizes road lengths by area type. According to the data in these tables, 69% of roads within the CMP network are classified as principal arterials, and 63% are located in urban areas.

Table 1: Length of CMP Network by Functional Classification

Functional Class	Length Miles (one direction)
1: Interstate	45.4
3: Principal Arterial – Other	199.1
4: Minor Arterial	0.6

Source: National Performance Management Research Data Set, 2023



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Table 2: Length of CMP Network by Area Type

Area Type	Length Miles (one direction)
Rural	10 5.8
Urban	184 .0

Source: National Performance Management Research Data Set, 2023

Tier 2 CMP Network

The Tier 2 CMP Network is based on network links defined by the LWCAMPO Technical Committee in 2015. The Tier 2 CMP was developed based on the following data:

- **Top 100 Congestion Roadways (TxDOT)**

Each year, the Transportation Planning and Programming (TPP) Division of the Texas Department of Transportation (TxDOT) contracts with Texas A&M Transportation Institute (TTI) to identify and rank the most congested roadways in the state. The LWCAMPO had one segment on the list, Mines Rd / FM 1472, which ranks 25th for all traffic and second for truck traffic.

- **Strategic Highway Network (TxDOT)**

STRAHNET (Strategic Highway Network) is a network of highways which are important to the United States' strategic defense policy and which provide defense access, continuity and emergency capabilities for defense purposes. These are major regional roadways and include US 83 (future IH 27) and IH 35.

- **Texas Highway Freight Network (TxDOT)**

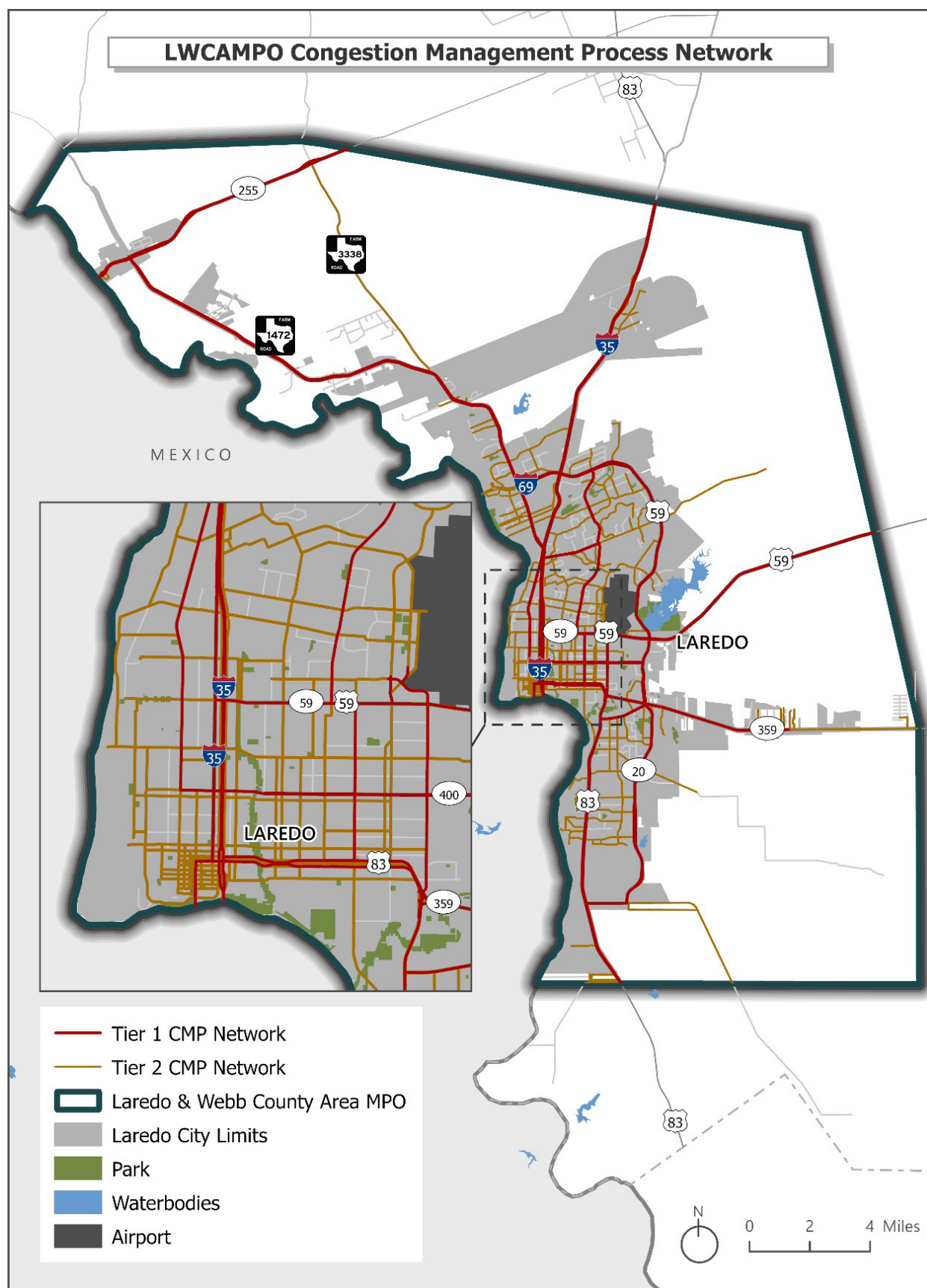
The foundation of the Texas Highway Freight Network is the Texas portion of the National Highway Freight Network. Additional highways critical to freight movement are also included and were identified through a systematic, data driven, and stakeholder-informed process during development of the Texas Freight Mobility Plan. Numerous roadways are included as part of this network.

- **Roadway Inventory (TxDOT)**

The TxDOT Roadway Inventory layer is a statewide dataset that has attribute information routed to TxDOT Roadway linework, including functional classification. Roadways with a functional classification of 1 Interstate, 2 Other Freeway or Expressway, 3 Other Principal Arterial, 4 Minor Arterial, or 5 Major Collector were included in the CMP Network.

A map of the full CMP network for the LWCAMPO is displayed in Figure 2.

Figure 2: LWCAMPO CMP Network



Source: WSP Analysis of Texas Department of Transportation, National Performance Management Research Data Set, and Laredo and Webb County Metropolitan Planning Organization Data



Step 3: Performance Measures

The identification of performance measures to identify, assess, and communicate to others about congestion is a critical element of the CMP. The purpose of performance measures in the CMP is to characterize current and future conditions of the regional transportation system. However, performance measures serve multiple purposes that intersect and overlap in the context of the CMP, including:

- To characterize existing and anticipated conditions on the regional transportation system.
- To track progress toward meeting regional objectives.
- To identify specific locations with congestion to address.
- To assess congestion mitigation strategies, programs, and projects.
- To communicate system performance, often via visualization, to decision-makers, the public, and MPO member agencies

For the CMP, performance measures are classified into two levels: systemwide performance measures and corridor performance measures.

At the systemwide level, performance measures are used to compare plan alternatives in the development of the MTP, to determine which alternatives are more successful in achieving a balance between different goals/objectives, maximizing overall benefit. They also can be used as part of transportation system monitoring to track progress toward the achievement of the objectives. Systemwide performance measures evaluated for the LWCAMPO CMP include:

- **Speed:** A measure of the average speed in miles per hour (mph)
- **Travel Time Index (TTI):** A measure of average conditions that tells one how much longer, on average, travel times are during congestion compared to during light traffic.
- **Planning Time Index (PTI):** A measure of how much total time a traveler should allow to ensure on-time arrival.
- **Buffer Time Index (BTI):** A measure of the extra time (or time cushion) that travelers must add to their average travel time when planning trips to ensure on-time arrival.

At the corridor level, performance measures are used to identify locations currently experiencing or anticipated to experience congestion problems in the future. They also are used to support assessment and selection of congestion mitigation strategies and evaluation of implemented strategies. The smaller scale application of performance measures in this context often means that the performance measures selected for monitoring system-level congestion and tracking regional objectives must be tailored to be applicable at a segment, link, or intersection scale. Corridor performance measures evaluated for the LWCAMPO CMP include:

- **Travel Time Index (TTI):** A measure of average conditions that tells one how much longer, on average, travel times are during congestion compared to during light traffic.



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- **Level of Travel Time Reliability (LOTTR):** A measure of a traveler's ability to reach a destination within an anticipated timeline.
- **Truck Travel Time Reliability (TTTR):** A measure of a truck's ability to reach a destination within an anticipated timeline.
- **Peak-Hour Excessive Delay (PHED):** A measure of the annual hours of peak hour excessive delay (PHED) per capita; the threshold for excessive delay is based on the travel times at 20 miles per hour or 60 percent of the posted speed limit travel time, whichever is greater.

Step 4: Data Collection and System Performance

After establishing performance measures that will be used to evaluate system performance, the LWCAMPO gathered all necessary data to include in the CMP. Gathering data to evaluate system performance is typically the element of the CMP that requires the largest amount of resources and staff time for the MPO and its planning partners.

To support the analysis of congestion challenges and needs across the CMP network, multiple datasets were processed and integrated into a single file. Several data attributes were sourced and integrated into a single GIS shapefile for analysis, including the following:

- The National Performance Management Research Data Set (NPMRDS) provides field-observed travel time and speed data collected anonymously from a fleet of probe vehicles, including cars and trucks equipped with mobile devices. By using time and location information gathered from these probe vehicles, the NPMRDS generates aggregated speed and travel time data in increments of 5 minutes, 15 minutes, or 1 hour. This data is available across the National Highway System (NHS) and is defined by Traffic Message Channel (TMC) location codes. A TMC represents a unique, directional roadway segment, typically ranging from half of a mile to one mile long in urban and suburban areas, and up to five to ten miles long in rural areas. The LWCAMPO CMP network comprises 341 TMCs, covering freeways and arterial roads within the MPA.
- To enhance network attribute completeness, roadway characteristics such as the number of lanes and shoulder widths were supplemented utilizing the Texas Department of Transportation (TxDOT) Roadway Inventory GIS shapefile.
- Speed limit data was incorporated from the NPMRDS PM3 performance report, which also provided hourly aggregated speed and travel time data for each Traffic Message Channel (TMC) segment.



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- The 2023 Annual Average Daily Traffic (AADT) values and estimated hourly traffic volumes were extracted from the NPMRDS, further disaggregated by vehicle classification (automobiles and trucks).
- Crash data was sourced from the 2024 crash records from the TxDOT Crash Records Information System (CRIS).

Once collected, the data was subsequently analyzed to identify locations with congestion issues and gain insight on their underlying cause(s), as demonstrated in the following step.

Step 5: Analyze Challenges and Needs

Before congestion management strategies can be identified, the congestion challenges and needs must be identified. This action step serves as a critical link between data collection and strategy identification. According to federal regulations (23 CFR 450.222), the CMP must include “methods to monitor and evaluate the performance of the multimodal transportation system [and] identify the causes of recurring and non-recurring congestion.”

The LWCAMPO structured the data analysis to assess congestion challenges and needs, to evaluate traffic performance, congestion patterns, and capacity utilization across the CMP network. The primary objective was to provide a comprehensive picture of mobility conditions by assessing time-based performance metrics, congestion severity, and frequency, as well as identifying high-priority segments for future improvements.

Time Period Definitions

The analysis segmented the day into five distinct time periods to account for variations in traffic patterns:

- **AM Peak (AM):** 6:00 a.m. – 10:00 a.m., weekdays
- **Midday (MD):** 10:00 a.m. – 4:00 p.m., weekdays
- **PM Peak (PM):** 4:00 p.m. – 8:00 p.m., weekdays
- **Night (NT):** 8:00 p.m. – 6:00 a.m., weekdays
- **Weekend (WE):** 12:00 a.m. – 12:00 a.m., weekends

The variability or change in congestion on a day-to-day basis provides a measure of reliability. Variability of congestion comes in two forms:

Recurring Congestion: Recurring congestion is generally predictable, regularly occurring, and typically caused by excess demand compared to the capacity of the system.

Non-recurring Congestion: Conversely non-recurring congestion causes unreliable travel times and is caused by transient events such as traffic incidents, weather conditions, work zones, or special events. Non-recurring congestion, and unreliable travel times that result, are often the most frustrating form of congestion to travelers.



Key Performance Indicators

For each TMC segment, and for every defined time period and calendar day, the following key performance indicators were derived:

- Average Speed
- Average Travel Time
- Free-Flow Travel Time
- Average Volume
- Travel Time Index (TTI) – Defined as the ratio of average travel time to free-flow travel time.

Annual Aggregation and Performance Metrics

The daily values were aggregated into annual averages using time-period-specific summaries. Several derived metrics and assumptions were integrated as part of this process.

- **Speed and Volume Metrics:**
 - Average annual speed and volume were computed for each TMC by time period.
 - Weekday peak period volumes were estimated in two steps. First, the percentage of traffic volumes for each time period was estimated using hourly and daily volumes. Then, the percentages of traffic volumes were multiplied by AADT.
 - Weekend volumes were estimated as 85% of weekday AADT.
 - Truck percentages were estimated by taking the ratio of Truck AADT and Total AADT
 - Volume-over-Capacity (V/C) ratio
 - Annual Average Travel Time and TTI
- **Capacity Estimation:**
 - Hourly roadway capacity was estimated using the *Simplified Highway Capacity Calculation Method for the Highway Performance Monitoring System*².
 - For freeway segments, capacity was based on area type (urban or rural), number of lanes, truck percentage, and at the Level of Service (LOS) E service volumes.

² United States Department of Transportation Federal Highway Administration. (2017). *Simplified Highway Capacity Calculation Method for Highway Performance*, accessed at <https://www.fhwa.dot.gov/policyinformation/pubs/pl18003/>



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- For non-freeway segments, roads were treated as signalized arterials. Capacity was estimated based on the number of through-lanes, posted speed limit, and a simplified assumption of 50% effective green time during signal cycles.
- **Congestion Status Metrics:**
 - Congestion classification was based on TTI thresholds:
 - Freeways: Congested if $TTI \geq 1.33$
 - Non-Freeways: Congested if $TTI \geq 2.5$
- **Recurring vs. Non-Recurring Congestion and Frequency:**

Congestion events were distinguished using statistical deviation from normal speed conditions:

- For each TMC and for each day and time period, Speed Standard Normal Deviate (SSND) was calculated as:
 - $SSND = (\text{Annual Average Speed} - \text{Average Speed}) / \text{Standard Deviation of Speed}$
 - If a segment experienced congestion and its SSND was greater than -1.5, it was considered recurring congestion (i.e., a regular, expected pattern).
 - If SSND fell below -1.5, the congestion was deemed non-recurring, likely caused by incidents, weather, or temporary disruptions.
 - Annual Frequencies of both congestion types were tracked across all segments.

This method enabled the differentiation of structural congestion issues from isolated or unpredictable delays. For each TMC, the frequency of both congestion types was tracked across the entire year and across time periods.

- **Congestion Severity:**

A multi-tiered classification system based on percentile TTI values was developed to further understand the extent of congestion. Congestion severity was classified from “Uncongested” to “Extreme Congestion” across seven tiers, with threshold values tailored to facility type. These classifications help visualize and prioritize congestion mitigation strategies.

Severity levels were assigned using the 50th and 95th percentile TTI values based on the following ranges:



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- **Freeway TTI Categories:**
 - Uncongested (≤ 1.10)
 - Developing (1.10–1.33)
 - Light (1.33–1.60)
 - Moderate (1.60–1.80)
 - Heavy (1.80–2.00)
 - Severe (2.00–2.50)
 - Extreme (≥ 2.50)
- **Non-Freeway TTI Categories:**
 - Uncongested (≤ 2.00)
 - Developing (2.00–2.50)
 - Light (2.50–3.00)
 - Moderate (3.00–3.40)
 - Heavy (3.40–3.80)
 - Severe (3.80–4.70)
 - Extreme (≥ 4.70)
- **Composite Metrics:**

The Prevailing Recurring Congestion metric was defined as the product of recurring congestion frequency and average TTI. This composite index was used to highlight segments with both high regularity and severity of congestion.

Identification of Top Priority Segments

To identify critical areas for congestion mitigation, both recurring and non-recurring congestion patterns were examined. Recurring congestion is generally predictable, regularly occurring, and typically caused by excess demand compared to the capacity of the system. Conversely, non-recurring congestion causes unreliable travel times and is caused by transient events such as traffic incidents, weather conditions, work zones, or special events.

Recurring Congestion

TMC segments were first filtered based on the following criteria:

- Annual recurring congestion frequency $\geq 25\%$, or
- Prevailing recurring congestion in the top 15% for any time period



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Segments were further analyzed by dividing the prevailing congestion scores into quartiles and constructing a matrix to count the number of segments falling within each quartile across all periods.

Table 3 and Table 4 summarize the count of the number of segments and percentage over total counts.

Table 3: Selected TMC Segment Count by Rank, Quartile, and Time Period

Quartile	AM	MD	NT	PM	WE	Total
0%-25%	1934	1527	1876	1678	614	7629
25%-50%	1335	1912	1482	2170	730	7629
50%-75%	1234	2095	887	2849	564	7629
75%-100%	962	2163	554	3635	316	7630
Total	5465	7697	4799	10332	2224	30517

Table 4: Selected TMC Segment County Percentages by Rank, Quartile, and Time Period

Quartile	AM	MD	NT	PM	WE	Total
0%-25%	6%	5%	6%	5%	2%	25%
25%-50%	4%	6%	5%	7%	2%	25%
50%-75%	4%	7%	3%	9%	2%	25%
75%-100%	3%	7%	2%	12%	1%	25%
Total	18%	25%	16%	34%	7%	100%

Based on the quartile and time period matrix, the TMCs were selected for diagnosis and improvement strategy determination, which meet the recurring congestion criteria for the following quartile and time period combinations. A total of 67 TMC segments were selected for diagnosing recurring congestion, which were grouped into 23 segments and intersections.

- Quartile Range 0% - 25%: AM, MD, PM and NT
- Quartile Range 25% - 50%: MD, PM and NT
- Quartile Range 50% - 75%: MD and PM
- Quartile Range 75% 100%: MD and PM



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Non-Recurring Congestion

Segments experiencing non-recurring congestion of more than 5% of the year were selected for non-recurring congestion diagnosis. A total of 45 TMC segments were selected for diagnosing non-recurring congestion, which were grouped into 16 segments and intersections.

The 2024 crash counts were collected for all selected segments for non-recurring congestion. Counts were aggregated by:

- K – Killed: Died due to injuries sustained from the crash, within 30 days of the crash.
- A – Incapacitating Injury: Severe injury which prevents continuation of normal activities; includes broken or distorted limbs, internal injuries, crushed chest, etc.
- B – Non-incapacitating Injury: Evident injury such as bruises, abrasions, or minor lacerations which do not incapacitate.
- C – Possible Injury: Injury which is claimed, reported, or indicated by behavior, but without visible wounds; includes limping or complaint of pain.
- O – Not Injured: The person involved in crash did not sustain an A, B, or C injury.
- U – Unknown: Unable to determine whether injuries exist. Some examples may include: Hit and Run, Fled Scene, FSRA, etc.

Results of Challenges and Needs Analysis

The performance and diagnosis of needs as a result of this analysis of congestion challenges and needs are summarized in the following step, in Table 5 – Table 6. Detailed results of the analysis are included in the following appendices for reference:

- Appendix A: Systemwide Performance
- Appendix B: Corridor Performance
- Appendix C: Maps of Congestion Challenges and Needs
- Appendix D: El Metro Transit System Map

Step 6: Identify Strategies

The identification of appropriate congestion mitigation strategies is a key component of the CMP. At this point, the MPO has synthesized the data and analysis from Step 4 and Step 5 into a set of recommended solutions to effectively manage congestion and achieve the defined CMP congestion management objective. The strategies that the LWCAMPO has chosen support the following considerations:

- **Contribution to Meeting Regional CMP Objectives:** The strategies that have been selected support the regional CMP objectives defined in Step 1.
- **Local Context:** Strategies were selected that fit within the context of the community and are appropriate regarding the role and function of the transportation facilities within the regional network.



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- **Contribution to Other MPO Goals and Objectives:** The selection of strategies was informed by overarching goals of the MPO, including the goals and objectives of the 2025-2050 MTP.
- **Jurisdiction over CMP Strategies:** The MPO is committed to continuing coordination and collaboration with partners on the implementation of the selected strategies.

The LWCAMPO developed congestion management strategies that can be applied at the systemwide level and the corridor level.

Systemwide Strategies

For systemwide strategies, the LWCAMPO identified a wide-ranging “toolbox” of congestion management strategies that can be applied, as appropriate, across the regional transportation system. The vast majority of the systemwide strategies presented in this toolbox are considered Transportation System Management and Operations (TSMO) strategies over capacity adding strategies.

The existing transportation system can be utilized most effectively and efficiently through TSMO strategies. TSMO strategies actively manage the multimodal transportation network, optimizing performance to preserve capacity, and improve the safety and reliability of the transportation system. Strategies to add capacity can either address long-term needs via corridor-wide or alternative route expansion or can contribute to moving more traffic through a short bottleneck location in less time. These improvements are costly and will require high construction dollars to accomplish the needed goals, and thus, should be considered as a last resort.

The toolbox of systemwide congestion management strategies include:

- **Transit Operations and Management** — These strategies pertain to the operation and management of the transit system in a safe and efficient manner.
 - *Strategies include:* transit signal preemption, designated lanes for transit, express bus service, high-capacity and high-frequency transit service, optimized route structure, queue jumps, pedestrian and bicycle infrastructure including at signals, active monitoring technology, electronic fare collection, hard shoulder running, expanded hours or frequency, consolidated account systems among transit providers/modes, and improved user interfaces to facilitate trip planning. The El Metro Transit System Map is located in Appendix D.
- **Travel Demand Management** — Travel demand management is defined as providing users with effective travel choices to shift or reduce the demand for travel in congested conditions. Travel demand management oversees two types of travel: commute travel and travel associated with tourism, emergencies, special events, shopping, etc.



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- Strategies include: parking pricing strategies and management, congestion pricing, flexible work hours or telecommuting/work from home benefits and policies, trip chaining, carpool and vanpool programs, park-n-ride lots, mixed use development, first/last mile options.
- **Arterial Management** — Arterial management is the management of arterial facilities in a manner that provides users with a safe, efficient, and reliable trip.
 - Strategies include: Integrated corridor management, traffic signal coordination, advance traffic management systems (ATMS), intersection control evaluation (ICE), special use lanes, active monitoring technology, reducing access points, reducing full access density, alternative intersection geometry and signal phasing, reversible lane systems, variable speed limits.
- **Freeway Management** — Freeway management is the implementation of policies, strategies, and technologies to improve freeway performance. The over-riding objectives of freeway management programs include minimizing congestion (and its side effects), improving safety, and enhancing overall mobility.
 - Strategies include: Ramp metering, congestion pricing, managed lanes, special use lanes, active monitoring technology.
- **Freight Management** — Freight management is the effective management of the system for freight transportation. The goal of freight is to move goods safely, efficiently, and reliably throughout the region. This may range from satisfying the customer (e.g., freight shippers, receivers, and carriers) to reducing travel time on the system.
 - Strategies include: Freight priority corridors/signals, congestion pricing, curb management, and commercial truck parking areas.
- **Emergency / Incident Management.** Emergency management is designed to provide users with a safe and efficient transportation system during an emergency. Incident management is defined as verifying, responding to, and clearing traffic incidents in a manner that provides transportation system users with the least disruption.
 - Strategies include: Expanding the use of roving patrols (e.g., Road Ranger programs), enhancing inter-agency voice and data communications systems, active monitoring technology (i.e., CCTV cameras), emergency equipment technology and vehicle upgrades, responder training, dynamic detours, queue warning systems and other traveler information messaging, hard shoulder running, reversible lanes.



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- **Work Zone Management** — Work zone management involves organizing and operating areas impacted by road or rail construction or maintenance activities to minimize traffic delays, maintain safety for workers as well as travelers, and accomplish the work efficiently.
 - Strategies: include Deploying and managing DMS and websites, advanced warning signs, integration into traveler information systems, dynamic detours.
- **Special Event Management** — Special event management provides users with a safe and efficiently managed transportation system during a planned special event.
 - Strategies include: Deploying and managing DMS and websites, advanced warning signs, integration into traveler information systems, integrated corridor management, recurring and routine interagency coordination and planning, dynamic detours.
- **Travel Weather Management** — Travel weather management focuses on providing users with a safe and efficient transportation system during and after weather events.
 - Strategies include: Deploying and managing DMS and websites, traveler information messaging (via mobile access or integration into vehicles), dynamic detours, hard shoulder running.
- **Traveler Information** — Traveler information is designed to provide transportation system users with the information they need to choose the safest and most efficient mode and route of travel.
 - Strategies include: Deploying and managing DMS and websites, mobile access to information, integration into vehicles.
- **Non-Motorized Transportation Strategies** — Non-motorized transportation strategies include improvements that directly impact bicycle and pedestrian facilities and may encourage a shift from automobile trips to these other modes.
 - Strategies include: New sidewalk connections, designated bicycle facilities, improved safety of existing bicycle and pedestrian facilities, exclusive non-motorized right of way, complete streets.
- **Capacity Adding Strategies** — Strategies to add capacity can either address long-term needs via corridor-wide or alternative route expansion or can contribute to moving more traffic through a short bottleneck location in less time. These improvements are costly and will require high construction dollars to accomplish the needed goals.
 - Strategies include: Adding traffic lanes, constructing new roadways, managed lanes, auxiliary lanes, intersection improvements.



Corridor Strategies

Based on the results of the congestion analysis performed in Step 5, congestion management strategies at the corridor level were identified to resolve the determined challenges and needs. These corridor level strategies align with the CMP objectives and overarching goals of the LWCAMPO as defined in the MTP. These strategies focus on providing an efficient transportation system that maintains travel time reliability and reduces congestion.

The corridor level strategies are grouped into two categories: Congestion management strategies for recurring congestion and congestion management strategies for non-recurring congestion. Different strategies are appropriate for the type of congestion that is experienced. These two categories are defined as:

- **Recurring Congestion Strategies** — Strategies that aim at resolving recurring congestion. Recurring congestion is generally predictable, regularly occurring, and typically caused by excess demand compared to the capacity of the system. See Table 5 and Figure 3 for the recommended congestion management strategies for recurring congestion
- **Non-recurring Congestion Corridor Strategies** — Strategies that aim at resolving non-recurring congestion. Non-recurring congestion causes unreliable travel times and is caused by transient events such as traffic incidents, weather conditions, work zones, or special events. See Table 6 and Figure 4 for the recommended congestion management strategies for non-recurring congestion.

Table 5 – Table 6 show details for the recommended congestion management strategies, including performance and diagnosis of need. Figure 3 – Figure 4 show where these strategies are recommended geographically on maps.

Capacity improvements (including intersection and interchange reconfigurations) are recommended for consideration as tools to optimize capacity and resolve bottlenecks in targeted areas. In alignment with FHWA guidance, this CMP does not identify specific projects but rather supplies recommended actions and strategies that can advance the overall goals of the LWCAMPO for system efficiency and reliability.



Corridor ID	Corridor	Direction	TMC	Maximum Recurring Congestion Frequency	Maximum Recurring TTI	Included in Non- Recurring Congestion Diagnosis	V/C Ratio					Diagnosis of Need	Recommended Strategy
							AM	MD	PM	NT	WE		
R1	Lloyd Bentsen Hwy From IH-35 To Bob Bullock Loop	E	112+07375	29%	3.32				1.05			Poor Signal Operations	Improve Signal Operations
			112+07377	56%	4.32				1.05				
			112+07378	89%	5.00				0.93				
			112P07379	71%	6.24			0.64	0.65	0.17			
		W	112-07376	32%	3.62				1.05				
			112N07374	41%	4.73	✓		0.85	0.86				
			112N07379	36%	5.21					0.17			
R2	IH-35 from Juarez-Lincoln POE to Park St	N	112P16149	78%	8.33	✓		0.31	0.31			Mild Congestion High Volume of Truck Traffic During Night Time	Monitor Facility Performance
			112+16150	26%	3.44				0.22	0.06			
			112P16150	100%	4.20	✓	0.34	0.34	0.31	0.08			
			112+15299	100%	3.88		0.34	0.34	0.31	0.08			
			112+05257	100%	3.97		0.34	0.34	0.31	0.08			
			112P15299	100%	4.00		0.34	0.34	0.31	0.08			
			112+05258	98%	2.03		0.56	0.56	0.52	0.14			
			112P05258	46%	1.72		0.56	0.56		0.14			
			112+05259	29%	1.59					0.14			
R3	IH-35 from US 83 to Park St	S	112N16149	74%	6.57				0.31			Backup from Signalized intersection of I-35 at US 83 and Heavy Left Turn volume from I-35 to US 83	Recommendation is an ICE Study and Intersection Improvement
			112N15298	100%	4.38		0.3	0.32	0.34	0.08			
			112N16150	99%	4.49		0.31	0.34	0.35	0.08			
			112-16150	100%	5.61		0.31	0.34	0.35	0.08			
			112-15298	100%	5.61		0.31	0.34	0.35	0.08			
			112N15299	100%	6.72		0.31	0.34	0.35	0.08			
			112-05257	100%	8.49		0.52	0.56	0.59	0.14			
			112N05258	100%	18.33	✓	0.52	0.56	0.59	0.14			
			112-05258	99%	15.41	✓	0.52	0.56	0.59	0.14			
			112N05259	98%	13.06	✓		0.56	0.59	0.14			
			112-05259	79%	2.76	✓		0.58	0.63				
			112N05260	71%	2.40	✓			0.63				
			112-05260	50%	2.12	✓			0.66				
R4	IH-35 SB at Exit 2	N	112+05265	47%	1.45			0.76	0.69			Inadequate Weaving Segment at Exit 2	Provide Adequate Weaving Distance (e.g. Ramp Relocation)
R5	IH-35 NB at Exit 4	S	112-05262	54%	1.65				0.72			Inadequate Weaving Segment at Exit 4	Provide Adequate Weaving Distance (e.g. Ramp Relocation or Auxiliary Lane)

* ICE — Intersection Control Evaluation



CONGESTION MANAGEMENT PROCESS

Corridor ID	Corridor	Direction	TMC	Maximum Recurring Congestion Frequency	Maximum Recurring TTI	Included in Non- Recurring Congestion Diagnosis	V/CRatio					Diagnosis of Need	Recommended Strategy
							AM	MD	PM	NT	WE		
R6	SH 359 from US 83 to Loop 20	E	112+08383	34%	4.25				0.72			High access point density, inadequate driveway spacing, inadequate capacity and suboptimal intersection configuration	Access Management and Intersection/Interchange improvements
			112+08384	52%	4.73				0.56				
			112P08384	58%	4.90			0.63	0.61				
		W	112N08384	99%	6.44			0.55	0.56	0.15			
R7	US 83 from Cedar Ave to SH 359	E	112-15296	53%	4.46				1.54			Inadequate Capacity and high intersection density	Signal Optimization and Coordination, Increase Capacity
		W	112+15296	47%	4.20	✓			1.27				
R8	US 83 from San Luis St to Jaime Zapata Memorial Highway	S	112-15476	49%	4.66				1.37			Inadequate Capacity	Signal Optimization and Coordination, Increase Capacity and Access Management
		N	112P15475	46%	4.42			1.18	1.2				
R9	Interchange of Bob Bullock Loop at SH 359	S	112-15816	84%	5.58			0.59	0.59			Inadequate at-grade Intersection and Signal Timing	ICE Study and Signal Optimization
R10	Bob Bullock Loop from Jacaman Rd to Del Mar Blvd	S	112-15819	49%	4.56				1.08			Inadequate Capacity	Increase Capacity, Signal Optimization
R11	Interchange of Bob Bullock Loop at International Blvd	E	112N15822	98%	9.08			0.63	0.64	0.17		Inadequate Interchange Capacity	ICE Study
		W	112P15822	95%	6.27			0.8	0.82	0.17			
R12	Convent Avenue POE	S	112N50555	49%	7.33	✓			0.27			Queuing from POE Traffic	Implement TSMO strategy to POE Operation
		N	112P50555	28%	5.00	✓		0.26					
R13	San Bernardo Ave at W Calton Rd	S	112-50562	30%	4.43				0.83			Inadequate Capacity	Increase Capacity, Signal Optimization
R14	McPherson Ave at US 59	N	112N50595	84%	9.33			0.33	0.34	0.09		Inadequate Capacity	Increase Capacity, Signal Optimization
		N	112P50595	26%	4.04	✓		0.33					
R15	McPherson Ave at E Calton Rd	S	112N50596	34%	3.90			0.71				Inadequate Capacity	Increase Capacity, Signal Optimization
		N	112P50596	63%	5.03			0.71	0.72				
R16	N Bartlett Ave at US 59	S	112N50606	47%	6.25			1.32	1.34	0.35		Inadequate Capacity	Increase Capacity, Signal Optimization
		N	112P50606	45%	4.81			1.32	1.34				
R17	IH-69 W from FM-1472 to McPherson Ave	E	112N15824	31%	1.64	✓		0.82	0.85			Inadequate Capacity	Capacity Improvement
		W	112+15825	52%	9.30	✓			0.75				
			112P15824	32%	3.60	✓			0.78				
R18	FM 1472 from Las Tiendas Rd to IH-69W	S	112N16336	25%	3.30				1.03			Inadequate Capacity	Capacity Improvement and ICE
			112-16336	73%	3.44				1.07				
			112-16337	76%	6.16	✓			0.89				
		N	112P16336	96%	4.20			0.7	0.71				
R19	TX 255 at FM 1472	W	112N16341	54%	4.26			0.13	0.13			Inadequate Intersection Control (Gap Acceptance)	ICE Study
R20	Mcpherson Ave from Shiloh Dr to International Blvd	S	112-50601	52%	4.29				0.93			Inadequate Intersection Capacity	Increase Capacity, Signal Optimization, ICE Study
			112N50600	70%	5.03			1.01	1.03				
R21	Mcpherson Ave at Del Mar Blvd and Mcpherson Ave at Bob Bullock Loop	S	112N50603	60%	5.58	✓		0.56	0.57			Inadequate Intersection Capacity	Increase Capacity, Signal Optimization, ICE Study
		N	112P50600	98%	5.51			1.01	1.03	0.27			
R22	Colombia POE	E	112P53333	71%	10.67	✓			0.07	0.07		Queuing from POE Traffic	Implement TSMO strategy to POE Operation
		W	112N53333	29%	6.14	✓			0.07	0.02			
R23	Mangana Hein Rd at US 83	W	112N53774	78%	9.31			0.39	0.37	0.09		Inadequate Intersection Control (Gap Acceptance)	ICE Study

* ICE — Intersection Control Evaluation

POE — Port of Entry

TSMO — Transportation System Management & Operations



Corridor ID	Corridor	Direction	TMC	Maximum Non-Recurring Congestion Frequency	Maximum TTI	Included in Recurring Congestion Diagnosis	2024 Crash Count by Severity								Diagnosis of Need	Recommended Strategy
							Total	K	A	B	C	O	U			
N1	IH-35 at Lloyd Bentsen Hwy	E	112P07374	8%	5.08		10	-	-	-	1	9	-	Rear-end crashes happened on the Lloyd Bentsen Hwy at the diamond interchange with IH-35. Most likely due to inadequate signal timing.	Improve Signal Operations	
		W	112N07374	8%	6.71	✓										
N2	IH-35 from Juarez-Lincoln POE to Park St	N	112P16149	12%	6.60	✓	8	1	-	3	1	2	1	Rear-end and run off-road crashes, primarily attributed to stop and go nature of the border crossing	Advance Warning Signs, Implement ITS Solutions to POE	
N3	San Dario Ave at US 83	N	112P16150	5%	4.80	✓	114	-	-	8	15	88	3	Mostly sideswipe or rear-end crashes resulting from vehicles turning left, changing lanes to through movement, generally attributed to dual left turn lanes without proper signage and lane marking	Install Lane Assignment and Advance Warning Sign	
N4	IH-35 Southbound between US 83 and Mann Rd	S	112N05258	9%	12.69	✓	233	-	2	17	30	180	4	42% of crashes are attributed to on/off-ramps, Most likely occurring due to ramp back up and/or inadequate weaving section. 58% crashes are attributed to driver inattention, over speeding, and lane departure.	Improve Frontage Road Operation, and/or Potential Ramp Relocation, and/or Driver Education Campaigns	
			112-05258	9%	12.31	✓										
			112N05259	8%	12.61	✓										
			112-05259	10%	8.72	✓										
			112N05260	10%	10.10	✓										
			112-05260	10%	9.83	✓										
			112N05261	7%	8.59											
			112-05261	5%	8.97											
			112N05262	5%	4.62											
			112N05263	5%	2.68											
			112-05263	7%	2.74											
N5	US 83 from N Meadow Ave and SH 359	W	112+15296	6%	5.39	✓	142	-	-	12	14	113	3	71% of crashes are related to intersection operation, most likely due to inadequate green and yellow phases for the left turns. The remaining 29% of crashes are mostly rear-end and they can be also attributed to queue spillback at intersections.	Improve Existing Traffic Signal, Conduct ICE Study, Install Advance Warning Sign	

* ICE — Intersection Control Evaluation
 POE — Port of Entry
 ITS — Intelligent Transportation System



