Laredo Urban Transportation Study

Metropolitan Planning Organization Policy Committee

Notice of Public Meeting

City of Laredo City Hall
City Council Chambers
1110 Houston Street
Laredo, Texas
May 19, 2014
12:00 noon

MEETING AGENDA

I. CHAIRPERSON TO CALL MEETING TO ORDER

II. CHAIRPERSON TO CALL ROLL

III. COMMITTEE AND DIRECTOR'S REPORTS (No action required)

IV. ITEMS REQUIRING POLICY COMMITTEE ACTION

1. Approval of the minutes for the meeting held on April 24, 2014.

2. Motion authorizing the execution of Amendment #1 of the contract with CoPLAN LLC for professional services related to the development of the Congestion Management Plan in order to:
   - Add volume based performance measurement to the collected delay data from peak period travel time runs in order to develop a volume weighted listing of top 20 congested locations.
   - Increase the contract fee by $16,429.47 from $126,135.29 to $142,564.76 for additional work.
   - Extend contract completion date to December 31, 2014.

3. Motion authorizing the execution of Amendment #2 of the contract with Kimley-Horn and Associates, Inc for professional services related to the development of the Railroad Quiet Zone Study Update in order to:
   - Increase the number of crossings to be studied from 26 to 32.
   - Increase the number of traffic counts to be collected from 10 crossings to 32 crossings.
   - Extend contract completion date to March 31, 2015
   - Increase the contract fee by $8,100 from $48,600 to $56,700 for additional work

4. Receive public testimony and approve a motion initiating a ten-day public review and comment period for the proposed amendment of the 2013-2016 Transportation Improvement Program (TIP).

V. TECHNICAL COMMITTEE REPORT(S) (No action required)

VI. ADJOURNMENT

THIS NOTICE WAS POSTED AT THE MUNICIPAL GOVERNMENT OFFICES, 1110 HOUSTON STREET, LAREDO, TEXAS, AND AT A PLACE CONVENIENT AND READILY ACCESSIBLE TO THE PUBLIC AT ALL TIMES. SAID NOTICE WAS POSTED BY 12:00 NOON, MAY 16, 2014.

Persons with disabilities who plan to attend this meeting and who may need auxiliary aid or services are requested to contact Ms. Vanessa Guerra, City Planning at (956) 794-1604 at least two working days prior to the meeting so that appropriate arrangements can be made. The accessible entrance and accessible parking spaces are located at City Hall and can be accessed through the Victoria Ave. entrance.

The Laredo Metropolitan Planning Organization Policy Committee is comprised of the following members:

CITY OF LAREDO REPRESENTATIVES:

Honorable Raul G. Salinas, Mayor and LUTS Chairperson
Honorable Roque Vela Jr., City Councilmember, District V
Honorable Juan Narvaez, City Councilmember, District IV
Honorable Jorge A Vera, City Councilmember, District VII

COUNTY OF WEBB REPRESENTATIVES:

Honorable Danny Valdez, Webb County Judge
Honorable John Galo, Webb County Commissioner Pct 3
Honorable Jaime Canales, Webb County Commissioner, Pct. 4

STATE REPRESENTATIVES:

Ms. Melisa Montemayor, District Administrator
Mr. Albert Ramirez, P.E., Transportation Planning and Development Director

***** EX-OFFICIO *****

Honorable Judith Zaffirini, State Senator, District 21
Honorable Richard Raymond, State Representative, District 42
Honorable Tracy O. King, State Representative, District 80

(FOR)
Nathan R. Bratton
MPO Director

Gustavo Guevara, Jr.
City Secretary

Laredo Urban Transportation Study

Metropolitan Planning Organization Policy Committee
City of Laredo Council Chambers
1110 Houston St. -Laredo, Texas

MINUTES OF THE APRIL 24, 2014, MEETING

LAREDO, TEXAS
1755

I. CALL TO ORDER

Judge Danny Valdez called the meeting to order at 12:10 p.m.

II. CHAIRPERSON TO CALL ROLL

Nathan R. Bratton, MPO Director, called roll to verify that a quorum did exist.

Cm. Galo made a motion to excuse members not present.

Second: Cm. Vera
In Favor: 7
Against: 0
Abstained: 0

Motion carried unanimously

Regular members present:

Honorable Danny Valdez, Webb County Judge
Honorable John Galo, Webb County Commissioner, Pct. 3
Honorable Juan Narvaez, City Councilmember, District IV
Honorable Roque Vela, Jr. City Councilmember, District V
Honorable Jorge A. Vera, City Councilmember, District VII
Melisa Montemayor, TxDOT
Albert Ramirez, TxDOT

Regular members not present:

Honorable Raul G. Salinas, Mayor and LUTS Chairperson
Honorable Jaime Canales, Webb County Commissioner, Pct. 4

Ex-Officio Members Not Present:

Honorable Richard Raymond, State Representative, District 42
Honorable Judith Zaffirini, State Senator, District 21
Honorable Tracy O. King, State Representative, District 80

Staff (Of Participating LUTS Agencies) Present:

City:

Nathan R. Bratton, City Planning/LUTS Staff
Vanessa Guerra, City Planning/LUTS Staff
Angie Quijano, City Planning/LUTS Staff

State:

Ana Duncan, TxDOT
Carlos Rodriguez, TxDOT

Others:

Eduardo Bernal, Transit, El Metro

III. COMMITTEE AND DIRECTOR'S REPORTS (No action required)

Neither the Committee nor the Director had any business to report.

IV. ITEMS REQUIRING POLICY COMMITTEE ACTION

1. Approval of the minutes for the meeting held on March 17, 2014.

Cm. Vera made a motion to approve the minutes for the meeting held of March 17, 2014.

Second:	Cm. Galo
For:	7
Against:	0
Abstained:	0

Motion carried unanimously

2. Receive public testimony and approve Resolution No. MPO 2014-02 adopting the proposed 2015-2018 Transportation Improvement Program (TIP).

Cm. Galo made a motion to open a public hearing.

Second:	Cm. Narvaez
For:	7
Against:	0
Abstained:	0

Motion carried unanimously

There was no public comment.

Cm. Galo made a motion to close the public hearing and approve resolution No. MPO 2014-02 adopting the proposed 2015-2018 TIP.

Second: Cm. Narvaez
For: 7
Against: 0
Abstained: 0

Motion carried unanimously

3. Receive public testimony and approve Resolution No. MPO 2014-03 adopting the proposed revision of the 2010-2035 Laredo Metropolitan Transportation Plan (MTP).

Cm. Galo made a motion to open a public hearing.

Second: Cm. Vela
For: 7
Against: 0
Abstained: 0

Motion carried unanimously

There was no public comment.

Cm. Galo made a motion to close the public hearing and approve resolution No. MPO 2014-03 adopting the proposed revision of the MTP.

Second: Cm. Vera
For: 7
Against: 0
Abstained: 0

Motion carried unanimously

4. Discussion with possible action on a Mines Road Corridor Study.

Mr. Bratton informed the committee members present that there are funds in the Unified Planning Work Program (UPWP) currently allocated for the performance of an outer loop alignment study. He stated he believed it would be more beneficial to the MPO, the City of Laredo and Webb County to do a traffic study on the Mines Road Corridor. The proposed study would explore options and recommendations for the reduction of congestion on the Mines Road Corridor.

Cm. Galo stated he is not opposed to allocating funds for the Mines Road study but also emphasized the importance of the Outer Loop Study.

Mr. Bratton recommended moving forward with the outer loop study in a subsequent fiscal year, and replace the Outer Loop Study with the Mines Road Corridor Study in current year.

Judge Valdez asked how much money has been allocated for the Outer Loop Project.

Mr. Bratton stated $75,000.00 was currently allocated to the Outer Loop study.

Melisa Montemayor, TxDOT, recommended extending the area of the study to include the Columbia Toll Road.

Cm. Vera stated that subsequent to the performance of the previous study, Laredo has grown, while infrastructure has stayed the same. He recommended contacting the land owner and incorporating all his data and traffic analysis.

Mr. Bratton stated that Staff is seeking guidance from the Policy Committee whether to move forward with this study or the Outer Loop Study as previously programmed. He also stated that when the scope of the project is done, TxDOT will have to be fully engaged in the study.

Cm. Narvaez recommended that commercial freight vehicles should use the Del Mar exit then use Santa Maria instead of using Calton Rd. He stated his traffic concerns on Calton Rd.

Mr. Bratton suggested the study may include some data collection efforts on altering the truck routes.

Cm. Galo stated he supports the performance of the Mines Road study if it will include the Hachar Road. He also asked how the Regional Mobility Authority (RMA) will fit into this study.

Mr. Bratton stated that the RMA board will need to be constituted first before inclusion into the local planning process may be undertaken.

Mr. Bratton stated his objective is for staff to get data, find out where the trucks are coming from, recommendations about truck routes, and also recommendations about relief routes. He stated that the MPO funds are solely used for planning studies. He stated that after project scoping is done, he will have a better estimate of cost.

Cm. Galo made a motion to recommend moving forward on a Mines Road Corridor Study and to include FM1472, SH255, FM3338, intersection of Green Road, go down SH255 and come down on IH 35.

Second:	Cm. Vera
For:	7
Against:	0

Abstained: 0

Motion carried unanimously

V. TECHNICAL COMMITTEE REPORT(S) (No action required)

There was nothing to report.

VI. ADJOURNMENT

Cm. Vera made a motion to adjourn the meeting at 12:33 p.m.

Second: Cm. Narvaez
For: 7
Against: 0
Abstained: 0

Motion carried unanimously

Prepared by: _____ Reviewed by: _____
Angie Quijano
MPO Staff

Vanessa Guerra,
MPO Coordinator

Reviewed by: _____
Nathan R. Bratton,
MPO Director

_____
Melisa Montemayor,
District Administrator

_____
Raul G. Salinas,
Mayor and LUTS Chairperson

ACTION ITEM

DATE:	SUBJECT: Motion(s)
5-19-14	Authorizing the execution of Amendment #1 of the contract with CoPLAN LLC for professional services related to the development of the Congestion Management Plan in order to: • Add volume based performance measurement to the collected delay data from peak period travel time runs in order to develop a volume weighted listing of top 20 congested locations. • Increase the contract fee by $16,429.47 from $126,135.29 to $142,564.76 for additional work. • Extend contract completion date to December 31, 2014.

INITIATED BY:	STAFF SOURCE:
Staff	Nathan Bratton, Director of Planning

PREVIOUS COMMITTEE ACTION: On June 17th, 2013, the Policy Committee approved a Motion accepting the Selection Committee's ranking of the submittals, authorized the selection the consultant and approved Staff entering into negotiations with the selected firm. On August 19, 2013 the Policy Committee approved a Motion authorizing the award and execution of a contract in the amount of $126,135.29 with CoPLAN LLC for professional services related to the Congestion Management Plan project.

BACKGROUND:

The Unified Planning Work Program (UPWP) describes and schedules work to be undertaken by the MPO during the 2013-2014 fiscal period. The development the Congestion Management Plan is an objective of the 2013 Unified Planning Work Program, adopted by the MPO in Subtask 5.1.

5.1 Congestion Management Plan- Congestion and Delay Study

As a newly designated Transportation Management Area, the Laredo MPO is federally required to develop and implement a Congestion Management Process as an integral part of the metropolitan planning process. 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.

Objective: To identify existing congestion levels, evaluate congested locations, and develop recommendations for addressing congestion.

Expected Outcome: Travel time and delay data on the selected network, identification of top 20 most congested locations, and congestion mitigation recommendations for 8 intersections.

Firms that submitted proposals include:

- CoPLAN LLC
- CDM Smith

Selection Committee Recommendation:

The Selection Committee recommended the selection of CoPLAN LLC for the performance of the project.

CONTRACT AMENDMENT 1

	ORIGINAL CONTRACT	AMENDMENT 1	TOTAL
FEE	$126,135.29	16,429.47	142,564.76
MONTHS	5	7	12*

*- Project was suspended for 3 months, therefore total actual time elapsed during project development is estimated at 15 months.

SCOPE OF WORK - is also amended such that volume based performance measures are added to the collected delay data from peak period travel time runs in order to develop a volume weighted listing of top 20 congested locations.

FINANCIAL IMPACT:

In FY 2014 UPWP allocated 150,000 for this project using federal planning grant (PL112) funds.

TECHNICAL COMMITTEE RECOMMENDATION:	STAFF RECOMMENDATION:
Approval	Approval

Amendment 1
To The Contract Between
Laredo Urban Transportation Study
Metropolitan Planning Organization
And
CoPLAN LLC

The original contract, dated August 20th, 2013, by and between the Laredo Urban Transportation Study, Metropolitan Panning Organization, and CoPLAN LLC is hereby amended in the following respects:

Paragraph 1: *Article I – CONTRACT PERIOD-First paragraph - is amended to read as follows:*

Upon execution of this contract, Consultant shall not proceed with the scope of work outlined under Article II until authorized in writing by the Transportation Planning Director of the L.U.T.S. to proceed as provided in Article XXV - Notice To Proceed. This contract shall terminate at the close of business on **[~~September 30, 2014~~]** ***December 31, 2014*** unless extended by a written supplemental agreement duly executed by the parties prior to the date of termination, as provided in Article XXVII - Supplemental Agreements, or otherwise terminated as provided by Article XIV - Termination. Any work performed or costs incurred after the date of termination shall be ineligible for reimbursement.

Paragraph 2: *ARTICLE III – COMPENSATION – First paragraph is amended to read as follows*:

The L.U.T.S. shall pay up to **[~~$126,135.29~~] $142,564.76** as compensation for the services to be performed under this contract. In the event of a change in the scope of services, additional complexity or a different character of work from that originally anticipated and authorized by the L.U.T.S., the amount may be revised only by written agreement of the parties.

Paragraph 3: ATTACHMENT A- SCOPE OF SERVICES- will be amended in order to add services listed on ATTACHMENT A-1 which is attached hereto and part a part of for all purposes. (see attachment "A" -1)

Paragraph 4: The parties agree that the foregoing amendments shall be hereinafter considered a part of the contract referred to above and incorporated by reference therein for all purposes. The amendments shall be subject to any and all other provisions of the contract, with the exception of the parts or provisions of the contract which have been modified by this amendment.

IN WITNESS WHEREOF, the parties hereto have executed this Amendment 1 on the dates set forth below.

Laredo Urban Transportation Study Metropolitan Planning Organization	CoPLAN LLC.
_____	_____
Raul G. Salinas	By: _____
Chairman, MPO Policy Committee	Title: _____
Date: _____	Date: _____

ATTACHMENT "A–1"

SCOPE OF SERVICES

PROJECT PARAMETERS

The following assumptions pertain to the provision of Basic Services:

A. The PROJECT will consist of the following activities, as requested by the Laredo Urban Transportation Study:

Task 7.0 Congestion Management Process Data Collection **(Fall 2013):**

1.1 Volume Based Performance Measure

B. PROJECT is located within Webb County, Texas

C. Final deliverable, including presentations to the Technical Advisory Committee and Policy, will be completed by the end of March.

D. Items not directly described within this scope (i.e. tasks, additional copies or report, etc.) will be considered additional services and will require an agreement on scope and fee between the LUTS and CoPLAN, LLC prior to work being completed.

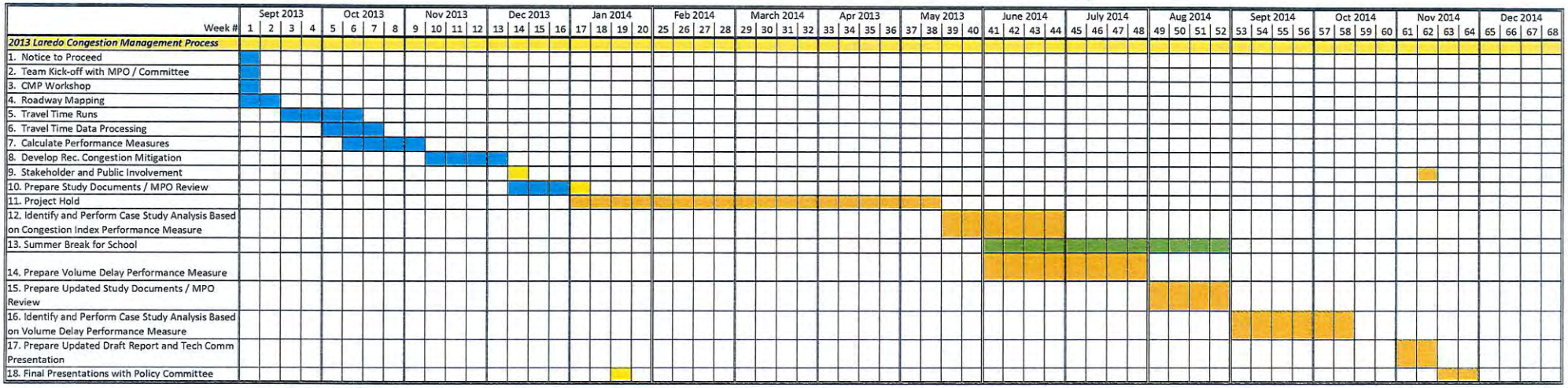
TASK 7.0 Congestion Management Process Data Collection – Fall 2013

1.1 Volume Based Performance Measure

- LUTS will provide current model network in shapefile format containing ADT volumes
- CoPLAN will conflate the model volumes and apply to respective intersection segments within the CMP linear reference system. Many of the segments will not have a direct equivalent segment. Those will require a weighted average calculation between 2 or more multiple segments.
- A new performance measure will be developed that applies the volume to the delay from the peak period travel time runs
- The resulting volume weighted performance measure will be ranked and a Top 20 list developed
- A combined performance measure is envisioned that will reflect the results of both the raw CI and the volume weighted delay result

2013 LAREDO ROADWAY CONGESTION MONITORING AND ANALYSIS PROGRAM
(Updated with Additional Services Task 7)

Personnel	Sr. Project Manager	Task Manager	Project Controls	GIS Programming	GIS Specialist	Traffic Engineer	Data Collection	Mileage	Expenses	Task Hours	Task Budget
Task											
Laredo Congestion Management Process (CMP)											
Task 1 - CMP Policy Development and Network Definition	33									33	$7,246.00
Roundtrip Airfare ($300 each)									$600		
Car Rental ($60/day)									$120		
Per Diem ($36/day per person)									$72		
Hotel ($92/night/room)									$184		
Task 2 - Data Collection - Mapping/Travel Time Runs	40	80	12	40	92	52	100	6,000	$100	416	$60,289.96
Roundtrip Airfare ($300 each)									$1,200		
Car Rental ($60/day) - 5 days for mapping + travel time runs									$1,200		
Car Rental Gas - Mapping									$1,200		
Per Diem ($36/day per person)									$1,440		
Hotel ($92/night/room)									$3,680		
GRAM Expenses									$2,753		
Task 3 - Data Analysis	24	8	3	32		10				77	$11,976.44
Task 4 - Report and Database	20	40	2	6	20	6			$188.20	94	$14,018.30
Task 5 - Instruction and Presentations (3 presentations)	40									40	$9,352.00
Roundtrip Airfare ($300 each)									$900		
Car Rental ($60/day)									$360		
Per Diem ($36/day per person)									$216		
Hotel ($92/night/room)									$276		
Task 6 - Additional Data Requirements (Traffic Counts & Intersection Ops)	20	32							$1,600	52	$13,584.00
Roundtrip Airfare ($300 each)									$600		
Car Rental ($60/day)									$120		
Per Diem ($36/day per person)									$1,008		
Hotel ($92/night/room)									$1,656		
Fee (12% on PM Effort) - Base Scope											$6,915.60
Task 7 - Additional Services - Volume Delay Performance Measure	20	60		24							$16,429.47
Total Hours	197	220	17	102	112	68	100	6000		712	
Rate	$190.00	$150.00	$155.74	$151.23	$113.26	$90.99	$55.00	$0.550			
Fee (12% on PM Effort) - Base Scope	$4,035.60	$2,880.00									
Staff Effort	$41,465.60	$35,880.00	$2,647.66	$15,425.24	$12,685.65	$6,187.41	$5,500.00	$3,300.00	$19,473.20	Budget	$142,564.76


Week #
Sept 2013 1 2 3 4
Oct 2013 5 6 7 8
Nov 2013 9 10 11 12
Dec 2013 13 14 15 16
Jan 2014 17 18 19 20
Feb 2014 25 26 27 28
March 2014 29 30 31 32
Apr 2013 33 34 35 36
May 2013 37 38 39 40
June 2014 41 42 43 44
July 2014 45 46 47 48
Aug 2014 49 50 51 52
Sept 2014 53 54 55 56
Oct 2014 57 58 59 60
Nov 2014 61 62 63 64
Dec 2014 65 66 67 68
2013 Laredo Congestion Management Process
1. Notice to Proceed
2. Team Kick-off with MPO / Committee
3. CMP Workshop
4. Roadway Mapping
5. Travel Time Runs
6. Travel Time Data Processing
7. Calculate Performance Measures
8. Develop Rec. Congestion Mitigation
9. Stakeholder and Public Involvement
10. Prepare Study Documents / MPO Review
11. Project Hold
12. Identify and Perform Case Study Analysis Based on Congestion Index Performance Measure
13. Summer Break for School
14. Prepare Volume Delay Performance Measure
15. Prepare Updated Study Documents / MPO Review
16. Identify and Perform Case Study Analysis Based on Volume Delay Performance Measure
17. Prepare Updated Draft Report and Tech Comm Presentation
18. Final Presentations with Policy Committee

ORIGINAL CONTRACT

STATE OF TEXAS §
COUNTY OF WEBB §

KNOW ALL MEN BY THESE PRESENTS

This contract is made, entered and executed between the **LAREDO URBAN TRANSPORTATION STUDY (LUTS)**, which is the designated Metropolitan Planning Organization (MPO) for the City of Laredo Metropolitan urbanized area, and a portion of Webb County, hereinafter called the MPO, and **COPLAN LLC..**, hereinafter called the Consultant, **For Professional Services In The Development of THE CONGESTION MANAGEMENT PLAN.**

WITNESSETH

WHEREAS, pursuant to provisions of 23 USC 134, the Governor of the State of Texas has designated the MPO to be the single-focus planning organization for the City of Laredo Metropolitan urbanized area, and a portion of Webb County, and has executed an agreement to effectuate the designation; and,

WHEREAS, pursuant to the Governor's designation and in compliance with applicable federal, state, and local laws, regulations, and ordinances, the MPO has developed and maintains a current Unified Planning Work Program which outlines work tasks and estimated expenditures; and,

WHEREAS, the current Unified Planning Work Program has been approved by the State of Texas, acting by and through the Texas Department of Transportation, and the U.S. Department of Transportation, acting by and through the Federal Highway Administration; and,

WHEREAS, the current Unified Planning Work Program authorizes the MPO to engage a consultant to develop the Congestion Management Plan for the Laredo Metropolitan Area, and the Consultant has proposed a plan to complete the task, and the MPO has accepted the proposal; and,

WHEREAS, the Policy Committee of the L.U.T.S. includes the Mayor of the City of Laredo, three members of the Laredo City Council, the County Judge of Webb County, two county commissioners, the State Representatives (ex-officio) and State Senator (ex-officio), the Laredo District Administrator of the Texas Department of Transportation ("TxDOT") and the Deputy District Engineer of TxDOT; and,

WHEREAS, the City of Laredo acts as the fiscal agent for the L.U.T.S.; and,

WHEREAS, the City of Laredo ("City"), is a municipal corporation chartered under the laws of the State of Texas, with its principal place of business located at 1110 Houston Street, Laredo, Texas; and,

WHEREAS, the Congestion Management Plan is approved in the current Unified Planning Work Program pursuant to the requirements of Moving Ahead for Progress in the 21st Century (MAP 21); and,

WHEREAS, CoPLAN LLC. ("Consultant") is a professional corporation, incorporated in Texas whose local place of business is 5508 Sandalwood, McKinney, TX 75070; and,

WHEREAS, the Consultant was found to be the best qualified to perform the services requested under the Request for Proposal for the development of the Congestion Management Plan for the Laredo metropolitan area;

NOW THEREFORE, in consideration of the premises and of the mutual covenants and agreements of the parties hereto, the MPO and the Consultant do mutually agree as follows.

