Camino Real Regional Mobility Authority

Regional Toll Implementation Plan

15 April 2010

CAMINO REAL
REGIONAL MOBILITY
AUTHORITY

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Glossary

AASHTO	American Association of State Highway Transportation Officials
ARRA	American Recovery and Reinvestment Act
BAB	Build America Bond
BNSF	Burlington Northern Santa Fe
BRAC	Base Realignment and Closure
BHW	Border Highway
CBI	Coordinated Border Infrastructure
CDA	Comprehensive Development Agreement
CE	Categorical Exclusion
CFR	Code of Federal Regulations
CMAQ	Congestion Mitigation and Air Quality Improvement
CMP	Comprehensive Mobility Plan
CRRMA	Camino Real Regional Mobility Authority
CTRMA	Central Texas Regional Mobility Authority
DOD	Department of Defense
EA	Environmental Assessment
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
EPMPO	El Paso Metropolitan Planning Organization
FHWA	Federal Highway Administration
FONSI	Finding of No Significant Impact
HB	House Bill
HIRE Act	Hiring Incentives to Restore Employment Act
HSIP	Highway Safety Improvement Program
HTF	Highway Trust Fund
IBWC	International Boundary and Water Commission
IM	Interstate Maintenance
ITS	Intelligent Transportation Systems
LRTP	Long Range Transportation Plan
MOE	Maintenance of Effort
MTP	Metropolitan Transportation Plan
MV	Market Valuation
NAFTA	North American Free Trade Agreement
NEPA	National Environmental Policy Act
NHS	National Highway System
NTE	North Tarrant Express
PAB	Private Activity Bond
PDA	Project Development Agreement
PFA	Preliminary Financial Analysis
POE	Port of Entry

P3	Private-Public Partnerships
PS&E	Plans, Specifications & Estimates
RMA	Regional Mobility Authority
ROD	Record of Decision
ROW	Right-of-Way
SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users
SB	Senate Bill
SH	State Highway
SIB	State Infrastructure Bank
STP	Surface Transportation Program
T2P	Texas Toll Providers
TCEQ	Texas Commission on Environmental Quality
TIFIA	Transportation Infrastructure Finance and Innovation Act
TIP	Transportation Improvement Plan
T&R	Traffic & Revenue
TTC	Texas Transportation Commission
TTMC	Texas Tech Medical Center
TxDOT	Texas Department of Transportation
UP	Union Pacific
UPWP	Unified Planning Work Program
U.S.	United States
USDOT	United States Department of Transportation
V/C	Volume to Capacity
VMT	Vehicle Miles Traveled

Executive Summary

The Camino Real Regional Mobility Authority (CRRMA) was established in March 2007 by an act of the City Council of the City of El Paso, following approval of the City's request to the Texas Department of Transportation (TxDOT) and subsequent authorization by the Texas Transportation Commission (TTC) to form a regional mobility authority (RMA).

> *The mission of the Camino Real Regional Mobility Authority is to assist in the establishment of a comprehensive transportation system to directly benefit the traveling public within the El Paso region through the development of additional transportation alternatives within the region.*

Influenced by growth projections in population and commercial activities, the need to expand transportation infrastructure to serve the community became evident. According to the U.S. Census, the El Paso County population was approximately 742,000 in 2008. According to the Texas Water Development Board, the El Paso County population is expected to grow to approximately 1.12 million by 2030. The Ciudad Juárez population today is estimated at 1.5 million and is projected to increase to 3 million in 2035. The expected combined El Paso and Ciudad Juárez urbanized cross-border metropolitan area population is expected to grow to 4.1 million by 2035[1].

In conjunction with the CRRMA, the TxDOT El Paso District, the City of El Paso, and the El Paso Metropolitan Planning Organization (EPMPO) identified potential transportation improvements to address existing and future congestion in the 2008 Comprehensive Mobility Plan (CMP).

The 2008 CMP identified the projects in *Table ES-1* and shown on the Projects' Location Map (*Figure ES-1*) as potential toll facilities that could fall under the purview of the CRRMA to develop. Project 14c is a non-tolled project, but was included in the list of tolled projects on the 2008 CMP as it includes elements designed to facilitate movement between the Loop 375 and I-10 tolled managed lanes (Projects 14a and 14d respectively).