Corridor ID	Corridor	Direction	TMC	Maximum Non-Recurring Congestion Frequency	Maximum TTI	Included in Recurring Congestion Diagnosis	2024 Crash Count by Severity							Diagnosis of Need	Recommended Strategy
							Total	K	A	B	C	O	U		
N6	IH-69 W from Sandia Dr to International Blvd	E	112-15822	7%	4.66		55	2	-	4	6	43	-	Inadequate weaving length on the eastbound mainlane and frontage road. Queue Spillback at the intersection in the westbound direction.	Improve Frontage Road Operation, and/or Potential Ramp Relocation, and/or Driver Education Campaigns
			112-15823	10%	6.35										
		W	112+15824	7%	8.61										
N7	Convent Avenue POE	S	112-50555	10%	6.33		7	-	-	-	1	6	-	Rear-end and run off-road crashes, primarily attributed to stop and go nature of the border crossing	Advance Warning Signs, Implement ITS Solutions to POE
			112N50555	16%	7.33	✓									
		N	112P50555	10%	6.67	✓									
N8	San Bernardo Ave	S	112-50558	8%	6.67		139	-	1	16	18	101	3	Due to crashes attributed to inadequate traffic control and gap acceptance	ICE Study
			112-50559	7%	10.00										
			112-50560	8%	7.25										
			112-50561	8%	4.91										
		N	112+50560	6%	4.97										
			112+50561	8%	5.66										
			112+50562	8%	5.08										
			112+50563	10%	7.33										
			112+53761	5%	8.00										
N9	Intersection of McPherson Ave at Saunders St, Southbound Approach Receiving Lane	N	112P50595	10%	10.67	✓	39	-	-	4	-	34	1	All Crashes are intersection related most likely due to inadequate signing and lane marking.	Install High Visibility Lane Marking and Advance Warning Sign
N10	Intersection of N Bartlett Ave at E Saunders St, Southbound Approach	S	112-50606	5%	4.46		41	-	1	4	1	33	2	Crashes occur mainly due to drivers' inattention or distraction.	Install High Visibility Lane Marking, Advance Warning Sign and Driver Education Campaigns
N11	Interchange between IH-35 and IH-69 W	S	112N05267	7%	2.62		61	-	-	4	7	50	-	Crashes occurring mainly due to drivers' inattention and inadequate merging distance	Reconfigure Interchange, Advance Warning Sign
N		112+05267	8%	3.02											
N12		E	112N15824	6%	4.29	✓	74	-	1	5	7	61	-		
W		112+15825	24%	11.72	✓										
		112P15824	17%	14.18	✓										

* ICE — Intersection Control Evaluation
 POE — Port of Entry
 ITS — Intelligent Transportation System



Corridor ID	Corridor	Direction	TMC	Maximum Non-Recurring Congestion Frequency	Maximum TTI	Included in Recurring Congestion Diagnosis	2024 Crash Count by Severity							Diagnosis of Need	Recommended Strategy
							Total	K	A	B	C	O	U		
N13	FM 1472 from FM 3338 to IH-69 W	N	112+16337	10%	4.63		306	-	5	22	29	245	5	Inadequate braking distance and unsafe lane changing behavior	Truck Lane Assignment, Advance Warning Sign
		E	112-16337	10%	5.94	✓									
N14	Interchange of US 59 and McPherson Rd	S	112N50603	5%	13.33	✓	8	-	-	1	-	6	1	Mainly Angle crashes, most likely attributed to driveways and access points	Access Management and ICE Study
N15	Colombia POE	E	112P53333	8%	8.36	✓	14	-	-	-	6	8	-	Non crash related caused by queueing from POE operations	Advance Warning Signs, Implement ITS Solutions to POE
		W	112-53333	7%	5.20										
			112N53333	6%	9.00	✓									
N16	Intersection of Cuatro Vientos Rd at Mangana Hein Rd	N	112P53777	5%	5.24		1	-	-	-	-	1	-	Inadequate traffic control/intersection capacity	ICE Study

* ICE — Intersection Control Evaluation

POE — Port of Entry

ITS — Intelligent Transportation System

Figure 3: Map of Congestion Management Strategies for Recurring Congestion

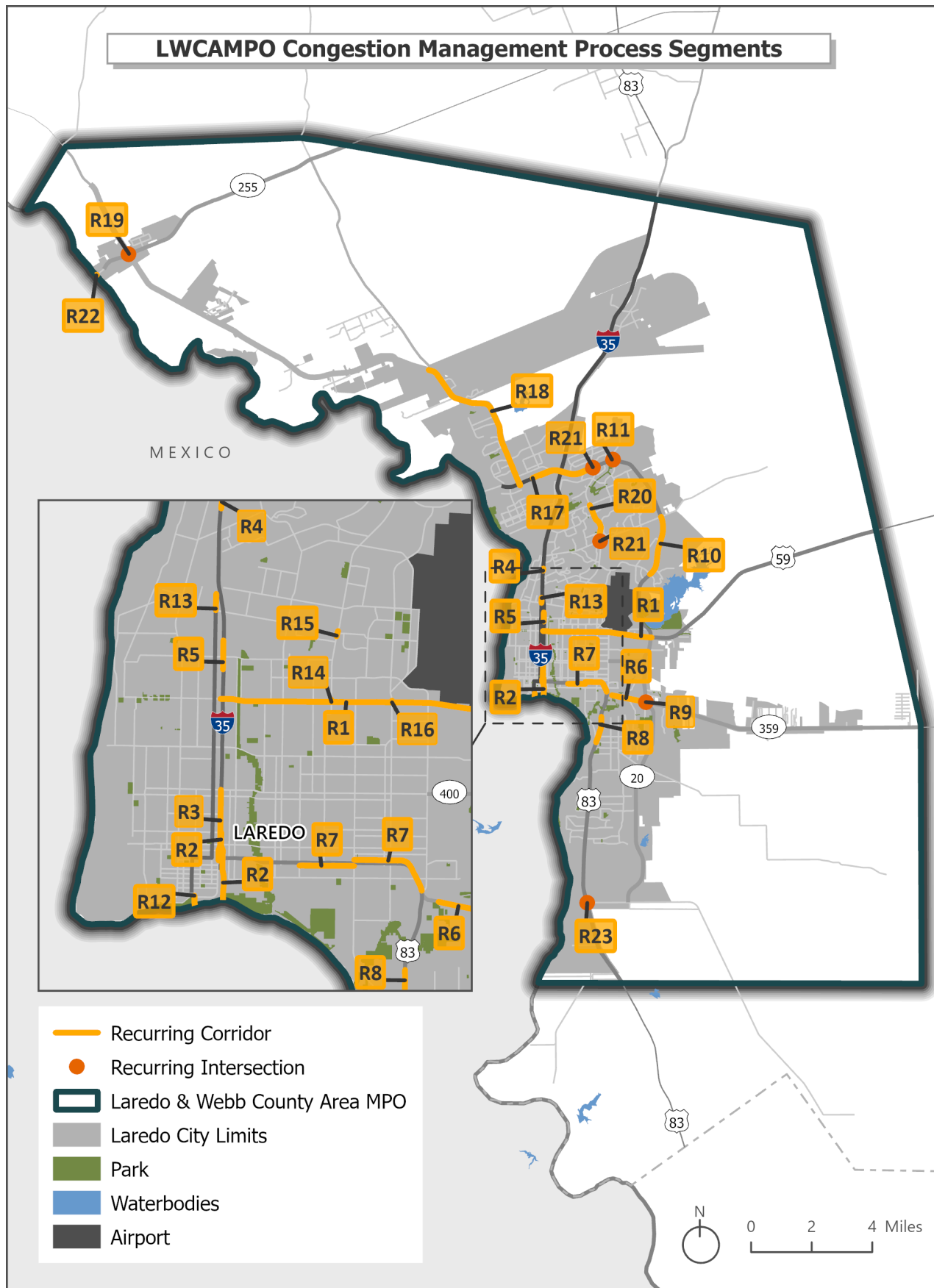
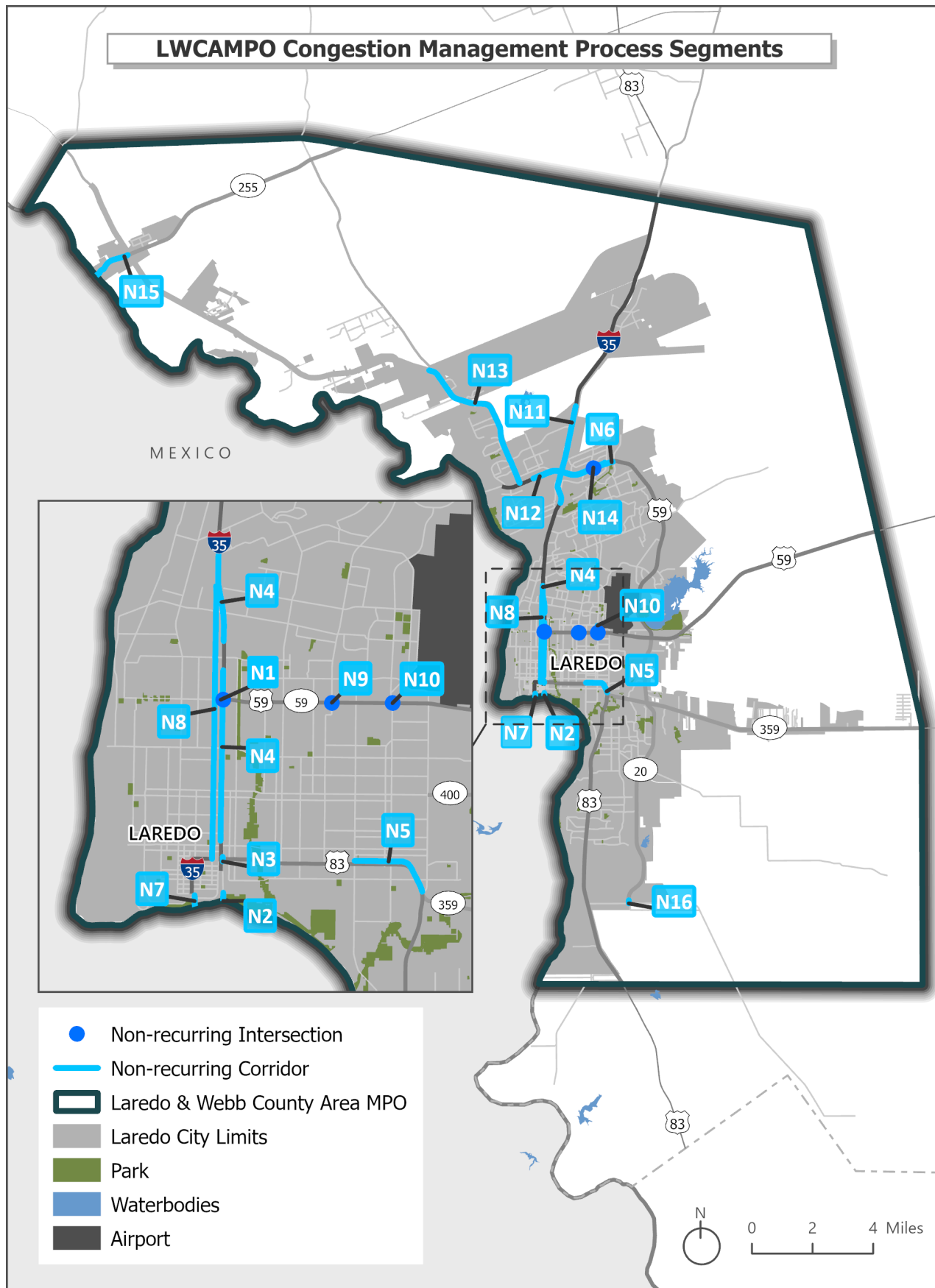


Figure 4: Map of Congestion Management Strategies for Non-recurring Congestion





Step 7: Program and Implementation

Implementation of CMP strategies occurs on three levels: system or regional, corridor, and project.

- **Regional-level** implementation of congestion management strategies occurs through inclusion of strategies in the fiscally constrained MTP and the TIP. The LWCAMPO is most influential at the regional level of implementation. Funding for implementation for roadway projects is typically sourced from the twelve (12) TxDOT categories of funding along with Federal Transit Administration (FTA) funding categories.
- At the **corridor level**, more specific strategies such as bicycle and pedestrian improvements and operational improvements can be assessed in studies and implemented using a variety of funding sources, including Federal funding streams such as the Surface Transportation Program (STP), National Highway System (NHS) funds, and the Congestion Mitigation and Air Quality Improvement (CMAQ) Program, as well as through state or local funding or other discretionary funding sources. The LWCAMPO coordinates and collaborates with partners such as the Regional Mobility Authority (RMA), TxDOT, El Metro, and the City of Laredo to implement specific strategies at the corridor level.
- For larger **projects**, particularly capacity-adding projects, demand management and operational strategies should also be analyzed, as part of the project development process, for incorporation into the project scope. Similar to corridor level implementation, the LWCAMPO coordinates and collaborates with partners such as the RMA, TxDOT, El Metro, and the City of Laredo to implement specific strategies at the project level.

This tiered approach to strategy implementation integrates the CMP into all aspects of MPO planning and allows a flexible and robust incorporation of congestion management. It also introduces the consideration of scale, i.e. the difference in scale between regional analysis and project analysis, and the notable challenges it poses on implementing the CMP. However, the CMP bridges this gap by translating system-level understanding to inform project-level decisions.

As previously noted, the LWCAMPO is most involved and influential in the regional prioritization and implementation of CMP strategies through the MTP and TIP. The LWCAMPO considers identification of federal or non-federal funding, for potential CMP-related programs and projects, as part of ongoing planning and programming and as part of MTP project selection and fiscally constrained project planning activities. As funding for the CMP, as well as the implementation of the selected strategies, is important to the success of the process and projects identified and included in the MTP require the consideration of a variety of objective criteria.



CONGESTION MANAGEMENT PROCESS

Establishing the linkage between the CMP and the long-range transportation process is important for developing cohesive solutions to regional transportation challenges. The recommendations from the CMP are reflected in the 2025-2050 MTP; specifically, the CMP was considered and incorporated throughout the project identification, evaluation, prioritization, and financially constrained project list.

As part of the MTP, all roadways within the CMP network were analyzed for technical evaluation of existing and future congestion issues and combined with input from stakeholders and the public. Additionally, CMP roadways requiring capacity or other related congestion management improvements were identified.

The LWCAMPO applied a set of adopted objective and subjective evaluation criteria to score the identified projects. The project evaluation criteria were developed and adopted as part of the development of the 2025-2050 MTP and were reviewed for alignment with its [the 2025-2050 MTP's] established goals, objectives, and performance measures as well as for adherence to FAST Act regulations.

Objective project evaluation criteria were scored by the LWCAMPO based on technical performance data determined for each criterion. Two criteria of the objective project evaluation include the contribution of the project to the CMP, as shown below:

- **System Reliability** - Provide an efficient surface transportation system that maintains travel time reliability and reduces congestion

Does the project address a currently congested facility? For new location roadways, does the project address a parallel facility that is currently congested? Is the project located on the CMP Network?

- LOS F - 10 Points
- LOS E - 8 Points
- LOS D - 6 Points
- LOS C - 4 Points
- LOS B - 2 Points
- LOS A - 0 Points
- Gives relief to a parallel facility that is LOS F – 10 points
- All bicycle, pedestrian, and transit improvements receive 10 points
- Located on CMP Network, receives 10 points automatically
- Connects to one CMP corridor – 2 points
- Connects to two or more CMP corridors – 4 points

- **Innovation and Technology** - Leverage latest research and technologies to enhance the transportation system

Does the project support alternative fuel stations and corridors? Does the project serve as a congestion management strategy from the Congestion Management Process (CMP)? Does the project deliver improvements through innovation and technology?

- LOS F - 10 Points
- Project is (or includes) CMP strategy - 10 points
- Project supports alternative fuel stations/corridors or delivers improvements through innovation and technology – 8 points
- No - 0 points



CONGESTION MANAGEMENT PROCESS

Throughout the planning process, the importance of CMP and related projects has been emphasized to the Technical and Policy Committees and the general public. These CMP-related projects are generally lower-cost strategies to improve congestion without adding capacity.

The programmed projects that are part of the fiscally constrained LWCAMPO 2025-2050 MTP Project List are shown in Table 7 (note: the table identifies which projects overlay with the CMP network). The LWCAMPO is committed to continued collaboration, at the regional, corridor, and project level, with implementation partners to advance the included CMP strategies into implementation. A map of the programmed projects as part of the fiscally constrained LWCAMPO 2025-2050 MTP is displayed in Figure 5.

Table 7: 2025-2050 MTP Fiscally Constrained Project List on CMP Network

Map #	Project Name	Let Year	Project Description	On CMP Network
1	SL 20 Interchange at Lomas Del Sur Blvd.	2025	Construction Of Interchange Improvement at Lomas Del Sur Blvd	✓
2	FM1472 / Flecha Lane	2025	Realignment Of Flecha and Las Cruces	✓
3	River Vega Trail	2025	Construction Of River Vega Multiuse Alternative Transportation Trail	
4	World Trade Bridge Expansion	2028	Preliminary Engineering and Construction For The Expansion Of The World Trade Bridge Consisting Of 8 Lanes By Building A New 8 Lanes By Building A New 8-Lane Bridge Adjacent To The Existing Bridge For A Total Of 16 Lanes After Completing Of The Project.	✓
5	NEVI Charging Station	2025	Install 8 Direct Current Fast Charge Ports Along the Electric Alternative Fuel Corridors (IH 35)	✓
6	Replace Bridge at Uniroyal Dr.	2026	Ih-35 Reconstruction & Interchanges (Reconstructed/New) @Uniroyal Dr & SH84	✓
7	Direct Connector #3 and # 6	2026	New Direct Connector (#3, #4 And #6) Northbound And Southbound IH35 To US59 Eastbound	✓



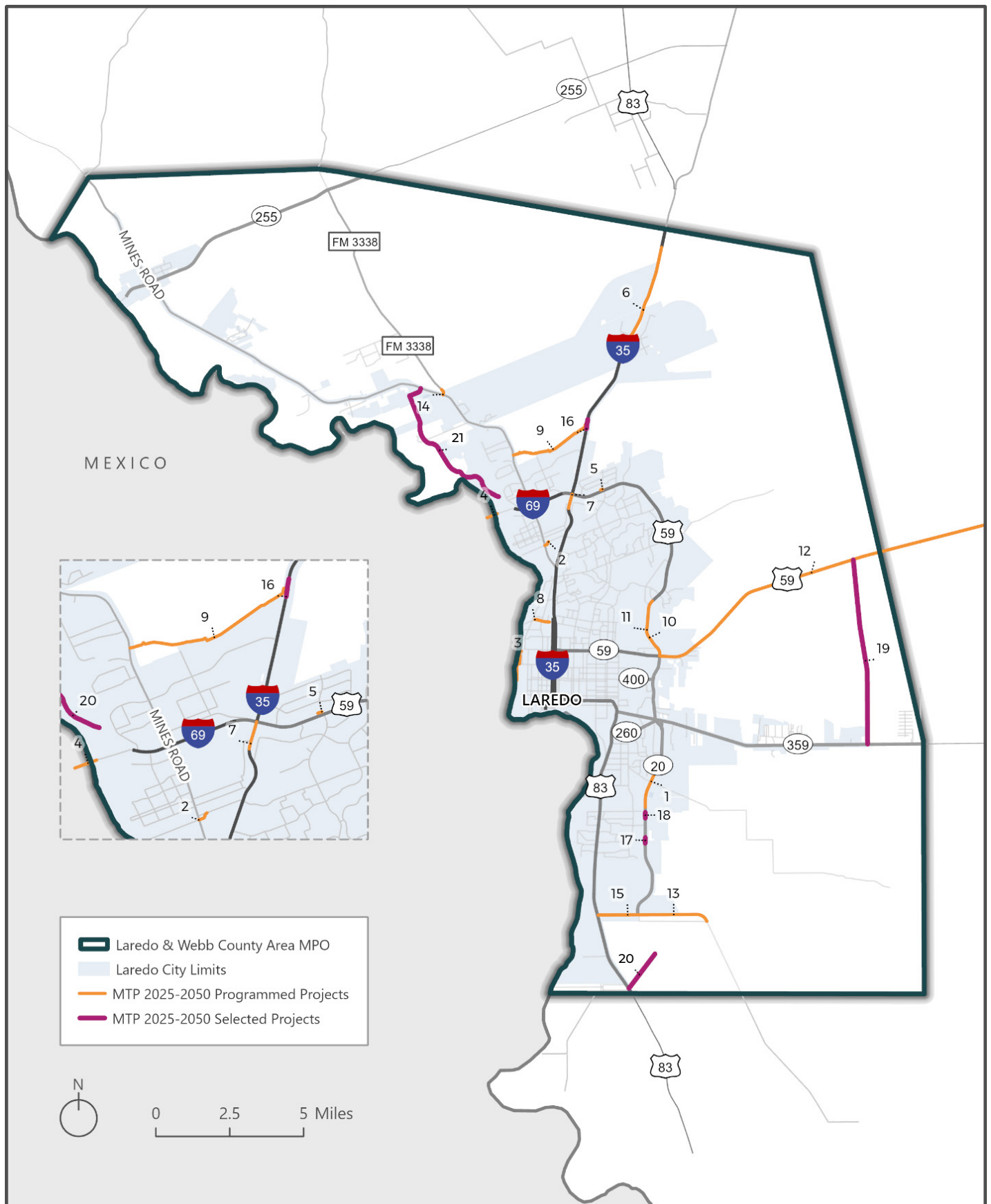
CONGESTION MANAGEMENT PROCESS

Map #	Project Name	Let Year	Project Description	On CMP Network
8	Calton and Santa Maria Interchange	2026	Construction of a Grade Separation Interchange	✓
9	Vallecillo Road	2027	Construction of Vallecillo Road 4-Lane Off-System Hwy with Continuous Turn Lane	
10	US 59 (Loop 20) Interchange at Airport	2028	Construction of Interchange at Airport	✓
11	US 59 (Loop 20) Reconstruction	2028	Converting a 6-Lane Non-Freeway Facility to a 6-Lane Freeway Facility with Auxiliary Lanes and Frontage Roads	✓
12	US 59 Widening (Future IH 69)	2031	Widen Existing Roadway to 4-Lane Divided (Future I-69 Corridor)	✓
13	Mangana-Hein Expansion Segment 1	2033	Widen Mangana-Hein Roadway From 2 Lanes To 4 Lanes	
14	FM 3338 / FM 1472 Realignment	2033	Realignment Of Intersection FM 1472/FM 3338	✓
15	Mangana-Hein Expansion Segment 2	2034	Widen Mangana-Hein Roadway From 2 Lanes To 4 Lanes	✓
16	Vallecillo Road Interchange at IH 35	2030	New Interchange at Vallecillo Roadway	✓
17	SL 20 Interchange at Cielito Lindo Blvd.	2030	Construction Of Interchange Improvement at Cielito Lindo Blvd	✓
18	SL 20 Interchange at Sierra Vista Blvd.	2030	Construction Of Interchange Improvement at Sierra Vista Blvd	✓
19	Laredo Outer Loop, Segment 5	2034	Construction New 4-Lane Divided Highway - Future Laredo Outer Loop Segment 5	
20	Loop 20 Extension, Segment 3B	2034	Construction New 4-Lane Divided Highway Rio Bravo Extension Segment 3B	
21	River Road	2040	New Location Roadway Serving as A Non-Commercial Parallel Alternate Route to FM 1472 That Will Also Have Connectivity To FM 1472 From Existing Developments Between The Two. This Is 4-Lane Divided with Shared Use Paths on Both Sides.	

Source: Laredo and Webb County Area 2025-2050 Metropolitan Transportation Plan



Figure 5: Map of 20 25 -20 50 MTP Fiscally Constrained Project List



Source: Laredo and Webb County Area 2025-2050 Metropolitan Transportation Plan



Step 8: Strategy Effectiveness

Evaluation of strategy effectiveness is an on-going process as part of the living CMP document. The primary goal of this step is to ensure that implemented strategies are effective at addressing congestion as intended, and to make changes based on the findings as necessary. Two general approaches are utilized to evaluate strategy effectiveness:

- **System-level performance evaluation** — Regional analysis of historical trends to identify improvement or degradation in system performance, in relation to objectives.
- **Strategy effectiveness evaluation** — Project-level or program-level analysis of conditions before and after the implementation of a congestion mitigation effort.

How effectively have implemented strategies achieved congestion management objectives?

23 CFR 450.322 requires that the CMP include: "Implementation of a process for periodic assessment of the effectiveness of implemented strategies, in terms of the area's established performance measures. The results of this evaluation shall be provided to decisionmakers and the public to provide guidance on selection of effective strategies for future implementation."

Several tools are available to aid the LWCAMPO in on-going evaluation of congestion management strategy effectiveness. Tools and techniques may include:

- Travel demand models
- Sketch planning tools
- Past evaluations of strategies
- Analytical/deterministic tools (HCM based)
- Traffic signal optimization tools
- Simulation models
- Dynamic Traffic Assignment (DTA)
- Vehicle-probe data tools

Findings from this evaluation help to indicate whether specific strategies or efforts lead to improvements in congested conditions. In tandem with the periodic and ongoing data collection efforts in the CMP, the [CMP] strategy evaluation process is an important step in the feedback loop that provides local decision-makers with valuable information for adjusting current strategies or envisioning new strategies, i.e. PM analysis, recent FM1472 traffic signal optimization. The aforementioned PM Analysis is submitted by the MPO to USDOT; this information will provide a continual method to evaluate methods and progress and as input into further discussions with the MPO Technical and Policy Committees and the public on proposed strategies identification and evaluations.



CONGESTION MANAGEMENT PROCESS

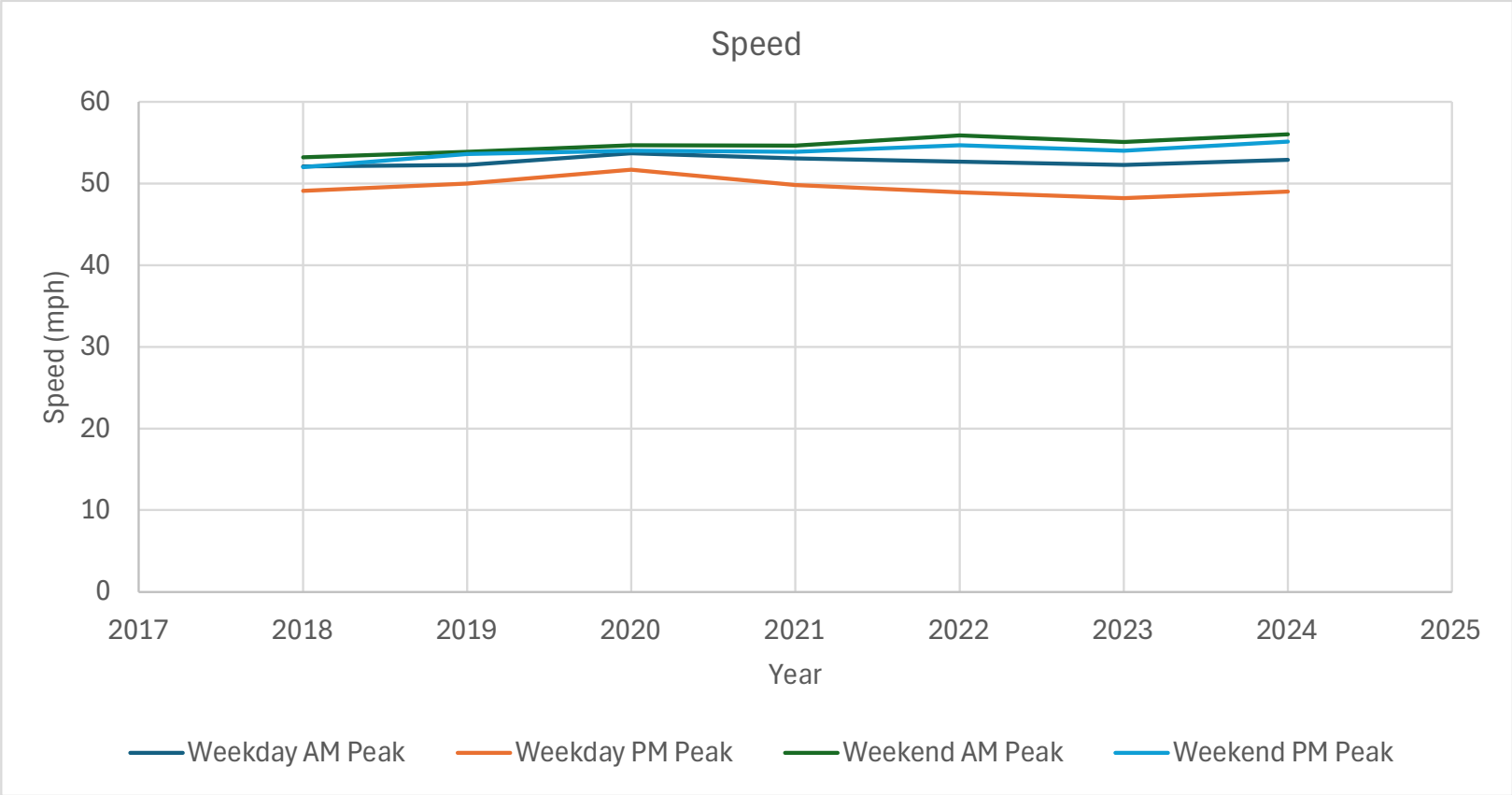
Although the CMP does not have an update cycle established by federal regulations, both the four-year certification review cycle and the five-year MTP update cycle (for MPOs in attainment of air quality standards) for each TMA provide a baseline for a re-evaluation/update cycle in the absence of an identified requirement. The CMP must, at a minimum, be updated often enough to provide relevant, recent information as an input to each MTP update. To establish a routine CMP review, the LWCAMPO has committed to linking CMP updates to the MTP development cycle. This linkage to the MTP allows the update to the CMP to inform the development and selection of projects in the MTP that are inclusive of needed congestion management strategies.

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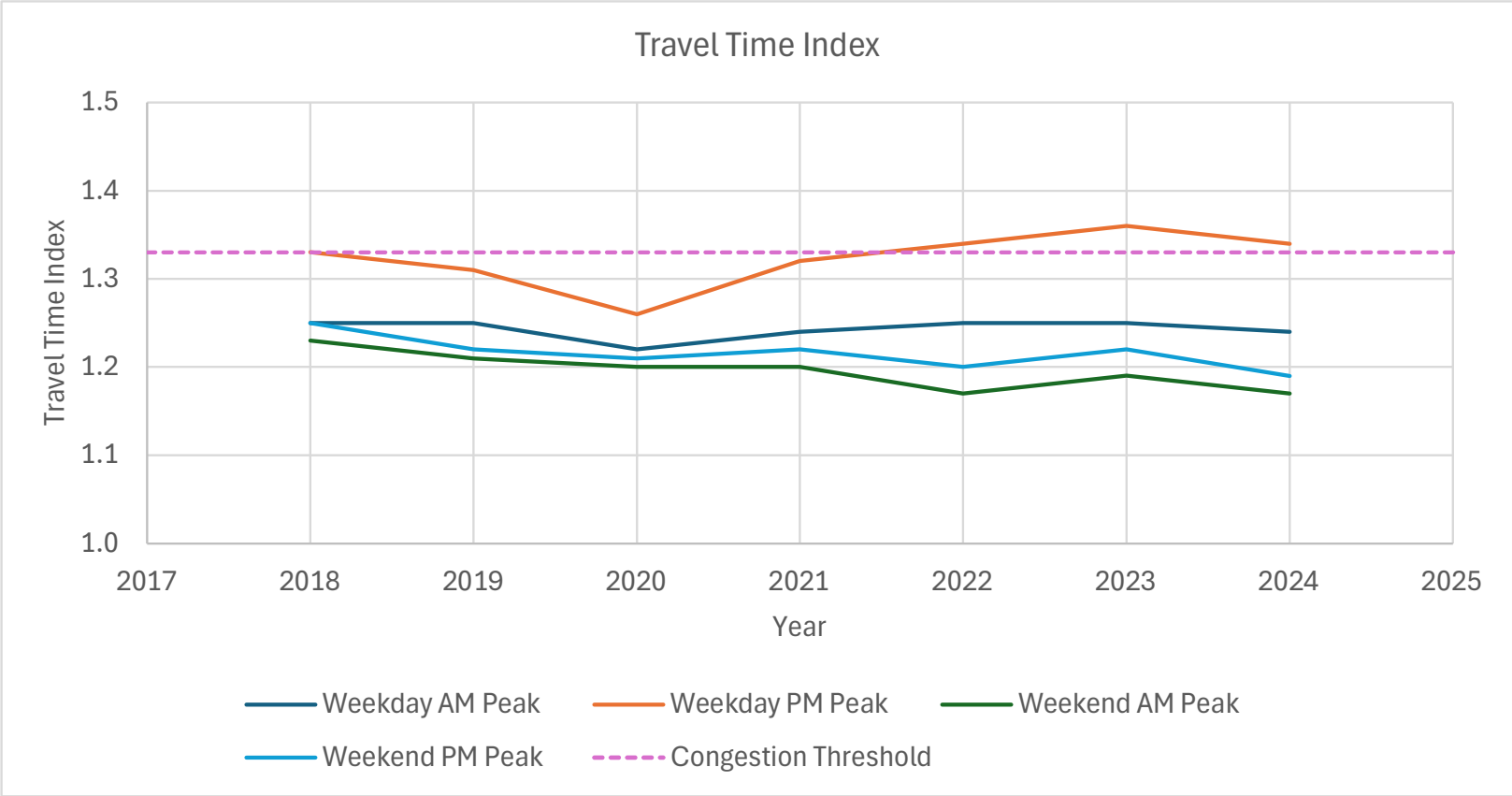