ARTICLE I- CONTRACT PERIOD

Upon execution of this contract, Consultant shall not proceed with the scope of work outlined under Article II until authorized in writing by the Transportation Planning Director of the L.U.T.S. to proceed as provided in Article XXV - Notice To Proceed. This contract shall terminate at the close of business on September 30, 2014 unless extended by a written supplemental agreement duly executed by the parties prior to the date of termination, as provided in Article XXVII - Supplemental Agreements, or otherwise terminated as provided by Article XIV - Termination. Any work performed or costs incurred after the date of termination shall be ineligible for reimbursement.

Consultant shall notify the Transportation Planning Director of the L.U.T.S. in writing as soon as possible if it determines, or reasonably anticipates, that the work under this contract cannot be completed before the termination date, and the Transportation Planning Director of the L.U.T.S. may, at his sole discretion, extend the contract period by timely supplemental agreement as provided in Article XXVII - Supplemental Agreements. Consultant shall allow adequate time for review and approval of the request for time extension by the L.U.T.S. prior to the expiration of this contract.

ARTICLE II- RESPONSIBILITIES OF THE PARTIES

Consultant shall perform those services for fulfillment of the contract identified in *Attachment A - Scope of Services*, attached hereto, incorporated by reference, and made a part hereof for all purposes. The Work Schedule incorporated in Attachment A shall contain a complete schedule so that Consultant's Scope of Services under this contract can be accomplished within the specified time and contract cost. The Work Schedule shall provide a specific work sequence and review times by the L.U.T.S. and Consultant of the work performed. If the review time shall take longer than shown on the work schedule, through no fault of Consultant, additional time may be authorized by the L.U.T.S. under a supplemental agreement if so requested upon timely written request from Consultant and approved in writing by the Transportation Planning Director of the L.U.T.S.

ARTICLE III- COMPENSATION

The L.U.T.S. shall pay up to $ 126,135.29 as compensation for the services to be performed under this contract. In the event of a change in the scope of services, additional complexity or a different character of work from that originally anticipated and authorized by the L.U.T.S., the amount may be revised only by written agreement of the parties.

Consultant shall prepare and submit to the Transportation Planning Director of the L.U.T.S. progress reports in sufficient detail to support the progress of the work and in support of invoice(s) precedent to requesting payment for services rendered. Satisfactory progress of work shall be maintained as a condition of payment.

Payments to Consultant for services rendered will be made while work is in progress. Consultant will prepare and submit to the Transportation Planning Director of the L.U.T.S., no more frequently than once per month, a progress report stating the percent completion of the work accomplished during the billing period and to date, and one original and one copy of an invoice. The submittal shall also include a project assessment report. Payment of the lump sum fee will be in proportion to the percentage completion of work tasks identified in Attachment A. Upon receipt and approval of each complete statement, the L.U.T.S. shall make a good faith effort to pay within 30 working days.

The L.U.T.S. shall reserve the right to withhold payment pending verification of satisfactory work performed. Consultant shall be required to submit adequate proof that the task was completed. Payment of costs incurred is further governed by cost principles outlined in the Federal Acquisition Regulation, 48 CFR, Chapter 1, Part 31, Subpart 31.2, Contracts with Commercial Organizations.

The progress report shall show the total amount earned to the date of submission and the amount due and payable as of the date of the current statement. Final payment of any money due shall be made to Consultant once satisfactory completion of all services and obligations covered in this contract, including acceptance of work by the Transportation Planning Director of the L.U.T.S., except as provided below. The release of any retainage does not relieve Consultant of the responsibility for correcting any errors and/or omissions resulting from its negligence.

ARTICLE IV- CONTRACT AMENDMENTS

Significant changes in the terms and conditions of this contract can be made only by written amendment executed by the parties hereto prior to the changes being made. Any such amendment must be approved by the Transportation Planning Director of the L.U.T.S.

ARTICLE V- ADDITIONAL WORK

If Consultant is of the opinion that any work it has been directed to perform is beyond the scope of this agreement and constitutes extra work, it shall promptly notify the Transportation Planning Director of the L.U.T.S. in writing. In the event that the Transportation Planning Director of the L.U.T.S. finds that such work does constitute additional work and will exceed the maximum amount specified in Article III, the L.U.T.S. shall so advise the Consultant and a written supplemental agreement may be executed between the parties as provided in Article XXVII-

Supplemental Agreements. Consultant shall not perform any additional work or incur any additional costs prior to the signing, by both parties, of a supplemental agreement. The L.U.T.S. shall not be responsible for the actions of Consultant or any costs incurred by Consultant relating to additional work not directly associated with the performance authorized in this contract, or as amended.

ARTICLE VI- CHANGES IN WORK

If the L.U.T.S. finds it necessary to request changes to previously satisfactorily completed work or parts thereof which involve changes to the original scope of services or character of work under the contract, Consultant shall make such revisions if requested and as directed by the Transportation Planning Director of the L.U.T.S. This will be considered additional work and paid for as specified in Article V - Additional Work.

Consultant shall make such revisions to the work authorized in this contract, which have been completed as are necessary to correct errors appearing therein, when required to do so by the L.U.T.S. No additional compensation shall be paid for this work.

ARTICLE VII- INDEMNIFICATION

Consultant shall save and hold harmless the L.U.T.S., the City of Laredo, the County of Webb, the Texas Department of Transportation, and the U.S. Department of Transportation from all claims and liability due to the activities of itself, its agents or employees, performed under this contract and which are caused by or result from negligent error, omission, or act of Consultant or of any person employed by Consultant. Consultant shall also save harmless the L.U.T.S., the City of Laredo, the County of Webb, the Texas Department of Transportation, and the U.S. Department of Transportation from any and all expense, including but not limited to, reasonable attorney fees which may be incurred in litigation or otherwise resisting said claim or liabilities which may be imposed as a result of the activities of Consultant, its agents or employees.

ARTICLE VIII- INSPECTION OF WORK

The L.U.T.S., the Texas Department of Transportation, and the U.S. Department of Transportation and any authorized representatives, shall have the right at all reasonable times to review or otherwise evaluate the work performed or being performed hereunder and the premises in which it is being performed. If any review or evaluation is made on the premises of Consultant or a subcontractor, Consultant shall provide and require its subcontractors to provide all reasonable facilities and assistance for the safety and convenience of the representatives of the L.U.T.S., the Texas Department of Transportation, or the U.S. Department of Transportation.

ARTICLE IX- DISPUTES

The Consultant shall be responsible for the settlement of all contractual and administrative issues arising out of procurements entered into in support of contract work. The MPO shall act as referee in all disputes regarding non - procurement issues, and the MPO's decision shall be final and binding.

ARTICLE X- NONCOLLUSION

Consultant warrants that it has not employed or retained any company or persons other than a bona fide employee working solely for Consultant, to solicit or secure this contract, and that it has not paid or agreed to pay any company or person any fee, commission, percentage, brokerage fee, gifts, or any other consideration, contingent upon or resulting from the award or making of this contract. For breach or violation of this warranty, the L.U.T.S. shall have the right to annul this contract without liability or, in its discretion, to deduct from the contract price or compensation, or otherwise recover, the full amount of such fee, commission, percentage, brokerage fee, gifts, or contingent fee.

ARTICLE XI- REPORTING

Consultant shall from time to time during the progress of the work, confer with the L.U.T.S. Consultant shall prepare and present such information as may be pertinent and necessary, or as may be requested by the Transportation Planning Director of the L.U.T.S., in order to evaluate the features of the work.

Upon the request of the Transportation Planning Director of the L.U.T.S. or Consultant, conferences shall be provided at the offices of the L.U.T.S., or at any other locations designated by the Transportation Planning Director of the L.U.T.S. These conferences shall also include evaluation of the services and work of Consultant when requested by the L.U.T.S. All work performed pursuant to the contract is subject to review by the Laredo District Office of the Texas Department of Transportation and the U.S. Department of Transportation.

Consultant shall promptly advise the Transportation Planning Director of the L.U.T.S. in writing of events that have significant impact upon the progress of work, including but not limited to:

(1) Problems, delays, or adverse conditions which will materially affect the ability to attain program objectives, prevent the meeting of time schedules and goals, or preclude the attainment of project work units by established time periods; this disclosure will be accompanied by statement of the action taken or contemplated;

(2) Favorable developments or events which enable work schedule goals to be completed sooner than anticipated or scheduled.

All notices to either party by the other required under this contract shall be personally delivered or mailed to such party as follows:

BY CERTIFIED MAIL OR HAND DELIVERY

Nathan Bratton
Transportation Planning Director
P.O. Box 579
Laredo, Texas 78042-0579

Steve Taylor
CoPLAN, LLC
5508 Sandalwood
McKinney, TX 75070

ARTICLE XII- RECORDS

The L.U.T.S., the City of Laredo, the Texas Department of Transportation, and the U.S. Department of Transportation shall have the right to examine the books and records of Consultant for the purpose of checking the amount of work performed at the time of contract

termination. Consultant shall maintain all books, records, documents, papers, accounting records and other evidence pertaining to costs incurred for a period of four years from the date of final contract payment or until pending litigation has been fully and completely resolved, whichever occurs last. Records pertinent to this contract shall be made available for inspection during normal business hours to the authorized representatives of the L.U.T.S., the City of Laredo Finance Department, the Texas Department of Transportation, U.S. Department of Transportation, and the Comptroller General.

ARTICLE XIII- SUBCONTRACTS

Consultant shall not assign, subcontract, or transfer any portion of the work under this contract without the prior written approval of the Transportation Planning Director of the L.U.T.S., which approval shall not be unreasonably withheld. All sums due and payable under this contract shall be made to the order of Consultant and to no other. All subcontracts shall include the provisions required in this contract and shall be approved as to form, in writing, by the Transportation Planning Director of the L.U.T.S. prior to work being performed under the subcontract. No subcontract relieves Consultant of responsibilities for performance under this contract.

ARTICLE XIV- TERMINATION

The contract may be terminated before the stated termination date by any of the following conditions:

(1) By mutual agreement and consent, in writing, of both parties.
(2) In writing, by the Transportation Planning Director of the L.U.T.S. as a consequence of Consultant's failure to perform the services set forth herein.
(3) By either party, upon the failure of the other party to fulfill its obligations as set forth herein with proper notice given.
(4) Upon thirty (30) days written notice to Consultant.
(5) By satisfactory completion of all services and obligations described herein.

Should the L.U.T.S. terminate this contract as herein provided, no fees other than fees due and payable at the time of termination shall be paid to Consultant. Compensation for work at termination will be based on the percentage of work completed at that time. The value of work charged during the time after notice of termination is received shall not exceed the value of the work performed in the preceding thirty-day period.

If Consultant defaults in the performance of this contract or if the L.U.T.S. terminates this contract for fault on the part of Consultant, consideration will be given to the actual costs incurred by Consultant in performing the work up to the date of default. This includes the amount of work that was satisfactorily completed, the value of the work that is usable, the cost of securing a substitute consultant for completion of the work, and other factors affecting the value of the work performed at the time of default.

The termination of this contract and the payment of an amount in settlement as prescribed above shall extinguish all rights, duties, and obligations of the L.U.T.S. and Consultant, except the obligations set forth in Article XVI - Compliance With Laws of this agreement. If the termination of this contract is due to the failure of Consultant to fulfill its contract obligations,

the L.U.T.S. staff may complete the work. In such case, Consultant shall be liable for any additional cost occasioned by such failure.

ARTICLE XV- REMEDIES

Any violation of contract terms or breach of contract by Consultant shall be grounds for termination of the contract and any increased cost arising from the default of Consultant shall be paid solely by Consultant.

This agreement shall not be considered as specifying the exclusive remedy for any default, but all remedies existing at law and in equity may be availed of by either party and shall be cumulative.

ARTICLE XVI- COMPLIANCE WITH LAWS

Consultant shall comply with all applicable Federal, State and local laws, statutes, codes, ordinances, rules and regulations, and orders and decrees of any court or administrative body or tribunal in any manner affecting the performance of this contract, including without limitation, worker's compensation laws, minimum and maximum salary and wage statutes and regulations, and licensing laws and regulations. When required, Consultant shall furnish in writing satisfactory proof of its compliance therewith.

ARTICLE XVII- SUCCESSORS AND ASSIGNS

The L.U.T.S. and the Consultant each binds itself, its successors, executors, assigns and administrators to each other party of this agreement and to the successors, executors, assigns and administrators of such other party in respect to all covenants of this contract. Neither the L.U.T.S. nor the Consultant shall assign, sublet, or transfer its interest in this contract without written consent of the other.

ARTICLE XVIII- OWNERSHIP OF DOCUMENTS

All data, basic sketches, charts, calculations, plans, specifications, and other documents created, or collected under the terms of this contract are the exclusive property of the L.U.T.S. and shall be furnished to the Transportation Planning Director of the L.U.T.S. upon request. All documents prepared by Consultant and all documents furnished by Consultant shall be delivered to the Transportation Planning Director of the L.U.T.S. upon completion or termination of this contract. Consultant, at its own expense, may retain copies of such documents or any other data that it has furnished to the L.U.T.S. under this contract. The release of any information shall be in conformance with the Texas Open Records Act.

ARTICLE XIX- SIGNATORY WARRANTY

The undersigned signatory for the Consultant hereby represents and warrants that he is an officer of the organization for which he has executed this contract and that he has full and complete authority to enter into this contract on behalf of his firm. The above-stated representations and warranties are made for the purpose of inducing the L.U.T.S. to enter into this contract.

ARTICLE XX- CONSULTANT RESOURCES

Consultant shall furnish and maintain, at its own expense, quarters for the performance of all services, and adequate and sufficient personnel and equipment to perform the services required.

All employees of Consultant shall have such knowledge and experience as will enable them to perform the duties assigned to them.

Any employee of Consultant who, in the opinion of the Transportation Planning Director of the L.U.T.S. is incompetent, or whose conduct becomes detrimental to the work shall immediately be removed from association with the project when so instructed in writing. Consultant certifies that it presently has adequate qualified personnel in its employment for performance of the services required under this contract, or will be able to obtain such personnel from sources other than the L.U.T.S.

Any change in the Project Manager shall be requested in writing and approved in writing by the Transportation Planning Director of the L.U.T.S.

ARTICLE XXI- EQUAL EMPLOYMENT OPPORTUNITY

The Consultant agrees to comply with Executive Order 11246 entitled "Equal Employment Opportunity" as amended by Executive Order 11375 and as supplemented in Department of Labor Regulations (41 CFR 60).

ARTICLE XXII- NONDISCRIMINATION

During the performance of this contract, the Consultant, its assigns and successors in interest, agrees as follows:

1. *Compliance with Regulations*: The Consultant shall comply with the regulations relative to nondiscrimination in federally-assisted programs of the U.S. Department of Transportation, Title 49, Code of Federal Regulations, Part 21 and Title 23, Code of Federal Regulations, Part 710.405(b), as they may be amended from time to time (hereinafter referred to as the Regulations), which are herein incorporated by reference and made a part of this contract.

2. *Nondiscrimination*: The Consultant, with regard to the work performed by it during the contract, shall not discriminate on the grounds of race, color, sex, or national origin in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The Consultant shall not participate either directly or indirectly in the discrimination prohibited by Section 21.5 and Part 710.405(b) of the Regulations, including employment practices when the contract covers a program set forth in Appendix B of the Regulations.

3. *Solicitations for Subcontracts, Including Procurements of Materials and Equipment*: In all solicitations either by competitive bidding or negotiation made by the Consultant for work to be performed under a subcontract, including procurements of materials or leases of equipment, each potential subcontractor or supplier shall be notified by the Consultant of the Consultant's obligations under this contract and the Regulations relative to nondiscrimination of the grounds of race, color, sex, or national origin.

4. *Information and Reports*: The Consultant shall provide all information and reports required by the Regulations, or directives issued pursuant thereto, and shall permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the L.U.T.S., the Texas Department of Transportation or the U.S. Department of Transportation to be pertinent to ascertain compliance with such Regulations or directives. Where any information required of the Consultant is in the exclusive possession of another who fails or refuses to furnish this information, the Consultant shall so certify to the L.U.T.S., the Texas

Department of Transportation or the U.S. Department of Transportation as appropriate, and shall set forth what efforts it has made to obtain the information.

5. *Sanctions for Noncompliance*: In the event of the Consultant's noncompliance with the nondiscrimination provisions of this contract, the Texas Department of Transportation shall impose such contract sanctions as it or the U.S. Department of Transportation may determine to be appropriate, including but not limited to:

   a. Withholding of payments to the Consultant under the contract until the Consultant complies, and/or,
   b. Cancellation, termination, or suspension of the contract in whole or in part.

6. *Incorporation of Provisions*: The Consultant shall include the provisions of paragraphs 1 through 6 in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Regulations or directives issued pursuant thereto. The Consultant shall take such action with respect to any subcontract or procurement as the L.U.T.S. may direct as a means of enforcing such provisions including sanctions for noncompliance; provided, however, that in the event a Consultant becomes involved in, or is threatened with litigation with a subcontractor or supplier as a result of such direction, the Consultant may request the L.U.T.S. to enter into such litigation to protect the interests of the L.U.T.S.; in addition, the Consultant may request the United States to enter into such litigation to protect the interests of the United States.

ARTICLE XXIII- MINORITY BUSINESS ENTERPRISES

It is the policy of the U.S. Department of Transportation that Minority Business Enterprises as defined in 49 CFR 23, Subpart A, shall have the maximum opportunity to participate in the performance of contracts financed in whole or in part with Federal funds. Consequently the Minority Business Enterprise requirements of 49 CFR 23, exclusive of Subpart D, apply to this contact as follows:

The Consultant agrees to insure that Minority Business Enterprises as defined in 49 CFR 23, Subpart A, have the maximum opportunity in the performance of contracts and subcontracts financed in whole or in part with Federal funds. In this regard, the Consultant shall take all necessary and reasonable steps in accordance with 49 CFR 23, exclusive of Subpart D, to insure that Minority Business Enterprises have the maximum opportunity to compete for and perform contracts.

The Consultant and any subcontractor shall not discriminate on the basis of race, color, sex, or national origin in the award and performance of contracts funded in whole or in part with Federal funds.

These requirements shall be physically included in any subcontract. Failure to carry out the requirements set forth above shall constitute a breach of contract and, after the notification of the L.U.T.S., may result in termination of the contract by the L.U.T.S. or other such remedy as the L.U.T.S. deems appropriate.

ARTICLE XXIV- DELINQUENT TAX CERTIFICATION

Pursuant to Article 2.45 of the Business Corporation Act, Texas Civil Statutes, which prohibits the State from awarding a contract to a corporation that is delinquent in paying taxes under

Chapter 171, Tax Code, the Consultant hereby certifies that it is not delinquent in its Texas franchise tax payments, or that it is exempt from or not subject to such tax. A false statement concerning the corporation's franchise tax status shall constitute grounds for cancellation of the contract at the sole option of the Transportation Planning Director of the L.U.T.S.

ARTICLE XXV- NOTICE TO PROCEED

The Transportation Planning Director of the L.U.T.S. will issue a written authorization to proceed with the work identified in the scope of services. The L.U.T.S. shall not be responsible for actions by Consultant or any costs incurred by Consultant relating to additional work not included in Attachment A - Scope of Services.

ARTICLE XXVI- SUSPENSION

Should the L.U.T.S. desire to suspend the work, but not terminate the contract, this may be done by giving thirty (30) days verbal notification followed by written confirmation from the Transportation Planning Director of the L.U.T.S. to that effect. The thirty-day notice may be waived in writing by both parties. The work may be reinstated and resumed in full force and effect within sixty (60) days of receipt of written notice from the Transportation Planning Director of the L.U.T.S. to resume work. The sixty-day notice may be waived by both parties in writing. If the L.U.T.S. suspends the work, the contract period as determined in Article I-Contract Period is not affected and the contract will terminate on the date specified unless the contract is amended.

The L.U.T.S. assumes no liability for work performed or costs incurred prior to the date of the notice to proceed authorized by the L.U.T.S. to begin work, during periods when work is suspended, or subject to contract completion date.

ARTICLE XXVII- SUPPLEMENTAL AGREEMENTS

The terms of this contract may be modified by supplemental agreement if the L.U.T.S. determines that there has been a significant change in the:

(1) Scope, complexity, character of the service to be performed; or

(2) The duration of work.

Additional compensation, if appropriate, shall be identified in writing as provided in Article III-Compensation, and the supplemental agreement shall state what, if any, additional compensation shall be provided. The Transportation Planning Director of the L.U.T.S. shall issue a notice to proceed for work authorized under the supplementary agreement in accordance with the provisions of Article XXV- Notice to Proceed. Any supplemental agreement must be executed in writing by both parties within the contract period specified in Article I - Contract Period.

It is distinctly understood and agreed that no claim for extra work done or materials furnished shall be made by Consultant until full execution of the supplemental agreement and authorization to proceed is granted. The L.U.T.S. reserves the right to withhold payment pending verification of satisfactory work performed in accordance with Article III-Compensation of this agreement.

ARTICLE XXVIII- SUBMISSION OF REPORTS

All applicable study reports shall be submitted in preliminary form for approval before a final report is issued. The comments of the Transportation Planning Director of the L.U.T.S. shall be noted and addressed in the final report.

ARTICLE XXIX- INSURANCE

Consultant shall furnish a properly completed Certificate of Insurance, in a form approved by the fiscal agent of the L.U.T.S. prior to beginning work under this contract and shall maintain such insurance through the contract period.

ARTICLE XXX- GRATUITIES

No member of the L.U.T.S. shall accept any benefits, gifts or favors from any person doing business with the L.U.T.S. under this contract, nor shall any person doing business with or who may reasonably do business with the L.U.T.S. under this contract make an offer of benefits, gifts, or favors to L.U.T.S. personnel or staff.

ARTICLE XXXI- DEBARMENT, SUSPENSION AND DISCIPLINARY ACTION

By execution of this agreement, Consultant warrants that it has not been disbarred, suspended, or subject to disciplinary action which would affect its ability to perform the services contracted. It further warrants that it is in compliance with regulations relating to Equal Employment Opportunity and Civil Rights Regulations.

