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
November 20, 2017
1:30 p.m.

MEETING AGENDA

I. CHAIRPERSON TO CALL MEETING TO ORDER

II. CHAIRPERSON TO CALL ROLL

III. CITIZEN COMMENT

Speakers are required to fill out witness cards, which must be submitted to MPO Staff no later than 15 minutes after the start of the meeting. Speakers shall identify themselves at the microphone. Comments are limited to three (3) minutes per speaker. No more than three (3) persons will be allowed to speak on any side of an issue. Should there be more than three (3) people who wish to speak on a specific issue, they should select not more than three (3) representatives to speak on their behalf. The presiding officer may further limit public comment in the interest of order or time. Speakers may not transfer their minutes to any other speaker. Comments should be relevant to City business and delivered in a professional manner. No derogatory remarks shall be permitted.

IV. ITEMS REQUIRING POLICY COMMITTEE ACTION

A. Approval of the minutes for the meeting held on October 16, 2017.

B. Receive public testimony and initiate a ten-day public review and comment period for the following proposed amendment(s) to the 2017-2020 Transportation Improvement Program (TIP):

1. ***Removal*** of project CSJ 0086-14-082 intended to provide for the development of plans, specifications, and estimates (PS&E) for the Jacaman and Airport overpasses. Proposed work has an estimated cost of 4.6 million dollars. ***Rationale***: All $4.6 million in project funds are being transferred to (grouped) project identified as CSJ 0086-14-058 intended to provide for the development of PS&E, schematic, environmental, and right of way (ROW) surveying/mapping on Loop 20, from International Boulevard to Saunders Avenue.

C. Motion supporting Webb County's request to re-allocate all surplus funds, in the approximate amount of $3,087,361.75 from CSJ0086-14-065 (Main lanes over I35), and approving TxDOT's re-allocation of said surplus funds to CSJ 0086-14-058, a grouped project, for Schematic, PS&E, Environmental, and right-of-way mapping and surveying and which generally includes, as its project limits, From: International To: US 59 Business (Saunders Ave.).

D. Motion supporting City's request for $10 million in CBI funding for the World Trade Bridge FASTLANE project as follows (and any matters incident thereto):

– Move from CSJ 0086- 14- 058 PS&E of Airport and Jacaman *($4,641,030 CBI funds previously approved MPO action*	$4,641,030.00
– Move from CSJ 0086 14 920 ROW on Loop 20 from US 59 to Airport Overpass *($4,806,663 CBI funds previously approved MPO action 10/16/16)*	$2,271,609.00
– Move remaining surplus CBI funds from Loop 20/IH 35 main lanes CSJ 0086 14 065 which let in July 2017	$3,087,361.75
Total CBI Funds to	**$10,000,000.75**

– Supplement US 59 Loop PS&E development with TxDOT Strategy 111 funds	$4,641,030.00
– Supplement US 59 Loop ROW from US 59 to Airport with TxDOT ROW funds	$2,271,609.00
– Propose use of TxDOT Strategy 111 funds for additional US 59 Loop PS&E development to offset surplus	$3,087,361.75
Total:	**$10,000,000.75**

– Additional CBI funds which remain in CSJ 0086- 14- 920	$2,535,054.00
Original	**$12,535,054.75**

E. Discussion with possible action on TxDOT's proposed development of a Right of Way (ROW), conceptual schematic and constraints analysis for the mid to long range improvements recommended by the TTI study for Mines Road.

F. Discussion with possible action on the Regional Mobility Authority's funding and its proposed system infrastructure project approach alternatives.

G. Discussion with possible action on the letting date for Calton Railroad Grade Separation project (0922-33-093) which is proposed to move from November 2017 (FY 2018) to August (FY 2018).

H. Discussion with possible action on Hachar Road.

V. REPORT(S) AND PRESENTATIONS (No action required)

A. Riverbank Road:

1. Presentation by Joe Medina on the Riverbank Road project.
2. Report by TxDOT on possible funding sources available to the Riverbank Road project.

B. RMA:
   1. Presentation on the proposed scope of services for the Mines Road Regional study.
   2. Presentation by the RMA on its mass transit recommendations.
   3. Status of the RMA.

C. Flecha/Las Cruces Realignment Project:
   1. Report by the City of Laredo Real Estate Division on the status of Flecha/Las Cruces Realignment project's Right of Way (ROW) acquisition.
   2. Report by CEC representative on the status of the Flecha/Las Cruces Realignment project's: plans and specification updates, Army Corp of Engineers permitting and request for additional funding.

D. Presentation by TxDOT on the proposed Outer Loop alignment.

E. Report by MPO Director on the relative competiveness of the City of Laredo's Infra Grant application.

F. Report by the TxDOT on the meeting had by the City and TxDOT to discuss the "wish list"/recommendations resulting from the Texas Transportation Institute's (TTI) Mines Road study, pertaining to proposed City of Laredo facility improvements intended to improve the function of Mines Road.

G. Letting date for the Zacate Creek Hike & Bike Trail (CSJ 0922-33-170) has been moved from November 2017 (FY 2018) to January 2018 (FY 2018).

VI. ADJOURNMENT

THIS NOTICE WAS POSTED AT THE MUNICIPAL GOVERNMENT OFFICES, 1110 HOUSTON STREET, LAREDO, TEXAS, AT A PLACE CONVENIENT AND READILY ACCESSIBLE TO THE PUBLIC AT ALL TIMES. SAID NOTICE WAS POSTED BY NOVEMBER 17, 2017, BY 1:30 P.M.

All meetings of the MPO Committee are open to the public. Persons who plan to attend this meeting and who may need auxiliary aid or services, such as: interpreters for persons who are deaf or hearing impaired, readers of large print or Braille, or a translator for the Spanish language are requested to contact Ms. Vanessa Guerra, City Planning, 1120 San Bernardo Ave. at (956) 794-1613, vguerra@ci.laredo.tx.us, at least five working days prior to the meeting so that appropriate arrangements can be made. Materials in Spanish may also be provided upon request.

Disability Access Statement - This meeting is wheelchair accessible. The accessible entrances are located at 1110 Victoria and 900 Flores. Accessible parking spaces are located at City Hall, 1110 Victoria.

Ayuda o Servicios Auxiliares: Todas las reuniones del Comité del MPO están abiertas al público. Personas que planean asistir a esta reunión y que pueden necesitar ayuda o servicios, auxiliares como: intérpretes para personas con discapacidad auditiva, lectores de letra grande o en Braille, o un traductor para el idioma español deben comunicarse con la Sra. Vanessa Guerra, en el Departamento de Planificación de la Ciudad, 1120 San Bernardo Ave. al (956) 794-1613, vguerra@ci.laredo.tx.us, al menos cinco días hábiles antes de la reunión para que los arreglos apropiados se pueden hacer. Materiales in español se proveerán a petición.

Declaración de Acceso a la Discapacidad: Esta reunión es accesible para sillas de ruedas. Las entradas accesibles están ubicadas en 1110 Victoria y 900 Flores. Las plazas de aparcamiento accesibles se encuentran en el Ayuntamiento, 1110 Victoria.

Información en Español: Si usted desea esta información en español o si desea explicación sobre el contenido, por favor llámenos al teléfono (956) 794-1623 o comuníquese con nosotros mediante correo electrónico a vguerra@ci.laredo.tx.us.

CITY OF LAREDO REPRESENTATIVES:

Honorable Pete Saenz, Mayor and LUTS Chairperson
Honorable Charlie San Miguel, City Councilmember, District VI
Honorable George Altgelt, City Councilmember, District VII

LAREDO MASS TRANSIT BOARD REPRESENTATIVE:

Honorable Roberto Balli, City Councilmember, District VIII

COUNTY OF WEBB REPRESENTATIVES:

Honorable Tano E. Tijerina, Webb County Judge
Honorable Jesse Gonzalez, Webb County Commissioner, Pct. 1
Honorable John Galo, Webb County Commissioner, Pct. 3

STATE REPRESENTATIVES:

Mr. David M. Salazar, Jr., P.E., District Engineer
Ms. Melisa Montemayor, District Administrator

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

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

Nathan R. Bratton
MPO Director

Angelica Anzaldua
For Jose A. Valdez, 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 OCTOBER 16, 2017 MEETING

Regular members present:

Honorable Pete Saenz, Mayor and LUTS Chairperson
Honorable Tano E. Tijerina, Webb County Judge (joined the meeting at 1:37 p.m.)
Honorable Jesse Gonzalez, Webb County Commissioner, Pct. 1
Honorable Charlie San Miguel, City Councilmember, District VI
Honorable George Altgelt, City Councilmember, District VII (joined the meeting at 1:47 p.m.)
Honorable Roberto Balli, City Councilmember, District VIII (joined the meeting at 1:57 p.m.)
Melisa Montemayor, TxDOT District Administrator
David M. Salazar, Jr., District Engineer

Regular members not present:

Honorable John Galo, Webb County Commissioner, Pct. 3

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
	Robert Peña, City Traffic Safety Department
	Eduardo Bernal, Transit, El Metro
	Garbriel Martinez, City Engineering
State:	Sara Garza, TxDOT
	Roberto Rodriguez, TxDOT
	Alberto Ramirez, TxDOT
	Ana Duncan, TxDOT
	Carlos Rodriguez, TxDOT
	Mike Graham, TxDOT
	Marissa Montoya, TxDOT
	Luis Villarreal, TxDOT

County:	Guillermo Cuellar, Webb County Engineering Luis Perez Garcia, Webb County Engineering
Others:	Ruben Soto, Regional Mobility Authority, (RMA) Antonio Rodriguez, HNTB, Inc. Enrique Valdez, LNV Ricardo Ramos Andy Gonzalez, Killam Industrial Angel Rivera, LDF Jorge Martinez, S & B Infrastructure Tim Juarez, Border Trade Miles Buillon, Halff Associates

I. CHAIRPERSON TO CALL MEETING TO ORDER

Mayor Saenz called the meeting to order at 1:33 p.m.

Mayor Saenz welcomed the new TxDOT District Engineer, Mr. David M. Salazar.

II. CHAIRPERSON TO CALL ROLL

Nathan R. Bratton, MPO Director, called roll and verified that a quorum existed.

III. CITIZEN COMMENT

Speakers are required to fill out witness cards, which must be submitted to MPO Staff no later than 15 minutes after the start of the meeting. Speakers shall identify themselves at the microphone. Comments are limited to three (3) minutes per speaker. No more than three (3) persons will be allowed to speak on any side of an issue. Should there be more than three (3) people who wish to speak on a specific issue, they should select not more than three (3) representatives to speak on their behalf. The presiding officer may further limit public comment in the interest of order or time. Speakers may not transfer their minutes to any other speaker. Comments should be relevant to City business and delivered in a professional manner. No derogatory remarks shall be permitted.

IV. ITEMS REQUIRING POLICY COMMITTEE ACTION

A. Approval of the minutes for the meeting held on September 18, 2017

C.M. San Miguel made a motion to **approve** the minutes of September 18, 2017.

Second:	C.M. Montemayor
For:	5
Against:	0
Abstained:	0

Motion carried unanimously

B. Discussion and possible action to utilize $31,632.85 originally obligated by the MPO for PS&E of the Loop 20 Extension from US 59 to the Jacaman Overpass to be used for the preliminary engineering for identifying drainage ponds along Loop 20. (CBI Funds-FY 2018 Letting).

Melisa Montemayor, TxDOT, stated said item would return to the committee for consideration at the next MPO meeting, as the funds are currently allocated to a project identification number that has been cancelled. At the next meeting, the funds would be proposed for relocation to an active project identification number.

C.M. San Miguel made a motion to **approve** the item.

Second: C.M. Gonzalez
For: 5
Against: 0
Abstained: 0

Motion carried unanimously

Judge Tijerina joined the meeting at 1:37 p.m.

C. Discussion with possible action to place digital signage on FM 1472 (Mines Road) intended to notify the driving public of congestion.

1. Report by TxDOT on possible sign locations, cost estimates, and funding sources for digital signage on Mines Road.

Robert Rodriguez, TxDOT gave a brief presentation on the proposed Digital Message Sign (DMS) improvements in the Mines Road area. The proposed sign locations and estimated costs were as follows:

Location	Proposed Work	QTY	Material/ Installation Price
LP20 @ EB FM1472	Upgrade DMS	1	$81,000
FM1472 @ NB LP20	Upgrade DMS	1	$81,000
DEL MAR NB	Upgrade DMS	1	$81,000
IH35 NB at LP20	Upgrade DMS	1	$81,000
IH35 SB @ MM8	Upgrade DMS	1	$81,000
IH 35 SB North of SH255	New DMS	1	$143,450
Camino Colombia EB DMS	New DMS	1	$143,450
EL Pico Rd SB DMS	New DMS	1	$143,450
Study Area (Min of 2 Sensors)	Radar Sensor and Pole	2	$149,450
Multiple Locations	Radio Communication	6	$14,400
		Total Estimate --->	**$999,200.00**

Ms. Montemayor stated the estimated construction costs for the proposed signage was 1 million dollars. She stated the District receives approximately 2 million dollars for traffic control type signage projects for the entire district; therefore utilizing half of their yearly budget on one million dollar project was not currently feasible.

Ms. Montemayor stated TxDOT would consider funding half of the total estimated cost for the DMS signs, but would not be able to fund 100 % of the project.

C.M. San Miguel stated that at a previous council meeting, there had been an item to discuss signage for the Overpass on Shiloh project. He mentioned that a portion of the funds allocated to that project could be considered for DMS signs on the Mines Road area.

Ms. Montemayor agreed that possibly those funds could fill the funding gap. She also suggested the Traffic Department review its fund balances for any available funding.

Mayor Saenz suggested C.M. San Miguel meet with TxDOT and the City Traffic Department to discuss which funds may be utilized. Mayor Saenz requested that meeting occur prior to the next MPO meeting.

2. **Report by TxDOT on "wish list"/recommendations from the Texas Transportation Institute (TTI) Mines Road Study pertaining to proposed City of Laredo facility improvements that would improve the function of Mines Road.**

Robert Peña, Traffic Safety Department, stated the City and TxDOT had previously met to discuss the Texas Transportation Institute's (TTI) short term recommendations. He further stated the City, TxDOT, and C.M. Altgelt would meet later in the week to further discuss possible alternatives.

Mayor Saenz requested to be included in the meeting, as well as a status report given on said meeting at the next Policy Committee meeting.

C.M. Altgelt joined the meeting at 1:48 p.m.

D. Discussion with possible action on the $2.4 million, Proposition 1, Category 2 funds allocated to project CSJ 0086-14-077, intended to provide for construction of an interchange at the international airport, with an estimated construction cost of $14,785,990. Latest estimated letting date is fiscal year (FY) 2024.

Ms. Montemayor stated the 2.4 million of Proposition 1, Category 2 funds originally allocated to project number CSJ 0086-14-077 set to lapse in FY 2018, were moved to project # CSJ 0086-14-065, for the construction of the Main Lanes over IH 35 on Loop 20, which let in July. Furthermore, 2.4 million in Coordinated Border Infrastructure (CBI) funds were moved from the 0086-14-065 to 0086-14-077 project to replace the lapsing 2.4 million in Category 2 Proposition 1 funds.
Mrs. Montemayor repeated that no funds were being lost. The funds were simply being swapped to prevent them from lapsing.

C.M. San Miguel made a motion to **approve** the transfer of the 2.4 million Proposition 1, Category 2 funds from the 0086-14-077 to 0086-14-065, and the transfer of 2.4 million in CBI funds from 0086-14-065 to 0086-14-077.

Second: Judge Tijerina
For: 7
Against: 0
Abstained: 0

Motion carried unanimously

E. Discussion with possible action on Hachar Road.

Mr. Bratton stated the owners of the Hachar Trust expressed interest in assuming responsibility of the remainder of the work necessary for the development of the environmental assessment for the Hachar Project.

Luis Perez Garcia, Webb County Engineer, stated the call for bids had been announced for the Reuthinger Project and proposals were currently being received. He stated the County Purchasing Department had developed criteria for the selection committee's use in making its determination of the firm to be selected. He stated the selection committee's recommendation is anticipated to be ready for presentation to the Commissioner's Court, possibly as soon as their next meeting.

C.M. Balli joined the meeting at 1:57 p.m.

F. Administrative change to the TIP Amendment approved October 16, 2016 meeting approving the PS&E funds for the Jacaman and Airport Overpasses. Remove Airport overpass and replace with Del Mar Overpass utilizing the existing allocated funds. (CBI funds FY 2018 Letting).

C.M. San Miguel made a motion to **approve** the removal of the Airport overpass, replacing it with the Del Mar Overpass project, and utilizing the existing allocated funds. (CBI funds FY 2018 Letting).

Second: C.M. Altgelt
For: 8
Against: 0
Abstained: 0

Motion carried unanimously

V. REPORT(S) AND PRESENTATIONS (No action required)

A. Status of submission of Infra Grant application.

Mr. Bratton gave a brief presentation on the item. He stated the first draft of the application had been submitted. TxDOT had received a draft of the application and Ms. Montemayor was heavily involved in the development of the application.

C.M. Altgelt requested Mr. Bratton return to the next meeting with information on the relative competitiveness of the application.

Mr. Bratton stated the application was due for submittal by November 2, 2017, by 8:00 p.m.

B. Presentation by TxDOT on the IH 35 Corridor Projects from mile marker 6 to mile marker 30.

Luis Villarreal, TxDOT, gave a brief presentation on the IH 35 Corridor Projects from mile marker 6 to mile marker 30.

The IH 35 Corridor Projects were as follows:

CSJ 0018-06-136 - Highway Overpass (Union Pacific Railroad Grade Separation)
CSJ 0018-06-183 - construction of Direct Connector Interchange #5
CSJ 0018-05-900 - widening of Carriers Drive Bridge
CSJ 0018-06-910 - widening of United Avenue Overpass
CSJ 0018-06-184 - for the construction of Direct Connector Interchange #8
CSJ 0018-06-185 - for the construction of Direct Connector Interchange #3
CSJ 0018-06-186 - for the construction of Direct Connector Interchange #4
CSJ 0018-06-187 - for the construction of Direct Connector Interchange #6
CSJ 0018-05-089 - bridge replacement (schematic & PS&E)
CSJ 0018-05-988 - widening to 6 lanes/railroad grade separation/direct connectors
CSJ 0018-04-988 - widening to 6 lanes
CSJ 0018-03-988 - widening to 6 lanes

Ms. Montemayor stated TxDOT would consider using Strategy 111funds on future Mines Road improvements.

Mr. Bratton, MPO Director, recommended that the MPO consider requesting that TxDOT utilize Strategy 111 funds to develop a schematic for Mines Road improvements, and thereby facilitate future funding thru project readiness enhancement.

Ms. Montemayor suggested a ROW, conceptual schematic, and constraints analysis study be developed for the mid/long-range Mines Road improvements recommended by the TTI study.

Mayor requested Ms. Montemayor's suggestion, recommending the development of a R.O.W., conceptual schematic, and constraints analysis for Mines Road, be placed on the next MPO Policy Committee agenda.

C.M. Altgelt requested a presentation on the proposed alignment of the Outer Loop at the next MPO Policy meeting.

C. TxDOT report on the feasibility of implementing a bike lane on FM 3338.

Although TxDOT would not build a true bike lane on FM 3338, Ms. Montemayor stated TxDOT would ensure that the FM 3338 roadway would include a ridable smooth surface on the 10-foot shoulder. Furthermore, the shoulder would be striped as a shared use facility due to the rural nature of the area.

D. TxDOT report on the status of ongoing construction projects.

Carlos Rodriguez, TxDOT, stated the Clark overpass project was approximately 98 percent complete and would be ready by December 2017. He stated the project over the railroad on Loop 20 would be completed by approximately December 2018.
He stated the overpass on Loop 20 and International would be completed by early December 2017.

TxDOT continues to work on the roadway overlay projects located in north and south Laredo. Work continues on 359, from Loop 20, to about 4 miles east of Loop 20.
Mr. Rodriguez stated the date for the Main Lanes over Loop 20 ground breaking ceremony had not yet been finalized.

C.M. San Miguel requested a presentation by the developers on Riverbank Road at the next MPO meeting.

C.M. Altgelt requested TxDOT give a presentation at the next meeting on the funding sources available to the proposed Riverbank Road.

Ms. Montemayor stated TxDOT could return to the committee with ideas on possible funding sources.

E. Status report on the Regional Mobility Authority (RMA).

Ruben Soto, Chairman, RMA, stated City Council authorized the RMA to develop a study on a Transportation Reinvestment Zone (TRZ) from US 59 to US 83.

Mr. Soto inquired on the status of the setback ordinance.

Mr. Bratton stated he had reviewed State guidance on setbacks as well as Bryan Texas and College Station. He stated he was waiting on guidance from El Paso, Texas. He stated the Bryan and College Station ordinances were only for study purposes, not for corridor maintenance preservation.

C.M. Altgelt requested Mr. Bratton present a draft ordinance so that Council could initiate a discussion on the subject.

Mr. Bratton stated he can have it ready in two City Council meetings.

Mr. Soto recommended the City consider exchanging lane miles from San Bernardo or Clark to the Vallecillo Road project and thus make the project eligible for funding.

C.M. Altgelt expressed his desire that the RMA begin focusing its efforts on the transit needs of the City of Laredo.

Antonio Rodriguez, Howard, Needles, Tammen, & Bergendoff (HNTB, Inc.), stated the RMA had already begun reviewing the Laredo Comprehensive Plan and various areas where the RMA could assist the City with its transit needs.

C.M. Altgelt requested a presentation by the RMA on suggestions for purposes of mass transit at the next MPO Policy meeting.

The RMA's consultant reported that they had already investigated the development of a proposed regional Mines Road traffic study and estimate the cost of said study would be $635,000.

C.M. Altgelt reminded the RMA to consider light rail when developing their scope of services.

C.M. San Miguel requested a presentation from the RMA and its consultant, on its proposed scope of services for the regional Mines Road Traffic study.

F. Letting date for Flecha Lane/Las Cruces realignment project CSJ 0922-33-076 is proposed to be moved from September 2017 (FY 2018) to August 2018 (FY 2018).

Gabriel Martinez, City Engineering, stated the acquisition of R.O.W. had not yet been completed.

C.M. Altgelt requested a representative from the City of Laredo Real Estate Division be present at the next MPO meeting to report on the status of the R.O.W. acquisition.

C.M. Altgelt further requested that a representative from CEC Engineering be present at the next meeting to report on the status of specification updates, Army Corps of Engineers permitting, and request for additional funding for the Flecha/Las Cruces project.

C.M. Gonzalez left the meeting at 3:29 p.m.

G. Letting date for Calton Railroad grade separation project (CSJ 0922-33-093) is proposed to move from November 2017 (FY 2018) to August 2018 (FY 2018).

Mr. Martinez stated that the plans and specifications were being updated in order to comply with TxDOT's recently revised specification standards.

Ana Duncan, TxDOT, stated TxDOT was reviewing a proposed contract amendment to acertain that all required federal procedures were being followed. She also stated TxDOT would require further supporting documentation from the City regarding its project negotiations process.

C.M. Altgelt requested the Calton Railroad Grade Separation item be placed on the next MPO Policy agenda as a discussion with possible action item.

VI. ADJOURNMENT

C.M. Algelt made a motion to adjourn the meeting at 3:34 p.m.

Second:	Judge Tijerina
For:	5
Against:	0
Abstained:	0

Motion carried unanimously

Nathan R. Bratton,
MPO Director

Pete Saenz, Mayor and
LUTS Chairperson

LAREDO URBAN TRANSPORTATION STUDY
ACTION ITEM

DATE:	**SUBJECT:** MOTION
11-20-17	Receive public testimony and initiate a ten-day public review and comment period for the following proposed amendment(s) to the 2017-2020 Transportation Improvement Program (TIP): 1. ***Removal*** of project CSJ 0086-14-082 intended to provide for the development of plans, specifications, and estimates (PS&E) for the Jacaman and Airport overpasses. Proposed work has an estimated cost of 4.6 million dollars. ***Rationale***: All 4.6 million in project funds are being transferred to (grouped) project identified as CSJ 0086-14-058 intended to provide for the development of PS&E, schematic, environmental, right of way (ROW) surveying/mapping on Loop 20, from International Boulevard to Saunders Avenue. TIP 17-20/REV 04

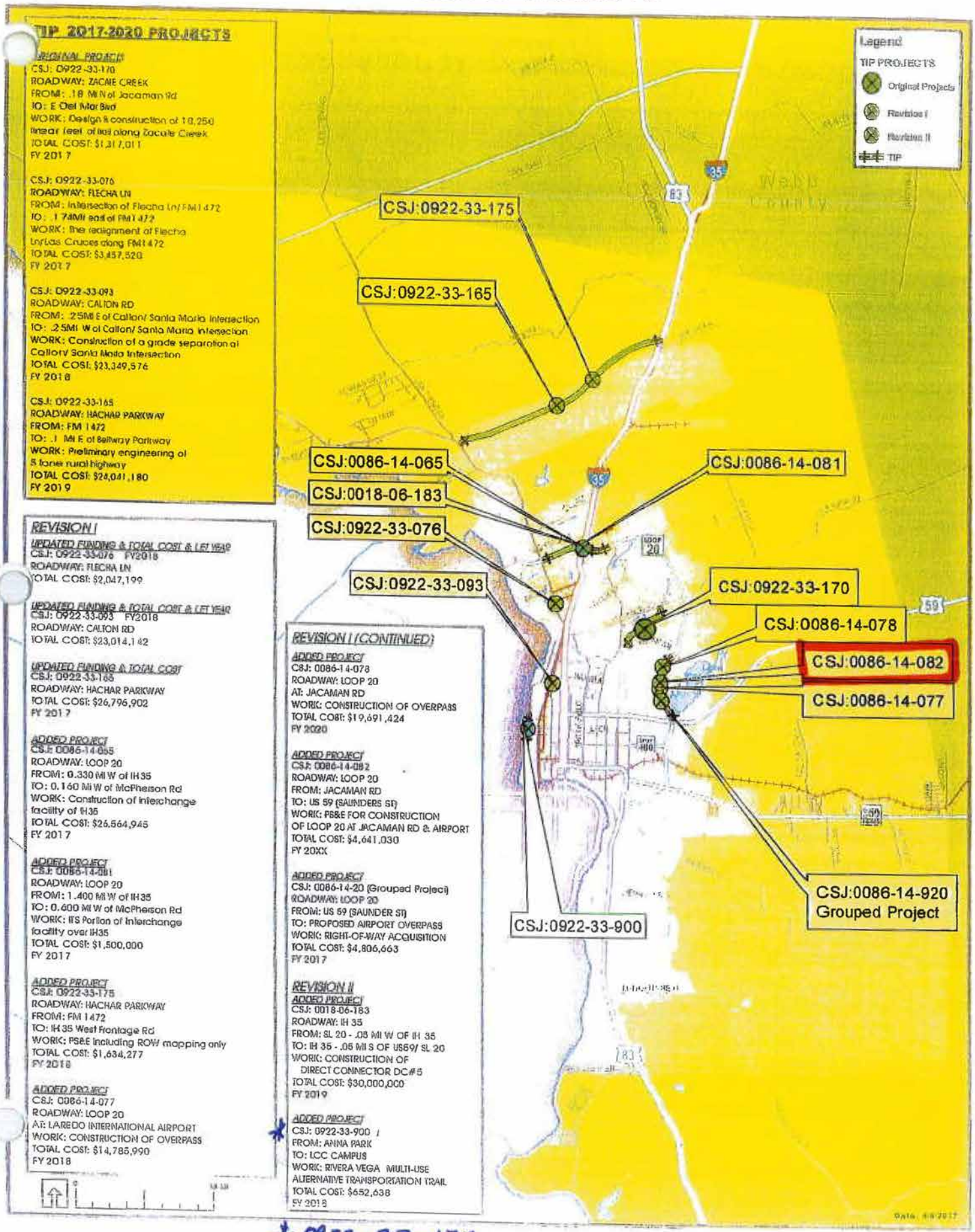
INITIATED BY: TxDOT/MPO	**STAFF SOURCE:** Nathan Bratton, MPO Director

PREVIOUS ACTION:
On 07/18/16, The Policy Committee approved revision #1. On 09/19/16, the Policy Committee approved revision #1-B. On May 15th, 2017, the Policy Committee approved Revision #2. The Policy Committee approved Revision 3 on July 17, 2017.

BACKGROUND: See attachments for full revision details.

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

2017-2020 TIP
LOCATIONS OF PROJECTS



* 0922-33-177

2017-2020 Laredo TIP - Revision 4 - Project Summaries

Remove

0086-14-082 US 59 Phase E Let 8/17 (FY 17)

Prev. 0086-14-910

From: International Boulevard

To: US 59/LP 20 Interchange

For development of PS&E for Jacaman Road and Airport overpasses.

PS&E							
PE	4,641,030	FUNDS	Federal	State	Local	LC	TOTAL
Construction	0	10-CBI	3,712,824	928,206	0	0	4,641,030
Const Eng	0						
Conting	0						

Vanessa Guerra

From: Randy Aguilar <Randy.Aguilar@txdot.gov>
Sent: Monday, November 06, 2017 1:41 PM
To: Vanessa Guerra
Subject: Updates

Vanessa,

QUESTION #1: TXDOT RESPONSE
Roberto and I talked with Lori this morning about the 082 money moving to 058. She advised that we need to do a revision to cancel 082. Since 058 already let and is grouped, nothing has to be done there.

QUESTION #2 TXDOT RESPONSE
We are in the process of updating CSJ:0086-14-077 to add $2.43million CBI to replace the Prop 1 funds that were transferred to 065. (NO TIP REVISION REQUIRED)

I was advised that Zacate Creek Hike & Bike was to be moved from November 2017 to January 2018. An LSM was submitted last month and it was approved Friday November 3rd. DCIS has been updated.

Randy Aguilar
Planner
TxDOT Laredo District
956-712-7457

Vanessa Guerra

From: Vanessa Guerra
Sent: Wednesday, November 01, 2017 4:20 PM
To: 'Lori Morel'
Cc: Karen Burkhard
Subject: TIP questions

Hi Lori,

I have a couple of questions for you.

1. 0086-14-082 – PS&E for Jacaman and Airport overpasses – 4.6 million – TIP FY 2017

TxDOT is requesting that this project be revised to:

- remove Airport and replace with Del Mar.

THEN

- Move the 4.6 million (with its new scope of work Jacaman and DEL MAR, PS&E) from this project to a GROUPED project 0086-14-058, which already let.

It seems the funds have already been moved in DCIS and the AFA's already reflect the additional 4.6 million.

How would I go about doing this change in the TIP?

2. 0086-14-077- construct Airport overpass – 14,785,990 – FY 2024
0086-14-065 – construct Loop 20 interchange – 25,564,945- FY 2017

TxDOT is requesting to swap 2.4 million in Prop 1 Cat 2 monies from 077 and move to 065, and replace with 2.4 million CBI from 065 to 077

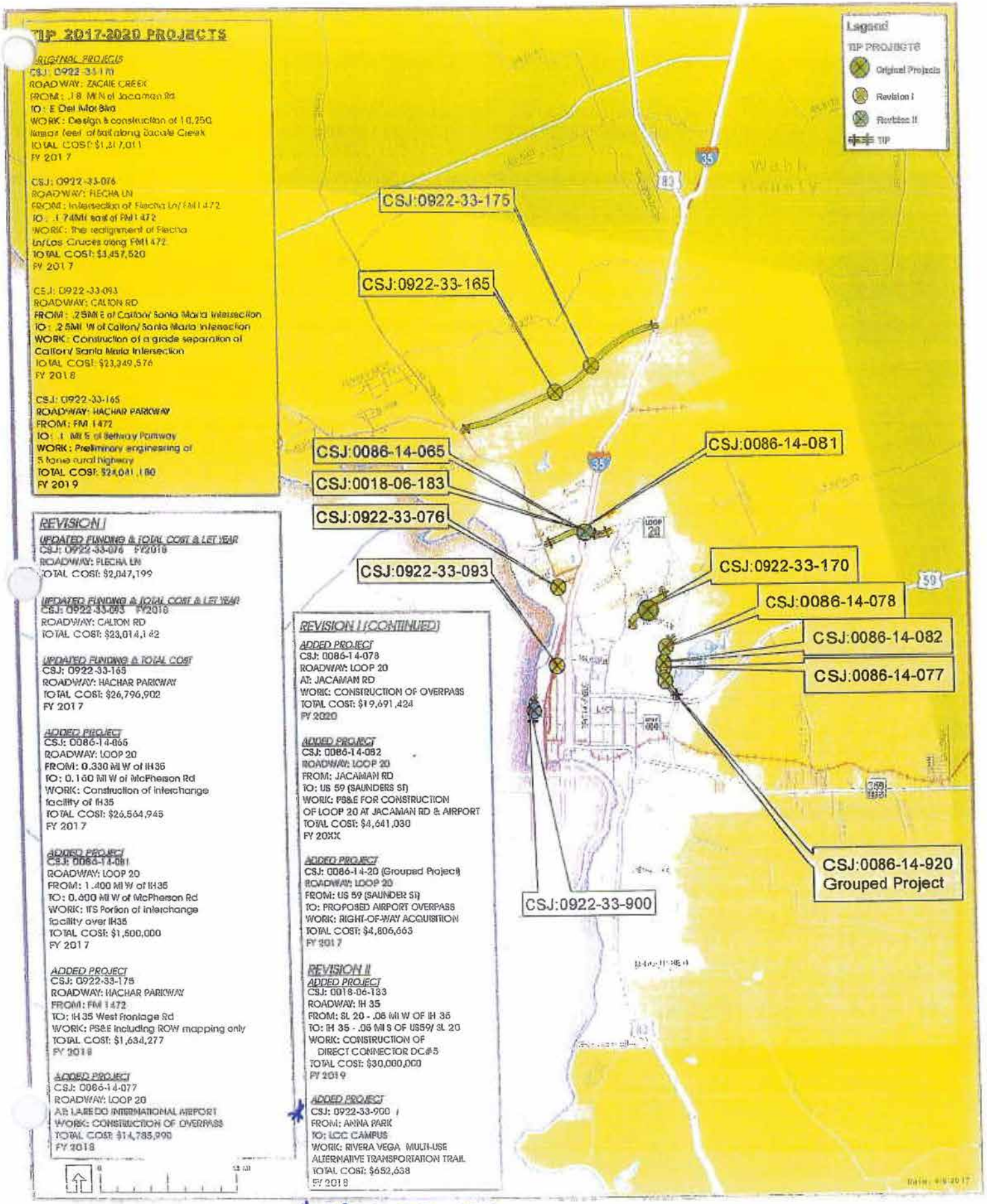
Issue is 077 is outside of the TIP and 065 already let.

Again, how would I go about doing this change in the TIP?

