

EXHIBIT B
SERVICES TO BE PROVIDED BY THE CONSULTANT

City: **San Marcos, Texas**
Location(s): **City Limits, ETJ**
Project: **Transportation Master Plan (TMP)**

SCOPE OF WORK

Kimley-Horn and Associates, Inc. (the CONSULTANT) will provide professional engineering and planning services to develop and update the Transportation Master Plan (TMP) for the City of San Marcos (City).

The CONSULTANT will establish implementation-oriented transportation projects, policies, and standards to realize the envisioned transportation network. Kimley-Horn will update the recommendations from past plans, such as the previous 2018 San Marcos Transportation Master Plan, Thoroughfare Plan, Sidewalk Plan, Bicycle Plan, Greenways Plan, Vision SMTX Comprehensive Plan, and the Transportation Design Criteria Manual (TDCM).

Additionally, Kimley-Horn will provide the City with the technical analysis to establish a basis for rough proportionality consistent with Senate Bill 1510. To conduct the land use assumptions analysis, the CONSULTANT will utilize the demographics from the traffic analysis zones (TAZs) per the localized CAMPO 2050 Travel Demand Model (TDM) that will be developed as part of the TMP process. The growth established by the localized TDM, will be compared to local historic growth based on building permit history.

The CONSULTANT will develop a prioritized short-term Capital Improvements Plan (CIP) for mobility improvements, to incorporate projects not yet completed from previous CIPs with available funding and identify high priority roadways, sidewalk, bicycle, intersection, and ITS projects. The CIP will be utilized during the development of the basis for rough proportionality, along with staff input. The project is broken into two phases. The first phase is the evaluation and analysis component, and the second phase is adoption and implementation.

The CONSULTANT will update the TDCM to align with the updated thoroughfare plan, cross sections, and other relevant aspects of the TMP. Updates to other City documents, including but not limited to the Development Code, Standard Details, Specifications, and Standard Products Lists will be conducted as Additional Services.

The CONSULTANT will lead a combined in-person and virtual engagement process to include citizens, stakeholders, and staff in development of the TMP. This process will include a designated project website, pop-up meetings, stakeholder meetings, coordination with decision-makers, and extensive outreach and notification to citizens; engagement activities and results will be documented as a separate chapter in the final report.

The CONSULTANT will deliver a plan document that summarizes the planning process, recommendations, and action plan for implementation. The CONSULTANT will present the findings and recommendations of the plan process to the City Council and appropriate boards and commissions.

RESPONSIBILITIES OF THE CITY

In conjunction with and for the completion of the professional services detailed below, the City agrees to complete the following tasks:

- 1) Provide a project coordinator to work with the CONSULTANT during the development of the project.
- 2) Provide a timely review of materials and presentations in advance of project meetings.
- 3) Attendance at all requested project meetings.
- 4) Provide existing data related to the project and described in following tasks.
- 5) Provide native file versions (MS Word, AutoCAD, etc.) for existing City design manuals, standard details, specifications, or similar documents.
- 6) Assist in developing a list of project stakeholders, regional agencies, and the Study Oversight Committee.
- 7) Attend Regional Agency Coordination and Study Oversight Committee meetings and secure a facility for hosting meetings.
- 8) Attend public meetings and stakeholder meetings, held at facilities within the City of San Marcos or virtually.
- 9) Obtain facilities for public involvement activities and assist in the coordination/reservation of space for pop-up events.

SERVICES TO BE PROVIDED BY KIMLEY-HORN

This project will be divided into twelve tasks:

Task 1: Project Management

Task 2: Stakeholder Coordination & Public Participation

Task 3: Data Collection & Needs Assessment

Task 4: Modeling, Mapping, Cross Sections, and Intersection Bottlenecks

Task 5: Transportation Design Criteria Manual Updates

Task 6: Multimodal Transportation System Alternatives

Task 7: Rough Proportionality Assessment

Task 8: Tools and CIP Development

Task 9: Plan Refinement

Task 10: Transportation Master Plan Document

Task 11: Hourly Support Services

TASK OUTLINE

1. PROJECT MANAGEMENT

1.1 Project Kick-Off Meeting

The CONSULTANT will meet with the City for a formal kick-off meeting for the TMP project. During this meeting, the scope and City contacts will be determined for each task.

Deliverables: Kickoff Meetings, Meeting Materials, and Notes

1.2 Project Management Plan

A Project Management Plan (PMP) will be drafted to serve as a living document for both the internal project team and the City's team and set expectations for communication guidelines, upcoming tasks, and overall project progress. The workplan will be revisited during regular project meetings by the CONSULTANT.

The CONSULTANT shall:

- Outline project team organization, roles, and responsibilities.
- Outline communication protocols and procedures.
- Document and graphics formatting protocols; filing protocols; project closeout procedures; and other important operational information.
- Prepare a Quality Assurance/Quality Control (QA/QC) component to document the quality control program to be implemented by the project team, and that the work is completed in a timely and efficient manner.
- Update the PMP throughout the project to define the key project milestones and details of work to be accomplished.

Deliverables: Draft and Final Project Management Plan

1.3 Project Schedule

The CONSULTANT shall prepare and maintain a project schedule. The schedule shall be reviewed and approved by the City. This schedule shall focus on key milestones and critical path tasks. The schedule shall depict the order and interdependence of various tasks, subtasks, milestones, and deliverables. The schedule is anticipated to be twenty-four (24) months for the TMP components. Any major changes to the schedule will be explicitly communicated to the City.

Deliverables: Project Schedule

1.4 Invoicing and Progress Reports

The CONSULTANT will prepare and submit monthly status reports and regarding project schedule and critical tasks. The CONSULTANT will prepare monthly invoices.