ARTICLE XXXII- PATENT AND COPYRIGHT

The L.U.T.S., the Texas Department of Transportation, and the U.S. Department of Transportation shall have the non-exclusive and irrevocable right to reproduce, publish, or otherwise use, and to authorize the use by others any reports developed by Consultant for governmental purposes.

ARTICLE XXXIII- SEVERABILITY

In the event any one or more of the provisions contained in this contract shall for any reason be held invalid, illegal, or unenforceable in any respect, such invalidity, illegality, or unenforceability shall not affect any other provision thereof and this contract shall be construed as if such invalid, illegal or unenforceable provision had never been contained therein.

ARTICLE XXXIV- PRIOR CONTRACT SUPERSEDED

This contract constitutes the sole and only agreement between the parties hereto and supersedes any prior understandings or written or oral contract between the parties respecting the subject matter defined herein.

ARTICLE XXXV- FORCE MAJEURE

Neither party to this agreement shall be required to perform any term, condition, or covenant in this agreement so long as performance is delayed or prevented by force majeure, which shall mean acts of God, strikes, lockouts, material or labor restrictions by a governmental authority, civil riots, floods, and any other cause not reasonably within the control of either party to this agreement and which by the exercise of due diligence such party is unable, wholly or in part, to

prevent or overcome. If by reason of force majeure either party is prevented from full performance of its obligations under this agreement, written notice shall be provided to the other party within three days.

ARTICLE XXXVI- APPLICABLE LAW

This agreement shall be construed under, and in accordance with, the laws of the State of Texas as amended from time to time, and all obligations of the parties created by this agreement are performable in Webb County, Texas.

IN WITNESS WHEREOF, the Laredo Urban Transportation Study acting by and through its Chairman as authorized by the Policy Committee, and CoPLAN, LLC have executed this agreement in duplicate originals, each of equal dignity.

EXECUTED this the 20th day of AUGUST, 2013.

Raul G. Salinas, Chairman
Policy Committee

Principal-in-Charge
CoPLAN, LLC

Steve Taylor
Print Name

ATTACHMENT A
SCOPE OF SERVICES

LAREDO MPO

CONGESTION MANAGEMENT PROCESS (CMP)

SCOPE OF WORK

The Congestion Management Process (CMP) PROJECT will consist of the following activities, as requested by the MPO:

Congestion Management Process Report **(Fall 2013):**

Task 1 – CMP Policy Development and Network Definition
Task 2 – Data Collection
Task 3 – Data Analysis
Task 4 – Report and Database
Task 5 – Instruction and Presentations
Task 6 – Additional Data Requirements

- Notice to Proceed is expected to be received on or before August 26, 2013
- Field travel times will be completed by Thursday November 15, 2013.
- Draft Report will be submitted to the MPO for review by December 6, 2013
- Committee and Public Meetings to discuss preliminary results are planned for the month of December 2013.
- Final deliverable, including a presentation to the MPO Policy Committee, will be completed by January 31, 2014.
- Travel Time runs will be limited to 300 centerline miles of roadway for the Fall 2013 Study.

Task 1: CMP Policy Development and Network Definition

- Travel time and delay studies as described in Task 2 are one component of a CMP. A well planned CMP not only evaluates the current congestion levels, but looks in the past to evaluate the benefits of previous projects and into the future to review priorities, anticipated conditions and planned improvements. Prior to beginning the Task 2, a general structure of the complete CMP should be discussed and developed with the Advisory Committee. This will help guide not only the methodology for the data collection, but the performance measures that are evaluated.

- The eight (8) components of an integrated CMP as defined by FHWA are:
  1. Develop Regional Objectives
  2. Define CMP Network
  3. Develop Multimodal Performance Measures
  4. Collect Data / Monitor System Performance
  5. Analyze Congestion Problems and Needs
  6. Identify and Assess Strategies
  7. Program and Implement Strategies
  8. Evaluate Strategy Effectiveness

- CoPLAN will work with the MPO to develop the data collection survey design and schedule. The survey design will include the following information:
    - Objectives of CMP
    - Detailed procedures for data collection
    - Schedule of Data Collection
    - Safety Plan
    - Performance Measures
    - List of routes included in the study and explanation of how they were chosen
    - List of the route segments defining their endpoints and lengths
    - Definition of terms
    - Description of the floating car method
    - Number of runs for each segment
    - Time periods for runs
    - Explanation of run start times
    - Procedures for handling construction, weather, and incidents
    - Training of data collectors
    - Procedures for quality control

- CoPLAN will meet with the MPO immediately after notice to proceed to begin refinement of the survey design. These meetings will include time with the Advisory Committee to finalize CMP methodology, congestion thresholds, and study routes.

- Selection of roadways is based on MPO and committee recommendations. A roadway list is attached in the Appendix for the Fall 2013 analysis. Any changes to the roadway list must be in writing and CoPLAN and the MPO must agree to the changes.

- Items not directly described within this scope (i.e. tasks, additional copies or report, etc.) will be considered additional services and will require an agreement on scope and fee between the MPO and CoPLAN prior to work being completed.

Task 2: Data Collection

- The MPO will provide a letter to be carried by members of the CoPLAN team while in the field that includes documentation about the project and client contact details.

- CoPLAN will work with the MPO to notify local agencies of planned field work. Those being notified will include:
    - City of Laredo Traffic Division
    - City Manager of Laredo
    - Laredo transit

- CoPLAN will also inquire with each of the representatives of those contacted about relevant data for the CMP which may include:
    - Traffic Counts,
    - Know problem areas,
    - Planned projects,
    - Planned developments, and
    - Recent / planned signal enhancements.

- After the meeting, each roadway segment will be driven and applicable elements mapped using GPS units with real time differential correction. This mapping

information is then used to establish the linear reference segments for later association with the travel time GPS data.

- Roadway construction and any atypical roadway conditions should be noted during the mapping task. Any adjustments to the routes or limits will be discussed based on the finding and mutually agreed to before travel time runs begin.

- While completing the mapping, roadway attributes will be collected using the GPS equipment and geocoded in the ArcGIS deliverable, as applicable. This includes and is limited to the following elements:
  - Signalized Intersections
  - Stop Sign controlled intersections (with stop on the study corridor)
  - Number of Lanes
  - Median Treatment
  - School zone limits and applicable times.

- CoPLAN will work closely with the MPO to incorporate elements provided by the MPO from existing model network, as available, into the linear reference system. These elements may include:
  - jurisdiction / city limits,

- Travel time data will be collected on roadways and limits identified in the Appendix for a total of:
  - 300 centerline miles of arterials, surface streets, and freeways

- CoPLAN will collect two-way AM and PM peak travel time data on the roadways using the following guidelines:

  - Travel Time runs will be limited to 300 centerline miles of roadway for the Fall 2013 Study.

  - 3 travel time runs will be performed in each direction on each roadway during the AM and PM period (AM and PM runs total 300 centerline miles).

  - For the purpose of this project, the AM peak is defined as 7:00 to 9:00 a.m. and the PM peak is defined as 4:00 to 6:00 p.m.

  - Data should be collected Monday PM, Tuesday through Thursday AM and PM, and Friday AM

  - Data should be collected while school is in session for the local school district in which the roadway is located

  - Data should not be collected during the day before or after any national holiday

Task 3: Data Analysis

Summary of Travel Times and Respective Congestion Indices

- Calculate the travel times for each segment of the selected roadways (a segment is defined as a link between a signal and/or stop sign on the subject roadway)
- The data collected will be used to calculate average travel time, average travel speed, and delay on each segment.
- Calculate the segment congestion index (average segment speed divided by weighted average posted speed limit for the segment)
- The thresholds of the various categories will be defined by the Advisory Committee prior to completion of the travel time data collection. Other methods of determining congestion may supplement the congestion index.
- Depending on guidance from the Advisory Committee, evaluation of the segment congestion index may be based on the following thresholds:
  - < 0.75 categorized as Congested
  - 0.75 – 0.99 categorized as Stable Flow
  - 1.00 + categorized as Free Flow

Ranking of congested corridors

- Roadway segments will be ranked in order of congestion index. As detailed above, the lower the index value, the worse the congestion.

Recommendations for improvements for congested segments

- Prepare recommendations for improvements for those roadway segments identified as congested.

Task 4: Reports and Database

CoPLAN is expected to submit monthly progress reports, a draft report of findings, a final report of findings, and an ArcGIS database of the data analysis.

- CoPLAN should expect to submit monthly status reports by e-mail to the MPO project manager. The reports shall describe significant achievements and problems which have potential effect on schedule or costs. They should be sufficiently detailed to assure that directives are in compliance with established scope.
- The draft report will include the survey design, a description of any changes or additions during the data collection process, and the following graphics using the GIS mapping:
  - Roadway Attributes
  - Average Intersection approach delay
  - Average Travel speed by time period
  - Average Congestion Index on each segment
  - Evaluation of Transit Accessibility
- After data collection and analysis are complete for the project, CoPLAN will submit twenty (20) copies of the preliminary draft report and thirty-five (20) copies of the final report along with a combined digital PDF. The reports will summarize the study's findings and conclusions. The reports must include:
  - table of contents

- executive summary
- description of study methodology and procedure
- detailed description and examples of the calculations used in processing the travel time runs into the ArcGIS database
- narrative description of all findings
- list of the top 20 most congested segments for AM and PM peaks
- summary of analyses

- CoPLAN will provide the MPO with an ArcGIS database containing the data and analysis. The data analysis will be based on the MPO's CMP network which is in TransCAD format.

- The following deliverables are planned before completion of the project:

  - Two (2) reproducible copies of preliminary draft
  - Thirty (20) bound copies of the preliminary draft
  - one electronic copy of the preliminary draft in the Microsoft Word or PDF
  - Two (2) reproducible copies of final report
  - Thirty-five (20) bound copies of the final report
  - one electronic copy of the final report in the Microsoft Word or PDF
  - one electronic copy of data and analyses, compatible with ESRI Geodatabase format

Task 5: Instruction and Presentations

- CoPLAN will hold a half-day training session for the MPO staff and invited member agency staff on the ArcGIS database. Instruction will also be required on the detailed description and examples of the calculations used in processing the travel time runs into the ArcGIS database.

- CoPLAN will conduct one (1) public meeting, one (1) presentation on draft results to the Advisory Committee, and one (1) presentation of final results to the Policy Committee.

- CoPLAN will make presentation of preliminary and final report to the MPO Advisory and Policy Committees.
  - Introduction of CMP to Advisory Committee (included in Task 1): September 2013
  - Advisory Committee Preliminary Results: November 2013
  - Public Meeting: December 2013
  - Advisory Committee Final Results: January 2014
  - Policy Committee: January 2014

Task 6: Additional Data Requirements

- CoPLAN will collect turning movement counts for up to eight (8) intersections (AM and PM peak periods) to be used in the following Synchro model. The intersections will be determined following the completion of the travel time analysis.

- In addition to identifying opportunities to reduce congestion for those segments found to be congested, CoPLAN will develop an in-depth Synchro model for up to eight (8) intersections (isolated or part of a corridor) for both time periods. These intersections or corridor will most likely be represented in the Top 20 most congested segments. Within Synchro, elements such as intersection geometric modifications and timing sequences can be adjusted to simulate those improvements in the field prior to

implementation. Typically, the improvement alternatives coded in Synchro will represent all ranges of improvements, including signal timing (short term), intersection improvements (mid-term), and the addition of through-lane capacity (long range), as warranted.

- CoPLAN will assist the MPO in assessing methods used to collect travel time data to determine whether the reliability of the congestion data can be improved by using private sector traffic information systems. CoPLAN will also assist the MPO in determining the best approach to integrate this data into the congestion management program and provide a step by step guide for integration into the process.

LIST OF ROADS AND LIMITS

MAP OF ROADS AND LIMITS

Attachment
B

COMPENSATION

The included scope will be completed for a not-to-exceed $126,135.29 for all fees and expenses as detailed in the following tables.

2013 LAREDO ROADWAY CONGESTION MONITORING AND ANALYSIS PROGRAM

Personnel	Sr. Project Manager	Task Manager	Project Controls	GIS Programming	GIS Specialist	Traffic Engineer	Data Collection	Mileage	Expenses	Task Hours	Task Budget
Task											
Laredo Congestion Management Process (CMP)											
Task 1 - CMP Policy Development and Network Definition	32									32	$7,056.00
Roundtrip Airfare ($300 each)									$600		
Car Rental ($60/day)									$120		
Per Diem ($36/day per person)									$72		
Hotel ($92/night/room)									$184		
Task 2 - Data Collection - Mapping/Travel Time Runs	40	80	12	40	92	52	110	6,000	$100	426	$60,839.96
Roundtrip Airfare ($300 each)									$1,200		
Car Rental ($60/day) - 5 days for mapping + travel time runs									$1,200		
Car Rental Gas - Mapping									$1,200		
Per Diem ($36/day per person)									$1,440		
Hotel ($92/night/room)									$3,680		
GRAM Expenses									$2,224		
Task 3 - Data Analysis	24	8	3	32		10				77	$11,976.44
Task 4 - Report and Database	20	40	2	6	20	6				94	$13,830.10
Task 5 - Instruction and Presentations (3 presentations)	40									40	$9,352.00
Roundtrip Airfare ($300 each)									$900		
Car Rental ($60/day)									$360		
Per Diem ($36/day per person)									$216		
Hotel ($92/night/room)									$276		
Task 6 - Additional Data Requirements (Traffic Counts & Intersection Ops)	20	32					36			88	$13,964.00
Roundtrip Airfare ($300 each)									$600		
Car Rental ($60/day)									$120		
Per Diem ($36/day per person)									$1,008		
Hotel ($92/night/room)									$1,656		
Fee (12% on PM Effort)											$6,892.80
Total Hours	176	160	17	78	112	68	146	6000		757	
Rate	$190.00	$150.00	$155.74	$151.23	$113.26	$90.99	$55.00	$0.550			
Fee (12% on PM Effort)	$4,012.80	$2,880.00									
Staff Effort	$37,452.80	$26,880.00	$2,647.66	$11,795.77	$12,685.65	$6,187.41	$8,030.00	$3,300.00	$17,156.00	Budget	$126,135.29

Week #	Sept 2013				Oct 2013				Nov 2013				Dec 2013				Jan 2013			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
2013 Laredo Congestion Management Process																				
Notice to Proceed																				
Team Kick-off with MPO / Committee																				
CMP Workshop																				
Roadway Mapping																				
Travel Time Runs																				
Travel Time Data Processing																				
Calculate Performance Measures																				
Develop Rec. Congestion Mitigation																				
Stakeholder and Public Involvement																				
Prepare Study Documents / MPO Review																				
Final Presentations with Policy Committee																				

DRAFT REPORT

2013 Laredo
Metropolitan Planning Organization

CONGESTION AND DELAY STUDY

Draft Report

EVALUATION PERIOD - FALL 2013

Prepared for:

Laredo Urban Transportation Study

Prepared by:

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November 2013

ACKNOWLEDGEMENTS

Laredo Urban Transportation Study

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Michael Barron – United Independent School District Representative

The contents of this report reflect the views of the preparers who are responsible for the opinions, findings, and conclusions herein. The contents do not necessarily reflect the views or policies of the Federal Highway Administration, Federal Transit Administration, or the Texas Department of Transportation.

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ES1 EXECUTIVE SUMMARY

Congestion management is the use of strategies to optimize operations of a transportation system through management of the existing system. As such, a congestion management process (CMP) is a systematic approach coordinated regionally that provided current performance measures detailing the systems performance and evaluates strategies that meet the local objectives.

By definition, the CMP is not to be a stand-alone study...it is to be an integral component of the metropolitan transportation planning process. Once an MPO exceeds a population of 200,000, the CMP is required according to SAFETEA-LU, while the federal regulations are not strictly stated as to the methodology or approach that is to be followed.

The flexibility is intentional within the regulations to allow the MPO to development a living methodology that evolves with the local objectives and needs.

By responding to congestion through a process that involves developing congestion management objectives, developing performance measures to support these objectives, collecting data, analyzing problems, identifying solutions, and evaluating the effectiveness of implemented strategies, the CMP provides a structure for responding to congestion in a consistent, coordinated fashion.

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***

The Laredo Urban Transportation Study(LUTS) is developing its' inaugural congestion management process (CMP) to monitor the transportation network in Laredo study area. The study area includes a portion of Webb County and all of the City of Laredo. The goal of the monitoring system is to ensure optimal performance of the transportation system by identifying congested areas and related transportation deficiencies.

The primary purpose of the 2013 Congestion and Delay Study is to evaluate the transportation system and prepare a report as part of the Congestion Management Process (CMP) in compliance with the Safe, Accountable, Flexible,and Efficient Transportation.

Equity Act: A Legacy for Users (SAFETEA-LU) requirements. The secondary purpose of the study was to identify trends in congestion and travel time in order to identify problem locations for possible improvements.

Being the inaugural study, the MPO is establishing the baseline of existing congestion for comparison in future years. To help establish the CMP network, the MPO staff invited representatives of local agencies and units of government to a kick-off meeting in October 2013. The primary goal of the meeting was to have a CMP workshop to provide an overview of the CMP objectives. This discussion was very helpful to those in attendance to help guide the local approach for the inaugural CMP. The study network included 272 centerline miles of roadway spread over 92 different roadways divided into 1154 directional links bound by a traffic signal, stop sign, or major cross street. For added functionality, each segment was assigned a jurisdiction (City / County) depending on its location within the MPO boundaries. This attribute will allow the MPO and its members to query data within the database for each respective jurisdiction.

The CMP is intended to use an objectives-driven, performance-based approach to planning for the management of congestion. Through the use of congestion management objectives and performance measures, the CMP provides a mechanism for ensuring that investment decisions are made with a clear focus on desired outcomes. The purpose of this study was to identify problem areas using travel time studies. The results of this study are used as factors in prioritizing needed improvements. Through the use of a Global Positioning System (GPS) in the travel time runs congestion is pinpointed. By collecting position and speed data every one second, areas of delay were highlighted. This data provide the needed reference material to prepare recommendations that are focused on the true cause of the congestion.

Travel time runs were conducted using the floating car method. Roadways included arterials and freeways. Intersection delay for through vehicles was recorded at signalized intersections and compared with criteria in the Highway Capacity Manual (HCM) to determine level of service. In order to differentiate between congested roadways and roadways with low speed limits, a performance measure for illustrating the data was introduced. This method uses a ratio of actual travel speed to posted speed limit and is referred to as the Congestion Index (CI). Of the 272 directional miles studied in AM and PM, it was observed that XX.X% were congested in AM, and XX.X% were congested in PM. **Table E-1** below shows the Top 20 congested segments in this study based on CI.

One of the biggest benefits of the CMP is a structured, transparent, process for effective allocation of limited transportation funding among operations and capital projects and programs. It also highlights travel demand management and operations strategies that historically may not have been a focus of metropolitan transportation planning. Through an integrated congestion monitoring system, decision-makers are provided with system

performance and the effectiveness of potential solutions as well as the results of implemented strategies.

Table E-1-Top 20 Congested Segments

Rank	Time Period	RouteID	RouteName	Intersection Segment	Average Speed	Wt Avg Speed Limit	Percent Posted
1	AM	1170	MEADOW - SB	CORPUS CHRISTI to GUADALUPE	3.56	30	0.12
2	PM	1170	MEADOW - SB	CORPUS CHRISTI to GUADALUPE	4.62	30	0.15
3	PM	1177	CHICAGO / TAYLOR - EB	HENDRICKS to MCPHERSON	5.19	30	0.17
4	PM	1111	US 59 - EB	BUENA VISTA to BARTLETT	6.45	35	0.18
5	AM	1177	CHICAGO / TAYLOR - EB	HENDRICKS to MCPHERSON	5.84	30	0.19
6	AM	1164	DEL MAR - WB	SPRINGFIELD to SAN DARIO	5.88	30	0.19
7	AM	1180	MCPHERSON / MCCLELLAND - SB	GRAND CENTRAL to BOB BULLOCK LOOP WB	8.36	42	0.20
8	PM	1115	US HIGHWAY 83 NB - NB	CANONES to SIERRA VISTA	11.16	55	0.20
9	AM	1179	MCPHERSON / MCCLELLAND - NB	UNITED HIGH SCHOOL to SHILOH	8.49	40	0.21
10	PM	1086	BOB BULLOCK / CUATRO VIENTOS - SB	to FM 1472	9.57	45	0.21
11	AM	1038	SEYMOUR - SB	CORPUS CHRISTI to GUADALUPE	6.40	30	0.21
12	PM	1085	BOB BULLOCK / CUATRO VIENTOS - NB	to IH 35 NBFR	11.76	55	0.21
13	PM	1169	MEADOW - NB	MARKET to CHIHUAHUA	6.49	30	0.22
14	AM	1011	CLARK - EB	AGUILA AZTECA to BOB BULLOCK	10.30	45	0.23
15	PM	1180	MCPHERSON / MCCLELLAND - SB	COUNTRY CLUB to DEL MAR	9.18	40	0.23
16	PM	1164	DEL MAR - WB	SPRINGFIELD to SAN DARIO	6.93	30	0.23
17	PM	1159	MANN - EB	SANTA MARIA to IH 35 SBFR	6.94	30	0.23
18	PM	1179	MCPHERSON / MCCLELLAND - NB	SAN ISIDRO to BOB BULLOCK LOOP EBFR	10.43	45	0.23
19	AM	1169	MEADOW - NB	MARKET to CHIHUAHUA	9.96	30	0.23
20	AM	1055	SAN DARIO (one-way) - NB	WASHINGTON to SCOTT	6.96	30	0.23

Managing demand and implementing operations strategies are more cost-effective in the short-term than larger capacity adding projects. At a minimum, operations should not be forgotten when performing capacity projects in order to enhance their effectiveness. History has shown, that widening a corridor without attention to optimizing the signal system leads to little reduction in delays. Other MPOs have created funding set-asides to be used to address smaller scale projects that can be quickly addressed without the need for lengthy ROW or environmental process.

In the Laredo region, many corridors could benefit from the application of access management techniques to its developed and currently undeveloped corridors. The Federal Highway Administration defines access management as "the process that provides access to land development while simultaneously preserving the flow of traffic on the surrounding system in terms of safety, capacity, and speed." It is accomplished by controlling the design of access points, the location of access points, and the number of access points allowed within a given distance. Access management provides benefits related to safety, mobility, the environment, and fuel consumption. While it is possible to retrofit already developed corridors for access management, common problems include lack of right-of-way and landowner opposition. It is less expensive to apply access management techniques to undeveloped corridors as they develop. Consideration should be given to developing an access management program that would define land patterns and traffic flow, program goals, policies, implementation and financial strategies.

INTRODUCTION

History of the Congestion Management Process

The Laredo MPO has initiated the Congestion Management Process (CMP) to monitor the transportation network in the region. The goal of the monitoring system is to ensure optimal performance of the transportation system by identifying congested areas and related transportation deficiencies. This information will then be used in the transportation planning process to develop strategic improvement projects that will improve and maintain the performance of roadways at a system level.

The 2013 study was conducted in the Fall 2013 with travel time runs in September - November 2013. The primary tasks completed as part of this study include:

- Mapping of the routes included to the CMP network
- Travel time data collection
- Delay Calculations

Study Background

The fall study was conducted on approximately 272centerline miles of roadways in the MPO region. **Figure 1** shows the study area and roadways.