C. Motion supporting Webb County's request to re-allocate all surplus funds, in the approximate amount of $3,087,361.75 from CSJ0086-14-065 (Mainlanes over I35), and approving TxDOT's re-allocation of said surplus funds to CSJ 0086-14-058, a grouped project, for Schematic, PS&E, Environmental, and right-of-way mapping and surveying and which generally includes, as its project limits, From: International To: US 59 Business (Saunders Ave.).

2017-2020 TIP

LOCATIONS OF PROJECTS



TIP 2017-2020 PROJECTS

ORIGINAL PROJECTS
CSJ: 0922-33-170
ROADWAY: ZACATE CREEK
FROM: .18 MI N of Jacaman Rd
TO: E Del Mar Blvd
WORK: Design & construction of 10,250 linear feet of trail along Zacate Creek
TOTAL COST: $1,317,011
FY 2017

CSJ: 0922-33-076
ROADWAY: FLECHA LN
FROM: Intersection of Flecha Ln/ FM 1472
TO: .17MI east of FM 1472
WORK: The realignment of Flecha Ln/Las Cruces along FM 1472
TOTAL COST: $3,457,520
FY 2017

CSJ: 0922-33-093
ROADWAY: CALTON RD
FROM: .25MI E of Calton/ Santa Maria Intersection
TO: .25MI W of Calton/ Santa Maria Intersection
WORK: Construction of a grade separation at Calton/ Santa Maria Intersection
TOTAL COST: $23,249,576
FY 2018

CSJ: 0922-33-165
ROADWAY: HACHAR PARKWAY
FROM: FM 1472
TO: .1 MI S of Beltway Parkway
WORK: Preliminary engineering of 5 lane rural highway
TOTAL COST: $24,041,180
FY 2019

REVISION I

UPDATED FUNDING & TOTAL COST & LET YEAR
CSJ: 0922-33-076 FY2018
ROADWAY: FLECHA LN
TOTAL COST: $2,047,199

UPDATED FUNDING & TOTAL COST & LET YEAR
CSJ: 0922-33-093 FY2018
ROADWAY: CALTON RD
TOTAL COST: $23,014,142

UPDATED FUNDING & TOTAL COST
CSJ: 0922-33-165
ROADWAY: HACHAR PARKWAY
TOTAL COST: $26,796,902
FY 2017

ADDED PROJECT
CSJ: 0086-14-065
ROADWAY: LOOP 20
FROM: 0.330 MI W of IH35
TO: 0.160 MI W of McPherson Rd
WORK: Construction of interchange facility of IH35
TOTAL COST: $26,564,945
FY 2017

ADDED PROJECT
CSJ: 0086-14-081
ROADWAY: LOOP 20
FROM: 1.400 MI W of IH35
TO: 0.600 MI W of McPherson Rd
WORK: ITS Portion of interchange facility over IH35
TOTAL COST: $1,500,000
FY 2017

ADDED PROJECT
CSJ: 0922-33-175
ROADWAY: HACHAR PARKWAY
FROM: FM 1472
TO: IH 35 West Frontage Rd
WORK: PS&E including ROW mapping only
TOTAL COST: $1,634,277
FY 2018

ADDED PROJECT
CSJ: 0086-14-077
ROADWAY: LOOP 20
AT: LAREDO INTERNATIONAL AIRPORT
WORK: CONSTRUCTION OF OVERPASS
TOTAL COST: $14,785,990
FY 2018

REVISION I (CONTINUED)

ADDED PROJECT
CSJ: 0086-14-078
ROADWAY: LOOP 20
AT: JACAMAN RD
WORK: CONSTRUCTION OF OVERPASS
TOTAL COST: $19,691,424
FY 2020

ADDED PROJECT
CSJ: 0086-14-082
ROADWAY: LOOP 20
FROM: JACAMAN RD
TO: US 59 (SAUNDERS ST)
WORK: PS&E FOR CONSTRUCTION OF LOOP 20 AT JACAMAN RD & AIRPORT
TOTAL COST: $4,641,030
FY 20XX

ADDED PROJECT
CSJ: 0086-14-920 (Grouped Project)
ROADWAY: LOOP 20
FROM: US 59 (SAUNDER ST)
TO: PROPOSED AIRPORT OVERPASS
WORK: RIGHT-OF-WAY ACQUISITION
TOTAL COST: $4,806,663
FY 2017

REVISION II

ADDED PROJECT
CSJ: 0018-06-183
ROADWAY: IH 35
FROM: SL 20 - .06 MI W OF IH 35
TO: IH 35 - .06 MI S OF US59/ SL 20
WORK: CONSTRUCTION OF DIRECT CONNECTOR DC#5
TOTAL COST: $30,000,000
FY 2019

ADDED PROJECT
CSJ: 0922-33-900
FROM: ANNA PARK
TO: LCC CAMPUS
WORK: RIVERA VEGA MULTI-USE ALTERNATIVE TRANSPORTATION TRAIL
TOTAL COST: $652,638
FY 2018

+ 0922-33-177

Project Summaries

0086-14-082 US 59 Phase E Let 8/17 (FY 17)
Prev. 0086-14-910

From: International Boulevard

To: US 59/LP 20 Interchange

For development of PS&E for Jacaman Road and Airport overpasses.

PS&E

PE	4,641,030	FUNDS	Federal	State	Local	LC	TOTAL
Construction	0	10-CBI	3,712,824	928,206	0	0	4,641,030
Const Eng	0						
Conting	0						

0086-14-065 LP 20 Phase C Let 1/17 (FY 17)

From: 0.330 Miles W of IH 35

To: 0.160 Miles W of McPherson

For the construction of an interchange facility over IH 35

PE	1,639,489	FUNDS	Federal	State	Local	LC	TOTAL
Construction	25,564,945	10-CBI	20,451,956	5,112,989	0	0	25,564,945
Const Eng	1,569,226	11	1	0	0	0	1
Conting	1,000,423	TOTAL:					25,564,945

00086-14-920 f Hachar/Reuthinger Phase E Let 2/17 (FY 17) **GROUPED**

From: FM 1472

To: IH 35 West Frontage Road

PS&E including ROW Mapping only

PE	80,079	FUNDS	Federal	State	Local	LC	TOTAL
Construction	1,634,277	CAT 7	1,307,421	0	326,855	0	1,634,277
Const Eng	79,916						
Conting	18,467						

Vanessa Guerra

From: Nathan R. Bratton
Sent: Wednesday, November 08, 2017 2:40 PM
To: 'Guillermo B. Cuellar'; Vanessa Guerra
Cc: Luis Perez Garcia III; Lalo Uribe; Jones Louis; 'Randy.Aguilar@txdot.gov'; Melisa D. Montemayor (Melisa.Montemayor@txdot.gov); 'Anthony Garza'; David.salazar@txdot.gov; Roberto Rodriguez (Roberto.Rodriguez@txdot.gov); Alberto Ramirez (Alberto.Ramirez@txdot.gov)
Subject: MPO Agenda Item - surplus funds from Mainlanes over I35

I am going to try to bring some clarity and offer a possible solution to further the County's request to utilize surplus funds that remained after the letting of the Mainlanes over 35 project (CSJ OO86-14-065).

07-18-16 Loop 20 Main lanes Over 35 had a programmed budget $39.1 million in CBI funds. You will recall there was much debate regarding the program budget as the consultants had estimated substantially less for the cost of the project. It was agreed that the $39.1m would be left as the project cost and that any surplus would be re-programmed after the project let so that we would be using actual numbers. When the project was let the cost was $26,564,945.25 (CSJ OO86-14-065). So the math is as follows:

$39,100,000.00 (Original budgeted cost of CSJ0086-14-065 Mainlanes over I35)
-$26,564,945.25 (Actual "let" cost of CSJ0086-14-065)
$12,535,054.75 (Surplus)

Of this surplus amount:

$4,641,030.00 was re-programmed to PS&E for Jacaman and Airport (CSJ 0086-14-082), at the last MPO the action taken by the Policy Committee was, at the request of TxDOT, to remove Airport from CSJ 0086-14-082 and replace it with Del Mar. So, CSJ 0086-14-082 is now PS&E for Jacaman and Del Mar. At the upcoming meeting of November 20, 2017 there is an item to remove CSJ 0086-14-082 entirely from the TIP. It is our understanding that TxDOT will be moving this money along with Jacaman and Del Mar to CSJ 0086-14-058 (this is the grouped project for Schematic, PS&E, Environmental, and right-of-way mapping and surveying as identified in the MTP) and as you know, and confirmed by Ms. Lori Morel, Transportation Planner, Transportation Planning and Programming Division, the MPO does not modify the STIP for grouped projects as grouped projects do not appear in the STIP/TIP. Further, CSJ 0086-14-058 will generally include as its project limits From: International To: US 59 Business (Saunders Ave.)

So, now back to the math:

$12,535,054.75 (Surplus)
-$ 4,641,030.00 to (Jacaman and Airport, CSJ 0086-14-082, proposed to move to CSJ 0086-14-058 (Grouped Project) on November 20, 2017.)
$ 7,894,024.75 (Surplus)

Next $4,806,663 was re-programmed to ROW for US 59(Saunders Ave.) to Airport.

$7,894,024.75 (Surplus)
-$4,806,663.00 to (CSJ 0086-14-920 Grouped Project) ROW for US 59 (Saunders Ave.) to Airport
$3,087,361.75 (Surplus)

Assuming the monetary values set forth above are correct the surplus available for re-programming/re-allocation is **$3,087,361.75.** The county is requesting that this sum be added to CSJ 0086-14-058 (which generally includes as its

project limits From: International To: US 59 Business (Saunders Ave.)) and is a grouped project for Schematic, PS&E, Environmental, and right-of-way mapping and surveying.

As we know, the surplus funds ($3,087,361.75) come from CSJ0086-14-065 Mainlanes over I35. This project is a project which has already "let" and as such is no longer in the STIP/TIP and cannot be revised. Further, County requests the funds be allocated to CSJ 0086-14-058 (Grouped Project), and we know, Grouped Projects are not in the STIP/TIP. Therefore, the allocation of these funds, as requested by the County, must be implemented through TxDOT's internal process.

To facilitate the allocation of the surplus funds ($3,087,361.75) I recommend that an item be placed on the Policy Committee Meeting Agenda as follows: "Motion supporting Webb County's request to re-allocate all surplus funds, in the approximate amount of $3,087,361.75 from CSJ0086-14-065 (Mainlanes over I35), and approving TxDOT's re-allocation of said surplus funds to CSJ 0086-14-058, a grouped project, for Schematic, PS&E, Environmental, and right-of-way mapping and surveying and which generally includes, as its project limits, From: International To: US 59 Business (Saunders Ave.)."

Finally, this re-allocation through TxDOT's internal process has been discussed with Mr. Randy Aguilar, Laredo District, TxDOT, and he advises that funds can be placed in the CSJ 0086-14-058 upon the request or direction of the MPO Policy Committee.

Please let me know your thoughts and concerns regarding this matter as soon as possible.

Thank you,
Nathan R. Bratton

From: Guillermo B. Cuellar [mailto:gbcuellar@webbcountytx.gov]
Sent: Wednesday, November 08, 2017 10:14 AM
To: Vanessa Guerra
Cc: Luis Perez Garcia III; Lalo Uribe; Jones Louis; Nathan R. Bratton; Anthony Garza
Subject: RE: MPO Agenda Item

Good morning Vanessa,

I still recommend the following be added to the agenda. The agenda language should read as follows:

Revision of the TIP to include:

"Revision of project 0086-14-058 (grouped) to include the $3,160,645 in Coordinated Border Infrastructure Funds for PS&E of the Airport, Shiloh, and University Overpasses along Loop 20. CBI funds – 2018 letting). As approved in the June 19, 2017 adoption of the Loop 20 Overpass Funding Plan and subsequent July 17, 2017 ten (10) day review and comment period as approved by the MPO Policy Committee.

These funds will supplement the existing funds available and may be administratively moved into CSJs 0086-14-075 (Del Mar Overpass), 0086-14-076 (Shiloh Overpass), 0086-14-077(Airport Overpass), 0086-14-078 (Jacaman Overpass), and 0086-14-079 (University Overpass) on an as needed basis for project completion"

The $3,160,645 is part of the left over portion of surplus CBI funds that came about from the reduction of the Loop 20 Main lanes over 35 from $39.1 million to $26,564,945.25 (0086-14-065) which created a surplus of about $12,535,054.75. Of that $12,535,054.75, about $9.3 m has already been allocated to PS&E and ROW and now we want the remaining $3.1 m to be allocated as well. Since the $3.1 has not been allocated yet we recommend a revision to the TIP.

Should you have questions, please let me know.

Thank you.

Guillermo B. Cuellar, P.E.
Assistant County Engineer

Webb County Engineering Department
1620 Santa Ursula, 2nd Floor
Laredo, Texas 78040
(956) 523-4185 Telephone
(956) 763-7097 Cell
(956) 523-5158 Fax
gbcuellar@webbcountytx.gov

From: Vanessa Guerra [mailto:vguerra@ci.laredo.tx.us]
Sent: Tuesday, November 07, 2017 2:52 PM
To: Guillermo B. Cuellar
Cc: Luis Perez Garcia III; Lalo Uribe; Jones Louis; Nathan R. Bratton
Subject: RE: MPO Agenda Item

Good afternoon Mr. Cuellar,

As promised, I followed up with Kirk Fauver, our area Federal Highway Administration representative, regarding the proposed MTP revision. He confirmed that let projects need not appear in the MTP. Again, let me know if you have any questions. Thanks. VG

Vanessa Guerra
Planner III : City of Laredo Planning Department : Laredo Metropolitan Planning Organization : 1120 San Bernardo Ave. : P.O. Box 579 : Laredo Texas 78042-579 : Main: 956-794-1613 : Dir.: 956-794-1604 : Fax: 956-794-1624 : vguerra@ci.laredo.tx.us

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From: Vanessa Guerra
Sent: Monday, November 06, 2017 4:20 PM
To: 'Guillermo B. Cuellar'
Cc: Luis Perez Garcia III; Lalo Uribe; Jones Louis; Nathan R. Bratton
Subject: RE: MPO Agenda Item

Good afternoon Mr. Cuellar,

A TIP revision is not required. The 0086-14-058 project is a grouped project. Formal TIP revisions, thru the MPO, are required on non-grouped projects only. TxDOT addresses funding issues relating to grouped projects. Please contact them regarding this project.

MTP revision is not required. This project let in 2013. I will reconfirm with FHWA, however MTP revisions are not typically required for projects that have already let.

Please do not hesitate to contact me should you have any questions. Thanks. V.

Vanessa Guerra
Planner III : City of Laredo Planning Department : Laredo Metropolitan Planning Organization : 1120 San Bernardo Ave. : P.O. Box 579 : Laredo Texas 78042-579 : Main: 956-794-1613 : Dir.: 956-794-1604 : Fax: 956-794-1624 : vguerra@ci.laredo.tx.us

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From: Guillermo B. Cuellar [mailto:gbcuellar@webbcountytx.gov]
Sent: Monday, November 06, 2017 2:56 PM
To: Nathan R. Bratton
Cc: Vanessa Guerra; Luis Perez Garcia III; Lalo Uribe; Jones Louis
Subject: FW: MPO Agenda Item

Good afternoon Mr. Bratton,

The MPO is pending the programming of funds to the TIP for the 3.2 Million in CBI funds for the PS&E on Delmar, Shiloh, and University. This has all been included in previous MPO actions. Please refer to the attachments and Anthony Garza's email in the thread below for additional information.

Thank you.

Guillermo B. Cuellar, P.E.
Assistant County Engineer

Webb County Engineering Department
1620 Santa Ursula, 2nd Floor
Laredo, Texas 78040
(956) 523-4185 Telephone
(956) 763-7097 Cell
(956) 523-5158 Fax
gbcuellar@webbcountytx.gov

From: Anthony Garza [mailto:danthonygarza@gmail.com]
Sent: Monday, November 06, 2017 11:50 AM
To: Guillermo B. Cuellar
Cc: Jones Louis; Lalo Uribe; Luis Perez Garcia III
Subject: MPO Agenda Item

Good Morning Memo,

The MPO is pending the programming of funds to the TIP for the 3.2 Million in CBI funds for the PS&E on Delmar, Shiloh, and University. The county needs to remind Nathan that this was approved by the MPO on July 17, 2017 and needs to be added to the TIP. This is CBI funds remaining from the Loop 20 at 35 project are the source of the funding. This has all been included in the previous MPO actions.

The agenda language should read

Revision of the TIP and MTP to include:

"Revision of project 0086-14-058 to include the $3,160,645 in Coordinated Border Infrastructure Funds for PS&E of the Airport, Shiloh, and University Overpasses Along Loop 20. CBI funds – 2018 letting). As approved in the June 19, 2017 adoption of the Loop 20 Overpass Funding Plan and subsequent July 17, 2017 ten (10) day review and comment period as approved by the MPO Policy Committee.

These funds will supplement the existing funds available and may be administratively moved into CSJs 0086-14-075 (Del Mar Overpass), 0086-14-076 (Shiloh Overpass), 0086-14-077(Airport Overpass), 0086-14-078 (Jacaman Overpass), and 0086-14-079 (University Overpass) on an as needed basis for project completion"

This is a critical item. Bakcup attached. Let me know if you need any info.

Thanks,

-AG

D. Motion on City's request for $10 million in CBI funding for the World Trade Bridge FASTLANE project as follows (and any matters incident thereto):

– Move from CSJ 0086-14-058 PS&E of Airport and Jacaman *($4,641,030 CBI funds previously approved MPO action 10/16/16)*	$4,641,030.00
– Move from CSJ 0086-14-920 ROW on Loop 20 from US 59 to Airport Overpass *($4,806,663 CBI funds previously approved MPO action 10/16/16)*	$2,271,609.00
– Move remaining surplus CBI funds from Loop 20/IH 35 main lanes CSJ 0086-14-065 which let in July 2017	$3,087,361.75
Total CBI Funds to	**$10,000,000.75**

– Supplement US 59 Loop PS&E development with TxDOT Strategy 111 funds	$4,641,030.00
– Supplement US 59 Loop ROW from US 59 to Airport with TxDOT ROW funds	$2,271,609.00
– Propose use of TxDOT Strategy 111 funds for additional US 59 Loop PS&E development to offset surplus	$3,087,361.75
Total:	**$10,000,000.75**

– Additional CBI funds which remain in CSJ 0086-14-920	$2,535,054.00
Original	**$12,535,054.75**

Surplus available from Loop 20/IH 35 mainlanes project (CSJ 0086-14-065) which let July 2017

$12,535,054.75

Proposed Actions for MPO Meeting (11/20/2017):

City of Laredo Action:

- Move from CSJ 0086-14-058 PS&E of Airport and Jacaman *($4,641,030 CBI funds previously approved MPO action 10/16/16)*	$4,641,030.00
- Move from CSJ 0086-14-920 ROW on Loop 20 from US 59 to Airport Overpass *($4,806,663 CBI funds previously approved MPO action 10/16/16)*	$2,271,609.00
- Move remaining surplus CBI funds from Loop 20/IH 35 mainlanes CSJ 0086-14-065 which let in July 2017	$3,087,361.75
Total CBI Funds to 559 project:	**$10,000,000.75**

TxDOT Action:

- Supplement US 59 Loop PS&E development with TxDOT Strategy 111 funds	$4,641,030.00
- Supplement US 59 Loop ROW from US 59 to Airport with TxDOT ROW funds	$2,271,609.00
- Propose use of TxDOT Strategy 111 funds for additional US 59 Loop PS&E development to offset surplus amount	$3,087,361.75
Total:	**$10,000,000.75**

- Additional CBI funds which remain in CSJ 0086-14-920	$2,535,054.00
Original Surplus Amount:	**$12,535,054.75**

E. Discussion with possible action on TxDOT's proposed development of a Right of Way (ROW), conceptual schematic and constraints analysis for the mid to long range improvements recommended by the TTI study for Mines Road.

F. Discussion with possible action on the Regional Mobility Authority's funding and its proposed system infrastructure project approach alternatives.

WCCLRMA

WEBB COUNTY- CITY OF LAREDO REGIONAL MOBILITY AUTHORITY

Strategic Workshop II: Transportation Projects Delivery for Webb County/City of Laredo

October 26, 2017

HNTB

AGENDA

- ❑ Welcome, Local Dignitary Introductions
  - ❖ WCCL RMA Chairman Ruben Soto
  - ❖ Recognize WCCL RMA Board Members
  - ❖ Recognize Local Elected Officials and TXDOT Representatives

- ❑ Workshop Goals
  - ❖ WCCL RMA Chairman Ruben Soto

Role of the WCCL RMA in the Community (Chairman Ruben Soto)

- ❑ What can the RMA do for the Laredo Community? (Chairman Soto and GEC)
- ❑ Discuss Possible Funding Tools (Chairman Soto and GEC)
- ❑ Discuss Priority Projects (Chairman Soto and GEC)
  - ❖ Webb County Perspective - Judge Tano Tijerina
  - ❖ City of Laredo Perspective - Mayor Pete Saenz/ City Manager Horacio DeLeon
  - ❖ TxDOT Perspective - District Engineer David Salazar/ District Administrator Melisa Montemayor

- ❑ Next Steps
- ❑ Adjournment

Role of the WCCL RMA

An RMA is a political subdivision formed by one or more counties or certain cities to finance, acquire, design, construct, operate, maintain, expand or extend transportation projects.

Our role is to expedite the planning, financing and construction of multi-modal projects.

- **We were enacted by the State Legislature to get projects completed that TxDOT and Municipalities (Counties and Cities) could not accomplish on their own.**

Role of the WCCL RMA

WEBB COUNTY, TEXAS	§	**BEFORE THE:**
	§	
AND	§	**TEXAS TRANSPORTATION COMMISSION**
	§	
CITY OF LAREDO, TEXAS	§	
	§	
JOINT PETITIONERS	§	

AMENDED PETITION FOR AUTHORIZATION TO FORM
A
REGIONAL MOBILITY AUTHORITY

WHEREAS, on August 18, 2013, the Commissioners Court of Webb County, Texas, approved a Resolution and Order authorizing the County Judge to coordinate with and assist the City of Laredo, and to take those actions necessary to insure the creation of a Joint Webb County-City of Laredo Regional Mobility Authority; and

WHEREAS, on April 15, 2013, the City Council of the City of Laredo, Texas, authorized the City Manager to coordinate with, assist, and take those actions necessary to insure the creation of Joint County of Webb – City of Laredo Regional Mobility Authority; and

WHEREAS, pursuant to provisions of Texas Transportation Code Chapter 370 and 43 Texas Administrative Code (TAC) , Section 26.11, Webb County and the City of Laredo Texas are each authorized to petition the Texas Transportation Commission for the creation of a Regional Mobility Authority; and

WHEREAS, Webb County and the City of Laredo have jointly resolved to petition the Texas Transportation Commission for approval to create a Regional Mobility Authority; and

WHEREAS, an initial petition was submitted, reviewed by the Texas Department of Transportation (TxDOT), and TxDOT required the submission of additional information.

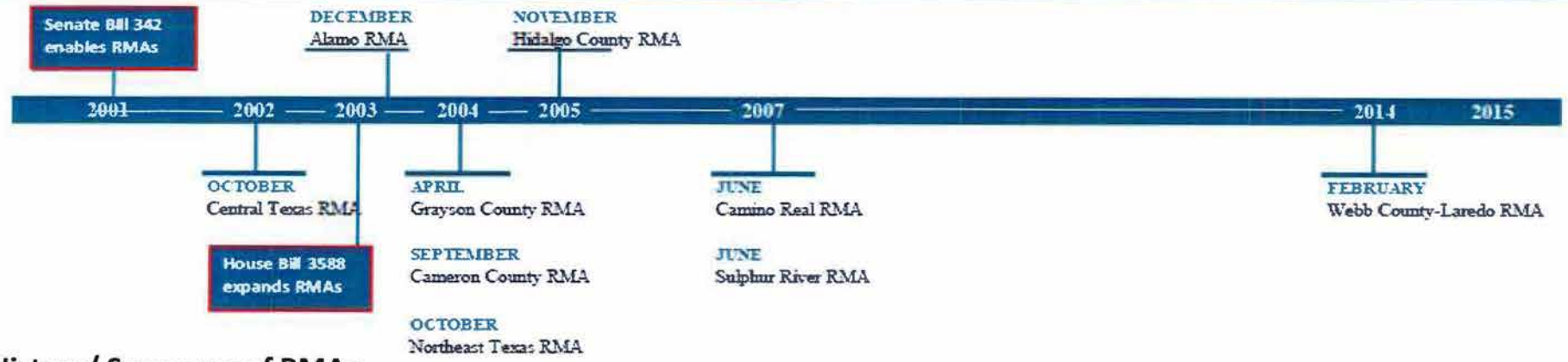
NOW COME, Webb County and the City of Laredo (hereinafter referred to as Petitioners) and tender this, their Amended Petition for Authorization to Form the Webb County – Laredo Regional Mobility Authority and, as required by 43 T AC Section 26.11 , the Petitioner submits the following in support of their petition.

1. WEBB COUNTY AND CITY OF LAREDO APPROVAL

On August 18, 2013 the Webb County Commissioners Court approved of the creation of the Webb County – City of Laredo Regional Mobility Authority (hereinafter referred to as Webb-Laredo RMA). A copy of the Webb County Commissioners Court Resolution is attached hereto as Attachment 1.

On April 15, 2013 the City Council of the City of Laredo approved of the creation of the Webb County – City of Laredo Regional Mobility Authority (hereinafter referred to as Webb - Laredo RMA). A copy of the City Council Resolution is attached hereto as Attachment 2.

History and Successes of the RMAs



History/ Successes of RMAs

- **CTRMA** was the first RMA in Texas to use Toll Revenues to fund improvements. It was the result of the State Laws getting streamlined and clarified to **accelerate mobility projects.** It was formed for the implementation of **US 183A (1st Toll Road in the Travis County and Williamson County Area) and other projects**. CTRMA has helped lead to the growth of **High Paying Jobs**!
- **NETRMA (12 Counties)** was formed to develop **Loop 49 Toll Road** among other projects to **improve mobility and spur economic development.**
- **Sulphur River RMA (3 Counties)** was formed in order to pool funding between Hunt, Delta and Lamar Counties to obtain a $38.5M SIB Loan to expand 10.4 miles of I-30 to **benefit mobility and spur economic development for all 3 Counties.**
- **CRRMA** is a City (El Paso) only sponsored RMA that has implemented the design build of the IH 10/ Loop 375 Interchange, led the procurement and management of the City Streetcar project, operate the City of El Paso Bike Share Program among others.
- **CCRMA** has incurred over $419M in project costs for the implementation of a POE Expansion (Veterans International Bridge) and a new Rail POE (West Rail) to **improve freight movement**.
- **ARMA** secured AARA funding for the Loop 1604/ US 281 Interchange and is developing Managed Lanes for Loop 1604 from SH 16 to IH 35.

HNTB

Regional Mobility Authorities in Texas: History and Current Status (PRC 15-41 F), Texas A&M Transportation Institute, dated Feb. 2016

Statewide RMA Project Summaries

RMA	Project Types	Total Incurred Project Costs	Funding Sources	Number of Tolled Facilities	Number of CDAs
Alamo	Highway Capacity and Operational Improvements Ramps, Interchanges Environmental Assessments	$197.1 M (*23*)	CDAs, American Recovery and Reinvestment Act (ARRA), TIFIA, TxDOT, Proposition 12 and 14 funds (*23*).	2 Planned (*24*)	0
Cameron County	Highway Capacity Bridge Expansion Rail Improvements Environmental Assessments	$419.6 M (*25*)	TxDOT Grants, Tiger II Grant, ARRA, Bonds based on Vehicle Registration Fee*26*	1 Open (*27*)	2 Planned (*28*)
Camino Real	Highway Capacity and operational improvements Transit/Streetcar Bike share	$348 M (*29*)	TxDOT Grants, SIB, CDAs, City of El Paso, El Paso MPO, UTEP	1 open, 1 Planned (*29*)	1 (*28*)
Central Texas	Highway Capacity and Operational Improvements Environmental Assessments	$2.19 B (*30, 31*)	CDAs, TxDOT Grants, Federal TIFIA grants, Senior Lien Bonds	3 (*27*)	2 (*28*)
Grayson County	Aviation Improvements Highway Capacity Feasibility Study Thoroughfare Plan	$95.4 M (*32*)	Federal ARRA, Grayson County, TxDOT Aviation Grant, Walton Development Funding Agreement, TxDOT Grant (*33*)	0	0
Hidalgo County	Highway Capacity International Bridge Environmental Assessment	$14.21 M (*3, 34*)	CDAs, Bonds from $10.00 vehicle registration fee, intergovernmental agreements with local cities, TxDOT Grants (*35*).	0	2
Webb County	No project information.				
Northeast Texas	Highway 49 Toll Road Rail plan Transit Planning	$242.2 M	TxDOT Financial Assistance, SIB, TxDOT Toll Equity Loans, Rusk Inter-local Agreement, TxDOT Grants (*36*)	1	2
Sulphur River	Highway Capacity	$3.8 M (*37*)	SIB (*38*)	0	0

HNTB

Regional Mobility Authorities in Texas: History and Current Status (PRC 15-41 F), Texas A&M Transportation Institute, dated Feb. 2016

Example Focus on CCRMA

Construction Projects Developed:

	Project Complete	CCRMA Funds/ Bond Funds	State/Federal Funds Leveraged	Other Local Funds	Sources
Olmito Switchyard & RIP	2013	$ 771,521	$ 9,919,810	$ 2,014,429	Federal, State, HRL, County (pending totals)
SH 550 1847	2011	2,345,000	8,080,897	-	Federal, State
SH 550 Port Spur	2013	6,198,978	47,902,939	-	Federal, State
U.S. 77/I-69 County Line & Sarita	2014	3,051,999	37,000,000	-	Federal, State
SH 550 Direct Connector	2015	56,091,211	39,141,590		Federal, Pass Through
West Rail Relocation (USA)	2015	4,488,594	39,266,076	5,184,516	Federal, FRA, State, County, CCRMA, COB (pending totals)
West Rail Relocation (Mexico)*	2015	-	90,000,000	-	Intl Coordination was managed by CCRMA secured funding from MX Fed Govt.
		$72,947,303	$271,311,312	$7,198,945	

Under Construction:

General Brant	Current	$ 408,824	$ 11,000,000	$ 4,000,000	Federal, State, County, CCRMA
FM 803	Current	232,596	10,000,000	-	Federal, State, CCRMA
SH 550 GAP I	Current	525,000	6,000,000	-	State, CCRMA
		$1,166,420	$27,000,000	$4,000,000	

Pre-Development/Environmental Phase:

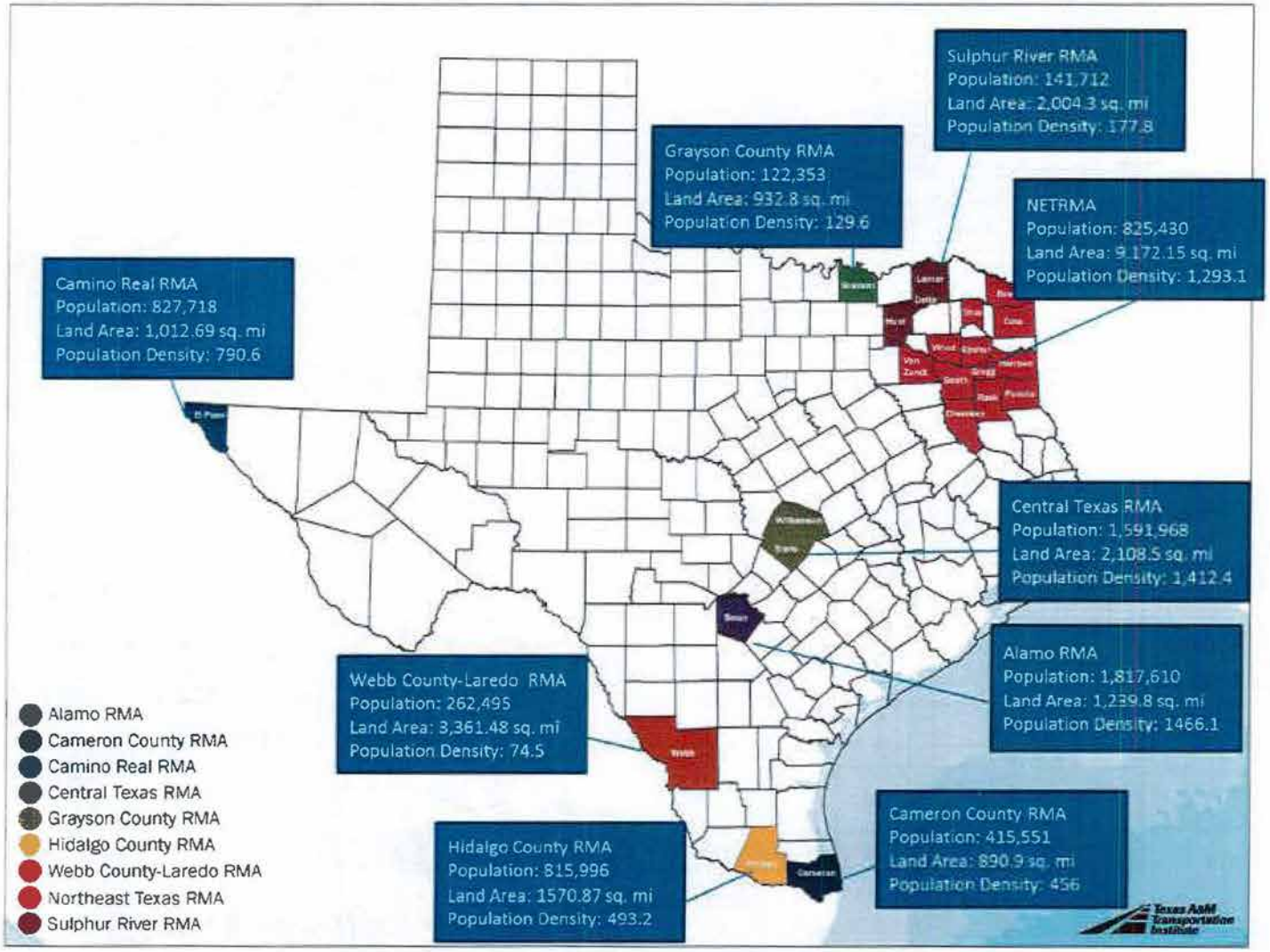
SH 550 Gap II	Current	$ -	$ 13,100,000	$ -	Federal, State
SPI 2nd Access	Current	187,578	17,800,000	-	State, CCRMA
SH 32 East Loop	Current	4,092,135	47,250,000	150,000	Federal, Pass Through, COB
Outer Parkway	Current	474,454	5,000,000	-	State, CCRMA
FM 1925	Current	250,000	2,000,000	750,000	State, HCRMA
281 Connector	Current	79,566	-	-	CCRMA
Port Isabel Access Rd	Current	112,160	-	-	CCRMA
FM 509	Current	-	686,000	200,000	Federal, County
Commerce Street Realignment	Current	-	480,000	-	FRA
Spur 54	Current	28,913	8,500,000	-	CCRMA, Federal, State
		$5,224,806	$94,816,000	$1,100,000	
Summarized Totals:		$79,338,529	$393,127,312	$12,298,945	$484,764,786