CONGESTION MANAGEMENT PROCESS

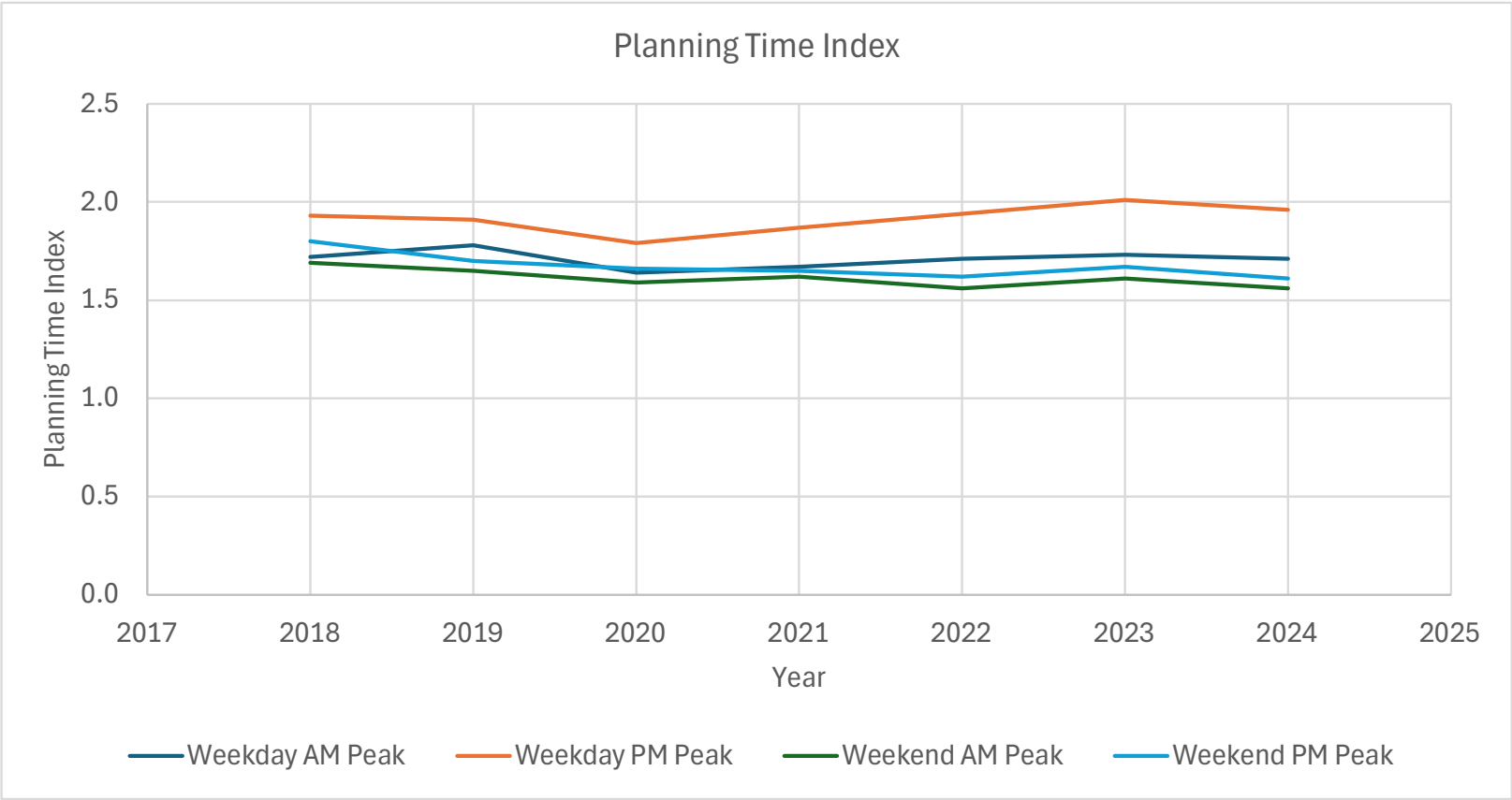
Appendix A: Systemwide Performance



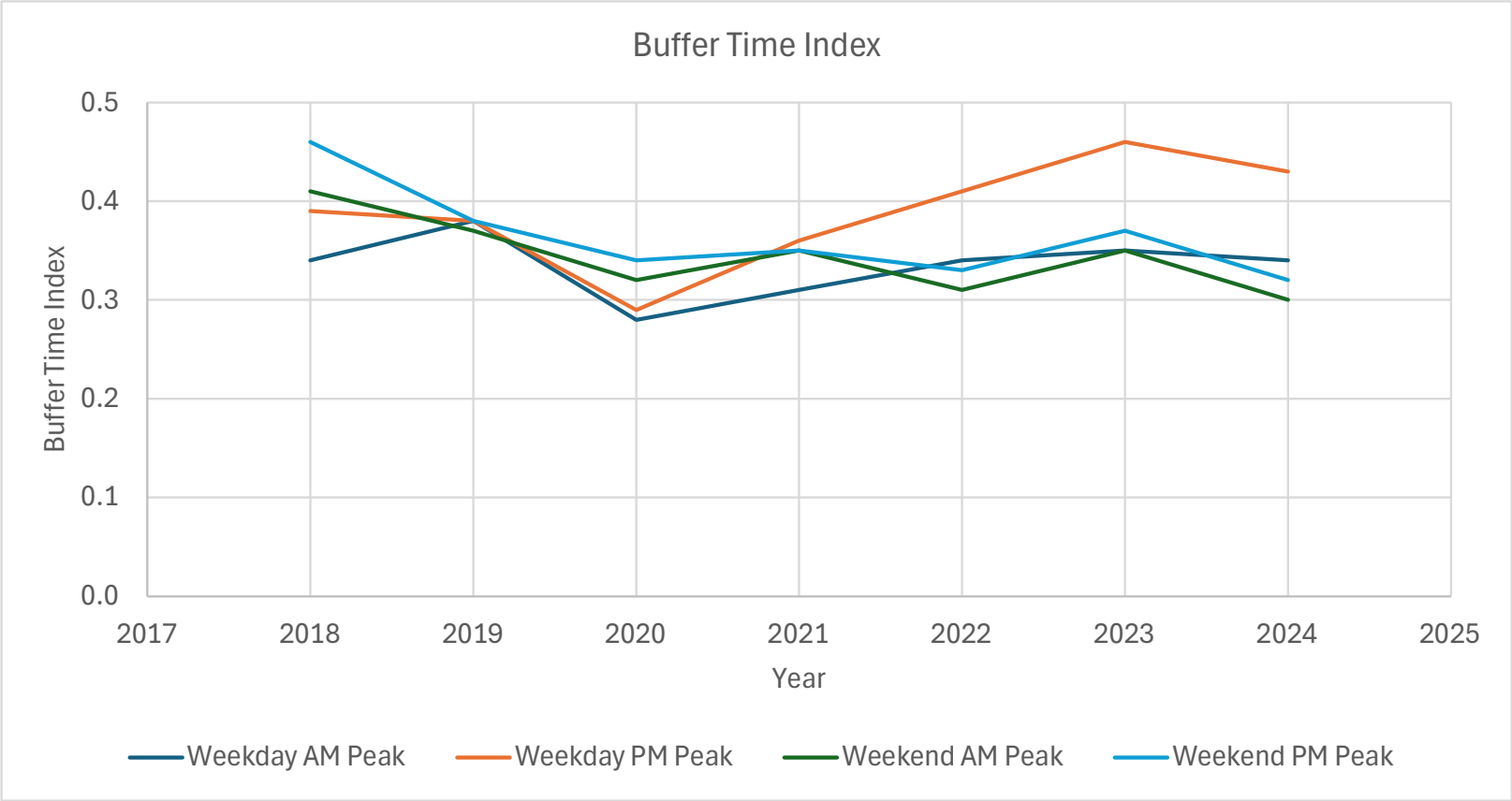
Year	Speed (mph)			
	Weekday		Weekend	
	AM Peak	PM Peak	AM Peak	PM Peak
2018	52	49	53	52
2019	52	50	54	54
2020	54	52	55	54
2021	53	50	55	54
2022	53	49	56	55
2023	52	48	55	54
2024	53	49	56	55



Year	Travel Time Index			
	Weekday		Weekend	
	AM Peak	PM Peak	AM Peak	PM Peak
2018	1.25	1.33	1.23	1.25
2019	1.25	1.31	1.21	1.22
2020	1.22	1.26	1.20	1.21
2021	1.24	1.32	1.20	1.22
2022	1.25	1.34	1.17	1.20
2023	1.25	1.36	1.19	1.22
2024	1.24	1.34	1.17	1.19



Year	Planning Time Index			
	Weekday		Weekend	
	AM Peak	PM Peak	AM Peak	PM Peak
2018	1.72	1.93	1.69	1.80
2019	1.78	1.91	1.65	1.70
2020	1.64	1.79	1.59	1.66
2021	1.67	1.87	1.62	1.65
2022	1.71	1.94	1.56	1.62
2023	1.73	2.01	1.61	1.67
2024	1.71	1.96	1.56	1.61



Year	Buffer Time Index			
	Weekday		Weekend	
	AM Peak	PM Peak	AM Peak	PM Peak
2018	0.34	0.39	0.41	0.46
2019	0.38	0.38	0.37	0.38
2020	0.28	0.29	0.32	0.34
2021	0.31	0.36	0.35	0.35
2022	0.34	0.41	0.31	0.33
2023	0.35	0.46	0.35	0.37
2024	0.34	0.43	0.30	0.32

Table of Contents	Contents: Overview		Step 1	Step 2
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List of Appendices: Appendix A		Appendix B	Appendix C	Appendix D



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Appendix B: Corridor Performance

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2024 Performance and Historic Trends



Highway	Segment	Direction	TMC Code	Cross Street and/or Interchange	Period	TTI		LOTTR		TTTR		PHED	
						2024	Trend 2018-2024	2024	Trend 2018-2024	2024	Trend 2018-2024	2024	Trend 2018-2024
I-35	From Border Crossing to Mines Rd	N	112P16149	Mexico/United States	6:00 am - 10:00 am	3.63		1.53				3506	
					10:00 am - 4:00 pm	4.07		1.75					
					4:00 pm - 8:00 pm	3.11		2.44					
					Overnight	2.01		1.67					
					Weekend	3.26		1.62					
			112+16150	US-83/Matamoros St	6:00 am - 10:00 am	2.19		1.32				24491	
					10:00 am - 4:00 pm	2.16		1.33					
					4:00 pm - 8:00 pm	2.34		1.27					
					Overnight	2.32		1.23					
					Weekend	2.32		1.27					
			112P16150	US-83/Matamoros St	6:00 am - 10:00 am	2.23		1.60		2.65		6266	
					10:00 am - 4:00 pm	2.05		1.44		2.67			
					4:00 pm - 8:00 pm	2.23		1.58		2.88			
					Overnight	2.40		1.36		2.71			
					Weekend	2.35		1.71		2.80			
			112+05257	Washington St	6:00 am - 10:00 am								
					10:00 am - 4:00 pm								
					4:00 pm - 8:00 pm								
					Overnight								
					Weekend								
			112+05258	Moctezuma St/Exit 1A	6:00 am - 10:00 am	1.42		1.17		1.79		198	
					10:00 am - 4:00 pm	1.50		1.16		1.82			
					4:00 pm - 8:00 pm	1.45		1.14		1.83			
					Overnight	1.53		1.19		2.04			
					Weekend	1.48		1.16		1.93			
			112P05258	Moctezuma St/Exit 1A	6:00 am - 10:00 am	1.28		1.18		1.68		0	
					10:00 am - 4:00 pm	1.32		1.16		1.74			
					4:00 pm - 8:00 pm	1.27		1.12		1.70			
					Overnight	1.33		1.20		1.96			
					Weekend	1.28		1.16		1.89			
			112+05259	Scott St/Exit 1A	6:00 am - 10:00 am	1.25		1.14		1.59		8	
					10:00 am - 4:00 pm	1.29		1.12		1.66			
					4:00 pm - 8:00 pm	1.24		1.10		1.67			
					Overnight	1.29		1.16		1.83			
					Weekend	1.25		1.12		1.74			
			112P05259	Scott St/Exit 1A	6:00 am - 10:00 am	1.20		1.09		1.36		31	
					10:00 am - 4:00 pm	1.23		1.08		1.36			
					4:00 pm - 8:00 pm	1.19		1.07		1.42			
					Overnight	1.25		1.12		1.59			
					Weekend	1.19		1.08		1.49			

TTI: Travel Time Index; LOTTR: Level of Travel Time Reliability; TTTR: Truck Travel Time Reliability; PHED: Peak-Hour Excessive Delay; PHED value of 0 indicates that travel time is less than Excessive Delay Threshold Travel Time

2024 Performance and Historic Trends



Highway	Segment	Direction	TMC Code	Cross Street and/or Interchange	Period	TTI		LOTTR		TTTR		PHED	
						2024	Trend 2018-2024	2024	Trend 2018-2024	2024	Trend 2018-2024	2024	Trend 2018-2024
I-35	From Border Crossing to Mines Rd	N	112+05260	Sanchez St/Exit 1B	6:00 am - 10:00 am	1.19		1.07		1.29		9	
					10:00 am - 4:00 pm	1.22		1.06		1.26			
					4:00 pm - 8:00 pm	1.19		1.06		1.30			
					Overnight	1.21		1.09		1.43			
					Weekend	1.17		1.07		1.38			
			112P05260	Sanchez St/Exit 1B	6:00 am - 10:00 am	1.17		1.07		1.25		9	
					10:00 am - 4:00 pm	1.20		1.06		1.23			
					4:00 pm - 8:00 pm	1.17		1.05		1.28			
					Overnight	1.19		1.08		1.38			
					Weekend	1.15		1.07		1.33			
			112+05261	Park St/Exit 1B	6:00 am - 10:00 am	1.18		1.07		1.24		9	
					10:00 am - 4:00 pm	1.20		1.05		1.22			
					4:00 pm - 8:00 pm	1.18		1.05		1.26			
					Overnight	1.19		1.07		1.37			
					Weekend	1.16		1.06		1.32			
			112P05261	Park St/Exit 1B	6:00 am - 10:00 am	1.16		1.06		1.19		65	
					10:00 am - 4:00 pm	1.18		1.05		1.18			
					4:00 pm - 8:00 pm	1.17		1.05		1.23			
					Overnight	1.17		1.07		1.30			
					Weekend	1.14		1.06		1.25			
			112+05262	US-59/Exit 2	6:00 am - 10:00 am	1.16		1.05		1.16		70	
					10:00 am - 4:00 pm	1.18		1.04		1.15			
					4:00 pm - 8:00 pm	1.17		1.05		1.19			
					Overnight	1.16		1.06		1.27			
					Weekend	1.14		1.05		1.22			
			112P05262	US-59/Exit 2	6:00 am - 10:00 am	1.14		1.05		1.15		171	
					10:00 am - 4:00 pm	1.15		1.04		1.14			
					4:00 pm - 8:00 pm	1.14		1.04		1.18			
					Overnight	1.14		1.05		1.24			
					Weekend	1.12		1.05		1.22			
			112+05263	Calton Rd/Exit 3A	6:00 am - 10:00 am	1.20		1.06		1.22		46	
					10:00 am - 4:00 pm	1.23		1.06		1.25			
					4:00 pm - 8:00 pm	1.23		1.06		1.32			
					Overnight	1.19		1.07		1.39			
					Weekend	1.17		1.07		1.31			
			112P05263	Calton Rd/Exit 3A	6:00 am - 10:00 am	1.14		1.05		1.15		131	
					10:00 am - 4:00 pm	1.15		1.04		1.14			
					4:00 pm - 8:00 pm	1.16		1.05		1.19			
					Overnight	1.14		1.05		1.25			
					Weekend	1.12		1.06		1.21			

TTI: Travel Time Index; LOTTR: Level of Travel Time Reliability; TTTR: Truck Travel Time Reliability; PHED: Peak-Hour Excessive Delay; PHED value of 0 indicates that travel time is less than Excessive Delay Threshold Travel Time

2024 Performance and Historic Trends



Highway	Segment	Direction	TMC Code	Cross Street and/or Interchange	Period	TTI		LOTTR		TTTR		PHED	
						2024	Trend 2018-2024	2024	Trend 2018-2024	2024	Trend 2018-2024	2024	Trend 2018-2024
I-35	From Border Crossing to Mines Rd	N	112+05264	Mann Rd/Exit 3B	6:00 am - 10:00 am	1.20		1.07		1.22		103	
					10:00 am - 4:00 pm	1.25		1.06		1.23			
					4:00 pm - 8:00 pm	1.25		1.06		1.30			
					Overnight	1.18		1.08		1.41			
					Weekend	1.19		1.08		1.39			
			112P05264	Mann Rd/Exit 3B	6:00 am - 10:00 am	1.15		1.06		1.16		204	
					10:00 am - 4:00 pm	1.20		1.05		1.14			
					4:00 pm - 8:00 pm	1.20		1.05		1.20			
					Overnight	1.14		1.06		1.26			
					Weekend	1.14		1.06		1.24			
			112+05265	Del Mar Blvd/Exit 4	6:00 am - 10:00 am	1.19		1.08		1.24		0	
					10:00 am - 4:00 pm	1.31		1.07		1.22			
					4:00 pm - 8:00 pm	1.34		1.08		1.28			
					Overnight	1.19		1.11		1.42			
					Weekend	1.20		1.10		1.39			
			112P05265	Del Mar Blvd/Exit 4	6:00 am - 10:00 am	1.15		1.07		1.18		0	
					10:00 am - 4:00 pm	1.23		1.06		1.16			
					4:00 pm - 8:00 pm	1.25		1.06		1.20			
					Overnight	1.15		1.09		1.33			
					Weekend	1.14		1.08		1.27			
		S	112-05264	Mann Rd/Exit 3B	6:00 am - 10:00 am	1.09		1.05		1.15		52	
					10:00 am - 4:00 pm	1.12		1.05		1.12			
					4:00 pm - 8:00 pm	1.16		1.06		1.21			
					Overnight	1.10		1.05		1.23			
					Weekend	1.09		1.07		1.23			
			112N05264	Mann Rd/Exit 3B	6:00 am - 10:00 am	1.10		1.05		1.16		246	
					10:00 am - 4:00 pm	1.15		1.05		1.14			
					4:00 pm - 8:00 pm	1.20		1.07		1.24			
					Overnight	1.11		1.05		1.22			
					Weekend	1.11		1.07		1.24			
			112-05263	Calton Rd/Exit 3A	6:00 am - 10:00 am	1.13		1.06		1.26		244	
					10:00 am - 4:00 pm	1.20		1.07		1.28			
					4:00 pm - 8:00 pm	1.33		1.12		1.51			
					Overnight	1.15		1.06		1.31			
					Weekend	1.15		1.08		1.38			
			112N05263	Calton Rd/Exit 3A	6:00 am - 10:00 am	1.10		1.05		1.16		761	
					10:00 am - 4:00 pm	1.14		1.05		1.12			
					4:00 pm - 8:00 pm	1.22		1.07		1.29			
					Overnight	1.13		1.05		1.22			
					Weekend	1.10		1.05		1.20			

TTI: Travel Time Index; LOTTR: Level of Travel Time Reliability; TTTR: Truck Travel Time Reliability; PHED: Peak-Hour Excessive Delay; PHED value of 0 indicates that travel time is less than Excessive Delay Threshold Travel Time

2024 Performance and Historic Trends



Highway	Segment	Direction	TMC Code	Cross Street and/or Interchange	Period	TTI		LOTTR		TTTR		PHED	
						2024	Trend 2018-2024	2024	Trend 2018-2024	2024	Trend 2018-2024	2024	Trend 2018-2024
I-35	From Border Crossing to Mines Rd	S	112-05262	US-59/Exit 2	6:00 am - 10:00 am	1.18		1.07		1.36		385	
					10:00 am - 4:00 pm	1.23		1.07		1.32			
					4:00 pm - 8:00 pm	1.39		1.14		1.66			
					Overnight	1.20		1.08		1.35			
					Weekend	1.17		1.07		1.32			
			112N05262	US-59/Exit 2	6:00 am - 10:00 am	1.10		1.05		1.17		670	
					10:00 am - 4:00 pm	1.14		1.05		1.15			
					4:00 pm - 8:00 pm	1.23		1.07		1.31			
					Overnight	1.16		1.06		1.28			
					Weekend	1.12		1.06		1.21			
			112-05261	Park St/Exit 1B	6:00 am - 10:00 am	1.13		1.05		1.20		2065	
					10:00 am - 4:00 pm	1.14		1.05		1.17			
					4:00 pm - 8:00 pm	1.36		1.10		1.64			
					Overnight	1.17		1.06		1.28			
					Weekend	1.14		1.06		1.23			
			112N05261	Park St/Exit 1B	6:00 am - 10:00 am	1.12		1.07		1.26		1917	
					10:00 am - 4:00 pm	1.16		1.07		1.30			
					4:00 pm - 8:00 pm	1.41		1.15		1.83			
					Overnight	1.16		1.09		1.34			
					Weekend	1.16		1.08		1.37			
			112-05260	Sanchez St/Exit 1B	6:00 am - 10:00 am	1.11		1.08		1.35		14	
					10:00 am - 4:00 pm	1.21		1.10		1.50			
					4:00 pm - 8:00 pm	1.62		1.19		2.40			
					Overnight	1.18		1.10		1.41			
					Weekend	1.15		1.09		1.51			
			112N05260	Sanchez St/Exit 1B	6:00 am - 10:00 am	1.14		1.08		1.39		877	
					10:00 am - 4:00 pm	1.27		1.13		1.61			
					4:00 pm - 8:00 pm	1.79		1.27		3.11			
					Overnight	1.21		1.11		1.49			
					Weekend	1.18		1.10		1.60			
			112-05259	Scott St/Exit 1A	6:00 am - 10:00 am	1.16		1.10		1.44		264	
					10:00 am - 4:00 pm	1.32		1.15		1.70			
					4:00 pm - 8:00 pm	1.90		1.35		3.38			
					Overnight	1.22		1.12		1.54			
					Weekend	1.20		1.11		1.68			
			112N05259	Scott St/Exit 1A	6:00 am - 10:00 am	1.34		1.20		1.70		60466	
					10:00 am - 4:00 pm	2.56		2.00		4.84			
					4:00 pm - 8:00 pm	5.38		1.95		3.10			
					Overnight	1.37		1.19		1.93			
					Weekend	1.48		1.35		2.98			

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2024 Performance and Historic Trends



Highway	Segment	Direction	TMC Code	Cross Street and/or Interchange	Period	TTI		LOTTR		TTTR		PHED	
						2024	Trend 2018-2024	2024	Trend 2018-2024	2024	Trend 2018-2024	2024	Trend 2018-2024
I-35	From Border Crossing to Mines Rd	S	112-05258	Moctezuma St/Exit 1A	6:00 am - 10:00 am	1.53		1.30		2.24		0	
					10:00 am - 4:00 pm	3.75		3.50		6.32			
					4:00 pm - 8:00 pm	8.03		1.44		1.75			
					Overnight	1.49		1.23		2.37			
					Weekend	1.85		1.65		6.00			
			112N05258	Moctezuma St/Exit 1A	6:00 am - 10:00 am	1.70		1.38		2.50		27350	
					10:00 am - 4:00 pm	4.59		3.58		5.16			
					4:00 pm - 8:00 pm	8.83		1.25		1.47			
					Overnight	1.57		1.26		2.59			
					Weekend	2.18		2.31		6.84			
			112-05257	Washington St	6:00 am - 10:00 am	2.58		1.38		2.34		60100	
					10:00 am - 4:00 pm	4.73		1.48		2.07			
					4:00 pm - 8:00 pm	6.21		1.16		1.47			
					Overnight	2.54		1.30		2.50			
					Weekend	3.22		1.67		2.44			
			112-16150	US-83/Matamoros St	6:00 am - 10:00 am	2.06		1.47		2.50		12625	
					10:00 am - 4:00 pm	2.70		1.38		1.89			
					4:00 pm - 8:00 pm	3.34		1.34		1.88			
					Overnight	1.99		1.32		2.33			
					Weekend	2.22		1.50		2.25			
			112N16150	US-83/Matamoros St	6:00 am - 10:00 am	1.84		1.52		2.35		12834	
					10:00 am - 4:00 pm	2.18		1.36		1.74			
					4:00 pm - 8:00 pm	2.79		1.38		2.00			
					Overnight	2.00		1.28		2.36			
					Weekend	2.09		1.50		2.14			
			112-16149	Mexico/United States	6:00 am - 10:00 am	1.20		1.27				19273	
					10:00 am - 4:00 pm	1.40		1.21					
					4:00 pm - 8:00 pm	1.75		1.29					
					Overnight	1.56		1.27					
					Weekend	1.52		1.24					
			112N16149	Mexico/United States	6:00 am - 10:00 am	1.26		1.26				4964	
					10:00 am - 4:00 pm	1.41		1.46					
					4:00 pm - 8:00 pm	3.57		1.69					
					Overnight	1.87		1.72					
					Weekend	1.73		1.92					
I-35	From I-69W To US Hwy 83	N	112+05266	Shiloh Dr/Shiloh Rd	6:00 am - 10:00 am	1.11		1.07		1.18		1594	
					10:00 am - 4:00 pm	1.13		1.05		1.12			
					4:00 pm - 8:00 pm	1.15		1.06		1.16			
					Overnight	1.13		1.07		1.26			
					Weekend	1.10		1.07		1.21			

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2024 Performance and Historic Trends



Highway	Segment	Direction	TMC Code	Cross Street and/or Interchange	Period	TTI		LOTTR		TTTR		PHED	
						2024	Trend 2018-2024	2024	Trend 2018-2024	2024	Trend 2018-2024	2024	Trend 2018-2024
I-35	From I-69W To US Hwy 83	N	112P05266	Shiloh Dr/Shiloh Rd	6:00 am - 10:00 am	1.17		1.08		1.22		1701	
					10:00 am - 4:00 pm	1.19		1.07		1.13			
					4:00 pm - 8:00 pm	1.21		1.08		1.22			
					Overnight	1.16		1.10		1.33			
					Weekend	1.11		1.08		1.20			
			112+05267	TX-20-LOOP/Exit 8	6:00 am - 10:00 am	1.16		1.10		1.26		1323	
					10:00 am - 4:00 pm	1.23		1.08		1.16			
					4:00 pm - 8:00 pm	1.31		1.11		1.39			
					Overnight	1.20		1.13		1.42			
					Weekend	1.14		1.09		1.22			
			112P05267	TX-20-LOOP/Exit 8	6:00 am - 10:00 am	1.07		1.07		1.15		524	
					10:00 am - 4:00 pm	1.15		1.06		1.11			
					4:00 pm - 8:00 pm	1.19		1.07		1.18			
					Overnight	1.14		1.08		1.23			
					Weekend	1.11		1.07		1.16			
			112+05268	Uniroyal Interchange / Exit 13	6:00 am - 10:00 am	1.06		1.06		1.10			
					10:00 am - 4:00 pm	1.17		1.07		1.18			
					4:00 pm - 8:00 pm	1.12		1.05		1.09			
					Overnight	1.08		1.05		1.13			
					Weekend	1.06		1.04		1.08			
			112P05268	Uniroyal Interchange / Exit 13	6:00 am - 10:00 am	1.03		1.05		1.13			
					10:00 am - 4:00 pm	1.09		1.04		1.10			
					4:00 pm - 8:00 pm	1.10		1.04		1.10			
					Overnight	1.08		1.04		1.16			
					Weekend	1.06		1.04		1.11			
			112+05269	US-83/Exit 18	6:00 am - 10:00 am	1.01		1.03		1.07			
					10:00 am - 4:00 pm	1.04		1.03		1.06			
					4:00 pm - 8:00 pm	1.05		1.03		1.06			
					Overnight	1.06		1.03		1.09			
					Weekend	1.04		1.04		1.08			
		S	112-05268	Uniroyal Interchange / Exit 13	6:00 am - 10:00 am	1.04		1.03		1.06			
					10:00 am - 4:00 pm	1.05		1.03		1.06			
					4:00 pm - 8:00 pm	1.04		1.04		1.07			
					Overnight	1.06		1.02		1.08			
					Weekend	1.03		1.03		1.06			
			112N05268	Uniroyal Interchange / Exit 13	6:00 am - 10:00 am	1.05		1.03		1.07			
					10:00 am - 4:00 pm	1.07		1.04		1.08			
					4:00 pm - 8:00 pm	1.05		1.04		1.10			
					Overnight	1.07		1.03		1.11			
					Weekend	1.04		1.04		1.09			

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2024 Performance and Historic Trends



Highway	Segment	Direction	TMC Code	Cross Street and/or Interchange	Period	TTI		LOTTR		TTTR		PHED	
						2024	Trend 2018-2024	2024	Trend 2018-2024	2024	Trend 2018-2024	2024	Trend 2018-2024
I-35	From I-69W To US Hwy 83	S	112-05267	TX-20-LOOP/Exit 8	6:00 am - 10:00 am	1.07		1.04		1.06			
					10:00 am - 4:00 pm	1.09		1.04		1.04			
					4:00 pm - 8:00 pm	1.09		1.05		1.07			
					Overnight	1.09		1.05		1.12			
					Weekend	1.05		1.05		1.08			
			112N05267	TX-20-LOOP/Exit 8	6:00 am - 10:00 am	1.08		1.06		1.15		907	
					10:00 am - 4:00 pm	1.09		1.05		1.08			
					4:00 pm - 8:00 pm	1.14		1.08		1.42			
					Overnight	1.13		1.07		1.29			
					Weekend	1.06		1.06		1.13			
			112-05266	Shiloh Dr/Shiloh Rd	6:00 am - 10:00 am	1.12		1.09		1.20		414	
					10:00 am - 4:00 pm	1.17		1.07		1.13			
					4:00 pm - 8:00 pm	1.20		1.08		1.20			
					Overnight	1.14		1.09		1.31			
					Weekend	1.10		1.08		1.20			
			112N05266	Shiloh Dr/Shiloh Rd	6:00 am - 10:00 am	1.08		1.07		1.14		445	
					10:00 am - 4:00 pm	1.12		1.06		1.09			
					4:00 pm - 8:00 pm	1.13		1.07		1.15			
					Overnight	1.12		1.07		1.22			
					Weekend	1.08		1.07		1.16			
			112-05265	Del Mar Blvd/Exit 4	6:00 am - 10:00 am	1.08		1.05		1.14		190	
					10:00 am - 4:00 pm	1.12		1.05		1.10			
					4:00 pm - 8:00 pm	1.13		1.06		1.15			
					Overnight	1.13		1.07		1.23			
					Weekend	1.08		1.07		1.16			
			112N05265	Del Mar Blvd/Exit 4	6:00 am - 10:00 am	1.09		1.05		1.18		233	
					10:00 am - 4:00 pm	1.11		1.05		1.14			
					4:00 pm - 8:00 pm	1.14		1.06		1.21			
					Overnight	1.12		1.06		1.28			
					Weekend	1.10		1.08		1.27			
I-69W	From Mines Rd To McPherson Rd	W	112+15824	I-35/US-83	6:00 am - 10:00 am								
					10:00 am - 4:00 pm								
					4:00 pm - 8:00 pm								
					Overnight								
					Weekend								
			112P15824	I-35/US-83	6:00 am - 10:00 am	1.02		1.09		1.23		5849	
					10:00 am - 4:00 pm	1.20		1.07		1.19			
					4:00 pm - 8:00 pm	2.26		2.28		7.20			
					Overnight	1.44		1.10		3.31			
					Weekend	1.05		1.10		1.23			

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CONGESTION MANAGEMENT PROCESS

2024 Performance and Historic Trends



Highway	Segment	Direction	TMC Code	Cross Street and/or Interchange	Period	TTI		LOTTR		TTTR		PHED	
						2024	Trend 2018-2024	2024	Trend 2018-2024	2024	Trend 2018-2024	2024	Trend 2018-2024
I-69W	From Mines Rd To McPherson Rd	W	112+15825	FM-1472/Mines Rd	6:00 am - 10:00 am	1.11		1.12		1.39		17553	
					10:00 am - 4:00 pm	1.36		1.09		1.44			
					4:00 pm - 8:00 pm	3.47		5.81		9.63			
					Overnight	1.77		1.13		8.44			
					Weekend	1.11		1.11		1.32			
		E	112N15825	FM-1472/Mines Rd	6:00 am - 10:00 am	1.08		1.08		1.12		51	
					10:00 am - 4:00 pm	1.24		1.07		1.15			
					4:00 pm - 8:00 pm	1.26		1.06		1.14			
					Overnight	1.10		1.09		1.19			
					Weekend	1.07		1.07		1.13			
			112-15824	I-35/US-83	6:00 am - 10:00 am	1.07		1.08		1.11		60	
					10:00 am - 4:00 pm	1.23		1.08		1.19			
					4:00 pm - 8:00 pm	1.23		1.07		1.15			
					Overnight	1.11		1.08		1.20			
					Weekend	1.07		1.08		1.14			
			112N15824	I-35/US-83	6:00 am - 10:00 am	1.09		1.12		1.22		137	
					10:00 am - 4:00 pm	1.30		1.16		1.70			
					4:00 pm - 8:00 pm	1.28		1.15		1.57			
					Overnight	1.16		1.15		1.35			
					Weekend	1.07		1.13		1.24			
			112-15823	McPherson Ave	6:00 am - 10:00 am								
					10:00 am - 4:00 pm								
					4:00 pm - 8:00 pm								
					Overnight								
					Weekend								
Lloyd Bentsen Hwy	From Bob Bullock Loop To Los Lomas Rd	E	112P07379	TX-20-LOOP/Bob Bullock Loop	6:00 am - 10:00 am	2.60		1.56				896	
					10:00 am - 4:00 pm	2.77		1.48					
					4:00 pm - 8:00 pm	2.81		1.40					
					Overnight	2.37		1.43					
					Weekend	2.56		1.47					
			112+07874	Killam	6:00 am - 10:00 am								
					10:00 am - 4:00 pm								
					4:00 pm - 8:00 pm								
					Overnight								
					Weekend								

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2024 Performance and Historic Trends



Highway	Segment	Direction	TMC Code	Cross Street and/or Interchange	Period	TTI		LOTTR		TTTR		PHED	
						2024	Trend 2018-2024	2024	Trend 2018-2024	2024	Trend 2018-2024	2024	Trend 2018-2024
Lloyd Bentsen Hwy	From Bob Bullock Loop To Los Lomas Rd	E	112+07875	Los Lomas Rd	6:00 am - 10:00 am								
					10:00 am - 4:00 pm								
					4:00 pm - 8:00 pm								
					Overnight								
					Weekend								
		W	112-07874	Killam	6:00 am - 10:00 am								
					10:00 am - 4:00 pm								
					4:00 pm - 8:00 pm								
					Overnight								
					Weekend								
			112-07379	TX-20-LOOP/Bob Bullock Loop	6:00 am - 10:00 am								
					10:00 am - 4:00 pm								
					4:00 pm - 8:00 pm								
					Overnight								
					Weekend								
			112N07379	TX-20-LOOP/Bob Bullock Loop	6:00 am - 10:00 am	2.15		1.43				631	
					10:00 am - 4:00 pm	2.13		1.44					
					4:00 pm - 8:00 pm	2.30		1.42					
					Overnight	2.38		1.41					
					Weekend	2.33		1.46					
Lloyd Bentsen Hwy	From I-35 To Bob Bullock Loop	E	112P07374	I-35/US-83/Santa Ursula Ave	6:00 am - 10:00 am	1.87		1.31				1112	
					10:00 am - 4:00 pm	2.04		1.32					
					4:00 pm - 8:00 pm	2.09		1.29					
					Overnight	1.76		1.25					
					Weekend	1.93		1.24					
			112+07375	Springfield Ave	6:00 am - 10:00 am	1.67		1.21				30355	
					10:00 am - 4:00 pm	1.99		1.20					
					4:00 pm - 8:00 pm	2.38		1.28					
					Overnight	1.40		1.22					
					Weekend	1.54		1.19					
			112+07376	McPherson Ave	6:00 am - 10:00 am	1.56		1.23				7975	
					10:00 am - 4:00 pm	1.74		1.19					
					4:00 pm - 8:00 pm	1.89		1.25					
					Overnight	1.29		1.21					
					Weekend	1.50		1.20					
			112+07377	N Meadow Ave	6:00 am - 10:00 am	1.69		1.31				15933	
					10:00 am - 4:00 pm	2.01		1.28					
					4:00 pm - 8:00 pm	2.59		1.44					
					Overnight	1.29		1.24					
					Weekend	1.50		1.24					

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CONGESTION MANAGEMENT PROCESS

2024 Performance and Historic Trends



Highway	Segment	Direction	TMC Code	Cross Street and/or Interchange	Period	TTI		LOTTR		TTTR		PHED	
						2024	Trend 2018-2024	2024	Trend 2018-2024	2024	Trend 2018-2024	2024	Trend 2018-2024
Lloyd Bentsen Hwy	From I-35 To Bob Bullock Loop	E	112+07378	N Arkansas Ave/E Bustamante St	6:00 am - 10:00 am	1.77		1.26				74143	
					10:00 am - 4:00 pm	2.13		1.26					
					4:00 pm - 8:00 pm	3.29		1.53					
					Overnight	1.41		1.23					
					Weekend	1.62		1.19					
			112+07379	TX-20- LOOP/Bob Bullock Loop	6:00 am - 10:00 am	1.53		1.22				15415	
					10:00 am - 4:00 pm	1.58		1.19					
					4:00 pm - 8:00 pm	1.80		1.27					
					Overnight	1.40		1.19					
					Weekend	1.40		1.17					
		W	112-07378	N Arkansas Ave/E Bustamante St	6:00 am - 10:00 am	1.61		1.30				11266	
					10:00 am - 4:00 pm	1.59		1.18					
					4:00 pm - 8:00 pm	1.60		1.19					
					Overnight	1.39		1.21					
					Weekend	1.38		1.18					
			112-07377	N Meadow Ave	6:00 am - 10:00 am	1.87		1.29				15216	
					10:00 am - 4:00 pm	1.99		1.23					
					4:00 pm - 8:00 pm	2.07		1.26					
					Overnight	1.43		1.23					
					Weekend	1.64		1.20					
			112-07376	McPherson Ave	6:00 am - 10:00 am	1.94		1.34				11695	
					10:00 am - 4:00 pm	2.21		1.26					
					4:00 pm - 8:00 pm	2.40		1.32					
					Overnight	1.36		1.25					
					Weekend	1.63		1.27					
			112-07375	Springfield Ave	6:00 am - 10:00 am	1.64		1.24				7895	
					10:00 am - 4:00 pm	1.90		1.20					
					4:00 pm - 8:00 pm	2.01		1.22					
					Overnight	1.33		1.17					
					Weekend	1.49		1.23					
			112-07374	I-35/US- 83/Santa Ursula Ave	6:00 am - 10:00 am	2.01		1.37				31966	
					10:00 am - 4:00 pm	2.19		1.29					
					4:00 pm - 8:00 pm	2.22		1.29					
					Overnight	1.48		1.20					
					Weekend	1.61		1.22					
			112N07374	I-35/US- 83/Santa Ursula Ave	6:00 am - 10:00 am	2.20		1.52				2206	
					10:00 am - 4:00 pm	2.52		1.53					
					4:00 pm - 8:00 pm	2.47		1.46					
					Overnight	2.02		1.45					
					Weekend	1.97		1.44					

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CONGESTION MANAGEMENT PROCESS

2024 Performance and Historic Trends



Highway	Segment	Direction	TMC Code	Cross Street and/or Interchange	Period	TTI		LOTTR		TTTR		PHED	
						2024	Trend 2018-2024	2024	Trend 2018-2024	2024	Trend 2018-2024	2024	Trend 2018-2024
TX 359	From US 83 To Tierra Bonita	E	112P08382	US-83/Zapata Hwy/S Martin Ave	6:00 am - 10:00 am	1.18		1.11				42	
					10:00 am - 4:00 pm	1.22		1.12					
					4:00 pm - 8:00 pm	1.28		1.14					
					Overnight	1.17		1.10					
					Weekend	1.16		1.11					
			112+08383	Dorel Dr	6:00 am - 10:00 am	1.57		1.29				10570	
					10:00 am - 4:00 pm	1.75		1.25					
					4:00 pm - 8:00 pm	2.43		1.55					
					Overnight	1.29		1.18					
					Weekend	1.43		1.25					
			112+08384	TX-20-LOOP/Bob Bullock Blvd	6:00 am - 10:00 am	1.86		1.32				17738	
					10:00 am - 4:00 pm	2.14		1.32					
					4:00 pm - 8:00 pm	2.70		1.47					
					Overnight	1.54		1.25					
					Weekend	1.73		1.36					
			112P08384	TX-20-LOOP/Bob Bullock Blvd	6:00 am - 10:00 am	2.05		1.39				1672	
					10:00 am - 4:00 pm	2.42		1.43					
					4:00 pm - 8:00 pm	2.77		1.51					
					Overnight	1.72		1.30					
					Weekend	1.87		1.30					
			112+08385	Tierra Bonita	6:00 am - 10:00 am	1.58		1.21				20206	
					10:00 am - 4:00 pm	1.78		1.19					
					4:00 pm - 8:00 pm	1.88		1.27					
					Overnight	1.43		1.17					
					Weekend	1.53		1.26					
		W	112-08384	TX-20-LOOP/Bob Bullock Blvd	6:00 am - 10:00 am	1.86		1.38				24362	
					10:00 am - 4:00 pm	1.67		1.20					
					4:00 pm - 8:00 pm	1.81		1.30					
					Overnight	1.37		1.14					
					Weekend	1.50		1.28					
			112N08384	TX-20-LOOP/Bob Bullock Blvd	6:00 am - 10:00 am	3.47		1.38				2095	
					10:00 am - 4:00 pm	3.43		1.38					
					4:00 pm - 8:00 pm	3.59		1.34					
					Overnight	2.55		1.48					
					Weekend	2.94		1.38					
			112-08383	Dorel Dr	6:00 am - 10:00 am	1.98		1.32				8349	
					10:00 am - 4:00 pm	2.05		1.28					
					4:00 pm - 8:00 pm	2.21		1.29					
					Overnight	1.51		1.25					
					Weekend	1.74		1.30					