Table ES-1: **Projects**

Project	Limits
Project 12	Loop 375 (César Chávez) – Phase I Southern Corridor (US 54 to Zaragoza)
Project 13	Loop 375 (César Chávez) – Phase I Southern Corridor (Park to Schuster)
Project 14a	Loop 375 [Border Highway (BHW) Extension Part 2 and Americas] – Schuster to IH 10 at Sunland Park Interchange
Project 14b	Loop 375 (BHW Extension Part 2 and Americas) – Zaragoza to IH-10
Project 14c	IH-10 – Phase III Southern Corridor (Mesa to Executive Center Blvd) – collector/distributor and not tolled
Project 14d	IH-10 – Phase III Southern Corridor (Sunland Park Interchange to Loop 375 Transmountain)
Project 15	Northeast Parkway (Joe Battle Blvd. to TX/NM State Line)

[1] El Paso Metropolitan Planning Organization (EPMPO)

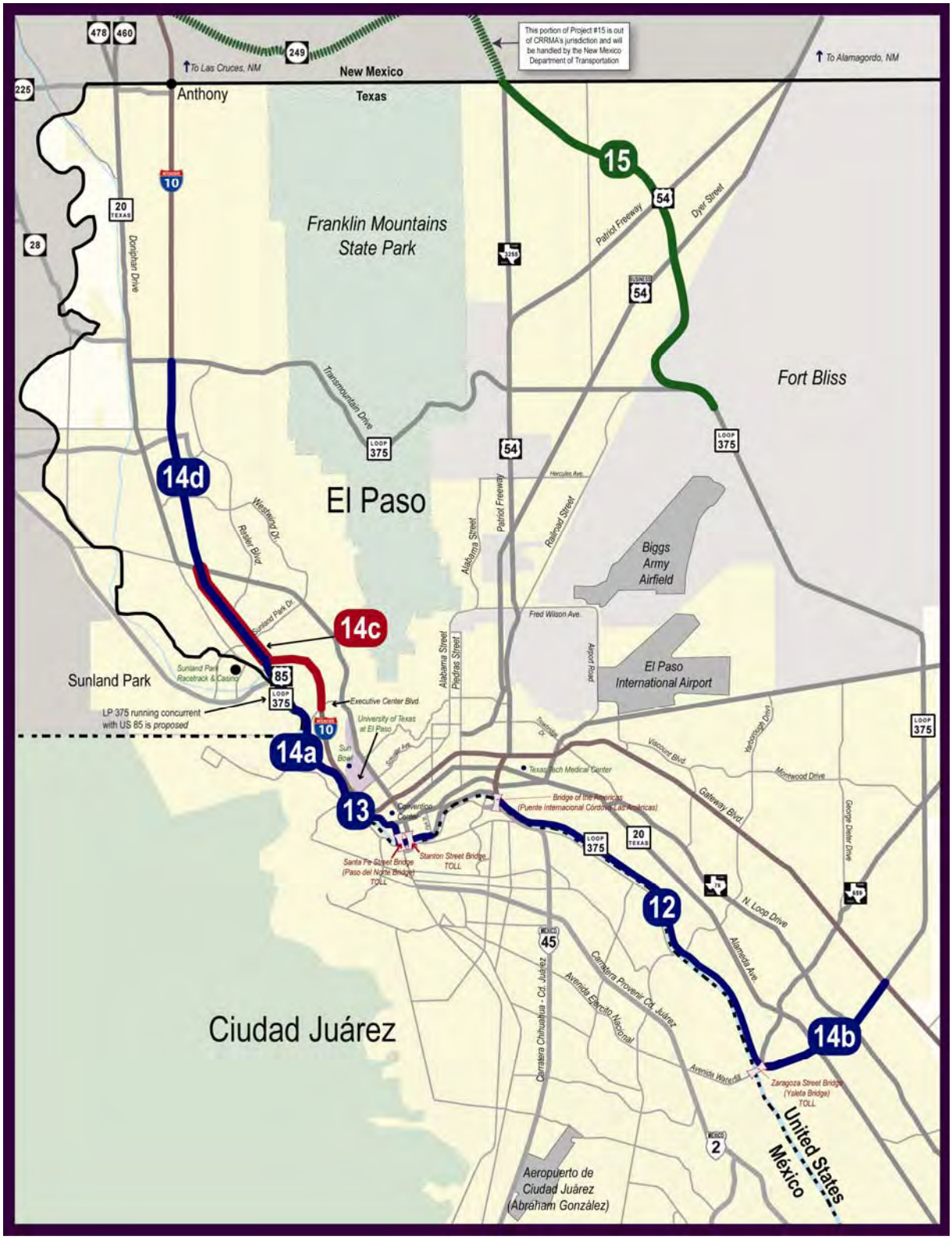


Figure ES-1: **Projects' Location Map**

The purpose of the Regional Toll Implementation Plan (the Plan) is to present alternative approaches for development of the 2008 CMP toll projects based on each project's readiness for development and available funding. Phases of project development generally follow the steps shown in *Figure ES-2*. A project's position on the readiness for development and delivery scale indicates its anticipated time line for development.