Total CCRMA & Local Funds:	91,637,474
Total State / Federal Leveraged:	393,127,312
Percentage Leveraged:	81.10%

http://www.ccrma.org/resources/CCRMA-By-the-Numbers.pdf

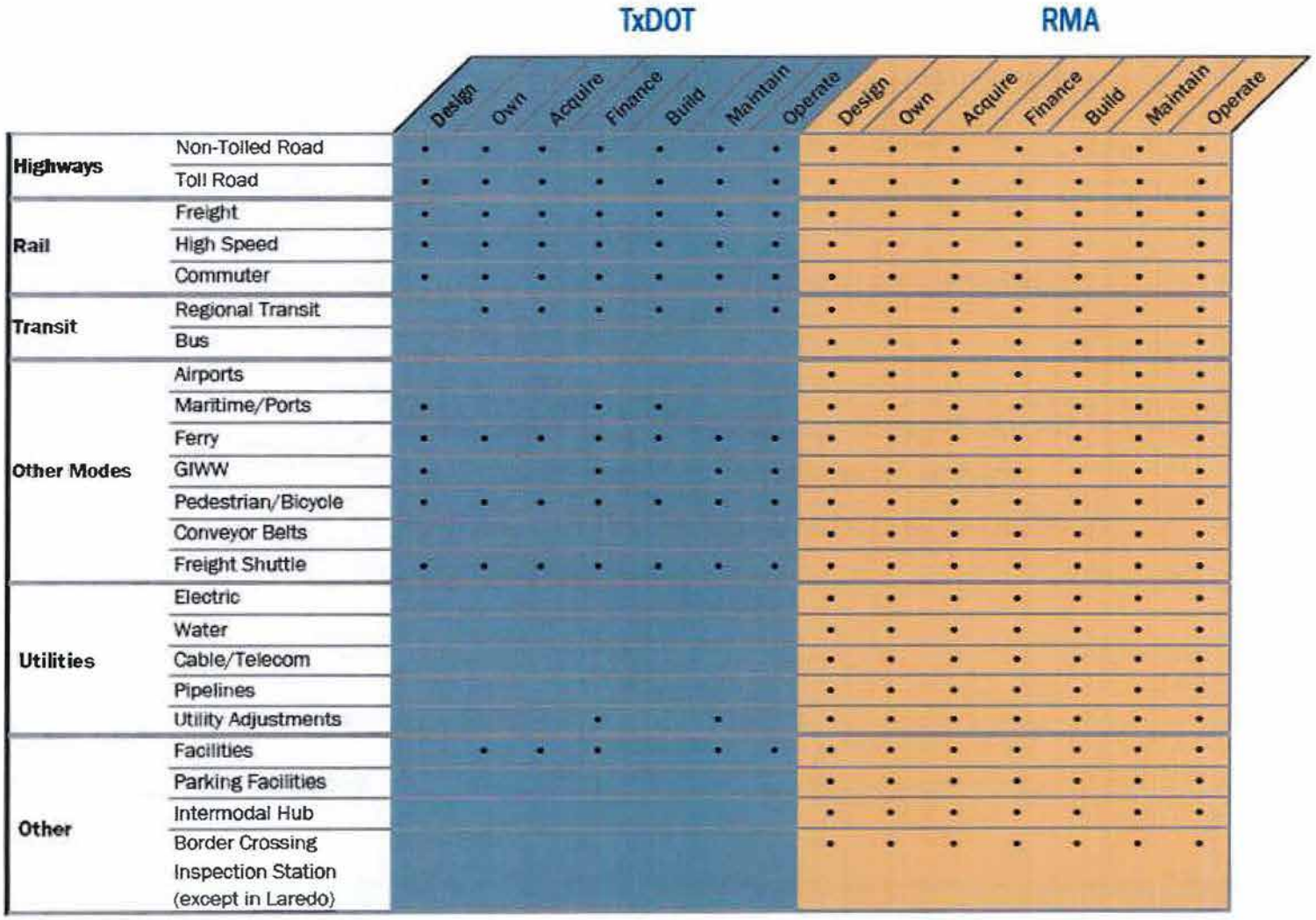
HNTB

RMAs in Texas



Regional Mobility Authorities in Texas: History and Current Status (PRC 15-41 F), Texas A&M Transportation Institute, dated Feb. 2016

Role of the WCCL RMA



		TxDOT							RMA						
		Design	Own	Acquire	Finance	Build	Maintain	Operate	Design	Own	Acquire	Finance	Build	Maintain	Operate
Highways	Non-Tolled Road	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	Toll Road	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Rail	Freight	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	High Speed	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	Commuter	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Transit	Regional Transit		•	•	•	•	•	•	•	•	•	•	•	•	•
	Bus								•	•	•	•	•	•	•
Other Modes	Airports								•	•	•	•	•	•	•
	Maritime/Ports	•			•	•			•	•	•	•	•	•	•
	Ferry	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	GIWW	•			•		•	•	•	•	•	•	•	•	•
	Pedestrian/Bicycle	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	Conveyor Belts								•	•	•	•	•	•	•
	Freight Shuttle	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Utilities	Electric								•	•	•	•	•	•	•
	Water								•	•	•	•	•	•	•
	Cable/Telecom								•	•	•	•	•	•	•
	Pipelines								•	•	•	•	•	•	•
	Utility Adjustments				•		•		•	•	•	•	•	•	•
Other	Facilities		•	•	•		•	•	•	•	•	•	•	•	•
	Parking Facilities								•	•	•	•	•	•	•
	Intermodal Hub								•	•	•	•	•	•	•
	Border Crossing Inspection Station (except in Laredo)								•	•	•	•	•	•	•

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Regional Mobility Authorities, A Partnership in Progress, Texas Department of Transportation, dated November 2014

Role of the WCCL RMA

Powers of an RMA

- ❑ Develop a transportation project
- ❑ Issue revenue bonds
- ❑ Establish tolls
- ❑ Acquire property for transportation projects
- ❑ Use surplus revenue to finance other local transportation projects
- ❑ Enter into a Comprehensive Development Agreement (CDA)
- ❑ *Note that SB 1730 (83rd Legislature, 2013) specifically identifies projects that can be developed under a CDA.*
- ❑ Apply for federal highway and rail funds
- ❑ Enter into contracts with other governmental entities and Mexico
- ❑ Apply for State Infrastructure Bank loans
- ❑ Maintain a feasibility fund
- ❑ Set speed and weight limits consistent with state guidelines
- ❑ Enter into agreements with other governmental entities to develop a transportation project on behalf of that entity.

What can the RMA do for the Laredo Community?

- Historically throughout the State of Texas, Communities with an RMA have been able to advance their mobility goals further than communities without**. It's a local organization that is focused on transportation and gives our community a better chance of successfully developing and implementing our mobility goals.**

- RMA brings the extra funding in the form of the Vehicle Registration Fees. **This can be leveraged as extra bonding capacity for both the County and the City as part of the local match for State and Federal Funding.**

- With their funding, the RMA can take the lead in the Long Term Planning Efforts for the Community:
  - North Laredo/ Webb County Transportation Planning Study
  - Outer Loop Planning Study
  - Long Term Transit Plan
  - Long Term Bike/ Pedestrian Mobility Plan

What can the RMA do for the Laredo Community?

RMA can be the **Main Delivery Vehicle** for all of the major mobility projects on behalf of the County and the City.

- RMA can utilize its monies on-hand to begin the environmental clearance for these projects and make them attractive for additional state and federal funding. **Make them Shovel-Ready! Note that monies dedicated to advance these projects can act as the local match!**

- With ILAs, the RMA can get projects started sooner while AFAs are still in process.

Funding and Financing tools

Funding Tools

- Vehicle registration fee
- Transportation Reinvestment Zone
- Grants
  - TIGER Grant Program
  - INFRA Grant Program
- TxDOT funding
  - Category 7
  - Category 10 (Rider 11B)
  - Proposition 1
  - Proposition 7

Financing Tools

- Pass-through Finance
- RMA Bonds
- City/County Bonds
- SIB Loan
- TIFIA Loan
- P3: Design-Build-Finance

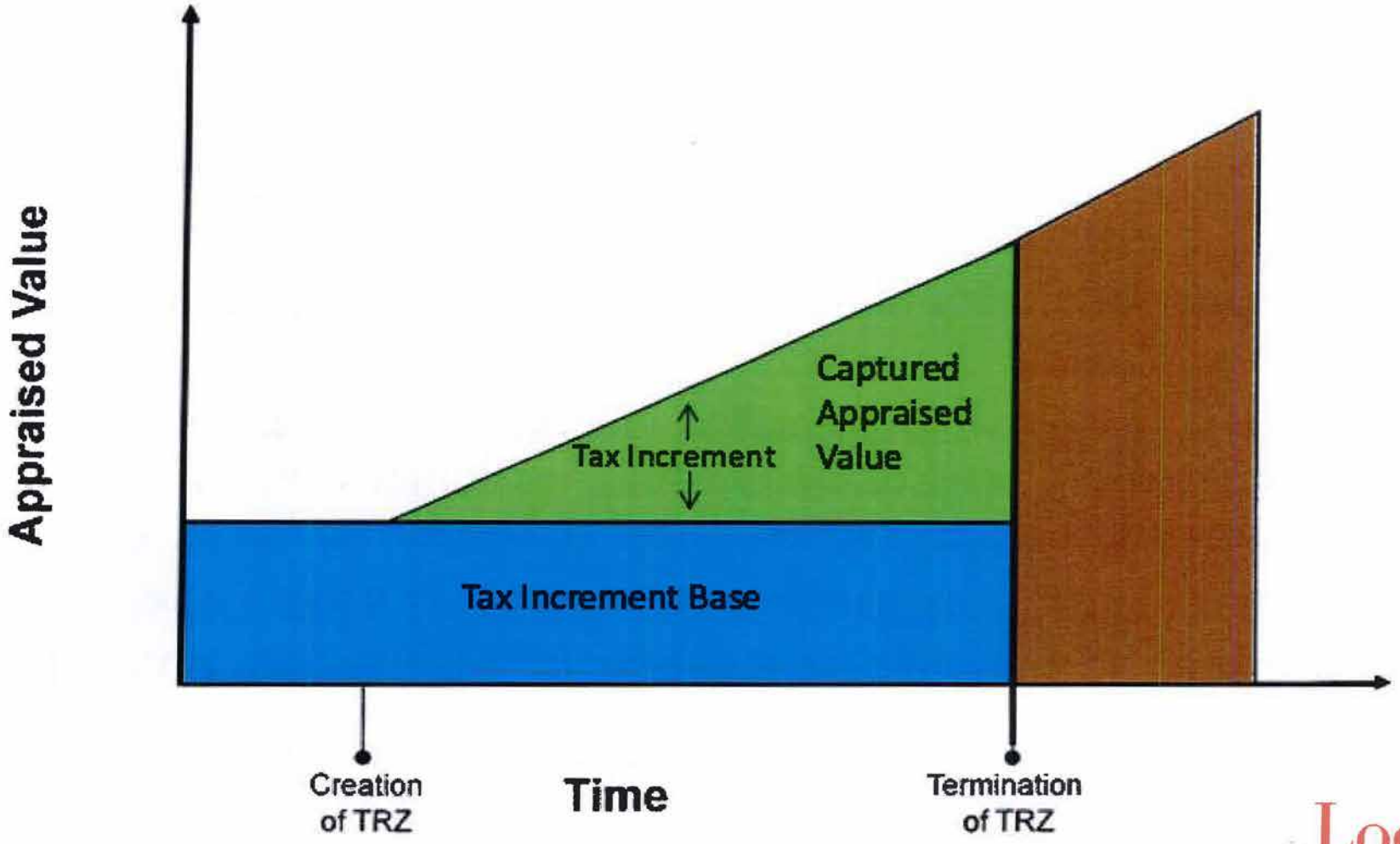
Transportation Reinvestment Zone (TRZ)

- A geographical area that dedicates a percentage of **future** tax revenue over time to fund transportation
- Assumes new road project(s) substantially increases land value of surrounding area, thus increasing the future tax value - growth helps to pay for itself.
- Captures only the difference between the current tax value and the future tax value over the life of the TRZ.
  - A percent increment of the future tax value difference can be specified to go to the TRZ (100%, 50%, 10%, etc.)
- **IS NOT A TAX INCREASE**

What's the Benefit of a TRZ?

- TRZ can serve multiple benefits
  - **At a minimum it provides a steady source of funding for an area strictly for transportation improvements.**
    - **It can be used to fill gap in funding for transportation projects within the zone or help to make projects more attractive for additional state and federal funding within the zone.**
  - **Based on the projections of revenue produced, a TRZ can be used for bonding to help accelerate transportation projects.**
    - **Extra benefit of bonding to accelerate projects results in an increase in land development; thus, increasing the surrounding property value and increasing the amount of revenue that can be produced by the TRZ .**

Generation of TRZ Funds



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Attorneys & Counselors

TRZ Financing - Use of Revenues

- Constrained to the physical boundaries of the Zone, the Community can:
  - ➢ pay ongoing costs as incurred
  - ➢ reimburse itself for other project expenditures
  - ➢ assign revenue stream to the WC-CL RMA
    - RMAs have express authority to receive TRZ assignments
  - ➢ Enter into an agreement with Design Build Developer for the use of the monies.

High Level Steps to form a TRZ

1. Designate an area for the proposed zone. Note the zone revenue can only be utilized within its geographical limits.
2. Perform a feasibility study on the potential revenue produced by the zone.
3. If outside the City limits, City must annex the area.
4. Begin the process of enacting the zone by passing a City resolution. Resolution includes a public comment period. Zone is enacted upon completion of Public Comment Period.

Formation – Public Hearing

- Community must hold a public hearing at least 30 days before it designates the TRZ
- At least 7 days prior, notice of the hearing must be published in the newspaper
- Interested persons are permitted to speak for or against the designation of the TRZ and/or its boundaries

Locke Lord LLP
Attorneys & Counselors

Termination of a TRZ

TRZ terminates on:

1. December 31 of the year in which the county/city complies with any contractual requirement regarding the assignment of money generated by (or through) the TRZ; OR

2. December 31 of the 10th year, if before that date the county/city has not used the zone for the purpose for which it was designated

TxDOT Pass-Through Finance

This innovative financing tool was developed in the early 2000s when funding was tight for State Highway Fund Projects. The Pass-Through Program was designed to help local governments advance projects faster than TxDOT could fund the projects.

Basics of the Pass-Through Agreement in the Program Calls

- TxDOT will reimburse the construction costs based upon the rate per vehicle mile travelled determined in the agreement
- Minimum payment per year
- Maximum payment per year
- Financing costs are not a reimbursable expense
- 1st TxDOT payment due 60 days after substantial completion of the project.
- If the local entity issued bonds, typically a pledge of the Pass-Through Agreement payment was made, which lowered the bond costs. The local entity could also build project with cash, and receive reimbursements from the Pass-Through Agreement.
- A typical reimbursement period is approximately 12-15 years.

TxDOT currently has 41 pass-through agreements State Highway Fund Projects which represent a future obligation of $1.2 billion in future expenditures over time. TxDOT is currently accepting applications for Pass-Through Finance. LOOP 20 IS A GREAT CANDIDATE!

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Priority Projects – Two Approaches

Individual Project Approach

- ***Loop 20***
  - International Blvd. to US 59
  - World Trade Bridge to IH 35
  - US 59 to US 83
- ***FM 1472***
  - Loop 20 to SH 255 (Camino Columbia)
- ***Vallecillo Road***
- ***Hachar Loop***
- ***Outer Loop Phase 1 - US 59 to SH 359***
- ***IH 35/ IH 69W (MILO Interchange) Improvements***
- ***IH 69W – US 59 to Duval County Line***
- ***Bridge 5***
- ***East Rail By-Pass***

System Infrastructure Approach

- ***North Laredo/Webb County Regional Project***
  - World Trade Bridge Fast Lane
  - IH 69W - World Trade Bridge to IH 35
  - FM 1472 - Loop 20 to SH 255 (Camino Columbia)
  - Vallecillo Road
  - Hachar Loop
  - River Road
  - IH 35/ IH 69W (Milo Interchange) Improvements
- ***South Laredo/ Webb County Regional Project***
  - Loop 20 - International Blvd. to US 59
  - Cuatro Vientos Overpasses
  - Southern Extension of Cuatro Vientos
  - International Bridge No. 5
- ***Outer Loop***
  - East Rail By-Pass
  - Outer Loop – Camino Columbia to Bridge 5.
- ***Complete IH 69W***
  - IH 69W – US 59 to Duval County Line
  - IH 69W – Duval County Line to Nueces County Line.

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Priority Projects – High Level Cost

❑ *North Laredo/Webb County Regional Project - $668M**

- ➢World Trade Bridge Fast Lane - $12M
- ➢Loop 20 - World Trade Bridge to IH 35 - $15M
- ➢FM 1472 - Loop 20 to SH 255 (Camino Columbia) - $450M
- ➢Vallecillo Road - $20M
- ➢Hachar Loop - $50M
- ➢River Road - $6M
- ➢IH 35/ IH 69W (MILO Interchange) Improvements - $115M

❑ *South Laredo/Webb County Regional Project - $813M**

- ➢IH 35 to US 59 - $400M
- ➢Cuatro Vientos Overpasses - $102M
- ➢Southern Extension of Cuatro Vientos - $105M
- ➢International Bridge No. 5 - $206M

* **Planning-level estimates. Cost will be refined through more detailed project development**

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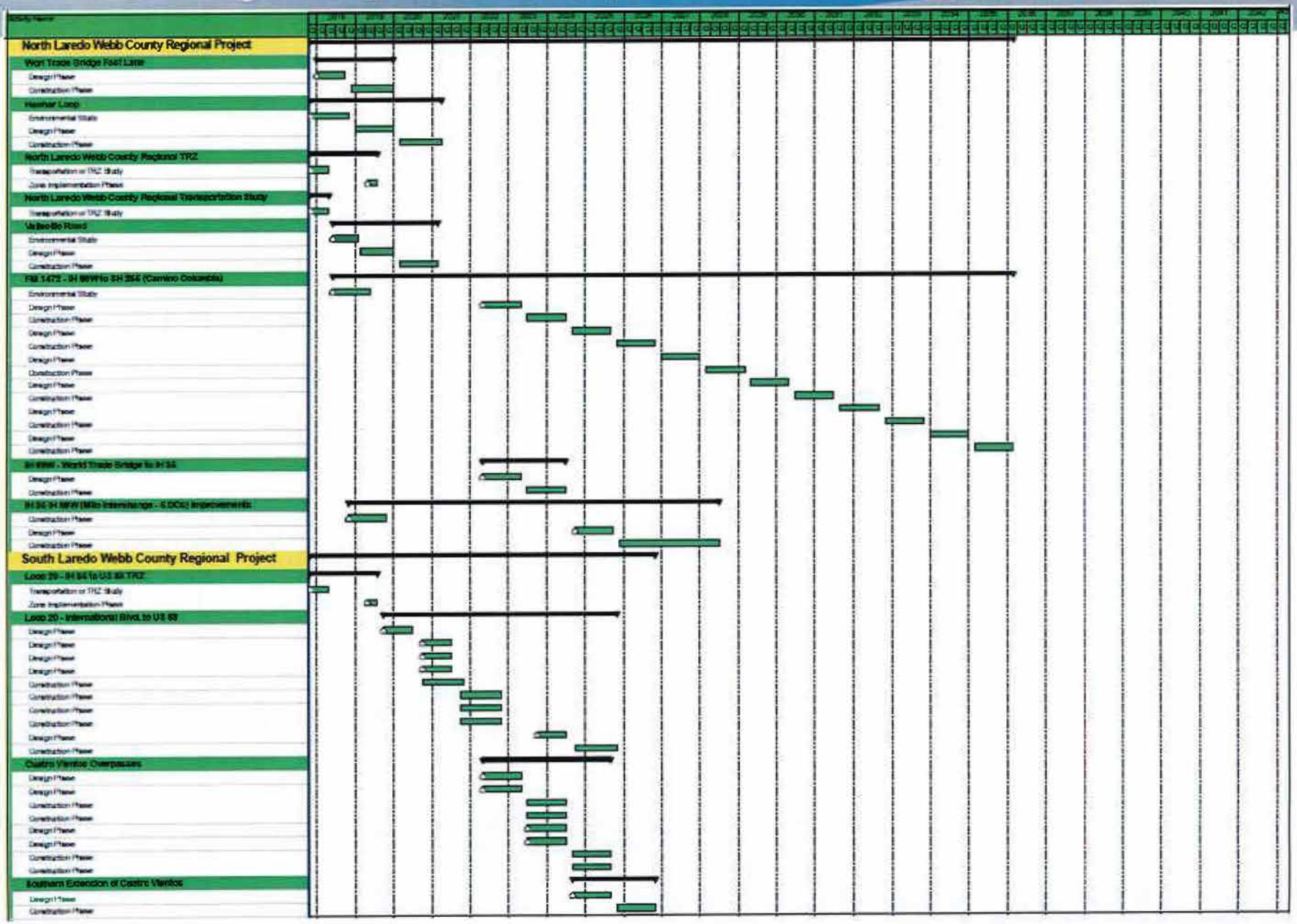
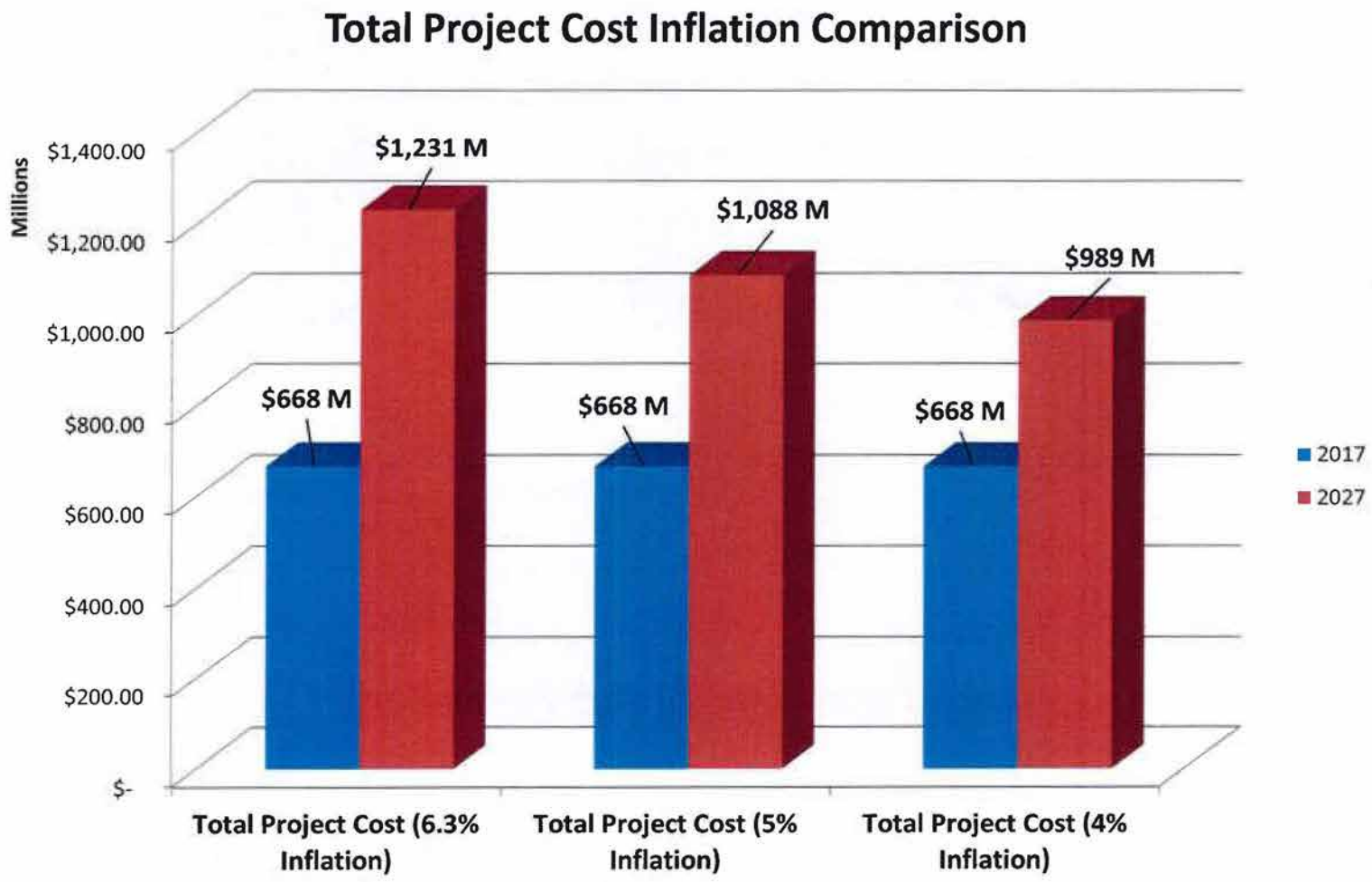
Priority Projects – Implementation Schedule



North Laredo/ Webb County Regional Project



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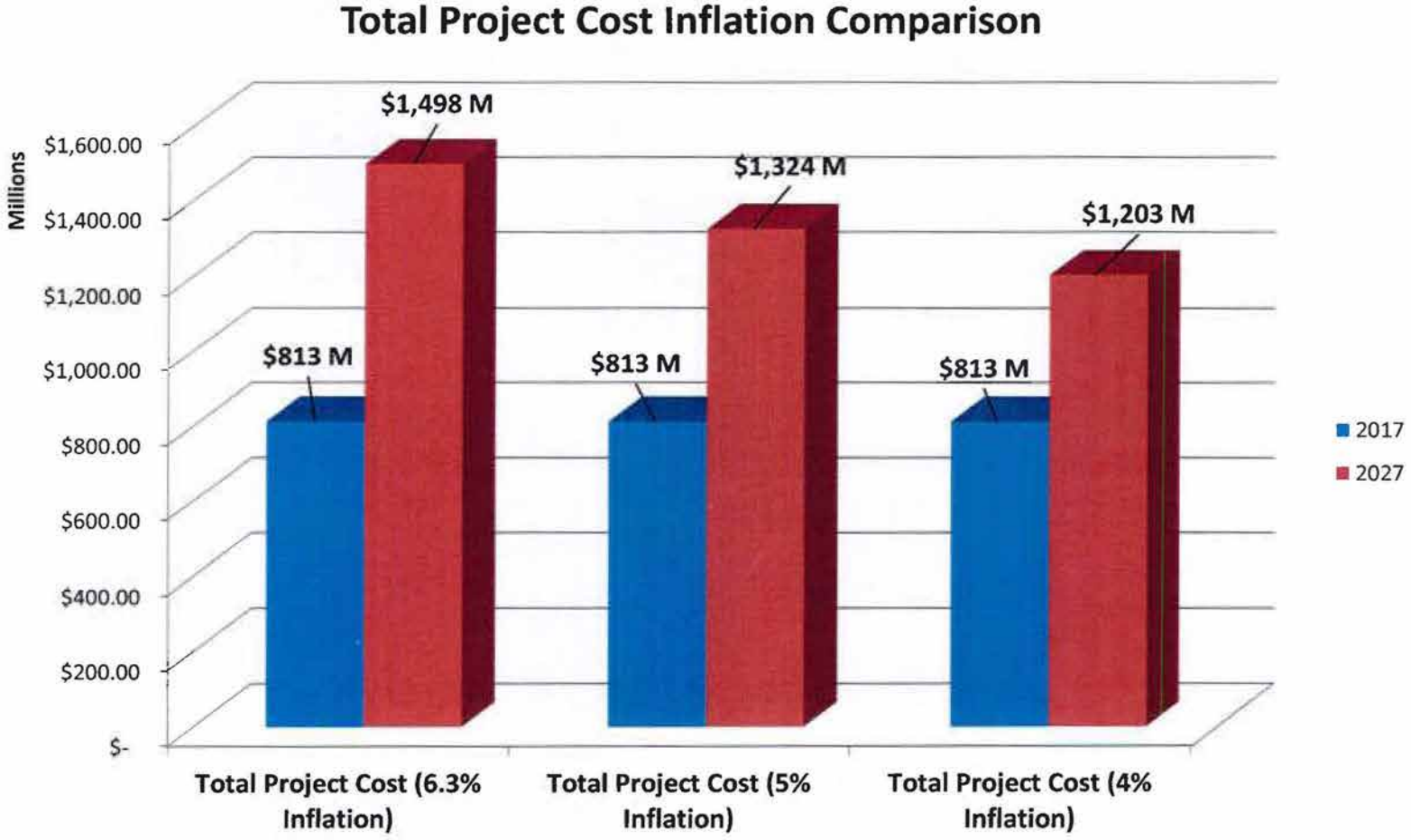
South Laredo/ Webb County Regional Project



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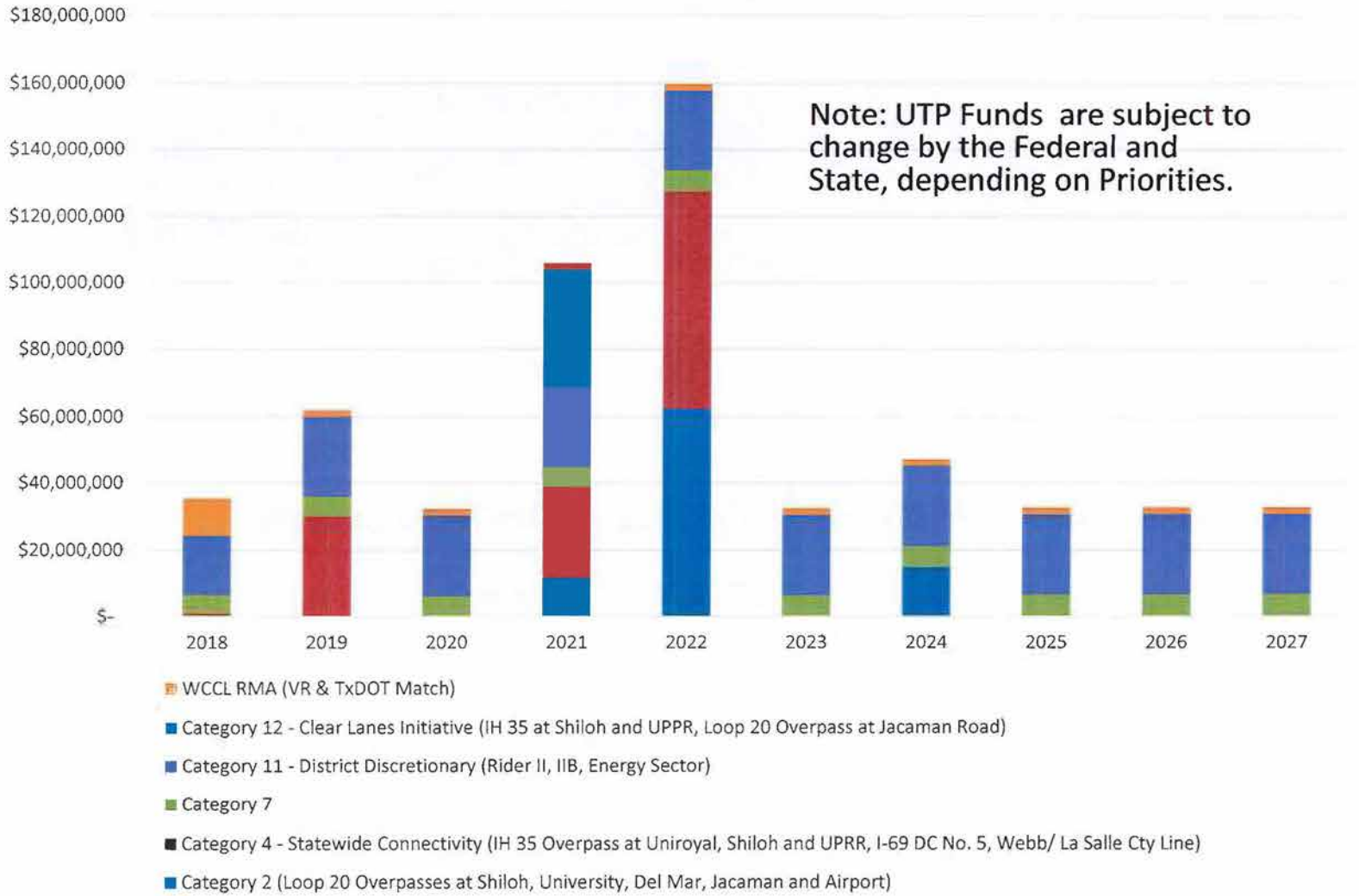
Existing funding sources thru 2027

- $572 M of "Projected Total Funds" per the 2018 UTP up to 2027.
- $326 M of "Projected Unallocated Funds" per the 2018 UTP up to 2027



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Potential TRZ Revenue for North Region

- TRZ numbers are high-level estimates extrapolated from Vallecillo TRZ Study commissioned by WCCL RMA in 2016.
- WC-CL RMA is prepared to commission a new study for the North Region.
- Below are extrapolated results showing potential revenue

One Mile Corridor – 50% Allocation	30 Yrs	5% PV
Extrapolated Estimate	$272 M	$101 M

Potential TRZ Revenue for Loop 20 Corridor

- TRZ numbers are high-level estimates extrapolated from Municap TRZ Study commissioned by TxDOT in 2013.
- WC-CL RMA is prepared to commission a new study for the Loop 20 Corridor
- Below are extrapolated results showing potential revenue
- Assumes a one-mile wide TRZ corridor from US 59 to US 83 in addition to the two-mile wide TRZ corridor from IH 35 to US 59.

50% Allocation	30 Year Growth	5% NPV
Extrapolated Estimate	$678 M	$260 M

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Funding and Financing tools

Funding Tools

- Vehicle registration fee
- Transportation Reinvestment Zone
- Grants
  - TIGER Grant Program
  - INFRA Grant Program
- TxDOT funding
  - Category 7
  - Category 10 (Rider 11B)
  - Proposition 1
  - Proposition 7

Financing Tools

- Pass-through Finance
- RMA Bonds
- City/County Bonds
- SIB Loan
- TIFIA Loan
- P3: Design-Build-Finance

How do you accelerate construction?

- "Cash in Hand" and financing tools
- Pay back over time utilizing a **leveraged revenue stream**
- Interest expense is partially offset by construction inflation cost savings
- Double positive – **Build Projects** sooner and obtain flexibility for other transportation priorities.

Why should we try to accelerate construction?