The study included 92 different roadways, divided into 1154separate segments that ranged from 500 feet to 11.4 miles in length in the rural area. For added functionality, each segment was assigned a jurisdiction (City / County) depending on its location within the MPO boundaries. This attribute will allow the MPO and its members to query data within the database for each respective jurisdiction.

All of the study roadways are evaluated during the AM and PM peak periods between the hours of 7:00 AM-9:00 AM and 4:00 PM-6:00 PM respectively. The total directional and centerline miles during each study period are shown in **Table 1**.

Table 1-Total Study Miles Summary

Study Period	Total Directional Miles	Total Centerline Miles
AM	476.8	272.0
PM	476.8	272.0
Total	953.6	486.0

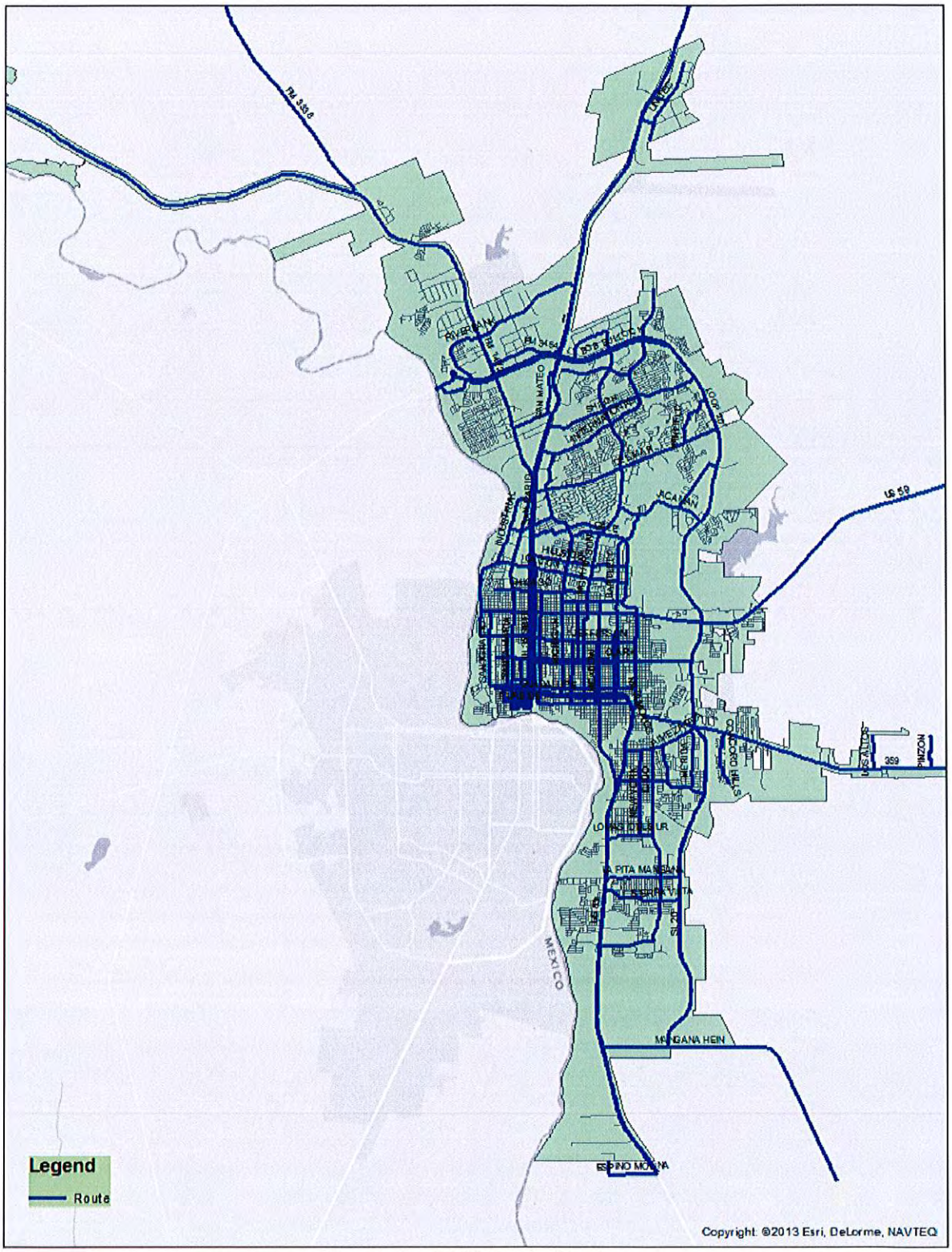

Figure 1 – 2013 Study Routes

Guidance provided by FHWA includes eight (8) "actions" that comprise a well-developed CMP. The elements are referred to as actions to indicate that the process is not to be thought of as a linear methodology to step through, but may include variations and at times one may need to revisit previous steps as a result of another. The actions below taken directly from the 2011 FHWA published "*Congestion Management Process: A Guidebook*" will be used as the structure for this report to help the MPO in developing its inaugural CMP.

1. **Develop Regional Objectives for Congestion Management** – First, it is important to consider,—What is the desired outcome? —What do we want to achieve? It may not be feasible or desirable to try to eliminate all congestion, and so it is important to define objectives for congestion management that achieve the desired outcome. Some MPOs also define congestion management principles, which shape how congestion is addressed from a policy perspective.

2. **Define CMP Network** – This action involves answering the question, —What components of the transportation system are the focus...and involves defining both the geographic scope and system elements (e.g., freeways, major arterials, transit routes) that will be analyzed in the CMP.

3. **Develop Multimodal Performance Measures** – The CMP should address, —How do we define and measure congestion? This action involves developing performance measures that will be used to measure congestion on both a regional and local scale. These performance measures should relate to, and support, regional objectives.

4. **Collect Data/Monitor System Performance** – After performance measures are defined, data should be collected and analyzed to determine, —How does the transportation system perform? Data collection may be on-going and involve a wide range of data sources and partners.

5. **Analyze Congestion Problems and Needs** – Using data and analysis techniques, the CMP should address the questions, —What congestion problems are present in the region, or are anticipated? —What are the sources of unacceptable congestion?

6. **Identify and Assess Strategies** – Working together with partners, the CMP should address the question, —What strategies are appropriate to mitigate congestion? This action involves both identifying and assessing potential strategies, and may include efforts conducted as part of the MTP, corridor studies, or project studies.

7. **Program and Implement Strategies** – This action involves answering the question...How and when will solutions be implemented?It typically involves including strategies in the MTP, determining funding sources, prioritizing strategies, allocating funding in the TIP, and ultimately, implementing these strategies.

8. **Evaluate Strategy Effectiveness** - Finally, efforts should be undertaken to assess, —What have we learned about implemented strategies? This action may be tied closely to monitoring system performance under Action 4, and is designed to inform future decision making about the effectiveness of transportation strategies.

1.0 Action 1 –Develop Regional Objective for Congestion Management

The starting point for the CMP is to develop regional objectives for congestion management. These objectives draw from the regional vision and goals that are articulated in the MTP.

It should not be a goal to eliminate congestion. This can be accomplished by reducing economic activity; so many times congestion is an indicator of successful development. What should be a goal is to manage this activity while balancing community livability, access, and pedestrian safety. Therefore, the objective is to manage congestion and identify those roadway segments with "unacceptable" congestion and establish objectives for congestion management in line with regional goals.

Stakeholders and participants in this study were part of a Congestion Advisory Committee. The committee included representatives of the following governments units or agencies :

- City of Laredo,
- Webb County,
- El Metro Transit,
- South Texas Economic Development,
- Laredo Independent School District,
- United Independent School District,
- Federal Highway Administration, and
- TxDOT Laredo District and Region staff.

1.1 Traffic Flow

The Highway Capacity Manual 2010 defines capacity as "...the maximum hourly rate at which persons or vehicles reasonably can be expected to traverse a point or a uniform section of a lane or roadway during a given time period under prevailing roadway, traffic, and control conditions."

The capacity of a roadway, and its operational characteristics, is a function of a number of elements including: the number of lanes and lane widths, shoulder widths, roadway alignment, access, traffic signals, grades, and vehicle mix. Generally, roadways with wider travel lanes, fewer traffic control devices, straight alignments, etc. allow faster travel speeds.

1.2 Level of Service

The Highway Capacity Manual 2010 defines level of service as "...a quality measure describing operational conditions within a traffic stream, generally in terms of such service measures as speed and travel time, freedom to maneuver, traffic interruptions, and comfort and convenience.

"Six Levels of Service (LOS) are defined for each type of facility that has analysis procedures available. Letters designate each level, from A to F, with LOS A representing the best operating conditions and LOS F the worst. Each level of service

represents a range of operating conditions and the driver's perception of those conditions."

1.3 Congestion Index (CI)

A CMP should reflect performance measures that are clearly understood and relatable by the public, decision makers, and technical practitioners. Many times the public do not immediately relate to Capacity or Level or Service. What they do relate to is travel time and speed. The one performance measure that brings all stakeholders together is Congestion Index (CI).

The Laredo MPO has introduced the use of congestion index (CI) for the primary performance measure in the inaugural CMP. This performance measure allows easy comparison of the efficiency of roadways as a ratio of average travel speed to the posted speed limit. Being the inaugural study, the MPO technical committee evaluated thresholds to define what will be used as "unacceptable" congestion. In order to narrow the focus on those roadway segments that need attention and commonly have recurring delay, a CI rate of 0.60 or 60% of posted speed has been established. Those with a ratio of 0.60 - 0.99 will be considered stable and those ≥1.00 will be considered as free-flow.

Another objective that is important to the public is travel time reliability. Given the primarily arterial network in the Laredo region, this is accomplished by giving special attention to a handful of commuter corridors. With a well-timed and maintained signal system, a commuter will have a consistent travel time each day without the high variance found with a fully free or actuated system. As a demonstration project of the benefit of operations, a signal optimization case-study is included in this CMP and will be documented later in the report.

In future years, as the MPO CMP matures, other objectives can be added to compliment the ones established as the baseline this year. In addition, the MPO should establish goals for improving CI, reducing delay, etc. as a goal to guide implementation of congestion mitigation. Other performance measures may not be as quantitative as CI, travel time, delay, or travel time reliability and be more qualitative.

The MPO has done a great job coming to a consensus this year in defining congestion for CI. In updates to the CMP, the technical committee will need to develop objectives for the performance measure goals to show some improvement in addressing congestion and delay. The process of developing regional congestion management objectives may be a good starting point for getting decision-makers to work together with a common focus.

2.0 Action 2 – Define CMP Network

To help establish the CMP network, the MPO staff invited representatives of local agencies and units of government to a kick-off meeting in October 2013. The primary goal of the meeting was to have a CMP workshop to provide an overview of the CMP objectives. This discussion was very helpful to those in attendance to help guide the local approach for the inaugural CMP.

The 2013 inaugural CMP network included a large portion of the roadway network functionally classified as an arterial. This will allow a baseline to be established of the existing delay for the MPO to compare to with future updates. Within the overall network, together with the technical committee, a subset of roadway segments were identified as "preserved". By associating this identification with the corridors, the committee wants to maintain the character and low speeds of the corridor for various reasons and is not interested in reducing congestion, delays or increasing speeds. This applies to areas with high density of pedestrians, on-street parking, minimum ROW, etc. These corridors are primarily in the CBD area. These corridors were evaluated, but will not be included in the congestion analysis or mitigation considerations.

It is necessary for Laredo MPO to maintain an accurate, up to date regional transportation model in order to conform to State and Federal regulations for air quality and transportation projects. The MPO updates and calibrates its model using current information on the roadway network, area development, and other relevant characteristics. The MPO updates their travel time and speed data periodically.

For this 2013 study, the base conditions of the selected corridors were collected including: roadway characteristics, field-measured travel time, and speed data for use in calibrating and validating the regional transportation model. The primary purpose of this year's 2013 CMPis to establish the MPOs initial CMP based on the expected growth in population.

Mapping and travel time runs were conducted on arterials and freeways. The breakdown of mileage by peak period is shown below:

- 272.0 centerline miles AM and PM peak periods

The routes that were studied in 2013 are shown in **Figure 1**. In future years, the MPO may consider analysis of a subset of the overall network based on the results of this year's baseline analysis. That way, the MPO can maximize the detail collected on a smaller roadway set, while not collecting data just for the sake of treating the entire network the same. FHWA favors using professional judgment on defining the network with consideration given for a systematic data collection plan that may include cyclical analysis of certain roadways based on historic results or known changes since the last update.

3.0 Action 3 – Develop Multimodal Performance Measures

This year's network also reflects the existence of the transit network. Details on the transit operations are not currently included in the analysis, but the MPO needs to continue building on the system created so the CMP can truly be multi-modal not only with transit but bike and pedestrian accessibility also. The CMP can and should reflect various performance measures to evaluate the components of an integrated multimodal transportation system.

Performance measures are a critical component of the CMP. According to Federal regulation, the CMP must include *"appropriate performance measures 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. Since levels of acceptable system performance may vary among local communities, performance measures should be tailored to the specific needs of the area and established cooperatively by the State(s), affected MPO(s), and local officials in consultation with the operators of major modes of transportation in the coverage area."*23 CFR 450.320 (c) 2

The Laredo MPO's primary performance measure on the intersection segment level is Congestion Index (CI). Being the inaugural study, the MPO technical committee evaluated thresholds to define what will be used as "unacceptable" congestion. In order to narrow the focus on those roadway segments that need attention and commonly have recurring delay, a CI rate of 0.60 or 60% of posted speed has been established. A 0.60 CI relates to an average speed through a segment of 24 mph when the posted speed is 40 mph. With relation to travel time, if a commuter was able to drive through a corridor at the posted speed and arrive at the destination in 20 minutes, the delay encountered with a CI of 0.6 would result in a travel time of 33 minutes. Those with a ratio of 0.60 - 0.99 are considered stable and those ≥1.00 are free-flow. Overtime, with future updates, the committee will be able to revisit these thresholds and adjust is desired. FHWA encourages the MPO to be flexible with the process and customize the methodology and performance measures to respond to the local and regional objectives.

Based on the local conditions in the Laredo region, attention was focused on the peak periods and intersection level delays. The duration of congestion and other performance measures were not as much of a concern with the short peaking of congestion within the region. This also is applicable in most areas of the region to performance measures based on volume. There are a few areas within the region where capacity is an issue, but most delay occurs at the node level and is not a link problem. Because volume is measured mid-block and does not consider the operations of the nodes (intersections), attention is being focused at the moment where the MPO can get the most benefit.

The MPO can also consider adding other performance measures in future updates that are multi-modal based that reflect the accessibility of transit, bike, and pedestrian facilities. This can be as direct on the regional level as the % of jobs or households within ¼ mile of transit. This will serve as an indicator of the accessibility to transit and should have some correlation to the ridership.

4.0 Action 4 – Collect Data / Monitor System Performance

Study's like a CMP are data intensive and typically require a large amount of the overall resources and time to assemble. The MPO can serve as the clearinghouse of data from the various components of the transportation system and its members. The data flow can be continuous and not only limited to the update cycle of the CMP. Use the GIS created with this CMP to host and integrate all available datasets.

This inaugural CMP has established a foundation for the MPO to build on over time. Through the methodology developed and the additional data assembled, the data collected in this study has a variety of additional uses outside the CMP. Because the information is all housed in the GIS system, queries can group data by area for use in individual planning processes. Within the GIS, the MPO will have access to the following:

- CMP Routes
- Speed Limits
- School Zones
- Intersection Control
- Jurisdiction
- Average Speed
- Congestion Index (% posted speed)
- Free Flow Travel Time
- Peak Period Travel Time
- Segment Delay