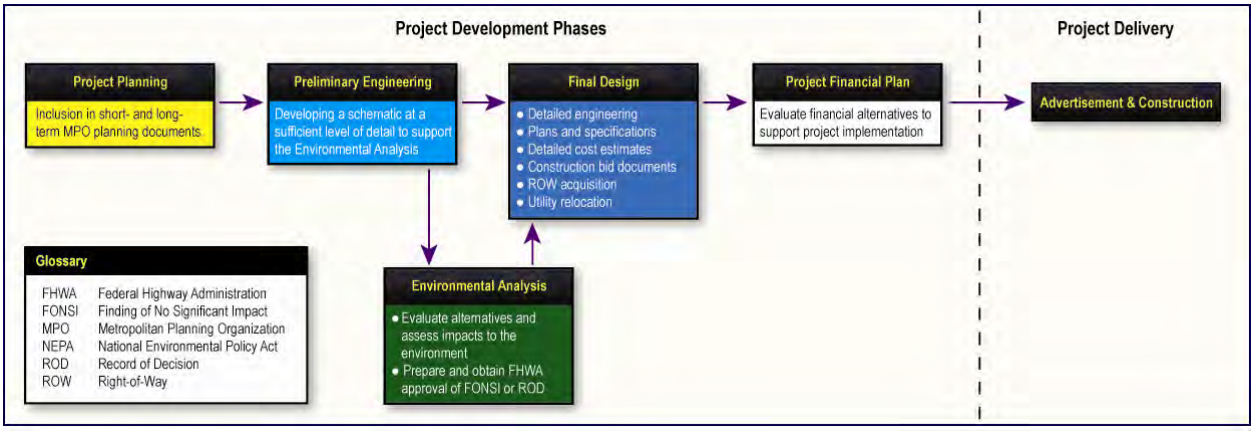


Figure ES-2: **Project Development and Delivery Process**

TxDOT has reinitiated the environmental analysis phase for the Border Highway West (BHW) projects, which includes Project 13/14a and Project 14d. The environmental analysis process for these projects could potentially require a modification to the toll-to-toll connection provided by the configuration of the non-tolled collector distributor project identified in the 2008 CMP (Project 14c). Therefore, the CRRMA developed an alternative configuration that focuses on the congestion relief aspects of Project 14c. The alternative (Project 14c – Auxiliary Lanes) includes the addition of auxiliary lanes in select areas of I-10 between Mesa and Executive Blvd. Due to the uncertainties regarding the Project 14c configuration represented in the 2008 CMP, the analysis in this Plan for Project 14c is based upon the Project 14c Auxiliary Lanes alternative described.

Individual project cost estimates prepared for each development phase derive total costs to deliver the project. *Table ES-2* displays the cost estimates in 2009$ for each proposed toll project in the 2008 CMP and the non-tolled Project 14c. Given limitations in funding, all projects cannot be initiated immediately. Therefore, the costs presented would need to be inflated based upon the year in which the activities are anticipated to commence.

Table ES-2. **Project Development and Construction Costs for 2008 CMP Tolled Projects (2009$)**

Project	Phase	Cost	Project	Phase	Cost
12	Planning (EPMPO)	COMPLETED	14C Auxiliary Lanes	Planning (EPMPO)	$0**
	Preliminary Engineering	COMPLETED		Preliminary Engineering	$279,000
	Environmental Analysis	COMPLETED		Environmental Analysis	$72,000
	Final Design & Project Delivery*	$105,585,157		Final Design & Project Delivery*	$13,170,749
	Total	**$105,585,157**		**Total**	**$13,521,749**
13/14A	Planning (EPMPO)	$0**	14C Collector Distributor	Planning (EPMPO)	$0**
	Preliminary Engineering	$0**		Preliminary Engineering	$0**
	Environmental Analysis	$0**		Environmental Analysis	$0**
	Final Design & Project Delivery*	$674,279,050		Final Design & Project Delivery*	$143,324,049
	Total	**$674,279,050**		**Total**	**$143,324,049**
14B	Planning (EPMPO)	$0**	14D	Planning (EPMPO)	$0**
	Preliminary Engineering	$879,000		Preliminary Engineering	$0**
	Environmental Analysis	$72,000		Environmental Analysis	$0**
	Final Design & Project Delivery*	$37,106,964		Final Design & Project Delivery*	$197,644,359
	Total	**$38,057,964**		**Total**	**$197,644,359**
			15	Planning (EPMPO)	COMPLETED
				Preliminary Engineering	COMPLETED
				Environmental Analysis	$0**
				Final Design & Project Delivery*	$269,854,450
				Total	**$269,854,450**

**Includes final design, right-of-way, utility and construction costs*
***No CRRMA funds required to complete. Costs to be incurred by others*

Funds identified to develop and deliver the projects listed in *Table ES-1* are as follows:

- $74M Proposition 14 plus $5M federal funds ($79M total) allocated to Project 12 – César Chávez from 2010 to 2011
- $151M Category 2 EPMPO funds allocated overall for the proposed projects from 2012 to 2020. Per TxDOT, distribution of funds as follows: $81.3M in 2015, $45.25M in 2018, and $24.75M in 2019.