- Decrease traffic congestion
- Increase traffic safety; thus, minimizing accidents
- Increase mobility; thus, decreasing pollution from queued motor vehicles
- Spurs economic development (i.e., increased job growth, increased property value, increased revenue from sales tax)

What does it take to get there?

- **Cooperative, collaborative partnering to *leverage* all funding opportunities from all partners…**
  - WC-CL RMA
  - City of Laredo
  - Webb County
  - TxDOT Laredo District

Who Leads the Charge?

The WCCL RMA Leads the Charge. We are the "**Tip of the Spear**" for **all of these projects**. This is why you created us!

1. RMA can utilize their monies or leverage their monies to get these projects shovel ready!
2. RMA is the bridge between the City of Laredo, Webb County, Laredo MPO and TxDOT!
3. We can do it, but we need your support to work as a Community to lead this effort and get these **projects done.**
4. **Which Project First? All of them! Which project within the next 5 Years? Loop 20 and FM 1472!**

Round Table Thoughts

1. City of Laredo Perspective
   - ❖ Mayor Pete Saenz
   - ❖ City Manager Horacio DeLeon
   - ❖ Members of City Council Attending
2. Webb County Perspective
   - ❖ Judge Tano Tijerina
   - ❖ Members of Commissioners Court Attending
3. TxDOT Perspective
   - ❖ District Engineer David Salazar
   - ❖ District Administrator Melisa Montemayor

Action Items for Next Steps

G. Discussion with possible action on the letting date for Calton Railroad Grade Separation project (0922-33-093) which is proposed to move from November 2017 (FY 2018) to August (FY 2018).

Texas Department of Transportation
125 EAST 11TH STREET | AUSTIN, TEXAS 78701-2483 | (512) 463-8588 | WWW.TXDOT.GOV

September 11, 2017

Mr. Gabriel Martinez, P.E.
Assistant City Engineer
City of Laredo Engineering Department
1110 Houston St.
Laredo, Texas 78042

Re: Calton Road Grade Separation: Revised Letting Date
CSJ 0922-33-093, Webb County

Dear Mr. Martinez:

In the attached letter dated August 29, 2017, we requested a status update to the project as well as a revised letting date by September 8, 2017. You were informed that the current scheduled letting date of November 2017 could not be met because the project had not reached a "ready to let" status.

Per our phone conversation, we will be changing the let date for this project to August 2018 (FY 2018), to reflect the decision of the City of Laredo. This will require an administrative update in the STIP and will be presented as such during the next available Laredo MPO meeting.

Should you have any questions, please do not hesitate to contact Ana Duncan at 956-712-7460.

Sincerely,

Alberto Ramirez, P.E.
Director of Transportation Planning & Development

CC: Rogelio Rivera, P.E., City Engineer, City of Laredo
Nathan Bratton, P.E., Director of Planning, City of Laredo
Pedro R. Alvarez, P.E., Laredo District Engineer, TxDOT
Melisa Montemayor, Laredo District Administrator, TxDOT
Ana Duncan, P.E., Project Manager, TxDOT

Texas Department of Transportation
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August 29, 2017

Mr. Gabriel Martinez, P.E.
Assistant City Engineer
City of Laredo Engineering Department
1110 Houston St.
Laredo, Texas 78042

Re: Calton Road Grade Separation: Letting Date Update
CSJ 0922-33-093, Webb County

Dear Mr. Martinez:

The letting date for the subject project is currently scheduled for November 2017, as was requested in your letter dated April 4, 2017. At that time you listed the following uncertainties on the project:

- Pending railroad agreement for construction and maintenance,
- Further utility coordination and utility relocations,
- Clearing of right-of-way encroachments, and
- Changing of design from 2004 specifications to current 2014.

Since the project has not yet met the "ready to let" definition, we are requesting that the City of Laredo provide a status update on the overall project development and the uncertainties listed above. Please also indicate the revised letting date for this project that will allow you to meet the ready to let definition below. This will require an administrative update in the STIP and will be presented as such during the next available Laredo MPO meeting.

"Ready to Let" Definition (completed four months prior to letting):

- Environmentally cleared and Environmental mitigation completed
- Environmental permits secured
- Right-of-Way cleared (acquisition, abatement, demolition, etc.)
- Schematic approved
- 100% PS&E completed
- Project agreements in place (Local funding received)
- Railroad Coordination/Agreements in place
- Utility agreements in place/relocations in progress and/or scheduled

We ask that you submit this information by September 8, 2017. After this date, TxDOT will be required to move the project from the November 2017 letting schedule and will do so as deemed necessary. Should you have any questions, please do not hesitate to contact Ana Duncan at 956-712-7460.

Sincerely,

Alberto Ramirez, P.E.
Director of Transportation Planning & Development

CC: Rogelio Rivera, P.E., City Engineer, City of Laredo
Nathan Bratton, P.E., Director of Planning, City of Laredo
Pedro R. Alvarez, P.E., Laredo District Engineer, TxDOT
Melisa Montemayor, Laredo District Administrator, TxDOT
Ana Duncan, P.E., Project Manager, TxDOT

Vanessa Guerra

From: Roberto Rodriguez III <Roberto.Rodriguez@txdot.gov>
Sent: Tuesday, October 03, 2017 9:22 AM
To: Angelica Quijano; Vanessa Guerra
Cc: Nathan R. Bratton
Subject: MPO Agenda Item - CSJ 0922-33-093 Calton Letting update
Attachments: 2017-0911 Calton letting TxDOT Update .pdf

Attached find an administrative update for next MPO.

The Calton Rd Grade Separation project (CSJ 0922-33-093) will not be letting in November 2017 (FY 18) and is being moved to August 2018 (FY 18).

Thanks

Roberto Rodriguez, P.E.
TP&D-Advanced Planning Supervisor
Laredo District
1817 Bob Bullock Lp
Laredo TX 78043
(956) 712-7735 (Direct)
(956) 333-4075 (Cell)

From: Ana Duncan
Sent: Monday, September 11, 2017 5:10 PM
To: Gabriel Martinez
Cc: Nathan R. Bratton; Pedro Alvarez; Melisa Montemayor; Alberto Ramirez; 'rrivera@ci.laredo.tx.us'
Subject: CSJ 0922-33-093 Calton Letting update

Gabriel,

As discussed earlier, see attached letter moving the letting date to August 2018. Hard copy to follow.

Thank you.

Ana A. Duncan, P.E.
Transportation Engineer

Texas Department of Transportation – Laredo District
1817 Bob Bullock Loop * Laredo, TX 78043
O: 956/712-7460 F: 956/712-7401
Email: ana.duncan@txdot.gov

H. Discussion with possible action on Hachar Road.

V. REPORT(S) AND PRESENTATIONS (No action required)

A. Riverbank Road:
   1. Presentation by Joe Medina on the Riverbank Road project. -C.M. Altgelt
   2. Report by TxDOT on possible funding sources available to the Riverbank Road project. -C.M. San Miguel.

B. RMA:
   1. Presentation on the proposed scope of services for the Mines Road Regional study. -C.M. San Miguel
   2. Presentation by the RMA on its mass transit recommendations. -C.M. Altgelt
   3. Status of the RMA.

C. Flecha/Las Cruces Realignment Project:
   1. Report by the City of Laredo Real Estate Division on the status of Flecha/Las Cruces Realignment project's Right of Way (ROW) acquisition. -C.M. Altgelt
   2. Report by CEC representative on the status of the Flecha/Las Cruces Realignment project's: plans and specification updates, Army Corp of Engineers permitting and request for additional funding. -C.M. Altgelt

Texas Department of Transportation
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July 31, 2017

Mr. Gabriel Martinez, P.E.
Assistant City Engineer
City of Laredo Engineering Department
1110 Houston St.
Laredo, Texas 78042

Re: Flecha/Las Cruces Realignment: Letting Date Update
CSJ 0922-33-076, Webb County

Dear Mr. Martinez:

Since early June 2017, we have been requesting a status update to the proposed letting date for the subject project. A project must be "ready to let" a minimum of four months prior to the actual letting month/year. As of the date of this letter, the project is scheduled for letting in September 2017 and has not met the "ready to let" definition.

Ready to Let Definition:

- Environmentally cleared and Environmental mitigation completed
- Environmental permits secured
- Right-of-Way cleared (acquisition, abatement, demolition, etc.)
- Schematic approved
- 100% PS&E completed
- Project agreements in place (Local funding received)
- Railroad Coordination/Agreements in place
- Utility agreements in place/relocations in progress and/or scheduled

In your response email, you confirmed that the project is still, at a minimum, pending completion of ROW acquisition and Corps of Engineering approval for mitigation issues. Without proposing a new letting date, you also indicated that the project will not be "ready to let" in 2017. Please be informed that TxDOT will be proposing to change the let date for this project to August 2018 (FY 2018), until further advisement from the City of Laredo. This will require an administrative update in the STIP and will be presented as such during the next available Laredo MPO meeting.

Should you have any questions, please do not hesitate to contact me at 956-712-7446.

Sincerely,

Alberto Ramirez, P.E.
Director of Transportation Planning & Development

CC: Rogelio Rivera, P.E., City Engineer, City of Laredo
Nathan Bratton, P.E., Director of Planning, City of Laredo
Pedro R. Alvarez, P.E., Laredo District Engineer, TxDOT
Melisa Montemayor, Laredo District Administrator, TxDOT
Ana Duncan, P.E., Project Manager, TxDOT

Ana Duncan

From: Gabriel Martinez, Jr. <gmartinez@ci.laredo.tx.us>
Sent: Friday, July 28, 2017 2:42 PM
To: Ana Duncan
Cc: Rogelio Rivera; Nathan R. Bratton
Subject: FW: CSJ 0922-33-076 - Bridge Submittal Review comments

Ana:

From the land acquisition perspective, I have been unable to get a timeline for the pending parcels at this point.

Also, as you know, the mitigation issue is also pending, as per TxDOT e-mail from Maria Rogers dated yesterday, July 27, 2017 & related pending approval from Corps of Engineers.

At this point, I do not foresee reaching a point anytime in 2017 when we will be ready with 100% completion / approval 4 months before advertising for bids.

I will follow up with you as I soon as I have with something more concrete from the other parties involved.

Gabriel Martinez, PE
Assistant City Engineer
City of Laredo Engineering Dept
Laredo, Texas 78040
Phone: (956)791-7346
Fax: (956)791-7496
e-mail: gmartinez@ci.laredo.tx.us

-----Original Message-----
From: Arturo Garcia
Sent: Friday, July 28, 2017 2:05 PM
To: Gabriel Martinez, Jr.; Jessica Nelson
Cc: Rogelio Rivera; Linda Teniente
Subject: RE: CSJ 0922-33-076 - Bridge Submittal Review comments

Gabriel, not sure if you knew but today is Jessica's last day. Linda Teniente will be taking over the duties as acting real estate manager effective Monday. We'll have to sit down with you to sort out what is pending.

-----Original Message-----
From: Gabriel Martinez, Jr.
Sent: Thursday, July 27, 2017 2:41 PM
To: Arturo Garcia <agarcia@ci.laredo.tx.us>; Jessica Nelson <jnelson@ci.laredo.tx.us>
Cc: Rogelio Rivera <rrivera@ci.laredo.tx.us>
Subject: FW: CSJ 0922-33-076 - Bridge Submittal Review comments
Importance: High

Arturo/ Jessica:
Please provide an estimated schedule for the remainder of acquisition of pending parcels for the Flecha project.

Ana Duncan

From: Ana Duncan
Sent: Monday, July 24, 2017 1:46 PM
To: 'Gabriel Martinez, Jr.'
Cc: 'Rogelio Rivera'; 'Arturo Garcia'; 'Angelita C. Ramos'; Ricardo De La Parra; Alberto Ramirez; Roberto Rodriguez III
Subject: RE: City of Laredo - Flecha project - letting dates

Good afternoon Gabriel,

We have been asking since early June for an updated letting date for the Flecha Realignment project (CSJ 0922-33-076). We understand that you are coordinating with your Consultant, but the decision must come from the City of Laredo as soon as possible. A project must be "ready to let" a minimum of 4 months prior to the actual letting month/year. In order to be accepted as "ready to let" a project must have complete PS&E, all ROW, ENV and Utility clearances, which includes utility coordination complete with relocations underway or scheduled accordingly. This project is currently scheduled for a September 2017 letting and must be moved as soon as possible.

Please provide an updated letting date for this project, in writing from City of Laredo, by this Friday, July 28, 2017. If we do not receive an update, we will be required to move the let date and notify the Laredo MPO accordingly.

Should you have any questions or concerns, feel free to contact me. Thank you.

Ana A. Duncan, P.E.
Transportation Engineer

Texas Department of Transportation – Laredo District
1817 Bob Bullock Loop * Laredo, TX 78043
O: 956/712-7460 F: 956/712-7401
Email: ana.duncan@txdot.gov

From: Ana Duncan
Sent: Wednesday, June 21, 2017 8:14 AM
To: Gabriel Martinez, Jr.
Cc: Jeffrey G. Puig, P.E., R.P.L.S.; Rogelio Rivera; Arturo Garcia; Angelita C. Ramos; 'Kyle Gass, P.E., CFM'; Edward L. Ochoa P.E., S.I.T., CFM; Julio Ramos, P.E., PTOE; Ricardo De La Parra; Alberto Ramirez; Roberto Rodriguez III
Subject: Fwd: City of Laredo - Flecha project - letting dates

Gabriel,

With this information from your Consultant, the City should be able to propose a reasonable letting date. Keep in mind the definition of "ready to let." This is not just complete PS&E, but also includes all ROW, ENV and Utility clearance letters. As was discussed with other projects, utility coordination needs to be complete with relocations underway before the project should be submitted for letting.

We await your response. If you have any questions or would like to discuss, please do not hesitate to call us. Thank you.

Ana A. Duncan, P.E.
Transportation Engineer

Texas Department of Transportation – Laredo District
1817 Bob Bullock Loop * Laredo, TX 78043
O: 956/712-7460 F: 956/712-7401
Email: ana.duncan@txdot.gov

From: Kyle Gass, P.E., CFM [mailto:kgass@cectexas.com]
Sent: Tuesday, June 20, 2017 4:22 PM
To: Gabriel Martinez, Jr.
Cc: Jeffrey G. Puig, P.E., R.P.L.S.; Rogelio Rivera; Arturo Garcia; Angelita C. Ramos; Ana Duncan; Edward L. Ochoa P.E., S.I.T., CFM; Julio Ramos, P.E., PTOE
Subject: RE: City of Laredo - Flecha project - letting dates

Gabriel,

Thanks for following up on this. Been trying to catch up on everything since getting back in the office.

Our current schedule anticipates that we will receive Corps Approval for the mitigation plan in October. I believe that would fulfill the environmental clearance, so we'll target October to submit final plans. That means 90% plans will be submitted in August for review and comment. Final plans in October I believe means letting around December or January.

We need to confirm that the utility relocations will be completed to allow for letting. Will also need city input on the status of ROW acquisitions and funding agreements.

Thanks,
Kyle Gass, P.E., CFM
Principal - Division Manager
CEC
Texas Firm Registration Numbers
Engineering F-2214 & Surveying 100410-00
11550 IH 10 West, Suite 395 | San Antonio, TX 78230
Tel: 210-641-9999 Fax: 210-641-6440
Direct: 210-798-9218

From: Gabriel Martinez, Jr. [mailto:gmartinez@ci.laredo.tx.us]
Sent: Tuesday, June 20, 2017 1:43 PM
To: Kyle Gass, P.E., CFM <kgass@cectexas.com>
Cc: Jeffrey G. Puig, P.E., R.P.L.S. <jpuig@cectexas.com>; Rogelio Rivera <rrivera@ci.laredo.tx.us>; Arturo Garcia <agarcia@ci.laredo.tx.us>; Angelita C. Ramos <aramos1@ci.laredo.tx.us>; Ana Duncan <Ana.Duncan@txdot.gov>
Subject: RE: City of Laredo - Flecha project - letting dates

Please provide a status regarding the email request below.

From: Gabriel Martinez, Jr.
Sent: Thursday, June 08, 2017 8:40 AM

To: 'Kyle Gass'
Cc: Jeffrey G. Puig; Rogelio Rivera; Arturo Garcia; Angelita C. Ramos
Subject: FW: City of Laredo - Flecha project - letting dates
Importance: High

Kyle:

Can you please respond to this TxDOT concern with any needed schedule revisions?

Thanks,

Gabriel Martinez, PE
Assistant City Engineer
City of Laredo Engineering Dept
Laredo, Texas 78080
Phone: (956)791-7346
Fax: (956)791-7496
e-mail: gmartinez@ci.laredo.tx.us

From: Ana Duncan [mailto:Ana.Duncan@txdot.gov]
Sent: Tuesday, June 06, 2017 3:41 PM
To: Gabriel Martinez, Jr.
Cc: Rogelio Rivera; Ricardo De La Parra
Subject: City of Laredo - Calton & Flecha projects - letting dates

Good afternoon Gabriel,

With Fiscal Year 2018 fast approaching, we are beginning to confirm let dates for fiscal year 2018. The fiscal year is from September 1, 2017 to August 31, 2018. We have two projects with the City of Laredo currently scheduled in FY 18.
Flecha Realignment **(CSJ 0922-33-076) – September 2017** (Ready to Let date: May 2017)
Calton Road **(CSJ 0922-33-093) - November 2017** (Ready to let date: July 2017)

The ready to let date for Flecha has already passed and that for Calton is fast approaching. Based on discussions with the utility companies, a November letting date for Calton may not be attainable. **Please propose a new letting date for each of these projects in writing as soon as possible. Your prompt response is appreciated.**

A project must meet the "ready to let" definition at least 4 months prior to the letting date:

- Environmental clearance complete
- Environmental permits secured
- ROW cleared (acquisition, abatement, demolition, etc.)
- Schematic approved (if applicable)
- 100% Plans, Specifications and Estimate (PS&E)
- Project agreements in place (Local funding received)
- Railroad Coordination/agreements in place (if applicable)
- Utility agreements in place/relocations completed or in progress and near completion

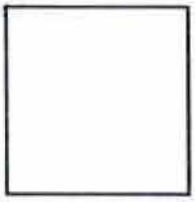
Please let us know if you have any questions.

Thank you.

Ana A. Duncan, P.E.

Transportation Engineer

Texas Department of Transportation – Laredo District
1817 Bob Bullock Loop * Laredo, TX 78043
O: 956/712-7460 F: 956/712-7401
Email: ana.duncan@txdot.gov



D. Presentation by TxDOT on the proposed Outer Loop alignment.

E. Report by MPO Director on the relative competiveness of the City of Laredo's Infra Grant application.

CITY OF Laredo

FY17-18 INFRA

I-35/I-69W International Freight Gateway

November 2, 2017

Cover Page: I-35/I-69W International Freight Gateway, INFRA Grant Application

FY17-18 INFRA Grant Application Summary	
Was an INFRA application for this project submitted previously?	Yes
If yes, what was the name of the project in the previous application?	I-69W International Freight Gateway
Previously Incurred Project Cost	$32,000,000
Future Eligible Project Cost	$98,000,000
Total Project Cost (Sum of the two previous rows)	$130,000,000
INFRA Request	$78,000,000
Total Federal Funding (including INFRA)	$78,000,000
Are matching funds restricted to a specific project component? If so, which one?	Yes, Construction
Is the project or a portion of the project currently located on National Highway Freight Network?	Yes
Is the project or a portion of the project located on the National Highway System?	Yes
Does the project add capacity to the Interstate system?	Yes
Is the project in a national scenic area?	No
Do the project components include a railway-highway grade crossing or grade separation project?	No
Do the project components include an intermodal or freight rail project, or freight project within boundaries of a public or private freight rail, water, or intermodal facility?	No
If answered yes to either of the two component questions above, how much of requested INFRA funds will be spent on each of these projects components?	$0
State(s) in which project is located.	Texas
Small or Large Project	Large
Urbanized Area in which project is located, if applicable.	Laredo
Population of Urbanized Area.	270,000
Is the project currently programmed in the:	
• TIP?	No, U.S. Highway 59 only
• STIP?	Yes
• MPO Long Range Transportation Plan?	Yes
• State Long Range Transportation Plan?	Yes
• State Freight Plan?	Yes

Executive Summary

The Port of Laredo is the busiest inland port in the nation, facilitating over $198 billion in imports and exports in 2015. As a "gateway" to the U.S. and the dominant Port of Entry (POE) along the U.S./Mexican border, smart investments in transportation infrastructure are important in meeting current and future challenges of moving people and goods in the region, the nation, and enhancing economic competitiveness of the U.S. The roadways and commercial/industrial areas that connect and serve Laredo's four POEs act as the backbone of commerce for the region and the nation. The I-35/U.S. 59 interchange is at the hub of trade entering Laredo's cross-border system via I-35, U.S. 83 and U.S. 59/I-69W corridors, connecting to Laredo's busiest commercial port of entry, the World Trade Bridge.

To address the acute challenge of efficiently moving people and goods and supporting international trade, the City of Laredo, Texas, and Webb County, Texas, in partnership with the Texas Department of Transportation (TxDOT), is submitting the I-35/I-69W International Freight Gateway Project for consideration in the first round of the INFRA grant program. ***This INFRA grant request is for $78 million, and if selected, the funding will be utilized towards the project's total construction cost of $130 million.*** This project will significantly improve efficiency, reliability, and safety by constructing the final five (of eight) direct connectors between U.S. 59 and I-35 in north Laredo. These five direct connectors between two high-volume truck freight routes have been identified as current and future segments of the National Highway System (NHS) and National Highway Freight Network (NHFN). This project, which directly impacts the fluidity of traffic for both Texas and Mexico, has national significance and sets the conditions for supporting the expected future freight growth out to 2050.

Currently, over 22 percent of the state economy and approximately 465,000 jobs in Texas are dependent on U.S.-Mexico trade. The Port of Laredo accounts for 37% of all trade between U.S.-Mexico. Furthermore, a 2016 Texs Department of Transportation time series analysis of the Truck-Freignt Flow from the border in Laredo to the rest of the United States revealed that trucks originating in Laredo, Texas, traveled to every state in the contiguous United States of America in just one week. ***If left to operate without these improvements, the "Laredo Gateway" will become the "Laredo Bottleneck" which will have negative consequences.***

The project elements included in this funding request will ensure that U.S.-Mexico trade will support, and be the catalyst for economic growth, for Laredo, Texas, and the U.S. The five direct connector projects are in different stages of development, but ***all are scheduled to begin construction prior to September 30, 2020 and cannot be completed without Federal funds.*** When completed, these projects will provide for an upgraded, controlled access facility that will move traffic to/from through this portion of Laredo with an improved level of service (LOS) through currently-congested sections of roadway. The direct connectors have been identified by TxDOT, the City of Laredo, Webb County and the Webb County-City of Laredo Regional Mobility Authority (WCCL RMA) as a priority project for this community.

Based on the BCA results, this project will result in public benefits of $4.32 for every $1 spent. A summary of the public benefits realized by this project are shown in **Table ES-1** below.

Table ES-1: Summary of Benefit Cost Analysis Statistics

Statistics	Discounted @ 7%	Discounted @ 3%
Total Benefits	**$392.4 M**	**$745.0 M**
Travel Time Benefits	$300.4 M	$568.8 M
Vehicle Operating Cost Benefits	$43.7 M	$84.4 M
Emission Cost Benefits	$4.1 M	$7.9 M
Accident Cost Benefits	$44.3 M	$83.8 M
Incremental O&M Costs	$0.0 M	$0.0 M
Total Capital Costs	$90.8 M	$103.7 M
Right of Way Costs	$9.1 M	$10.4 M
Construction Costs	$81.7 M	$93.3 M
Net Present Value (NPV)	$301.6 M	$641.3 M
Benefit-Cost Ratio (BCR)	4.32	7.18
Return on Investment (ROI)	332%	618%
Internal Rate of Return (IRR)	28.8%	

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1 Project Description

The Port of Laredo is the busiest inland port/gateway/border crossing along the U.S.-Mexico border, and it facilitated over $195 billion in imports and exports in 2015. As a gateway and the premier Port of Entry (POE) along the 1,969-mile U.S.-Mexico border, smart investments in transportation infrastructure are important in meeting current and future challenges of moving people, goods, and commodities in the bi-national region and the U.S., and enhancing economic competitiveness of the U.S. economy. The roadways, railroads, and commercial and industrial areas that connect and serve Laredo's four POEs act as the backbone of commerce for the region and U.S. One of the busiest POEs is the World Trade Bridge in Laredo, which on average, handles about 11,000 to 12,000 trucks per day.

Growth in trade and related activities, coupled with significant economic and population growth on both sides of the international border has significantly increased border traffic on Laredo's four international bridges and the existing railroad bridge over the Rio Grande River that marks the international border. Auto parts are the top goods that ship through Laredo, according to the Laredo Development Foundation. The Laredo Customs District, which stretches from Brownsville to Del Rio, Texas, leads the nation in exports of vehicle parts, with the bulk of the freight moving through Laredo. During first quarter 2017, motor vehicle imports and exports through Laredo totaled $8.1 billion, according to a WorldCity analysis of U.S. Census data.

Figure 1-1: Truck Traffic at One Laredo Port of Entry

Figure 1-2: The World Trade Bridge is one of the busiest POEs along the entire U.S. – Mexico Border

The borders are major contributors to the regional, state, and national economies of both U.S. and Mexico, and it is imperative they provide efficient connectivity between the transportation systems of both nations and the critical trade gateways in the Laredo region. Forecasts in commercial and non-commercial traffic growth recommend that improvements in infrastructure capacity, operations, and Intelligent Transportation Systems (ITS) are needed to meet increasing demand. Additionally, improvements made to system linkages will allow for more efficient and safe movements of people and goods, improved supply

chain efficiency for industries, and improve freight and passenger mobility. The improvements will also provide greater access for jobs, education, and training opportunities; enhance safety; and provide infrastructure needed to support projected growth in cross-border trade, freight volumes, population growth, and employment.

The I-35/I-69W interchange is the nexus of trade moving in all directions through the Laredo Gateway to include the busiest POE between the U.S. and Mexico, the World Trade Bridge. I-69W passes over I-35 and tracks of the Union Pacific Railroad (UP). ***This project will construct the final five (of eight) direct connectors between I-69W (formerly U.S. 59) and I-35 in north Laredo, also known as the "Milo" interchange.*** Three of the connectors between I-35 and I-69W have already been constructed. Each connector will span approximately 3,000 feet and will require bridges to flyover the existing I-35 and I-69W main lanes and frontage roads. ***The project will also upgrade a 1.8-mile segment of I-69W to interstate standards by adding one additional 12-foot mainlane in each direction and widening to 10-foot inside/outside shoulders.*** Preliminary design has been completed for this project, and the interchange was environmentally reviewed and approved in an Environmental Assessment (EA) by the FHWA in the 1990s. Any additional phase implemented would be cleared environmentally as a standalone Categorical Exclusion (CE).

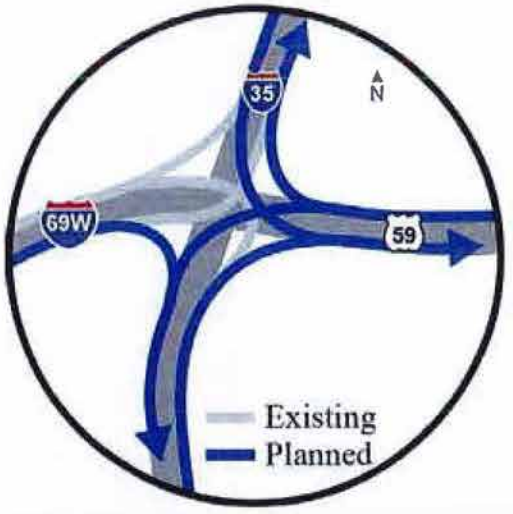
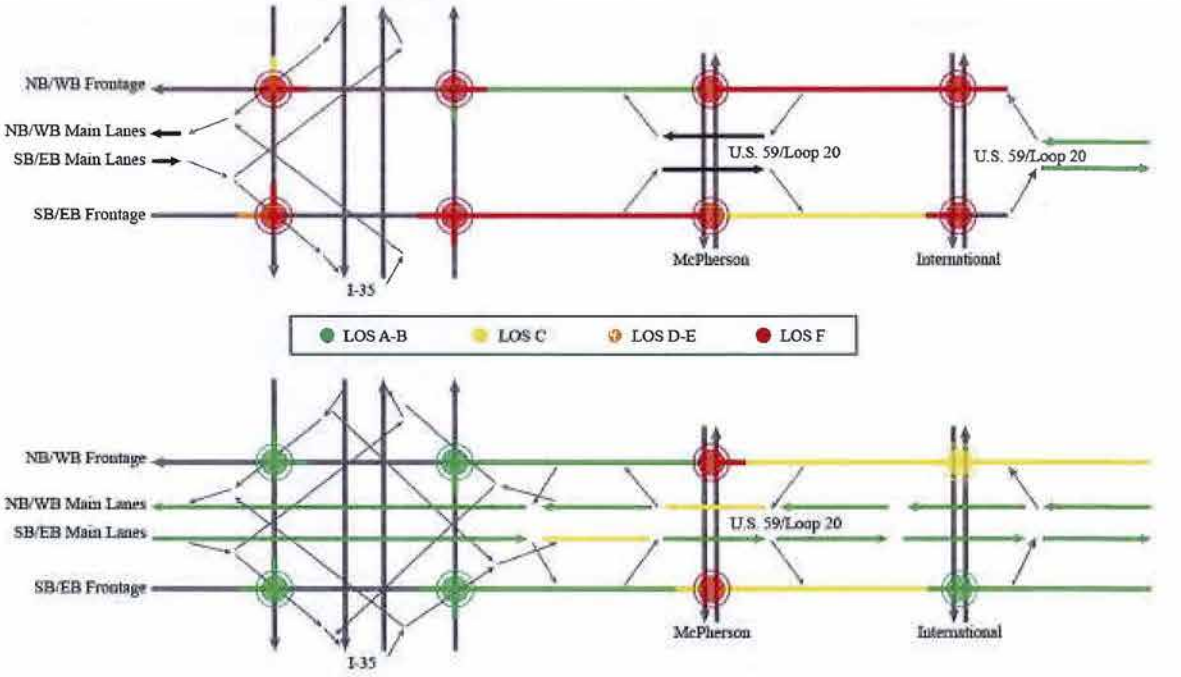


Figure 1-3: Planned Project Connectors

1.1 Mobility Outcomes

As shown in **Figure 1-4**, the I-35/I-69W International Freight Gateway project is expected to improve highway and intersection level of service and reduce congestion while increasing throughput in the corridor. ***Without the improvements, intersection delay in all directions at the U.S. 59/I-69W interchange with I-35 as well as adjacent intersections will reach Level of Service (LOS) F, further exacerbating what is already a critical bottleneck for accessing the World Trade Bridge.*** As proposed in the I-35/I-69W International Freight Gateway project, adjusting the number of travel lanes, the type of traffic control at intersections, the number of access points, and speed limits all positively affect roadway capacity and congestion. The new U.S. 59/I-69W mainlanes allow for additional throughput and mobility through the corridor, while the I-35 direct connectors significantly reduce intersection delay. Most intersections see dramatic LOS improvements (**Figure 1-4** below) and the U.S. 59/I-69W mainlanes allow for the uncongested flow of trucks and passenger vehicles.

Figure 1-4: Level of Service Comparison, 2040 No-Build versus Build



1.2 Safety Outcomes

Another key objective of the I-35/I-69W International Freight Gateway project is to improve safety throughout the project limits, especially by creating direct connections at the Milo Interchange as well as a continued through movement on U.S. 59/I-69W, decreasing movements at signalized intersections. The average number of incidents (crashes) for the project vicinity based on 2010-2012 data was 48.5 crashes/year. **Table 1-1** identifies the top intersections in Laredo with crash occurrences, including fatal crash locations, between the years 2010 and 2012. Intersection numbers 5, 6, and 15 from **Table 1-1** are within the project limits. Adding the U.S. 59/I-69W mainlanes overpass and direct connectors with I-35 will allow a large volume of vehicles to bypass these intersection safety hotspots.

The project will address safety concerns caused by an increase in traffic and an increase in crash rates in the region. Some of the most significant growth in daily traffic volumes between the years 2002 and 2015 occurred along U.S. 59 and I-35 (**Table 1-2**). Based on these trends, population and freight volumes located within the corridor will continue to grow well into the future; the new infrastructure will help accommodate this growth.

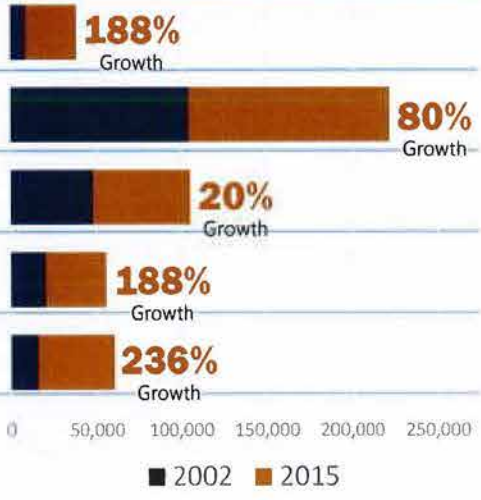
Table 1-1: Top 20 Crash Locations in Laredo, 2010-2012

	Intersection	Number of Crashes
1.	McPherson Rd. and Del Mar Blvd.	268
2.	Loop 20 (Bob Bullock Loop) and SH 359	222
3.	IH 35 and U.S. 83 (Matamoros St.)	212
4.	IS 35 and Calton Rd.	165
5.	**IH 35 and Loop 20 (Bob Bullock Loop)**	**159**
6.	**FM 1472 and Loop 20 (Bob Bullock)**	**129**
7.	U.S. 83 (Zapata) and Loop 20 (Bob Bullock)	126
8.	IH 35 and Mann Rd.	114
9.	Loop 20 (Bob Bullock Loop) and Spur 400 (Clark Blvd.)	109
10.	IH 35 and Victoria St.	108
11.	IH 25 and U.S. 59 (Lafayette St.)	105
12.	McPherson Rd. and Calton Rd.	103
13.	IH 35 and U.S. 83 (Houston St.)	102
14.	McPherson Rd and Jacaman Rd.	97
15.	**McPherson Rd. and Loop 20 (Bob Bullock Loop)**	**95**
16.	McPherson Rd. and Shiloh Dr.	93
17.	Loop 20 (Bob Bullock Loop)	90
18.	U.S. 59 and N. Bartlett Ave.	75
19.	McPherson Rd. and Hillside Rd.	70
20.	Mines Rd. and Bristol Rd.	68

Table 1-2: High-Traffic Volume Growth Locations Close to the Project Area (ADT 2002 to 2015)

Roadway	Location	Absolute Growth	% Growth between 2002 -2015
U.S. 59	Between I-35 and McPherson Ave. *(east of Milo Interchange)*	29,147	188% Growth
U.S. 59	Between Del Mar Blvd. and U.S. 59 *(4.6 miles east of Milo Interchange)*	15,974	80% Growth
I-35	Between FM 1472 and U.S. 59 (south of Milo Interchange)	9,474	20% Growth
I-35	Between Carlton Rd. and Mann Rd. *(3.6 miles south of Milo Interchange)*	13,864	188% Growth
U.S. 59	Between I-35 and McPherson Ave. *(1 mile east of Milo Interchange)*	20,566	236% Growth

Source: Created using data from 2012 and 2015 Laredo District Traffic Map by TxDOT



The components of the I-35/I-69W International Freight Gateway project are in different stages of development, but all are scheduled to begin construction prior to September 30, 2020, ***and cannot be completed without Federal funds***. When completed, the project will provide for an upgraded, controlled access facility that will move traffic through this portion of Laredo with an improved Level of Service (LOS) through congested sections of roadway present today. ***It is estimated that the project will provide $4.32 of benefit for every $1 invested.*** The I-35/I-69W International Freight Gateway project has been identified by TxDOT, the City of Laredo, Webb County, and the Webb County-City of Laredo Regional Mobility Authority as a priority project for this community and is reflected in their planning documents.