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2024 Performance and Historic Trends



Highway	Segment	Direction	TMC Code	Cross Street and/or Interchange	Period	TTI		LOTTR		TTTR		PHED	
						2024	Trend 2018-2024	2024	Trend 2018-2024	2024	Trend 2018-2024	2024	Trend 2018-2024
TX 359	From US 83 To Tierra Bonita	W	112-08382	US-83/Zapata Hwy/S Martin Ave	6:00 am - 10:00 am	1.33		1.17				392	
					10:00 am - 4:00 pm	1.41		1.19					
					4:00 pm - 8:00 pm	1.46		1.24					
					Overnight	1.20		1.10					
					Weekend	1.27		1.16					
			112N08382	US-83/Zapata Hwy/S Martin Ave	6:00 am - 10:00 am	1.35		1.15				121	
					10:00 am - 4:00 pm	1.31		1.11					
					4:00 pm - 8:00 pm	1.33		1.12					
					Overnight	1.21		1.08					
					Weekend	1.22		1.09					
US 83	From I-35 To N Arkansas Ave	E	112N15299	I-35	6:00 am - 10:00 am	2.53		1.32		2.10		0	
					10:00 am - 4:00 pm	3.78		1.27		1.82			
					4:00 pm - 8:00 pm	4.48		1.24		1.72			
					Overnight	2.49		1.26		2.04			
					Weekend	2.96		1.39		2.17			
			112-15297	Springfield Ave	6:00 am - 10:00 am	1.29		1.13				1236	
					10:00 am - 4:00 pm	1.36		1.11					
					4:00 pm - 8:00 pm	1.40		1.18					
					Overnight	1.27		1.13					
					Weekend	1.28		1.11					
			112N15297	Springfield Ave	6:00 am - 10:00 am	1.25		1.15				1306	
					10:00 am - 4:00 pm	1.33		1.13					
					4:00 pm - 8:00 pm	1.40		1.17					
					Overnight	1.25		1.13					
					Weekend	1.25		1.13					
			112-15296	Meadow Ave	6:00 am - 10:00 am	1.58		1.19				54152	
					10:00 am - 4:00 pm	2.00		1.22					
					4:00 pm - 8:00 pm	2.67		1.50					
					Overnight	1.34		1.25					
					Weekend	1.52		1.21					
			112-15295	TX-359	6:00 am - 10:00 am	1.59		1.22				15678	
					10:00 am - 4:00 pm	1.73		1.16					
					4:00 pm - 8:00 pm	1.94		1.26					
					Overnight	1.41		1.15					
					Weekend	1.45		1.15					
		W	112+15296	Meadow Ave	6:00 am - 10:00 am	2.53		1.60				55950	
					10:00 am - 4:00 pm	2.35		1.29					
					4:00 pm - 8:00 pm	2.42		1.37					
					Overnight	1.38		1.18					
					Weekend	1.77		1.40					

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2024 Performance and Historic Trends



Highway	Segment	Direction	TMC Code	Cross Street and/or Interchange	Period	TTI		LOTTR		TTTR		PHED	
						2024	Trend 2018-2024	2024	Trend 2018-2024	2024	Trend 2018-2024	2024	Trend 2018-2024
US 83	From I-35 To N Arkansas Ave	W	112+15297	Springfield Ave	6:00 am - 10:00 am	1.59		1.18				6095	
					10:00 am - 4:00 pm	1.63		1.16					
					4:00 pm - 8:00 pm	1.66		1.18					
					Overnight	1.33		1.15					
					Weekend	1.50		1.17					
			112P15297	Springfield Ave	6:00 am - 10:00 am	1.30		1.17				736	
					10:00 am - 4:00 pm	1.28		1.16					
					4:00 pm - 8:00 pm	1.26		1.17					
					Overnight	1.17		1.12					
					Weekend	1.19		1.17					
			112+15298	I-35/San Dario Ave/Santa Ursula Ave	6:00 am - 10:00 am	2.07		1.45				19341	
					10:00 am - 4:00 pm	2.03		1.27					
					4:00 pm - 8:00 pm	1.99		1.29					
					Overnight	1.34		1.18					
					Weekend	1.58		1.22					
			112P15299	I-35	6:00 am - 10:00 am	2.07		1.36		2.99		0	
					10:00 am - 4:00 pm	2.17		1.35		2.92			
					4:00 pm - 8:00 pm	2.15		1.35		3.12			
					Overnight	2.37		1.34		3.14			
					Weekend	2.26		1.39		2.94			
N Louisiana Ave	From TX 359 To Espejo Molina Rd	N	112P15294	Espejo Molina Rd	6:00 am - 10:00 am	1.04		1.04					
					10:00 am - 4:00 pm	1.05		1.04					
					4:00 pm - 8:00 pm	1.06		1.05					
					Overnight	1.10		1.07					
					Weekend	1.04		1.05					
			112+53783	Mangana Hein Rd	6:00 am - 10:00 am	1.08		1.06					
					10:00 am - 4:00 pm	1.08		1.05					
					4:00 pm - 8:00 pm	1.09		1.06					
					Overnight	1.13		1.07					
					Weekend	1.09		1.07					
			112+15476	Meadow Ave	6:00 am - 10:00 am	1.82		1.28				40125	
					10:00 am - 4:00 pm	1.80		1.19					
					4:00 pm - 8:00 pm	1.90		1.22					
					Overnight	1.51		1.22					
					Weekend	1.64		1.25					
			112+15475	TX-20-LOOP	6:00 am - 10:00 am	1.65		1.27				10891	
					10:00 am - 4:00 pm	1.77		1.24					
					4:00 pm - 8:00 pm	1.87		1.28					
					Overnight	1.37		1.22					
					Weekend	1.48		1.25					

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2024 Performance and Historic Trends



Highway	Segment	Direction	TMC Code	Cross Street and/or Interchange	Period	TTI		LOTTR		TTTR		PHED	
						2024	Trend 2018-2024	2024	Trend 2018-2024	2024	Trend 2018-2024	2024	Trend 2018-2024
N Louisiana Ave	From TX 359 To Espejo Molina Rd	N	112P15475	TX-20-LOOP	6:00 am - 10:00 am	2.09		1.42				1019	
					10:00 am - 4:00 pm	2.40		1.40					
					4:00 pm - 8:00 pm	2.55		1.45					
					Overnight	1.95		1.49					
					Weekend	2.14		1.49					
			112+15295	TX-359	6:00 am - 10:00 am	1.37		1.17				1557	
					10:00 am - 4:00 pm	1.53		1.16					
					4:00 pm - 8:00 pm	1.49		1.19					
					Overnight	1.25		1.14					
					Weekend	1.32		1.16					
			112P15295	TX-359	6:00 am - 10:00 am	1.50		1.23				1508	
					10:00 am - 4:00 pm	1.29		1.12					
					4:00 pm - 8:00 pm	1.26		1.11					
					Overnight	1.16		1.08					
					Weekend	1.16		1.10					
		S	112N15295	TX-359	6:00 am - 10:00 am	1.20		1.14				226	
					10:00 am - 4:00 pm	1.23		1.14					
					4:00 pm - 8:00 pm	1.26		1.16					
					Overnight	1.19		1.13					
					Weekend	1.15		1.11					
			112-15475	TX-20-LOOP	6:00 am - 10:00 am	1.35		1.20				3387	
					10:00 am - 4:00 pm	1.52		1.17					
					4:00 pm - 8:00 pm	1.65		1.17					
					Overnight	1.24		1.14					
					Weekend	1.35		1.17					
			112N15475	TX-20-LOOP	6:00 am - 10:00 am	1.94		1.59				449	
					10:00 am - 4:00 pm	2.18		1.42					
					4:00 pm - 8:00 pm	2.20		1.31					
					Overnight	1.86		1.68					
					Weekend	2.03		1.47					
			112-15476	Meadow Ave	6:00 am - 10:00 am	1.52		1.21				36449	
					10:00 am - 4:00 pm	1.68		1.22					
					4:00 pm - 8:00 pm	2.63		1.60					
					Overnight	1.34		1.21					
					Weekend	1.49		1.20					
			112-53783	Mangana Hein Rd	6:00 am - 10:00 am	1.87		1.30				42011	
					10:00 am - 4:00 pm	1.96		1.22					
					4:00 pm - 8:00 pm	2.14		1.27					
					Overnight	1.65		1.29					
					Weekend	1.76		1.27					

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CONGESTION MANAGEMENT PROCESS

2024 Performance and Historic Trends



Highway	Segment	Direction	TMC Code	Cross Street and/or Interchange	Period	TTI		LOTTR		TTTR		PHED	
						2024	Trend 2018-2024	2024	Trend 2018-2024	2024	Trend 2018-2024	2024	Trend 2018-2024
N Louisiana Ave	From TX 359 To Espejo Molina Rd	S	112-15294	Espejo Molina Rd	6:00 am - 10:00 am	1.13		1.08					
					10:00 am - 4:00 pm	1.12		1.07					
					4:00 pm - 8:00 pm	1.08		1.06					
					Overnight	1.15		1.10					
					Weekend	1.12		1.08					
			112N15294	Espejo Molina Rd	6:00 am - 10:00 am	1.07		1.06					
					10:00 am - 4:00 pm	1.07		1.05					
					4:00 pm - 8:00 pm	1.03		1.05					
					Overnight	1.08		1.07					
					Weekend	1.05		1.05					
Bob Bullock Loop	From Lloyd Bentsen Hwy To Tx 359	N	112+53784	TX-20 Loop/Bob Bullock Loop	6:00 am - 10:00 am	1.45		1.11				558	
					10:00 am - 4:00 pm	1.47		1.10					
					4:00 pm - 8:00 pm	1.51		1.12					
					Overnight	1.37		1.13					
					Weekend	1.39		1.11					
			112+15817	TX-400-SPUR/Clark Blvd	6:00 am - 10:00 am	1.22		1.07				380	
					10:00 am - 4:00 pm	1.17		1.06					
					4:00 pm - 8:00 pm	1.17		1.06					
					Overnight	1.15		1.06					
					Weekend	1.12		1.06					
			112P15817	TX-400-SPUR/Clark Blvd	6:00 am - 10:00 am	1.25		1.07				1279	
					10:00 am - 4:00 pm	1.13		1.05					
					4:00 pm - 8:00 pm	1.12		1.04					
					Overnight	1.12		1.05					
					Weekend	1.09		1.05					
			112+15818	US-59/Lloyd Bentsen Hwy	6:00 am - 10:00 am	1.31		1.10				1089	
					10:00 am - 4:00 pm	1.15		1.05					
					4:00 pm - 8:00 pm	1.15		1.05					
					Overnight	1.13		1.05					
					Weekend	1.10		1.05					
			112P15818	US-59/Lloyd Bentsen Hwy	6:00 am - 10:00 am	1.46		1.12				3170	
					10:00 am - 4:00 pm	1.15		1.05					
					4:00 pm - 8:00 pm	1.18		1.05					
					Overnight	1.13		1.06					
					Weekend	1.09		1.05					
		S	112N15818	US-59/Lloyd Bentsen Hwy	6:00 am - 10:00 am	1.09		1.06				100	
					10:00 am - 4:00 pm	1.14		1.07					
					4:00 pm - 8:00 pm	1.15		1.06					
					Overnight	1.12		1.06					
					Weekend	1.09		1.06					

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CONGESTION MANAGEMENT PROCESS

2024 Performance and Historic Trends



Highway	Segment	Direction	TMC Code	Cross Street and/or Interchange	Period	TTI		LOTTR		TTTR		PHED	
						2024	Trend 2018-2024	2024	Trend 2018-2024	2024	Trend 2018-2024	2024	Trend 2018-2024
Bob Bullock Loop	From Lloyd Bentsen Hwy To Tx 359	S	112-15817	TX-400-SPUR/Clark Blvd	6:00 am - 10:00 am	1.08		1.07				75	
					10:00 am - 4:00 pm	1.13		1.07					
					4:00 pm - 8:00 pm	1.13		1.06					
					Overnight	1.12		1.05					
					Weekend	1.08		1.07					
			112N15817	TX-400-SPUR/Clark Blvd	6:00 am - 10:00 am	1.10		1.06				296	
					10:00 am - 4:00 pm	1.15		1.06					
					4:00 pm - 8:00 pm	1.17		1.06					
					Overnight	1.12		1.06					
					Weekend	1.10		1.06					
			112-53784	TX-20 Loop/Bob Bullock Loop	6:00 am - 10:00 am	1.18		1.06				241	
					10:00 am - 4:00 pm	1.26		1.08					
					4:00 pm - 8:00 pm	1.33		1.09					
					Overnight	1.16		1.07					
					Weekend	1.15		1.07					
			112-15816	TX-359	6:00 am - 10:00 am	2.06		1.40				54947	
					10:00 am - 4:00 pm	2.88		1.63					
					4:00 pm - 8:00 pm	3.18		1.53					
					Overnight	1.69		1.27					
					Weekend	1.74		1.31					
Bob Bullock Loop	From McPherson Rd To Lloyd Bentsen Hwy	N	112+15819	Jacaman Rd/Bayside Blvd	6:00 am - 10:00 am								
					10:00 am - 4:00 pm								
					4:00 pm - 8:00 pm								
					Overnight								
					Weekend								
			112+15820	E Del Mar Blvd	6:00 am - 10:00 am								
					10:00 am - 4:00 pm								
					4:00 pm - 8:00 pm								
					Overnight								
			112+15821	Shiloh Dr	6:00 am - 10:00 am								
					10:00 am - 4:00 pm								
					4:00 pm - 8:00 pm								
					Overnight								
					Weekend								
		W	112+15822	International Blvd	6:00 am - 10:00 am								
					10:00 am - 4:00 pm								
					4:00 pm - 8:00 pm								
					Overnight								
					Weekend								

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2024 Performance and Historic Trends



Highway	Segment	Direction	TMC Code	Cross Street and/or Interchange	Period	TTI		LOTTR		TTTR		PHED	
						2024	Trend 2018-2024	2024	Trend 2018-2024	2024	Trend 2018-2024	2024	Trend 2018-2024
Bob Bullock Loop	From McPherson Rd To Lloyd Bentsen Hwy	W	112P15822	International Blvd	6:00 am - 10:00 am								
					10:00 am - 4:00 pm								
					4:00 pm - 8:00 pm								
					Overnight								
					Weekend								
			112+15823	McPherson Ave	6:00 am - 10:00 am								
					10:00 am - 4:00 pm								
					4:00 pm - 8:00 pm								
					Overnight								
					Weekend								
		E	112-15822	International Blvd	6:00 am - 10:00 am								
					10:00 am - 4:00 pm								
					4:00 pm - 8:00 pm								
					Overnight								
			112N15822	International Blvd	6:00 am - 10:00 am								
					10:00 am - 4:00 pm								
					4:00 pm - 8:00 pm								
					Overnight								
		E	112-15821	Shiloh Dr	6:00 am - 10:00 am								
					10:00 am - 4:00 pm								
					4:00 pm - 8:00 pm								
					Overnight								
			112-15820	E Del Mar Blvd	6:00 am - 10:00 am								
					10:00 am - 4:00 pm								
					4:00 pm - 8:00 pm								
					Overnight								
		E	112-15819	Jacaman Rd/Bayside Blvd	6:00 am - 10:00 am								
					10:00 am - 4:00 pm								
					4:00 pm - 8:00 pm								
					Overnight								
			112-15818	US-59/Lloyd Bentsen Hwy	6:00 am - 10:00 am								
					10:00 am - 4:00 pm								
					4:00 pm - 8:00 pm								
					Overnight								
					Weekend								

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CONGESTION MANAGEMENT PROCESS

2024 Performance and Historic Trends



Highway	Segment	Direction	TMC Code	Cross Street and/or Interchange	Period	TTI		LOTTR		TTTR		PHED	
						2024	Trend 2018-2024	2024	Trend 2018-2024	2024	Trend 2018-2024	2024	Trend 2018-2024
Mines Rd	From I-35 To I-69W	N	112P16335	I-35	6:00 am - 10:00 am	1.17		1.08				472	
					10:00 am - 4:00 pm	1.22		1.07					
					4:00 pm - 8:00 pm	1.23		1.08					
					Overnight	1.16		1.08					
					Weekend	1.14		1.08					
			112+16336	TX-20-LOOP	6:00 am - 10:00 am	1.73		1.27				15181	
					10:00 am - 4:00 pm	1.93		1.18					
					4:00 pm - 8:00 pm	1.83		1.12					
					Overnight	1.40		1.19					
					Weekend	1.43		1.18					
			112P16336	TX-20-LOOP	6:00 am - 10:00 am	2.31		1.42				15178	
					10:00 am - 4:00 pm	3.19		1.23					
					4:00 pm - 8:00 pm	2.57		1.26					
					Overnight	1.95		1.24					
					Weekend	1.94		1.36					
		S	112-16335	I-35	6:00 am - 10:00 am	1.56		1.16				18222	
					10:00 am - 4:00 pm	1.78		1.15					
					4:00 pm - 8:00 pm	2.11		1.15					
					Overnight	1.46		1.26					
					Weekend	1.57		1.21					
			112N16335	I-35	6:00 am - 10:00 am	1.21		1.13				797	
					10:00 am - 4:00 pm	1.32		1.10					
					4:00 pm - 8:00 pm	1.39		1.11					
					Overnight	1.19		1.13					
					Weekend	1.18		1.15					
Mines Rd	From I-69W To TX 255	N	112+16337	Killam Industrial Blvd	6:00 am - 10:00 am	1.84		1.22				48463	
					10:00 am - 4:00 pm	2.30		1.19					
					4:00 pm - 8:00 pm	2.01		1.16					
					Overnight	1.47		1.16					
					Weekend	1.46		1.18					
			112+16338	FM-3338/Las Tiendas Rd	6:00 am - 10:00 am	1.49		1.13				5255	
					10:00 am - 4:00 pm	1.75		1.09					
					4:00 pm - 8:00 pm	1.60		1.10					
					Overnight	1.42		1.15					
					Weekend	1.45		1.15					
			112+16339	TX-255-TOLL/FM-255/Camino Colombia Rd	6:00 am - 10:00 am	1.12		1.07					
					10:00 am - 4:00 pm	1.16		1.04					
					4:00 pm - 8:00 pm	1.17		1.05					
					Overnight	1.23		1.09					
					Weekend	1.19		1.08					

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2024 Performance and Historic Trends



Highway	Segment	Direction	TMC Code	Cross Street and/or Interchange	Period	TTI		LOTTR		TTTR		PHED	
						2024	Trend 2018-2024	2024	Trend 2018-2024	2024	Trend 2018-2024	2024	Trend 2018-2024
Mines Rd	From I-69W To TX 255	S	112-16338	FM-3338/Las Tiendas Rd	6:00 am - 10:00 am	1.13		1.08					
					10:00 am - 4:00 pm	1.14		1.05					
					4:00 pm - 8:00 pm	1.14		1.06					
					Overnight	1.19		1.07					
					Weekend	1.15		1.07					
			112-16337	Killam Industrial Blvd	6:00 am - 10:00 am	1.69		1.17				319212	
					10:00 am - 4:00 pm	2.39		1.28					
					4:00 pm - 8:00 pm	3.18		1.59					
					Overnight	1.44		1.12					
					Weekend	1.46		1.14					
			112-16336	TX-20-LOOP	6:00 am - 10:00 am	1.49		1.17				16815	
					10:00 am - 4:00 pm	2.12		1.16					
					4:00 pm - 8:00 pm	2.61		1.22					
					Overnight	1.39		1.18					
					Weekend	1.39		1.18					
			112N16336	TX-20-LOOP	6:00 am - 10:00 am	1.80		1.27				37279	
					10:00 am - 4:00 pm	2.03		1.17					
					4:00 pm - 8:00 pm	2.32		1.28					
					Overnight	1.62		1.25					
					Weekend	1.66		1.33					
TX 255	From Border Crossing To I-35	E	112P16341	FM-1472/Mines Rd	6:00 am - 10:00 am	1.44		1.28					
					10:00 am - 4:00 pm	1.57		1.27					
					4:00 pm - 8:00 pm	1.56		1.28					
					Overnight	1.57		1.42					
					Weekend	1.11		1.26					
			112+16342	FM-3338/Las Tiendas Rd	6:00 am - 10:00 am	1.46		1.32					
					10:00 am - 4:00 pm	1.25		1.15					
					4:00 pm - 8:00 pm	1.23		1.12					
					Overnight	1.41		1.23					
					Weekend	1.26		1.19					
			112+16343	US-83	6:00 am - 10:00 am	1.14		1.08					
					10:00 am - 4:00 pm	1.16		1.05					
					4:00 pm - 8:00 pm	1.13		1.04					
					Overnight	1.13		1.07					
					Weekend	1.12		1.06					
		W	112-16342	FM-3338/Las Tiendas Rd	6:00 am - 10:00 am	1.09		1.05					
					10:00 am - 4:00 pm	1.10		1.05					
					4:00 pm - 8:00 pm	1.11		1.06					
					Overnight	1.11		1.05					
					Weekend	1.10		1.06					

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2024 Performance and Historic Trends



Highway	Segment	Direction	TMC Code	Cross Street and/or Interchange	Period	TTI		LOTTR		TTTR		PHED	
						2024	Trend 2018-2024	2024	Trend 2018-2024	2024	Trend 2018-2024	2024	Trend 2018-2024
TX 255	From Border Crossing To I-35	W	112-16341	FM-1472/Mines Rd	6:00 am - 10:00 am	1.34		1.41					
					10:00 am - 4:00 pm	1.60		1.42					
					4:00 pm - 8:00 pm	1.65		1.48					
					Overnight	1.34		1.23					
					Weekend	1.27		1.43					
			112N16341	FM-1472/Mines Rd	6:00 am - 10:00 am	1.94		1.47					
					10:00 am - 4:00 pm	2.58		1.46					
					4:00 pm - 8:00 pm	2.53		1.40					
					Overnight	1.77		1.37					
					Weekend	1.75		1.53					
Convent Ave	From Border Crossing To I-35	N	112P50555	Mexico/United States	6:00 am - 10:00 am	2.17		2.14				1803	
					10:00 am - 4:00 pm	2.21		1.95					
					4:00 pm - 8:00 pm	1.86		1.67					
					Overnight	1.52		1.40					
					Weekend	1.90		1.75					
			112+52305	Water St	6:00 am - 10:00 am	1.66		1.50				0	
					10:00 am - 4:00 pm	1.74		1.50					
					4:00 pm - 8:00 pm	1.64		1.62					
					Overnight	1.70		1.25					
					Weekend	1.68		1.75					
			112+50556	I-35/San Dario Ave	6:00 am - 10:00 am	2.08		1.26				70287	
					10:00 am - 4:00 pm	2.04		1.21					
					4:00 pm - 8:00 pm	1.93		1.26					
					Overnight	1.72		1.19					
					Weekend	1.83		1.24					
		S	112-50555	Mexico/United States	6:00 am - 10:00 am	1.17		1.18				0	
					10:00 am - 4:00 pm	1.20		1.21					
					4:00 pm - 8:00 pm	3.05		1.78					
					Overnight	2.51		3.50					
					Weekend	1.48		1.19					
San Bernardo Ave	From Matamoros St To Mines St	S	112N50555	Mexico/United States	6:00 am - 10:00 am	1.17		1.18				851	
					10:00 am - 4:00 pm	1.31		1.18					
					4:00 pm - 8:00 pm	3.87		3.33					
					Overnight	3.67		3.33					
					Weekend	1.84		1.19					
			112-50563	Santa Ursula Ave	6:00 am - 10:00 am	1.29		1.29					
					10:00 am - 4:00 pm	1.33		1.24					
					4:00 pm - 8:00 pm	1.44		1.28					
					Overnight	1.52		1.30					
					Weekend	1.38		1.24					

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2024 Performance and Historic Trends



Highway	Segment	Direction	TMC Code	Cross Street and/or Interchange	Period	TTI		LOTTR		TTTR		PHED	
						2024	Trend 2018-2024	2024	Trend 2018-2024	2024	Trend 2018-2024	2024	Trend 2018-2024
San Bernardo Ave	From Matamoros St To Mines St	S	112-50562	W Calton Rd	6:00 am - 10:00 am	1.96		1.60				2547	
					10:00 am - 4:00 pm	2.00		1.37					
					4:00 pm - 8:00 pm	2.32		1.49					
					Overnight	1.92		1.54					
					Weekend	2.07		1.42					
			112-50561	US-59/Lafayette St	6:00 am - 10:00 am	1.59		1.25				7208	
					10:00 am - 4:00 pm	1.80		1.28					
					4:00 pm - 8:00 pm	1.89		1.32					
					Overnight	1.60		1.24					
					Weekend	1.76		1.33					
			112-50560	Jefferson St	6:00 am - 10:00 am	1.47		1.34				2436	
					10:00 am - 4:00 pm	1.61		1.31					
					4:00 pm - 8:00 pm	1.66		1.29					
					Overnight	1.51		1.37					
					Weekend	1.55		1.26					
			112-50559	Park St	6:00 am - 10:00 am	1.72		1.35				2517	
					10:00 am - 4:00 pm	1.59		1.27					
					4:00 pm - 8:00 pm	1.82		1.39					
					Overnight	1.57		1.38					
					Weekend	1.44		1.24					
			112-50558	Matamoros St/Houston St	6:00 am - 10:00 am	1.76		1.44				15520	
					10:00 am - 4:00 pm	1.79		1.41					
					4:00 pm - 8:00 pm	2.01		1.45					
					Overnight	2.01		1.71					
					Weekend	1.81		1.44					
		N	112+50559	Park St	6:00 am - 10:00 am	1.87		1.49				19832	
					10:00 am - 4:00 pm	1.69		1.40					
					4:00 pm - 8:00 pm	1.67		1.40					
					Overnight	1.76		1.50					
					Weekend	1.62		1.47					
			112+50560	Jefferson St	6:00 am - 10:00 am	1.61		1.36				3576	
					10:00 am - 4:00 pm	1.59		1.31					
					4:00 pm - 8:00 pm	1.83		1.39					
					Overnight	1.39		1.17					
					Weekend	1.48		1.24					
			112+50561	US-59/Lafayette St	6:00 am - 10:00 am	1.62		1.36				3722	
					10:00 am - 4:00 pm	1.66		1.37					
					4:00 pm - 8:00 pm	1.67		1.29					
					Overnight	1.80		1.37					
					Weekend	1.68		1.31					

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2024 Performance and Historic Trends



Highway	Segment	Direction	TMC Code	Cross Street and/or Interchange	Period	TTI		LOTTR		TTTR		PHED	
						2024	Trend 2018-2024	2024	Trend 2018-2024	2024	Trend 2018-2024	2024	Trend 2018-2024
San Bernardo Ave	From Matamoros St To Mines St	N	112+50562	W Calton Rd	6:00 am - 10:00 am	1.67		1.30				10019	
					10:00 am - 4:00 pm	1.77		1.38					
					4:00 pm - 8:00 pm	1.82		1.39					
					Overnight	1.73		1.34					
					Weekend	1.76		1.40					
			112+50563	Santa Ursula Ave	6:00 am - 10:00 am	1.69		1.62				1078	
					10:00 am - 4:00 pm	1.75		1.50					
					4:00 pm - 8:00 pm	1.73		1.50					
					Overnight	1.81		1.56					
					Weekend	1.73		1.49					
			112+53761	Tesoro Plz	6:00 am - 10:00 am	1.28		1.35					
					10:00 am - 4:00 pm	2.21		1.62					
					4:00 pm - 8:00 pm	1.42		1.54					
					Overnight	2.30		2.83					
					Weekend	1.49		1.50					
McPherson Ave	From Lloyd Bentsen Hwy To Ne Bob Bullock Loop	N	112P50595	US-59/E Saunders St	6:00 am - 10:00 am	2.16		1.52				107	
					10:00 am - 4:00 pm	2.42		1.46					
					4:00 pm - 8:00 pm	2.29		1.46					
					Overnight	1.83		1.33					
					Weekend	2.16		1.40					
			112+50596	E Calton Rd	6:00 am - 10:00 am	1.72		1.25				7803	
					10:00 am - 4:00 pm	1.83		1.22					
					4:00 pm - 8:00 pm	1.93		1.23					
					Overnight	1.41		1.20					
					Weekend	1.61		1.23					
			112P50596	E Calton Rd	6:00 am - 10:00 am	2.58		1.56				1652	
					10:00 am - 4:00 pm	2.64		1.46					
					4:00 pm - 8:00 pm	2.72		1.49					
					Overnight	2.01		1.66					
					Weekend	2.25		1.58					
			112+50597	E Hillside Rd	6:00 am - 10:00 am	1.72		1.34				2677	
					10:00 am - 4:00 pm	2.03		1.30					
					4:00 pm - 8:00 pm	1.82		1.28					
					Overnight	1.43		1.30					
					Weekend	1.59		1.28					
			112+50598	Calle Del Norte	6:00 am - 10:00 am	1.57		1.24				6177	
					10:00 am - 4:00 pm	1.55		1.19					
					4:00 pm - 8:00 pm	1.58		1.22					
					Overnight	1.37		1.21					
					Weekend	1.38		1.16					

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2024 Performance and Historic Trends



Highway	Segment	Direction	TMC Code	Cross Street and/or Interchange	Period	TTI		LOTTR		TTTR		PHED	
						2024	Trend 2018-2024	2024	Trend 2018-2024	2024	Trend 2018-2024	2024	Trend 2018-2024
McPherson Ave	From Lloyd Bentsen Hwy To Ne Bob Bullock Loop	N	112+50599	Jacaman Rd	6:00 am - 10:00 am	1.66		1.36				14894	
					10:00 am - 4:00 pm	1.71		1.31					
					4:00 pm - 8:00 pm	1.89		1.37					
					Overnight	1.33		1.17					
					Weekend	1.44		1.19					
			112+50600	E Del Mar Blvd	6:00 am - 10:00 am	1.60		1.28				13662	
					10:00 am - 4:00 pm	1.76		1.26					
					4:00 pm - 8:00 pm	1.79		1.30					
					Overnight	1.38		1.24					
					Weekend	1.41		1.20					
			112P50600	E Del Mar Blvd	6:00 am - 10:00 am	2.76		1.58				1260	
					10:00 am - 4:00 pm	3.32		1.47					
					4:00 pm - 8:00 pm	3.11		1.44					
					Overnight	2.06		1.67					
					Weekend	2.50		1.54					
			112+50601	International Blvd	6:00 am - 10:00 am	1.49		1.20				8990	
					10:00 am - 4:00 pm	1.59		1.17					
					4:00 pm - 8:00 pm	1.73		1.17					
					Overnight	1.29		1.18					
					Weekend	1.39		1.16					
			112+50602	Shiloh Dr	6:00 am - 10:00 am	1.81		1.31				5673	
					10:00 am - 4:00 pm	1.85		1.23					
					4:00 pm - 8:00 pm	1.89		1.22					
					Overnight	1.40		1.21					
					Weekend	1.59		1.21					
			112+50603	TX-20-LOOP/Bob Bullock Loop	6:00 am - 10:00 am	1.57		1.26				9519	
					10:00 am - 4:00 pm	1.76		1.26					
					4:00 pm - 8:00 pm	1.81		1.25					
					Overnight	1.53		1.24					
					Weekend	1.55		1.23					
			112P50603	TX-20-LOOP/Bob Bullock Loop	6:00 am - 10:00 am	2.07		1.41				332	
					10:00 am - 4:00 pm	1.81		1.34					
					4:00 pm - 8:00 pm	1.84		1.41					
					Overnight	2.00		1.43					
					Weekend	2.29		1.46					
		S	112N50603	TX-20-LOOP/Bob Bullock Loop	6:00 am - 10:00 am	2.27		1.60				740	
					10:00 am - 4:00 pm	2.89		1.53					
					4:00 pm - 8:00 pm	2.76		1.55					
					Overnight	1.98		1.56					
					Weekend	1.98		1.41					

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2024 Performance and Historic Trends



Highway	Segment	Direction	TMC Code	Cross Street and/or Interchange	Period	TTI		LOTTR		TTTR		PHED	
						2024	Trend 2018-2024	2024	Trend 2018-2024	2024	Trend 2018-2024	2024	Trend 2018-2024
McPherson Ave	From Lloyd Bentsen Hwy To Ne Bob Bullock Loop	S	112-50602	Shiloh Dr	6:00 am - 10:00 am	1.67		1.29				11315	
					10:00 am - 4:00 pm	1.76		1.23					
					4:00 pm - 8:00 pm	1.85		1.24					
					Overnight	1.39		1.19					
					Weekend	1.54		1.19					
			112-50601	International Blvd	6:00 am - 10:00 am	1.91		1.34				19568	
					10:00 am - 4:00 pm	2.07		1.28					
					4:00 pm - 8:00 pm	2.64		1.53					
					Overnight	1.49		1.24					
					Weekend	1.66		1.21					
			112-50600	E Del Mar Blvd	6:00 am - 10:00 am	1.43		1.21				13516	
					10:00 am - 4:00 pm	1.83		1.37					
					4:00 pm - 8:00 pm	1.71		1.25					
					Overnight	1.30		1.19					
					Weekend	1.38		1.21					
			112N50600	E Del Mar Blvd	6:00 am - 10:00 am	2.27		1.50				836	
					10:00 am - 4:00 pm	2.91		1.48					
					4:00 pm - 8:00 pm	2.62		1.41					
					Overnight	1.65		1.57					
					Weekend	2.08		1.51					
			112-50599	Jacaman Rd	6:00 am - 10:00 am	1.59		1.26				13061	
					10:00 am - 4:00 pm	1.80		1.25					
					4:00 pm - 8:00 pm	1.90		1.30					
					Overnight	1.31		1.21					
					Weekend	1.45		1.24					
			112-50598	Calle Del Norte	6:00 am - 10:00 am	1.49		1.24				17568	
					10:00 am - 4:00 pm	1.51		1.19					
					4:00 pm - 8:00 pm	2.03		1.54					
					Overnight	1.28		1.21					
					Weekend	1.31		1.15					
			112-50597	E Hillside Rd	6:00 am - 10:00 am	1.51		1.29				10220	
					10:00 am - 4:00 pm	1.64		1.26					
					4:00 pm - 8:00 pm	1.80		1.32					
					Overnight	1.32		1.23					
					Weekend	1.39		1.23					
			112-50596	E Calton Rd	6:00 am - 10:00 am	1.55		1.24				2420	
					10:00 am - 4:00 pm	1.83		1.19					
					4:00 pm - 8:00 pm	1.88		1.28					
					Overnight	1.31		1.23					
					Weekend	1.45		1.18					

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2024 Performance and Historic Trends



Highway	Segment	Direction	TMC Code	Cross Street and/or Interchange	Period	TTI		LOTTR		TTTR		PHED	
						2024	Trend 2018-2024	2024	Trend 2018-2024	2024	Trend 2018-2024	2024	Trend 2018-2024
McPherson Ave	From Lloyd Bentsen Hwy To Ne Bob Bullock Loop	S	112N50596	E Calton Rd	6:00 am - 10:00 am	2.15		1.54				744	
					10:00 am - 4:00 pm	2.44		1.32					
					4:00 pm - 8:00 pm	2.23		1.31					
					Overnight	1.87		1.56					
					Weekend	2.12		1.38					
			112-50595	US-59/E Saunders St	6:00 am - 10:00 am	1.64		1.21				6616	
					10:00 am - 4:00 pm	1.88		1.21					
					4:00 pm - 8:00 pm	1.99		1.21					
					Overnight	1.47		1.24					
					Weekend	1.56		1.17					
			112N50595	US-59/E Saunders St	6:00 am - 10:00 am	3.16		1.56				362	
					10:00 am - 4:00 pm	3.41		1.50					
					4:00 pm - 8:00 pm	3.25		1.45					
					Overnight	3.11		1.65					
					Weekend	3.18		1.44					
N Bartlett Ave	From Lloyd Bentsen Hwy To N Arkansas Ave	S	112-50606	US-59/E Saunders St	6:00 am - 10:00 am	1.52		1.26				2470	
					10:00 am - 4:00 pm	1.67		1.27					
					4:00 pm - 8:00 pm	2.03		1.49					
					Overnight	1.40		1.22					
					Weekend	1.41		1.26					
			112N50606	US-59/E Saunders St	6:00 am - 10:00 am	2.23		1.71				67	
					10:00 am - 4:00 pm	2.37		1.61					
					4:00 pm - 8:00 pm	2.46		1.47					
					Overnight	2.19		1.62					
					Weekend	2.27		1.64					
		N	112P50606	US-59/E Saunders St	6:00 am - 10:00 am	2.33		1.51				58	
					10:00 am - 4:00 pm	2.39		1.49					
					4:00 pm - 8:00 pm	2.53		1.51					
					Overnight	1.87		1.51					
					Weekend	2.25		1.58					
			112+50607	E Bustamante St	6:00 am - 10:00 am	1.85		1.40				1990	
					10:00 am - 4:00 pm	1.85		1.33					
					4:00 pm - 8:00 pm	1.86		1.32					
					Overnight	1.35		1.25					
					Weekend	1.49		1.30					
TX 255	From Border Crossing To I-35	E	112P53333	USA/Mexico	6:00 am - 10:00 am	3.55		2.60					
					10:00 am - 4:00 pm	3.52		2.60					
					4:00 pm - 8:00 pm	2.42		2.44					
					Overnight	2.00		1.43					
					Weekend	2.02		1.71					