The Plan includes two alternatives to advance some of the 2008 CMP projects considering available funds. The base project cost estimates shown in *Table ES-2* were inflated based on the year each activity is expected to occur. As previously stated, TxDOT has reinitiated the environmental process for the BHW tolled projects (Projects 13/14a and 14d). This process may result in realignment of these projects. Due to the uncertainty regarding the BHW projects and Project 14c (Collector Distributor) and the need for TxDOT to complete the environmental analysis process before the CRRMA can pursue additional project development activities, an analysis that prioritizes available funding sources for the BHW projects and Project 14c (Collector Distributor) was deemed not appropriate at this time. Therefore, the alternatives developed focus on Projects 12, 14b, 14c (Auxiliary Lanes), and 15, as summarized below.

- Scenario 1: Develop and construct Projects 12 and 14b and allocate all remaining funds to acquisition of right-of-way for Project 15 *(Figure ES-3)*
- Scenario 2: Develop and construct Projects 12 and 14b and allocate all remaining funds to development and construction of Project 14c (Auxiliary Lanes) followed by acquisition of right-of-way for Project 15 *(Figure ES-4)*

SCENARIO 1: PROJECT 15 RIGHT-OF-WAY ACQUISITION
IDENTIFIED FUNDS

FUNDING CONSTRAINED SCHEDULE												
	$79 MILLION		$151 MILLION									
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
PROJECT 12												
PROJECT 13/14A						NO FUNDING FOR PROJECT DEVELOPMENT ACTIVITIES						
PROJECT 14B												
PROJECT 14C						NO FUNDING FOR PROJECT DEVELOPMENT ACTIVITIES						
PROJECT 14D						NO FUNDING FOR PROJECT DEVELOPMENT ACTIVITIES						
PROJECT 15												
AVAILABLE FUNDS	$79.0	$69.4	$0.0	$0.0	$0.0	$81.3	$69.1	$53.9	$45.3	$41.6	$13.8	
FUNDS NEEDED FOR PROJECT 12	$9.6	$103.1										
FUNDS NEEDED FOR PROJECT 14B						$1.7	$4.6	$43.3	$0.5			
FUNDS NEEDED FOR PROJECT 15						$10.6	$10.6	$10.7	$28.0	$27.8		
TOTAL FUNDS NEEDED	$9.6	$103.1	$0.0	$0.0	$0.0	$12.3	$15.2	$53.9	$28.4	$27.8	$0.0	
FUNDS REMAINING	$69.4	$0.0	$0.0	$0.0	$0.0	$69.1	$53.9	$0.0	$16.9	$13.8	$13.8	
SHORTFALL		$33.7										

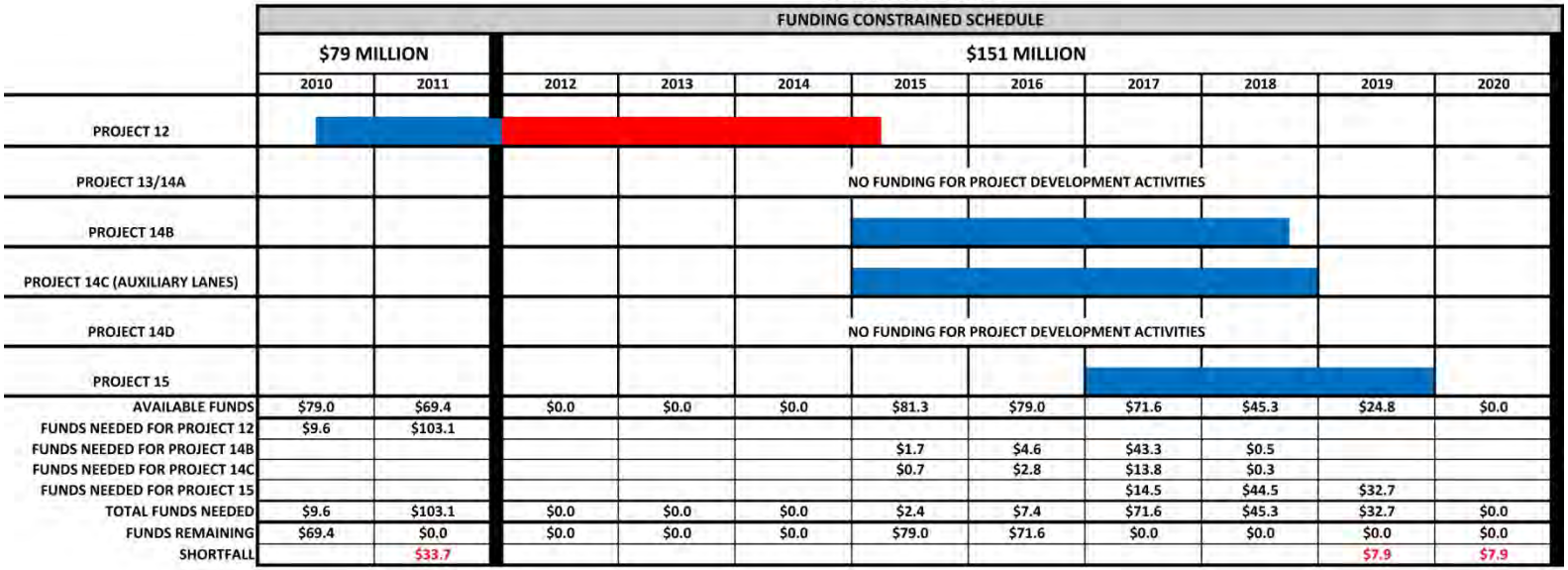
NOTES:
1. BASE COST ESTIMATES WERE PREPARED IN 2009 DOLLARS. SCHEDULE REPRESENTS INFLATED COSTS BASED ON YEAR ACTIVITY INCURRED. ANNUAL INFLATION RATES USED TO ESTIMATE FUTURE COSTS ARE AS FOLLOWS: 5% FOR RIGHT-OF-WAY AND UTILITIES AND 3.5% FOR ALL OTHERS (I.E. PRELIMINARY ENGINEERING, ENVIRONMENTAL, FINAL DESIGN, CONSTRUCTION & CE&I).