Deliverables: Monthly Invoices and Progress Reports

1.5 Project Team Status Meetings and Coordination

The CONSULTANT shall conduct up to forty-eight (48) bi-weekly project team coordination meetings with the City to discuss study progress, key issues, and upcoming tasks including public outreach. An agenda will be provided one day in advance of each meeting. Meetings are assumed to be 0.5 hours in length and virtual or in-person. Except for the project kick-off meeting and other milestone meetings identified below, which will be in-person and up to 1.5 hours in length and be held in a workshop format to dive deeper into these specified topics directly with staff. The CONSULTANT will host up to six (6) staff workshops.

Bi-weekly meetings will be attended by two members of the CONSULTANT's team. The CONSULTANT shall prepare meeting notes with key decisions and action items within seven calendar days after each meeting. The notes shall include Project Team members (present), decisions made, issues log (resolved issues and new issues), and action items (including the person responsible, due date, and completion date).

Example milestone meeting (to be held in person) topics are summarized below and should only be considered example topics, but should not be considered the exact six workshop topics and are not limited to the following topics:

- Project Kickoff
- State of the City / Existing Conditions
- Goals & Objectives
- Needs & Opportunities
- Rough Proportionality Assessment Kickoff
- Transportation Design Criteria Manual Kickoff
- Proposed Multimodal Network Review
- Draft Projects & Recommendations; Project Prioritization
- Implementation Toolkit / Draft Final Report

Deliverables: Bi-weekly TMP Progress Meetings (48, hybrid format), Meeting Agendas and Notes, Staff Workshops (6)

1.6 SUB-CONSULTANT Management and Meetings

The CONSULTANT will prepare and execute contracts for all SUB-CONSULTANTS for this project. The CONSULTANT will monitor SUB-

CONSULTANT staff activities and ensure SUB-CONSULTANT adherence to schedules, as well as review and recommend approval of SUB-CONSULTANT invoices.

Deliverables: SUB-CONSULTANT Contracts, Monthly Progress Reports/Invoices

1.7 Project Files

The CONSULTANT shall assemble and maintain project files that will be delivered to the City with a complete index at project closeout. Files will be delivered to the City via the City's preferred ShareFile site. The CONSULTANT will utilize the ShareFile site for internal and external transfer of project data, document management, and project scheduling and coordination. This also includes coordination to transfer GIS documentation.

Deliverable: Project File Index at Completion, File Delivery

2. **STAKEHOLDER COORDINATION & PUBLIC PARTICIPATION**

2.1 Public Involvement Plan

The CONSULTANT team will develop a plan for community and stakeholder outreach and a strategy for communication. The Public Involvement Plan (PIP) will incorporate outreach and engagement methods that foster meaningful participation and provide community input for the successful development and implementation of the TMP. The PIP will also identify a list of key stakeholders.

The engagement strategy will leverage existing communication channels and identify any supplemental strategies needed to educate and engage the community on the project. As part of the PIP development, the CONSULTANT team will hold a one-hour virtual coordination meeting with project team staff and Communications staff to determine previous outreach experience and social media channel capabilities for advertising and promoting the plan. The CONSULTANT team will work closely with participating staff to ensure communication and outreach strategies are integrated and coordinated with concurrent related efforts. The PIP will be presented with the Project Work Plan to the Study Oversight Committee.

Deliverables: PIP Coordination Meeting Preparation and Facilitation, Public Involvement Plan (Draft with up to 2 revisions)

2.2 Advertising Content

The CONSULTANT team will work with the City's predefined branding standards to define colors, fonts, and other graphical themes for the project with up to three revisions from the City before developing public-facing project materials. The CONSULTANT team will develop advertising content for use by the City to promote involvement in the project, including the following:

- Flyers or business cards (up to 2,000) in English and Spanish

- Content for City social media pages for up to six (6) posts during the project

Deliverables: Project Branding Standards, Social Media Posts (6), and Bilingual Business Cards

2.3 Regional Agency Coordination Meetings

The CONSULTANT team will conduct up to two (2) virtual meetings utilizing Teams or Zoom with regional agency partners, including TxDOT, CAMPO, Hays County, neighboring cities (such as Kyle and New Braunfels), MoveSM, Texas State University, Great Springs Projects, Greenbelt Alliance, and CARTS to discuss regional plan alignment, potential future service, and existing plans or recommendations from other agencies within or neighboring the San Marcos City Limits and ETJ. The purpose of the meeting will be to gather additional information on other agency plans within or in connection with the City.

Deliverables: Regional Agency Member List, Regional Agency Coordination Meeting Preparation and Facilitation, Presentation Materials, and Notes

2.4 Stakeholder Meetings

The CONSULTANT team will meet with Stakeholders during the data collection and needs assessment phase of the process to obtain feedback and recommendations from key groups within the community, as identified by the City and documented in the PIP. The CONSULTANT team will provide agendas and materials for facilitated discussion at each meeting. It is assumed that the same information and materials will be used for all meetings.

The CONSULTANT team is anticipated to conduct up to three (3) in-person meetings with three (3) stakeholder groups to take place over a 2-to-3-day period. At least two (2) members from the CONSULTANT team will be in attendance at each meeting.

Deliverables: Stakeholder List & Database, Stakeholder Meeting Facilitation (3), Presentation Materials, and Notes

2.5 Study Oversight Committee Meetings

The CONSULTANT team will identify potential study oversight committee (SOC) members in coordination with the City and develop and send a mass email invitation to encourage participation. The CONSULTANT will meet with the SOC at key points during the planning process to present topical materials and obtain feedback and recommendations across multiple City departments, including Community Development, Economic Development, Engineering & Capital Improvements, GIS, Main Street/Downtown, Parking, Parks & Recreation, Planning and Development Services, Public Works, Transit, and others as deemed necessary by the City. The CONSULTANT team will provide agendas and materials for facilitated discussion at each meeting. The SOC will have a technical focus with emphasis on identifying conflicts in recommendations or solutions on administrative implementation of projects or policies.