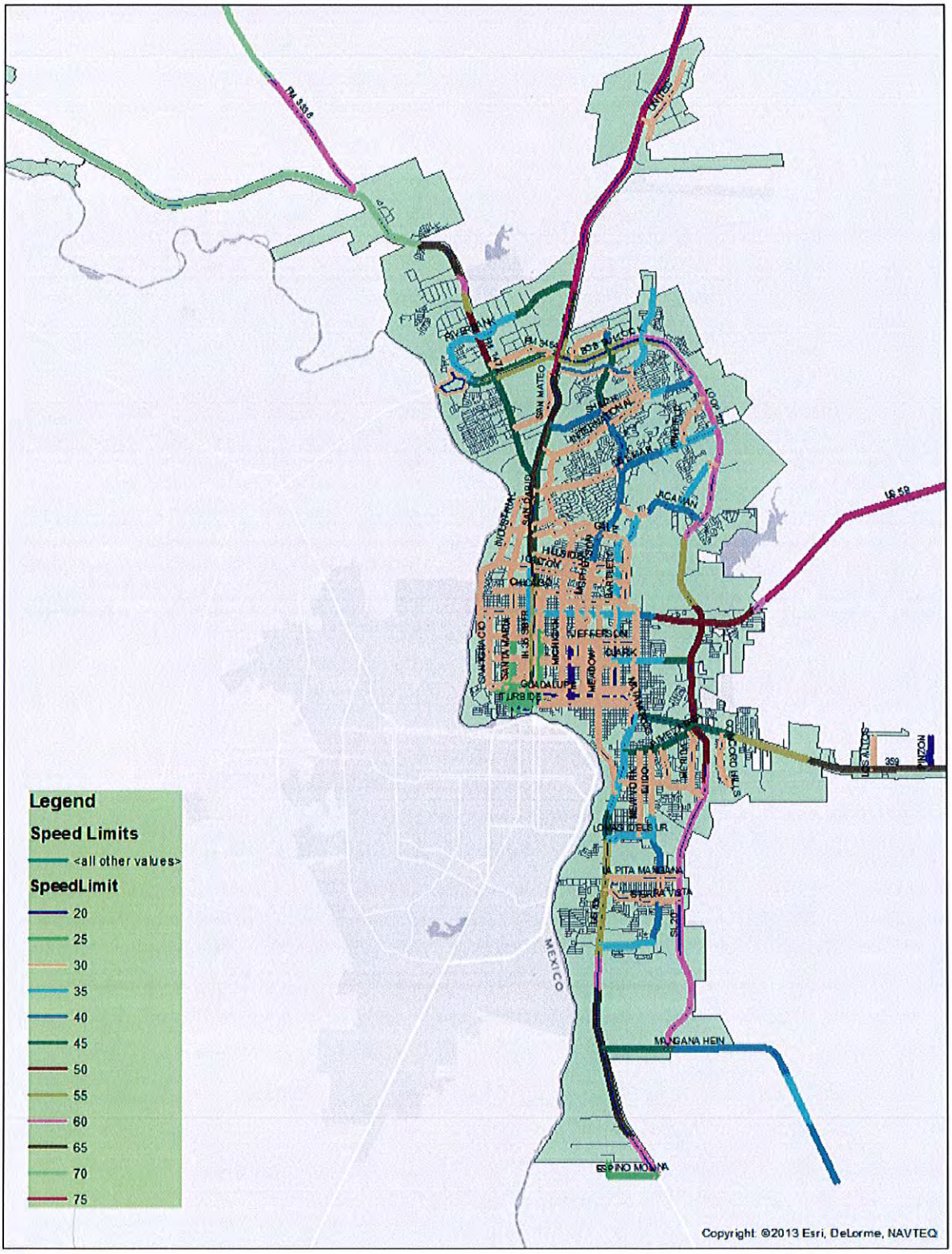

Figure 2 – Speed Limits

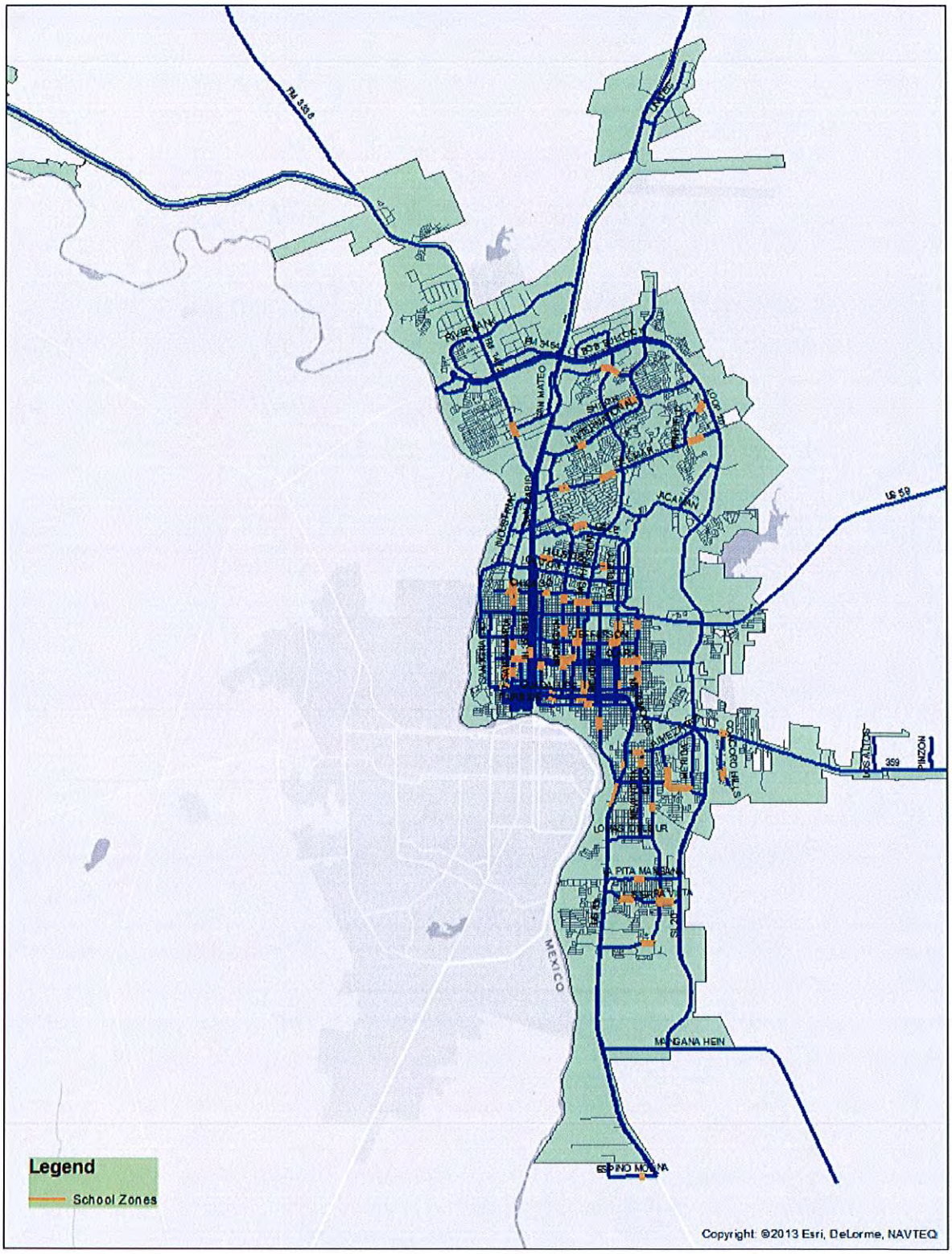

Figure 3 – School Zones

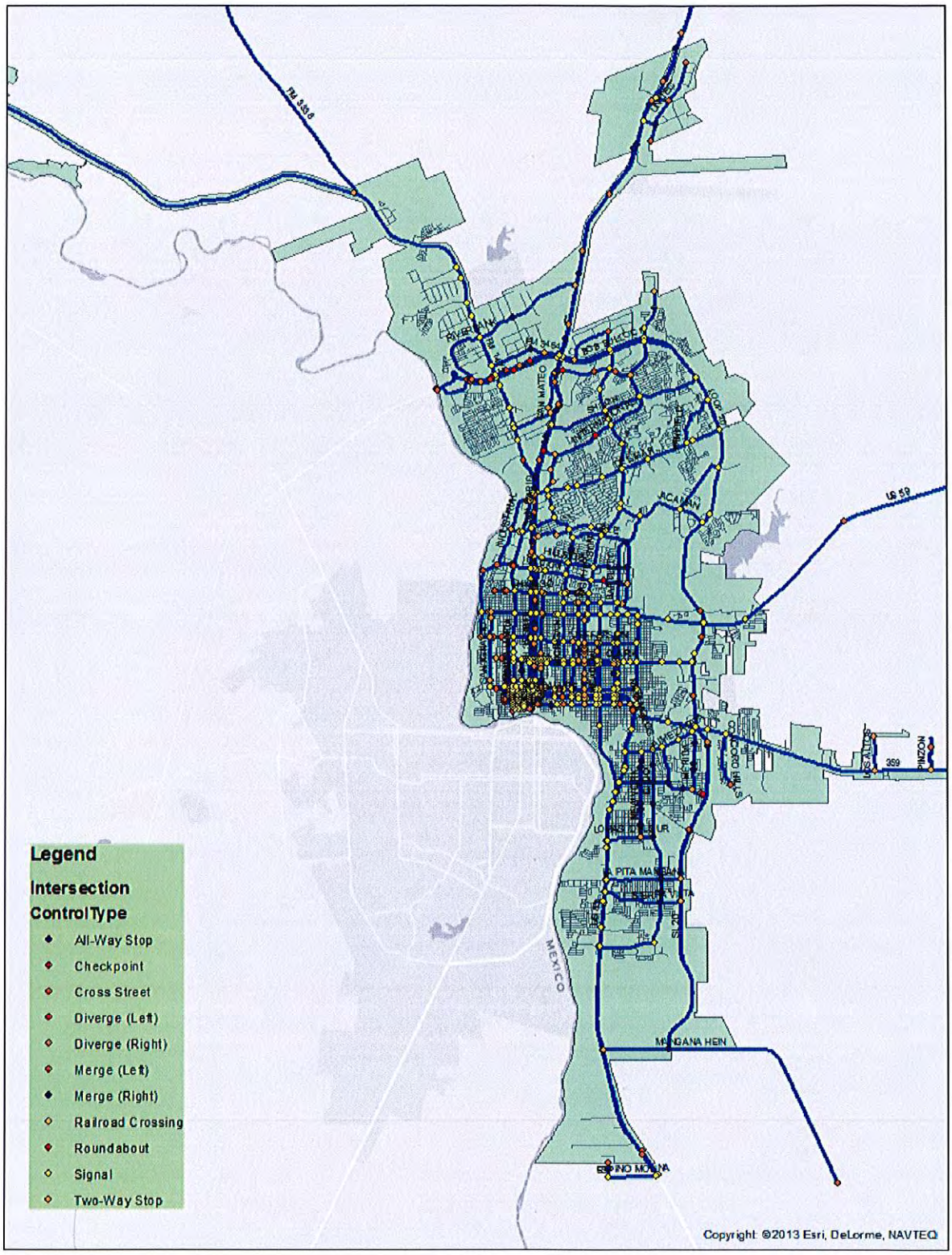

Figure 4 – Intersection Control

5.0 Action5 – Analyze Congestion Problems and Needs

Given the data collected and dataset assembled, the primary performance measure that is used in this CMP is Congestion Index (CI). CI is the ratio of the actual average speed to the weighted average posted speed limit.

CI = Actual Average Speed / Weighted Average Posted Speed Limit

CI = Congestion Index
Actual Average Speed = Average speed of all runs on a segment
Weighted Average Posted Speed Limit = Average of all posted speed limits on the segment weighted by length

According to the MPO thresholds developed by the technical committee in consultation with the CMP Advisory Committee, a CI less than 0.60, indicates a congested section. For example, this would be traveling less than 24 mph when the posted speed limit is 40 mph. A CI of 0.60 to 0.99, or approximately 24 mph to 39 mph, indicates a section of stable flow. And a CI greater than 0.99, or 40 mph or higher, indicates free flow conditions. **Table 2** defines the Congestion Index criteria.

The travel speeds on congested segments are slower than drivers typically want to drive, and there may be less opportunity for lane changing and maneuvering. Stable sections are accommodating volumes less than capacity. Travel speeds are somewhat slower than the speed limit, but generally acceptable to drivers. Lane changing and maneuvering is less difficult than in congested segments. Free-flow sections are operating well below capacity. Travel speeds equal or exceed the speed limit and traffic can maneuver without interference.

Table 2 - Congestion Index Criteria

Congestion Index (CI)		
Congestion	Stable Flow	Free Flow
< 0.60	0.60 to 0.99	> 0.99

5.1 Roadway Segment Definition

Utilizing the roadway attributes, the CMP corridors were divided into segments with the endpoint or nodes being represented by controlled intersections or major cross-streets. In addition to these segments, they were further broken down into common unit lengths of approximately 0.1 mile to allow for direction comparisons between sub-segments.

The roadway segment endpoints are defined at each traffic signal or stop sign. This allowed the segments to be evaluated on a detailed level and then combined, as appropriate, to make corridor recommendations. In addition, for the approximately 272.0 miles of roadways, including 92different roads, were further divided into 1154 directional links for detailed evaluation. These segments either had a traffic signal, stop sign, or a major cross street in rural areas with limited controlled intersections, as the end points.

The methodology developed and applied specifically for this project resulted in a calculated Congestion Index for each 1-second GPS data point. The actual speed between successive points provides detailed results that can highlight the problem areas. This is in contrast to other performance measures that are primarily link based and do not include assessment of the intersection delays. These other performance measures may categorize a segment as congested when actually the intersection created sufficient delay to pull the full segment down. A detailed intersection segment and 0.1 sub-segment level CI were used to develop the appropriate recommendations for the congested segments. In addition to the intersection segment CI analysis, one-tenth of a mile segmentation was included to better highlight local areas of delay. The approach is described in Section 6.1.

5.2 Data Reduction

The method of recording roadway information and travel times using GPS results create large amounts of data that require manipulation into a useable format. City limits were added directly into the database using the most current boundary files in the MPO's system. Each roadway was defined as a "route" in both directions and beginning and ending points were determined in order to calculate travel time for the segment. The GIS coordinate system provided by the MPO was modified to match the NAD 83 (feet) coordinate system used in the data collection. All information was organized so that data could be sorted by jurisdiction.

5.3 Presentation

The travel time information and associated CI's were formatted into tables, graphs, and in ArcGIS. ArcGIS is a geographic information system (GIS) software that allows the user a quick, easy-to-understand graphical reference. ArcGIS reads the study data files, stored in geo-databases, and presents the information graphically. ArcGIS allows the user to group and summarize data for specific purposes. For example, ArcGIS can be used to find out the number of congested segments in each City.

The 1-second data points are color coded according to the criteria for free-flow, stable, and congested conditions. These 1-second points can be used to determine at what point along a segment a traveler experiences delays or congestion.

When congestion occurs during only one time period, the user can study the detailed information to determine the cause of the delay. This information includes the 1-second data points. Thus, improvements can be better focused to ensure the most appropriate use of funds.

ArcGIS can be used to view the information provided in this study for reference and for future projects. Maps and figures can be made for presentations. Information such as speed limits along specific roadways, location and number of traffic signals, the location and number of stop signs, and the location and length of school zones can be summarized and viewed. The information can be summarized for the entire County or broken down and summarized by city, and can be used to identify future improvements. The data provided as part of this study combined with the use of ArcGIS gives the MPO a powerful tool for everyday operation as well as future planning.

Figure 5 illustrates the PM Peak Period Congestion Index results for the CMP network. More detailed results can be seen within the tabular summaries included.

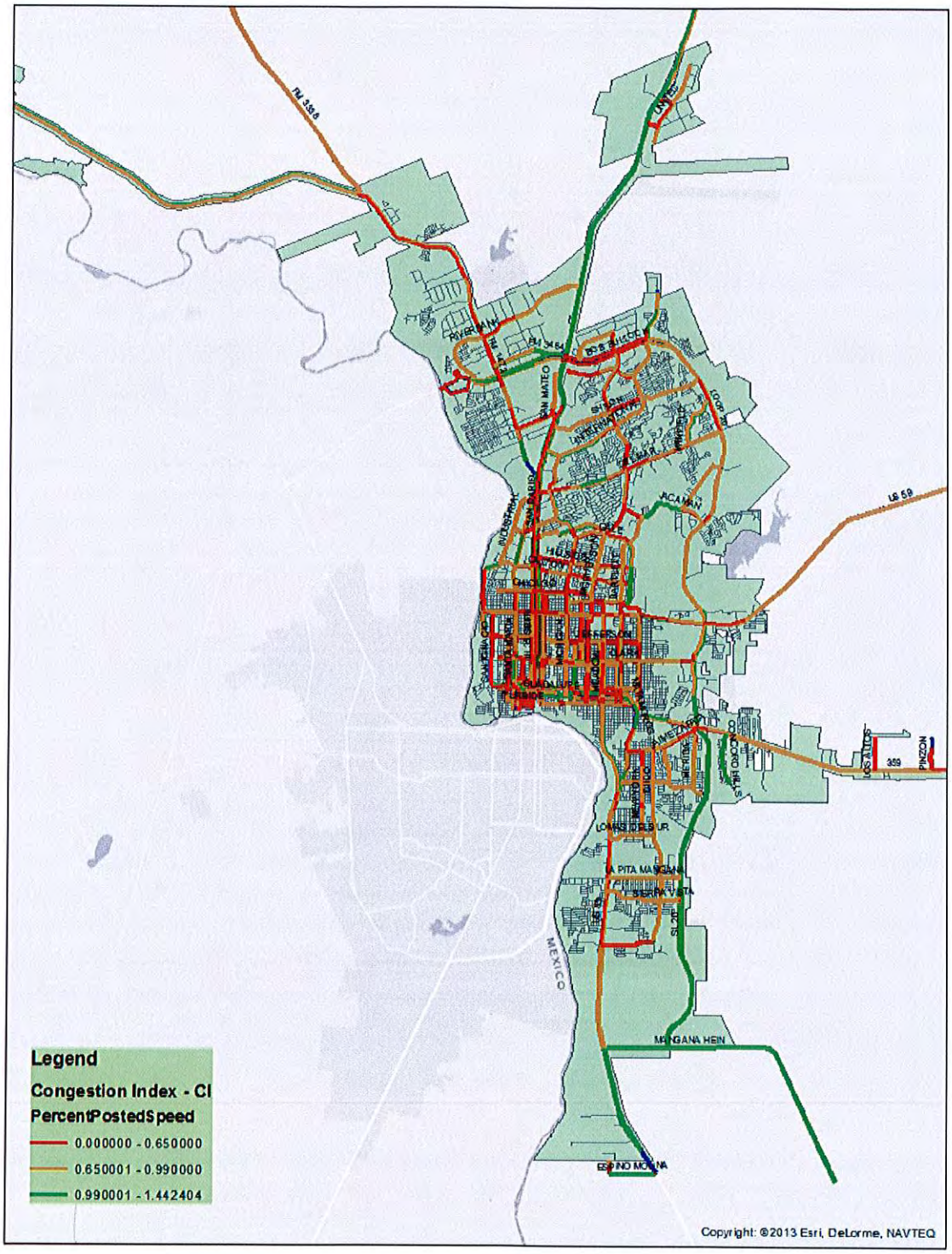

Figure 5 – PM Peak Period Congestion Index

6.0 Action6 – Identify and Assess CMP Strategies

6.1 Congestion Index Results

Appendix B-1 and B-2 list each roadway segment and the average CI for the travel time runs. Of the 476.8 directional miles of roadways studied in the AM peak period, XXX.X miles were free-flow, XXX.X miles were stable, and XXX.X miles were congested. Therefore, for the 2013 study, XX.X% of the roadways operated within an acceptable range during the AM peak period. Of the 476.8 directional miles of roadways studied in the PM peak period, XXX.Xmiles were free-flow, XXX.Xmiles were stable, and XXX.Xmiles were congested. Therefore, for the 2013 study, XX.X%of the roadways operated within an acceptable range during the PM peak period. **Table 3** summarizes the number of segments and miles operating under free-flow, stable, and congested conditions.

Table 3-Summary of Study Roadways in Terms of CI for AM and PM

Peak Period	Measure	Roadway Condition			Total
		Free Flow > 0.99	Stable 0.6–0.99	Congested < 0.60	
AM	Number of Miles	XXX.X	XXX.X	XXX.X	476.8
	Percentage of Miles	XX.X%	XX.X%	XX.X%	100%
PM	Number of Miles	XXX.X	XXX.X	XXX.X	476.8
	Percentage of Miles	XX.X%	XX.X%	XX.X%	100%

Only the congested segments are summarized in **Appendix A-1 and A-2**. In these tables, segments with CI's ranging below0.60 are shown. The table lists the roadway, direction, endpoints, distance, and weighted average Congestion Index.

The 20 worst segments are summarized in **Table 4**. This table was developed by ranking segments by CI from most congested to least congested. Starting with the most congested, the segments were examined in detail to determine the cause of congestion. Some segments were removed from the list because the congestion was caused by construction or a very short segment length. Thereby only segments with actual congestion problems are shown in the top 20 list.

Table 4–Top 20 Congested Segments

Rank	Time Period	RouteID	RouteName	Intersection Segment	Average Speed	Wt Avg Speed Limit	Percent Posted
1	AM	1170	MEADOW - SB	CORPUS CHRISTI to GUADALUPE	3.56	30	0.12
2	PM	1170	MEADOW - SB	CORPUS CHRISTI to GUADALUPE	4.62	30	0.15
3	PM	1177	CHICAGO / TAYLOR - EB	HENDRICKS to MCPHERSON	5.19	30	0.17
4	PM	1111	US 59 - EB	BUENA VISTA to BARTLETT	6.45	35	0.18
5	AM	1177	CHICAGO / TAYLOR - EB	HENDRICKS to MCPHERSON	5.84	30	0.19
6	AM	1164	DEL MAR - WB	SPRINGFIELD to SAN DARIO	5.88	30	0.19
7	AM	1180	MCPHERSON / MCCLELLAND - SB	GRAND CENTRAL to BOB BULLOCK LOOP WB	8.36	42	0.20
8	PM	1115	US HIGHWAY 83 NB - NB	CANONES to SIERRA VISTA	11.16	55	0.20
9	AM	1179	MCPHERSON / MCCLELLAND - NB	UNITED HIGH SCHOOL to SHILOH	8.49	40	0.21
10	PM	1086	BOB BULLOCK / CUATRO VIENTOS - SB	to FM 1472	9.57	45	0.21
11	AM	1038	SEYMOUR - SB	CORPUS CHRISTI to GUADALUPE	6.40	30	0.21
12	PM	1085	BOB BULLOCK / CUATRO VIENTOS - NB	to IH 35 NBFR	11.76	55	0.21
13	PM	1169	MEADOW - NB	MARKET to CHIHUAHUA	6.49	30	0.22
14	AM	1011	CLARK - EB	AGUILA AZTECA to BOB BULLOCK	10.30	45	0.23
15	PM	1180	MCPHERSON / MCCLELLAND - SB	COUNTRY CLUB to DEL MAR	9.18	40	0.23
16	PM	1164	DEL MAR - WB	SPRINGFIELD to SAN DARIO	6.93	30	0.23
17	PM	1159	MANN - EB	SANTA MARIA to IH 35 SBFR	6.94	30	0.23
18	PM	1179	MCPHERSON / MCCLELLAND - NB	SAN ISIDRO to BOB BULLOCK LOOP EBFR	10.43	45	0.23
19	AM	1169	MEADOW - NB	MARKET to CHIHUAHUA	9.96	30	0.23
20	AM	1055	SAN DARIO (one-way) - NB	WASHINGTON to SCOTT	6.96	30	0.23

In many cases, Congestion Indexes fell below 0.60 due to stop signs or traffic signals. These situations can be clearly seen in ArcGIS. The one-second speeds are green (free-flow) along the length of a segment and then several red one second speeds (congested) occur while the vehicle is stopped at a stop sign or traffic signal. An example is provided in **Figure 6**.Traffic may be traveling at good speeds until they hit a red light. Less than optimal timing or signal progression may be the cause of delay in these areas.

In order to further pin-point the congested segments and provide a common unit length for equitable comparison of segments, the intersection segments were divided into shorter 0.1 mile (~528 feet) segments and the congestion statistics were generated for these 0.1 mile segments in AM and PM peak periods. These are presented graphically in the following figures.

A total of 3,846 such 0.1 mile segments were analyzed in AM and PM peak periods. It was found that XXXsegments in AM (approximately X.X%)and XXXsegments in PM (approximately X.X%) were congested. Of the congested segments, X.X% include a controlled intersection (Signal, Stop Sign etc.) as the downstream node in both peak periods while the other X.X% were midblock links. This observation shows that a majority of the delays are localized within 0.1 miles of a controlled intersections and do not occur mid-block. These delays can be reduced by either signal timing improvements or intersection geometric changes.

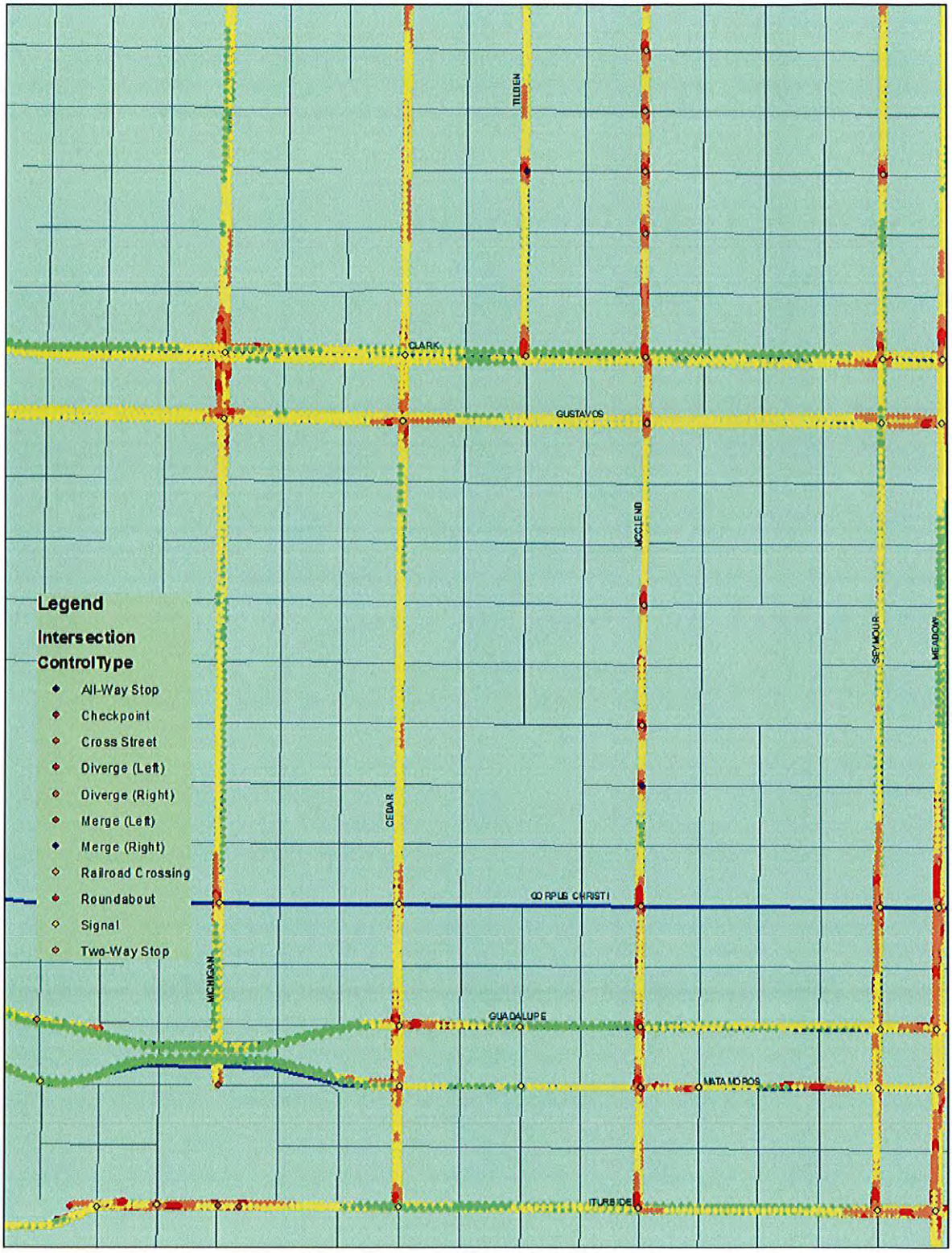

Figure 6 – Travel Time Run Example

6.2 Recommendations

Recommendations for each section of congested roadway are shown in **Appendix A** and recommendations for the 20 roadway segments with the worst CI's are summarized in **Table 5**.

Improvements include signal timing optimization / traffic signal progression, access management, additional capacity, and adding signals in place of stop signs. Benefits of these improvements are described below. Additionally, the MPO should encourage the use of alternative modes such as public transit, bicycling, and walking to the extent possible. This will not only help divert some vehicular trips but will also minimize vehicular emissions.

Many of the recommendations include signal timing improvements. Signal timing improvements are a relatively inexpensive way to make significant improvements on a transportation network. Improved signal timing can decrease delay by appropriately allocating green time among competing phases. This allows more traffic to pass through the signal with less delay. By adjusting cycle lengths and offsets, drivers can travel longer distances along a corridor before having to stop for a red light. This decreases travel time and improves air quality. Both signal timing optimization and traffic signal progression are low cost improvements to make the best use of existing capacity and optimize allocation of funding. The cost for a signal timing improvement project varies depending on the number of traffic signals, the controller capabilities, the location of the traffic signals and adjacent signals, the number of timing plans required, and implementation and fine-tuning needs.

The U.S. Department of Transportation's Federal Highway Administration (FHWA) has produced a video showing that retiming traffic signals is one of the more cost-effective techniques available to state and local agencies in their efforts to manage congestion and growing travel demand. The video, "It's About Time, Traffic Signal Management: Cost-Effective Street Capacity and Safety," demonstrates how signal timing on roads can improve air quality while reducing fuel consumption, decreasing traffic congestion, and saving time for commercial and emergency vehicles. Two-thirds of all highway miles in the United States are roads with traffic signals. According to the Institute of Transportation Engineers, the United States has about 300,000 traffic signals. The performance of about 75 percent of them could be improved easily and inexpensively by updating equipment or by simply adjusting the timing.

The Federal Highway Administration defines access management as "the process that provides access to land development while simultaneously preserving the flow of traffic on the surrounding system in terms of safety, capacity, and speed."