NO FUNDS AVAILABLE IN 2012 THROUGH 2015 TO COMPLETE PROJECT 12.

Figure ES-3: **Scenario 1: Project 15 Right-of-Way Acquisition - Identified Funds**

SCENARIO 2: PROJECT 14C (AUXILIARY LANES) DEVELOPMENT & PROJECT 15 RIGHT-OF-WAY ACQUISITION

IDENTIFIED FUNDS



	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
AVAILABLE FUNDS	$79.0	$69.4	$0.0	$0.0	$0.0	$81.3	$79.0	$71.6	$45.3	$24.8	$0.0
FUNDS NEEDED FOR PROJECT 12	$9.6	$103.1									
FUNDS NEEDED FOR PROJECT 14B						$1.7	$4.6	$43.3	$0.5		
FUNDS NEEDED FOR PROJECT 14C						$0.7	$2.8	$13.8	$0.3		
FUNDS NEEDED FOR PROJECT 15								$14.5	$44.5	$32.7	
TOTAL FUNDS NEEDED	$9.6	$103.1	$0.0	$0.0	$0.0	$2.4	$7.4	$71.6	$45.3	$32.7	$0.0
FUNDS REMAINING	$69.4	$0.0	$0.0	$0.0	$0.0	$79.0	$71.6	$0.0	$0.0	$0.0	$0.0
SHORTFALL		$33.7								$7.9	$7.9

NOTES:

1. BASE COST ESTIMATES WERE PREPARED IN 2009 DOLLARS. SCHEDULE REPRESENTS INFLATED COSTS BASED ON YEAR ACTIVITY INCURRED. ANNUAL INFLATION RATES USED TO ESTIMATE FUTURE COSTS ARE AS FOLLOWS: 5% FOR RIGHT-OF-WAY AND UTILITIES AND 3.5% FOR ALL OTHERS (I.E. PRELIMINARY ENGINEERING, ENVIRONMENTAL, FINAL DESIGN, CONSTRUCTION & CE&I).

NO FUNDS AVAILABLE IN 2012 THROUGH 2015 TO COMPLETE PROJECT 12.

Figure ES-4: Scenario 2: Project 14c (Auxiliary Lanes) Development & Project 15 Right-of-Way Acquisition - Identified Funds

Both scenarios developed for this Plan include construction of Projects 12 and 14b. However, there is a shortfall of $33.7 million in 2012 to complete Project 12. Since the EPMPO funds are not anticipated to be available until 2015 and typically construction must be fully funded in order to procure construction services, the schedule scenarios presented in this Plan assume that the EPMPO funds will not be available to address the funding gap on Project 12. The first scenario allocates all funds becoming available in 2015, 2018, and 2019 to completion of Project 14b and to the purchase of right-of-way for Project 15. Under this scenario, almost $14M would be remaining in 2020. These remaining funds could be used to initiate preliminary engineering and environmental analysis activities on the BHW projects that are defined through the environmental process. The BHW project activities are not presented on the schedules at this time due to uncertainties regarding the ultimate project scopes and costs which will be better defined upon completion of the environmental process. Alternatively, the funds could be used to implement mobility improvements on I-10 by advancing Project 14c – Auxiliary Lanes. This implementation approach is reflected in Scenario 2. Scenario 2 allocates all funds remaining following allocation of $79 million to Project 12 and completion of Project 14b to development and construction of Project 14c - Auxiliary Lanes. Any funds remaining following completion of Project 14c – Auxiliary Lanes were then allocated to acquisition of right-of-way for Project 15. Approximately 91 percent of the right-of-way can be acquired under this scenario, leaving a $7.9 million shortfall.