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2024 Performance and Historic Trends



Highway	Segment	Direction	TMC Code	Cross Street and/or Interchange	Period	TTI		LOTTR		TTTR		PHED	
						2024	Trend 2018-2024	2024	Trend 2018-2024	2024	Trend 2018-2024	2024	Trend 2018-2024
TX 255	From Border Crossing To I-35	E	112+53334	FM-1472	6:00 am - 10:00 am	1.47		1.27					
					10:00 am - 4:00 pm	1.94		1.22					
					4:00 pm - 8:00 pm	1.93		1.24					
					Overnight	1.46		1.30					
					Weekend	1.16		1.47					
			112P53334	FM-1472	6:00 am - 10:00 am	1.60		1.33					
					10:00 am - 4:00 pm	2.06		1.38					
					4:00 pm - 8:00 pm	2.02		1.38					
					Overnight	1.87		1.27					
					Weekend	1.36		1.39					
		W	112N53334	FM-1472	6:00 am - 10:00 am	1.63		1.26					
					10:00 am - 4:00 pm	1.87		1.24					
					4:00 pm - 8:00 pm	1.95		1.25					
					Overnight	1.59		1.23					
					Weekend	1.46		1.27					
			112-53333	USA/Mexico	6:00 am - 10:00 am	1.35		1.25					
					10:00 am - 4:00 pm	1.47		1.14					
					4:00 pm - 8:00 pm	1.90		1.59					
					Overnight	1.53		1.52					
					Weekend	1.49		1.24					
			112N53333	USA/Mexico	6:00 am - 10:00 am	1.79		1.38					
					10:00 am - 4:00 pm	1.70		1.39					
					4:00 pm - 8:00 pm	2.19		1.80					
					Overnight	2.59		1.38					
					Weekend	1.55		1.56					
Cuatro Vientos Rd	From US 83 To Sierra Vista Blvd	E	112P53774	US-83	6:00 am - 10:00 am	1.42		1.13					
					10:00 am - 4:00 pm	1.36		1.15					
					4:00 pm - 8:00 pm	1.34		1.14					
					Overnight	1.40		1.20					
					Weekend	1.34		1.15					
			112+53775	TX-20 Loop	6:00 am - 10:00 am	1.14		1.07					
					10:00 am - 4:00 pm	1.13		1.08					
					4:00 pm - 8:00 pm	1.12		1.08					
					Overnight	1.16		1.09					
					Weekend	1.10		1.07					
		W	112N53775	TX-20 Loop	6:00 am - 10:00 am	1.33		1.10					
					10:00 am - 4:00 pm	1.27		1.10					
					4:00 pm - 8:00 pm	1.23		1.08					
					Overnight	1.26		1.12					
					Weekend	1.24		1.09					

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CONGESTION MANAGEMENT PROCESS

2024 Performance and Historic Trends



Highway	Segment	Direction	TMC Code	Cross Street and/or Interchange	Period	TTI		LOTTR		TTTR		PHED	
						2024	Trend 2018-2024	2024	Trend 2018-2024	2024	Trend 2018-2024	2024	Trend 2018-2024
Cuatro Vientos Rd	From US 83 To Sierra Vista Blvd	W	112-53774	US-83	6:00 am - 10:00 am	1.25		1.11					
					10:00 am - 4:00 pm	1.25		1.12					
					4:00 pm - 8:00 pm	1.28		1.13					
					Overnight	1.18		1.07					
					Weekend	1.16		1.10					
			112N53774	US-83	6:00 am - 10:00 am	3.67		1.58					
					10:00 am - 4:00 pm	3.47		1.58					
					4:00 pm - 8:00 pm	3.89		1.47					
					Overnight	2.53		1.83					
					Weekend	2.80		1.52					
Cuatro Vientos Rd	From US 83 To TX 359	S	112N53782	TX-20 Loop/Bob Bullock Loop	6:00 am - 10:00 am	1.14		1.08				1947	
					10:00 am - 4:00 pm	1.36		1.18					
					4:00 pm - 8:00 pm	1.39		1.25					
					Overnight	1.15		1.07					
					Weekend	1.12		1.08					
		N	112P53777	Mangana Hein Rd	6:00 am - 10:00 am	1.35		1.13					
					10:00 am - 4:00 pm	1.47		1.18					
					4:00 pm - 8:00 pm	1.47		1.16					
					Overnight	1.53		1.19					
					Weekend	1.51		1.14					
			112+53778	Cielito Lindo Blvd	6:00 am - 10:00 am	1.16		1.10					
					10:00 am - 4:00 pm	1.19		1.11					
					4:00 pm - 8:00 pm	1.18		1.11					
					Overnight	1.27		1.11					
					Weekend	1.19		1.10					
			112P53778	Cielito Lindo Blvd	6:00 am - 10:00 am	1.12		1.07					
					10:00 am - 4:00 pm	1.11		1.08					
					4:00 pm - 8:00 pm	1.12		1.08					
					Overnight	1.14		1.07					
					Weekend	1.12		1.09					
			112+53779	Sierra Vista Blvd	6:00 am - 10:00 am	1.12		1.07					
					10:00 am - 4:00 pm	1.10		1.06					
					4:00 pm - 8:00 pm	1.10		1.06					
					Overnight	1.13		1.06					
					Weekend	1.10		1.07					
			112P53779	Sierra Vista Blvd	6:00 am - 10:00 am	1.19		1.10					
					10:00 am - 4:00 pm	1.13		1.08					
					4:00 pm - 8:00 pm	1.13		1.08					
					Overnight	1.17		1.12					
					Weekend	1.16		1.10					

TTI: Travel Time Index; LOTTR: Level of Travel Time Reliability; TTTR: Truck Travel Time Reliability; PHED: Peak-Hour Excessive Delay; PHED value of 0 indicates that travel time is less than Excessive Delay Threshold Travel Time

CONGESTION MANAGEMENT PROCESS

2024 Performance and Historic Trends



Highway	Segment	Direction	TMC Code	Cross Street and/or Interchange	Period	TTI		LOTTR		TTTR		PHED	
						2024	Trend 2018-2024	2024	Trend 2018-2024	2024	Trend 2018-2024	2024	Trend 2018-2024
Cuatro Vientos Rd	From US 83 To TX 359	N	112+53780	La Pita Mangana Rd	6:00 am - 10:00 am	1.19		1.06					
					10:00 am - 4:00 pm	1.16		1.06					
					4:00 pm - 8:00 pm	1.15		1.06					
					Overnight	1.17		1.07					
					Weekend	1.15		1.07					
			112+53781	TX-359	6:00 am - 10:00 am	1.14		1.05					
					10:00 am - 4:00 pm	1.14		1.05					
					4:00 pm - 8:00 pm	1.14		1.06					
					Overnight	1.16		1.07					
					Weekend	1.14		1.06					
			112+53782	TX-20 Loop/Bob Bullock Loop	6:00 am - 10:00 am	1.11		1.04					
					10:00 am - 4:00 pm	1.10		1.05					
					4:00 pm - 8:00 pm	1.11		1.04					
					Overnight	1.13		1.05					
					Weekend	1.09		1.04					
			112P53782	TX-20 Loop/Bob Bullock Loop	6:00 am - 10:00 am	1.13		1.05					
					10:00 am - 4:00 pm	1.11		1.06					
					4:00 pm - 8:00 pm	1.10		1.06					
					Overnight	1.13		1.07					
					Weekend	1.08		1.06					
		S	112-53781	TX-359	6:00 am - 10:00 am	1.15		1.11					
					10:00 am - 4:00 pm	1.19		1.09					
					4:00 pm - 8:00 pm	1.19		1.06					
					Overnight	1.17		1.08					
					Weekend	1.13		1.10					
			112-53780	La Pita Mangana Rd	6:00 am - 10:00 am	1.14		1.07					
					10:00 am - 4:00 pm	1.11		1.05					
					4:00 pm - 8:00 pm	1.15		1.05					
					Overnight	1.14		1.06					
					Weekend	1.10		1.06					
			112-53779	Sierra Vista Blvd	6:00 am - 10:00 am	1.25		1.10					
					10:00 am - 4:00 pm	1.19		1.08					
					4:00 pm - 8:00 pm	1.20		1.08					
					Overnight	1.19		1.09					
					Weekend	1.18		1.09					
			112N53779	Sierra Vista Blvd	6:00 am - 10:00 am	1.20		1.14					
					10:00 am - 4:00 pm	1.17		1.12					
					4:00 pm - 8:00 pm	1.20		1.12					
					Overnight	1.23		1.18					
					Weekend	1.20		1.18					

TTI: Travel Time Index; LOTTR: Level of Travel Time Reliability; TTTR: Truck Travel Time Reliability; PHED: Peak-Hour Excessive Delay; PHED value of 0 indicates that travel time is less than Excessive Delay Threshold Travel Time

2024 Performance and Historic Trends



Highway	Segment	Direction	TMC Code	Cross Street and/or Interchange	Period	TTI		LOTTR		TTTR		PHED	
						2024	Trend 2018-2024	2024	Trend 2018-2024	2024	Trend 2018-2024	2024	Trend 2018-2024
Cuatro Vientos Rd	From US 83 To TX 359	S	112-53778	Cielito Lindo Blvd	6:00 am - 10:00 am	1.16		1.09					
					10:00 am - 4:00 pm	1.14		1.08					
					4:00 pm - 8:00 pm	1.15		1.08					
					Overnight	1.15		1.08					
					Weekend	1.14		1.09					
			112N53778	Cielito Lindo Blvd	6:00 am - 10:00 am	1.23		1.29					
					10:00 am - 4:00 pm	1.18		1.18					
					4:00 pm - 8:00 pm	1.16		1.17					
					Overnight	1.17		1.14					
					Weekend	1.19		1.28					
			112-53777	Mangana Hein Rd	6:00 am - 10:00 am	1.31		1.24					
					10:00 am - 4:00 pm	1.20		1.15					
					4:00 pm - 8:00 pm	1.17		1.12					
					Overnight	1.19		1.11					
					Weekend	1.19		1.16					
			112N53777	Mangana Hein Rd	6:00 am - 10:00 am	1.70		1.29					
					10:00 am - 4:00 pm	1.74		1.32					
					4:00 pm - 8:00 pm	1.78		1.27					
					Overnight	1.62		1.34					
					Weekend	1.60		1.21					

TTI: Travel Time Index; LOTTR: Level of Travel Time Reliability; TTTR: Truck Travel Time Reliability; PHED: Peak-Hour Excessive

Delay; PHED value of 0 indicates that travel time is less than Excessive Delay Threshold Travel Time

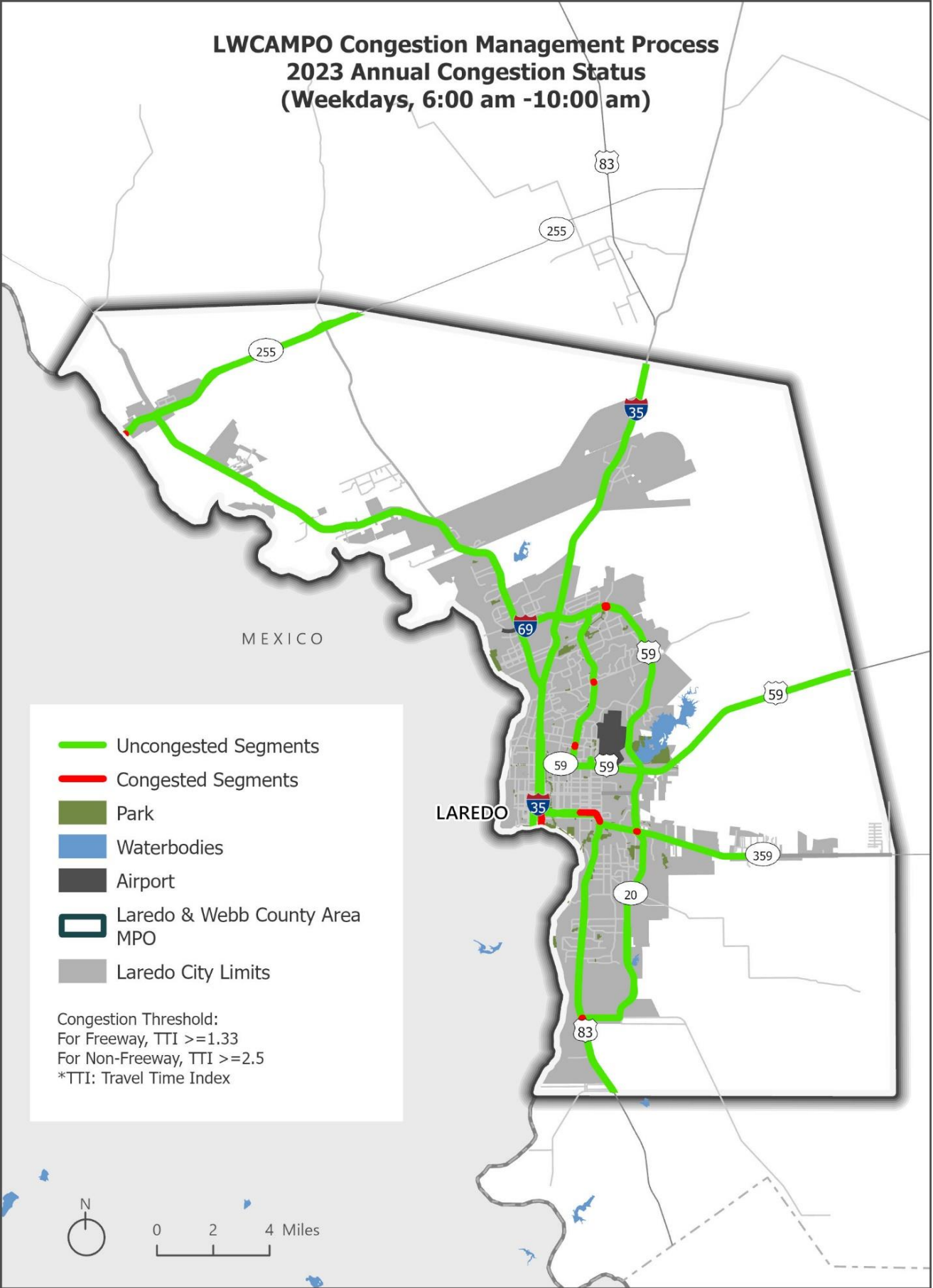
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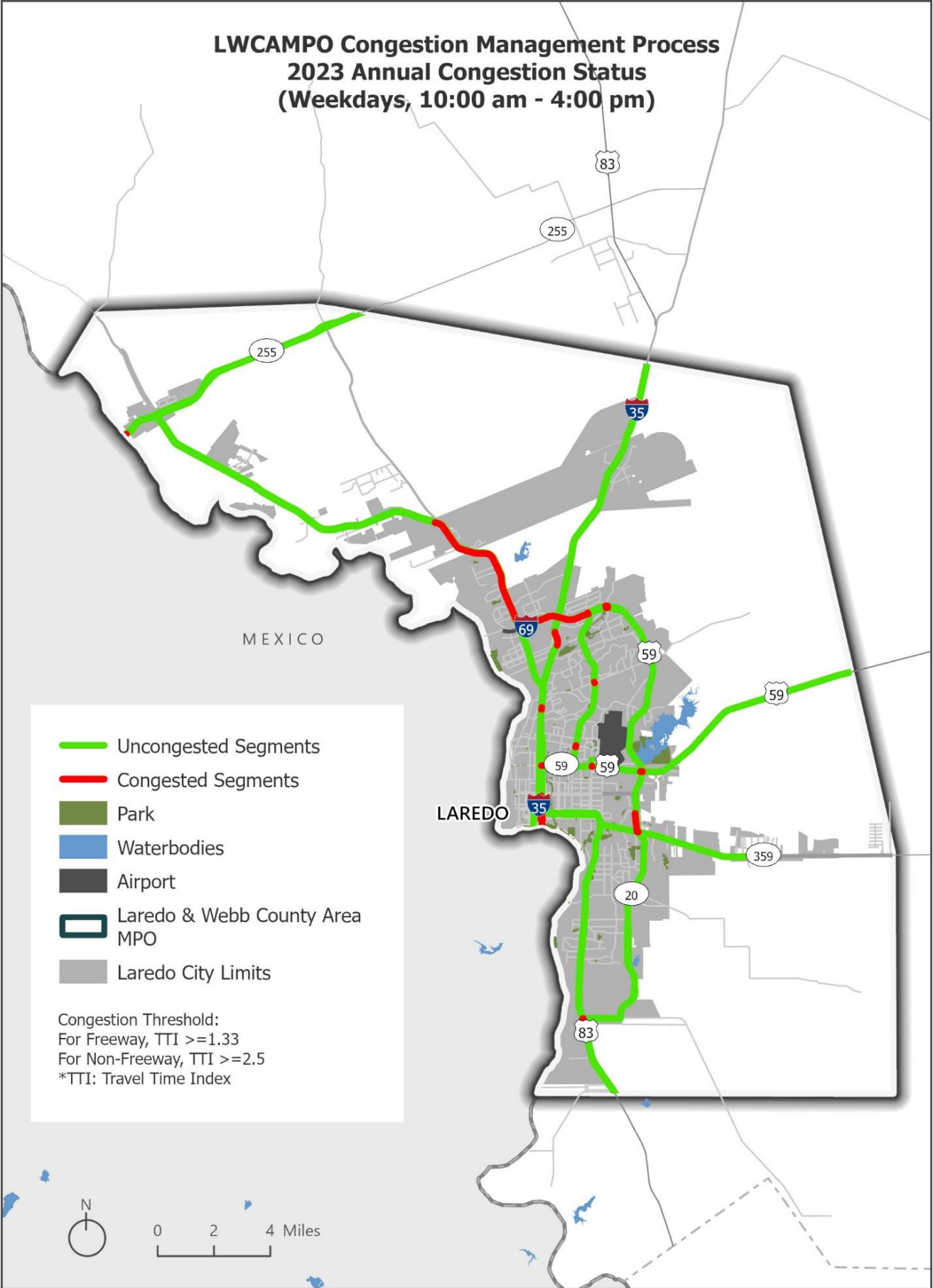
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Appendix C: Maps of Congestion Challenges and Needs

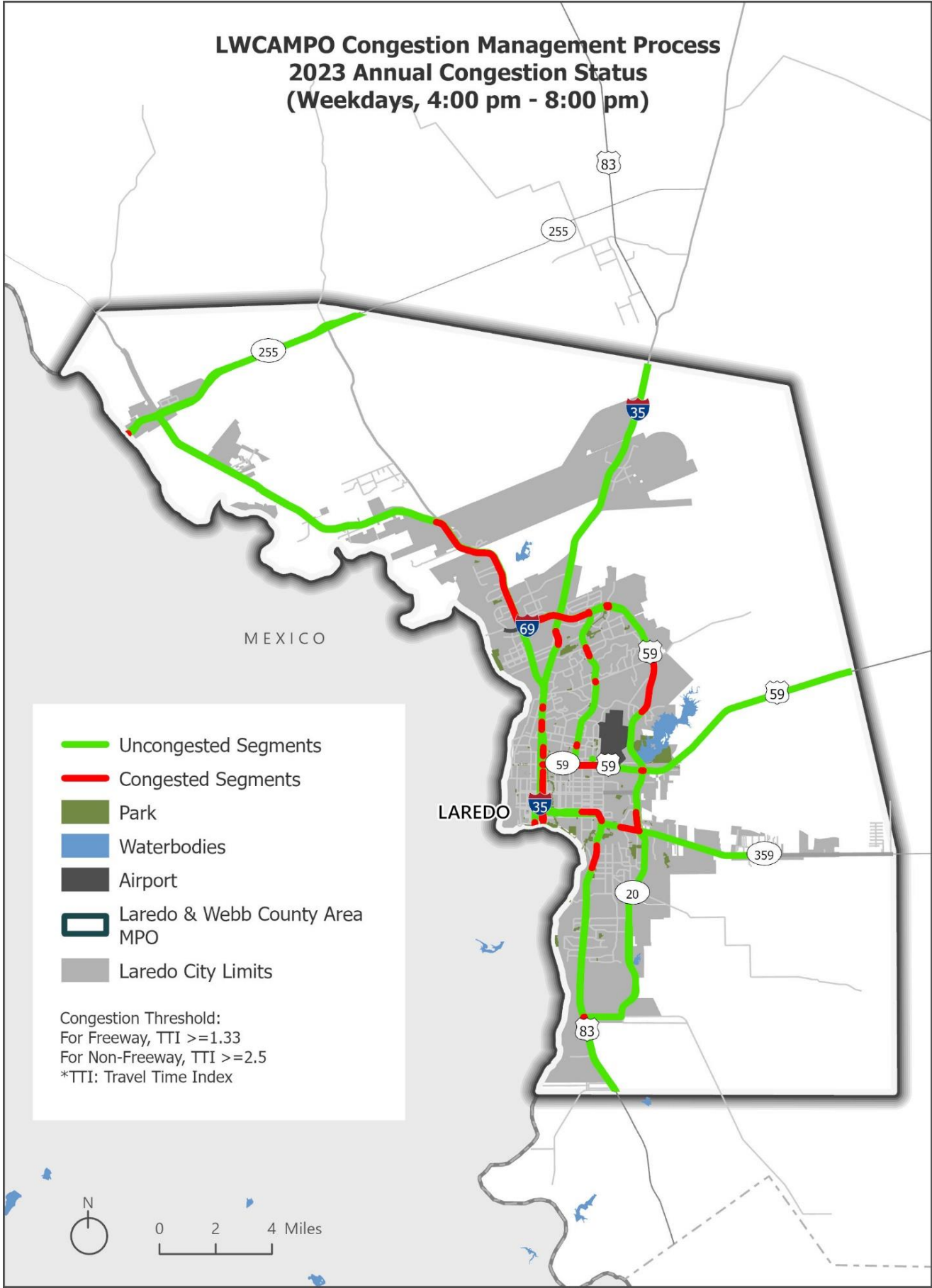
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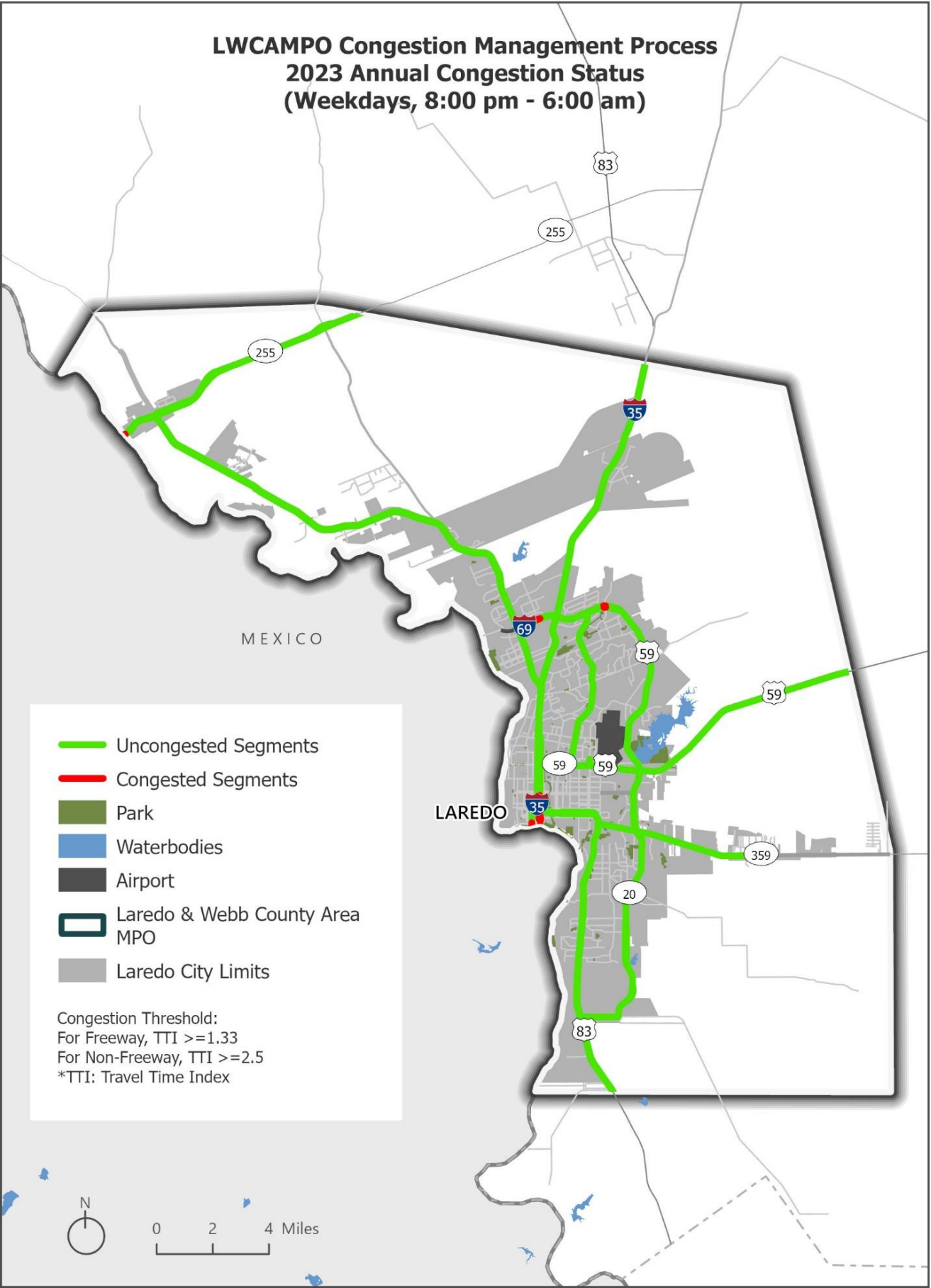
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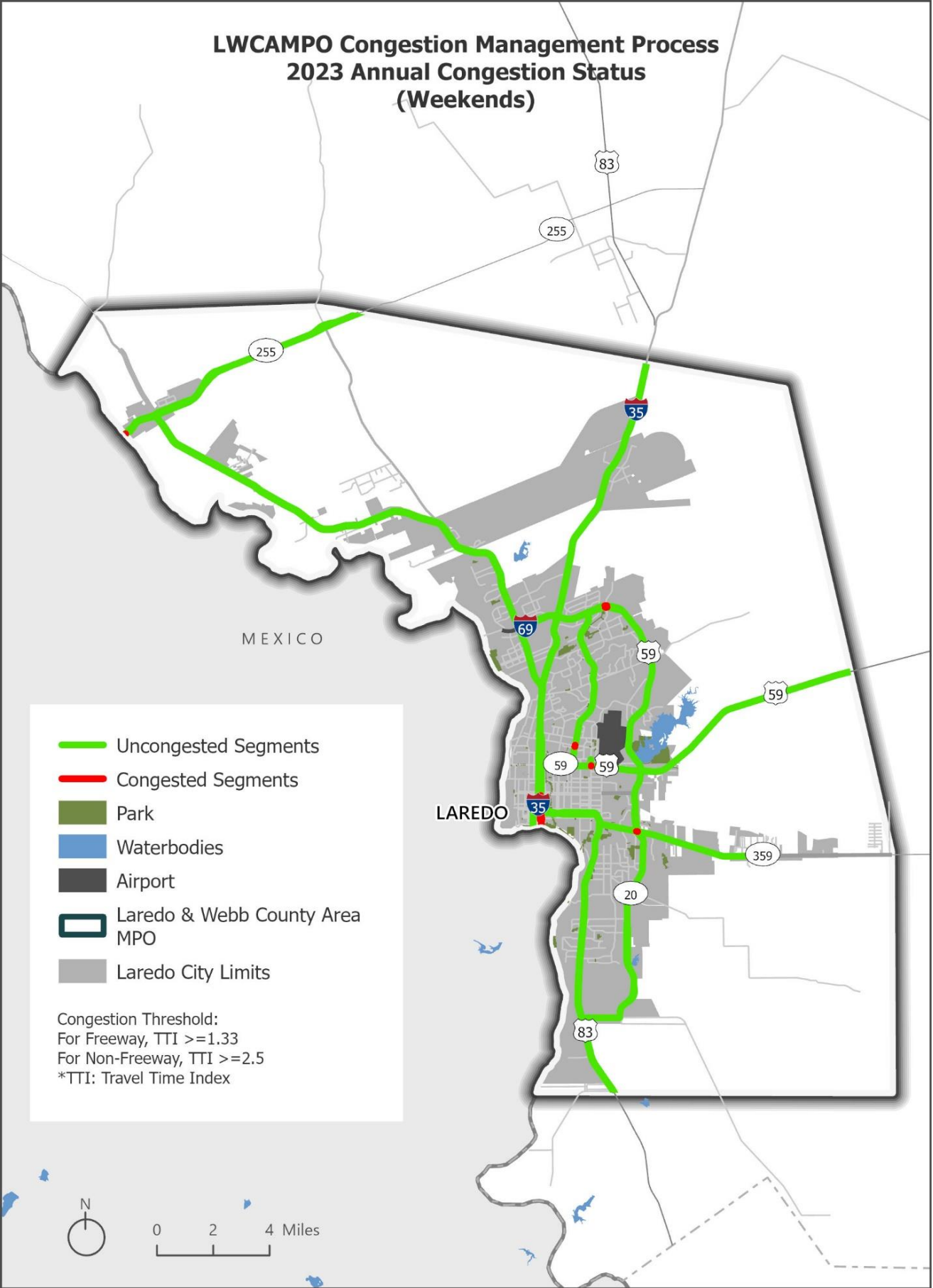
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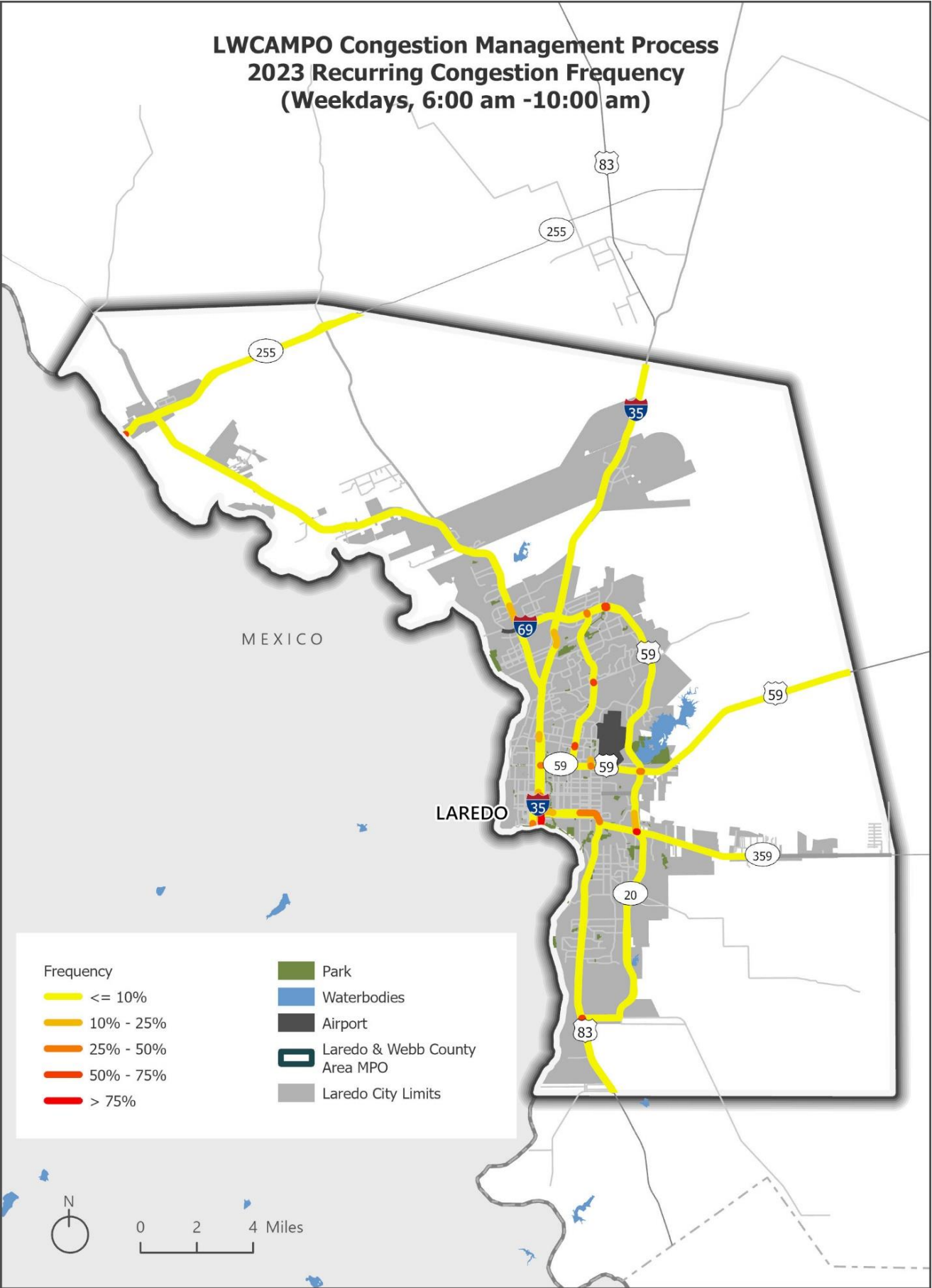
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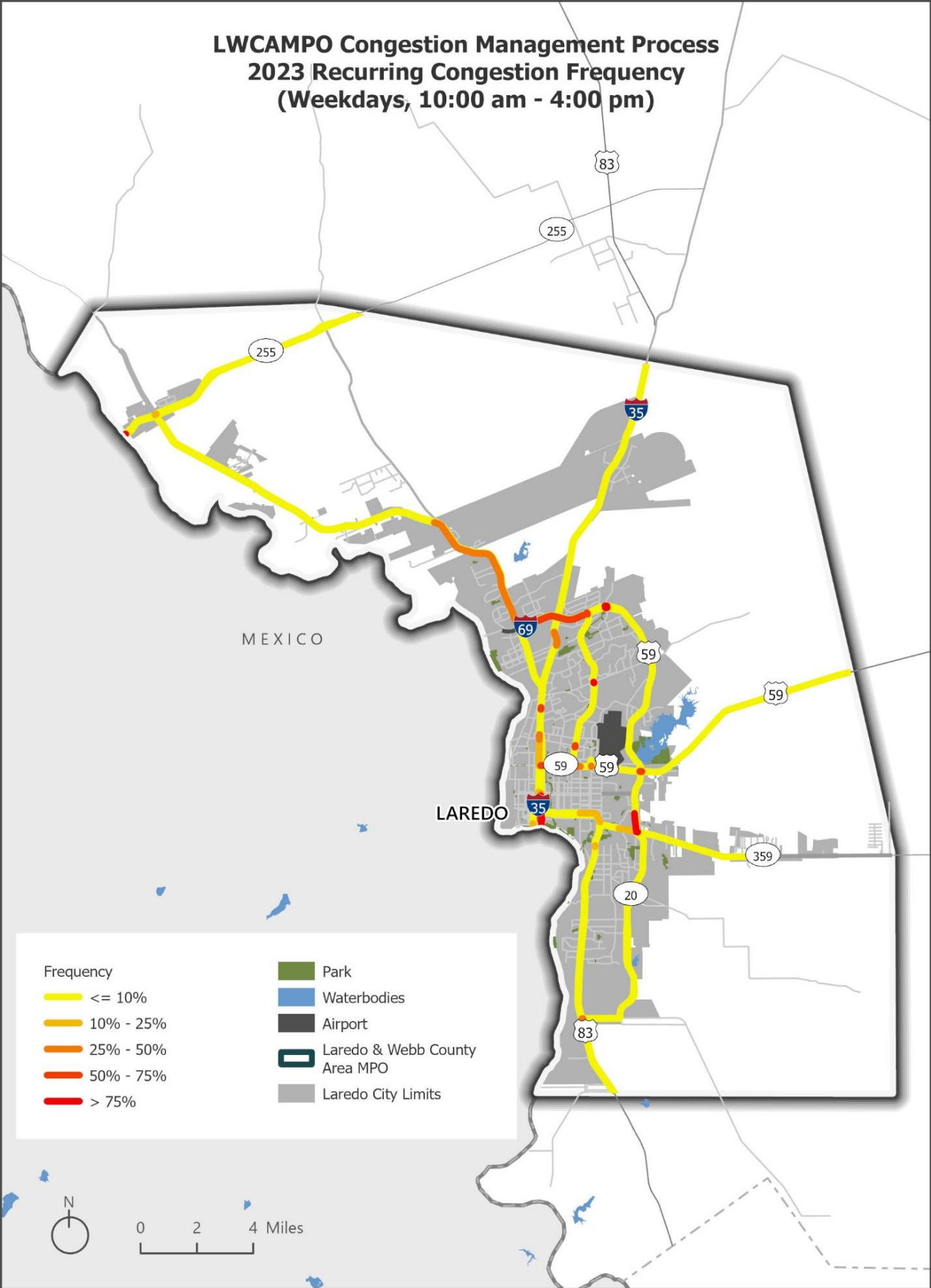