The CONSULTANT team is anticipated to conduct four (4) meetings with the SOC on specific topics from the project that may be adjusted throughout the project, lasting for roughly 2 to 3 hours each meeting. All meetings will be in-person with at least two (2) members from the CONSULTANT team in attendance at each in-person meeting. Meeting topics are anticipated as follows:

- Meeting 1 | Goals and Objectives, Needs Assessment Findings
- Meeting 2 | Roadway Network Revisions, Transportation Design Criteria Manual Updates, Active Transportation Network Planning Activities & Project Screening
- Meeting 3 | Project Prioritization Results, Rough Proportionality Assessment
- Meeting 4 | Recommendations and Draft Plan

Deliverables: Study Oversight Meeting Member List & Email Invitation, Meetings, Presentation Materials, and Notes

2.6 Online Engagement

The CONSULTANT team will host a website on PublicCoordinate to be used as a base for online engagement activities, including interactive maps, surveys, and other tools. The website will also serve as a hub for information dissemination about public engagement activities and as a repository for project documents and engagement activity summaries. The CONSULTANT team will develop and host:

- Interactive Map 1 | Initial Feedback – Opportunities & Issues (Engagement Phase 1 – Existing Conditions)
- Survey 1 | Current Mobility Practices (Engagement Phase 1 – Existing Conditions)
- Interactive Map 2 | Potential Project Feedback (Engagement Phase 2 – Preliminary Ideas)
- Survey 2 | Feedback on Preliminary Ideas (Engagement Phase 2 – Preliminary Ideas)
- Information Dissemination | Post relevant information on the website throughout the life of the project, including meeting materials, upcoming event information, draft plan components.
- Engagement Summaries | The CONSULTANT will provide detailed summaries of feedback and observations recorded in each phase of engagement.

Feedback from the public meetings will be used in weighting project prioritization in Task 8.5.

The CONSULTANT will provide raw data files downloaded from PublicCoordinate to the City for future use and analysis to enable the City to access any data after project completion.

Deliverables: Project Website Updates (2), Surveys (2), Interactive Maps (2), Engagement Summaries (2)

2.7 Pop-Up Events

The CONSULTANT team will complement online engagement with in-person pop-up events to engage the community. The CONSULTANT team will host four (4) pop-up events for up to four (4) hours each at regularly scheduled City events, as identified by the City, to promote participation in surveys and interactive maps. Pop-up events will include up to two (2) members from the CONSULTANT team.

- Kick-Off (Pop-Up Event #1 & #2) | Information Gathering and Needs Identification: A planned community event to gather input on the location of specific needs and goals of the community.
- Community Studio (Pop-Up Event # 3 & #4) | After data is collected about what the existing issues are, this public meeting will serve to find out more about how to address them. Activities could include a mapping activity, dot voting, and / or a budgeting activity. During this public meeting, PublicCoordinate should be updated to provide similar online participation.

Deliverables: Pop-up Event Preparation and Facilitation

2.8 Goals and Objectives

Community transportation goals and TMP objectives will be developed by the CONSULTANT after the first SOC in Task 2.5. Potential goals and objectives will be sourced from local plans, such as the 2018 San Marcos Transportation Master Plan, Thoroughfare Plan, Sidewalk Plan, Bicycle Plan, and Greenways Plan, Vision SMTX Comprehensive Plan, and others identified by the CONSULTANT and staff. These goals and objectives will inform project prioritization, needed programs, and policy recommendations.

Deliverables: Goals and Objectives (Draft with up to 1 revision)

2.9 Engagement Report

The CONSULTANT will prepare an engagement report that summarizes engagement efforts and findings for the project. The report will document the engagement methods used, present quantitative data, such as number of participants and responses, and identify key takeaways from each round of engagement.

Deliverables: Engagement Report (Draft with up to 1 revision)

3. **DATA COLLECTION & NEEDS ASSESSMENT**

3.1 Review of Plans, Policies, and Design Criteria Manual/Standards

The CONSULTANT will review local documents and plans that will serve as a reference throughout the project. It is anticipated this information will be synthesized into 4-5 pages of “past plans” and incorporated into the final document, such as the 2018 San Marcos Transportation Master Plan, Thoroughfare Plan, Sidewalk Plan, Bicycle Plan, and Greenways Plan, Vision

SMTX, Design and Construction Guide, 2019 Transit Plan, and the CAMPO 2050 Regional Transportation Plan.

The CONSULTANT will synthesize the current mobility-related policies and ordinances provided by the City into a one-stop review matrix. This task is intended to identify each policy and an associated action item in the form of a policy diagnostic. New policies will be identified, and edits will be completed as an additional service either in tandem with the project or after its conclusion.

Deliverables: Existing Plan Review & Matrix

3.2 Field Verify Existing Conditions

The CONSULTANT will have at least two (2) team members that will spend one (1) full day in the City to verify existing transportation systems throughout the City. Following this trip, the CONSULTANT will prepare and deliver a GIS-based database file documenting the existing conditions along roadways and intersection improvement opportunities in Task 3.4. In addition, the database file will include relevant existing datasets and aerial observations to be verified during the field visit, such as existing number of lanes, pavement width, median presence, sidewalk presence, drainage type, and bike facility presence.

Deliverables: Existing Conditions GIS Inventory

3.3 Data Collection

The CONSULTANT will create a data needs request that lists technical data (GIS) and applicable documents to be provided by the City. The CONSULTANT will create a file sharing system in ShareFile online to be hosted by the CONSULTANT for this data request and other document deliverables.