As a new entity responsible for the evaluation and possible implementation of toll roads in the El Paso region, the CRRMA will need to adopt policies and practices for operating its toll facilities. Senate Bill (SB) 792 established a process that the CRRMA will need to follow to assume primacy for development, construction, and operation of any toll roads addressed in this Plan. The terms and conditions of a project addressed through the SB 792 process (market valuation) are comprised of the project scope of work, initial toll rate, and toll escalation policy. Pursuant to the provisions of SB 792, the CRRMA will need to coordinate a project's terms and conditions with the EPMPO for its approval. SB 792 is scheduled to sunset August 31, 2011.

The financial plan for development and construction of Projects 12 and 14b consists of funds identified by the EPMPO. Based on the $79 million of available funds for Project 12, there is a $33.7 million shortfall to complete Project 12. Project 14b can be fully developed using EPMPO funds and opened in 2018. Depending upon the toll implementation scenario selected, the financial plan for Project 14c – Auxiliary Lanes could also be fully funded using EPMPO funds. Right-of-way acquisition for Project 15 is either fully funded or partially funded depending upon the implementation scenario selected. There is insufficient EPMPO funding to cover project development and construction costs for Projects 13/14a, 14d, and 15. A financial plan for continued development and construction of the remaining projects that consists of a combination of various alternative funding mechanisms, including federal funds, loans, bonds, grants, and others needs to be developed. Development of financial plans for these projects will occur later in the project development phase as detailed traffic and revenue forecasts that allow for an analysis of the availability of toll revenue for debt financing become available.

Chapter 1: Introduction

The city of El Paso is experiencing significant growth in population. According to the U.S. Census, between 2000 and 2008, the population in El Paso County increased from 681,115 to 742,062. The City of El Paso's population grew from 564,901 in 2000 to 613,190 in 2008.[2] Based on Texas Water Development Board projections, the population in El Paso County is expected to total 1,491,415 by 2060. As is the case with many other U.S. cities, significant increases in population can place a tremendous strain on the existing transportation infrastructure and will require the development of additional capacity to alleviate increasing levels of congestion in the region.

The primary entity responsible for transportation planning in the El Paso Region is the El Paso Metropolitan Planning Organization (EPMPO). The EPMPO in conjunction with the Camino Real Regional Mobility Authority (CRRMA) and the Texas Department of Transportation (TxDOT) El Paso District identified potential transportation improvements to address existing and future congestion in its 2008 Comprehensive Mobility Plan (CMP). The 2008 CMP recognized the projects identified in *Table 1-1* as potential toll facilities that could fall under the jurisdiction of the CRRMA for development. As noted in *Table 1-1*, one of these projects, Project 14c, is a non-tolled facility. However, this project was included in the "tolled" category of projects as it is designed to facilitate movement between both tolled and non-tolled roadways. A location map of these projects is presented in *Figure 1-1*.

Table 1-1: **Projects**

Project	Limits
Project 12	Loop 375 (César Chávez) – Phase I Southern Corridor (US 54 to Zaragoza)
Project 13	Loop 375 (César Chávez) – Phase I Southern Corridor (Park to Schuster)
Project 14a	Loop 375 [Border Highway (BHW) Extension Part 2 and Americas] – Schuster to IH 10 at Sunland Park Interchange
Project 14b	Loop 375 (BHW Extension Part 2 and Americas) – Zaragoza to IH-10
Project 14c	IH-10 – Phase III Southern Corridor (Mesa to Executive Center Blvd) – collector/distributor and not tolled
Project 14d	IH-10 – Phase III Southern Corridor (Sunland Park Interchange to Loop 375 Transmountain)
Project 15	Northeast Parkway

[2] Tax Increment Project Study Transportation Reinvestment Zone Number One. City of El Paso, Texas, Camino Real Regional Mobility Authority, (November 2009).