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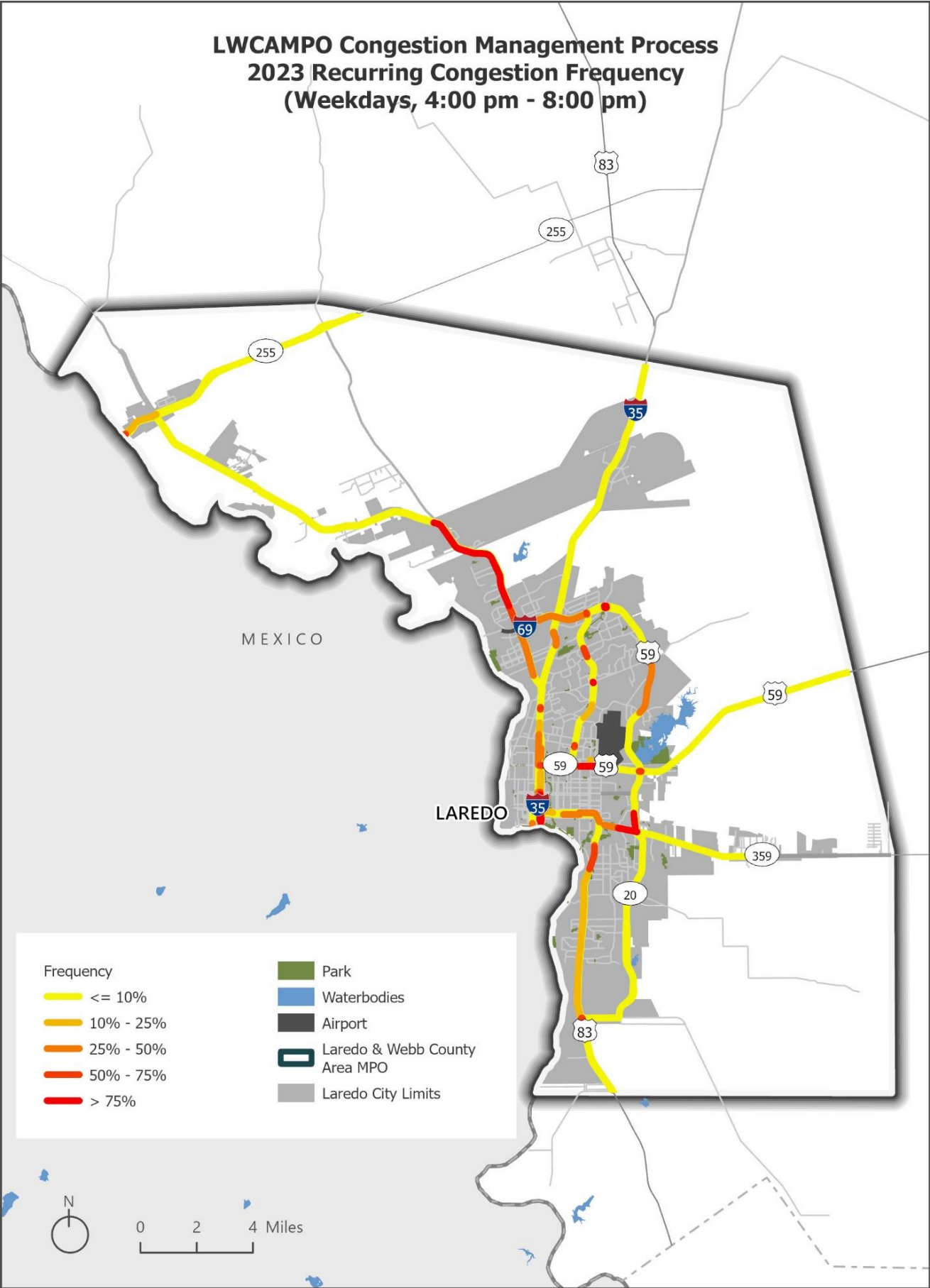


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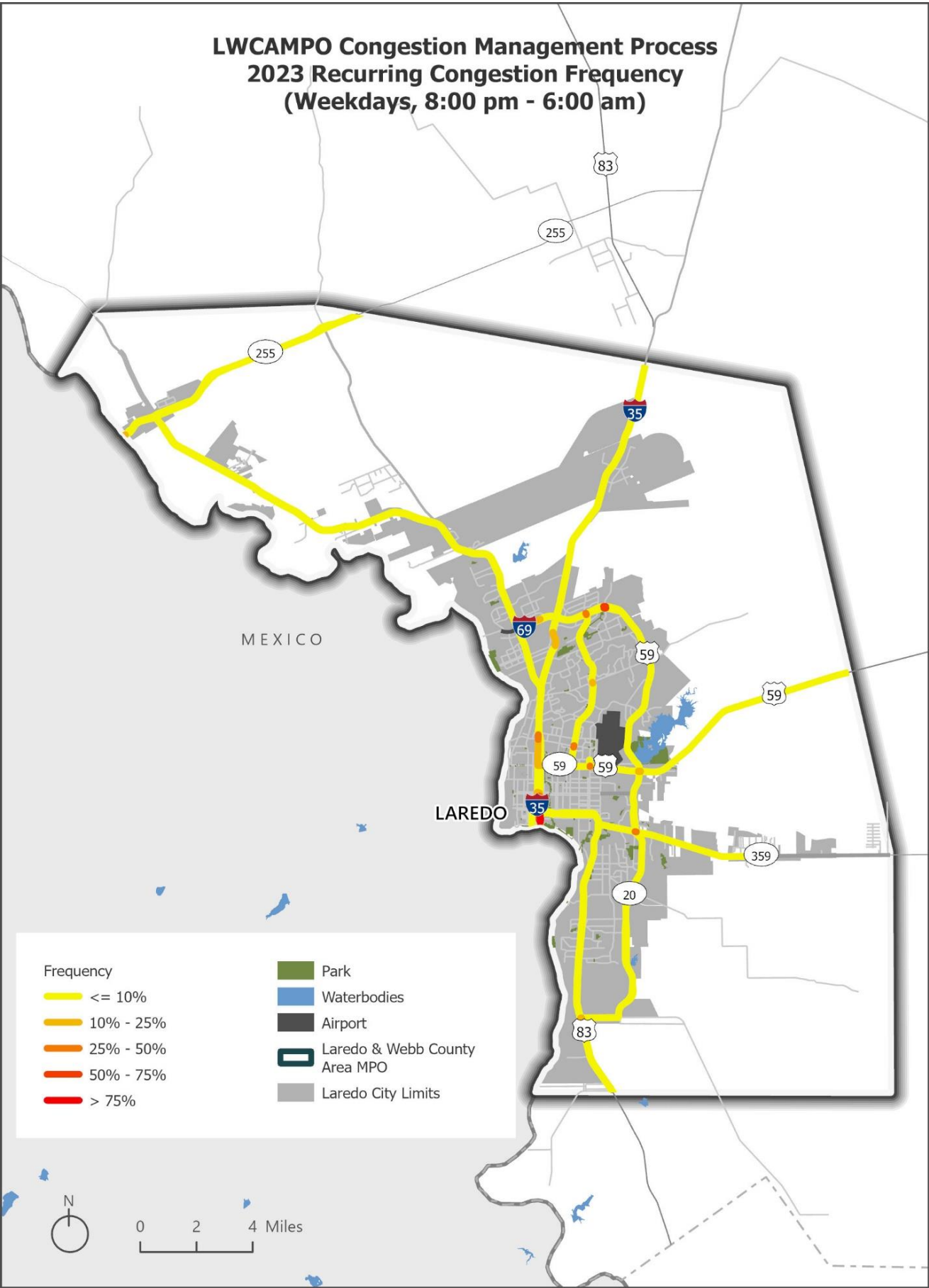