The CONSULTANT will collect turning movement counts for the AM and PM peak periods at specified signalized intersections and roundabouts where data does not currently exist (assumed to be up to 15 locations) for evaluation of bottleneck intersections. These counts will supplement existing counts provided by TxDOT and the City. In addition, the CONSULTANT will collect tube count data from up to 15 locations in the City, along arterial and collector roadways. These counts will be collected once in Spring 2026 and a second time at the same locations in Spring 2027 while schools are in session in San Marcos ISD. The CONSULTANT will process traffic count data on arterials to include in the GIS-based database in Task 3.2 for evaluation of the Thoroughfare Plan and base year TDM in Task 4 and Project Prioritization in Task 8.

The CONSULTANT will collect crash data from 2022-2025 based on the TxDOT Crash Records Information System and verify with any supplemental City data for crashes involving pedestrians or bikes and any fatalities. Crash data collected will include location, severity, manner of collision, contributing factors, and whether pedestrians or bicyclists were involved in crashes. Crash data will be provided in SHP and XLS format.

For the Rough Proportionality Assessment, the CONSULTANT will coordinate with

the City to obtain the following data if not previously collected as part of the TMP data request:

- City Contacts – The City shall provide the organization structure and contact information for the applicable City staff involved with the land use assumptions.
- Maps – The City shall provide the Consultant with available GIS shapefiles, associated databases, and layer files in ESRI ArcGIS10.x format. All data shall be projected in NAD 83 State Plane, North Central Texas Zone coordinates.
- Current Zoning Map;
- Future Land Use Plan Map;
- City / County Parcel Data;
- Most recent digital orthophotograph (DOQ) of the City.

Deliverables: Data Request Letter, ShareFile, Data

3.4 Inventory, Issues, and Opportunity Maps

The CONSULTANT will prepare an inventory map of existing roadway, sidewalk, greenway, transit, and bicycle infrastructure, as well as points of interest such as parks and schools. The inventory will account for recommendations made in the previous TMP subcomponents, specifically the Sidewalk Master Plan, Greenways Plan, and Bicycle Master Plan; where recommendations are conflicting with new information, recommendations will be provided for future reconciliation. It is assumed that the CONSULTANT will utilize base data sets from the current CIP and fill in the missing gaps with the assistance of aerials and field verifications from Task 3.2. GIS data will be gathered and displayed on a map based on public input via PublicCoordinate, from Pop-Up Event #1 & #2, and combined with observed existing infrastructure gaps or deficiencies.

Deliverables: Existing Conditions Maps, Issues and Opportunities Maps

3.5 Regional Alignment & Concurrent Efforts

The CONSULTANT will collect data from the region and identify potential conflicts between existing San Marcos planned projects and the Thoroughfare Update roadway alignments and classifications with other agency plans. The results of this exercise will be presented at the agency coordination meeting identified in Task 2.3.

The CONSULTANT will coordinate with other City CONSULTANTs on concurrent planning efforts anticipated during the TMP update, including any roadway, corridor, or intersection studies/projects.

Deliverables: Regional Agency Coordination, Regional Projects Map

3.6 Safety Needs & Countermeasures Identification

Crash data collected in Task 3.3 will be integrated with traffic volume information

to create a comprehensive crash rate map for the City, highlighting locations with higher-than-average crash rates. This analysis will build on analysis created during the Hays County Safety Action Plan (SAP) as part of CAMPO's 2025 Regional Safety Action Plan. This crash rate data will be utilized for CIP performance measures in Task 8, safety-related grant applications, and to support the development of citywide policy and process recommendations, including a Vision Zero initiative.

The CONSULTANT will utilize components from the County SAP where possible, but may need to create localized heat maps of crashes to visually emphasize both high frequency and high injury locations at intersections and midblock segments, indicating where further safety countermeasures may be necessary. These projects will focus on intersections or corridors extending up to one-quarter of a mile in length and will inform policy and process improvement recommendations applicable across the city.

The CONSULTANT will review the toolbox of safety countermeasures provided in the County SAP, evaluating the recommended crash modification factors (CMFs) of future mobility projects. These safety enhancements and derived insights will be incorporated into citywide policy development and process improvements, as outlined in the prioritization task in Task 8.5.

The CONSULTANT will review the top crash locations identified in the County SAP, and select the top ten (10) crash locations (assuming six (6) intersections and four (4) roadway segments). The CONSULTANT will develop local transportation safety improvement concepts. The results of this safety analysis will be summarized by creating detailed summary sheets for each safety priority project, including planning-level costs and benefits, and form the basis for broader policy and procedural recommendations aimed at reducing crash rates citywide.

Deliverables: Crash Heat Map and raw data, High Injury Network, Safety Countermeasure Toolbox, Safety Project Summary Sheets, Standalone Vision Zero Statement and Chapter

4. MODELING, MAPPING, CROSS SECTIONS, AND INTERSECTION BOTTLENECKS

4.1 Travel Demand Model Preparation and Calibration

The CONSULTANT team will utilize the following information provided by the City or other entities (such as CAMPO) for the model preparation step:

- Existing year and forecast year model inputs from CAMPO and/or the City.
- Roadways and split Traffic Analysis Zones (TAZs) as necessary to add the required level of detail to the CAMPO model.
- Updated socio-demographic information from the City.
- Compare existing model and associated traffic counts within the City of San Marcos to validate flows against counts using new TAZ structure and roadway network.

The CONSULTANT team, after preparing the model, will then:

- Code the additional roadways within the City modeling boundaries and the new centroid connectors associated with the split TAZs.
- Incorporate the socio-demographic information from the City into the TAZ geographic file input into the model.

The CONSULTANT team will calibrate the existing model so that assigned volumes in the base year match available 2025 counts. Calibration may require revisiting facility and area type classifications, factoring trip generation trip rates, as well as post-processing model outputs for the base year.

The CONSULTANT team will refer to FHWA acceptable ranges for volume to count ratios to determine how closely assigned volumes match observed traffic counts. The model calibration step may require building a post-processor which adjusts forecast year volumes based on base year validation metrics. The post-processor will follow NCHRP methods to post-process traffic volumes.