1.3 Eligibility

The I-35/I-69W International Freight Gateway project meets the following INFRA project eligibility requirements:

- A highway freight project carried out on the National Highway Freight Network.
- A highway or bridge project carried out on the National Highway System that adds capacity and increases mobility to the U.S. interstate system.

TxDOT previously submitted a "Laredo Bundle" Federal FASTLANE application as part of the FY2016 program. In hopes of obtaining needed funding for these critical international trade gateway improvements, the City of Laredo, in partnership with TxDOT, is submitting a new application for the project with a more comprehensive project scope. Rather than highlighting the many changes made to the previous application submittal, the project has been redefined to maximize benefits to the region and nation, and a new INFRA grant application has been submitted.

1.4 Previously Incurred Costs

The City of Laredo and TxDOT have previously invested over $32 million in prior work on the project. These previous costs include the completion of three (of eight) direct connectors between U.S. 59 and I-35 in north Laredo. This application for INFRA funding will be used to complete the remaining five connectors.

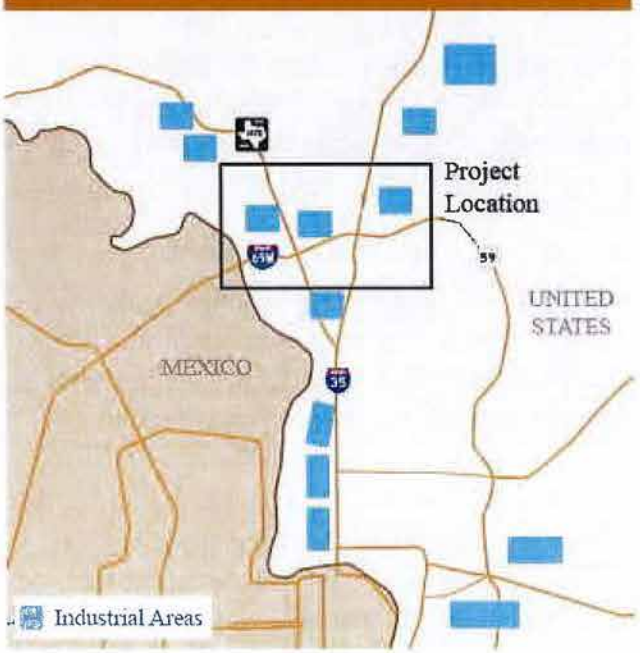
2 Project Location

Laredo, the county seat of Webb County, Texas, is located on the north bank of the Río Grande River in South Texas, across from Nuevo Laredo, Tamaulipas, Mexico. The Laredo Urbanized Area (ID 47854) has a population of almost 270,000 (2016). As shown in **Figure 2-1**, the I-35/I-69W International Freight Gateway project is located near the World Trade Bridge, a critical international border crossing located approximately 2.75 miles to the west of I-35 and the U.S. 59/I-69W interchange. U.S. 59/I-69W provides access to and from the World Trade Bridge and other major freight corridors in the region. The Juarez-Lincoln International Bridge, which is the fourth busiest port of entry for non-commercial vehicles at the U.S.-Mexico border, is located approximately 8 miles to the south.

Figure 2-1: Project Location Map

In addition, industrial facilities in the area are the nerve centers for cross-border freight traffic in the Laredo region. These facilities serve as the origins and destinations of the majority of commercial traffic, and the project is located within a 10-mile radius of these facilities (**Figure 2-2**). Laredo's location at the border of the U.S. and Mexico on the southern end of I-35 and close to the manufacturers in northern Mexico highlights its vital role in trade between the two nations. The project is located on the north end of the City of Laredo, approximately 3 miles east of the U.S.-Mexico border crossing (World Trade Bridge).

Figure 2-2: Laredo Area Industrial Areas



The projects would fully integrate with each other, thus improving connectivity between the trade gateways and transportation corridors. The project will also integrate with the McPherson Road interchange that opened to traffic in 2014 and with the International Boulevard interchange project that is currently under contract. The major destination points for trucks crossing at the World Trade International Bridge are within 4 miles from this POE. I-69W connects the POE with truck routes FM 1472, I-35, and U.S. 59, which provides direct access to destinations within Laredo.

3 Project Parties

The City of Laredo, Webb County, Webb County-City of Laredo Regional Mobility Authority, and TxDOT have formed a strong partnership to address the challenges of moving people and goods, and to facilitate cross-border trade. The applicant – the City of Laredo – who is leading this project as part of the I-35 Statewide Corridor Implementation Plan, is submitting this grant application.

The City of Laredo is the county seat of Webb County, Texas, located on the north bank of the Rio Grande River in South Texas, across from Nuevo Laredo, Tamaulipas, Mexico. According to the 2010 census, the city population was 236,091, making it the tenth-most populous city in the state of Texas and third-most populated on the Mexico–United States border, after San Diego, California, and El Paso, Texas. Its metropolitan area is the 178th-largest in the U.S. and includes all of Webb County, with a population of 250,304. Laredo is also part of the cross-border Laredo-Nuevo Laredo Metropolitan Area with an estimated population of 636,516.

Because Laredo is 95.6 percent Hispanic and Latino, it is one of the least ethnically diverse cities in the United States. When economic diversity, household diversity, and social class diversity are considered, Laredo is rated the 19th least diverse city overall out of the 313 largest cities in the nation. Laredo's economy is based on international trade with Mexico. Most major transportation companies have a facility in Laredo. The city's location on the southern end of I-35, close to the manufacturers in northern Mexico, promotes its vital role in trade between the two nations. Laredo International Airport is within the Laredo city limits, while the Quetzalcoatl International Airport is nearby in Nuevo Laredo on the Mexican side.

Webb County was created on January 28th, 1848 by the Texas legislature and is the 6th largest county in the state of Texas with 3,307 square miles. Like all Texas counties, Webb County is governed by four part-time county commissioners and elected by single-member districts of equivalent population, and a county-wide county judge, who is the full-time administrator of the county.

The mission of the Webb County-City of Laredo Regional Mobility Authority is to assist the establishment of a comprehensive transportation system to directly benefit the traveling public within Webb County-City of Laredo region through the development of additional transportation alternatives within the region.

As a project partner, the Laredo District of TxDOT would be responsible for the development and implementation of the projects. TxDOT, in cooperation with local and regional officials, is responsible for planning, designing, building, operating and maintaining the state's transportation system. This

includes acquiring right-of-way for state highways and other modes of transportation; researching issues to save lives and solve transportation problems; constructing roads and bridges; and improving and maintaining roadways, bridges, airports, and other transportation infrastructure. The Laredo District plans, designs, builds, operates and maintains the state transportation system in the following counties: Dimmit, Duval, Kinney, La Salle, Maverick, Val Verde, Webb and Zavala.

There are many other entities supporting this project and its proposed benefits, including many organizations, agencies, businesses, and government officials. In partnership with supporters Webb County, Webb County-City of Laredo Regional Mobility Authority, and the Laredo Metropolitan Planning Organization (MPO), the City of Laredo continues to gain support from legislators, government, local businesses, and other economic development organizations within the region and the state. Letters of Support can be found in **Appendix A**.

4 Grant Funds and Sources and Uses of Project Funds

The I-35/I-69W International Freight Gateway project represents a significant surface transportation infrastructure investment to improve freight and passenger vehicle mobility. Accordingly, multiple revenue sources will be utilized for construction, to balance project needs against the broader fiscal constraints of TxDOT's statewide construction program. **Table 4-1** shows the planned sources of project funds, and includes $78 million of INFRA grant funds.

4.1 Viability and Completeness of the Project's Financing

Table 4-1: Overall Project Fund Sources

Source	Cost	Type
INFRA (Grant)	$78,000,000	Federal
CBI – Federal Match (80%)	$24,000,000	Federal
CBI – State Match (20%)	$6,000,000	Non-federal
City of Laredo	$22,000,000	Non-federal
TOTAL SOURCES	**$130,000,000**	

The $130,000,000 is the cost of project construction.

The funding package for the projects is a mix of federal, state, and local dollars, with overall funding comprised of Coordinated Border Infrastructure (CBI) program funds and an INFRA grant award, as well as a financial commitment from the State of Texas and City of Laredo. Sixty (60) percent of total funding is attributed to the anticipated federal INFRA grant award; the remaining 40 percent of funding is attributed to the federal CBI funds (18%) and local sources (22%). **Table 4-1** illustrates the various funding mechanisms and sorts them by funding type.

4.2 Stable and Reliable Fund Commitments

The $30 million of Coordinated Border Infrastructure (CBI) funding through FHWA is being provided through TxDOT with an 80/20 federal/state split. The City of Laredo's City Council

passed a resolution in 2016 to provide $22 million of the matching funds. The City of Laredo's funds generally come from tax revenue, fees/collections, and other sources.

TxDOT also supports this project financially. TxDOT annually oversees $7.5 billion in the state highway fund, $3.4 billion in state bond proceeds, $1.8 billion in other funding mechanisms (tolls, mobility fund, concession fees), and over $8.6 billion in federal funds to construct, maintain, and operate approximately 197,100 miles of state highway system.

4.3 Contingency Reserves

The City of Laredo currently has a fund balance exceeding $44 million. The City has the capacity to utilize or leverage funding towards the issuance of bonds/debt service in the future, if the project were to exceed the anticipated budget.

Despite the strong funding plan that is in place, TxDOT will also support any needed contingency reserves. TxDOT recognizes the need for contingency funding in the event of funding interruptions. The possibility of federal or state transportation dollars being unavailable for project expenditures is remote. Historically, periodic short-term interruptions in federal reimbursements have been successfully managed through cash management practices. In 1946, language was added to the Texas Constitution requiring three-fourths of all net revenue generated by motor fuels taxes to be used only for acquiring right-of-way; constructing, maintaining, and policing public roadways; or for the payment of principal and interest on certain road district bonds or warrants. In the unlikely event that federal and state dollars are both unavailable, Texas has contingency solutions ranging from short-term cash management techniques to longer-term access to credit and capital markets.

4.4 Financial Condition of the Project Sponsor

The City of Laredo is rated by Moody's and Standard and Poor's (August 2016) and has received a strong credit rating from both agencies. As a 100-year-old organization, TxDOT also has the financial wherewithal to see the Laredo Gateway Project through to completion. TxDOT oversees a biennial budget of $8.6 billion and is able to access capital markets by selling general obligation debt backed by the full faith and credit of the state government. This debt is rated "AAA" by all three national rating agencies.

4.5 Ability to Manage Funding and Grants

The City of Laredo has successfully managed multiple CBI funds (including roadway projects) over the past few years. The city is also familiar with federal funding requirements, specifically programs like FASTLANE. Past projects include the construction of U.S. 59 (future I-69W) mainlanes over McPherson Road and construction along Loop 20 from Business U.S. 59 to State Highway 359.

The financial strength of TxDOT goes hand-in-hand with past success in managing several federal grants and hundreds of federal contracts, both as a recipient and a pass-through agency for sub-recipients. TxDOT complies with all federal government expenditure and reporting

requirements, including the general requirements of the Office of Management and Budget's "Super Circular" and the transportation specific guidance outlined in the Stewardship and Oversight Agreement between TxDOT and FHWA.

4.6 Future Eligible Cost

The future eligible cost of this project is $98,000,000 (including contingency) for construction, which is an eligible cost under this funding program.

4.7 Availability and Commitment of Funds

Table 4-1 shows that the City of Laredo is requesting $78 million in INFRA funds to construct the I-35/I-69W International Freight Gateway project. This amount will be matched with $52 million in committed other federal/state/local funds for a total project cost and funding of $130 million. As previously described, funding commitment and availability is shown in **Table 4-1**.

4.8 Federal Funds Already Provided

The construction of the U.S. 59/I-69W overpass at I-35 has been identified by TxDOT, the City of Laredo, Webb County, and the Webb County-City of Laredo Regional Mobility Authority as a priority project for the region. This component is identified in TxDOT's Unified Transportation Plan (UTP) and Statewide Transportation Improvement Program (STIP) as well as the Laredo MPO's TIP and Metropolitan Transportation Plan (MTP). The I-69W additional mainlanes are not identified in the UTP. This segment of I-69W is part of the future I-69 corridor by the Texas Transportation Commission, TxDOT, and FHWA. Federal law requires that this roadway must be upgraded to interstate standards by 2035. The Federal funds identified are $78,000,000 in INFRA grant funds and $24,000,000 in CBI Federal funds.

The five direct connectors at the Milo Interchange are not identified in the UTP. However, three of them (WB-NB, SB-EB, and WB-SB) are identified in the Laredo MPO's 2010-2035 MTP as projects needed for congestion relief, economic development, and improved safety.

5 Merit Criteria

5.1 Support for National or Regional Economic Vitality

Funds from this INFRA grant are necessary to complete the proposed projects expeditiously, eliminate delays in the project delivery process and reduce project costs due to escalation. ***The construction of the five direct connectors is crucial to provide valuable benefits to the region of reduced traffic congestion; minimized accident counts through improved traffic safety; improved shipping times resulting in decreased pollution from queued motor vehicles and savings to shippers; and increased job growth.*** Impediments to trade with Mexico have direct and indirect impacts on jobs – not only in border regions – but also other parts of Texas, the U.S., and North America. The current configuration of U.S. 59/I-69W with its discontinuous mainlanes, at-grade intersections, and railroad crossing, and only three of eight direct connectors with I-35 open to traffic, is becoming an increasingly strained bottleneck for

the movement of people and goods in the region as well as cross-border movements at the World Trade Bridge in Laredo.

The I-35/I-69W International Freight Gateway project improvements would increase the efficiency and reliability of truck and passenger vehicle movements in the study area, and the economic benefits from increasing throughput of goods and people in and out of the region and the international border crossing would enhance the competitiveness of the region, state, and U.S. By 2040, trade values of all outbound, inbound, or internal freight movement will more than double in the Laredo region. The economic benefits from additional trade and the movement of people in the region and the international border crossing would enhance the global economic competitiveness of the region, state, and nation. From a regional perspective, the Laredo economy relies heavily on the international movement of freight due to its geographic location and job specialization characteristics. North American Free Trade Agreement (NAFTA) has created a strong demand for trucking, warehousing, and support service industries in the region; and employment in trade, transportation, and utilities has accounted for approximately 33 percent of the jobs in Webb County since 2000.

In support of this INFRA grant application, a Benefit Cost Analysis (BCA) was performed to assess the cost-effectiveness of the project. The results of the BCA are shown in **Table 5-1**. ***Based on the BCA results, this project will result in public benefits of $4.32 for every $1 spent.***

Table 5-1: Summary of Results from the Benefit Cost Analysis

Statistics	Undiscounted	Discounted at 7%	Discounted at 3%
Total Benefits	**$1,315.7 M**	**$392.4 M**	**$745.0 M**
Total Travel Time Savings	$1,002.5 M	$300.4 M	$568.8 M
Total Emission Cost Savings	$151.3 M	$43.7 M	$84.4 M
Total Vehicle Operating Cost Savings	$14.2 M	$4.1 M	$7.9 M
Total Accident Cost Savings	$147.7 M	$44.3 M	$83.8 M
Incremental O&M	$0.0 M	$0.0 M	$0.0 M
Total Capital Costs	**$115.0 M**	**$90.8 M**	**$103.7 M**
Total Right of Way Costs	$11.5 M	$9.1 M	$10.4 M
Total Construction Costs	$103.5 M	$81.7 M	$93.3 M
Net Present Value		$301.6 M	$641.3 M
Benefit-Cost Ratio		4.32	7.18
ROI		332%	618%
IRR	28.8%		

The period of analysis used in the estimation of the I-35/I-69W International Freight Gateway project benefits and costs corresponds to 34 years, including 2 years of project development (design and construction) and 30 years of operation. Annual costs and benefits are estimated

through 2050. Construction of all the improvements is expected to be completed in 2021. Benefits will accrue during the full operation of the improvements constructed for the project (30 years).

Considering all monetized benefits (user as well as non-user) and costs (capital as well as operations and maintenance costs), the estimated internal rate of return of the I-35/I-69W International Freight Gateway project is estimated at 28.8 percent. The payback period is estimated at 3.18 years. With a 7 percent discount rate, the project will result in a net present value of nearly $301.6 million and a benefit-cost ratio of 4.32. With a 3 percent real discount rate, the net present value of the project would increase to more than $641.3 million, for a benefit-cost ratio of 7.18 (see **Table 5-2**). The detailed information on the BCA can be found in **Appendix B**.

Table 5-2: Summary of Benefit Metrics

Project Evaluation Metric	7% Discount Rate	3% Discount Rate
Total Discounted Benefits	**$392.4**	**$745.0**
Total Discounted Costs	**$90.8**	**$103.7**
Net Present Value	$301.6	$641.3
Benefit / Cost Ratio	4.32	7.18
Internal Rate of Return (%)	28.8%	
Payback Period (years)	3.18	

The I-35/I-69W International Freight Gateway has other ancillary project benefits, including general improvements in freight resiliency and improvements in travel time reliability for all motorists.

5.2 Leveraging of Federal Funding

The funding package for the projects is a mix of federal, state, and local dollars, with overall funding comprised of Coordinated Border Infrastructure (CBI) program funds and an INFRA grant award, as well as a financial commitment from the State of Texas and City of Laredo. Sixty (60) percent of total funding is attributed to the anticipated federal INFRA grant award; the remaining 40 percent of funding is attributed to the federal CBI funds (18%) and local sources (22%). **Table 4-1** illustrates the various funding mechanisms and sorts them by funding type. Funds from this INFRA grant are necessary to complete the proposed projects expeditiously, eliminate delays in the project delivery process, and reduce project costs due to escalation. The construction of the I-35/I-69W International Freight Gateway project is crucial to provide valuable benefits to the region of reduced traffic congestion; minimized accident counts through improved traffic safety; improved shipping times resulting in decreased pollution from queued motor vehicles and savings to shippers; and increased job growth.

5.3 Potential for Innovation

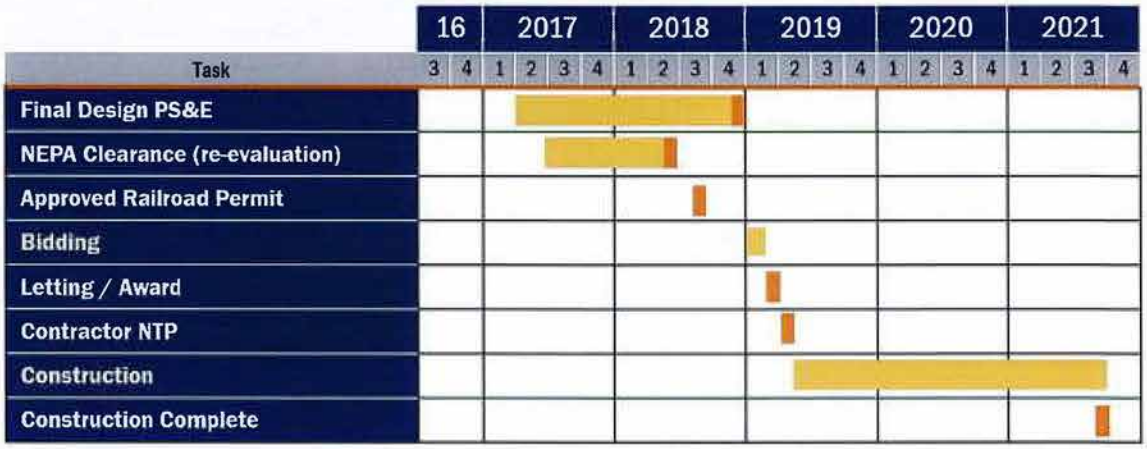
TxDOT will develop a unified Border and Gateway Plan beginning in November 2017. The entire border region, to include Texas and Mexico and all modal freight users, will be represented to ensure issues and needs are identified, goals and objectives are developed, projects and programs are recommended, policies are reviewed, performance metrics are established, and that continuous planning will be pursued. This will ensure all of the Texas-

Mexico border crossings and freight corridors receive continuous attention to support economic growth, efficient and reliable mobility, safety improvement, environmental quality, and quality of life for Americans and Mexicans.

5.4 Performance and Accountability

A project implementation schedule is provided in **Figure 5-1**. The schedule details anticipated timeframes for major milestones such as preliminary and final design, environmental approvals, project award, contract execution, contractor notice to proceed for construction activities, and construction completion. All of the projects within the I-35/I-69W International Freight Gateway project meet all identified schedule requirements for obligation of INFRA grant funds.

Figure 5-1: Project Schedule



6 Project Readiness

6.1 Technical Feasibility

All portions of the I-35/I-69W International Freight Gateway project are anticipated to begin construction within 18 months of notice of award of the INFRA grant. The projects within the I-35/I-69W International Freight Gateway are at different phases of development. Project design criteria conforms to the TxDOT Roadway Design Manual, TxDOT Bridge Design Manual, Texas Manual on Uniform Traffic Control Devices (TMUTCD), and other state and federal design standards, as applicable.

The statement of work for the projects includes:

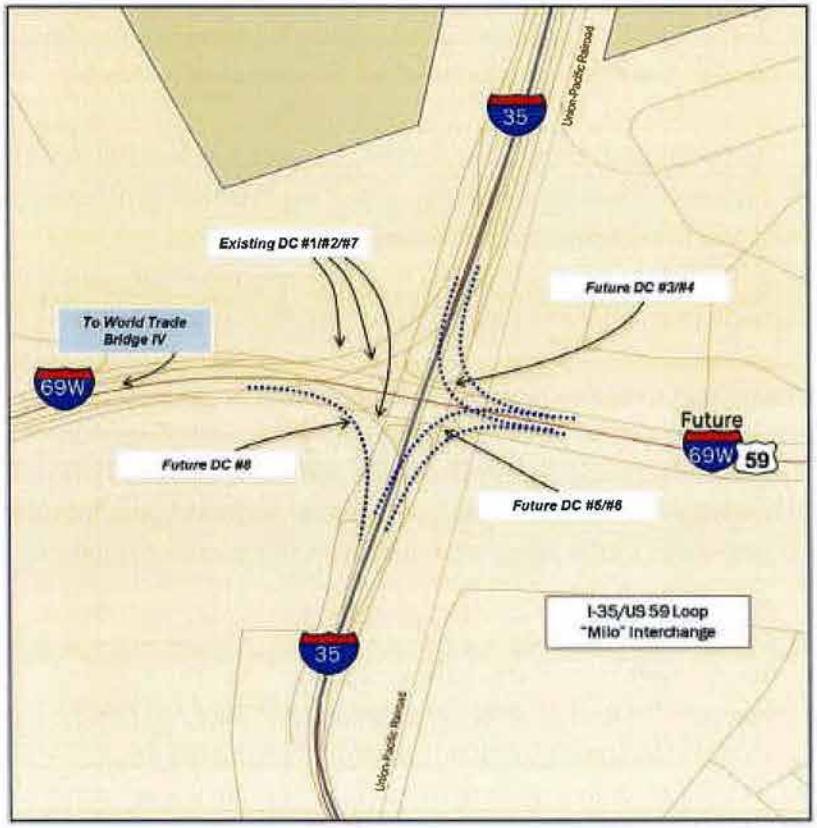
- Construction of five direct connectors at the I-35/U.S. 59 Interchange: westbound U.S. 59 to southbound I-35, westbound U.S. 59 to northbound I-35, eastbound I-69W to southbound I-35, northbound I-35 to eastbound U.S. 59, and southbound I-35 to eastbound U.S. 59. The work includes pavement approaches, earthwork, direct connector bridge substructure and superstructure, and signage and pavement markings.

- Construction of 1.8 miles of two mainlanes, one eastbound and one westbound on I-69 W from the entrance of World Trade Bridge to 0.3 miles west of I-35, constructing one additional 12-foot main lane, in each direction, with 10-foot shoulders.

The director connectors are shown in **Figure 6-1** below.

The project cost estimate, which includes agency, financial, design, construction costs, and contingency, is based on a detailed review of the preliminary design drawings, similar projects, and concessionaire information. A 10-percent project contingency is included in the cost estimate.

Figure 6-1: Milo Interchange Direct Connectors



6.3 Required Approvals

An Environmental Assessment (EA) was completed in the early 1990s by the Federal Highway Administration (FHWA) in conjunction with TxDOT that covered the construction of the existing I-35 frontage roads and mainlanes; widening of the I-35 mainlanes over the U.S. 59 frontage roads; construction of eight direct connectors between I-35 and U.S. 59; and construction of the U.S. 59 frontage roads and mainlanes. Of the cleared improvements, the U.S. 59 frontage roads, widening of I-35 mainlanes, three of the eight direct connectors, and the McPherson Road overpass were complete. In the early 2000s, FHWA and TxDOT Environmental Affairs Division determined that all remaining work in this area would be required to be re-cleared as standalone Categorical Exclusions (CEs).

The direct connectors project has not yet received environmental clearance, but it is anticipated to be cleared as a CE by June 2018, which would be nearly one year prior the anticipated letting date. Coordination with the following agencies is anticipated for the environmental review of the direct connectors:

- Texas Council on Environmental Quality for the Construction General Permit;
- City of Laredo for general project coordination and construction notification including MS4 permitting and floodplain administration; and
- Texas Parks and Wildlife Department (TPWD) may require coordination if there are any anticipated impacts to threatened or endangered species and their habitats.

Previous studies in the project location indicate that there would be no significant (or substantial) impacts to either the human or natural environment by this work, including to threatened or endangered species, particularly due to the project being contained within existing TxDOT right-of-way. TxDOT will determine the extent, if any, of potential impacts to the following resources: air quality, biological resources, traffic noise, community, water resources, historic, and archeological.

6.3.1.1 Discussions with the Federal Highway Administration

FHWA assigned its responsibility for National Environmental Policy Act (NEPA) to TxDOT through a Memorandum of Understanding (MOU) signed on December 14, 2014. This delegation authorized TxDOT to review and approve environmental documents without seeking approval from FHWA. As such, outside of the previously discussed agency review, no discussions with U.S. Department of Transportation offices or headquarters are required for the grant application's projects.

6.3.1.2 *Public Engagement*

Public engagement has occurred throughout the development of the entire interchange project, including during the EA. Comments received to date have shown general public support for the project, and local officials strongly support construction of the I-35/I-69W International Freight Gateway. Due to the minimal impacts associated with the I-35/I-69W International Freight Gateway, public involvement through public meetings or hearings are not required. Meetings with affected property owners and open houses may occur as environmental review proceeds for the direct connectors and I-69W widening projects.

6.3.1.3 *State and Local Approvals and Planning*

The I-35/I-69W International Freight Gateway project is identified as priority project for the region by the City of Laredo, Webb County, Webb County-City of Laredo Regional Mobility Authority, and TxDOT. The I-35/I-69W International Freight Gateway project is included in the Laredo Metropolitan Organization's (MPO) 2015-2040 Metropolitan Transportation Plan (MTP) as funded and illustrative projects. The project is listed in the MTP as a project that will provide congestion relief, economic development, and improved safety. The U.S. 59 mainlanes project is also listed in the Laredo MPO's 2015-2018 Transportation Improvement Plan, which was incorporated in the Statewide Transportation Improvement Plan (STIP) in August 2015. The I-35/I-69W International Freight Gateway project has wide support from multiple sectors of government including the City of Laredo, Webb County, and Texas legislature. Once clearance is received for all three projects, the project will satisfy all required state and local approvals to move forward with construction within 18 months of INFRA funding obligation.

6.4 Project Risks and Mitigation Strategies

The I-35/I-69W International Freight Gateway project will be implemented within the existing right-of-way footprints of I-35, U.S. 59, and I-69. Furthermore, the construction of both the U.S. 59 and the I-69 mainlanes are within the corresponding frontage roads, which dramatically minimizes the risk to encounter unforeseen issues that could delay the development and construction of the projects. The complete interchange obtained NEPA clearance through an Environmental Assessment in the early 1990s, thus minimizing the possibility of encountering major issues when pursuing the NEPA clearance documents for the direct connectors through a Categorical Exclusion. No major utility relocations are anticipated for these projects. **Table 6-1** below shows the general categories of risk assessed and mitigation strategies.

Table 6-1: Project Risks and Mitigation

1 = Low 2 = Minor 3 = Moderate 4 = Significant

Risk #	Risk Category	Risk Name	Description	Likelihood	Impact		Mitigation Strategies
					Cost	Schedule	
1	Financial	Loss of Public or Private Funding	Loss of funding because of unforeseen circumstances	1	2	2	Given public and private benefits, this project will need both Federal and State sources to be completed in a timely manner. If a funding source does not materialize, the project will be delayed.
2	Management	Stakeholders	Stakeholders may have varying procedures and objectives	1	2	2	TxDOT has successfully worked numerous times with the groups involved, and feels all obstacles could be overcome with stakeholder communication to address potential concerns.
3	Contracting & Procurement	Administrative Burden	TxDOT will manage all contracts	1	1	1	TxDOT will administer all contracts. It has successfully completed many capital projects, in the past, with a similar scope.
4	Contracting & Procurement	Availability of Qualified Contractors	Project involves specialized construction, and is being undertaken in a rural area	1	1	1	TxDOT has experience delivering capital projects. It will manage resources in line with the funding requirements and established time requirements.
5	Construction	Traffic	Roadway traffic congestion resulting from construction and site infrastructure	2	1	2	Project phasing will reduce impact. Coordination by TxDOT with the local jurisdiction, and other highway users and stakeholders will occur prior to scheduling work and any potential outages or road closures or detours in order to minimize potential impacts.
6	Construction	Business Disruption	The region's existing businesses may be impacted by construction	1	1	2	Project phasing and stakeholder coordination will reduce impact. Coordination with customers will occur to minimize business disruption.
7	Environmental	State Historic Preservation Officers (SHPO)	Historic/ archaeological/ cultural resources discoveries	1	2	2	Required regulations will be followed and responded to accordingly by TxDOT and other stakeholders, if any such resources are found in the area.

Risk #	Risk Category	Risk Name	Description	Likelihood	Impact		Mitigation Strategies
					Cost	Schedule	
8	Environmental	Wetlands	Project impact on existing wetlands	2	2	2	Required environmental regulations will be followed and responded to accordingly.
9	Environmental	Endangered Species	Impact to any endangered species within the project area	1	1	2	Required environmental regulations will be followed and responded to accordingly, if any known threatened or endangered species are discovered within the project area.
10	Environmental	NEPA	Compliance with NEPA because of federal funding	2	2	2	Identify lead agency and cooperating agencies that can use the project's NEPA clearance document as their decision document. Potential environmental issues include environmental justice, community impacts, noise analysis, cultural resources, habitat and biota, water resources, and hazardous materials.
11	Real Estate	Property acquisitions	Need for property acquisition	2	2	2	Property acquisitions are required per preliminary design.
12	Utilities	Utility Relocations	Need for some utilities to be relocated as a result of project	2	2	2	Coordination is ongoing with affected utility companies to relocate utility lines as necessary.

7 Large/Small Project Requirements

I-35/I-69W International Freight Gateway project is considered a Large Project under the INFRA grant program requirements. The project meets the criteria listed in the Notice of Funding Opportunity (NOFO), as detailed below.

The Project Generates National or Regional Economic, Mobility, and Safety Benefits

Based on the convergence of three major freight corridors at the project location (i.e., I-35/ I-69W/Ports-to-Plains Trade Corridor between Canada, U.S., and Mexico) as it approaches the busiest inland POE in the U.S. that supports millions of jobs in Laredo, Texas, and the U.S., ***this project would clearly generate local, regional, national, and international benefits by enhancing the movement of goods to the Laredo POE***. Over 22 percent of the state economy and approximately 465,000 jobs in Texas are dependent on U.S.-Mexico trade.

This project would also provide safety benefits by enhancing commercial traffic flows into and through this portion of Laredo, which contains the World Trade International Bridge POE and the drayage/customs brokers' facilities that serve international trade crossing at Laredo. These safety benefits would result from the removal of traffic signals at the I-35/I-69W/U.S. 59 Loop interchange, which are the primary causative reason for accidents in this portion of Laredo.

7.1 The Project is Cost Effective

The project upgrades would be highly cost effective to implement, as the World Trade Bridge is a vital international freight crossing between U.S. and Mexico. This POE handles up to 11,000-12,000 truck crossings per day on average totaling over 1.8 million per year and is the busiest inland POE in the U.S. This international crossing handles more trucks than any other of the U.S.-Mexico-Canada border crossings (approximately 17.8 percent in 2015). The trade value of the international cargoes crossing at this POE, and carried on these connecting roadways, was valued at approximately $280 billion, or 7 percent of the U.S. international trade in 2014. ***Based on the BCA results, this project will result in public benefits of $4.32 for every $1 spent.***

7.2 The Project Contributes to One or More of the Goals Listed under 23 USC 150

Safety. Current analysis indicates that the majority of all accidents are located at the signalized intersections in this portion of the US 59/I-69W Loop. This project would enhance safety by eliminating the need for traffic to stop at the existing signalized intersections along this portion of the Loop. ***This project will provide nearly $45 million in Total Accident Cost Savings (discounted at 7%).***

Congestion Reduction. Current analysis indicates that congestion on this portion of the U.S. 59/I-69W Loop is associated with the existing signalized intersections along this portion of the Loop. This project would eliminate the need for all traffic to use these signalized intersections. ***This project will result in over $300 million in Total Travel Time Savings (discounted at 7%).***

System Reliability/Freight Movement and Economic Vitality. The proposed upgrades enhance the reliability of these roadways by eliminating the need for all traffic to utilize the signalized intersections. Freight movement and economic vitality would be enhanced by this proposed work, including by the addition of an I-69W Loop mainlane for eastbound traffic leaving the World Trade International Bridge that would be utilizing the pre-certified/pre-inspected "FASTLANE" (not a reference to the FASTLANE Grant program) being proposed by the City of Laredo at the World Trade Bridge. ***This project will provide over $4 million in Total Vehicle Operating Cost Savings (discounted at 7%).***

Environmental Sustainability. This project would enhance the performance of this intertwined transportation and international bridge system without contributing to any substantial environmental impacts; by moving traffic more efficiently, the project would contribute to improved air quality by reducing emissions by cars and heavy trucks at the existing signalized intersections. ***This project will provide over $43 million in Total Emission Cost Savings (discounted at 7%).***

Reduced Project Delivery Delays. This grant funding would allow the City to accelerate the construction of the project sooner than the current longer-term phased approach. This in turn, will reduce project inflationary costs that would be incurred without this grant funding. It would also promote jobs as well as the local, state, national and international economies by expediting the movement of people and international trade goods.