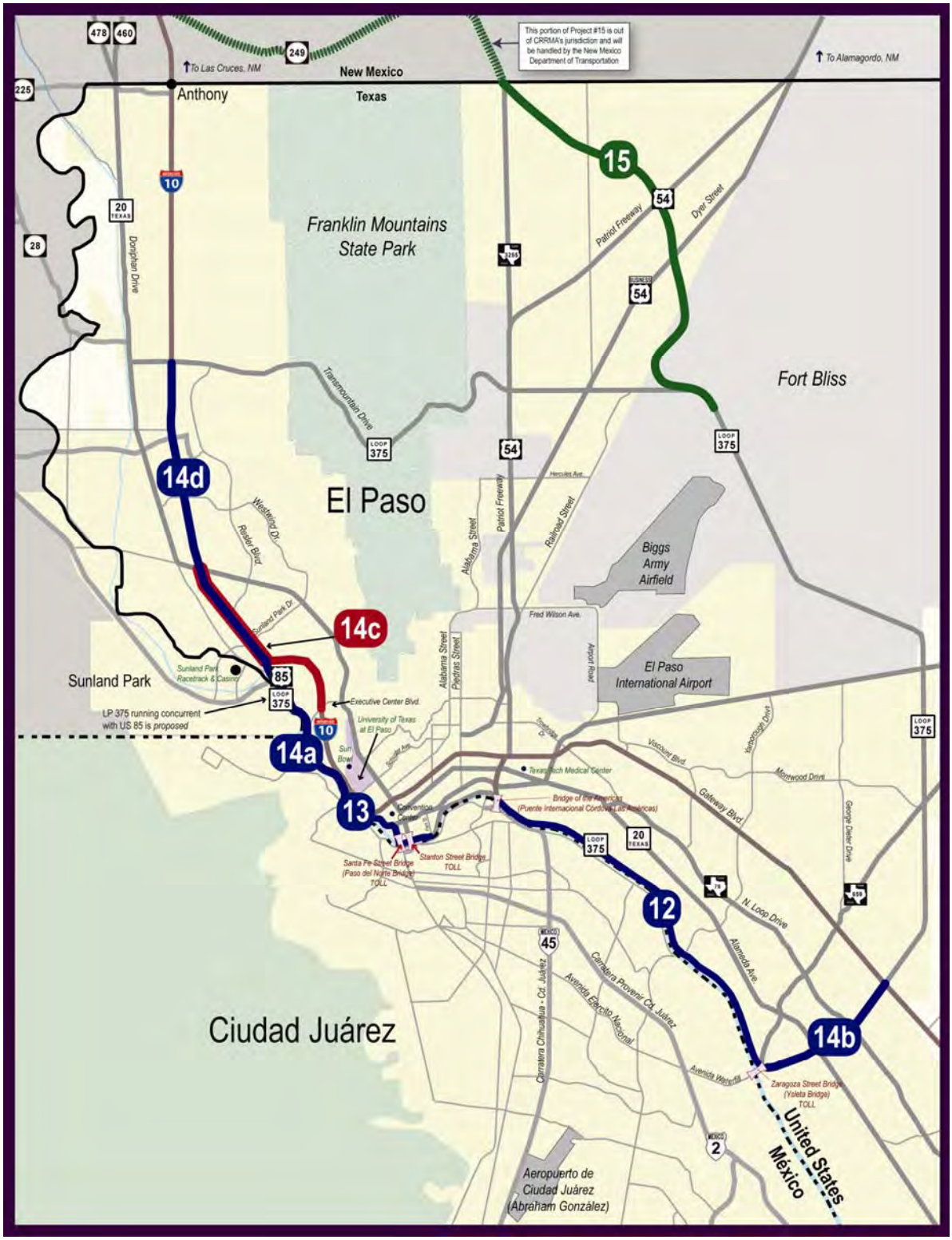


Figure 1-1: **Projects' Location Map**

The purpose of this Regional Toll Implementation Plan (the Plan) is to present alternative approaches for development of the seven projects listed in Table 1-1 based upon their readiness for development and available funding. A summary of the chapters that follow and the structure of the Plan are provided in *Table 1-2*.

Table 1-2: **CRRMA Toll Implementation Plan Chapter Summary**

Chapter	Summary
Chapter 2	Provides an overview of regional mobility authorities and background information on the CRRMA.
Chapter 3	Includes a summary of the El Paso Transportation Planning Process, including a description of planning documents mandated by the Federal Highway Administration (FHWA) and the relationship of these documents to the 2008 CMP.
Chapters 4-6	Focuses on the existing and projected population estimates, the transportation system available to the local community, and regional mobility needs.
Chapter 7-8	Discusses the importance of toll policies and practices and public involvement in the development and implementation of toll roads.
Chapter 9	Presents an overview of the project development process and includes descriptions of the major activities that must be completed before a new project can be opened to traffic.
Chapter 10	Describes each of the seven CRRMA projects evaluated in the Plan, including a project location map.
Chapter 11	Presents a readiness for development time line for each project based on activities completed to date and exclusive of funding availability.
Chapter 12	Presents project development costs in 2009$ for each of the projects evaluated in this Plan.
Chapter 13	Includes two implementation schedules based on the availability of traditional funding sources and readiness for development.
Chapter 14	Provides an overview of the various alternative funding sources that may be available to the CRRMA to develop the projects evaluated in this Plan.