The CONSULTANT expects to receive the following data to undertake the calibration of the model:

- A working base model (CAMPO)
- Land use forecasts (City)
- Network improvements (City and from TMP development)
- Traffic counts (City, TxDOT, and select counts as described in Task 3.3)

The CONSULTANT will NOT conduct any primary or secondary data collection.

Deliverables: Base and Forecast Year Travel Demand Models

4.2 Travel Demand Model Scenario Planning

With oversight from the CONSULTANT team will run a total of five (5) scenarios on the Existing and Forecast Year models and extract performance measures for each run. The scenarios will include:

- Existing Condition (2025)
- Intermediate year model with 2035 forecasted traffic volumes excluding any programmed projects (2050 NO BUILD)
- Intermediate year model with 2035 forecasted traffic volumes representing the updated TMP prioritized projects (2035 BUILD)
- Forecast year model with 2050 forecasted traffic volumes excluding any programmed projects (2050 NO BUILD)
- Forecast year model with 2050 forecasted traffic volumes representing the all updated TMP projects (2050 BUILD)

The CONSULTANT team will provide documentation regarding the model preparation and calibration process as well as performance measures extracted in support of the TMP.

Deliverables: Model Scenarios, Model Scenario Outputs, Model Documentation

4.3 Thoroughfare Plan Map Revisions

This task will incorporate adjustments to the Thoroughfare Plan based on regional alignment evaluations in Task 3.5, the agency coordination meeting from Task 2.3, initial modeling results, and CONSULTANT and City evaluations of streets that may be good candidates for changes to functional classification in the staff workshop and SOC meetings. Any potential functional classification downgrades will be tested in scenario planning in Task 4.2 for feasibility. Streets that are “built-out”, unlikely to be changed, and showing adequate capacity at build-out will be specified as “established streets” in the Thoroughfare Plan. This status would not preclude a street from potential improvements but is an indication that the number of through lanes and outside lane curb lines are unlikely to change in the future.

Deliverables: Updated Thoroughfare Plan Map, Established Streets Network

4.4 Cross Section Development

The CONSULTANT will review and assess the City's existing cross sections, gathering input from stakeholders through workshops and meetings, and collecting and analyzing pertinent transportation data, such as traffic volumes, multimodal use, crash data, parking utilization, freight and delivery movement, travel time and delay, and future demand. Incorporating contemporary best practices and standards, the CONSULTANT will develop up to ten (10) updated or new cross section designs. These preliminary designs will be refined based on stakeholder feedback and finalized for documentation.

Specific meetings and workshops are identified for this process in the SOC meetings in Task 2.

Deliverables: Multimodal Cross Sections Updates (10)

4.5 Intersection Bottleneck Identification

The CONSULTANT will develop PM peak period scenarios in a SYNCHRO 12 model for up to ten (10) intersections identified as bottlenecks during the relevant staff workshop. Existing signal timings will be obtained by the CONSULTANT and existing performance metrics such as intersection delay, volume to capacity ratio, Level of Service, and turn lane queues will be summarized in a tabular format with observations in a standalone memo. The City will select up to five (5) intersections to evaluate potential improvements to be included in the Short-Term Capital Plan in Task 9.1, and a summary of recommendations and activities in the TMP Plan Document.

Deliverables: Intersection Bottleneck Evaluations

5. **TRANSPORTATION DESIGN CRITERIA MANUAL UPDATES**

This task will update the Transportation Design Criteria Manual (TDCM) to align with the updated thoroughfare plan, cross sections, and other relevant aspects of the TMP. Updates to other City documents, such as the Development Code,

Standard Details (except where noted below), Specifications, and Standard Products Lists are excluded from the scope of work.

5.1 Recommendation Development

The CONSULTANT will prepare detailed recommendations for proposed revisions to the TDCM. The CONSULTANT assumes two (2) in-person half-day workshops to review the detailed recommendations. Recommendations may include, as appropriate, examples from other municipalities, best practices from example projects, or criteria or standards from other manuals.

Deliverables: Staff Workshops (2), Matrix (Excel format) outlining recommendations to add, remove, or modify content.

5.2 Design Criteria Manual Development

The CONSULTANT will draft the updated TDCM based on feedback received in Task 5.1. The CONSULTANT will prepare a redlined version of the document tracking all revisions made. The CONSULTANT will address two (2) rounds of comments from City Staff. The CONSULTANT will attend up to two (2) in-person meetings to review staff comments.

The CONSULTANT will prepare a final revised version of the TDCM based on staff comments. The CONSULTANT will attend up to two (2) in-person meetings with the City Council, boards, and/or commissions for the potential adoption of the new TDCM.

The CONSULTANT assumes approximately 250 hours for this task. Updates requiring additional work will be conducted as Additional Services.

Deliverables: Redlined version of revised TDCM, draft and final versions of revised TDCM, attendance at specified meetings

5.3 Standard Detail Development

The CONSULTANT will develop content for a standard detail for installation of bus stop. The standard detail will include dimensions for concrete pad, landing area, bench, shelter, clear space, waste container, sidewalk, and curb.

The CONSULTANT will address up to two (2) rounds of comments from City Staff

Deliverables: Draft and final versions of standard detail in PDF and OpenRoads DGN format

6. MULTIMODAL TRANSPORTATION SYSTEM ALTERNATIVES

This task will build upon the needs assessment in Task 3 by developing a prioritized plan for a complete and connected network bike infrastructure, sidewalks, greenways, trails, and natural corridors for pedestrians and cyclists in the City. As a result of this task, the CONSULTANT will deliver a core multimodal network for investment, multimodal crossings flowchart, intersection

appropriateness flowchart, and a list of active transportation projects for implementation.