7.3 The Project is Based on the Results of Preliminary Engineering

This project is located at the I-35/US 59 Loop (formerly Loop 20) interchange that has seen ongoing engineering design and construction phases since the construction of the Loop and the World Trade Bridge in the late 1990s. This interchange has had an approved design schematic since this time and continues to be used as the basis of the engineering in each of the construction phases.

7.4 The Project has One or More Stable and Dependable Funding or Financing Sources

The City of Laredo currently has a fund balance exceeding $44 million and has the capacity to utilize or leverage that funding towards the issuance of bonds/debt service in the future if the project were to exceed the anticipated budget.

The Project Cannot be Easily and Efficiently Completed without Other Federal Funding

This project would need to compete for traditional and available state funding with other much needed projects in Laredo with the actual implementation of this project's work completed in piecemeal fashion over time.

7.5 The Project is Reasonably Expected to Begin Construction No Later than 18 Months from Obligation

The PS&E development for the rest of the project phases included in the application are either currently under development by TxDOT (i.e. the remaining five US 59 Loop/I-35 interchange direct connectors) or would begin in late 2017 (i.e. the additional eastbound mainlane between the World Trade Bridge and I-35 interchange). It is anticipated that these phases would begin construction within 18-months of the obligation of the funds as no additional right-of-way would be required and the appropriate environmental clearances and PS&E packages would be completed within this timeframe.

8 Federal Wage Certification Letter

Signed certification stating that the City of Laredo will comply with the requirements of Subchapter IV of Chapter 31 of Title 40, United States Code (federal wage rate requirements) as required by the FY2016 Appropriations Act is completed and attached as Appendix C.

9 Standard Form 424 (Application for Federal Assistance)

The City of Laredo has completed the Standard Form 424 and has uploaded it to grants.gov.

10 Standard Form 424C (Budget Information for Construction Projects)

The City of Laredo has completed the Standard Form 424C and has uploaded it to grants.gov.

Appendix A. Letters of Support

JOHN CORNYN
TEXAS

United States Senate

WASHINGTON, DC 20510–4305

October 17, 2017

The Honorable Elaine Chao
Secretary
U.S. Department of Transportation
1200 New Jersey Avenue SE
Washington, DC 20590

Dear Secretary Chao:

I am writing to express my support for the INFRA application submitted to the Department of Transportation by the City of Laredo.

As you and your staff review the proposal, I trust you will give full consideration to the many strengths of this application. As you may know, the City of Laredo is the busiest inland port in the nation and the third largest U.S. Customs District. As trade with Mexico continues to grow, it is critical that the World Trade Bridge IV continues to function as efficiently as possible despite traffic and congestion issues. This grant, if awarded, would enable the City of Laredo to add capacity and relieve congestion along a corridor that sees over 12,000 daily commercial truck crossings. The additions will ultimately improve freight corridors for trade and facilitate safer movement of truck and vehicle traffic.

I would appreciate your efforts to ensure that I am kept informed of the progress of this application. Please contact Andrea McGee (Andrea_McGee@cornyn.senate.gov), my Grants Coordinator, with any developments regarding this proposal as soon as they are available.

Thank you for your assistance and consideration.

Sincerely,

John Cornyn

JOHN CORNYN
United States Senator

COMMITTEE ON
APPROPRIATIONS
SUBCOMMITTEES:
DEFENSE
HOMELAND SECURITY

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DEMOCRATIC STEERING AND
POLICY COMMITTEE
SENIOR WHIP

HENRY CUELLAR, PH.D.
U.S. HOUSE OF REPRESENTATIVES

October 10, 2017

The Honorable Elaine L. Chao
U.S. Secretary of Transportation
U.S. Department of Transportation
1200 New Jersey Avenue SE
Washington, D.C. 20590

Dear Secretary Chao:

I would like to express my support for the joint City of Laredo and the Texas Department of Transportation *Infrastructure For Rebuilding America* (INFRA) grant application to upgrade I-35 & I-69W interstates in Laredo, Texas. This is a significant project to the nation that will foster economic development, create jobs and alleviate congestion on the Primary Highway Freight System.

The City of Laredo's World Trade Bridge is the largest inland port in the nation, and second largest port for total trade among the nation's roughly 450 airports, seaports and border crossings. The Laredo Customs District is the third largest in the nation – second only to Los Angeles and New York. Last year, the Laredo Customs District processed $283.18 billion in total trade, accounting for over 60 percent of all U.S.-Mexico trade that is over 14,000 daily commercial truck crossings and 22 trains. The State of Texas was responsible for over $650 billion in international trade in 2015, making Texas the nation's largest exporter and the world's 10th largest economy. Of the total international trade through Texas, 32 percent was attributed to the Laredo border crossings.

The regional and national impact of the City of Laredo cannot be understated. The Texas Comptroller estimates that the trade processed through the City of Laredo contributes 363,000 net jobs to Texas and a minimum of $52 billion to the Texas economy. Furthermore, a 2016 Texas Department of Transportation time series analysis of the Truck-Freight Flow from the border in Laredo to the rest of the United States revealed that trucks originating in Laredo, Texas, traveled to every state in the contiguous United States of America in just one week.

The City of Laredo functions as the most effective and efficient inland port in the nation despite congestion issues caused by tremendous growth and outdated roadways to and from our port of entry. The rate of trade at the World Trade Bridge continues to grow and has increased 7.33 percent in the first eight months of this year compared to 2016. The U.S. Customs and Border Protection recognizes the importance of the World Trade Bridge and has announced a $100 million plan to increase technology and modernize their cargo processing facility. Congestion at our port of entry is costing consumers across the country. The International Trade Administration has estimated that wait times at five of the busiest ports of entry along our southern border result in an economic loss of $166 million per minute.

LAREDO
602 EAST CALTON ROAD
SUITE 2
LAREDO, TX 78041
PHONE: (956) 725-0639
FAX: (956) 725-2647

SAN ANTONIO
615 EAST HOUSTON STREET
SUITE 563
SAN ANTONIO, TX 78205
PHONE: (210) 271-2851
FAX: (210) 277-6671

MISSION
117 EAST TOM LANDRY STREET
MISSION, TX 78572
PHONE: (956) 424-3943
FAX: (956) 424-3936

RIO GRANDE CITY
100 NORTH FM 3167
SUITE 209
RIO GRANDE CITY, TX 78582
PHONE: (956) 487-5603
FAX: (956) 488-0952

To address this, the City of Laredo in conjunction with the Texas Department of Transportation have proposed significant infrastructure improvements including the following:

1. The construction of 1.4 miles of additional lanes on I-69 W, extending to and from World Trade Bridge port of entry to the I-35 direct access points.
2. The construction of five direct connectors at the U.S. 59/I-69W interchange with I-35.

The completion of these projects will alleviate congestion, improve safety conditions, and reduce emissions. This will result in savings to manufacturers, shippers and consumers nation-wide, and a safer, cleaner community.

I fully support this national, significant project. Thank you for your time and consideration. I hope you choose to approve the joint City of Laredo and the Texas Department of Transportation INFRA grant application to help improve the Primary Highway Freight System.

Sincerely,

Henry Cuellar, Ph.D.
U.S. Congressman
28th District of Texas

HC: js

TEXAS HOUSE OF REPRESENTATIVES

HOUSE COMMITTEE ON HUMAN SERVICES
CHAIR

HOUSE COMMITTEE ON JUDICIARY
AND CIVIL JURISPRUDENCE

RICHARD PEÑA RAYMOND

STATE REPRESENTATIVE
DISTRICT 42

October 12, 2017

The Honorable Elaine L. Chao
U.S. Secretary of Transportation
U.S. Department of Transportation
1200 New Jersey Avenue SE
Washington, D.C. 20590

Dear Secretary Chao:

I would like to express my support for the joint City of Laredo and the Texas Department of Transportation *Infrastructure For Rebuilding America* (INFRA) grant application to upgrade I-35 & I-69W interstates in Laredo, Texas. This is a significant project to the nation that will foster economic development, create jobs and alleviate congestion on the Primary Highway Freight System.

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The City of Laredo functions as the most effective and efficient inland port in the nation despite congestion issues caused by tremendous growth and outdated roadways to and from our port of entry.

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The completion of these projects will alleviate congestion, improve safety conditions, and reduce emissions. This will result in savings to manufacturers, shippers and consumers nation-wide, and a safer, cleaner community.

I fully support this national, significant project. Thank you for your time and consideration. I hope you choose to approve the joint City of Laredo and the Texas Department of Transportation INFRA grant application to help improve the Primary Highway Freight System.

If you have questions regarding my support of this proposed development, please contact me at (956) 286-9500.

Sincerely,

Richard Peña Raymond

Richard Peña Raymond
State Representative

Tracy O. King
State Representative

October 17, 2017

The Honorable Elaine L. Chao
U.S. Secretary of Transportation
U.S. Department of Transportation
1200 New Jersey Avenue SE
Washington, D.C. 20590

Dear Secretary Chao:

Please accept this letter of support for the joint City of Laredo and the Texas Department of Transportation Infrastructure For Rebuilding America (INFRA) grant application to upgrade I-35 & I-69W interstates in Laredo, Texas. This is a significant project to the nation that will foster economic development, create jobs and alleviate congestion on the Primary Highway Freight System.

The City of Laredo's World Trade Bridge is the largest inland port in the nation, and second largest port for total trade among the nation's roughly 450 airports, seaports and border crossings. The Laredo Customs District is the third largest in the nation – second only to Los Angeles and New York. Last year, the Laredo Customs District processed $283.18 billion in total trade, accounting for over 60 percent of all U.S.-Mexico trade that is over 14,000 daily commercial truck crossings and 22 trains. The State of Texas was responsible for over $650 billion in international trade in 2015, making Texas the nation's largest exporter and the world's 10th largest economy. Of the total international trade through Texas, 32 percent was attributed to the Laredo border crossings.

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P.O. Box 2910 • Austin, Texas 78768-2910 • 512-463-0194 • Email: district80.king@house.state.tx.us

Protection recognizes the importance of the World Trade Bridge and has announced a $100 million plan to increase technology and modernize their cargo processing facility. Congestion at our port of entry is costing consumers across the country. The International Trade Administration has estimated that wait times at five of the busiest ports of entry along our southern border result in an economic loss of $166 million per minute.

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The completion of these projects will alleviate congestion, improve safety conditions, and reduce emissions. This will result in savings to manufacturers, shippers and consumers nation-wide, and a safer, cleaner community.

I respectfully request a thorough and favorable review of the joint City of Laredo and the Texas Department of Transportation INFRA grant application to help improve the Primary Highway Freight System. Thank you for your time and attention to this important matter and for your leadership in improving our nations roadways.

Respectfully,

Tracy O. King

WEBB COUNTY–CITY OF LAREDO
REGIONAL MOBILITY AUTHORITY

7917 McPherson Road, Suite 203
Laredo, Texas 78045
956-723-9841

October 17, 2017

The Honorable Elaine L. Chao
U.S. Secretary of Transportation
U.S. Department of Transportation
1200 New Jersey Avenue SE
Washington, D.C. 20590

Dear Secretary Chao:

On behalf of the WC-CL RMA Board, I would like to express my support for the joint City of Laredo and the Texas Department of Transportation *Infrastructure For Rebuilding America* (INFRA) grant application to upgrade I-35 & I-69W interstates in Laredo, Texas. This is a significant project to the nation that will foster economic development, create jobs and alleviate congestion on the Primary Highway Freight System.

The City of Laredo's World Trade Bridge is the largest inland port in the nation, and second largest port for total trade among the nation's roughly 450 airports, seaports and border crossings. The Laredo Customs District is the third largest in the nation – second only to Los Angeles and New York. Last year, the Laredo Customs District processed $283.18 billion in total trade, accounting for over 60 percent of all U.S.-Mexico trade that is over 14,000 daily commercial truck crossings and 22 trains. The State of Texas was responsible for over $650 billion in international trade in 2015, making Texas the nation's largest exporter and the world's 10th largest economy. Of the total international trade through Texas, 32 percent was attributed to the Laredo border crossings.

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The completion of these projects will alleviate congestion, improve safety conditions, and reduce emissions. This will result in savings to manufacturers, shippers and consumers nation-wide, and a safer, cleaner community.

I fully support this national, significant project. Thank you for your time and consideration. I hope you choose to approve the joint City of Laredo and the Texas Department of Transportation INFRA grant application to help improve the Primary Highway Freight System.

Sincerely,

Ruben Soto Jr

Ruben Soto, Jr., CPA
Chairman
Webb County-City of Laredo RMA

Laredo Chamber of Commerce

October 19, 2017

The Honorable Elaine L. Chao
U.S. Secretary of Transportation
U.S. Department of Transportation
1200 New Jersey Avenue SE
Washington, DC 20590

Dear Secretary Chao:

Please accept this as a letter of support for the City of Laredo and the Texas Department of Transportation *Infrastructure for Rebuilding America* (INFRA) grant application (to upgrade I-35 & I-69W interstates in Laredo, Texas) currently under consideration by the U.S. Department of Transportation.

The City of Laredo's World Trade Bridge is the largest inland port in the nation, and second largest port for total trade among the nation's roughly 450 airports, seaports and border crossings. The Laredo Customs District is the third largest in the nation – second only to Los Angeles and New York. Last year, the Laredo Customs District processed $283.18 billion in total trade, accounting for over 60 percent of all U.S.-Mexico trade that is over 14,000 daily commercial truck crossings and 22 trains. The State of Texas was responsible for over $650 billion in international trade in 2015, making Texas the nation's largest exporter and the world's 10th largest economy. Of the total international trade through Texas, 32 percent was attributed to the Laredo border crossings.

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P.O Box 790 2310 San Bernardo Ave. Laredo, Texas 78040 P. 956-722-9895 F. 956-791-4503
www.laredochamber.com

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   The completion of these projects will alleviate congestion, improve safety conditions, and reduce emissions. This will result in savings to manufacturers, shippers and consumers nation-wide, and a safer, cleaner community.

We urge you to give this application your utmost consideration. Your approval of this joint City of Laredo and Texas Department of Transportation INFRA grant application will undoubtedly help improve America's Primary Highway Freight System.

Thank you.

Sincerely,

Miguel A. Conchas
President and CEO

LAREDO MOTOR CARRIERS ASSOCIATION

- KEEPS OUR WORLD MOVING -

October 17, 2017

The Honorable Elaine L. Chao
U.S. Secretary of Transportation
U.S. Department of Transportation
1200 New Jersey Avenue SE
Washington, D.C. 20590

Dear Secretary Chao:

I would like to express my support for the joint City of Laredo and the Texas Department of Transportation *Infrastructure For Rebuilding America* (INFRA) grant application to upgrade I-35 & I-69W interstates in Laredo, Texas. This is a significant project to the nation that will foster economic development, create jobs and alleviate congestion on the Primary Highway Freight System.

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Secretary Elaine L. Chao

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I fully support this national, significant project. Thank you for your time and consideration. I hope you choose to approve the joint City of Laredo and the Texas Department of Transportation INFRA grant application to help improve the Primary Highway Freight System.

Sincerely,

Rafael Tawil
President
Laredo Motor Carriers Association

LAREDO LIC.
U.S. CUSTOMS BROKERS ASSOC., INC.
2310 SAN BERNARDO AVE.
LAREDO, TEXAS 78040
TEL: (956) 722-9898 FAX: (956) 722-8785
Web Site: http://www.lluscba.org E-mail: admin@lluscba.org

October 12, 2017

The Honorable Elaine L. Chao
U.S. Secretary of Transportation
U.S. Department of Transportation
1200 New Jersey Avenue SE
Washington, D.C. 20590

Dear Secretary Chao:

I would like to express my support for the joint City of Laredo and the Texas Department of Transportation *Infrastructure For Rebuilding America* (INFRA) grant application to upgrade I-35 & I-69W interstates in Laredo, Texas. This is a significant project to the nation that will foster economic development, create jobs and alleviate congestion on the Primary Highway Freight System.

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Sincerely,

Enrique Gonzalez
President
LLUSCBA

Appendix B. Benefit Cost Analysis

Benefit-Cost Analysis Supplementary Documentation
INFRA Grants Program

I-35/I-69W International Freight Gateway

City of Laredo, Texas

November 2, 2017

Contents

Tables

Benefit-Cost Analysis Supplementary Documentation

1. Executive Summary

The Benefit-Cost Analysis conducted for this grant application compares the costs associated with the proposed investment to the benefits of the project. To the extent possible, benefits have been monetized. Where it was not possible to assign a dollar value to a benefit, efforts have been made to quantify it. A qualitative discussion is also provided when a benefit is anticipated to be generated but is not easily monetized or quantified.

The Port of Laredo is the busiest inland port/gateway/border crossing along the U.S. – Mexican border, facilitating over $195 billion in imports and exports in 2015. As a gateway and the premier port of entry (POE) along the 1,969 mile U.S. – Mexican border, smart investments in transportation infrastructure are important in meeting current and future challenges of moving people, goods and commodities in the bi-national region, the nation and enhancing economic competitiveness of the U.S. economy. The roadways, railways and commercial/industrial areas that connect and serve Laredo's four (4) POEs act as the backbone of commerce for the region and nation. One of the busiest POEs is the World Trade Bridge, which on average, handles about 11,000 to 12,000 trucks per day.

The I-35/I-69W interchange is the nexus of trade moving in all directions through the Laredo Gateway to include the busiest POE between the U.S. and Mexico, the World Trade Bridge. I-69W passes over I-35 and the Union Pacific Railroad (UPRR) track. This project will construct the final five (of eight) direct connectors between I-69W (formerly U.S. 59) and I-35 in north Laredo (three (3) connectors between I-35 and I-69W have already been constructed), also known as the "Milo" interchange. Each connector will span approximately 3,000 feet and will require bridges to flyover the existing I-35 and I-69W main lanes and frontage roads. The project will also upgrade a 1.8-mile segment of I-69W to interstate standards by adding one additional 12-foot mainline in each direction and widening to 10-foot inside/outside shoulders.

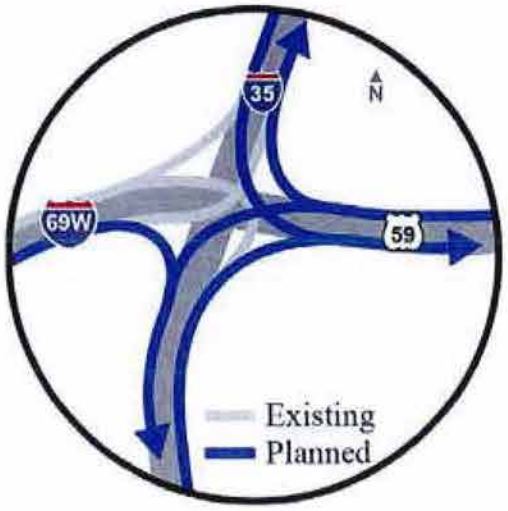

Figure 1: Planned Project Connectors

Laredo, the county seat of Webb County, Texas, is located on the north bank of the Rio Grande River in South Texas, across from Nuevo Laredo, Tamaulipas, Mexico. The Laredo Urbanized Area (ID 47854) has a population of almost 270,000 (2016) .As shown in Figure 2, the I-35/I-69W International Freight Gateway project is located near the World Trade Bridge and other major freight corridors in the region. The Juarez-Lincoln International Bridge, which is the fourth busiest port of entry for non-commercial vehicles at the U.S./Mexico border, is

located approximately eight miles to the south.

A table summarizing the changes expected from the project, and the associated benefits, is provided below including both monetized and non-monetized benefits.

Table ES-1: Merit Criteria and Cost-Effectiveness - Summary of Infrastructure Improvements and Associated Benefits

Current Status or Baseline & Problems to be Addressed	Changes to Baseline / Alternatives	Type of Impacts	Economic Benefit	Summary of Results	Page Reference
Trends and forecasts indicate growing traffic demand in the "Milo" interchange will result in significant intersection congestion in all directions at the interchange, further exacerbating what is already a critical bottleneck for accessing the World Trade Bridge.	Constructing the remaining five direct connectors will alleviate traffic at intersections by providing motorists the opportunity to bypass signalized intersections to access the corresponding freeways	Reduced travel time costs from increases in average traffic speed	Reduced Travel Time Costs	$300.4 M	Pg. 18
		Avoided emission costs from reduced vehicle miles travelled and increases in average traffic speed	Avoided Emission Costs	$4.1 M	Pg. 21
		Reduced non-fuel vehicle operating costs from reduced vehicle miles travelled	Reduced Vehicle Operating Costs	$7.5 M	Pg. 19
		Reduced fuel vehicle operating costs from reduced vehicle miles travelled and increases in average traffic speed		$36.1 M	Pg. 19
		Avoided accident costs from diverting traffic away from signalized intersections	Avoided Accident Cost Savings	$44.3 M	Pg. 24
		Avoided intersection delays improves travel time reliability for freight, eliminating critical bottleneck	Freight Resiliency	N/A	Pg. 26

In addition to benefits that can be monetized and quantified, a number of qualitative benefits are also likely to be generated by this improvement. Given the economic and population growth on both sides of the border, traffic has and is expected to continue to increase. Without the project improvements, intersection delays at the Milo interchange as well as adjacent intersections will reach a level of service (LOS) F, exacerbating a critical bottlenecking for accessing the World Trade Bridge. By constructing these improvements, the bottleneck can be eliminated, improving freight resiliency and improving travel time reliability for all motorists.

The period of analysis used in the monetization of benefits and costs corresponds to 34 years, including 2 years of construction and 30 years of operation. The total project costs are $115 million dollars and are expected to be financed by Federal, State, and local funds according to the distribution shown in Table ES-2.

Table ES-2: Summary of Project Costs and Anticipated Funding Sources, in 2016 Dollars

Funding Source	Capital Costs	Operation & Maintenance Costs	Total Project Cost	Percent of Total Cost Financed by Source
Federal	$78,000,000		$78,000,000	68%
State	$5,000,000		$5,000,000	4%
Local	$32,000,000		$32,000,000	28%
Private			$0	0%
TOTAL	**$115,000,000**	**$0**	**$115,000,000**	**100%**

A summary of the relevant data and calculations used to derive the monetized benefits and costs of the project are shown in Tables ES-3, ES-4, (in dollars of 2016) and ES-5. Based on the analysis presented in the rest of this document, the project is expected to generate $392.4 million in discounted benefits and $90.8 million in discounted costs, using a 7 percent real discount rate. Therefore, the project is expected to generate a Net Present Value of $301.6 million and a Benefit/Cost Ratio of 4.32.

Table ES-3: Summary of Pertinent Data, Quantifiable Benefits and Costs

Calendar Year	Project Year	Total Benefits	Total Costs	Undiscounted Net Benefits	Discounted Total Benefits (7%)	Discounted Total Costs (7%)	Discounted Net Benefits (7%)
2017	1	-	-	-	-	-	-
2018	2	-	-	-	-	-	-
2019	3	-	$57,500,000	-$57,500,000	-	$46,937,128	-$46,937,128
2020	4	-	$57,500,000	-$57,500,000	-	$43,866,475	-$43,866,475
2021	5	$35,773,523	-	$35,773,523	$25,506,027	-	$25,506,027
2022	6	$36,424,712	-	$36,424,712	$24,271,324	-	$24,271,324
2023	7	$36,997,088	-	$36,997,088	$23,039,927	-	$23,039,927
2024	8	$37,569,896	-	$37,569,896	$21,866,022	-	$21,866,022
2025	9	$38,182,942	-	$38,182,942	$20,768,991	-	$20,768,991
2026	10	$38,787,303	-	$38,787,303	$19,717,498	-	$19,717,498
2027	11	$39,372,778	-	$39,372,778	$18,705,723	-	$18,705,723
2028	12	$39,941,022	-	$39,941,022	$17,734,292	-	$17,734,292
2029	13	$40,555,725	-	$40,555,725	$16,829,184	-	$16,829,184
2030	14	$41,209,826	-	$41,209,826	$15,981,881	-	$15,981,881
2031	15	$41,869,264	-	$41,869,264	$15,175,348	-	$15,175,348
2032	16	$42,544,615	-	$42,544,615	$14,411,333	-	$14,411,333
2033	17	$43,159,305	-	$43,159,305	$13,663,131	-	$13,663,131
2034	18	$43,834,902	-	$43,834,902	$12,969,166	-	$12,969,166

Calendar Year	Project Year	Total Benefits	Total Costs	Undiscounted Net Benefits	Discounted Total Benefits (7%)	Discounted Total Costs (7%)	Discounted Net Benefits (7%)
2035	19	$44,499,039	-	$44,499,039	$12,304,355	-	$12,304,355
2036	20	$45,238,144	-	$45,238,144	$11,690,396	-	$11,690,396
2037	21	$45,904,953	-	$45,904,953	$11,086,647	-	$11,086,647
2038	22	$46,593,200	-	$46,593,200	$10,516,699	-	$10,516,699
2039	23	$47,335,604	-	$47,335,604	$9,985,298	-	$9,985,298
2040	24	$48,059,065	-	$48,059,065	$9,474,682	-	$9,474,682
2041	25	$48,089,510	-	$48,089,510	$8,860,453	-	$8,860,453
2042	26	$48,095,707	-	$48,095,707	$8,281,864	-	$8,281,864
2043	27	$48,115,739	-	$48,115,739	$7,743,283	-	$7,743,283
2044	28	$48,139,018	-	$48,139,018	$7,240,215	-	$7,240,215
2045	29	$48,167,614	-	$48,167,614	$6,770,575	-	$6,770,575
2046	30	$48,197,942	-	$48,197,942	$6,331,625	-	$6,331,625
2047	31	$48,242,570	-	$48,242,570	$5,922,885	-	$5,922,885
2048	32	$48,233,710	-	$48,233,710	$5,534,390	-	$5,534,390
2049	33	$48,268,426	-	$48,268,426	$5,176,050	-	$5,176,050
2050	34	$48,335,892	-	$48,335,892	$4,844,191	-	$4,844,191
Total		$1,315,739,035	$115,000,000	$1,200,739,035	$392,403,455	$90,803,603	$301,599,853

Table ES-4: Summary of Project Benefits by Benefit Type

Calendar Year	Project Year	Reduced Travel Time Costs	Reduced Vehicle Operating Costs	Reduced Emission Costs	Avoided Accident Costs
2017	1	-	-	-	-
2018	2	-	-	-	-
2019	3	-	-	-	-
2020	4	-	-	-	-
2021	5	$27,774,936	$3,562,745	$344,629	$4,091,212
2022	6	$28,174,014	$3,747,459	$353,167	$4,150,071
2023	7	$28,578,827	$3,846,604	$361,880	$4,209,777
2024	8	$28,989,455	$3,939,329	$370,770	$4,270,342
2025	9	$29,405,984	$4,065,339	$379,841	$4,331,778
2026	10	$29,828,498	$4,175,612	$389,096	$4,394,098
2027	11	$30,257,082	$4,259,843	$398,539	$4,457,315
2028	12	$30,691,825	$4,319,584	$408,173	$4,521,441
2029	13	$31,132,814	$4,422,377	$414,045	$4,586,489
2030	14	$31,580,139	$4,553,198	$424,015	$4,652,473
2031	15	$32,033,891	$4,681,779	$434,186	$4,719,407
2032	16	$32,494,163	$4,818,585	$444,563	$4,787,304

Calendar Year	Project Year	Reduced Travel Time Costs	Reduced Vehicle Operating Costs	Reduced Emission Costs	Avoided Accident Costs
2033	17	$32,961,049	$4,886,932	$455,148	$4,856,177
2034	18	$33,434,642	$5,008,273	$465,945	$4,926,042
2035	19	$33,915,041	$5,110,128	$476,959	$4,996,911
2036	20	$34,402,342	$5,278,809	$488,193	$5,068,800
2037	21	$34,896,644	$5,366,934	$499,652	$5,141,723
2038	22	$35,398,049	$5,468,115	$511,340	$5,215,696
2039	23	$35,906,658	$5,614,954	$523,260	$5,290,732
2040	24	$36,422,575	$5,734,224	$535,418	$5,366,848
2041	25	$36,422,575	$5,760,039	$540,048	$5,366,848
2042	26	$36,422,575	$5,766,236	$540,048	$5,366,848
2043	27	$36,422,575	$5,781,638	$544,677	$5,366,848
2044	28	$36,422,575	$5,800,288	$549,307	$5,366,848
2045	29	$36,422,575	$5,824,255	$553,936	$5,366,848
2046	30	$36,422,575	$5,849,952	$558,566	$5,366,848
2047	31	$36,422,575	$5,889,951	$563,196	$5,366,848
2048	32	$36,422,575	$5,876,461	$567,825	$5,366,848
2049	33	$36,422,575	$5,906,548	$572,455	$5,366,848
2050	34	$36,422,575	$5,969,385	$577,084	$5,366,848
Total		$1,002,504,379	$151,285,576	$14,245,962	$147,703,119

In addition to the monetized benefits presented in Table ES-4, the project would generate other benefits that are difficult to monetize, but can be quantified using units that are not dollar values. These quantified benefits are presented below, as are qualitative benefits of the project.

- **Freight Resiliency:** Growth in trade and related activities, coupled with significant economic and population growth on both sides of the border has significantly increased border traffic on Laredo's four international bridges. With the improvements at the Milo interchange, intersection delay in all directions can be avoided, eliminating a critical bottleneck for freight accessing the World Trade Bridge.

Calendar Year	Project Year	Person Hours Saved	Gasoline Consumption Avoided (gallons)	Diesel Consumption Avoided (gallons)	Accidents Avoided	Fatalities Avoided	Injuries Avoided	PDO Avoided
2017	1	-	-	-	-	-	-	-
2018	2	-	-	-	-	-	-	-
2019	3	-	-	-	-	-	-	-
2020	4	-	-	-	-	-	-	-
2021	5	1,771,498	921,015	263,397	46.3	0.2	21.3	63.0
2022	6	1,796,951	934,265	267,187	47.0	0.2	21.6	63.9
2023	7	1,822,770	947,706	271,031	47.7	0.2	21.9	64.8
2024	8	1,848,960	961,341	274,930	48.3	0.2	22.3	65.7
2025	9	1,875,527	975,171	278,885	49.0	0.2	22.6	66.7
2026	10	1,902,475	989,201	282,898	49.7	0.2	22.9	67.6
2027	11	1,929,810	1,003,432	286,968	50.5	0.2	23.2	68.6
2028	12	1,957,538	1,017,869	291,096	51.2	0.2	23.6	69.6
2029	13	1,985,664	1,032,513	295,284	51.9	0.2	23.9	70.6
2030	14	2,014,195	1,047,367	299,532	52.7	0.2	24.2	71.6
2031	15	2,043,136	1,062,435	303,842	53.4	0.2	24.6	72.6
2032	16	2,072,492	1,077,720	308,213	54.2	0.2	24.9	73.7
2033	17	2,102,270	1,093,225	312,647	55.0	0.2	25.3	74.7
2034	18	2,132,476	1,108,953	317,145	55.8	0.2	25.7	75.8
2035	19	2,163,116	1,124,908	321,708	56.6	0.2	26.0	76.9
2036	20	2,194,196	1,141,092	326,336	57.4	0.2	26.4	78.0
2037	21	2,225,723	1,157,508	331,031	58.2	0.2	26.8	79.1
2038	22	2,257,703	1,174,161	335,794	59.0	0.2	27.2	80.3
2039	23	2,290,142	1,191,053	340,625	59.9	0.2	27.6	81.4
2040	24	2,323,048	1,208,189	345,526	60.8	0.2	28.0	82.6
2041	25	2,323,048	1,208,189	345,526	60.8	0.2	28.0	82.6
2042	26	2,323,048	1,208,189	345,526	60.8	0.2	28.0	82.6
2043	27	2,323,048	1,208,189	345,526	60.8	0.2	28.0	82.6
2044	28	2,323,048	1,208,189	345,526	60.8	0.2	28.0	82.6
2045	29	2,323,048	1,208,189	345,526	60.8	0.2	28.0	82.6
2046	30	2,323,048	1,208,189	345,526	60.8	0.2	28.0	82.6
2047	31	2,323,048	1,208,189	345,526	60.8	0.2	28.0	82.6
2048	32	2,323,048	1,208,189	345,526	60.8	0.2	28.0	82.6
2049	33	2,323,048	1,208,189	345,526	60.8	0.2	28.0	82.6
2050	34	2,323,048	1,208,189	345,526	60.8	0.2	28.0	82.6
Total		63,940,167	33,251,015	9,509,330	1,671.9	5.5	769.7	2,273.2

Table ES-5: Summary of Pertinent Quantifiable Data

2. Introduction

This document provides detailed technical information on the economic analyses conducted in support of the Grant Application for the I-35/I-69W International Freight Gateway project.

Section 3, Methodological Framework, introduces the conceptual framework used in the Benefit-Cost Analysis. To the extent possible, and as recommended in the Notice of Funding Opportunity (NOFO), monetized benefits and costs are estimated through a Benefit-Cost Analysis (BCA) framework, which is described in this section. Section 4, Project Overview, provides an overview of the project, including a brief description of existing conditions and proposed alternatives; a summary of cost estimates and schedule; and a description of the types of effects that the I-35/I-69W International Freight Gateway is expected to generate. Monetized, quantified, and qualitative effects are highlighted. Section 5, General Assumptions, discusses the general assumptions used in the estimation of project costs and benefits, while estimates of travel demand and traffic growth can be found in Section 6, Demand Projections. Specific data elements and assumptions pertaining to the merit criteria are presented in Section 7, Estimation of Economic Benefits, along with associated benefit estimates. Estimates of the project's Net Present Value (NPV), its Benefit/Cost ratio (BCR) and other project evaluation metrics are introduced in Section 8, Summary of Findings and BCA Outcomes. Additional data tables are provided in Section 9, Aggregate Annual Benefits and Costs, including annual estimates of benefits and costs to assist DOT in its review of the application.[1]

3. Methodological Framework

The Benefit-Cost Analysis (BCA) conducted for this project includes the monetized benefits and costs measured using USDOT guidance on this area, as well as the quantitative and qualitative merits of the project. A BCA provides estimates of the anticipated benefits that are expected to accrue from a project over a specified period and compares them to the anticipated costs of the project. Costs include both the resources required to develop the project and the costs of maintaining the new or improved asset over time. Estimated benefits are based on the projected impacts of the project on both users and non-users of the facility, valued in monetary terms.[2]

While BCA is just one of many tools that can be used in making decisions about infrastructure investments, USDOT believes that it provides a useful benchmark from which to evaluate and compare potential transportation investments.[3]

The specific methodology established for this application was developed using the BCA guidance promoted by USDOT and is consistent with the INFRA program guidelines. In particular, the methodology involves:

- Establishing existing and future conditions under the build and no-build scenarios;

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[1] While the models and software themselves do not accompany this appendix, they are provided separately as part of the application.