Table 5–Top 20 Recommendations to Mitigate Congestion

To Be Determined

Access management is accomplished in a variety of ways such as managing the design of access points, the location of access points, the number of access points allowed within a given distance (access density), and the roadway median treatment. Generally, the number of access points is minimized and regularly spaced from each other so that conflict points are separated.

Access management can provide a number of benefits to the public agency and to the traveling public. Capacity is preserved and safety (motorized and non-motorized) is improved by minimizing conflict points and minimizing speed differentials between through traffic and slow moving turning traffic. Safety for turning movements is also improved by providing adequate turning (auxiliary) lanes or by prohibiting turns in key locations using a raised median. In addition to safety and efficiency improvements, access management also provides environmental and financial benefits with reduced vehicle emissions and improved fuel economy by maintaining the flow of traffic.

On new roadways, or on undeveloped corridors, access management can be used to minimize operational traffic problems, due to unmanaged development, before they occur. In these cases, it is inexpensive and fairly easy to accomplish. The traveling public benefits from a safe and efficient corridor. Property owners benefit from safe access. The agency benefits from a low cost management plan from the onset rather than costly highway improvement projects once problems occur. Once corridors are developed, it is more difficult, expensive, and time consuming to retrofit managed access. Whenever possible, access management should be given high priority on undeveloped corridors.

Access management can be very challenging on existing 'built-up' urban roadways. Common issues include limited right-of-way and opposition by land owners. Still, retrofitting a corridor with access management can provide benefits. Possible retrofitting improvements include: consolidating and closing driveways, constructing raised medians, constructing auxiliary lanes, providing regularly spaced traffic signals to encourage use of a major cross-street or driveway, and providing alternative routes such as internal access roads.

Roadway widening is necessary where traffic signal timing and access management are unable to provide enough capacity for heavy traffic volumes. Some segments may improve in the short term with optimized signal timing, but may ultimately warrant additional capacity through widening. Widening could include adding a through lane for a long section of road, or providing turn lanes at intersections. Adding capacity through roadway widening is generally expensive.

Adding signals may be an improvement at four-way stop intersections or intersections with heavy major-street and cross-street traffic. This reduces delay for previously stop-controlled movements but may increase delay for movements that were not controlled. As traffic volumes increase, traffic signals or other types of intersection design such as roundabouts or continuous flow intersections should be considered to efficiently move traffic.

As included in Appendix A, the most often recommended improvement for 2013 study is local operations related to intersection signal timing at XX%.

Signal timing is an area that deserves attention within the region to allow maximum efficiency of the existing system before costly widening to add capacity. The results will be very evident as has been demonstrated previously with localized projects. A regional perspective would produce consistent travel time runs even when crossing from one city / agency to another.

As transportation funding continues to be limited, operations are being highlighted by many MPOs across the country. It has been clearly proven locally and nationally that operational improvements provide the highest benefit/cost ratio and on a regional scale as compared to local capacity projects that benefit a smaller portion of the county.

7.0 Action7 – Program and Implement CMP Strategies

A fully integrated CMP not only evaluates the current congestion conditions and recommends mitigation, but prioritizes the improvements and incorporates into the planning process. Those improvements can be viewed as local improvements, corridor strategies, or regional programs / initiatives.

As part of this study, the MPO is including a case study that combines the intersection and corridor level strategies. A case-study was performed of 8 intersections, and included in the Appendix of this report to demonstrate the possible benefits of signal coordination and optimization to reduce travel time and delay. These types of improvements are the foundation of the CMP. Regions are expected to manage their system to get as much capacity out of the existing system prior to capital projects to widen the roadways. Ideally, every effort should be exhausted and documented before getting to the end of the line and adding capacity.

This study should serve as the initial element of the CMP but not be viewed as a complete CMP. The CMP is a living process that is part of the planning process. This inaugural study is documenting the current conditions, ranking the magnitude of observed congestion, recommending possible mitigation, and prioritizing those improvements. The MPO and its members are responsible for applying these findings and integrating them into the planning process and developing an implementation schedule along with funding options.

One option that many MPOs have used is in the form of "set aside" funding category for localized bottleneck and operational projects. These projects are "quick fixes" and do not need the sometime lengthy process required for capital projects. Also, the prioritization of operational projects compared to the larger capital projects at times is tough to compare. By having a separate category for operational projects makes the time to market much shorter and the community can benefit much sooner.

8.0 Action8 – Evaluate Strategy Effectiveness

This 2013 Congestion and Delay Study is the inaugural effort toward development of a full CMP. Therefore, the MPO is not able to evaluate the benefits of implemented strategy this time around. But, the CMP needs to go full circle to identify the conditions, recommend mitigation, prioritize the improvements, plan the schedule and funding, and then evaluate the benefits.

As the MPO integrates the CMP into the planning process, with future updates to the study, be sure to revisit the projects that came about as a result to document the results to adjust strategies going forward for other similar situations.

CONCLUSION

The Congestion Management Process (CMP)plays an essential role within the transportation planningand programming process by providing decision-makers at MPOs, local governments, and state agencies a clear analytical understanding of congestion in the region. The CMP must be an integral element in well-organized, objectives-driven, performance-based planning approach.

The flexibility of the regulations and guidelines hasallowed the MPO to customize the CMP in various ways to both reflectregional needs and priorities.MPOs around the country have developed unique methods of implementing the CMP.The MPO needs to continue working with the members of the committee to build on the momentum begun through the development of this component of the overall CMP by using the performance measures identified here within, by aligning the CMP closely with the TIP, and using the CMP performance measures to directly influence project prioritization and funding.

Overall, the region has done a good job providing sufficient capacity for the current demand. Now with that in place, more attention needs to be given to operations to maximize the benefits of these investments and minimizing the overall delays along the corridors and side streets. This attention to operations can be accomplished through the integration of coordinated signal timing plans so that the priority flows are given the necessary attention to provide consistent results to the commuting public during the peak periods. Similar to the effort included in the "case studies" in this report, data collection, development of a model for each desired timing plan, signal timing optimization, and implementation can be accomplished along a corridor for around $3,000 per intersection (not including any necessary hardware in the signal cabinet).

The methods will vary as to how to accomplish the desired results depending on the signal hardware currently in place and the expansion capabilities. It can be as simple as installing a GPS clock at each intersection ($500) to synchronize the controller clocks to more advanced systems where each intersection needs vehicle detection ($15,000) and wireless communications ($2,500) between signals. Either way, the benefit / cost ratio of this type of work is unmatched in today's funding environment.

Until a time when the system is fine-tuned to operate efficiently within the existing roadway cross-section, it is difficult to identify those areas that may need more attention including local geometric improvements, access management, or finally added capacity.

Appendix A

2013 Congested Segments and Mitigation

Appendix B

2013 Intersection Segment Results

ACTION ITEM

DATE:	**SUBJECT:** Motion(s)
5-19-14	Authorizing the execution of Amendment #2 of the contract with Kimley-Horn and Associates, Inc for professional services related to the development of the Railroad Quiet Zone Study Update in order to: • Increase the number of crossings to be studied from 26 to 32. • Increase the number of traffic counts to be collected from 10 crossings to 32 crossings. • Extend contract completion date to March 31, 2015 • Increase the contract fee by $8,100 from $48,600 to $56,700 for additional work.

INITIATED BY:	**STAFF SOURCE:**
Staff	Nathan Bratton, Director of Planning

PREVIOUS COMMITTEE ACTION: On June 17th, 2013, the Policy Committee approved a Motion accepting the Selection Committee's ranking of the submittals, authorized the selection the consultant and approved Staff entering into negotiations with the selected firm. On 8-19-13, the Policy Committee approved a motion authorizing the award and execution of the contract in the amount of $48,600.00 to Kimley-Horn and Associates, Inc for the development of the Railroad Quiet Zone Study Update On 10-21-13, the Policy Committee approved Contract Amendment 1 which revised the contract language such that: North Carolina is identified as the state of incorporation for Kimley-Horn and Associates, Inc. and Article VII, entitled Indemnification will be revised to include the word "negligent".

BACKGROUND:

The Unified Planning Work Program (UPWP) describes and schedules work to be undertaken by the MPO during the 2013-2014 fiscal period. The development the Railroad Quiet Zone Study Update is an objective of the 2014 Unified Planning Work Program.

5.3 Railroad Quiet Zone Study Update: (Kimley-Horn and Associates, Inc. was the sole firm that submitted a proposal for the project.)

- To develop a strategy to implement a train whistle ban in Laredo following adopted federal guidelines for 26 Kansas City Southern Railroad crossings in Laredo.
- To evaluate railroad lines by segments and provide detailed recommendations for implementation.
- To collect data at each of the 26 railroad crossings, and develop recommendations for improvements necessary to achieve the required safety thresholds.
- To provide cost estimates, alternative recommendations, and order of implementation for infrastructure improvements.

Original Contract
Fee.....$48,600
Schedule.....8 months from initiation of project

Contract Amendment #1: (See attached)

- North Carolina is identified as the state of incorporation for Kimley-Horn and Associates, Inc
- Article VII, entitled Indemnification will be revised to include the word "negligent".

Contract Amendment #2 (See attached)

- **Increase the number of crossings to be studied from 26 to 32.**
- **Increase the number of traffic counts to be collected from 10 crossings to 32 crossings.**
- **Increase the contract fee by $8,100 from $48,600 to $56,700 for additional work.**
- **Extend contract completion date till March 31, 2015**

FINANCIAL IMPACT: The FY 2014 UPWP allocated 60,000 for this project using federal planning grant (PL112) funds.

TECHNICAL COMMITTEE RECOMMENDATION:	**STAFF RECOMMENDATION:**
Approval conditional to the Consultant retaining original traffic count fee rate ($200 per crossing)	Approval

Open Kansas City Southern Railroad Crossings*

No.	Street	ID Number
1	Zaragoza	793589T
2	Washington	793547G
3	Vidaurri	793548N
4	Santa Rita	793549V
5	Santa Cleotilde	793550P
6	Main	793551W
7	Davis	793552D
8	Santa Maria	793553K
9	Juarez	793554S
10	Convent	793556F
11	Flores	793557M
12	San Agustin	793558U
13	San Bernardo	793559B
14	Santa Ursula	793560V
15	San Dario	793561C
16	San Eduardo	793562J
17	San Francisco	793563R
18	San Jorge	793564X
19	Monterrey	793565E
20	Sanders	793566L
21	Corpus Christi	793567T
22	Marcella	793568A
23	Guadalupe*	
24	Chuahuahua*	
25	Market	793582V
26	Logan	793586X
27	Hendricks	793588L
28	North Stone	793591U
29	North Seymour	793593H
30	Buena Vista	793594P
31	North Maliche	793595W
32	North Bartlett	917530B
33	Market East	793596D
34	North Arkansas	793598S

*- The crossing located at Chihuahua and Guadalupe are closed and will not be included in the current study.

SAN JORGE
SAN FRANCISCO
SAN EDUARDO
SAN DARIO
SANTA URSULA
SAN BERNARDO
SAN AGUSTIN
FLORES
CONVENT
JUAREZ
SANTA MARIA
DAVIS
MAIN
SANTA CLEOTILDE
SANTA RITA
MADALURNI
WASHINGTON
ZARAGOZA
K
1
2
3
4
5
6
7
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13
14
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17
18

*Note-Crossings 23 and 24 are already closed and will not be studied.

34
NORTH ARKANSAS
33
MARKET
32
NORTH BARTLETT
31
NORTH MALICHE
30
BUENA VISTA

Amendment 2
To The Contract Between
Laredo Urban Transportation Study
Metropolitan Planning Organization
And
Kimley-Horn and Associates, Inc.

The original contract, dated August 20th, 2013, by and between the Laredo Urban Transportation Study, Metropolitan Panning Organization, and Kimley-Horn and Associates, Inc., is hereby amended in the following respects:

Paragraph 1: *ARTICLE I – CONTRACT PERIOD* – paragraph 1 is amended to read as follows:

> Upon execution of this contract, Consultant shall not proceed with the scope of work outlined under Article II until authorized in writing by the Transportation Planning Director of the L.U.T.S. to proceed as provided in Article XXV - Notice To Proceed. This contract shall terminate at the close of business on **~~[September 30, 2014]~~** ***March 31, 2015*** unless extended by a written supplemental agreement duly executed by the parties prior to the date of termination, as provided in Article XXVII - Supplemental Agreements, or otherwise terminated as provided by Article XIV - Termination. Any work performed or costs incurred after the date of termination shall be ineligible for reimbursement.

Paragraph 2: *ARTICLE III – COMPENSATION* paragraph number 1 is amended to read as follows:

> **ARTICLE III- COMPENSATION:**
> The L.U.T.S. shall pay up to **~~[48,600]~~** ***56,700*** as compensation for the services to be performed under this contract. In the event of a change in the scope of services, additional complexity or a different character of work from that originally anticipated and authorized by the L.U.T.S., the amount may be revised only by written agreement of the parties.

Paragraph 3: *ATTACHMENT A -SCOPE OF SERVICES – TASK 2 – DATA COLLECTION* – paragraphs 1 and 2 are amended as follows:

> **SCOPE OF SERVICES – TASK 2 – DATA COLLECTION**
>
> The Consultant will conduct field review of the **~~[26]~~** ***32*** at-grade KCSR railroad crossings to determine the potential for various improvements to reduce the Quiet Zone Risk Index at each.
>
> In addition, daily traffic volumes will be conducted at up to **~~[10]~~** **32** crossings. This data will be used during the analysis phase to determine the impacts of diverted trips that would result from potential crossing closures, if needed.

Paragraph 4: *ATTACHMENT A -SCOPE OF SERVICES – TASK3.3 – Crossing Closure Analysis* – paragraphs 1 is amended as follows:

> **SCOPE OF SERVICES – TASK 3.3 – Crossing Closure Analysis**
> For potential crossing closures, daily traffic counts will be conducted on the crossing road and the nearest parallel crossing. Diverted trips will be analyzed to determine if the closure will result in

unacceptable operating levels of service. As noted in Task 2, traffic counts at up to **[~~10~~]** ***32*** locations are budgeted. Additional counts will be considered as additional services and billed on a time and material basis.

Paragraph 5: The parties agree that the foregoing amendments shall be hereinafter considered a part of the contract referred to above and incorporated by reference therein for all purposes. The amendments shall be subject to any and all other provisions of the contract, with the exception of the parts or provisions of the contract which have been modified by this amendment.

IN WITNESS WHEREOF, the parties hereto have executed this Amendment 2 on the dates set forth below.

Laredo Urban Transportation Study Metropolitan Planning Organization	Kimley-Horn and Associates, Inc.
_____	_____
Raul G. Salinas	By: _____
Chairman, MPO Policy Committee	Title: _____
Date: _____	Date: _____

Kimley-Horn and Associates, Inc.

Project Workplan Budget

General Project Information	
Client:	City of Laredo
Project:	Citywide Quiet Zone Study
KHA No.	
PM:	Brian VDW

Budget Summary	
Date:	3/14/14

Task Budget Summary

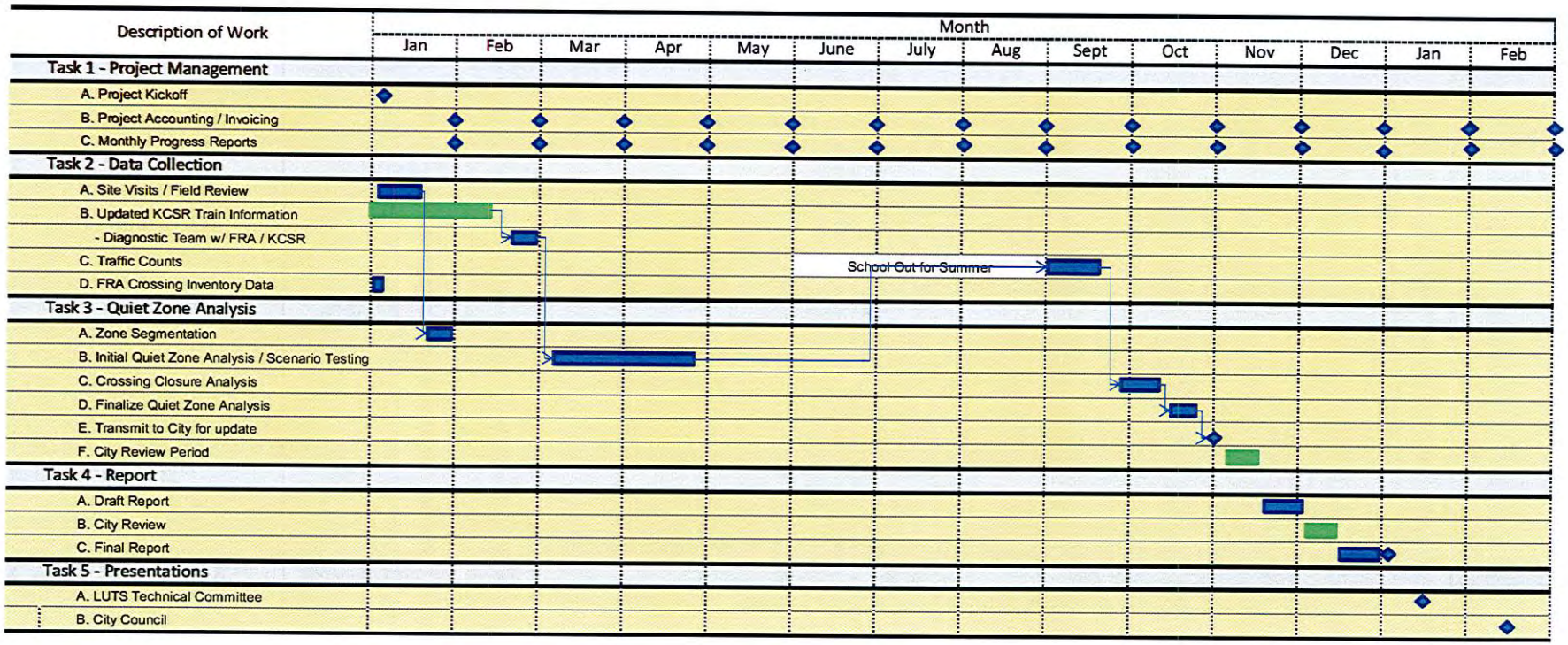
No.	Task Name	Hours	Labor	Expenses	Subtotal
1	Project Management	42	$ 7,100	$ -	$ 7,100
2	Data Collection	65	$ 10,800	$ 1,900	$ 12,700
3	Quiet Zone Analysisis	117	$ 14,800	$ -	$ 14,800
4	Report	42	$ 5,300	$ 400	$ 5,700
5	Presentations	48	$ 8,300	$ 600	$ 8,900
			$ -	$ -	
			$ -	$ -	
			$ -	$ -	
			$ -	$ -	
			$ -	$ -	
			$ -	$ -	
			$ -	$ -	
			$ -	$ -	
			$ -	$ -	
			$ -	$ -	
777	Contingency		$ -		
	TOTALS:	294	$ 46,300	$ 2,900	$ 49,200

Subconsultant Summary

Task No.	Task Name	Cost	Multiplier	Subtotal
2	AC Group - Traffic Counts	$ 2,000	1.15	$ 2,300
2	Additional Counts	$ 4,500	1.15	$ 5,200
		$ -	1.15	$ -
		$ -	1.15	$ -
		$ -	1.15	$ -
	TOTALS:	$ 6,500		$ 7,500

Project Budget Summary	
Labor:	$ 46,300
Expenses:	$ 10,400
TOTAL:	$ 56,700

Railroad Quiet Zone Study Update Schedule
Laredo, Texas



KEY:

Kimley-Horn Task

Review By Others

Amendment 1

Amendment 1
To The Contract Between
Laredo Urban Transportation Study
Metropolitan Planning Organization
And
Kimley-Horn and Associates, Inc.

The original contract, dated August 20th, 2013, by and between the Laredo Urban Transportation Study, Metropolitan Planning Organization, and Kimley-Horn and Associates, Inc., is hereby amended in the following respects:

Paragraph 1: *Preamble paragraph number 9 is amended to read as follows:*

WHEREAS, Kimley-Horn and Associates, Inc. is a professional corporation, incorporated in ~~[Texas]~~ ***North Carolina*** whose local place of business is 10415 Morado Circle, Bldg., Ste. 300, Austin, TX, 78759;

Paragraph 2: *Article VII- INDEMNIFICATION: is amended to read as follows:*

ARTICLE VII- INDEMNIFICATION:

Consultant shall save and hold harmless the L.U.T.S., the City of Laredo, the County of Webb, the Texas Department of Transportation, and the U.S. Department of Transportation from all claims and liability due to the activities of itself, its agents or employees, performed under this contract and which re caused by or result from negligent error, omission, or act of Consultant or of any person employed by Consultant. Consultant shall also save harmless the L.U.T.S., the City of Laredo, the County of Webb, the Texas Department of Transportation, and the U.S. Department of Transportation from any and all expense, including but not limited to, reasonable attorney fees which may be incurred in litigation or otherwise resisting said claim or liabilities which may be imposed as a result of the ***negligent*** activities of Consultant, its agents or employees.

Paragraph 3: The parties agree that the foregoing amendments shall be hereinafter considered a part of the contract referred to above and incorporated by reference therein for all purposes. The amendments shall be subject to any and all other provisions of the contract, with the exception of the parts or provisions of the contract which have been modified by this amendment.

IN WITNESS WHEREOF, the parties hereto have executed this Amendment 1 on the dates set forth below.

Laredo Urban Transportation Study
Metropolitan Planning Organization

Raul G. Salinas
Chairman, MPO Policy Committee
Date: 11/26/13

Kimley-Horn and Associates, Inc.

By: Andrew W. Van Leeuwen
Title: SR Vice President
Date: 12-13-2013

ORIGINAL CONTRACT

STATE OF TEXAS §
COUNTY OF WEBB § **KNOW ALL MEN BY THESE PRESENTS**

This contract is made, entered and executed between the **LAREDO URBAN TRANSPORTATION STUDY (LUTS)**, which is the designated Metropolitan Planning Organization (MPO) for the City of Laredo Metropolitan urbanized area, and a portion of Webb County, hereinafter called the MPO, and **KIMLEY-HORN AND ASSOCIATES, INC.** hereinafter called the Consultant, **For Professional Services in the development off the RAILROAD QUIET ZONE STUDY UPDATE.**

WITNESSETH

WHEREAS, pursuant to provisions of 23 USC 134, the Governor of the State of Texas has designated the MPO to be the single-focus planning organization for the City of Laredo Metropolitan urbanized area, and a portion of Webb County, and has executed an agreement to effectuate the designation; and,

WHEREAS, pursuant to the Governor's designation and in compliance with applicable federal, state, and local laws, regulations, and ordinances, the MPO has developed and maintains a current Unified Planning Work Program which outlines work tasks and estimated expenditures; and,

WHEREAS, the current Unified Planning Work Program has been approved by the State of Texas, acting by and through the Texas Department of Transportation, and the U.S. Department of Transportation, acting by and through the Federal Highway Administration; and,

WHEREAS, the current Unified Planning Work Program authorizes the MPO to engage a consultant to develop the Railroad Quiet Zone Study Update for the Laredo Metropolitan Area, and the Consultant has proposed a plan to complete the task, and the MPO has accepted the proposal; and,

WHEREAS, the Policy Committee of the L.U.T.S. includes the Mayor of the City of Laredo, three members of the Laredo City Council, the County Judge of Webb County, two county commissioners, the State Representatives (ex-officio) and State Senator (ex-officio), the Laredo District Administrator of the Texas Department of Transportation ("TxDOT") and the Deputy District Engineer of TxDOT; and,

WHEREAS, the City of Laredo acts as the fiscal agent for the L.U.T.S.; and,

WHEREAS, the City of Laredo ("City"), is a municipal corporation chartered under the laws of the State of Texas, with its principal place of business located at 1110 Houston Street, Laredo, Texas; and,

WHEREAS, the Railroad Quiet Zone Study Update is approved in the 2013 Unified Planning Work Program pursuant to the requirements of Moving Ahead for Progress in the 21st Century (MAP 21); and,

WHEREAS, Kimley-Horn and Associates, Inc. is a professional corporation, incorporated in Texas whose local place of business is 10415 Morado Circle, Bldg., Ste. 300; Austin, TX, 78759 and,

WHEREAS, the Consultant was found to be the best qualified to perform the services requested under the Request for Proposal for the development of a the Railroad Quiet Zone Study Update for the Laredo metropolitan area;

NOW THEREFORE, in consideration of the premises and of the mutual covenants and agreements of the parties hereto, the MPO and the Consultant do mutually agree as follows.