6.1 Facility Type Framework

The CONSULTANT will develop a framework for determining the suitability of active transportation network facilities based on context, including new connections off-street, retrofits on key thoroughfares, and crossings of streets at intersections and mid-block. This framework will consider context such as the ability to increase off-street connections, retrofit capabilities on key thoroughfares, and mid-block vs intersection crossings. The framework may consist of inputs such as posted speed limit, functional classification, presence of on-street parking, presence of curb, implementation of emerging technologies, and other factors. The resulting framework will be used to determine suitable facility types for new and retrofit connections and to identify projects which will create a core multimodal network.

Deliverables: Facility Type Suitability Framework

6.2 Core Active Transportation Network Development

Utilizing the maps prepared during the needs assessment in Task 3, the CONSULTANT will identify a core active transportation network including bike and pedestrian facilities, greenways, and trails for detailed evaluation. The core active transportation network is intended to establish a spine system for future investment to help build momentum towards further investment, especially by identifying projects that have high likelihood of heavy utilization.

Specific barriers to travel across the City will be identified that can lead to quick and easy project wins that aid in shifting modes. This network will lead directly into project identification, selection, and prioritization in Task 8.5, complemented by supportive policies to enable a smooth transition to a fully multimodal system identified in Task 9.2.

In addition to traditional sidewalks and bike paths, an emphasis will be placed on the greenway and trail development and branding of the City's greenway network. Additional branding efforts will be made for this section of the final report and associated graphics.

Deliverables: Core Active Transportation Network

6.3 Active Transportation Example Details

The CONSULTANT will identify up to five (5) potential active transportation considerations that need to be addressed along high priority active transportation projects. These considerations could consist of railroad crossings, stream crossings, midblock crossings, lighting, shade, and speed. These example details will assist future design to be aware of known issues along high priority active transportation sections and provide guidance for consideration on future active transportation projects.

Deliverables: Active Transportation Feasibility Analysis

6.4 **Multimodal Crossings & Intersection Appropriateness Flowchart**

The CONSULTANT will develop a Multimodal Crossings Flowchart to identify where specific types of multimodal crossings are appropriate. In addition, the CONSULTANT will develop a flowchart of guidelines for appropriate intersection type alternatives, including Two-Way Stop Control, All-Way Stop Control, Roundabouts, Traffic Signals, and innovative intersection concepts that include greenways and trail crossings.

Deliverables: Crossings and Intersections Flowcharts

6.5 **Project Listing and Alternate Funding Identification**

The CONSULTANT will prepare a list of projects necessary to complete the core multimodal network, as well as other priority projects not on the core network. The list of projects will be prioritized in Task 8. Potential funding sources for multimodal projects will also be explored at both a federal and state level for applicability to the projects identified and summarized in a tabular format in the final report.

Deliverables: Project List with Potential Funding Sources

6.6 **Active Transportation Element Documentation**

The CONSULTANT will create a chapter focused on active transportation, which will include concise standalone chapter subsections for the Bicycle Plan and Pedestrian Access Plans within the TMP. The Pedestrian Access Plan will discuss both greenway and sidewalk infrastructure. Each subsection will comprehensively address the specific infrastructure needs, planning, and development strategies for their respective focus areas, ensuring clear and actionable guidelines. The Bicycle Plan will include an inventory of existing facilities, gaps analysis, community input for prioritizing bike lanes, and recommendations for enhancing cyclist connectivity and safety. The Pedestrian Access Plan will assess current sidewalks, identify areas of need, gather public feedback, and propose improvements to connectivity and accessibility. The Pedestrian Access Plan will also map existing greenways and trails, identify gaps, evaluate natural corridors, and recommend enhancements for recreational use and connectivity. Each section will include prioritization criteria, implementation strategies, funding opportunities, and integration guidelines with broader transportation goals, visually supported by maps, charts, and diagrams. These standalone sections will collectively foster a multimodal active transportation network that enhances safety, accessibility, and connectivity throughout the City. These two sections (Bicycle Plan and Pedestrian Access Plan) will make up the Active Transportation Chapter.

Deliverables: Active Transportation Chapter

7. ROUGH PROPORTIONALITY ASSESSMENT

7.1 Transportation Review

The CONSULTANT will work with staff to collect any data not previously provided in Task 3. For the purposes of the Rough Proportionality Assessment, the CONSULTANT will undertake the following tasks in addition to those conducted in previous tasks:

- **Existing System Research** - The CONSULTANT will review how the City currently manages the development review process – specifically as it relates to off-site roadway infrastructure and right-of-way dedication requirements for developers. The CONSULTANT will work with the City to compile the applicable development codes and master plans that may be affected by Texas Local Government Code (LGC) 212 for transportation facilities. It is anticipated that the City will assist the Consultant in identifying the development codes and understanding the current development process.
- **Thoroughfare Plan and Historic Project Costs** - The CONSULTANT will utilize data gathered in Task 3, and also gather data from the existing and proposed updates to City design standards and cross section information for those roadway facilities that may be required to be improved (or contributed towards) by future development. This information will include right-of-way widths, pavement widths, pavement depth, and other required elements typically included as part of a roadway construction project. The CONSULTANT will also gather from the City the average unit prices for commonly used pay items and available historical bid tabulation information for recently completed thoroughfare construction projects. If limited recent City bid tabulations are available this data will be supplemented with the latest available TxDOT unit prices.
- **Trip Length Information** - The CONSULTANT will collect data from CAMPO, the National Household Travel Survey, Replica, and the City Impact Fee Program to determine average trip length information, or any similar studies to aid in the selection of an appropriate trip length for the calculations.

Deliverables: Existing System Review, Historic Project Costs, Average Trip Lengths

7.2 Methodology Development

Using the data collected, the CONSULTANT will assist the City in developing a rough proportionality methodology consistent with TLG 212.