[2] USDOT, Benefit-Cost Analysis Guidance for TIGER and INFRA Applications.

[3] Idem.

- Assessing benefits that align with those identified in the INFRA BCA guidance;
- Measuring benefits in dollar terms, whenever possible, and expressing benefits and costs in a common unit of measurement;
- Using DOT guidance for the valuation of travel time savings, safety benefits and reductions in air emissions, while relying on industry best practice for the valuation of other effects; and
- Discounting future benefits and costs with the real discount rates recommended by the DOT (7 percent, and 3 percent for sensitivity analysis).

4. Project Overview

Laredo, the county seat of Webb County, Texas, is located on the north bank of the Rio Grande River in South Texas, across from Nuevo Laredo, Tamaulipas, Mexico. The Laredo Urbanized Area has a population of almost 270,000 (2016). As shown in Figure 2, the I-35/I-69W International Freight Gateway project is located near the World Trade Bridge and other major freight corridors in the region. The Juarez-Lincoln International Bridge, which is the fourth busiest port of entry for non-commercial vehicles at the U.S./Mexico border, is located approximately eight miles to the south.

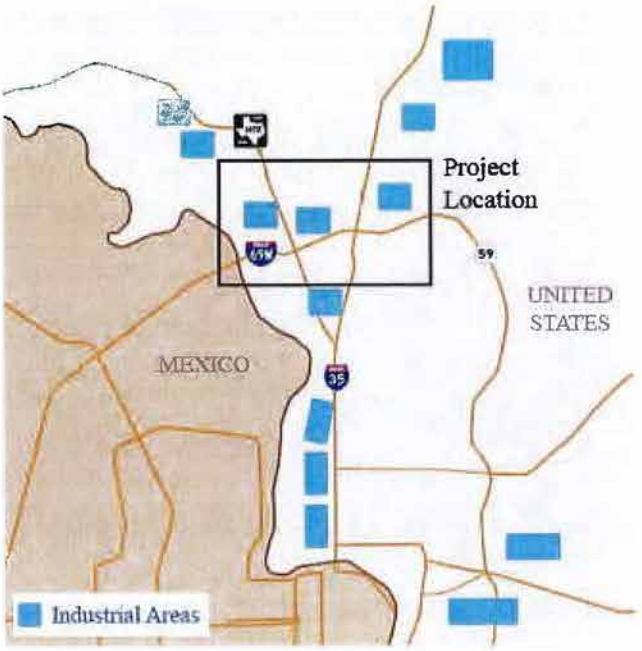

Table 1: Cost Summary Table, 2016 Dollars

Industrial facilities in the area are the nerve centers for cross-border freight traffic in the Laredo region. These facilities serve as the origins and destinations of the majority of commercial traffic, and the project is located within a 10-mile radius of these facilities. Growth in trade and related activities, coupled with significant economic and population growth on both sides of the border has significantly increased traffic on Laredo's four international bridges and the existing railroad bridge over the Rio Grande River/International border. The I-35/I-69W interchange is vital in accommodating the additional freight traffic resulting from continued growth in trade between the U.S. and Mexico. This project will construct the final five (of eight) direct connectors between I-69W and I-35 in north Laredo. Each connector will span approximately 3,000 feet and will require bridges to flyover the existing I-35 and I-69W main lanes and frontage roads. The project will also upgrade a 1.8-mile segment of I-69W to interstate standards by adding one additional 12-foot mainline in each direction and widening to 10-foot inside/outside shoulders.

The proposed upgrades would fully integrate with each other, thus improving connectivity between the trade gateways and transportation corridors. Given the forecasts, supported by trends of growth of commercial and non-commercial traffic, improvements in infrastructure

capacity are needed to meet increasing demand. System linkages, such as the proposed improvements to the Milo interchange, are required to support projected growth in cross-border trade, freight volumes, and population growth. Additionally, improved traffic flow provides the added benefits of the efficient movement of people and goods, increased mobility and access to opportunities, and enhanced safety.

Base Case and Alternatives

The base case, also referenced as the "no build" case, is defined as only 3 direct connectors exist at the project location, going northbound to westbound, southbound to westbound, and eastbound to northbound. In addition, an overpass which will allow traffic travelling on I-69W to bypass the signalized intersection with I-35, is assumed to have been constructed by the time the I-35/I-69W International Freight Gateway project opens. This overpass is expected to begin construction in late 2017, and take two years to complete.

In the build scenario, the remaining five connectors between I-69W and I-35 are constructed, allowing traffic to avoid frontage roads to transfer from one interstate to the next. The intersection will have a total of eight direct connectors, and the overpass for eastbound and westbound traffic on I-69W over I-35. In both cases, traffic growth is expected to be identical, as referenced in the demand projection section below.

Types of Impacts

The I-35/I-69W International Freight Gateway project is expected to have significant travel time savings. The construction of the remaining five connectors will allow traffic to avoid delays caused by signalized intersections significantly reducing the vehicle hours spent travelling. This will also yield vehicle operating cost and accident cost savings. In addition, the project will provide a more direct route for vehicles to travel, reducing the vehicle miles travelled. Over the lifecycle of the analysis, installation of the direct connectors will save an estimated 63.9 million person hours and 42.7 million gallons of fuel. Accident cost savings will result from diverting traffic away from signalized intersections, where a significant number of crashes occur. Crash modification factors suggest fatal accidents will diminish by 42%, injury accidents will diminish by 57% and property damage only accidents will diminish by 36% by allowing traffic to avoid the signalized at-grade intersection. The project will also yield benefits from avoided emissions, due to increased speeds and fewer vehicle miles travelled.

Project Cost and Schedule[4]

The project costs are $115 million in 2016 dollars. The majority of those funds, $103.5 million are allocated for the construction of direct connectors, and the remaining $11.5 million is allocated for right of way costs. Construction is expected to begin in 2019 and will take two years, allowing the project to open in 2021. Table ES-2 outlines the distribution of spending between involved parties.

[4] All cost estimates in this section are in millions of dollars of 2016, discounted to this year using a 7 percent real discount rate.

Table 1: Cost Summary Table, 2016 Dollars

Calendar Year	Capital Expenditures
2019	$57,500,000
2020	$57,500,000
Total	$115,000,000

INFRA Merit Criteria

The main benefit categories associated with the project are identified in the table below and align with Criterion #1 (Support for National or Regional Economic Vitality) as stated in the INFRA program's NOFO.

Table 2: Expected Effects on Benefit Categories

Benefit or Impact Categories	Description	Monetized	Quantified	Qualitative
Travel Time Savings	Reduced Vehicle Hours travelled from avoiding delays at intersection	Yes	-	-
Avoided Emission Cost Savings	Avoided emissions from reduced vehicle miles travelled and increases in average traffic speed	Yes	-	-
Vehicle Operating Cost Savings	Reduced fuel consumption from decreases in vehicle miles travelled and increases in speed	Yes	-	-
Vehicle Operating Cost Savings	Reduced non-fuel operating costs due to decrease in vehicle miles travelled	Yes	-	-
Accident Cost Savings	Reduced accident costs from reducing traffic at intersections, where significant number of crashes occur	Yes	-	-
Freight Resiliency	Elimination of bottleneck caused by intersection delays in accessing World Trade Bridge	-	-	Yes

5. General Assumptions

The BCA measures benefits against costs throughout a period of analysis beginning at the start of construction and including 30 years of operations.

The monetized benefits and costs are estimated in 2016 dollars with future dollars discounted in compliance with INFRA requirements using a 7 percent real rate, and sensitivity testing at 3 percent.

The methodology makes several important assumptions and seeks to avoid overestimation of benefits and underestimation of costs. Specifically:

- Input prices are expressed in 2016 dollars;

- The period of analysis begins in 2017 and ends in 2051. It includes project development and construction years (2019 - 2020) and 30 years of operations (2021 - 2050);
- A constant 7 percent real discount rate is assumed throughout the period of analysis. A 3 percent real discount rate is used for sensitivity analysis;
- Opening year demand is an input to the BCA and is assumed to be fully realized in 2021, the first year of operations (no ramp-up); and
- Unless specified otherwise, the results shown in this document correspond to the effects of the Full Build alternative (the installation of the remaining five direct connectors).

6. Demand Projections

Accurate demand projections are important to effectively estimate the benefits in a BCA. Demand projections for this project were estimated from a micro-simulation model of the IH-35 and Loop 20 Direct Connector Analysis provided by the Texas Transportation Institute (TTI).[5] The model output results provided vehicle miles travelled and vehicle hours travelled. Additional information was provided by TxDOT including percentage of trucks, and average vehicle occupancy was assumed to be equivalent to national averages provided in US DOT guidance.

Methodology

Growth in trade and related activities, coupled with significant economic and population growth on both sides of the border has significantly increased border traffic on Laredo's four international bridges and the existing railroad bridge over the Rio Grande River/International border. The table below indicates the growth in traffic volumes surrounding the project location, the Milo interchange. As shown in the average annual growth over the 13 year period, traffic continues to rapidly increase around the International Freight Gateway.

Table 3: High-Traffic Volume Growth Locations Close to the Project Area[6]

Road	Location	2002 Traffic	2015 Traffic	Absolute Growth	Percent Growth	Average Annual Growth
US 59	I-35 and McPherson (east of Milo interchange)	15,500	44,647	29,147	188%	8.5%
US 59	Del Mar Boulevard and US 59 (4.6 miles east of Milo Interchange)	19,900	35,874	15,974	80%	4.6%
I-35	FM 1472 and US 59 (south of Milo interchange)	48,000	57,474	9,474	20%	1.4%
I-35	Carlton Road and Mann Road (3.6 miles south of Milo interchange)	104,000	117,864	13,864	13%	1.0%
US 59	McPherson and Del Mar Boulevard (1 mile east of Milo interchange)	8,700	29,266	20,566	236%	9.8%

[5] *IH-35 and Loop 20 Direct Connector Analysis*. TTI. October 2016.

[6] Created using data from 2002 and 2015 Laredo District Traffic Map by TxDOT.

The micro-simulation model provided information on traffic volumes in both the no build and build case for a base year (2020) and a forecast year (2040), in terms of vehicle miles travelled and vehicle hours travelled. Traffic volumes for the years between the base and forecast year were estimated through a geometric growth pattern, calculated using the results from the micro-simulation model.

Assumptions

Based on the micro-simulation data shown in Table 5, traffic growth, measured in both vehicle miles travelled and vehicle hours travelled, was calculated and assumed to be growing annually at a rate of 1.44% in both the build and no build case. Due to the uncertainty in years past 2040, traffic growth was assumed to be 0% to present a conservative estimate of benefits.

Table 4: Assumptions used in the Estimation of Demand

Variable Name	Unit	Value	Source
VMT Growth (2017-2040)	%	1.44%	Calculated based on micro-simulation model. Traffic growth in build and no build cases identical. Assumed to be 0% after 2040 due to uncertainty.
VHT Growth (2017-2040)	%	1.44%	
VMT Growth (2040+)	%	0.00%	
VHT Growth (2040+)	%	0.00%	
Trucks	%	16.00%	TxDOT
Passenger Vehicles	%	84.00%	

Demand Projections

The resulting projections for vehicle miles travelled and vehicle hours travelled are presented in the table below. The project opens in 2021, at which time it is expected that nearly 1.9 million vehicle miles travelled can be avoided, as well as saving 1.4 million vehicle hours travelled. By 2040, the direct connectors are expected to save 1.7 million vehicle hours and avoid 2.4 million vehicle miles travelled.

Table 5: Demand Projections

		In Project Opening Year (2021)	2031	2041
No Build	Annual Vehicle Miles Travelled (mi)	42,005,362	48,455,172	55,102,590
	Annual Vehicle Hours Travelled (hrs)	2,408,104	2,777,752	3,158,710
	Annual Average Speed (mph)	17.44	17.44	17.44
Build	Annual Vehicle Miles Travelled (mi)	40,105,599	46,263,654	52,610,370
	Annual Vehicle Hours Travelled (hrs)	1,073,743	1,238,782	1,408,900
	Annual Average Speed (mph)	37.35	37.35	37.34

7. Estimation of Economic Benefits

Benefits Measurement, Data and Assumptions

This section describes the measurement approach used for each benefit or impact category identified in Section 4 (Types of Impacts) and provides an overview of the associated methodology, assumptions, and estimates.

LIST OF BENEFITS ANALYZED

The benefits assessed for the I-35/I-69W International Freight Gateway project are the following:

- Travel Time Savings: captures the reduced travel time for automobiles and trucks under the build scenario as a result of avoiding delays at signalized intersections.
- Vehicle Operating Cost Savings: captures the reduced vehicle operating costs for automobiles and trucks under the build scenario as a result of fewer vehicle miles travelled from the construction of direct connectors.
- Emission Cost Savings: captures the reduced emissions from automobiles and trucks under the build scenario as a result of fewer vehicle miles travelled and increases in the average speed.
- Accident Cost Savings: captures the expected reduction in accident cost savings under the build scenario as a result of removing traffic from signalized intersections.

METHODOLOGIES USED TO ESTIMATE BENEFITS

Benefits were estimated as a result of the installation of five additional direct connectors at the Milo interchange, preventing motorists from exiting the interstate system and avoiding congesting the frontage roads. These connectors will reduce vehicle hours travelled, vehicle operating costs, emissions, and accidents, all of which can be monetized using US DOT guidance. Travel time and accident savings were calculated based on the value of an hour of time and a statistical life, while emissions and vehicle operating costs were estimated using rates per metric ton and mile respectively. Comparing the build to the no build scenarios yielded the benefits described in further detail below.

ASSUMPTIONS USED TO ESTIMATE ECONOMIC BENEFITS

The assumptions used in the estimation of economic benefits for the I-35/I-69W International Freight Gateway project are summarized in the tables below.

Table 6: Assumptions used in the Estimation of Economic Benefits

Variable Name	Unit	Year	Value	Source
Discount Rate	%	2017-2050	7.00%	US DOT Guidance 2017
Days/Year	days	2017-2050	365	Known
Construction Begins	year		2017	TxDOT
Project Opens	year		2021	
Percent Trucks	%	2017-2050	16.00%	
Percent Automobiles	%	2017-2050	84.00%	

METHODOLOGIES USED TO ESTIMATE TRAVEL TIME BENEFITS

Travel time savings are calculated based on the vehicle hours travelled as determined by interpolation from the micro-simulation model. Annual vehicle hours were broken out to truck hours and automobile hours to account for the differences in the value of time for the different types of vehicles. Vehicle hours travelled were then converted to person hours, based on the average vehicle occupancy values recommended in the US DOT guidance. Annual person hours were then monetized using the US DOT guidance for the value of time.

ASSUMPTIONS USED TO ESTIMATE TRAVEL TIME BENEFITS

In addition to the economic variables listed above, the following assumptions were used in the estimation of travel time benefits.

Table 7: Assumptions used in the Estimation of Travel Time Benefits

Variable Name	Unit	Year	Value	Source
Average Vehicle Occupancy - Auto	people/vehicle	2017-2050	1.39	Federal Highway Administration Highway Statistics 2015, Table VM1
Average Vehicle Occupancy - Truck	people/vehicle	2017-2050	1.00	
Value of Time - Auto	$/hr	2017-2050	14.1	Revised Departmental Guidance on Valuation of Travel Time in Economic Analysis https://www.transportation.gov/officepolicy/transportation-policy/reviseddepartmental-guidance-valuationtravel-time-economic
Value of Time - Truck	$/hr	2017-2050	27.2	

TRAVEL TIME BENEFIT ESTIMATES

The table below shows the benefit estimates calculated over the life cycle of the project, due to a reduction in vehicle hours travelled from the installation of the direct connectors. At a 7% discount rate, travel time benefits total $300.4 million over the project lifecycle.

Table 8: Estimates of Travel Time Benefits, 2016 Dollars

	Over the Project Lifecycle		
	In Constant Dollars	Discounted at 7 Percent	Discounted at 3 Percent
Travel Time Benefits	$1,002,504,379	$300,391,681	$568,836,038

METHODOLOGIES USED TO ESTIMATE VEHICLE OPERATING COST BENEFITS

Vehicle operating cost savings were broken out to fuel and non-fuel cost savings. Fuel savings were calculated based on the breakout of annual vehicle miles by truck and automobiles. Given the average speed in the build and no build cases, fuel consumption rates were applied using estimates from California. The values were then multiplied by the retail price of diesel and gasoline as provided by the EIA in the Annual Energy Outlook 2017, less taxes to determine annual fuel costs. Non-fuel costs were estimated through US DOT guidance, less fuel costs. These costs were applied to the vehicle miles travelled to capture the differences between the build and no build case.

ASSUMPTIONS USED TO ESTIMATE VEHICLE OPERATING COST BENEFITS

The following assumptions were used to estimate the vehicle operating cost benefits.

Table 9: Assumptions used in the Estimation of Vehicle Operating Cost Benefits

Variable Name	Unit	Year	Value	Source
Non-Fuel Operating Cost - Auto	$/mi	2017-2050	0.33	US DOT Guidance 2017, AAA Your Driving Costs value of $0.40/mile less fuel costs. Fuel costs net of taxes calculated separately.
Non-Fuel Operating Cost - Truck	$/mi	2017-2050	0.56	US DOT Guidance 2017, American Transportation Research Institute value of $0.96/mile less fuel costs. Fuel costs net of taxes calculated separately. Value inflated from 2015 $ to 2016 $.
Gasoline Retail Price	2016 $/gallon	2017	1.89	EIA Annual Energy Outlook Forecast 2017, net price of fuel less taxes. Gasoline prices are assumed constant past 2050 due to uncertainty and to allow estimates to be made conservatively.
		2018	1.85	
		2019	2.07	
		2020	2.19	
		2021	2.31	
		2022	2.42	
		2023	2.46	
		2024	2.48	
		2025	2.53	
		2026	2.57	
		2027	2.58	
		2028	2.57	
		2029	2.60	
		2030	2.64	
		2031	2.69	
		2032	2.73	
		2033	2.73	
		2034	2.76	
		2035	2.78	
		2036	2.84	
		2037	2.85	
		2038	2.87	

Variable Name	Unit	Year	Value	Source
		2039	2.91	
		2040	2.94	
		2041	2.96	
		2042	2.96	
		2043	2.98	
		2044	2.99	
		2045	3.00	
		2046	3.02	
		2047	3.04	
		2048	3.02	
		2049	3.04	
		2050	3.08	
Diesel Retail Price	2016 $/gallon	2017	2.14	EIA Annual Energy Outlook Forecast 2017, net price of fuel less taxes. Diesel prices are assumed constant past 2050 due to uncertainty and to allow estimates to be made conservatively.
		2018	2.41	
		2019	2.60	
		2020	2.72	
		2021	2.80	
		2022	2.91	
		2023	2.96	
		2024	3.00	
		2025	3.09	
		2026	3.14	
		2027	3.19	
		2028	3.20	
		2029	3.25	
		2030	3.31	
		2031	3.37	
		2032	3.44	
		2033	3.44	
		2034	3.49	
		2035	3.51	
		2036	3.58	
		2037	3.59	
		2038	3.61	
		2039	3.65	
		2040	3.67	
		2041	3.68	
		2042	3.68	
		2043	3.68	
		2044	3.69	
		2045	3.71	

Variable Name	Unit	Year	Value	Source
		2046	3.73	
		2047	3.78	
		2048	3.79	
		2049	3.82	
		2050	3.86	
Gasoline Consumption	gallons/mi	2017-2051	0.05	California Department of Transportation, determined to be comparable to project location. Gasoline consumption is dependent on speed, with the variables referring to a 17 mph speed and 37 mph speed respectively.
	gallons/mi	2017-2050	0.03	
Diesel Consumption	gallons/mi	2017-2050	0.12	California Department of Transportation, determined to be comparable to project location. Diesel consumption is dependent on speed, with the variables referring to a 17 mph speed and 37 mph speed respectively.
	gallons/mi	2017-2050	0.08	

VEHICLE OPERATING COST BENEFIT ESTIMATES

The table below shows the benefit estimates calculated over the life cycle of the project, broken out by fuel and non-fuel cost savings. Fuel cost savings were a result of increases in average speeds the direct connectors provide, and non-fuel cost savings were a result of reduced vehicle miles travelled from the construction of direct connectors. Vehicle operating cost benefits total $43.7 million over the project lifecycle, discounted at 7%.

Table 10: Estimates of Vehicle Operating Cost Benefits, 2016 Dollars

	Over the Project Lifecycle		
	In Constant Dollars	Discounted at 7 Percent	Discounted at 3 Percent
Fuel Cost Savings	$126,103,937	$36,110,890	$70,154,925
Non Fuel Cost Savings	$25,181,639	$7,544,900	$14,287,979
Total	**$151,285,576**	**$43,655,790**	**$84,442,904**

METHODOLOGIES USED TO ESTIMATE EMISSION COST BENEFITS

Emission cost savings were calculated based on speeds in the build and no build case. These emission factors for carbon dioxide, nitrogen oxides, fine particulate matter, sulfur oxides, and volatile organic compounds were applied to the vehicle miles travelled, broken out by automobile and truck, to determine the metric tons produced in each case. The value of each greenhouse gas was then applied based on the US DOT guidance, converted from dollars per short ton to dollars per metric ton.

ASSUMPTIONS USED TO ESTIMATE EMISSION COST BENEFITS

The following assumptions were used to estimate the emission cost benefits.

Table 11: Assumptions used in the Estimation of Emission Reduction Benefits

Variable Name	Unit	Year	Value	Source
Grams/Metric ton	grams/metric ton	2017-2050	1,000,000	Known

Variable Name	Unit	Year	Value	Source
Volatile Organic Compounds (VOC)	$/metric ton	2017-2050	2,063.53	Corporate Average Fuel Economy for MY2017-MY2025 Passenger Cars and Light Trucks (August 2012), page 922, Table VIII16, "Economic Values Used for Benefits Computations (2010 dollars)" http://www.nhtsa.gov/staticfiles/rulemaking/pdf/cafe/FRIA_2017-2025.pdf, converted values to $/metric ton.
Nitrogen Oxides (NOx)	$/metric ton	2017-2050	8,131.75	
Fine Particulate Matter (PM2.5)	$/metric ton	2017-2050	371,984.89	
Sulfur Dioxide (SO2)	$/metric ton	2017-2050	48,060.78	
Carbon Dioxide Domestic Adjustment	%	2017-2050	24.58%	Calculated based on US proportion of World GDP based on World Bank values from 2016.
CO2 Emission Rate - Auto	g/mi	2017-2050	583.34	California Department of Transportation, determined to be comparable to project location. Emission rate is dependent on speed, with the variables referring to a 17 mph speed and 37 mph speed respectively. Based on 2016 model fleet.
	g/mi	2017-2050	313.28	
NOx Emission Rate - Auto	g/mi	2017-2050	0.19	
	g/mi	2017-2050	0.14	
PM Emission Rate - Auto	g/mi	2017-2050	0.01	
	g/mi	2017-2050	0.00	
SOx Emission Rate - Auto	g/mi	2017-2050	0.01	
	g/mi	2017-2050	0.00	
VOC Emission Rate - Auto	g/mi	2017-2050	0.12	
	g/mi	2017-2050	0.05	
CO2 Emission Rate - Truck	g/mi	2017-2050	1123.76	
	g/mi	2017-2050	785.54	
NOx Emission Rate - Truck	g/mi	2017-2050	2.83	
	g/mi	2017-2050	1.76	
PM Emission Rate - Truck	g/mi	2017-2050	0.04	
	g/mi	2017-2050	0.02	
SOx Emission Rate - Truck	g/mi	2017-2050	0.01	
	g/mi	2017-2050	0.01	
VOC Emission Rate - Truck	g/mi	2017-2050	0.31	
	g/mi	2017-2050	0.10	
Carbon Dioxide Price	2016 $/ton	2017	10.98	Interagency on the Social Working Cost of Capital, 2013. Values adjusted using carbon dioxide domestic adjustment to account for domestic value only. Domestic adjustment created by taking US proportion of World GDP. Prices assumed constant past 2050 to account for benefits conservatively.
		2018	11.26	
		2019	11.54	
		2020	11.82	
		2021	11.82	
		2022	12.10	
		2023	12.38	
		2024	12.66	
		2025	12.95	
		2026	13.23	
		2027	13.51	
		2028	13.79	

Variable Name	Unit	Year	Value	Source
		2029	13.79	
		2030	14.07	
		2031	14.35	
		2032	14.63	
		2033	14.92	
		2034	15.20	
		2035	15.48	
		2036	15.76	
		2037	16.04	
		2038	16.32	
		2039	16.60	
		2040	16.88	
		2041	17.17	
		2042	17.17	
		2043	17.45	
		2044	17.73	
		2045	18.01	
		2046	18.29	
		2047	18.57	
		2048	18.85	
		2049	19.14	
		2050	19.42	

EMISSION COST BENEFIT ESTIMATES

The table below shows the benefit estimates calculated over the life cycle of the project, broken out by emission type. Emission cost savings were a result of increases in average speeds and reduced vehicle miles travelled from the construction of direct connectors. At a 7% discount rate, emission cost benefits total $4.1 million over the project lifecycle.

Table 12: Estimates of Emission Reduction Benefits, 2016 Dollars

	Over the Project Lifecycle		
	In Constant Dollars	Discounted at 7 Percent	Discounted at 3 Percent
Volatile Organic Compounds (VOC)	$303,335	$90,886	$172,112
Nitrogen Oxides (NOx)	$2,886,893	$864,975	$1,638,019
Fine Particulate Matter (PM)	$3,682,628	$1,103,395	$2,089,518
Sulfur Dioxide (SO2)	$217,819	$65,263	$123,590
Carbon Dioxide (CO2)	$7,155,286	$1,976,413	$3,916,591
Total	**$14,245,962**	**$4,100,932**	**$7,939,831**

METHODOLOGIES USED TO ESTIMATE ACCIDENT COST BENEFITS

Accident costs are reduced in the build case as the direct connector allows interstate traffic to bypass an at grade intersection. Crash data for the Milo interchange intersection between 2014 and 2016 was gathered from TxDOT's Crash Records Information System (C.R.I.S.) to calculate the crash rates per million vehicle miles in the no build case. For the build case, accident rates were calculated to have decreased through the use of crash modification factors from CMF Clearinghouse. Holding VMT constant between the build and no build scenario, the number of accidents was estimated for each case. Using the crash data, the number of fatalities and injuries were estimated based on the type of crash. These were applied to the number of accidents to create the estimated number of injuries and fatalities. These were then monetized through values provided by U.S. DOT.

ASSUMPTIONS USED TO ESTIMATE ACCIDENT COST BENEFITS

The following assumptions were used to estimate the accident cost benefits.

Table 13: Assumptions used in the Estimation of Accident Cost Benefits

Variable Name	Unit	Year	Value	Source
Crash Modification Factor - Fatalities		2017-2050	0.58	CMF Clearinghouse, replacing at grade intersection with grade separated interchange; CMF ID 459. CMF determined to mirror installation feature
Crash Modification Factor - Injuries		2017-2050	0.43	CMF Clearinghouse, replacing at grade intersection with grade separated interchange; CMF 460. CMF determined to mirror installation feature
Crash Modification Factor - PDO		2017-2050	0.64	CMF Clearinghouse, replacing at grade intersection with grade separated interchange; CMF 461. CMF determined to mirror installation feature
Average Fatalities per Fatal Accident	events/accident	2017-2050	1.0	Calculated based on accident data at project location, intersection of I-35 and I-69W, between 2014 and 2016.
Average Injuries per Injury Accident	events/accident	2017-2050	1.54	
Average Injuries per Fatal Accident	events/accident	2017-2050	0.0	
Average Vehicles Damaged per PDO	events/accident	2017-2050	1.95	California Department of Transportation, TASAS Unit, 2007-2009, determined to be comparable region to project location.
Cost of a Fatality	$/accident	2017-2050	9,600,000	Guidance on Treatment of the Economic Value of a Statistical Life in U.S. Department of Transportation Analyses (2016) https://www.transportation.gov/officepolicy/transportation-policy/reviseddepartmental-guidance-on-valuation-of-astatistical-life-in-economic-analysis
Cost of an Injury	$/accident	2017-2050	110,663	Calculated weighted average of injuries based on US DOT Guidance 2017 values for injuries. Distribution of injuries gathered from 2014 Traffic Safety Facts, FARS/GES Annual Report, Publication #812139, Table 54 on page 106.
Cost of a PDO	$/accident	2017-2050	4,252	The Economic and Societal Impact of Motor Vehicle Crashes, 2010

Variable Name	Unit	Year	Value	Source
Fatal Accident Rate - No Build	accidents/Million VMT	2017-2050	0.01	Calculated based on crash data collected by TxDOT at the intersection of project location
Injury Accident Rate - No Build	accidents/Million VMT	2017-2050	0.58	
Property Damage Only Accident Rate - No Build	accidents/Million VMT	2017-2050	2.14	
Fatal Accident Rate - Build	accidents/Million VMT	2017-2050	0.01	
Injury Accident Rate - Build	accidents/Million VMT	2017-2050	0.25	
Property Damage Only Accident Rate - Build	accidents/Million VMT	2017-2050	1.37	

ACCIDENT COST BENEFIT ESTIMATES

The table below shows the benefit estimates calculated over the life cycle of the project, broken out by accident type. Accident cost savings were a result of removing traffic from signalized intersections; instead allowing traffic to take a grade separated direct connector. At a 7% discount rate, accident cost benefits total $44.3 million over the project lifecycle.

Table 14: Estimates of Accident Cost Benefits, 2016 Dollars

	Over the Project Lifecycle		
	In Constant Dollars	Discounted at 7 Percent	Discounted at 3 Percent
Fatalities Avoided	$52,860,176	$15,838,053	$29,992,803
Injuries Avoided	$85,177,196	$25,520,932	$48,329,442
PDO Avoided	$9,665,747	$2,896,067	$5,484,333
Total	**$147,703,119**	**$44,255,053**	**$83,806,578**

AGGREGATION OF BENEFIT ESTIMATES

The table below identifies the values of monetized benefits, based on the assumptions presented above. The project is estimated to produce benefits valued at $392.4 million at a 7% discount factor over the project lifecycle. Travel time savings are by far the largest and most significant benefit, accounting for over three-quarters of the total benefits, a result of avoiding nearly 64 million person hours of travel. Accident cost savings and vehicle operating cost savings provide the majority of the remaining benefits. Throughout the analysis period, a total of 42.7 million gallons of fuel are saved compared to the no build scenario, and an estimated 2,273 accidents are avoided.

Table 15: Estimates of Economic Benefits, 2016 Dollars

	Over the Project Lifecycle	
	In Constant Dollars	Discounted at 7 Percent
Travel Time Savings	$1,002,504,379	$300,391,681
Emission Cost Savings	$14,245,962	$4,100,932
Vehicle Operating Cost Savings	$151,285,576	$43,655,790
Accident Cost Savings	$147,703,119	$44,255,053
Total	$1,315,739,035	$392,403,455

Comparison of Benefits and Costs

The monetized benefits of the project are significantly greater than the costs. It is estimated that every dollar spent on this project will generate $4.32 in benefits. Travel time savings account for over 75% of the benefits for the I-69/I-35W International Freight Gateway project. Due to the high volume of truck traffic on the freight corridor, and the projected economic growth in the region, the absence of the I-35/I-69W International Freight Gateway project will yield significant delays at signalized intersections on local roads. Installation of the additional five direct connectors will improve traffic flow for both interstate and local traffic; interstate traffic will be able to merge onto either the I-35 or I-69W at faster speeds over shorter distances, while intersections carrying local traffic will become less congested. The additional monetized benefits are primarily driven by vehicle operating cost savings and accident cost savings, a result of lower fuel consumption due to increased speeds and a reduction in the vehicle miles travelled. Additionally, the project will result in improved resiliency in the U.S. freight network by eliminating a bottleneck critical to the transportation of goods between U.S. and Mexico.

8. Summary of Findings and BCA Outcomes

The tables below summarize the BCA findings. Annual costs and benefits are calculated over the lifecycle of the project (34 years). As stated above, construction is expected to be completed by 2021, at which point benefits begin to accrue.

Table 16: Overall Results of the Benefit Cost Analysis, Millions of 2016 Dollars*

Project Evaluation Metric	7% Discount Rate	3% Discount Rate
Total Discounted Benefits	$392.4	$745.0
Total Discounted Costs	$90.8	$103.7
Net Present Value	$301.6	$641.3
Benefit / Cost Ratio	4.32	7.18
Internal Rate of Return (%)	28.8%	
Payback Period (years)	3.18	

** Unless Specified Otherwise*

Considering all monetized benefits and costs, the estimated internal rate of return of the project is 29% percent. With a 7 percent real discount rate, the $90.8 million investment would result in $392.4 million in total benefits and a Benefit/Cost ratio of approximately 4.32.

With a 3 percent real discount rate, the Net Present Value of the project would increase to $641.3 million, for a Benefit/Cost ratio of 7.18.

Table 17: Benefit Estimates for the Full Build Alternative

Benefit Categories	7% Discount Rate	3% Discount Rate
Travel Time Savings	$300,391,681	$568,836,038
Vehicle Operating Cost Savings	$43,655,790	$84,442,904
Accident Cost Savings	$44,255,053	$83,806,578
Emissions Cost Savings	$4,100,932	$7,939,831
Total Benefit Estimates	**$392,403,455**	**$745,025,351**

9. Aggregate Annual Benefits and Costs

This section reports annual, aggregate benefits and costs associated with the I-35/I-69W International Freight Gateway and an annual breakdown of benefits by category. Detailed information and calculations by benefit category are provided in the spreadsheet used to conduct this BCA.