ARTICLE I- CONTRACT PERIOD

Upon execution of this contract, Consultant shall not proceed with the scope of work outlined under Article II until authorized in writing by the Transportation Planning Director of the L.U.T.S. to proceed as provided in Article XXV - Notice To Proceed. This contract shall terminate at the close of business on September 30, 2014 unless extended by a written supplemental agreement duly executed by the parties prior to the date of termination, as provided in Article XXVII - Supplemental Agreements, or otherwise terminated as provided by Article XIV - Termination. Any work performed or costs incurred after the date of termination shall be ineligible for reimbursement.

Consultant shall notify the Transportation Planning Director of the L.U.T.S. in writing as soon as possible if it determines, or reasonably anticipates, that the work under this contract cannot be completed before the termination date, and the Transportation Planning Director of the L.U.T.S. may, at his sole discretion, extend the contract period by timely supplemental agreement as provided in Article XXVII - Supplemental Agreements. Consultant shall allow adequate time for review and approval of the request for time extension by the L.U.T.S. prior to the expiration of this contract.

ARTICLE II- RESPONSIBILITIES OF THE PARTIES

Consultant shall perform those services for fulfillment of the contract identified in *Attachment A - Scope of Services*, attached hereto, incorporated by reference, and made a part hereof for all purposes. The Work Schedule incorporated in Attachment A shall contain a complete schedule so that Consultant's Scope of Services under this contract can be accomplished within the specified time and contract cost. The Work Schedule shall provide a specific work sequence and review times by the L.U.T.S. and Consultant of the work performed. If the review time shall take longer than shown on the work schedule, through no fault of Consultant, additional time may be authorized by the L.U.T.S. under a supplemental agreement if so requested upon timely written request from Consultant and approved in writing by the Transportation Planning Director of the L.U.T.S.

ARTICLE III- COMPENSATION

The L.U.T.S. shall pay up to $48,600 as compensation for the services to be performed under this contract. In the event of a change in the scope of services, additional complexity or a different character of work from that originally anticipated and authorized by the L.U.T.S., the amount may be revised only by written agreement of the parties.

Consultant shall prepare and submit to the Transportation Planning Director of the L.U.T.S. progress reports in sufficient detail to support the progress of the work and in support of invoice(s) precedent to requesting payment for services rendered. Satisfactory progress of work shall be maintained as a condition of payment.

Payments to Consultant for services rendered will be made while work is in progress. Consultant will prepare and submit to the Transportation Planning Director of the L.U.T.S., no more frequently than once per month, a progress report stating the percent completion of the work accomplished during the billing period and to date, and one original and one copy of an invoice. The submittal shall also include a project assessment report. Payment of the lump sum fee will be in proportion to the percentage completion of work tasks identified in Attachment A. Upon receipt and approval of each complete statement, the L.U.T.S. shall make a good faith effort to pay within 30 working days.

The L.U.T.S. shall reserve the right to withhold payment pending verification of satisfactory work performed. Consultant shall be required to submit adequate proof that the task was completed. Payment of costs incurred is further governed by cost principles outlined in the Federal Acquisition Regulation, 48 CFR, Chapter 1, Part 31, Subpart 31.2, Contracts with Commercial Organizations.

The progress report shall show the total amount earned to the date of submission and the amount due and payable as of the date of the current statement. Final payment of any money due shall be made to Consultant once satisfactory completion of all services and obligations covered in this contract, including acceptance of work by the Transportation Planning Director of the L.U.T.S., except as provided below. The release of any retainage does not relieve Consultant of the responsibility for correcting any errors and/or omissions resulting from its negligence.

ARTICLE IV- CONTRACT AMENDMENTS

Significant changes in the terms and conditions of this contract can be made only by written amendment executed by the parties hereto prior to the changes being made. Any such amendment must be approved by the Transportation Planning Director of the L.U.T.S.

ARTICLE V- ADDITIONAL WORK

If Consultant is of the opinion that any work it has been directed to perform is beyond the scope of this agreement and constitutes extra work, it shall promptly notify the Transportation Planning Director of the L.U.T.S. in writing. In the event that the Transportation Planning Director of the L.U.T.S. finds that such work does constitute additional work and will exceed the maximum amount specified in Article III, the L.U.T.S. shall so advise the Consultant and a written supplemental agreement may be executed between the parties as provided in Article XXVII-

Supplemental Agreements. Consultant shall not perform any additional work or incur any additional costs prior to the signing, by both parties, of a supplemental agreement. The L.U.T.S. shall not be responsible for the actions of Consultant or any costs incurred by Consultant relating to additional work not directly associated with the performance authorized in this contract, or as amended.

ARTICLE VI- CHANGES IN WORK

If the L.U.T.S. finds it necessary to request changes to previously satisfactorily completed work or parts thereof which involve changes to the original scope of services or character of work under the contract, Consultant shall make such revisions if requested and as directed by the Transportation Planning Director of the L.U.T.S. This will be considered additional work and paid for as specified in Article V - Additional Work.

Consultant shall make such revisions to the work authorized in this contract, which have been completed as are necessary to correct errors appearing therein, when required to do so by the L.U.T.S. No additional compensation shall be paid for this work.

ARTICLE VII- INDEMNIFICATION

Consultant shall save and hold harmless the L.U.T.S., the City of Laredo, the County of Webb, the Texas Department of Transportation, and the U.S. Department of Transportation from all claims and liability due to the activities of itself, its agents or employees, performed under this contract and which are caused by or result from negligent error, omission, or act of Consultant or of any person employed by Consultant. Consultant shall also save harmless the L.U.T.S., the City of Laredo, the County of Webb, the Texas Department of Transportation, and the U.S. Department of Transportation from any and all expense, including but not limited to, reasonable attorney fees which may be incurred in litigation or otherwise resisting said claim or liabilities which may be imposed as a result of the activities of Consultant, its agents or employees.

ARTICLE VIII- INSPECTION OF WORK

The L.U.T.S., the Texas Department of Transportation, and the U.S. Department of Transportation and any authorized representatives, shall have the right at all reasonable times to review or otherwise evaluate the work performed or being performed hereunder and the premises in which it is being performed. If any review or evaluation is made on the premises of Consultant or a subcontractor, Consultant shall provide and require its subcontractors to provide all reasonable facilities and assistance for the safety and convenience of the representatives of the L.U.T.S., the Texas Department of Transportation, or the U.S. Department of Transportation.

ARTICLE IX- DISPUTES

The Consultant shall be responsible for the settlement of all contractual and administrative issues arising out of procurements entered into in support of contract work. The MPO shall act as referee in all disputes regarding non - procurement issues, and the MPO's decision shall be final and binding.

ARTICLE X- NONCOLLUSION

Consultant warrants that it has not employed or retained any company or persons other than a bona fide employee working solely for Consultant, to solicit or secure this contract, and that it has not paid or agreed to pay any company or person any fee, commission, percentage, brokerage fee, gifts, or any other consideration, contingent upon or resulting from the award or making of this contract. For breach or violation of this warranty, the L.U.T.S. shall have the right to annul this contract without liability or, in its discretion, to deduct from the contract price or compensation, or otherwise recover, the full amount of such fee, commission, percentage, brokerage fee, gifts, or contingent fee.

ARTICLE XI- REPORTING

Consultant shall from time to time during the progress of the work, confer with the L.U.T.S. Consultant shall prepare and present such information as may be pertinent and necessary, or as may be requested by the Transportation Planning Director of the L.U.T.S., in order to evaluate the features of the work.

Upon the request of the Transportation Planning Director of the L.U.T.S. or Consultant, conferences shall be provided at the offices of the L.U.T.S., or at any other locations designated by the Transportation Planning Director of the L.U.T.S. These conferences shall also include evaluation of the services and work of Consultant when requested by the L.U.T.S. All work performed pursuant to the contract is subject to review by the Laredo District Office of the Texas Department of Transportation and the U.S. Department of Transportation.

Consultant shall promptly advise the Transportation Planning Director of the L.U.T.S. in writing of events that have significant impact upon the progress of work, including but not limited to:

(1) Problems, delays, or adverse conditions which will materially affect the ability to attain program objectives, prevent the meeting of time schedules and goals, or preclude the attainment of project work units by established time periods; this disclosure will be accompanied by statement of the action taken or contemplated;

(2) Favorable developments or events which enable work schedule goals to be completed sooner than anticipated or scheduled.

All notices to either party by the other required under this contract shall be personally delivered or mailed to such party as follows:

BY CERTIFIED MAIL OR HAND DELIVERY

Nathan Bratton
Transportation Planning Director
P.O. Box 579
Laredo, Texas 78042-0579

Brian Van De Walle
10415 Morado Circle,
Bldg. 1, Suite 300
Austin, TX 78759

ARTICLE XII- RECORDS

The L.U.T.S., the City of Laredo, the Texas Department of Transportation, and the U.S. Department of Transportation shall have the right to examine the books and records of

Consultant for the purpose of checking the amount of work performed at the time of contract termination. Consultant shall maintain all books, records, documents, papers, accounting records and other evidence pertaining to costs incurred for a period of four years from the date of final contract payment or until pending litigation has been fully and completely resolved, whichever occurs last. Records pertinent to this contract shall be made available for inspection during normal business hours to the authorized representatives of the L.U.T.S., the City of Laredo Finance Department, the Texas Department of Transportation, U.S. Department of Transportation, and the Comptroller General.

ARTICLE XIII- SUBCONTRACTS

Consultant shall not assign, subcontract, or transfer any portion of the work under this contract without the prior written approval of the Transportation Planning Director of the L.U.T.S., which approval shall not be unreasonably withheld. All sums due and payable under this contract shall be made to the order of Consultant and to no other. All subcontracts shall include the provisions required in this contract and shall be approved as to form, in writing, by the Transportation Planning Director of the L.U.T.S. prior to work being performed under the subcontract. No subcontract relieves Consultant of responsibilities for performance under this contract.

ARTICLE XIV- TERMINATION

The contract may be terminated before the stated termination date by any of the following conditions:

(1) By mutual agreement and consent, in writing, of both parties.
(2) In writing, by the Transportation Planning Director of the L.U.T.S. as a consequence of Consultant's failure to perform the services set forth herein.
(3) By either party, upon the failure of the other party to fulfill its obligations as set forth herein with proper notice given.
(4) Upon thirty (30) days written notice to Consultant.
(5) By satisfactory completion of all services and obligations described herein.

Should the L.U.T.S. terminate this contract as herein provided, no fees other than fees due and payable at the time of termination shall be paid to Consultant. Compensation for work at termination will be based on the percentage of work completed at that time. The value of work charged during the time after notice of termination is received shall not exceed the value of the work performed in the preceding thirty-day period.

If Consultant defaults in the performance of this contract or if the L.U.T.S. terminates this contract for fault on the part of Consultant, consideration will be given to the actual costs incurred by Consultant in performing the work up to the date of default. This includes the amount of work that was satisfactorily completed, the value of the work that is usable, the cost of securing a substitute consultant for completion of the work, and other factors affecting the value of the work performed at the time of default.

The termination of this contract and the payment of an amount in settlement as prescribed above shall extinguish all rights, duties, and obligations of the L.U.T.S. and Consultant, except the obligations set forth in Article XVI - Compliance With Laws of this agreement. If the termination of this contract is due to the failure of Consultant to fulfill its contract obligations,

the L.U.T.S. staff may complete the work. In such case, Consultant shall be liable for any additional cost occasioned by such failure.

ARTICLE XV- REMEDIES

Any violation of contract terms or breach of contract by Consultant shall be grounds for termination of the contract and any increased cost arising from the default of Consultant shall be paid solely by Consultant.

This agreement shall not be considered as specifying the exclusive remedy for any default, but all remedies existing at law and in equity may be availed of by either party and shall be cumulative.

ARTICLE XVI- COMPLIANCE WITH LAWS

Consultant shall comply with all applicable Federal, State and local laws, statutes, codes, ordinances, rules and regulations, and orders and decrees of any court or administrative body or tribunal in any manner affecting the performance of this contract, including without limitation, worker's compensation laws, minimum and maximum salary and wage statutes and regulations, and licensing laws and regulations. When required, Consultant shall furnish in writing satisfactory proof of its compliance therewith.

ARTICLE XVII- SUCCESSORS AND ASSIGNS

The L.U.T.S. and the Consultant each binds itself, its successors, executors, assigns and administrators to each other party of this agreement and to the successors, executors, assigns and administrators of such other party in respect to all covenants of this contract. Neither the L.U.T.S. nor the Consultant shall assign, sublet, or transfer its interest in this contract without written consent of the other.

ARTICLE XVIII- OWNERSHIP OF DOCUMENTS

All data, basic sketches, charts, calculations, plans, specifications, and other documents created, or collected under the terms of this contract are the exclusive property of the L.U.T.S. and shall be furnished to the Transportation Planning Director of the L.U.T.S. upon request. All documents prepared by Consultant and all documents furnished by Consultant shall be delivered to the Transportation Planning Director of the L.U.T.S. upon completion or termination of this contract. Consultant, at its own expense, may retain copies of such documents or any other data that it has furnished to the L.U.T.S. under this contract. The release of any information shall be in conformance with the Texas Open Records Act.

ARTICLE XIX- SIGNATORY WARRANTY

The undersigned signatory for the Consultant hereby represents and warrants that he is an officer of the organization for which he has executed this contract and that he has full and complete authority to enter into this contract on behalf of his firm. The above-stated representations and warranties are made for the purpose of inducing the L.U.T.S. to enter into this contract.

ARTICLE XX- CONSULTANT RESOURCES

Consultant shall furnish and maintain, at its own expense, quarters for the performance of all services, and adequate and sufficient personnel and equipment to perform the services required. All employees of Consultant shall have such knowledge and experience as will enable them to perform the duties assigned to them.

Any employee of Consultant who, in the opinion of the Transportation Planning Director of the L.U.T.S. is incompetent, or whose conduct becomes detrimental to the work shall immediately be removed from association with the project when so instructed in writing. Consultant certifies that it presently has adequate qualified personnel in its employment for performance of the services required under this contract, or will be able to obtain such personnel from sources other than the L.U.T.S.

Any change in the Project Manager shall be requested in writing and approved in writing by the Transportation Planning Director of the L.U.T.S.

ARTICLE XXI- EQUAL EMPLOYMENT OPPORTUNITY

The Consultant agrees to comply with Executive Order 11246 entitled "Equal Employment Opportunity" as amended by Executive Order 11375 and as supplemented in Department of Labor Regulations (41 CFR 60).

ARTICLE XXII- NONDISCRIMINATION

During the performance of this contract, the Consultant, its assigns and successors in interest, agrees as follows:

1. *Compliance with Regulations*: The Consultant shall comply with the regulations relative to nondiscrimination in federally-assisted programs of the U.S. Department of Transportation, Title 49, Code of Federal Regulations, Part 21 and Title 23, Code of Federal Regulations, Part 710.405(b), as they may be amended from time to time (hereinafter referred to as the Regulations), which are herein incorporated by reference and made a part of this contract.

2. *Nondiscrimination*: The Consultant, with regard to the work performed by it during the contract, shall not discriminate on the grounds of race, color, sex, or national origin in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The Consultant shall not participate either directly or indirectly in the discrimination prohibited by Section 21.5 and Part 710.405(b) of the Regulations, including employment practices when the contract covers a program set forth in Appendix B of the Regulations.

3. *Solicitations for Subcontracts, Including Procurements of Materials and Equipment*: In all solicitations either by competitive bidding or negotiation made by the Consultant for work to be performed under a subcontract, including procurements of materials or leases of equipment, each potential subcontractor or supplier shall be notified by the Consultant of the Consultant's obligations under this contract and the Regulations relative to nondiscrimination of the grounds of race, color, sex, or national origin.

4. *Information and Reports*: The Consultant shall provide all information and reports required by the Regulations, or directives issued pursuant thereto, and shall permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by

the L.U.T.S., the Texas Department of Transportation or the U.S. Department of Transportation to be pertinent to ascertain compliance with such Regulations or directives. Where any information required of the Consultant is in the exclusive possession of another who fails or refuses to furnish this information, the Consultant shall so certify to the L.U.T.S., the Texas Department of Transportation or the U.S. Department of Transportation as appropriate, and shall set forth what efforts it has made to obtain the information.

5. *Sanctions for Noncompliance*: In the event of the Consultant's noncompliance with the nondiscrimination provisions of this contract, the Texas Department of Transportation shall impose such contract sanctions as it or the U.S. Department of Transportation may determine to be appropriate, including but not limited to:

a. Withholding of payments to the Consultant under the contract until the Consultant complies, and/or,
b. Cancellation, termination, or suspension of the contract in whole or in part.

6. *Incorporation of Provisions*: The Consultant shall include the provisions of paragraphs 1 through 6 in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Regulations or directives issued pursuant thereto. The Consultant shall take such action with respect to any subcontract or procurement as the L.U.T.S. may direct as a means of enforcing such provisions including sanctions for noncompliance; provided, however, that in the event a Consultant becomes involved in, or is threatened with litigation with a subcontractor or supplier as a result of such direction, the Consultant may request the L.U.T.S. to enter into such litigation to protect the interests of the L.U.T.S.; in addition, the Consultant may request the United States to enter into such litigation to protect the interests of the United States.

ARTICLE XXIII- MINORITY BUSINESS ENTERPRISES

It is the policy of the U.S. Department of Transportation that Minority Business Enterprises as defined in 49 CFR 23, Subpart A, shall have the maximum opportunity to participate in the performance of contracts financed in whole or in part with Federal funds. Consequently the Minority Business Enterprise requirements of 49 CFR 23, exclusive of Subpart D, apply to this contact as follows:

The Consultant agrees to insure that Minority Business Enterprises as defined in 49 CFR 23, Subpart A, have the maximum opportunity in the performance of contracts and subcontracts financed in whole or in part with Federal funds. In this regard, the Consultant shall take all necessary and reasonable steps in accordance with 49 CFR 23, exclusive of Subpart D, to insure that Minority Business Enterprises have the maximum opportunity to compete for and perform contracts.

The Consultant and any subcontractor shall not discriminate on the basis of race, color, sex, or national origin in the award and performance of contracts funded in whole or in part with Federal funds.

These requirements shall be physically included in any subcontract. Failure to carry out the requirements set forth above shall constitute a breach of contract and, after the notification of the L.U.T.S., may result in termination of the contract by the L.U.T.S. or other such remedy as the L.U.T.S. deems appropriate.

ARTICLE XXIV- DELINQUENT TAX CERTIFICATION

Pursuant to Article 2.45 of the Business Corporation Act, Texas Civil Statutes, which prohibits the State from awarding a contract to a corporation that is delinquent in paying taxes under Chapter 171, Tax Code, the Consultant hereby certifies that it is not delinquent in its Texas franchise tax payments, or that it is exempt from or not subject to such tax. A false statement concerning the corporation's franchise tax status shall constitute grounds for cancellation of the contract at the sole option of the Transportation Planning Director of the L.U.T.S.

ARTICLE XXV- NOTICE TO PROCEED

The Transportation Planning Director of the L.U.T.S. will issue a written authorization to proceed with the work identified in the scope of services. The L.U.T.S. shall not be responsible for actions by Consultant or any costs incurred by Consultant relating to additional work not included in Attachment A - Scope of Services.

ARTICLE XXVI- SUSPENSION

Should the L.U.T.S. desire to suspend the work, but not terminate the contract, this may be done by giving thirty (30) days verbal notification followed by written confirmation from the Transportation Planning Director of the L.U.T.S. to that effect. The thirty-day notice may be waived in writing by both parties. The work may be reinstated and resumed in full force and effect within sixty (60) days of receipt of written notice from the Transportation Planning Director of the L.U.T.S. to resume work. The sixty-day notice may be waived by both parties in writing. If the L.U.T.S. suspends the work, the contract period as determined in Article I- Contract Period is not affected and the contract will terminate on the date specified unless the contract is amended.

The L.U.T.S. assumes no liability for work performed or costs incurred prior to the date of the notice to proceed authorized by the L.U.T.S. to begin work, during periods when work is suspended, or subject to contract completion date.

ARTICLE XXVII- SUPPLEMENTAL AGREEMENTS

The terms of this contract may be modified by supplemental agreement if the L.U.T.S. determines that there has been a significant change in the:

(1) Scope, complexity, character of the service to be performed; or

(2) The duration of work.

Additional compensation, if appropriate, shall be identified in writing as provided in Article III- Compensation, and the supplemental agreement shall state what, if any, additional compensation shall be provided. The Transportation Planning Director of the L.U.T.S. shall issue a notice to proceed for work authorized under the supplementary agreement in accordance with the provisions of Article XXV- Notice to Proceed. Any supplemental agreement must be executed in writing by both parties within the contract period specified in Article I - Contract Period.

It is distinctly understood and agreed that no claim for extra work done or materials furnished shall be made by Consultant until full execution of the supplemental agreement and authorization

to proceed is granted. The L.U.T.S. reserves the right to withhold payment pending verification of satisfactory work performed in accordance with Article III-Compensation of this agreement.

ARTICLE XXVIII- SUBMISSION OF REPORTS

All applicable study reports shall be submitted in preliminary form for approval before a final report is issued. The comments of the Transportation Planning Director of the L.U.T.S. shall be noted and addressed in the final report.

ARTICLE XXIX- INSURANCE

Consultant shall furnish a properly completed Certificate of Insurance, in a form approved by the fiscal agent of the L.U.T.S. prior to beginning work under this contract and shall maintain such insurance through the contract period.

ARTICLE XXX- GRATUITIES

No member of the L.U.T.S. shall accept any benefits, gifts or favors from any person doing business with the L.U.T.S. under this contract, nor shall any person doing business with or who may reasonably do business with the L.U.T.S. under this contract make an offer of benefits, gifts, or favors to L.U.T.S. personnel or staff.

ARTICLE XXXI- DEBARMENT, SUSPENSION AND DISCIPLINARY ACTION

By execution of this agreement, Consultant warrants that it has not been disbarred, suspended, or subject to disciplinary action which would affect its ability to perform the services contracted. It further warrants that it is in compliance with regulations relating to Equal Employment Opportunity and Civil Rights Regulations.