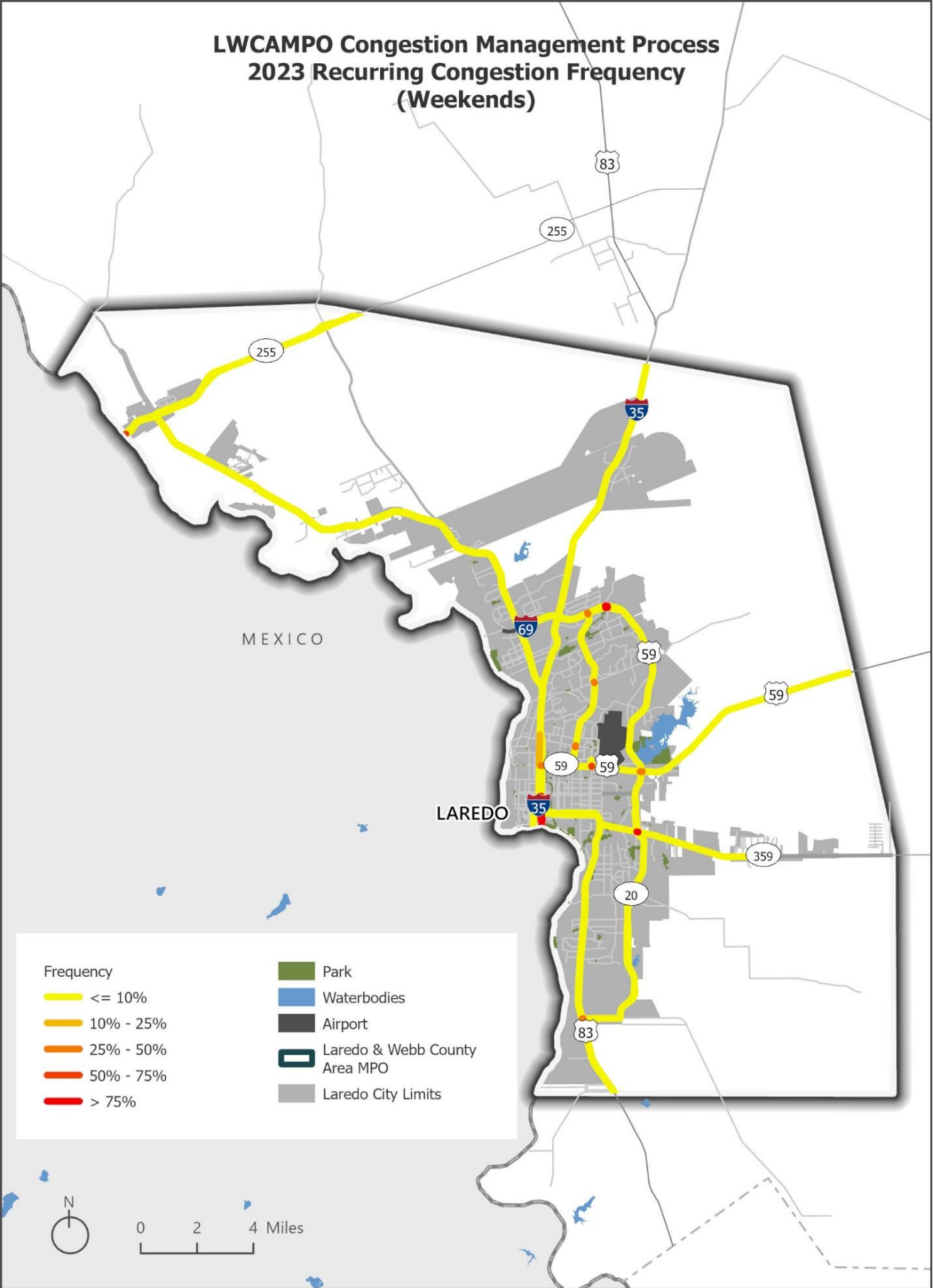
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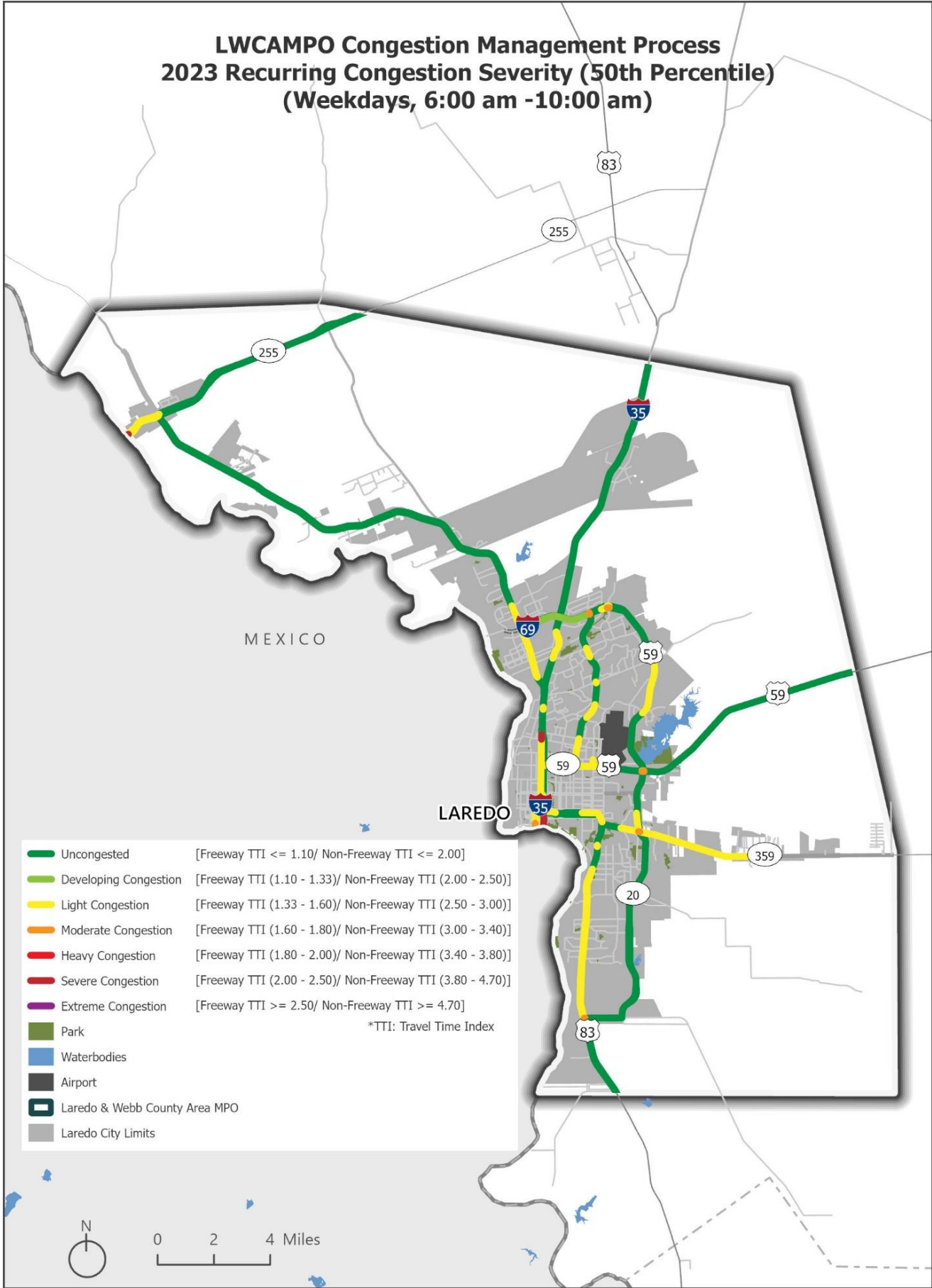
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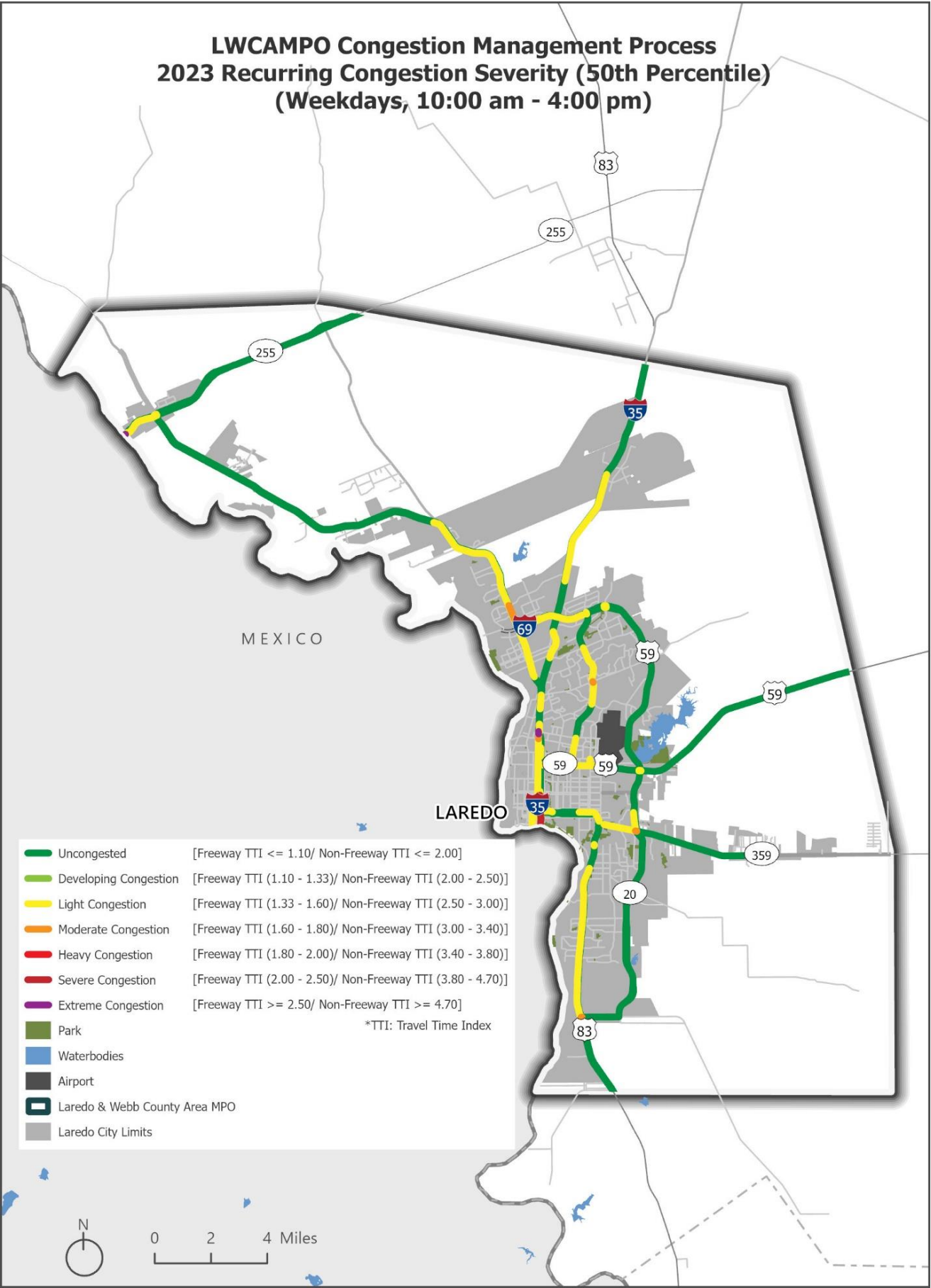
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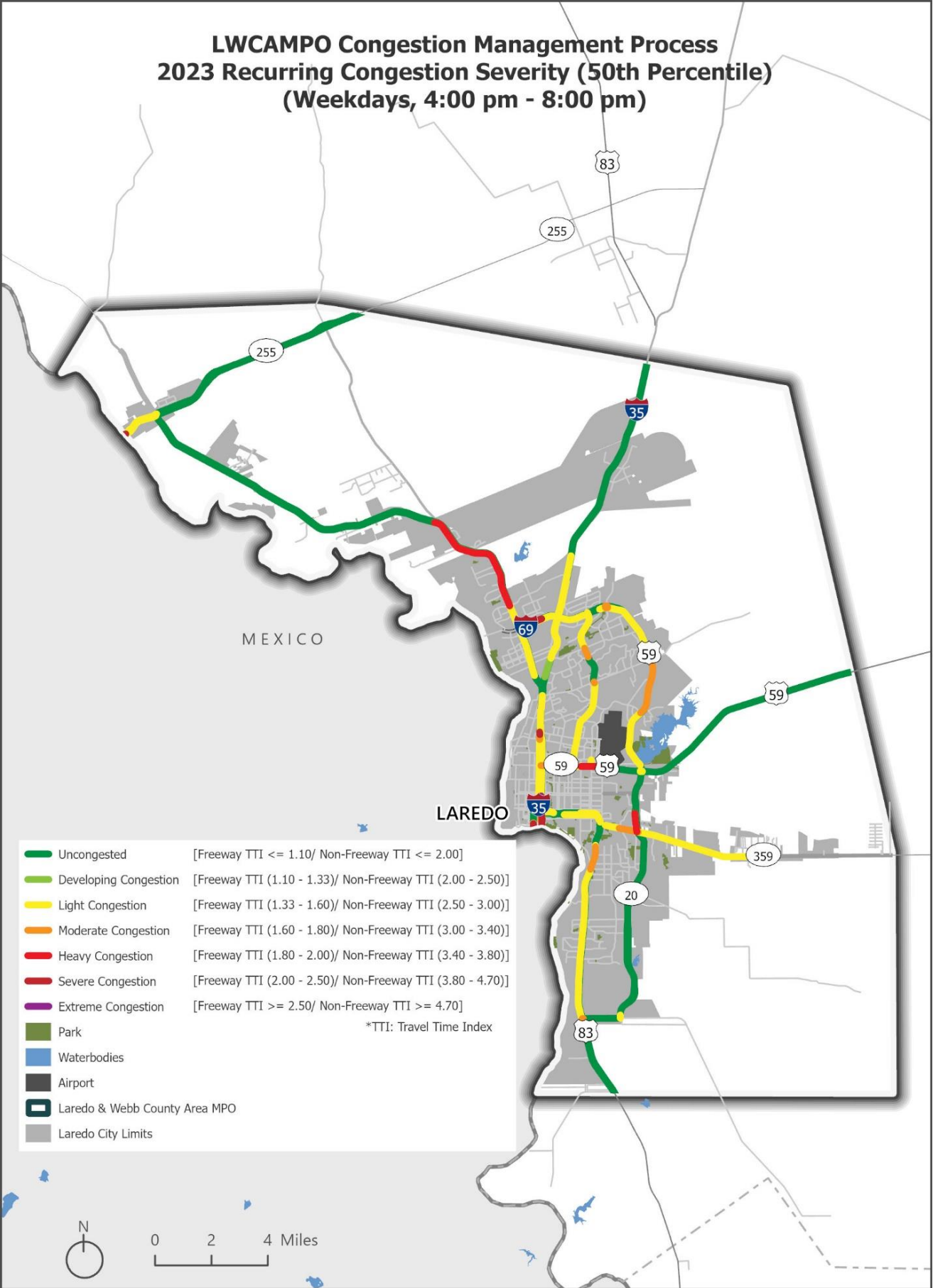
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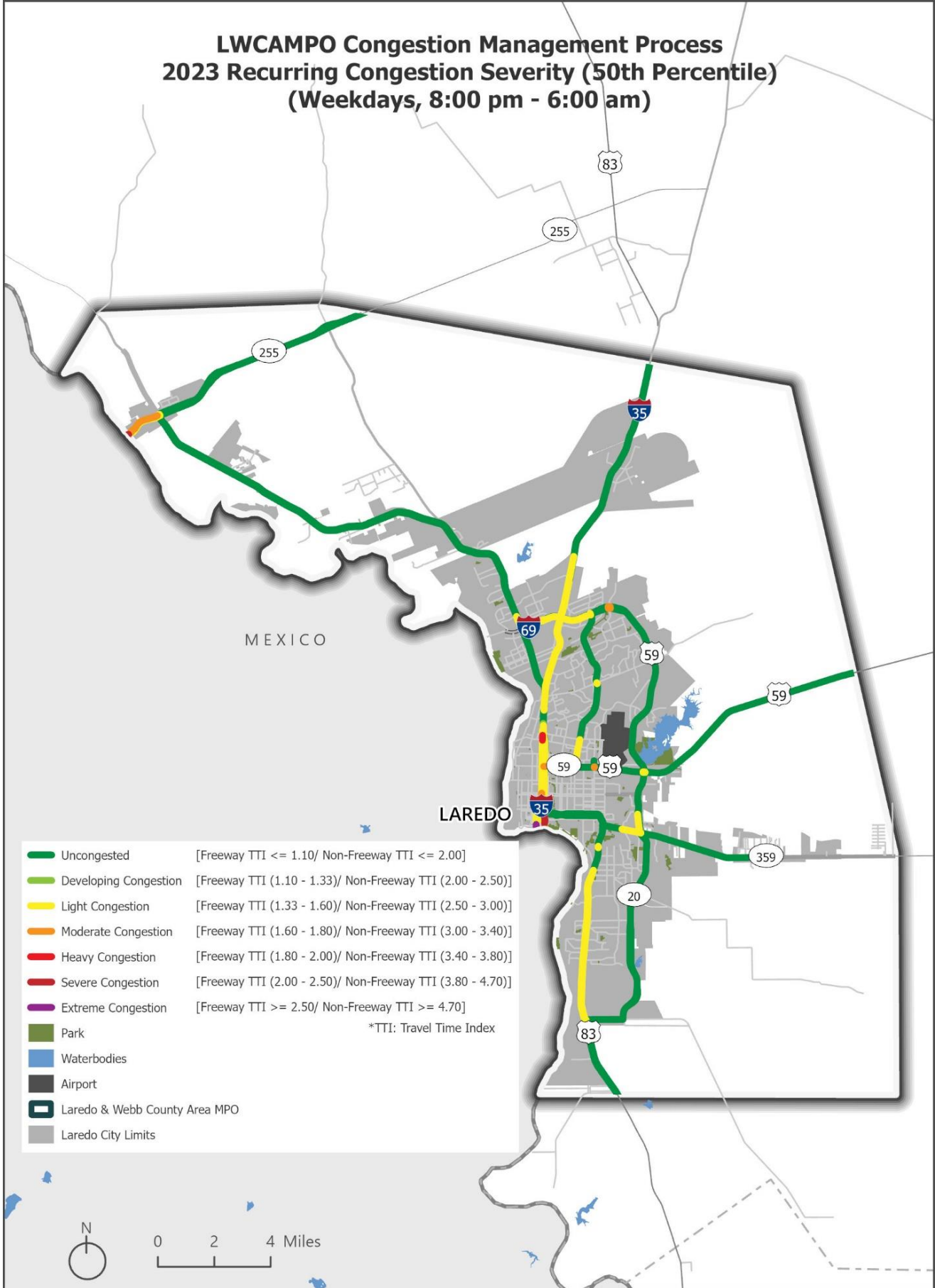
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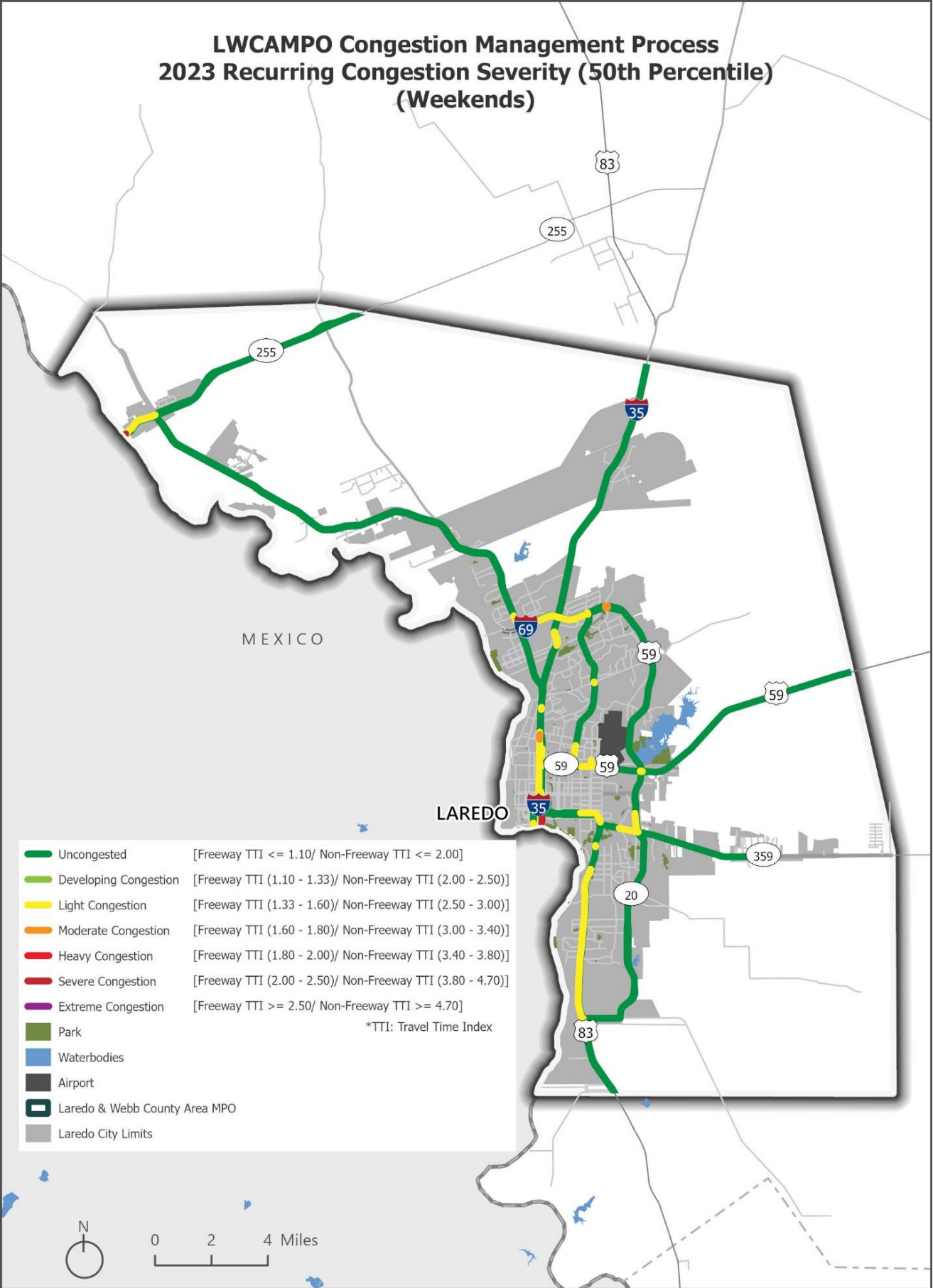
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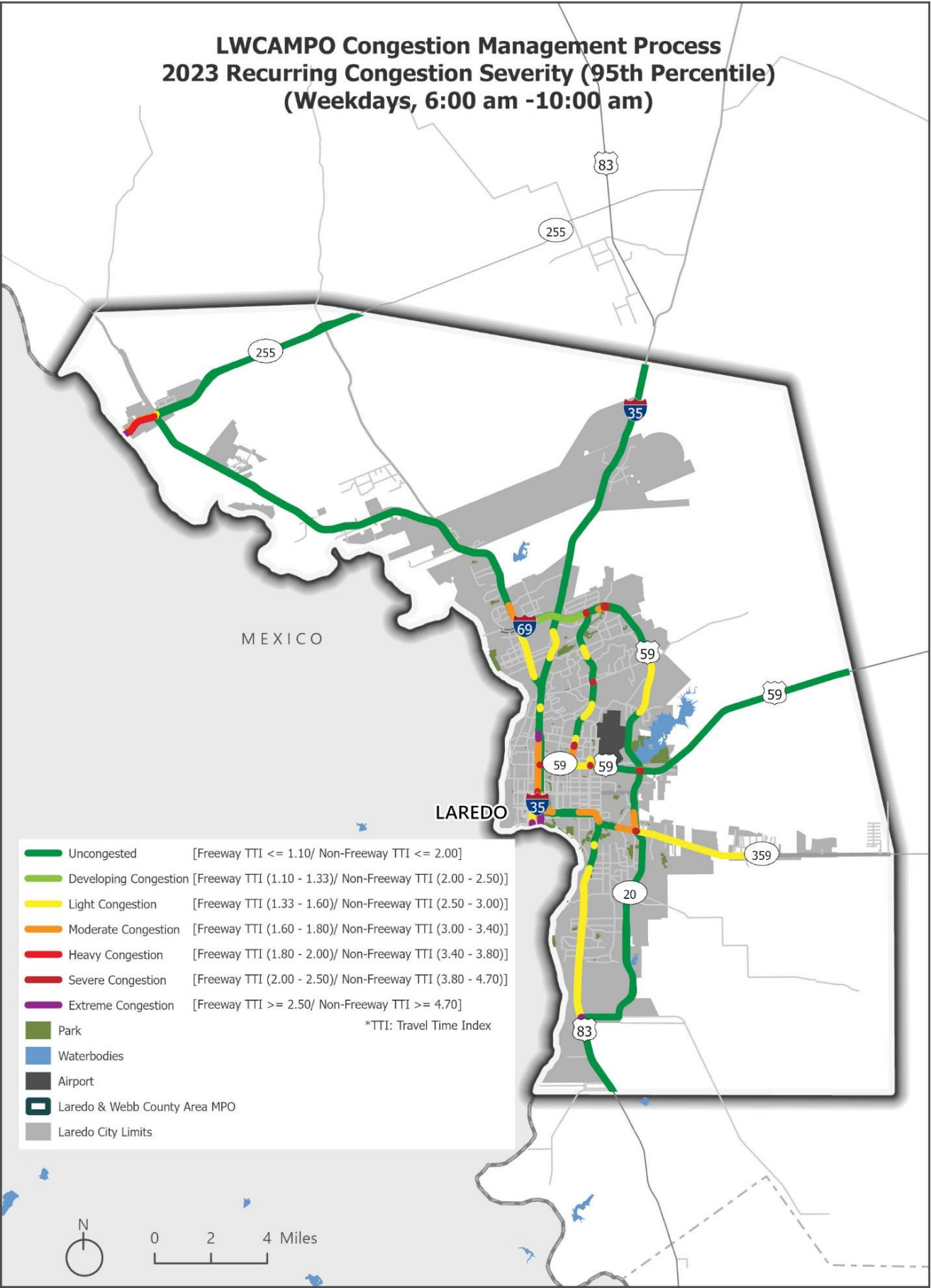
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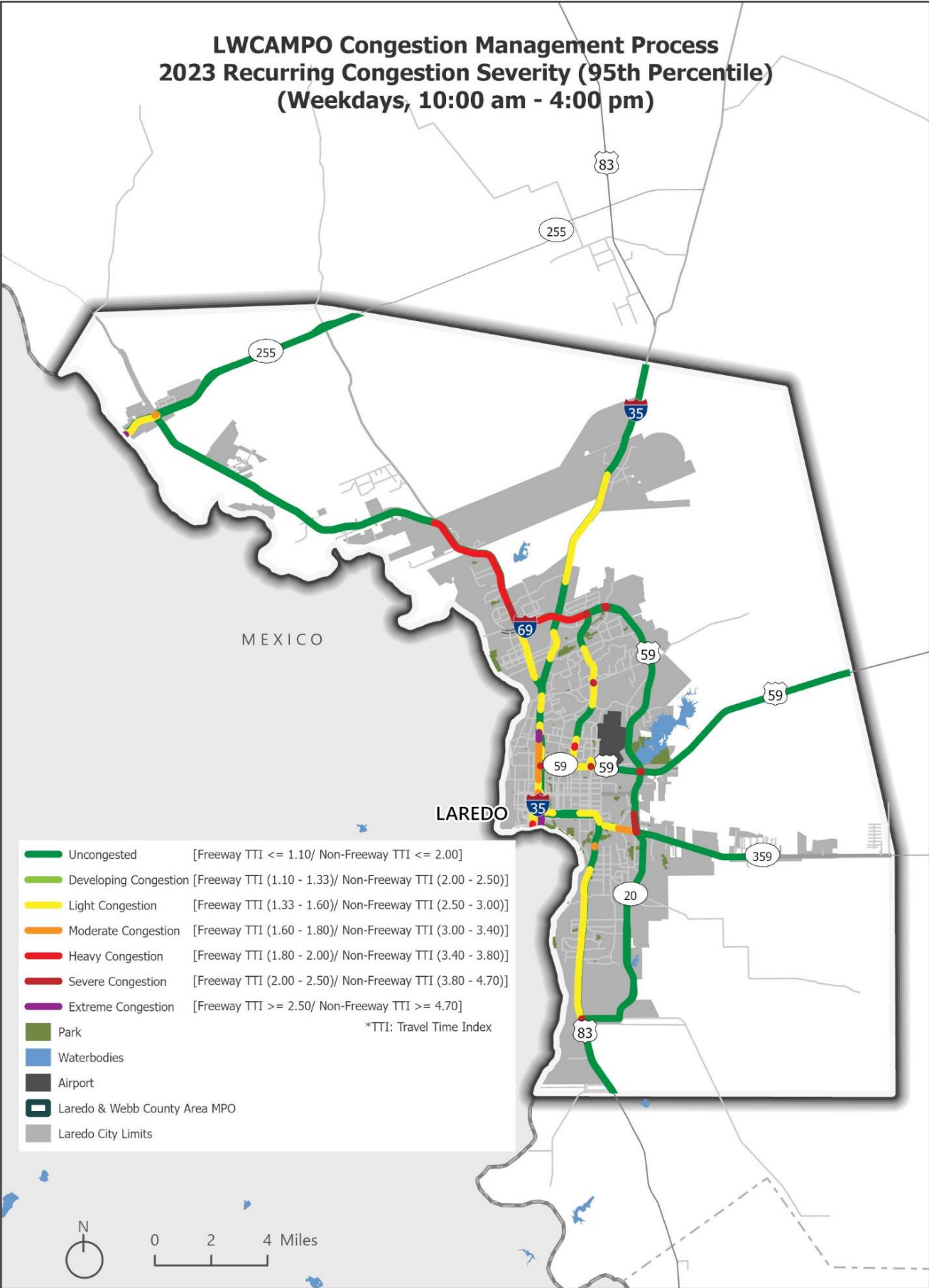
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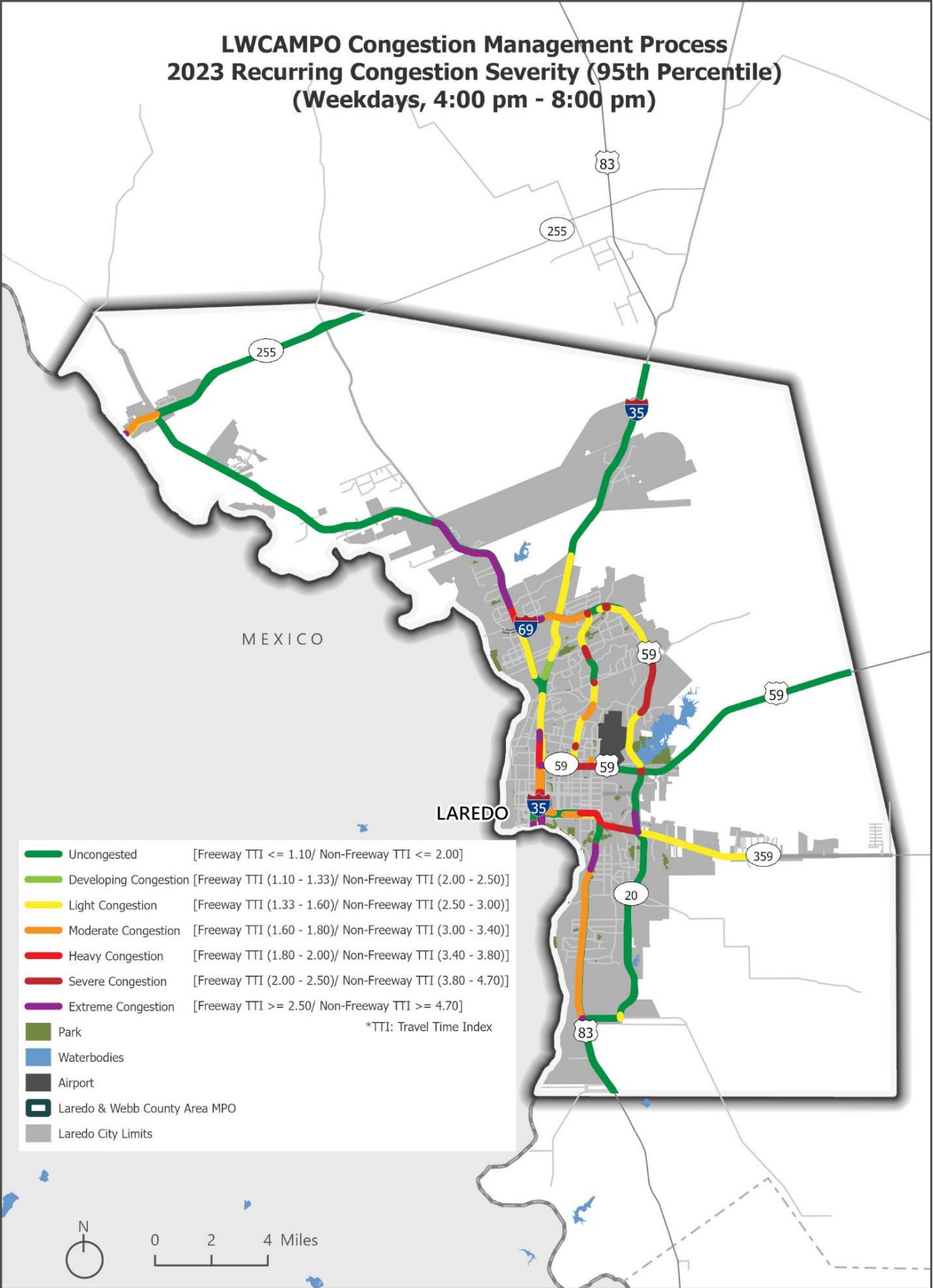
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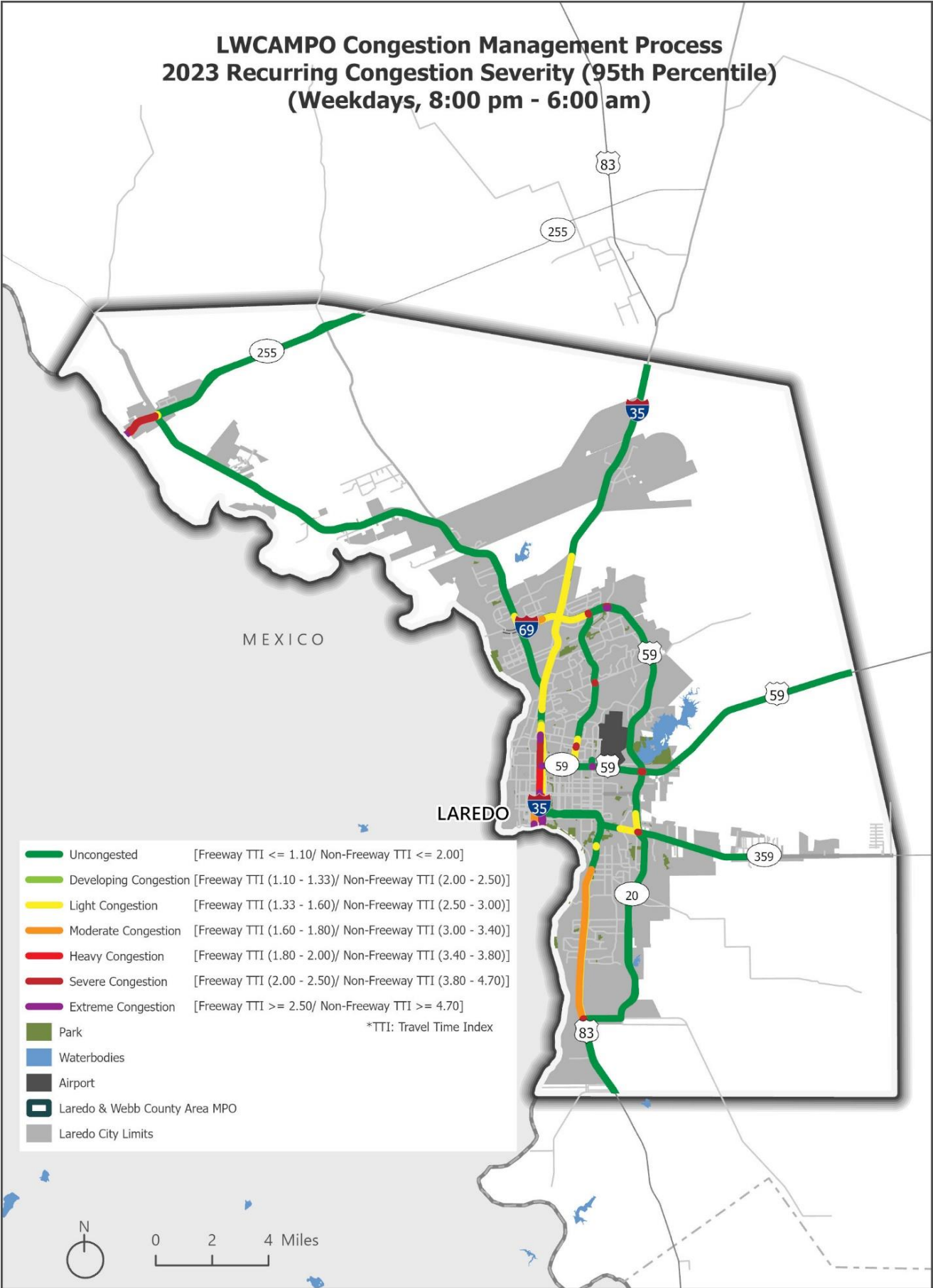
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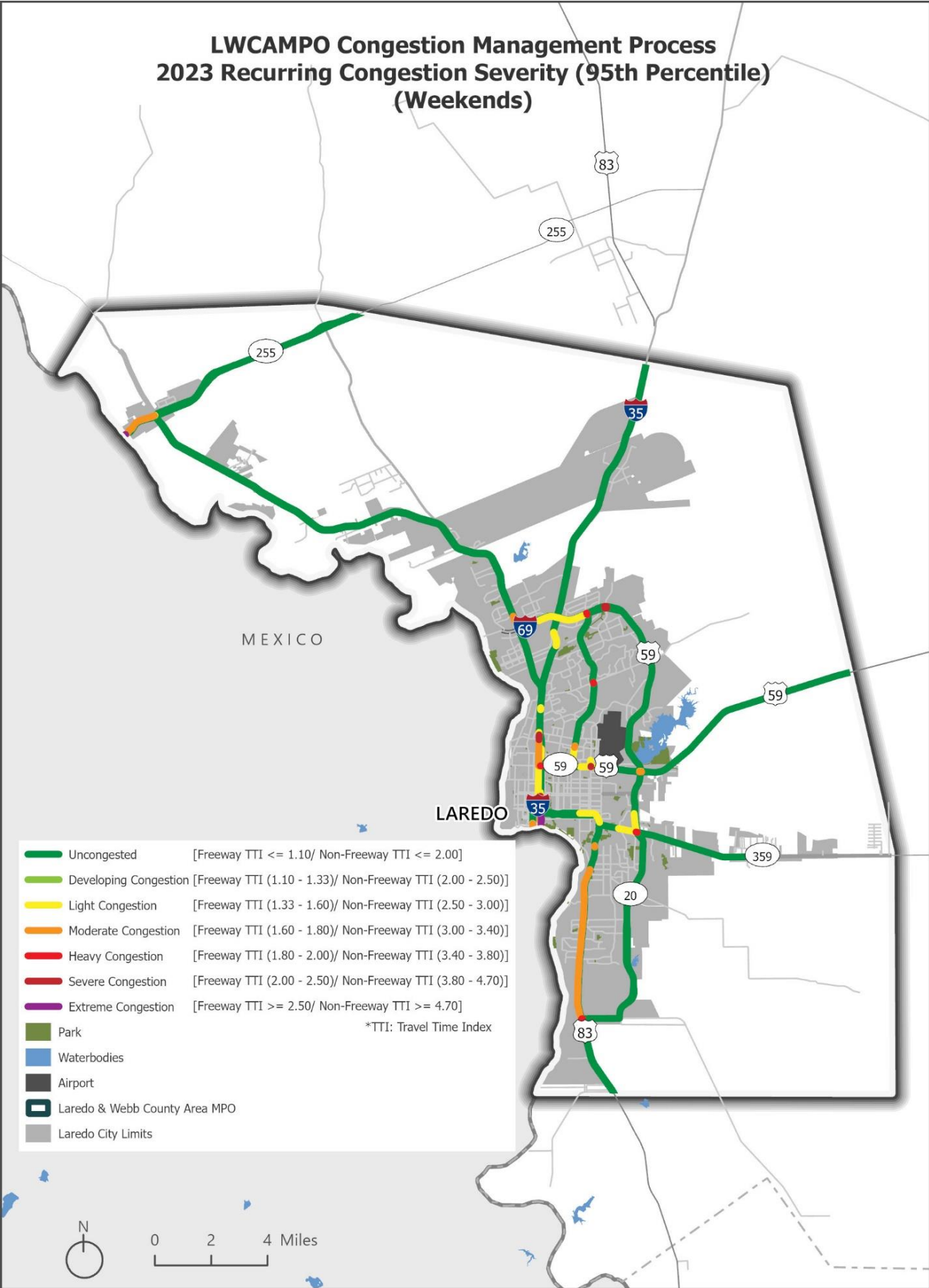
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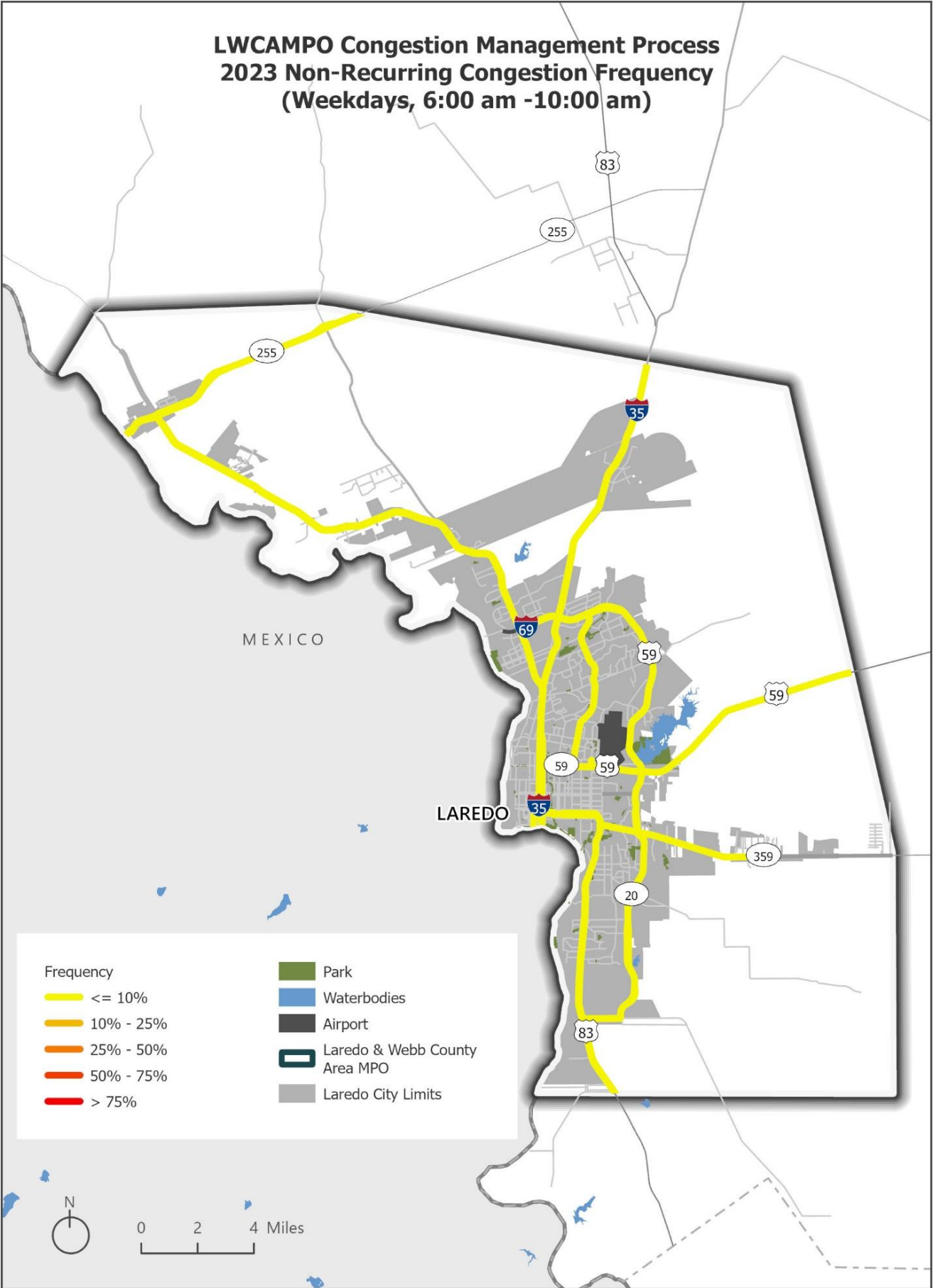
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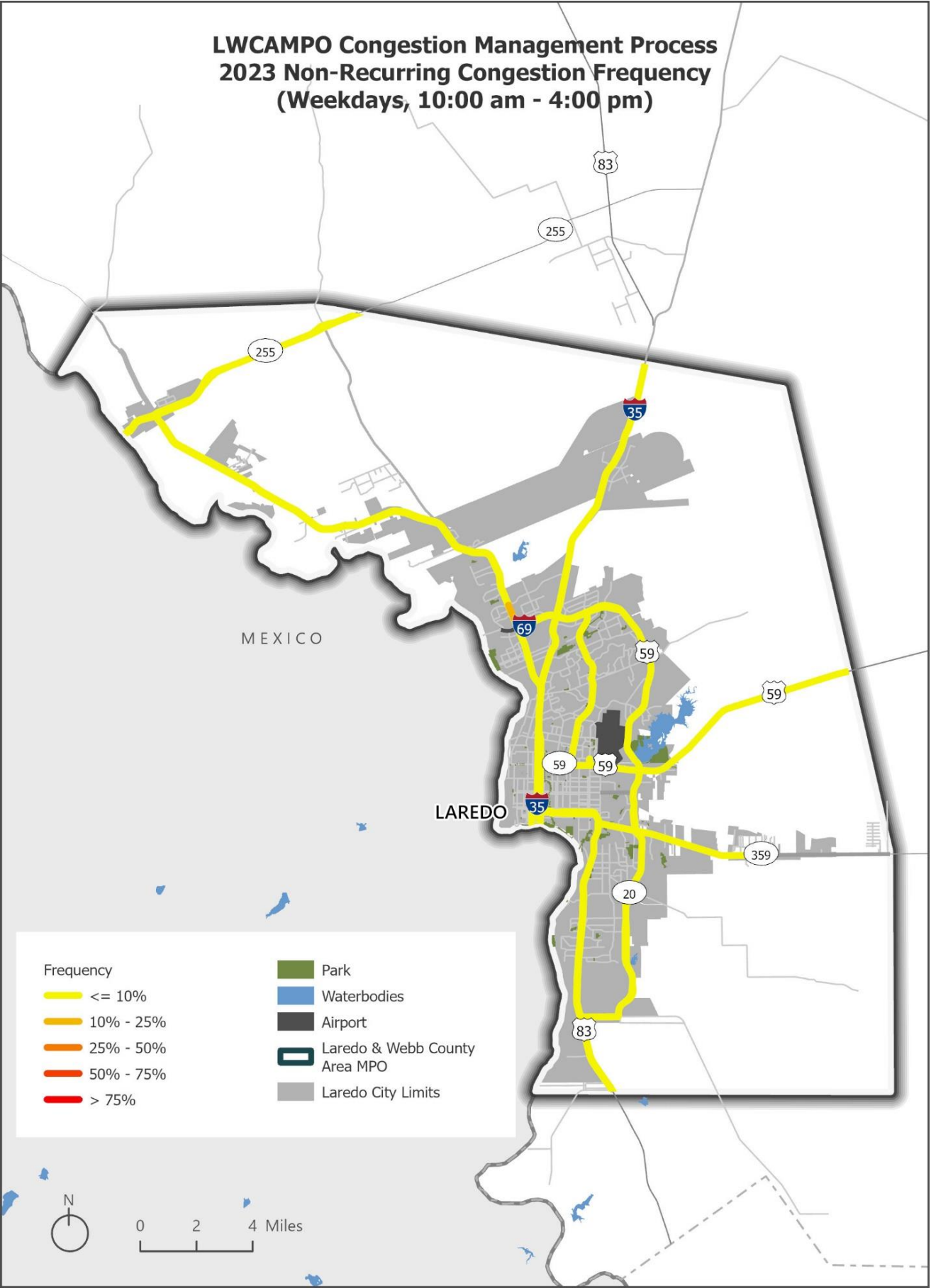
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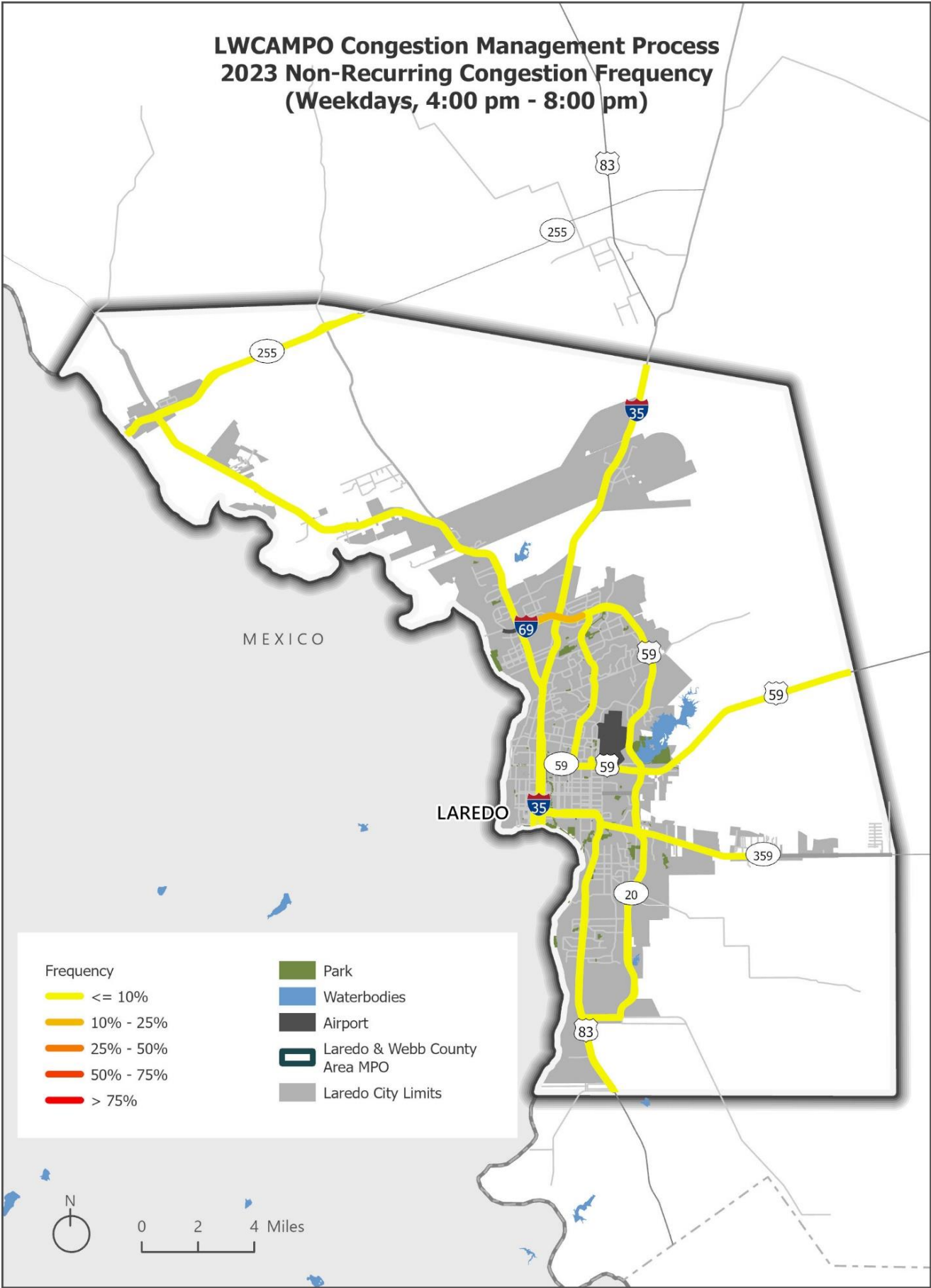
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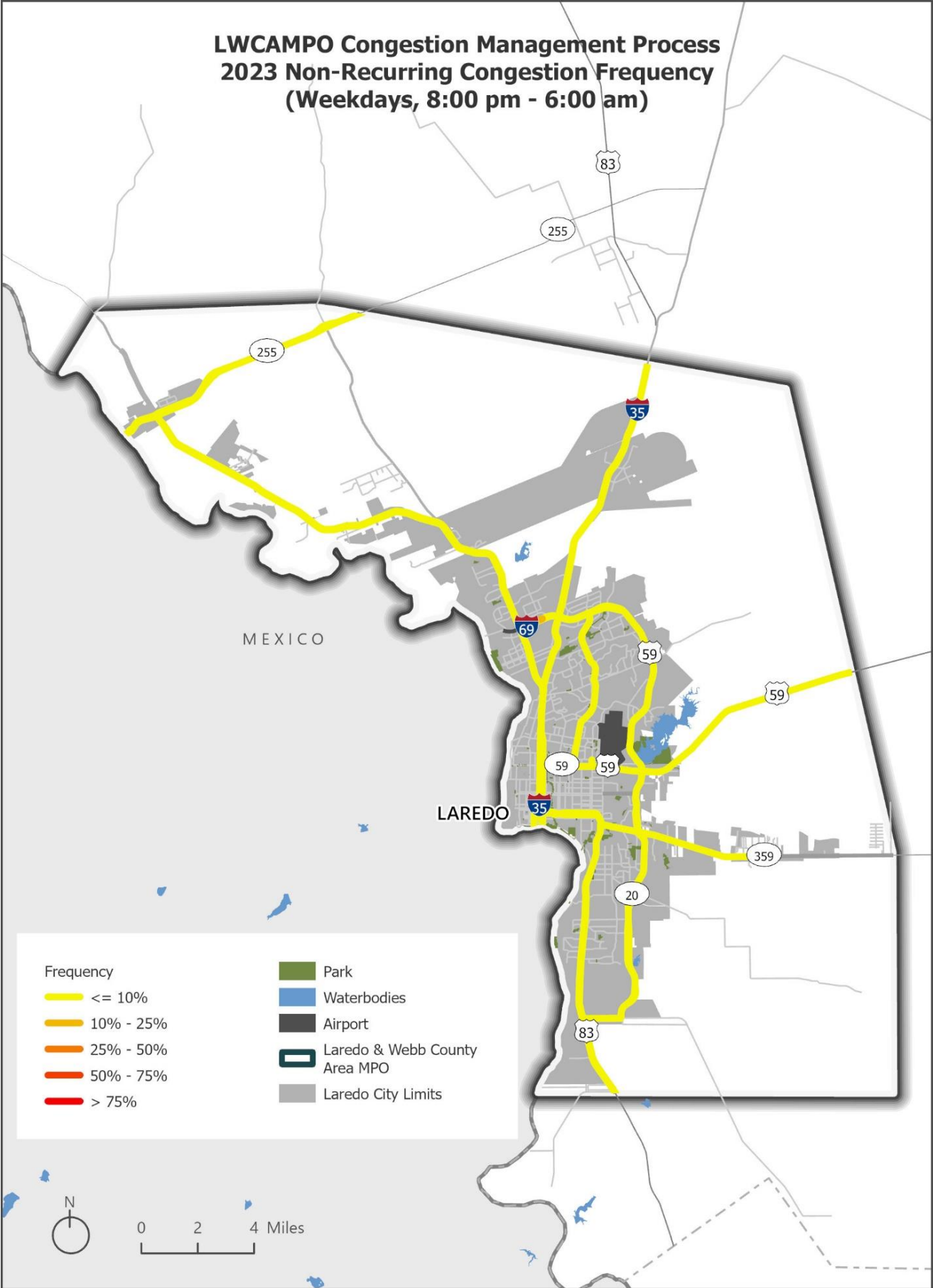
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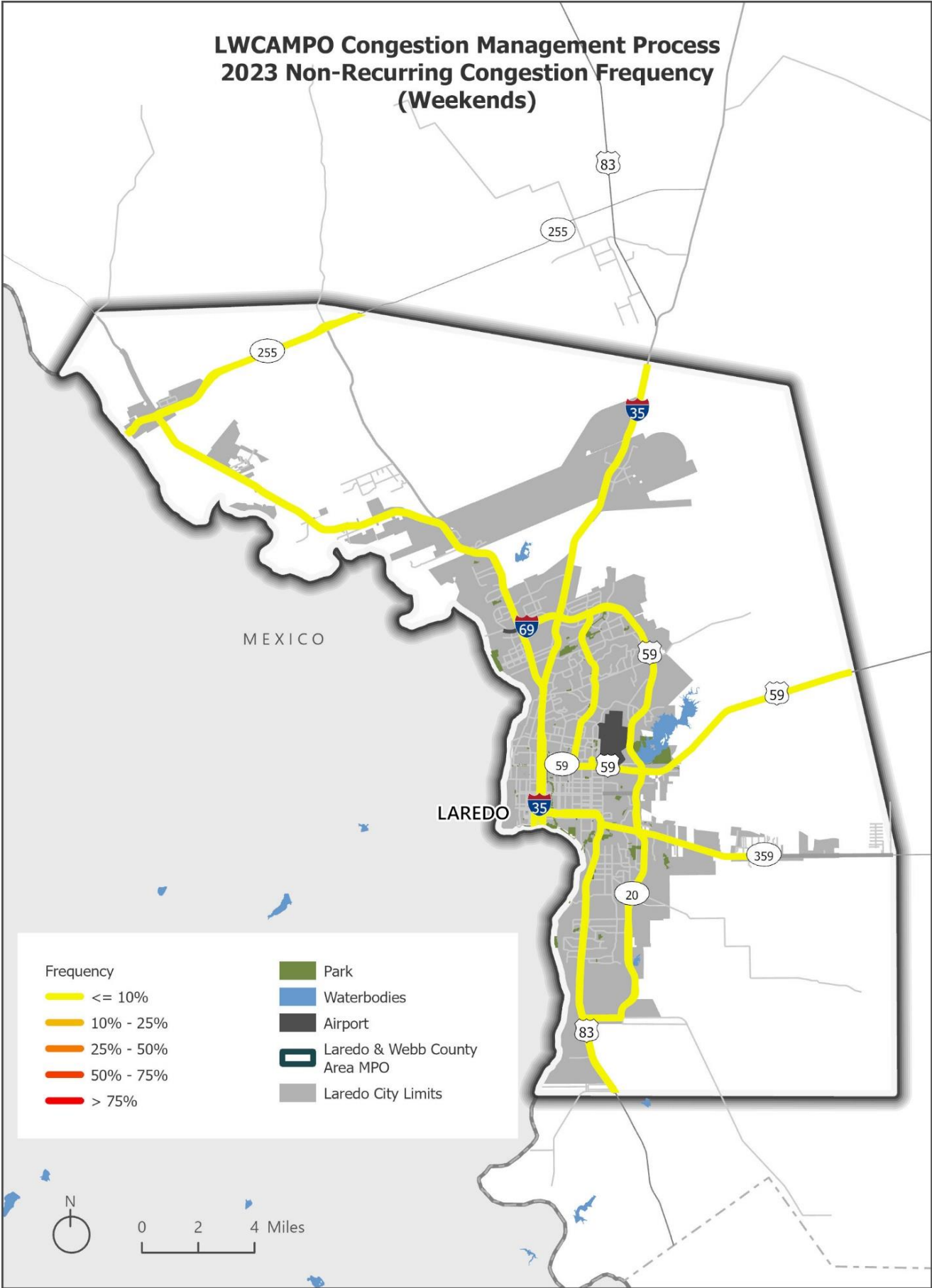
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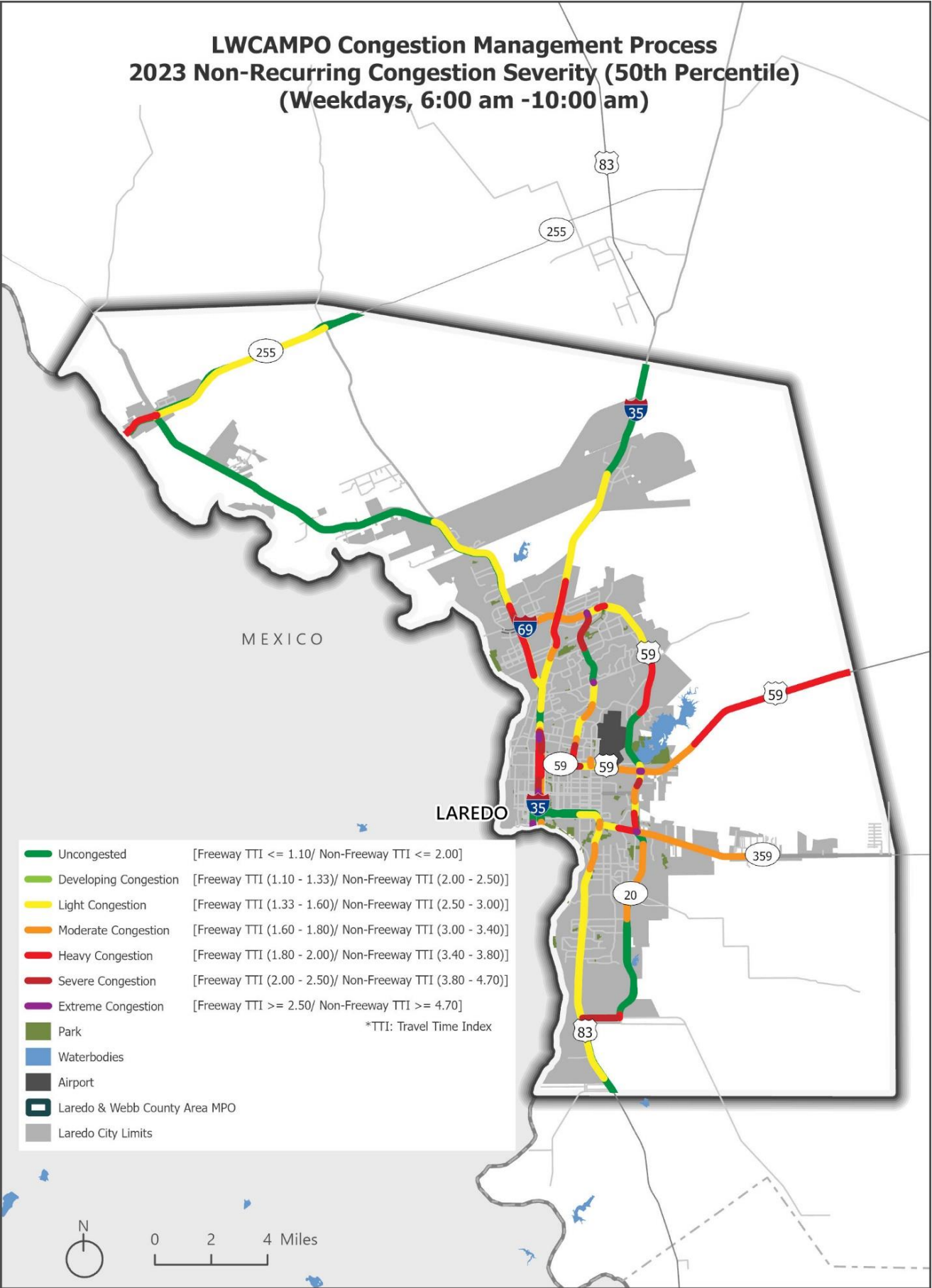
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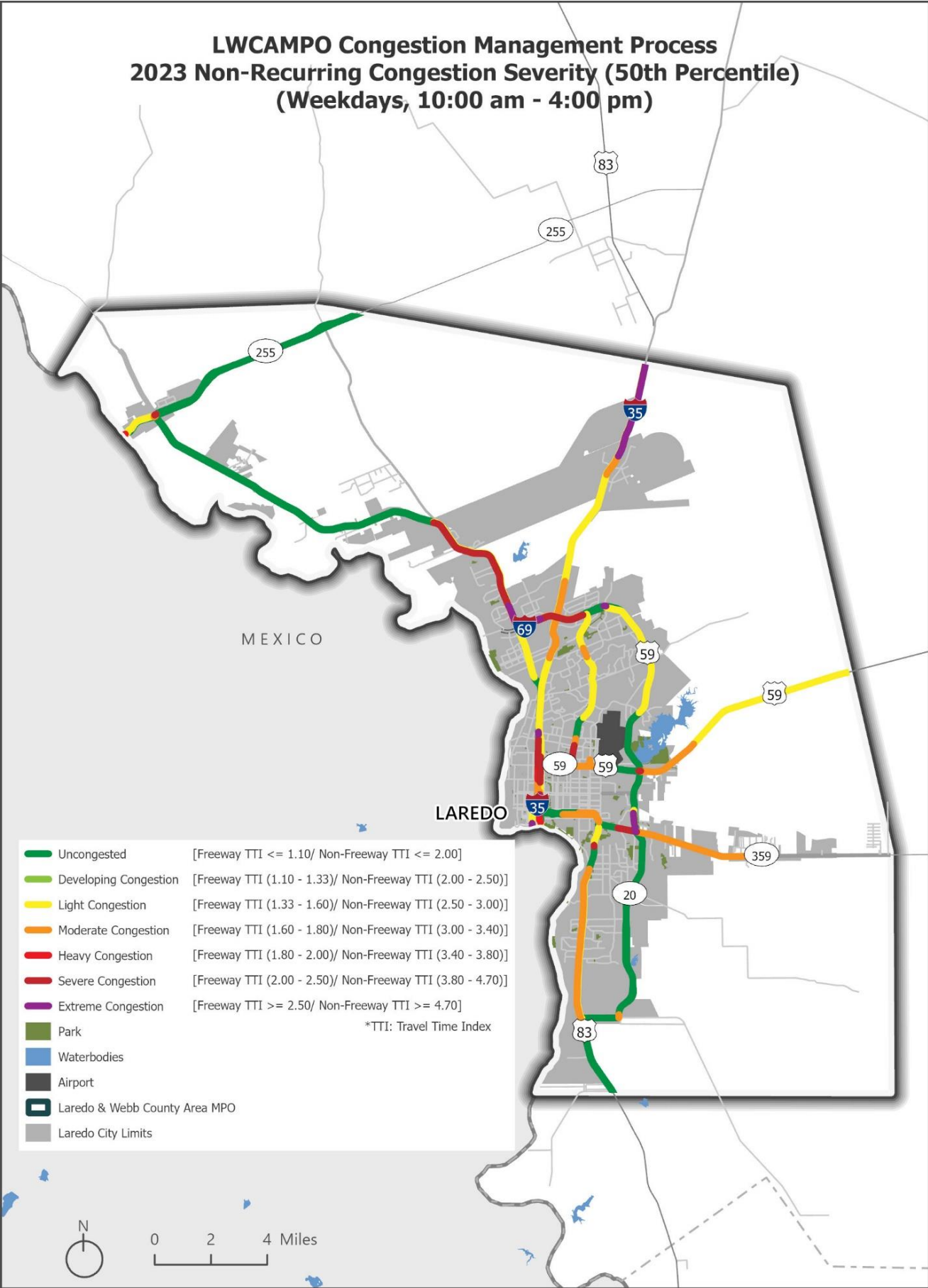