Table 18: Annual Monetized Estimates of Total Project Benefits and Costs

Calendar Year	Project Year	Total Benefits ($2016)	Total Costs ($2016)	Undiscounted Net Benefits ($2016)	Discounted Net Benefits at 7%	Discounted Net Benefits at 3%
2017	1	-	-	-	-	-
2018	2	-	-	-	-	-
2019	3	-	$57,500,000	-$57,500,000	-$46,937,128	-$52,620,645
2020	4	-	$57,500,000	-$57,500,000	-$43,866,475	-$51,088,005
2021	5	$35,773,523	-	$35,773,523	$25,506,027	$30,858,555
2022	6	$36,424,712	-	$36,424,712	$24,271,324	$30,505,123
2023	7	$36,997,088	-	$36,997,088	$23,039,927	$30,082,018
2024	8	$37,569,896	-	$37,569,896	$21,866,022	$29,658,023
2025	9	$38,182,942	-	$38,182,942	$20,768,991	$29,264,046
2026	10	$38,787,303	-	$38,787,303	$19,717,498	$28,861,396
2027	11	$39,372,778	-	$39,372,778	$18,705,723	$28,443,733
2028	12	$39,941,022	-	$39,941,022	$17,734,292	$28,013,829
2029	13	$40,555,725	-	$40,555,725	$16,829,184	$27,616,475
2030	14	$41,209,826	-	$41,209,826	$15,981,881	$27,244,549
2031	15	$41,869,264	-	$41,869,264	$15,175,348	$26,874,287
2032	16	$42,544,615	-	$42,544,615	$14,411,333	$26,512,397
2033	17	$43,159,305	-	$43,159,305	$13,663,131	$26,112,089
2034	18	$43,834,902	-	$43,834,902	$12,969,166	$25,748,385
2035	19	$44,499,039	-	$44,499,039	$12,304,355	$25,377,180
2036	20	$45,238,144	-	$45,238,144	$11,690,396	$25,047,264
2037	21	$45,904,953	-	$45,904,953	$11,086,647	$24,676,174

Calendar Year	Project Year	Total Benefits ($2016)	Total Costs ($2016)	Undiscounted Net Benefits ($2016)	Discounted Net Benefits at 7%	Discounted Net Benefits at 3%
2038	22	$46,593,200	-	$46,593,200	$10,516,699	$24,316,641
2039	23	$47,335,604	-	$47,335,604	$9,985,298	$23,984,560
2040	24	$48,059,065	-	$48,059,065	$9,474,682	$23,641,875
2041	25	$48,089,510	-	$48,089,510	$8,860,453	$22,967,818
2042	26	$48,095,707	-	$48,095,707	$8,281,864	$22,301,726
2043	27	$48,115,739	-	$48,115,739	$7,743,283	$21,661,179
2044	28	$48,139,018	-	$48,139,018	$7,240,215	$21,040,446
2045	29	$48,167,614	-	$48,167,614	$6,770,575	$20,439,752
2046	30	$48,197,942	-	$48,197,942	$6,331,625	$19,856,914
2047	31	$48,242,570	-	$48,242,570	$5,922,885	$19,296,408
2048	32	$48,233,710	-	$48,233,710	$5,534,390	$18,730,936
2049	33	$48,268,426	-	$48,268,426	$5,176,050	$18,198,464
2050	34	$48,335,892	-	$48,335,892	$4,844,191	$17,693,107
Total		$1,315,739,035	$115,000,000	$1,200,739,035	$301,599,853	$641,316,700

Table 19: Annual Monetized Estimates of Total Project Benefits by Category

Calendar Year	Project Year	Travel Time Savings (Undiscounted $2016)	Vehicle Operating Costs Savings (Undiscounted $2016)	Accident Cost Savings (Undiscounted $2016)	Emissions Cost Savings (Undiscounted $2016)	Total Benefits (Undiscounted $2016)
2017	1	-	-	-	-	-
2018	2	-	-	-	-	-
2019	3	-	-	-	-	-
2020	4	-	-	-	-	-
2021	5	$27,774,936	$3,562,745	$4,091,212	$344,629	$35,773,523
2022	6	$28,174,014	$3,747,459	$4,150,071	$353,167	$36,424,712
2023	7	$28,578,827	$3,846,604	$4,209,777	$361,880	$36,997,088
2024	8	$28,989,455	$3,939,329	$4,270,342	$370,770	$37,569,896
2025	9	$29,405,984	$4,065,339	$4,331,778	$379,841	$38,182,942
2026	10	$29,828,498	$4,175,612	$4,394,098	$389,096	$38,787,303
2027	11	$30,257,082	$4,259,843	$4,457,315	$398,539	$39,372,778
2028	12	$30,691,825	$4,319,584	$4,521,441	$408,173	$39,941,022
2029	13	$31,132,814	$4,422,377	$4,586,489	$414,045	$40,555,725
2030	14	$31,580,139	$4,553,198	$4,652,473	$424,015	$41,209,826
2031	15	$32,033,891	$4,681,779	$4,719,407	$434,186	$41,869,264
2032	16	$32,494,163	$4,818,585	$4,787,304	$444,563	$42,544,615
2033	17	$32,961,049	$4,886,932	$4,856,177	$455,148	$43,159,305
2034	18	$33,434,642	$5,008,273	$4,926,042	$465,945	$43,834,902
2035	19	$33,915,041	$5,110,128	$4,996,911	$476,959	$44,499,039
2036	20	$34,402,342	$5,278,809	$5,068,800	$488,193	$45,238,144
2037	21	$34,896,644	$5,366,934	$5,141,723	$499,652	$45,904,953
2038	22	$35,398,049	$5,468,115	$5,215,696	$511,340	$46,593,200
2039	23	$35,906,658	$5,614,954	$5,290,732	$523,260	$47,335,604
2040	24	$36,422,575	$5,734,224	$5,366,848	$535,418	$48,059,065
2041	25	$36,422,575	$5,760,039	$5,366,848	$540,048	$48,089,510
2042	26	$36,422,575	$5,766,236	$5,366,848	$540,048	$48,095,707
2043	27	$36,422,575	$5,781,638	$5,366,848	$544,677	$48,115,739

Calendar Year	Project Year	Travel Time Savings (Undiscounted $2016)	Vehicle Operating Costs Savings (Undiscounted $2016)	Accident Cost Savings (Undiscounted $2016)	Emissions Cost Savings (Undiscounted $2016)	Total Benefits (Undiscounted $2016)
2044	28	$36,422,575	$5,800,288	$5,366,848	$549,307	$48,139,018
2045	29	$36,422,575	$5,824,255	$5,366,848	$553,936	$48,167,614
2046	30	$36,422,575	$5,849,952	$5,366,848	$558,566	$48,197,942
2047	31	$36,422,575	$5,889,951	$5,366,848	$563,196	$48,242,570
2048	32	$36,422,575	$5,876,461	$5,366,848	$567,825	$48,233,710
2049	33	$36,422,575	$5,906,548	$5,366,848	$572,455	$48,268,426
2050	34	$36,422,575	$5,969,385	$5,366,848	$577,084	$48,335,892
Total		$1,002,504,379	$151,285,576	$147,703,119	$14,245,962	$1,315,739,035

Table 20: Annual Demand Projections

Calendar Year	Project Year	VMT No Build	VHT No Build	Speed No Build	VMT Build	VHT Build	Speed Build
2017	1	39,672,591	2,274,406	17.44	39,672,591	2,274,406	17.44
2018	2	40,243,349	2,307,118	17.44	40,243,349	2,307,118	17.44
2019	3	40,822,317	2,340,300	17.44	40,822,317	2,340,300	17.44
2020	4	41,409,615	2,373,960	17.44	41,409,615	2,373,960	17.44
2021	5	42,005,362	2,408,104	17.44	40,105,599	1,073,743	37.35
2022	6	42,609,680	2,442,739	17.44	40,682,581	1,089,205	37.35
2023	7	43,222,692	2,477,872	17.44	41,267,864	1,104,891	37.35
2024	8	43,844,524	2,513,510	17.44	41,861,567	1,120,802	37.35
2025	9	44,475,301	2,549,661	17.44	42,463,812	1,136,942	37.35
2026	10	45,115,153	2,586,332	17.44	43,074,720	1,153,314	37.35
2027	11	45,764,211	2,623,531	17.44	43,694,418	1,169,923	37.35
2028	12	46,422,606	2,661,264	17.44	44,323,031	1,186,770	37.35
2029	13	47,090,474	2,699,540	17.44	44,960,688	1,203,860	37.35
2030	14	47,767,950	2,738,367	17.44	45,607,518	1,221,196	37.35
2031	15	48,455,172	2,777,752	17.44	46,263,654	1,238,782	37.35

Calendar Year	Project Year	VMT No Build	VHT No Build	Speed No Build	VMT Build	VHT Build	Speed Build
2032	16	49,152,282	2,817,703	17.44	46,929,229	1,256,621	37.35
2033	17	49,859,420	2,858,229	17.44	47,604,380	1,274,717	37.35
2034	18	50,576,732	2,899,338	17.44	48,289,244	1,293,074	37.34
2035	19	51,304,364	2,941,038	17.44	48,983,960	1,311,695	37.34
2036	20	52,042,464	2,983,338	17.44	49,688,672	1,330,584	37.34
2037	21	52,791,182	3,026,247	17.44	50,403,522	1,349,745	37.34
2038	22	53,550,673	3,069,772	17.44	51,128,655	1,369,182	37.34
2039	23	54,321,089	3,113,923	17.44	51,864,222	1,388,899	37.34
2040	24	55,102,590	3,158,710	17.44	52,610,370	1,408,900	37.34
2041	25	55,102,590	3,158,710	17.44	52,610,370	1,408,900	37.34
2042	26	55,102,590	3,158,710	17.44	52,610,370	1,408,900	37.34
2043	27	55,102,590	3,158,710	17.44	52,610,370	1,408,900	37.34
2044	28	55,102,590	3,158,710	17.44	52,610,370	1,408,900	37.34
2045	29	55,102,590	3,158,710	17.44	52,610,370	1,408,900	37.34
2046	30	55,102,590	3,158,710	17.44	52,610,370	1,408,900	37.34
2047	31	55,102,590	3,158,710	17.44	52,610,370	1,408,900	37.34
2048	32	55,102,590	3,158,710	17.44	52,610,370	1,408,900	37.34
2049	33	55,102,590	3,158,710	17.44	52,610,370	1,408,900	37.34
2050	34	55,102,590	3,158,710	17.44	52,610,370	1,408,900	37.34
Total		1,678,647,696	96,229,853		1,610,059,278	48,067,630	

Table 21: Pertinent Quantifiable Impacts (1 of 2)

Calendar Year	Project Year	Person Hours Saved	Gasoline Consumption Avoided	Diesel Consumption Avoided	Accidents Avoided	Fatalities Avoided	Injuries Avoided	Damaged Vehicles Avoided
2017	1	-	-	-	-	-	-	-
2018	2	-	-	-	-	-	-	-
2019	3	-	-	-	-	-	-	-

Calendar Year	Project Year	Person Hours Saved	Gasoline Consumption Avoided	Diesel Consumption Avoided	Accidents Avoided	Fatalities Avoided	Injuries Avoided	Damaged Vehicles Avoided
2020	4	-	-	-	-	-	-	-
2021	5	1,771,498	921,015	263,397	46.3	0.2	21.3	63.0
2022	6	1,796,951	934,265	267,187	47.0	0.2	21.6	63.9
2023	7	1,822,770	947,706	271,031	47.7	0.2	21.9	64.8
2024	8	1,848,960	961,341	274,930	48.3	0.2	22.3	65.7
2025	9	1,875,527	975,171	278,885	49.0	0.2	22.6	66.7
2026	10	1,902,475	989,201	282,898	49.7	0.2	22.9	67.6
2027	11	1,929,810	1,003,432	286,968	50.5	0.2	23.2	68.6
2028	12	1,957,538	1,017,869	291,096	51.2	0.2	23.6	69.6
2029	13	1,985,664	1,032,513	295,284	51.9	0.2	23.9	70.6
2030	14	2,014,195	1,047,367	299,532	52.7	0.2	24.2	71.6
2031	15	2,043,136	1,062,435	303,842	53.4	0.2	24.6	72.6
2032	16	2,072,492	1,077,720	308,213	54.2	0.2	24.9	73.7
2033	17	2,102,270	1,093,225	312,647	55.0	0.2	25.3	74.7
2034	18	2,132,476	1,108,953	317,145	55.8	0.2	25.7	75.8
2035	19	2,163,116	1,124,908	321,708	56.6	0.2	26.0	76.9
2036	20	2,194,196	1,141,092	326,336	57.4	0.2	26.4	78.0
2037	21	2,225,723	1,157,508	331,031	58.2	0.2	26.8	79.1
2038	22	2,257,703	1,174,161	335,794	59.0	0.2	27.2	80.3
2039	23	2,290,142	1,191,053	340,625	59.9	0.2	27.6	81.4
2040	24	2,323,048	1,208,189	345,526	60.8	0.2	28.0	82.6
2041	25	2,323,048	1,208,189	345,526	60.8	0.2	28.0	82.6
2042	26	2,323,048	1,208,189	345,526	60.8	0.2	28.0	82.6
2043	27	2,323,048	1,208,189	345,526	60.8	0.2	28.0	82.6
2044	28	2,323,048	1,208,189	345,526	60.8	0.2	28.0	82.6
2045	29	2,323,048	1,208,189	345,526	60.8	0.2	28.0	82.6
2046	30	2,323,048	1,208,189	345,526	60.8	0.2	28.0	82.6

Calendar Year	Project Year	Person Hours Saved	Gasoline Consumption Avoided	Diesel Consumption Avoided	Accidents Avoided	Fatalities Avoided	Injuries Avoided	Damaged Vehicles Avoided
2047	31	2,323,048	1,208,189	345,526	60.8	0.2	28.0	82.6
2048	32	2,323,048	1,208,189	345,526	60.8	0.2	28.0	82.6
2049	33	2,323,048	1,208,189	345,526	60.8	0.2	28.0	82.6
2050	34	2,323,048	1,208,189	345,526	60.8	0.2	28.0	82.6
Total		63,940,167	33,251,015	9,509,330	1,671.9	5.5	769.7	2,273.2

Table 22: Pertinent Quantifiable Impacts (2 of 2)

Calendar Year	Project Year	Annual Emissions Avoided - VOC (tonnes)	Annual Emissions Avoided - NOx (tonnes)	Annual Emissions Avoided - PM (tonnes)	Annual Emissions Avoided - SO_2 (tonnes)	Annual Emissions Avoided - CO_2 (tonnes)	Vehicle Hours Saved
2017	1	-	-	-	-	-	-
2018	2	-	-	-	-	-	-
2019	3	-	-	-	-	-	-
2020	4	-	-	-	-	-	-
2021	5	4.07	9.83	0.27	0.13	12,541	1,334,361
2022	6	4.13	9.97	0.28	0.13	12,721	1,353,533
2023	7	4.19	10.12	0.28	0.13	12,904	1,372,981
2024	8	4.25	10.26	0.29	0.13	13,090	1,392,709
2025	9	4.31	10.41	0.29	0.13	13,278	1,412,720
2026	10	4.37	10.56	0.29	0.13	13,469	1,433,018
2027	11	4.44	10.71	0.30	0.14	13,663	1,453,608
2028	12	4.50	10.87	0.30	0.14	13,860	1,474,494
2029	13	4.56	11.02	0.31	0.14	14,059	1,495,680
2030	14	4.63	11.18	0.31	0.14	14,261	1,517,170
2031	15	4.70	11.34	0.32	0.14	14,466	1,538,969
2032	16	4.76	11.51	0.32	0.15	14,675	1,561,082
2033	17	4.83	11.67	0.33	0.15	14,886	1,583,512

Calendar Year	Project Year	Annual Emissions Avoided - VOC (tonnes)	Annual Emissions Avoided - NOx (tonnes)	Annual Emissions Avoided - PM (tonnes)	Annual Emissions Avoided - SO_2 (tonnes)	Annual Emissions Avoided - CO_2 (tonnes)	Vehicle Hours Saved
2034	18	4.90	11.84	0.33	0.15	15,100	1,606,264
2035	19	4.97	12.01	0.33	0.15	15,317	1,629,343
2036	20	5.04	12.18	0.34	0.16	15,537	1,652,754
2037	21	5.12	12.36	0.34	0.16	15,761	1,676,501
2038	22	5.19	12.54	0.35	0.16	15,988	1,700,590
2039	23	5.27	12.72	0.35	0.16	16,218	1,725,024
2040	24	5.34	12.90	0.36	0.16	16,451	1,749,810
2041	25	5.34	12.90	0.36	0.16	16,451	1,749,810
2042	26	5.34	12.90	0.36	0.16	16,451	1,749,810
2043	27	5.34	12.90	0.36	0.16	16,451	1,749,810
2044	28	5.34	12.90	0.36	0.16	16,451	1,749,810
2045	29	5.34	12.90	0.36	0.16	16,451	1,749,810
2046	30	5.34	12.90	0.36	0.16	16,451	1,749,810
2047	31	5.34	12.90	0.36	0.16	16,451	1,749,810
2048	32	5.34	12.90	0.36	0.16	16,451	1,749,810
2049	33	5.34	12.90	0.36	0.16	16,451	1,749,810
2050	34	5.34	12.90	0.36	0.16	16,451	1,749,810
Total		147.0	355.01	9.90	4.53	452,755	48,162,223

Table 23: Travel Time Savings and Pertinent Quantifiable Impacts

Calendar Year	Project Year	Vehicle Hours Saved	Person Hours Saved	Travel Time Savings (Undiscounted)	Travel Time Savings (Discounted 7%)	Travel Time Savings (Discounted 3%)
2017	1	-	-	-	-	-
2018	2	-	-	-	-	-
2019	3	-	-	-	-	-

Calendar Year	Project Year	Vehicle Hours Saved	Person Hours Saved	Travel Time Savings (Undiscounted)	Travel Time Savings (Discounted 7%)	Travel Time Savings (Discounted 3%)
2020	4	-	-	-	-	-
2021	5	1,334,361	1,771,498	$27,774,936	$19,803,145	$23,958,904
2022	6	1,353,533	1,796,951	$28,174,014	$18,773,535	$23,595,293
2023	7	1,372,981	1,822,770	$28,578,827	$17,797,457	$23,237,201
2024	8	1,392,709	1,848,960	$28,989,455	$16,872,127	$22,884,544
2025	9	1,412,720	1,875,527	$29,405,984	$15,994,907	$22,537,238
2026	10	1,433,018	1,902,475	$29,828,498	$15,163,296	$22,195,204
2027	11	1,453,608	1,929,810	$30,257,082	$14,374,922	$21,858,360
2028	12	1,474,494	1,957,538	$30,691,825	$13,627,537	$21,526,628
2029	13	1,495,680	1,985,664	$31,132,814	$12,919,011	$21,199,931
2030	14	1,517,170	2,014,195	$31,580,139	$12,247,322	$20,878,192
2031	15	1,538,969	2,043,136	$32,033,891	$11,610,556	$20,561,336
2032	16	1,561,082	2,072,492	$32,494,163	$11,006,897	$20,249,288
2033	17	1,583,512	2,102,270	$32,961,049	$10,434,624	$19,941,976
2034	18	1,606,264	2,132,476	$33,434,642	$9,892,104	$19,639,329
2035	19	1,629,343	2,163,116	$33,915,041	$9,377,791	$19,341,274
2036	20	1,652,754	2,194,196	$34,402,342	$8,890,219	$19,047,742
2037	21	1,676,501	2,225,723	$34,896,644	$8,427,996	$18,758,666
2038	22	1,700,590	2,257,703	$35,398,049	$7,989,806	$18,473,976
2039	23	1,725,024	2,290,142	$35,906,658	$7,574,398	$18,193,607
2040	24	1,749,810	2,323,048	$36,422,575	$7,180,588	$17,917,493
2041	25	1,749,810	2,323,048	$36,422,575	$6,710,830	$17,395,625
2042	26	1,749,810	2,323,048	$36,422,575	$6,271,803	$16,888,956
2043	27	1,749,810	2,323,048	$36,422,575	$5,861,498	$16,397,045
2044	28	1,749,810	2,323,048	$36,422,575	$5,478,036	$15,919,461
2045	29	1,749,810	2,323,048	$36,422,575	$5,119,660	$15,455,787
2046	30	1,749,810	2,323,048	$36,422,575	$4,784,729	$15,005,619

Calendar Year	Project Year	Vehicle Hours Saved	Person Hours Saved	Travel Time Savings (Undiscounted)	Travel Time Savings (Discounted 7%)	Travel Time Savings (Discounted 3%)
2047	31	1,749,810	2,323,048	$36,422,575	$4,471,709	$14,568,562
2048	32	1,749,810	2,323,048	$36,422,575	$4,179,167	$14,144,235
2049	33	1,749,810	2,323,048	$36,422,575	$3,905,764	$13,732,267
2050	34	1,749,810	2,323,048	$36,422,575	$3,650,247	$13,332,298
Total		48,162,223	63,940,167	$1,002,504,379	$300,391,681	$568,836,038

Table 24: Vehicle Operating Cost Savings and Pertinent Quantifiable Impacts

Calendar Year	Project Year	Gasoline Consumption Avoided	Diesel Consumption Avoided	Fuel Cost Savings	Non-Fuel Cost Savings	Vehicle Operating Cost Savings (undiscounted)	Vehicle Operating Cost Savings (7%)	Vehicle Operating Cost Savings (3%)
2017	1	-	-	-	-	-	-	-
2018	2	-	-	-	-	-	-	-
2019	3	-	-	-	-	-	-	-
2020	4	-	-	-	-	-	-	-
2021	5	921,015	263,397	$2,865,263	$697,481	$3,562,745	$2,540,188	$3,073,255
2022	6	934,265	267,187	$3,039,942	$707,518	$3,747,459	$2,497,090	$3,138,438
2023	7	947,706	271,031	$3,128,906	$717,698	$3,846,604	$2,395,472	$3,127,641
2024	8	961,341	274,930	$3,211,304	$728,025	$3,939,329	$2,292,725	$3,109,743
2025	9	975,171	278,885	$3,326,838	$738,501	$4,065,339	$2,211,275	$3,115,744
2026	10	989,201	282,898	$3,426,485	$749,127	$4,175,612	$2,122,669	$3,107,047
2027	11	1,003,432	286,968	$3,499,936	$759,906	$4,259,843	$2,023,821	$3,077,401
2028	12	1,017,869	291,096	$3,548,744	$770,841	$4,319,584	$1,917,947	$3,029,670
2029	13	1,032,513	295,284	$3,640,445	$781,932	$4,422,377	$1,835,129	$3,011,424
2030	14	1,047,367	299,532	$3,760,014	$793,184	$4,553,198	$1,765,809	$3,010,200
2031	15	1,062,435	303,842	$3,877,182	$804,597	$4,681,779	$1,696,892	$3,005,056
2032	16	1,077,720	308,213	$4,002,411	$816,174	$4,818,585	$1,632,221	$3,002,783

Calendar Year	Project Year	Gasoline Consumption Avoided	Diesel Consumption Avoided	Fuel Cost Savings	Non-Fuel Cost Savings	Vehicle Operating Cost Savings (undiscounted)	Vehicle Operating Cost Savings (7%)	Vehicle Operating Cost Savings (3%)
2033	17	1,093,225	312,647	$4,059,013	$827,918	$4,886,932	$1,547,077	$2,956,674
2034	18	1,108,953	317,145	$4,168,442	$839,831	$5,008,273	$1,481,767	$2,941,833
2035	19	1,124,908	321,708	$4,258,212	$851,916	$5,110,128	$1,412,993	$2,914,234
2036	20	1,141,092	326,336	$4,414,635	$864,174	$5,278,809	$1,364,145	$2,922,749
2037	21	1,157,508	331,031	$4,490,325	$876,609	$5,366,934	$1,296,185	$2,884,991
2038	22	1,174,161	335,794	$4,578,892	$889,222	$5,468,115	$1,234,226	$2,853,768
2039	23	1,191,053	340,625	$4,712,936	$902,018	$5,614,954	$1,184,457	$2,845,051
2040	24	1,208,189	345,526	$4,819,227	$914,997	$5,734,224	$1,130,483	$2,820,858
2041	25	1,208,189	345,526	$4,845,042	$914,997	$5,760,039	$1,061,282	$2,751,026
2042	26	1,208,189	345,526	$4,851,239	$914,997	$5,766,236	$992,920	$2,673,773
2043	27	1,208,189	345,526	$4,866,641	$914,997	$5,781,638	$930,441	$2,602,830
2044	28	1,208,189	345,526	$4,885,291	$914,997	$5,800,288	$872,376	$2,535,171
2045	29	1,208,189	345,526	$4,909,258	$914,997	$5,824,255	$818,674	$2,471,501
2046	30	1,208,189	345,526	$4,934,956	$914,997	$5,849,952	$768,491	$2,410,103
2047	31	1,208,189	345,526	$4,974,954	$914,997	$5,889,951	$723,127	$2,355,905
2048	32	1,208,189	345,526	$4,961,464	$914,997	$5,876,461	$674,272	$2,282,047
2049	33	1,208,189	345,526	$4,991,551	$914,997	$5,906,548	$633,387	$2,226,924
2050	34	1,208,189	345,526	$5,054,388	$914,997	$5,969,385	$598,248	$2,185,063
Total		33,251,015	9,509,330	$126,103,937	$25,181,639	$151,285,576	$43,655,790	$84,442,904

Table 25: Emission Cost Savings

Calendar Year	Project Year	Emissions Cost Savings - VOC	Emission Cost Savings - NOx	Emission Cost Savings - PM	Emission Cost Savings - SO_2	Emission Cost Savings - CO_2	Emission Cost Savings (undiscounted)	Emission Cost Savings (7%)	Emission Cost Savings (3%)
2017	1	-	-	-	-	-	-	-	-

Calendar Year	Project Year	Emissions Cost Savings - VOC	Emission Cost Savings - NOx	Emission Cost Savings - PM	Emission Cost Savings - SO_2	Emission Cost Savings - CO_2	Emission Cost Savings (undiscounted)	Emission Cost Savings (7%)	Emission Cost Savings (3%)
2018	2	-	-	-	-	-	-	-	-
2019	3	-	-	-	-	-	-	-	-
2020	4	-	-	-	-	-	-	-	-
2021	5	$8,402	$79,964	$102,005	$6,033	$148,226	$344,629	$245,716	$297,280
2022	6	$8,523	$81,114	$103,472	$6,120	$153,938	$353,167	$235,330	$295,772
2023	7	$8,646	$82,281	$104,961	$6,208	$159,784	$361,880	$225,361	$294,241
2024	8	$8,770	$83,465	$106,471	$6,298	$165,767	$370,770	$215,791	$292,689
2025	9	$8,896	$84,666	$108,003	$6,388	$171,888	$379,841	$206,608	$291,116
2026	10	$9,024	$85,884	$109,556	$6,480	$178,152	$389,096	$197,797	$289,524
2027	11	$9,154	$87,119	$111,133	$6,573	$184,560	$398,539	$189,343	$287,913
2028	12	$9,286	$88,373	$112,731	$6,668	$191,115	$408,173	$181,234	$286,284
2029	13	$9,419	$89,644	$114,353	$6,764	$193,865	$414,045	$171,814	$281,945
2030	14	$9,555	$90,934	$115,998	$6,861	$200,667	$424,015	$164,440	$280,324
2031	15	$9,692	$92,242	$117,667	$6,960	$207,625	$434,186	$157,369	$278,688
2032	16	$9,832	$93,569	$119,360	$7,060	$214,742	$444,563	$150,589	$277,037
2033	17	$9,973	$94,915	$121,077	$7,161	$222,021	$455,148	$144,088	$275,372
2034	18	$10,117	$96,281	$122,819	$7,264	$229,464	$465,945	$137,856	$273,694
2035	19	$10,262	$97,666	$124,586	$7,369	$237,076	$476,959	$131,883	$272,003
2036	20	$10,410	$99,071	$126,379	$7,475	$244,859	$488,193	$126,158	$270,301
2037	21	$10,559	$100,496	$128,197	$7,583	$252,817	$499,652	$120,673	$268,588
2038	22	$10,711	$101,942	$130,041	$7,692	$260,954	$511,340	$115,416	$266,864
2039	23	$10,865	$103,409	$131,912	$7,802	$269,272	$523,260	$110,380	$265,132
2040	24	$11,022	$104,896	$133,810	$7,915	$277,776	$535,418	$105,556	$263,390
2041	25	$11,022	$104,896	$133,810	$7,915	$282,405	$540,048	$99,503	$257,930
2042	26	$11,022	$104,896	$133,810	$7,915	$282,405	$540,048	$92,994	$250,417
2043	27	$11,022	$104,896	$133,810	$7,915	$287,035	$544,677	$87,655	$245,208

Calendar Year	Project Year	Emissions Cost Savings - VOC	Emission Cost Savings - NOx	Emission Cost Savings - PM	Emission Cost Savings - SO_2	Emission Cost Savings - CO_2	Emission Cost Savings (undiscounted)	Emission Cost Savings (7%)	Emission Cost Savings (3%)
2044	28	$11,022	$104,896	$133,810	$7,915	$291,664	$549,307	$82,617	$240,089
2045	29	$11,022	$104,896	$133,810	$7,915	$296,294	$553,936	$77,863	$235,061
2046	30	$11,022	$104,896	$133,810	$7,915	$300,924	$558,566	$73,377	$230,122
2047	31	$11,022	$104,896	$133,810	$7,915	$305,553	$563,196	$69,145	$225,271
2048	32	$11,022	$104,896	$133,810	$7,915	$310,183	$567,825	$65,153	$220,508
2049	33	$11,022	$104,896	$133,810	$7,915	$314,812	$572,455	$61,387	$215,831
2050	34	$11,022	$104,896	$133,810	$7,915	$319,442	$577,084	$57,835	$211,239
Total		$303,335	$2,886,893	$3,682,628	$217,819	$7,155,286	$14,245,962	$4,100,932	$7,939,831

Table 26: Accident Cost Savings and Pertinent Quantifiable Impacts

Calendar Year	Project Year	Accidents Avoided	Fatality Cost Savings	Injury Cost Savings	PDO Cost Savings	Accident Cost Savings (undiscounted)	Accident Cost Savings (7%)	Accident Cost Savings (3%)
2017	1	-	-	-	-	-	-	-
2018	2	-	-	-	-	-	-	-
2019	3	-	-	-	-	-	-	-
2020	4	-	-	-	-	-	-	-
2021	5	46.31	$1,464,168	$2,359,314	$267,730	$4,091,212	$2,916,978	$3,529,116
2022	6	46.98	$1,485,233	$2,393,257	$271,582	$4,150,071	$2,765,368	$3,475,620
2023	7	47.65	$1,506,600	$2,427,688	$275,489	$4,209,777	$2,621,638	$3,422,934
2024	8	48.34	$1,528,275	$2,462,614	$279,453	$4,270,342	$2,485,378	$3,371,047
2025	9	49.03	$1,550,262	$2,498,043	$283,473	$4,331,778	$2,356,200	$3,319,947
2026	10	49.74	$1,572,565	$2,533,981	$287,551	$4,394,098	$2,233,737	$3,269,622
2027	11	50.45	$1,595,189	$2,570,437	$291,688	$4,457,315	$2,117,638	$3,220,059
2028	12	51.18	$1,618,139	$2,607,417	$295,885	$4,521,441	$2,007,574	$3,171,247
2029	13	51.92	$1,641,418	$2,644,929	$300,142	$4,586,489	$1,903,230	$3,123,176

Calendar Year	Project Year	Accidents Avoided	Fatality Cost Savings	Injury Cost Savings	PDO Cost Savings	Accident Cost Savings (undiscounted)	Accident Cost Savings (7%)	Accident Cost Savings (3%)
2030	14	52.66	$1,665,033	$2,682,981	$304,460	$4,652,473	$1,804,309	$3,075,833
2031	15	53.42	$1,688,987	$2,721,580	$308,840	$4,719,407	$1,710,530	$3,029,208
2032	16	54.19	$1,713,286	$2,760,735	$313,283	$4,787,304	$1,621,625	$2,983,289
2033	17	54.97	$1,737,935	$2,800,452	$317,790	$4,856,177	$1,537,341	$2,938,067
2034	18	55.76	$1,762,938	$2,840,742	$322,362	$4,926,042	$1,457,438	$2,893,530
2035	19	56.56	$1,788,301	$2,881,611	$327,000	$4,996,911	$1,381,688	$2,849,668
2036	20	57.38	$1,814,028	$2,923,067	$331,704	$5,068,800	$1,309,874	$2,806,472
2037	21	58.20	$1,840,126	$2,965,121	$336,476	$5,141,723	$1,241,793	$2,763,930
2038	22	59.04	$1,866,600	$3,007,779	$341,317	$5,215,696	$1,177,251	$2,722,032
2039	23	59.89	$1,893,454	$3,051,051	$346,227	$5,290,732	$1,116,063	$2,680,770
2040	24	60.75	$1,920,694	$3,094,945	$351,209	$5,366,848	$1,058,056	$2,640,134
2041	25	60.75	$1,920,694	$3,094,945	$351,209	$5,366,848	$988,837	$2,563,237
2042	26	60.75	$1,920,694	$3,094,945	$351,209	$5,366,848	$924,147	$2,488,579
2043	27	60.75	$1,920,694	$3,094,945	$351,209	$5,366,848	$863,689	$2,416,096
2044	28	60.75	$1,920,694	$3,094,945	$351,209	$5,366,848	$807,186	$2,345,725
2045	29	60.75	$1,920,694	$3,094,945	$351,209	$5,366,848	$754,379	$2,277,403
2046	30	60.75	$1,920,694	$3,094,945	$351,209	$5,366,848	$705,027	$2,211,070
2047	31	60.75	$1,920,694	$3,094,945	$351,209	$5,366,848	$658,904	$2,146,670
2048	32	60.75	$1,920,694	$3,094,945	$351,209	$5,366,848	$615,798	$2,084,146
2049	33	60.75	$1,920,694	$3,094,945	$351,209	$5,366,848	$575,512	$2,023,443
2050	34	60.75	$1,920,694	$3,094,945	$351,209	$5,366,848	$537,862	$1,964,507
Total		1,671.9	$52,860,176	$85,177,196	$9,665,747	$147,703,119	$44,255,053	$83,806,578

Appendix C. Federal Wage Certification Letter

Federal Wage Rate Certification

The City of Laredo, Texas, certifies that it will ensure compliance with the requirements of Subchapter IV of Chapter 31 of Title 40, United States Code (federal wage rate requirements), as required by the FY 2017 Appropriations Act for any projects that receive federal funding under the Nationally Significant Freight and Highway Projects Program (INFRA Grants) for Fiscal Years 2017 and 2018.

Horacio De Leon
City Manager
City of Laredo, Texas

11/1/17
Date

F. Report by the TxDOT on the meeting had by the City and TxDOT to discuss the "wish list"/recommendations resulting from the Texas Transportation Institute's (TTI) Mines Road study, pertaining to proposed City of Laredo facility improvements intended to improve the function of Mines Road.

G. Letting date for the Zacate Creek Hike & Bike Trail (CSJ 0922-33-170) has been moved from November 2017 (FY 2018) to January 2018 (FY 2018).