Methodology Outline - The CONSULTANT will coordinate with the City to outline the methodology to be utilized in conducting the Rough Proportionality Assessment. It is anticipated that the methodology will consist of an MS Excel (.xls) worksheet that will include the following elements:

- User Guide (an overview of the proportionality worksheet)
- Proportionality Worksheet, including the following four (4) sections:

- (1) Development Information
 - (2) Demand Calculations (based on the land use and intensity of the development)
 - (3) Supply Calculations (listing of the required improvements to be provided by the development)
 - (4) Comparison Information - a summary comparison of the supply and demand from the development to determine if the improvements are roughly proportionate)
- Land Use Information (a summary of the land uses for the demand calculations)
 - Summary of Roadway Costs (a summary of the costs and capacities provided by the various roadway facilities identified in Task 7.1)
 - Detailed roadway costs sheets (a summary of the per mile project costs for up to five (5) roadway cross section types as identified during Task 7.1). The City will provide the CONSULTANT with guidance on the structure, format, and inputs for all of the above listed elements of the rough proportionality worksheet.

Worksheet Development - The CONSULTANT will develop a rough proportionality worksheet for use by the City in conducting rough proportionality determinations. It is anticipated that the CONSULTANT will develop a draft version for review and comment; followed by a final version of the worksheet that addresses comments. The CONSULTANT will update the worksheet for up to two (2) rounds of City comments.

Proportionality User Guide - The CONSULTANT will develop an 8.5" x 11" user guide (anticipated to be 5-10 pages in length with text and supporting exhibits / screen shots of the worksheet) for the rough proportionality methodology. The user guide will outline the history and objectives of the rough proportionality policy, along with summarized step-by-step instructions for completing the worksheet. The focus of the user guide will be to assist current and future staff members whom are unfamiliar with using the rough proportionality worksheet.

Staff Training Session - The CONSULTANT will prepare for and attend up to one (1) training session with City staff in-person. It is anticipated that this will be a 3-hour training session that covers the basics of rough proportionality, details of applying and using the rough proportionality worksheet, and two case studies utilizing the rough proportionality worksheet. The CONSULTANT will provide hard copies of the training materials for up to ten (10) attendees.

Deliverables: Methodology Outline, Rough Proportionality Worksheet, User Guide, Staff Training Session

8. TOOLS AND CIP DEVELOPMENT

8.1 Intersection Control Evaluation Tool

The CONSULTANT will develop a flow chart that specifies primary and alternative intersection control types based on functional class and levels of service of intersections not studied for use as a tool for evaluations by the City after study completion.

Deliverables: Intersection Control Flowchart

8.2 Signal Network and Technology Tools

The CONSULTANT will provide a summary of ongoing projects and programs that can incorporate signal technology, corridor timing enhancements, and communications. Recommendations will be developed for continued transportation network improvements by the CONSULTANT and for any traffic technology related capital programs discussed during one of the SOC meetings in Task 2.5. Recommendations, if any, will be incorporated into the Short-Term Capital Plan in Task 8.1, and a summary of recommendations and activities in the TMP Plan Document in Tasks 8 & 9.

Deliverables: Summary of Projects for Transportation Technology Updates

8.3 Project Listing

The CONSULTANT will develop a list of potential transportation projects based on the outcomes of the existing conditions and needs assessment that will occur in Task 3 and the resulting Thoroughfare Plan in Task 4.3. This list will be considered the “universe of projects”. The overall project list will be refined into a list of twenty (20) roadway projects through a screening process to then further prioritize projects in Task 7.5 beyond the projects funded in the previous CIP. These projects will be independently ranked from bottleneck intersection projects evaluated in Task 4.5.

Deliverables: Draft CIP List

8.4 Project Performance Measures

The CONSULTANT will work with City staff to create priorities for transportation project evaluation and prioritization. It is assumed that this tool will be used primarily for evaluation of roadway projects that involve retrofits, new alignments or widening. Projects that do not improve vehicular capacity and are solely multimodal in focus will be evaluated using qualitative measures such as effectiveness at improving connectivity, access, and safe crossings and will be separated into a different category for comparisons with other projects that are multimodal in focus. Intersection projects will be ranked based on metrics identified in Task 4.5.

Deliverables: Prioritization Scoring Criteria

8.5 Project Review and Prioritization

The CONSULTANT will use the project ranking system and tool updated in Task 8.4 to evaluate the resulting list of projects identified in Task 8.3. It is envisioned that the ranking system will sort projects based on high priority/short-term, medium, or low priority/long-term ranking. The result of this task will be a project map and table of results including planning level costs.

Deliverables: Prioritization Tool, Prioritized Map and List of Projects

8.6 Funding and Implementation

Eligibility of projects for funding via local, state, MPO, and federal resources will be evaluated in this subtask, including identified safety projects from Task 3.6. Identified opportunities for funding federal, state, regional, local, and other funding sources will be identified and documented in presentation of a prioritized project list in the Short-Term Capital Plan in Task 9.1.

Deliverables: Funding and Implementation Plan

9. PLAN REFINEMENT

9.1 Short-Term Capital Improvement Plan

The CONSULTANT will prepare planning-level cost projections for City-selected future capital improvement projects based on 2027 dollars, likely to be the highest-ranking projects identified in Task 8.5. These cost projections will be based on discussion with City staff, current City design guidelines, recently bid roadway and intersection projects in the City, and previous CONSULTANT experience with roadway construction costs. Due to the variety of unknowns associated with roadway project cost projections (ROW acquisition, utility relocations, etc.), the planning-level project cost projections used in this analysis should be further refined prior to being used for any future capital improvement planning within the City. The CONSULTANT will develop costs for projects estimated to be in the Short-Term (10 years or less) Capital Improvement Plan (CIP), which are anticipated to be high and medium priority projects identified in Task 8.5. The CIP list will be used to inform the Rough Proportionality Assessment, Task 7.