ARTICLE XXXII- PATENT AND COPYRIGHT

The L.U.T.S., the Texas Department of Transportation, and the U.S. Department of Transportation shall have the non-exclusive and irrevocable right to reproduce, publish, or otherwise use, and to authorize the use by others any reports developed by Consultant for governmental purposes.

ARTICLE XXXIII- SEVERABILITY

In the event any one or more of the provisions contained in this contract shall for any reason be held invalid, illegal, or unenforceable in any respect, such invalidity, illegality, or unenforceability shall not affect any other provision thereof and this contract shall be construed as if such invalid, illegal or unenforceable provision had never been contained therein.

ARTICLE XXXIV- PRIOR CONTRACT SUPERSEDED

This contract constitutes the sole and only agreement between the parties hereto and supersedes any prior understandings or written or oral contract between the parties respecting the subject matter defined herein.

ARTICLE XXXV- FORCE MAJEURE

Neither party to this agreement shall be required to perform any term, condition, or covenant in this agreement so long as performance is delayed or prevented by force majeure, which shall

mean acts of God, strikes, lockouts, material or labor restrictions by a governmental authority, civil riots, floods, and any other cause not reasonably within the control of either party to this agreement and which by the exercise of due diligence such party is unable, wholly or in part, to prevent or overcome. If by reason of force majeure either party is prevented from full performance of its obligations under this agreement, written notice shall be provided to the other party within three days.

ARTICLE XXXVI- APPLICABLE LAW

This agreement shall be construed under, and in accordance with, the laws of the State of Texas as amended from time to time, and all obligations of the parties created by this agreement are performable in Webb County, Texas.

IN WITNESS WHEREOF, the Laredo Urban Transportation Study acting by and through its Chairman as authorized by the Policy Committee, and Kimley-Horn and Associates, Inc. have executed this agreement in duplicate originals, each of equal dignity.

EXECUTED this the 20th day of AUGUST, 2013.

Raul G. Salinas Chairman
Policy Committee

Principal-in-Charge
Kimley-Horn and Associates, Inc.

Andrew W. Van Leeuwen
Print Name

ATTACHMENT A
Scope of Services
Railroad Quiet Zone Study Update

The Laredo Urban Transportation Study (LUTS) desires to update the Railroad Quiet Zone Study developed in 2006. There are currently 84 at-grade railroad crossings on two railroads, the Union Pacific Railroad (UPRR) and Kansas City Southern Railroad (KCSR), within the City Limits of Laredo, Texas. Of these, 21 are located on a spur line operated by UPRR which are the subject of a separate quiet zone project. The City of Laredo has decided to limit the scope of this study to the 26 crossings located on the KCSR line.

Throughout this scope of services, the terms City and LUTS refers to the Laredo Urban Transportation Study and the term Consultant refers to Kimley-Horn and Associates, Inc.

Project tasks (outlined in the following Scope of Services) consist of:

1. Project Administration;
2. Data Collection
3. Quiet Zone Analysis
4. Report
5. Presentations

A detailed description of each Task and deliverables is provided below.

Task 1 – Project Administration

Project administration spans the duration of the project- This task involves the monitoring and coordination of services to be provided to the Laredo Urban Transportation Study (LUTS) to achieve timely and efficient completion of the project. Included in this task are the project kick-off meeting, project control and management, maintenance of project records and files, reporting requirements, and project meetings.

Subtask 1.1 - Kick-off Meeting

Upon notice-to-proceed, the Consultant will meet once with the LUTS to begin the exchange of data to be provided to the Consultant. Also during this meeting, reporting requirements as they relate to invoicing and project status will be reviewed and agreed upon. It is assumed that the kick-off meeting will have an approximate duration of two hours and will be held at the LUTS offices.

Subtask 1.2 - Project Control and Management

The Consultant will be responsible for the day-to-day activities of managing the project, which is assumed to have a seven month duration, as shown in the attached project schedule. Specific activities include Sub-Consultant coordination; review, verification, and approval of Sub-Consultant(s) services; and ongoing reassessments of contract and schedule adherence

Subtask 1.3 - Project Records and Files

The Consultant will develop a project filing system, both for data in hard copy format and for electronic data. This filing system, which will be maintained in the Consultant's offices for the life of the project, will be designed to assure that files can be easily located and retrieved at all times. This filing system will also assure that electronic files are frequently backed up, with duplicate copies stored at a secure, off-site location.

Subtask 1.4 - Status Reports and Invoicing

Monthly progress reports will be prepared and submitted to the LUTS. The report will address technical progress, contract progress, and management-related topics. Monthly invoicing will be part of the status report package.

Subtask 1.5 - Project Status and Review Meetings

In addition to the reporting requirements outlined in Subtask 1.4, project status meetings with the LUTS will help the Consultant maintain schedule and contract adherence. It is assumed that up to two specifically called project status meetings will occur over the course of the project.

Deliverables and Meetings:

- One (1) Project kick-off meeting with Consultant and LUTS Staff
- Project Status and Review Meetings (up to 2 – by conference call)
- Project Schedule
- Project Meeting Minutes
- Monthly Status Reports and invoicing

Task 2 – Data Collection

The Consultant will conduct field review of the 26 at-grade KCSR railroad crossings to determine the potential for various improvements to reduce the Quiet Zone Risk Index at each.

In addition, daily traffic volumes will be conducted at up to 10 crossings. This data will be used during the analysis phase to determine the impacts of diverted trips that would result from potential crossing closures, if needed.

The Consultant will download FRA inventory data from the online FRA Calculator for comparison to the results of the field review.

The Consultant will obtain updated train volume and speed tables from UPRR and KCSR.

Deliverables and Meetings: - Summary of potential improvements to be considered at each crossing.

Task 3 – Quiet Zone Analysis

Subtask 3.1 – Initial Zone Segmentation

Starting with the existing Railroad Quiet Zone Study, Kimley-Horn will determine the segmentation of the various rail lines into separate Quiet Zones for analysis.

Subtask 3.2 – Quiet Zone Analysis

Using the FRA Calculator, quiet zone scenarios will be established for initial analysis. Data from the field review and railroads will be used to test various improvement scenarios at each crossing to determine the resultant reduction in crossing risk when train horns are no longer sounded. Crossing closures will be considered for minor roadways if other, less intrusive, improvements do not reduce the average risk of each zone below the National Risk With Horns Index.

Subtask 3.3 – Crossing Closure Analysis

For potential crossing closures, daily traffic counts will be conducted on the crossing road and the nearest parallel crossing. Diverted trips will be analyzed to determine if the closure will result in unacceptable operating levels of service. As noted in Task 2, traffic counts at up to 10 locations are budgeted. Additional counts will be considered as additional services and billed on a time and material basis.

Subtask 3.4 –Opinions of Probable Cost

For recommended improvements, the Consultant will develop opinions of probable cost that include the anticipated capital construction costs, planning and engineering costs. The Consultant will include a determination of the anticipated transportation user benefits and benefit/cost ratio for each of the potential projects.

Because the Consultant does not control the cost of labor, materials, equipment or services furnished by others, methods of determining prices, or competitive bidding or market conditions, any opinions rendered as to costs, including but not limited to opinions as to the costs of construction and materials, shall be made on the basis of its experience and represent its judgment as an experienced and qualified professional, familiar with the industry. The Consultant cannot and does not guarantee that proposals, bids or actual costs will not vary from its opinions of cost.

Deliverables and Meetings:

- Summary of scenario analysis results.
- Summary of impacts of crossing closures.
- Opinion of probable cost for recommended improvements.

Task 4 – Report

Subtask 4.1 – Draft Report

The Consultant will prepare a draft final document that compiles all of the findings of the previous study steps. Fifteen (15) copies of this report will be distributed to the LUTS Technical Committee for review and comment. A copy of the report will be provided in electronic format, including all maps and data tables, in the format specified. A presentation will be made to the LUTS Technical Committee to outline study findings and solicit comments for inclusion in the final report.

Subtask 4.2 – Final Report

One set of review comments will be addressed and a final document will be prepared. Twenty (20) copies of this report will be provided, along with 25 CDs with updated electronic files. All sets will be printed on 8 ½" x 11" paper and bound. Exhibits that require larger paper will be folded and referenced in the text.

Deliverables and Meetings:

- Five (5) copies of the Draft Report
- Twenty copies of the Final Report
- Electronic copy of the final report, in PDF format

Task 5.0 - Presentations

The Consultant will present the final report to public agencies as requested. The Client will be responsible for meeting logistics (i.e. providing meeting space, advertising the meeting, notifying attendees, etc.) It is assumed that the following presentations will be required:

Draft Report – LUTS Technical Committtee

Final Report - LUTS Technical Committee and LUTS Policy Board, to be scheduled on the same day.

For budgeting purposes, it is assumed that a total of two (2) days will be required for the presentation process. Additional meetings will be paid for as Additional Services.

Deliverables and Meetings: - Three presentations

Kimley-Horn and Associates, Inc.

Project Workplan Budget

General Project Information	
Client:	City of Laredo
Project:	Citywide Quiet Zone Study
KHA No.	
PM:	Brian VDW

Budget Summary	
Date:	8/7/13

Task Budget Summary

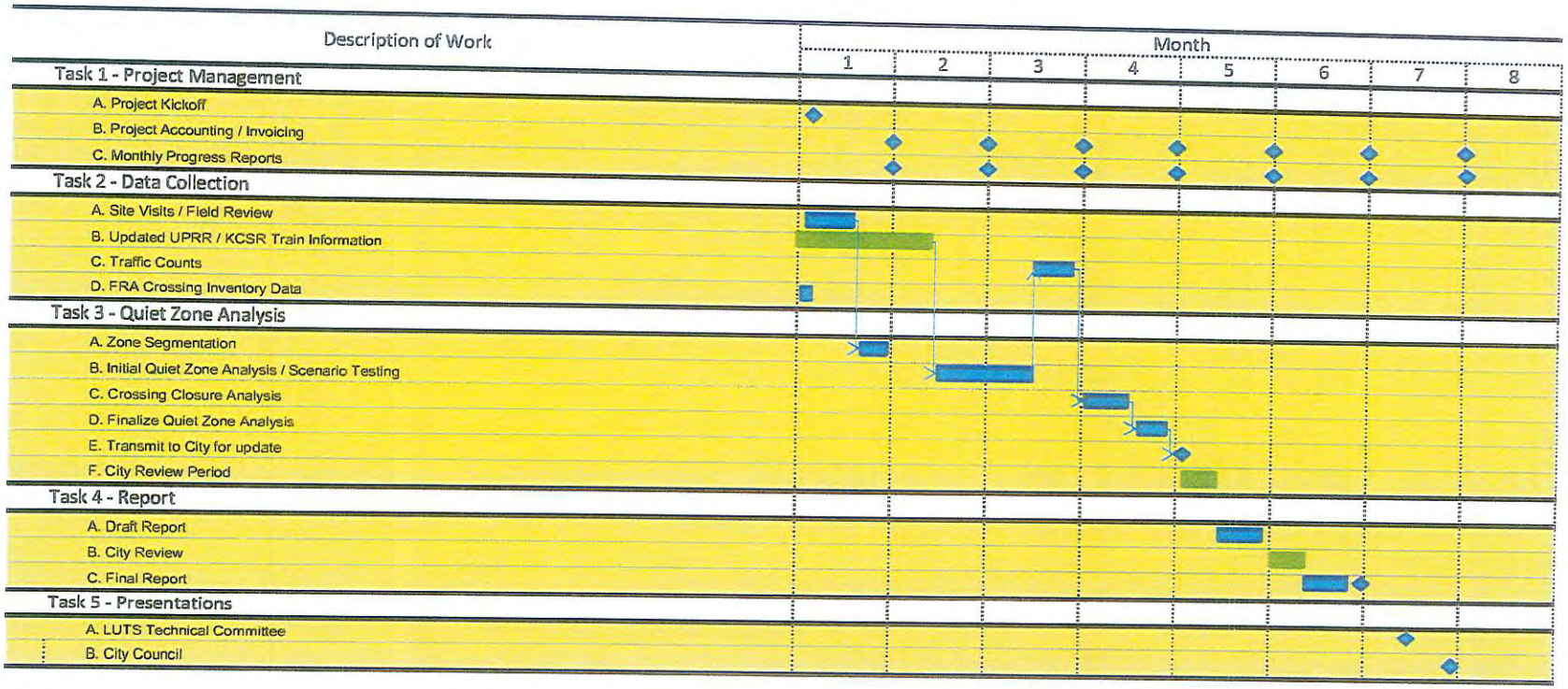
No.	Task Name	Hours	Labor	Expenses	Subtotal
1	Project Management	42	$ 7,100	$ -	$ 7,100
2	Data Collection	59	$ 9,800	$ 1,900	$ 11,700
3	Quiet Zone Analysisis	103	$ 12,900	$ -	$ 12,900
4	Report	42	$ 5,300	$ 400	$ 5,700
5	Presentations	48	$ 8,300	$ 600	$ 8,900
			$ -	$ -	
			$ -	$ -	
			$ -	$ -	
			$ -	$ -	
			$ -	$ -	
			$ -	$ -	
			$ -	$ -	
			$ -	$ -	
			$ -	$ -	
777	Contingency		$ -		
	TOTALS:	294	$ 41,200	$ 2,900	$ 46,300

Subconsultant Summary

Task No.	Task Name	Cost	Multiplier	Subtotal
2	AC Group - Traffic Counts	$ 2,000	1.15	$ 2,300
		$ -	1.15	$ -
		$ -	1.15	$ -
		$ -	1.15	$ -
		$ -	1.15	$ -
	TOTALS:	$ 2,000		$ 2,300

Project Budget Summary	
Labor:	$ 46,300
Expenses:	$ 2,300
TOTAL:	$ 48,600

Railroad Quiet Zone Study Update Schedule
Laredo, Texas



KEY:

Kimley-Horn Task

Review By Others

LAREDO URBAN TRANSPORTATION STUDY
ACTION ITEM

DATE: 5-19-14	**SUBJECT:** MOTION Receive public testimony and approve a motion initiating a ten-day public review and comment period for the proposed amendment of the 2013-2016 Transportation Improvement Program (TIP). TIP13-16/REV 2/Aug.2014 rev. cycle
INITIATED BY: Transit	**STAFF SOURCE:** Nathan Bratton, MPO Director

PREVIOUS ACTION:
The MPO Policy Committee approved resolution MPO No. 2012-05 on May 21, 2012 adopting the 2013-2016 Transportation Improvement Program. TIP Revision #1 was approved on August 19th, 2013 and Revision 1A was approved on November 18, 2013.

BACKGROUND:
Moving Ahead for Progress in the 21st Century (MAP21) requires that Metropolitan Planning Organizations (MPOs) in cooperation with the State and affected transit operators develop Transportation Improvement Programs (TIP) for their planning areas. These Transportation Improvement Programs then become part of the State Transportation Improvement Program (STIP). Selection for projects involving Federal participation is carried out by the State in cooperation with the MPO. The program will include a project, or an identified phase of a project, only if full funding can reasonably be anticipated to be available within the time period that is contemplated for completion of the project.

The approved revision is due to the TxDOT District offices on Wednesday, July 21st, 2014 in order to be submitted for the August quarterly revision cycle.

MOBILITY: Proposed amendments:

Revise Existing Project (*See attached Original and Proposed Project Information Sheets*)
CSJ 0922-33-076– the Flecha/Las Cruces Realignment Project – intended to realign Flecha in order to align with Las Cruces is proposed for revision such that the limits are changed as follows:

Original Limits: From 0.25 miles east of Calton Road/Sta. Maria Ave. to 0.25 miles east of Las Cruces/Flecha Lane
New Limits: Intersection of FM 1472 and Flecha to 0.174 miles east of FM 1472.

TRANSIT: Proposed amendments:
No transit revisions are proposed at this time.

COMMITTEE RECOMMENDATION: Approval.	**STAFF RECOMMENDATION:** Approval.

STATEWIDE TRANSPORTATION IMPROVEMENT PROGRAM
TIP FY 2013-2016
LAREDO METROPOLITAN PLANNING ORGANIZATION
FY 2015

DISTRICT	COUNTY	CSJ	HWY	PHASE	CITY	PROJECT SPONSOR	YOE COST
22 - LAREDO	WEBB	0922-33-076	CS	C,E		[redacted]	$ 2,087,741

LIMITS FROM 0.25 MI EAST OF CALTON RD/ST MARIA
LIMITS TO: 0.25 MI E OF LAS CRUCES/FLECHA LANE
PROJECT DESCR: REALIGNMENT OF FLECHA LN/LAS CRUCES ALONG FM1472
REMARKS
P7:

REVISION DATE: 07/2012
MPO PROJ NUM: [redacted]
FUNDING CAT(S): 10, 3-LC

PROJECT HISTORY: FOR THE REALIGNMENT OF FLECHA LN/LAS CRUCES ALONG FM1472 & FOR THE PE WORK OF A GRADE SEP AT CALTON RD/SANTA MARIA INT

TOTAL PROJECT COST INFORMATION

PRELIM ENG:	$	93,169
ROW PURCHASE:	$	0
CONST COST:	$	1,901,404
CONST ENG:	$	93,169
CONTING:	$	23,768
IND COSTS:	$	152,112
BND FINANCING:	$	0
TOTAL PRJ COST:	$	2,367,438

COST OF APPROVED PHASES: $ 2,087,741

AUTHORIZED FUNDING BY CATEGORY/SHARE

	FEDERAL	STATE	LOCAL	LC	TOTAL
10-MISC:	$ 1,440,411	$ 0	$ 360,103	$ 0	$ 1,800,514
3-LOCAL CONTR:	$ 0	$ 0	$ 0	$ 287,227	$ 287,227*
TOTAL:	$ 1,440,411	$ 0	$ 360,103	$ 287,227	$ 2,087,741

EXISTING LIMITS

PHASE: C = CONSTRUCTION, E = ENGINEERING, R = ROW, T = TRANSFER

* FUNDING NOT FIXED

STATEWIDE TRANSPORTATION IMPROVEMENT PROGRAM
TIP FY 2015-2018
LAREDO METROPOLITAN PLANNING ORGANIZATION
FY 2015

DISTRICT	COUNTY	CSJ	HWY	PHASE	CITY	PROJECT SPONSOR	YOE COST
22 - LAREDO	WEBB	0922-33-076	CS	C,E		[redacted]	$ 2,047,199

LIMITS FROM INTERSECTION OF FM 1472 AND FLECHA
LIMITS TO: 0.174 MILES EAST OF FM 1472
PROJECT DESCR: REALIGNMENT OF FLECHA LN/LAS CRUCES ALONG FM1472
REMARKS
P7:

REVISION DATE: 07/2014
MPO PROJ NUM: [redacted]
FUNDING CAT(S): 10,LC

PROJECT HISTORY: FOR THE REALIGNMENT OF FLECHA LN/LAS CRUCES ALONG FM1472 & FOR THE PE WORK OF A GRADE SEP AT CALTON RD/SANTA MARIA INT

TOTAL PROJECT COST INFORMATION

PRELIM ENG:	$	91,360
ROW PURCHASE:	$	1,250,000
CONST COST:	$	1,864,480
CONST ENG:	$	91,360
CONTING:	$	23,306
IND COSTS:	$	90,054
BND FINANCING:	$	0
TOTAL PRJ COST:	$	3,512,360

COST OF APPROVED PHASES: $ 2,047,199

AUTHORIZED FUNDING BY CATEGORY/SHARE

	FEDERAL	STATE	LOCAL	LC	TOTAL
10-MISC:	$ 1,440,411	$ 0	$ 360,103	$ 0	$ 1,800,514
LOCAL CONTR:	$ 0	$ 0	$ 0	$ 246,685	$ 246,685*
TOTAL:	$ 1,440,411	$ 0	$ 360,103	$ 246,685	$ 2,047,199

PROPOSED LIMITS

PHASE: C = CONSTRUCTION, E = ENGINEERING, R = ROW, T = TRANSFER

* FUNDING NOT FIXED

MPO / Laredo - 22

FY 2013 - 2016 Transportation Improvement Program

February 2014 Quarterly Revision

Funding by Category

		FY 2013		FY 2014		FY 2015		FY 2016		Total FY 2013 - 2016	
Category	Description	Programmed	Authorized	Programmed	Authorized	Programmed	Authorized	Programmed	Authorized	Programmed	Authorized
1	Preventive Maintenance and Rehabilitation	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
2M or 2U	Urban Area (Non-TMA) Corridor Projects	$0	$0	$2,990,000	$2,990,000	$0	$0	$0	$0	$2,990,000	$2,990,000
3	Non-Traditionally Funded Transportation Project	$0	$0	$7,000,000	$7,000,000	$9,920	$9,920	$73,920	$73,920	$7,083,840	$7,083,840
4	Statewide Connectivity Corridor Projects	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
5	CMAQ	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
6	Structures	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
7	Metro Mobility & Rehab	$0	$0	$1,510,000	$1,510,000	$7,500,000	$7,500,000	$0	$0	$9,010,000	$9,010,000
8	Safety	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
9	Enhancements	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
10	Supplemental Transportation	$0	$0	$13,500,000	$13,500,000	$1,800,514	$1,800,514	$14,819,709	$14,819,709	$30,120,223	$30,120,223
11	District Discretionary	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
12	Strategic Priority	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
12C	Strategic Priority RECON	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
12S	Strategic Priority RECON	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
SBPE	Strategy Budget PE	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
SB 102	Strategy 102	$0	$0	$15,757,662	$15,757,662	$0	$0	$0	$0	$15,757,662	$15,757,662
	Total	$0	$0	$40,757,662	$40,757,662	$9,310,434	$9,310,434	$14,893,629	$14,893,629	$64,961,725	$64,961,725

Funding Participation Source

Source	FY 2013	FY 2014	FY 2015	FY 2016	Total
Federal	$0	$14,475,874	$7,440,411	$12,926,124	$34,842,409
State	$0	$3,524,126	$1,500,000	$0	$5,024,126
Local Match	$0	$0	$360,103	$1,893,585	$2,253,688
CAT 3 - Local Contributions	$0	$0	$9,920	$73,920	$83,840
CAT 3 - Prop 12	$0	$0	$0	$0	$0
CAT 3 - Prop 14	$0	$7,000,000	$0	$0	$7,000,000
Cat 3- Prop 14 SB	$0	$0	$0	$0	$0
CAT 3 - Texas Mobility Fund	$0	$0	$0	$0	$0
CAT 3 - Pass Thru Toll Revenue	$0	$0	$0	$0	$0
CAT 3 - Regional Toll Revenue	$0	$0	$0	$0	$0
CAT 3 - Match to Regional Toll Revenue	$0	$0	$0	$0	$0
CAT 3 - Unique Federal Program - Tiger II	$0	$0	$0	$0	$0
CAT 3 - TDC	$0	$0	$0	$0	$0
Other - Section 5306	$0	$0	$0	$0	$0
Other - Strategy PE Budget	$0	$0	$0	$0	$0
Other - Stragegy 102 Budget	$0	$15,757,662	$0	$0	$15,757,662
Total	$0	$40,757,662	$9,310,434	$14,893,629	$64,961,725