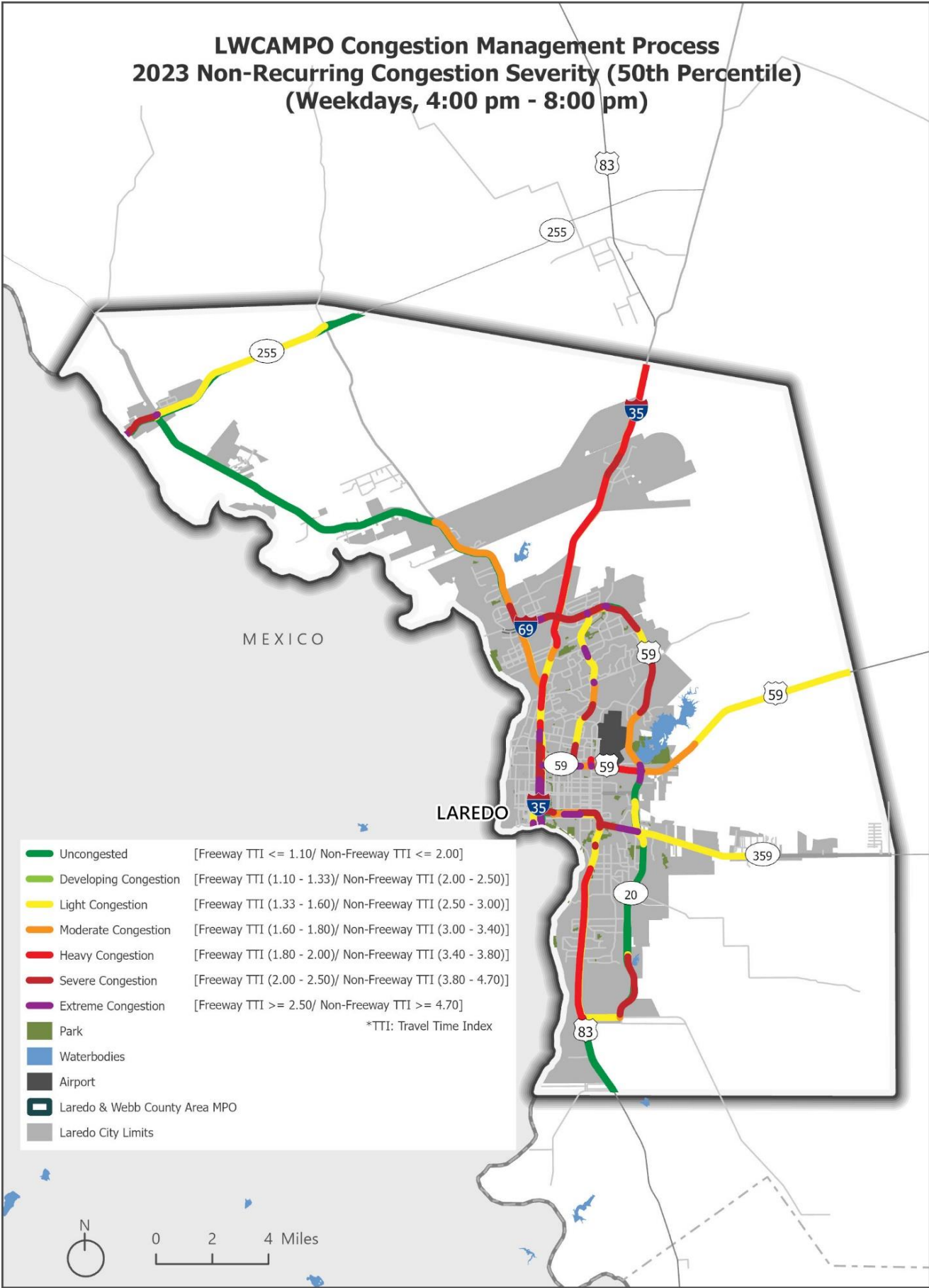
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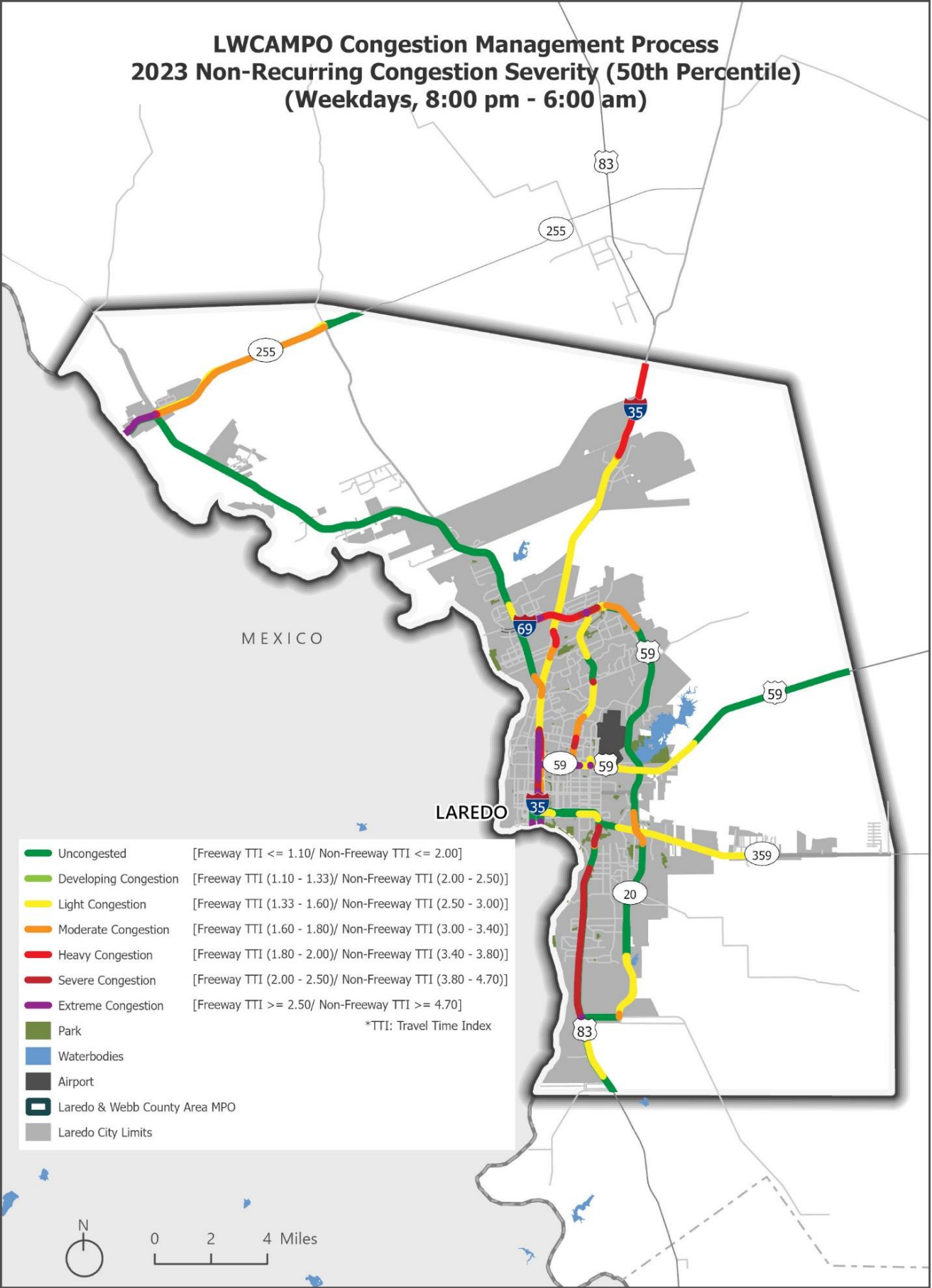
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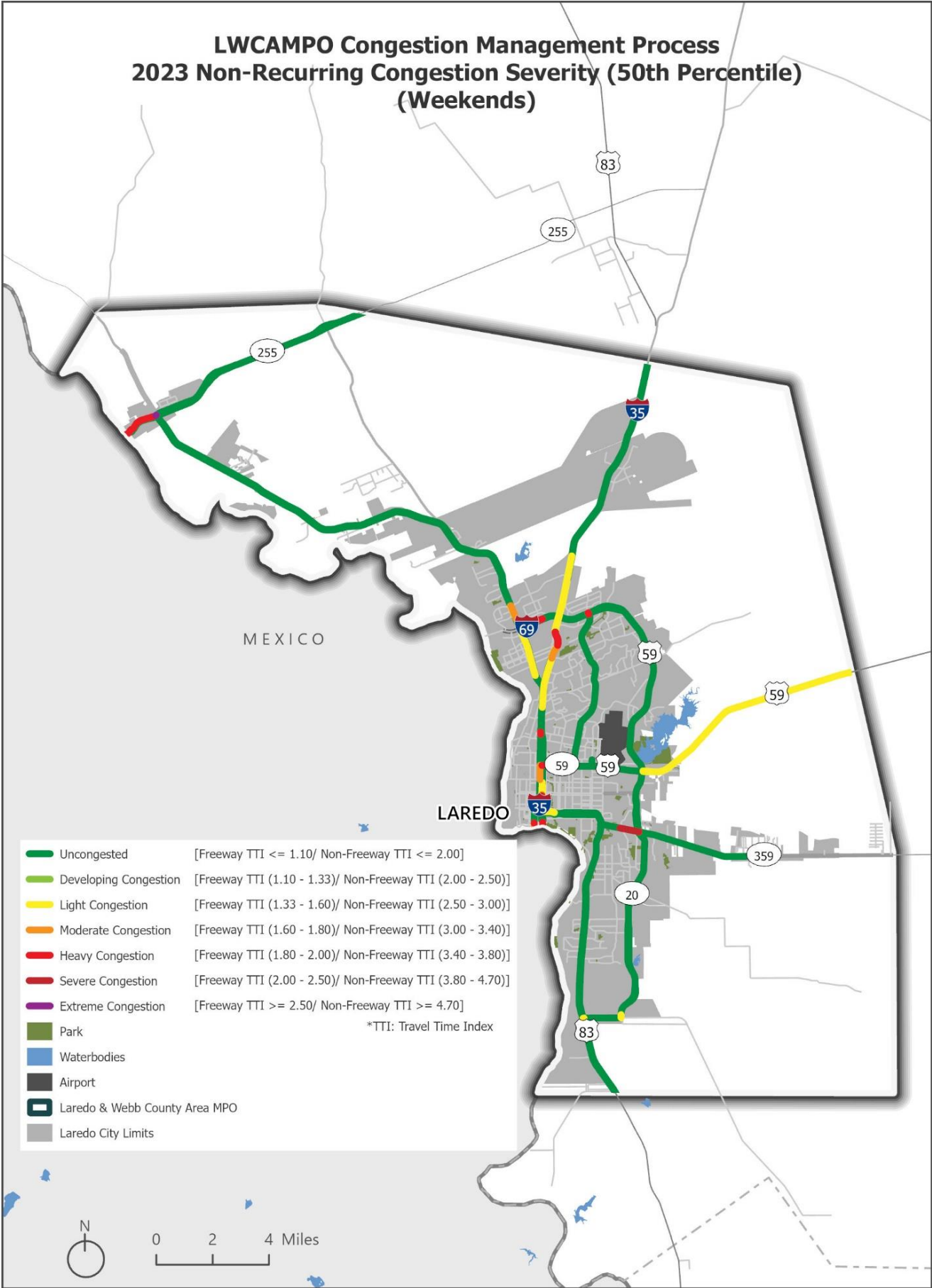


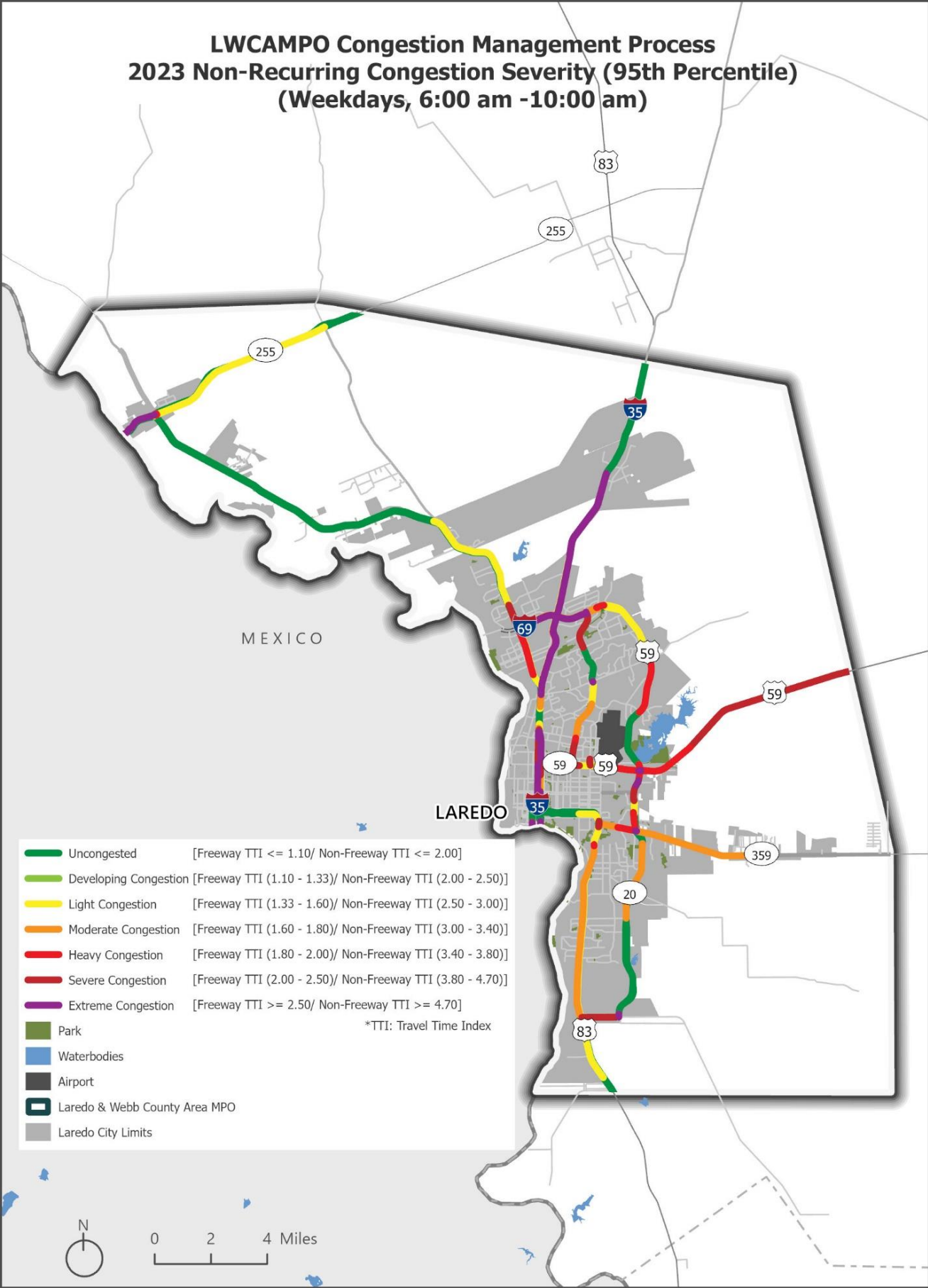




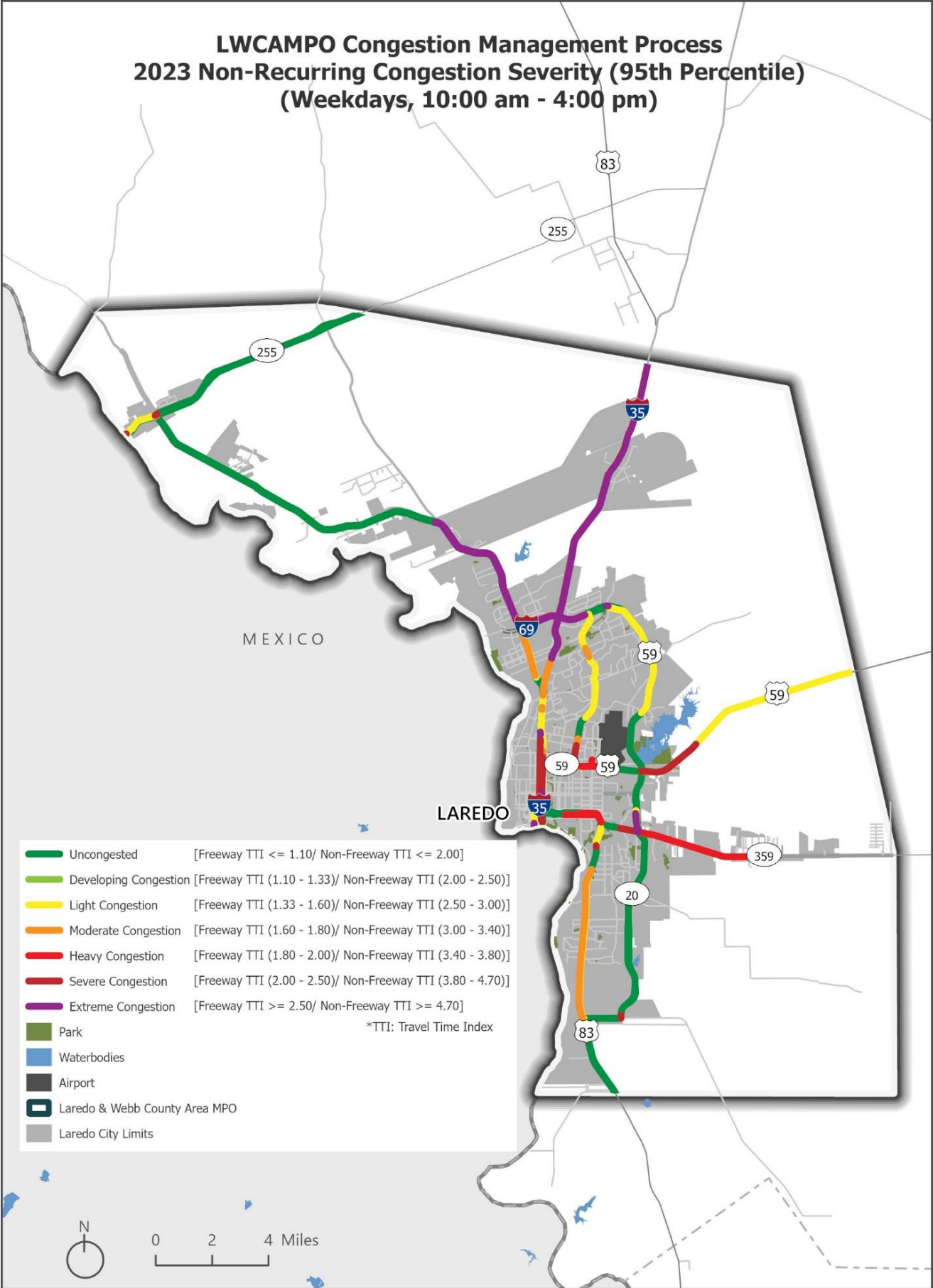
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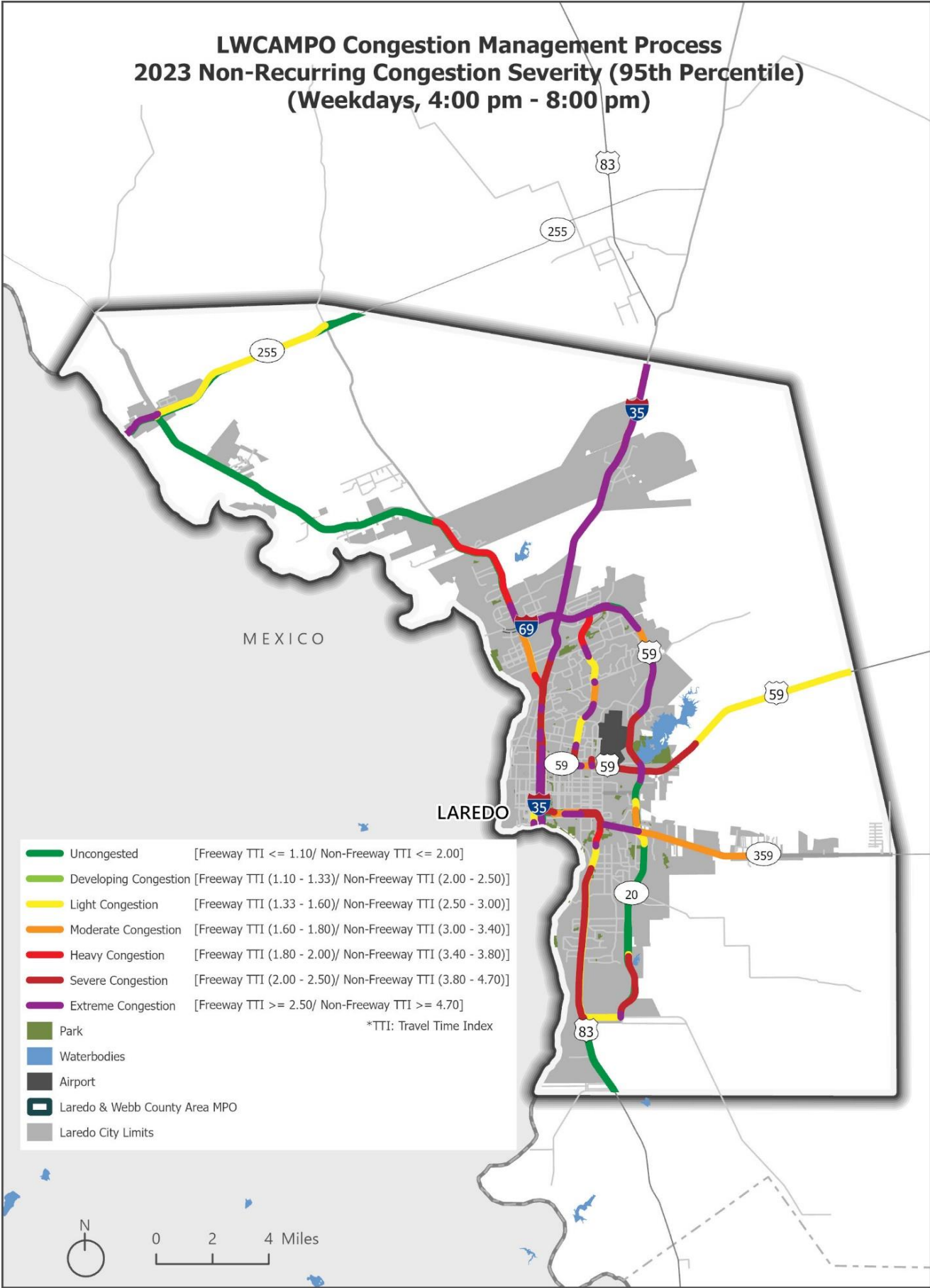




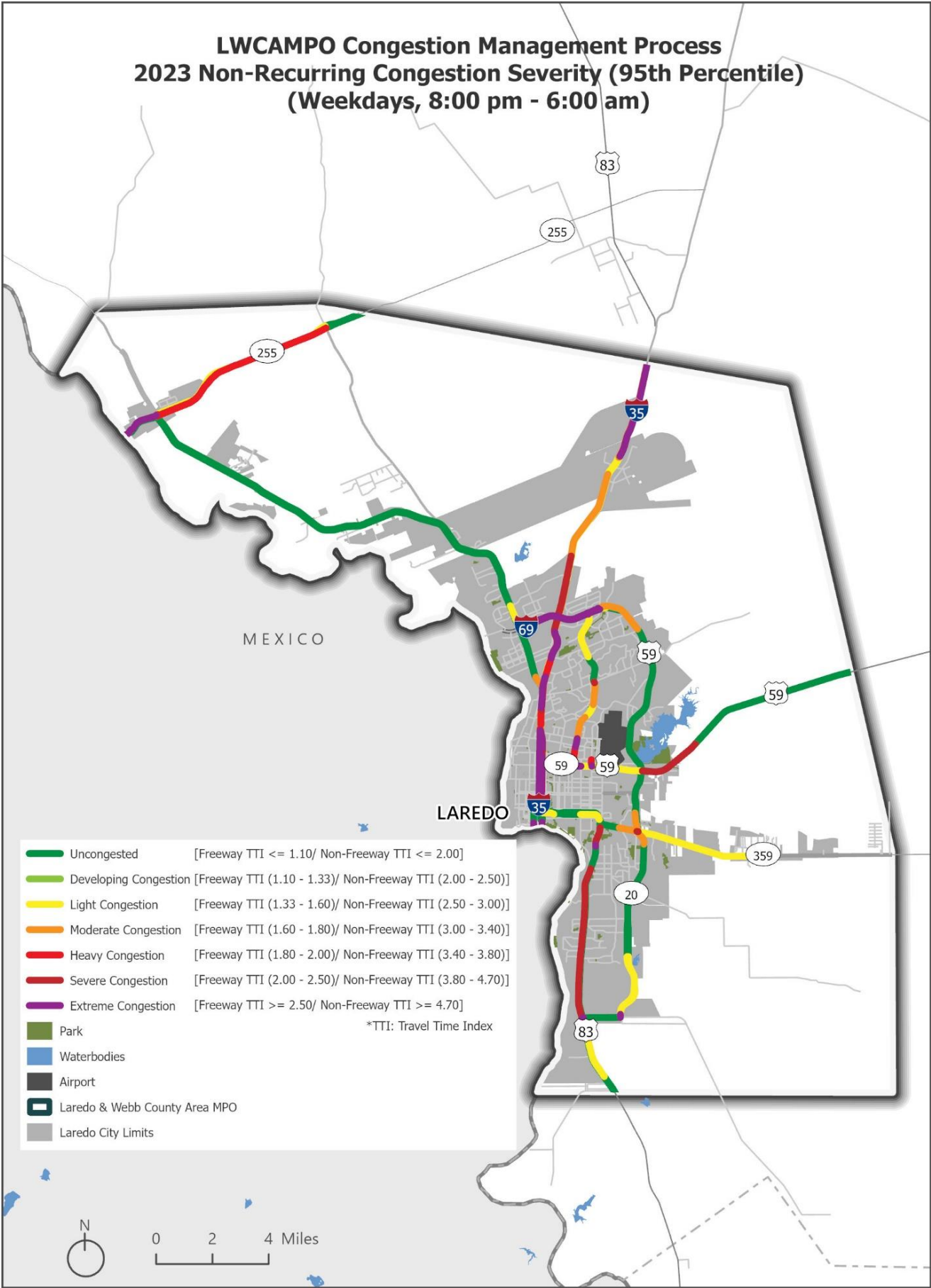


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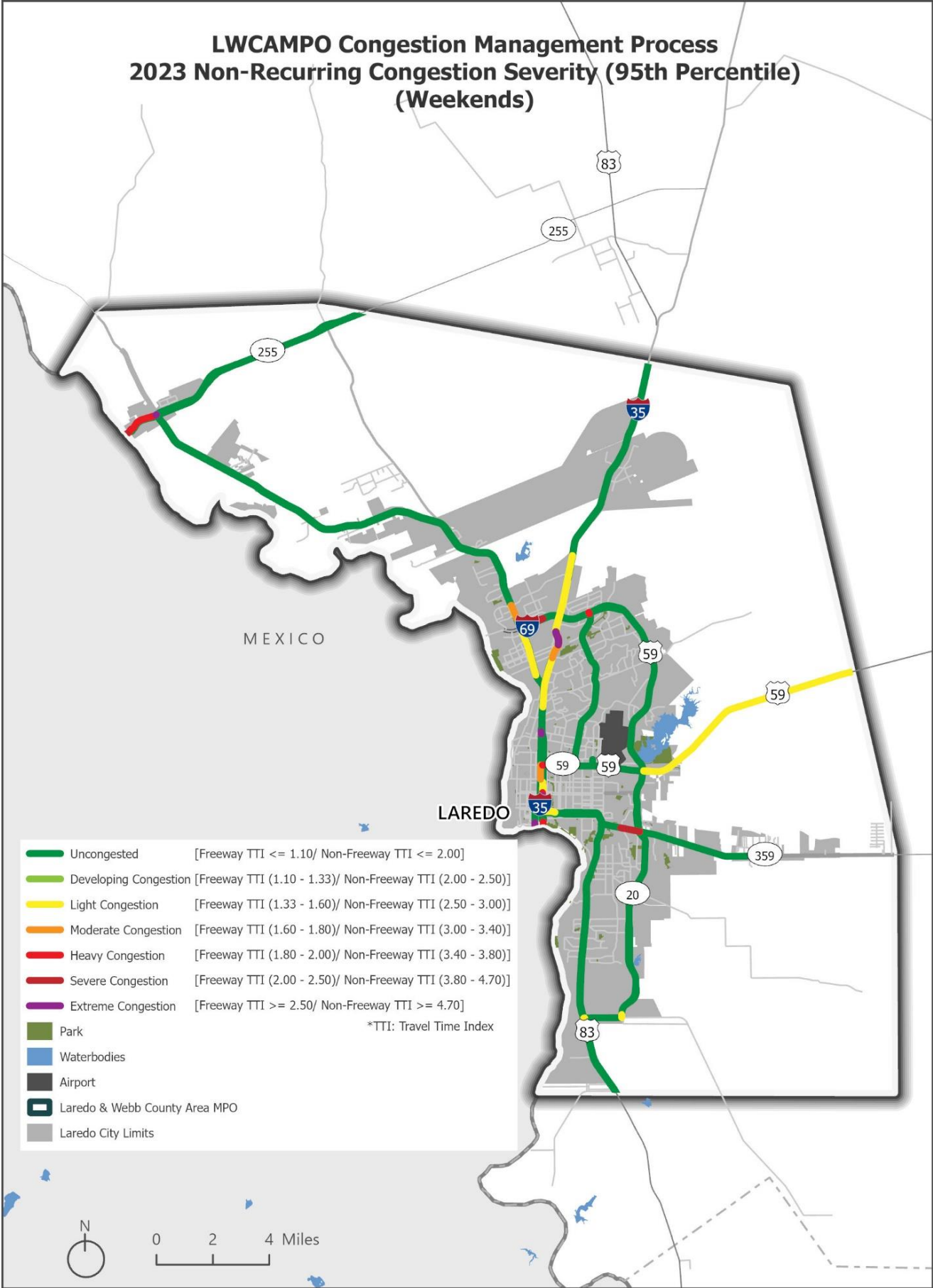


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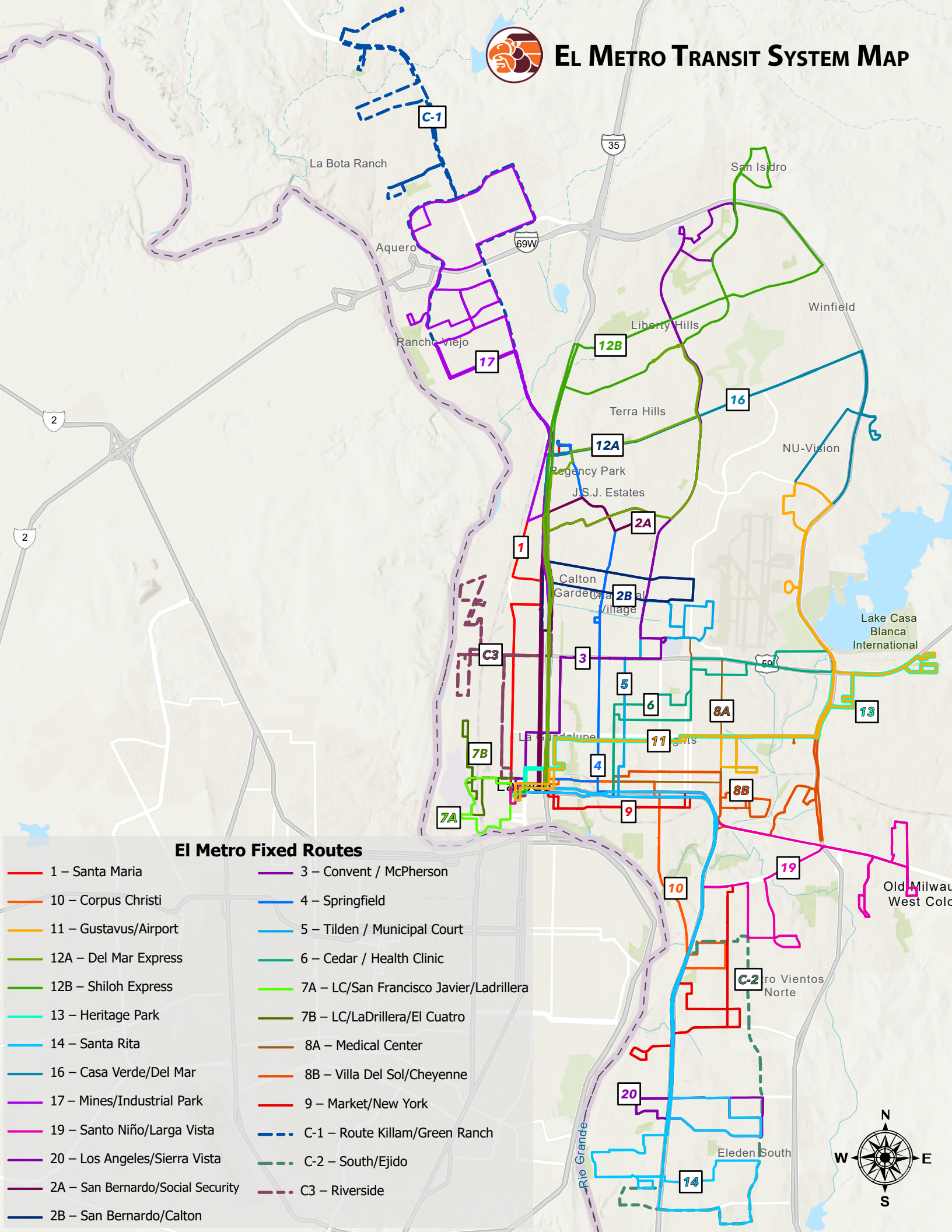


CONGESTION MANAGEMENT PROCESS

Appendix D: El Metro Transit System Map



EL METRO TRANSIT SYSTEM MAP



El Metro Fixed Routes

- | | |
|-----------------------------------|---|
| 1 – Santa Maria | 3 – Convent / McPherson |
| 10 – Corpus Christi | 4 – Springfield |
| 11 – Gustavus/Airport | 5 – Tilden / Municipal Court |
| 12A – Del Mar Express | 6 – Cedar / Health Clinic |
| 12B – Shiloh Express | 7A – LC/San Francisco Javier/Ladrillera |
| 13 – Heritage Park | 7B – LC/LaDrillera/El Cuatro |
| 14 – Santa Rita | 8A – Medical Center |
| 16 – Casa Verde/Del Mar | 8B – Villa Del Sol/Cheyenne |
| 17 – Mines/Industrial Park | 9 – Market/New York |
| 19 – Santo Niño/Larga Vista | C-1 – Route Killam/Green Ranch |
| 20 – Los Angeles/Sierra Vista | C-2 – South/Ejido |
| 2A – San Bernardo/Social Security | C3 – Riverside |
| 2B – San Bernardo/Calton | |

CONGESTION MANAGEMENT PROCESS



LAREDO & WEBB COUNTY
AREA METROPOLITAN PLANNING ORGANIZATION