Deliverables: Planning Level Cost Sheets

9.2 Supportive Policies

The CONSULTANT will develop recommendations for new or updated policies based on the resulting diagnostic table from Task 3.1 for further development by the City. These policies will be identified in the TMP but not resolved or developed for full implementation.

Deliverables: List of Recommended Policy Changes

9.3 Documentation of Draft Plan

The CONSULTANT will prepare a comprehensive report summarizing the plan overview, goals and objectives, existing conditions, public outreach, thoroughfare planning, cross section development, analysis, project list development, project prioritization, policy recommendations, and action plan. Additionally, standalone chapters will be dedicated to the Active Transportation and Vision Zero Initiatives.

The CONSULTANT will deliver technical materials such as maps and analysis results throughout the project at various milestones and meetings with the City, the SOC, and the community and include them, as appropriate, in the online document library.

Deliverables: Draft Plan Documenting Tasks 1-10

10. TRANSPORTATION MASTER PLAN DOCUMENT

10.1 Action Matrix and Strategy

The CONSULTANT will establish an action plan and methodology for implementation resulting from the outcomes in Task 2 through Task 9. The CONSULTANT will prepare the action plan in a map and table format for easy reference and use, intended to be incorporated into the annual budget reports for the City and overall CIP reports. The CONSULTANT anticipates incorporating the following elements:

- Potential Funding Sources for Projects
- Project Tracking in an online dashboard to include:
 - Transportation CIP Projects (Roadway and Intersection Projects)
 - Recommended Policy Updates
- Annual Reporting Metrics

Deliverables: Action Matrix, Online Dashboard

10.2 Final Report

The CONSULTANT anticipates the following review process with the City for the final report:

- 60% Review – This review will be provided via Microsoft Word for content review only.
- 90% Review – This review will be a minor review of the final report in PDF format after final graphics have been provided.

The CONSULTANT will deliver the final report in InDesign (.INDD) and PDF formats along with any ArcGIS Pro map packages (.MPKX) of final report maps developed in GIS format. 10 hard copies of the final report with binding will be delivered after plan adoption.

Deliverables: Ten (10) Printed and Bound Copies of the Final Report

10.3 TMP Adoption Support & Presentations

All meetings related to Staff Workshops, SOC, Pop-Up Meetings, and Public Meetings are included in Task 2.

The CONSULTANT will present the draft and final recommendations to the Planning and Zoning Commission at two (2) meetings each prior to two (2) meetings with City Council for adoption of the TMP. Each of the meetings with the Planning and Zoning Commission and City Council will include up to two (2) team members from the CONSULTANT.

Deliverables: Planning and Zoning Commission Meetings (2), City Council Meetings (2), Presentation Materials

10.4 Project Maps

All project maps will be delivered in an ArcGIS map package (MPKX) format for ease of use and visibility of data in the same symbology and format as shown in PDF maps. The CONSULTANT will also print and mount up to ten (10) copies of the updated Thoroughfare Plan in large format (30" x 40") frames or larger and five (5) copies in smaller frames (less than 30" x 40") size. Frames are anticipated to be provided by the City.

Deliverables: ArcGIS Pro Map Packages, 10 Large Format and 5 Small Format Print Copies of the Updated Thoroughfare Plan

11. **ADDITIONAL SERVICES**

The CONSULTANT has assumed additional on-call hourly support services for inquiries related to the TMP and any potential edits for up to two (2) years after adoption, as well as additional projects identified through the TMP Update. The Scope and Fee Schedule for these additional services will be provided at the City's request. No work under these additional services will commence prior to the issuance of the NTP. These include:

- **Hourly Support Services:** This hourly support includes further development of concepts, plans, or standards developed as part of Tasks 2-10. This task may also be used for attendance at additional meetings on behalf of the City by the CONSULTANT, beyond those anticipated in the scope for Tasks 1-10.
- **Additional TDCM Updates** outside of the described scope in Task 5.
- **Equity Analysis and Plan:** Develop a comprehensive plan that ensures equitable access to transportation resources and infrastructure for all community members by identifying and addressing disparities.
- **Complete Streets and LID Infrastructure Plan:** Create an integrated plan promoting safe and accessible streets for all users, incorporating low-impact development (LID) practices to manage stormwater and enhance environmental sustainability.

- **Safe Routes to School Plan:** Formulate strategies and infrastructure improvements to ensure that students have safe, reliable, and convenient routes for walking and biking to school.
- **ITS Plan:** Develop an Intelligent Transportation Systems (ITS) Plan to enhance traffic management, improve safety, and optimize the overall efficiency of the transportation network through advanced technology applications.
- **Transit Plan Review & Updates:** Provide regular reviews and updates to existing transit plans to ensure they meet current needs and future growth, improving transit service delivery and accessibility.
- **Gateway Corridors Design Guidelines:** Establish design guidelines for gateway corridors to enhance their visual appeal, functionality, and integration with surrounding areas, promoting a welcoming atmosphere.
- **Roadway Impact Fee:** Comprehensive analysis of traffic impacts caused by new developments within the designated area. This includes forecasting future traffic volumes, assessing the capacity and performance of existing roadway infrastructure, and identifying necessary improvements. The study will quantify the costs associated with these improvements and propose equitable fee structures to recover the costs from developers, ensuring that new growth contributes fairly to expanded roadway facilities."
- **Ongoing Transportation Modeling Support:** Offer continuous assistance in transportation modeling to support planning efforts, ensure accuracy in forecasting, and facilitate data-driven decision-making.
- **Ongoing Transportation Development/Site Plan Review Support:** Provide ongoing support in reviewing transportation aspects of development proposals and site plans to ensure compliance with regulations and best practices.
- **Ongoing Traffic Engineering Support:** Deliver continuous traffic engineering services, including analysis and recommendations to improve traffic flow, safety, and efficiency within the transportation network.