Chapter 2: Regional Mobility Authorities

Texas voters approved the creation of regional mobility authorities (RMAs) by passing Proposition 15, a constitutional amendment, on November 6, 2001. Regional mobility authorities are political subdivisions formed to finance, acquire, design, construct, operate, maintain, expand or extend transportation projects (these projects can be tolled or non-tolled and must be approved by the applicable metropolitan planning organization and consistent with the statewide transportation plan and improvement program). Designed to allow for more local control in transportation planning for projects that strive to improve mobility in the region, the types of projects addressed by an RMA can include turnpikes, rail facilities, ferries, airports, pedestrian and bicycle facilities, intermodal hubs, border crossing inspection facilities, air quality improvement initiatives and mass transit systems.

CRRMA

The CRRMA was established in March 2007 by an act of the City Council of El Paso, following approval of the City's request to and subsequent authorization by the TTC to form an RMA. The CRRMA is unique in that its boundaries are the City of El Paso rather than being comprised of a county or combined counties as are the other RMAs in Texas. The CRRMA is governed by a seven member board of directors: six of whom are appointed by the City Council and the chair who is appointed by the governor.

> *The mission of the Camino Real Regional Mobility Authority is to assist in the establishment of a comprehensive transportation system to directly benefit the traveling public within the El Paso region through the development of additional transportation alternatives within the region.*

Since its inception in 2007, the CRRMA assumed responsibility for financing the State Spur 601 project (El Paso Inner Loop) and a 7.4-mile facility connecting US 54 to Loop 375 (Purple Heart Memorial Freeway) through Fort Bliss. By relieving traffic on Montana Avenue and improving accessibility and mobility for the area in general, State Spur 601 will address some of the mobility issues expected to arise as a result of an influx of approximately 20,000 additional troops and their families being reassigned to Fort Bliss in accordance with recommendations from the Base Realignment and Closure (BRAC) Commission. Construction of State Spur 601 began in August 2007 and is due for completion in early 2011; Phase I of State Spur 601 opened May 29, 2009. The State Spur 601 project is the first private enterprise pass-through finance project in Texas.

In addition to State Spur 601, the CRRMA is currently developing the I-10 at Loop 375 (Americas Interchange) Project, one of the major interchanges in El Paso County. This project, which is being partially funded through American Recovery and Reinvestment Act (ARRA) funding, Coordinated Border Infrastructure (CBI) funds, bond proceeds, and a pass-through toll agreement with TxDOT, includes design and construction of direct connectors between I-10 and Loop 375 on El Paso's far East side and related work.

The El Paso Metropolitan Planning Organization (EPMPO) planning region includes El Paso County, TX and the southern portions of Doña Ana and Otero counties in New Mexico. It is the responsibility of the EPMPO, a federally mandated and federally funded (matched by state and local funds) transportation policy making agency to prepare the region's planning documents mandated by the Federal Highway Administration (FHWA). Federal and state funding for transportation projects and programs are channeled through this planning process. For transportation improvements to obtain environmental clearance from FHWA and advance to development, the projects need to be identified by the EPMPO and included in the region's transportation planning documents.

Collectively the Metropolitan Transportation Plan (MTP), the Transportation Improvement Program (TIP), and the Unified Planning Work Program (UPWP) identify financially constrained transportation projects (for which funding has been identified) that will be implemented in the region over the long term, medium term, and short-term. A description of each of these planning documents is provided below.

Metropolitan Transportation Plan

The MTP is the Metropolitan Planning Organization's (MPO) long-range plan that identifies multi-modal transportation needs and available funding sources for projects and programs within the MPO area. FHWA requires the MTP to identify the regional transportation needs for a minimum planning horizon of 20 years. The EPMPO Transborder 2035 MTP covering a 26-year period was finalized in 2007. The MTP includes Projects 12 and 15 as tolled. The EPMPO anticipates issuing an updated MTP in 2010 that would also include Project 14b as tolled. The remaining proposed toll projects identified in the Comprehensive Mobility Plan (CMP) are identified in the MTP as non-tolled projects – the exception is Project 14a that does not appear in the MTP. FHWA requires the MTP for areas with air quality equal to or better than the national ambient air quality standards (i.e., attainment areas) every five years. MPOs in non-attainment areas (i.e., areas with at least one criteria pollutant higher than the level allowed by the federal standards) are required to update the MTP every three years. EPA has classified El Paso as non-attainment for particulate matter (PM 10).

Transportation Improvement Program

The TIP is required by FHWA to identify projects that will be implemented over a minimum planning horizon of four years and the funding amounts for each fiscal year covered by the plan. The TIP is a financially constrained plan and includes only those projects which can reasonably be expected to be implemented based on the availability of federal, state, and local resources. Projects identified in the TIP must be consistent with the MTP. FHWA requires the MPOs to update the TIP every two years. The current TIP for the El Paso region covers FY 2008 – 2013. The two outer years (FY 2012 and 2013) fall outside the required planning horizon and are therefore not fiscally constrained. The MPO anticipates publishing an updated TIP for FY 2011-2014 in September 2010.

Unified Planning Work Program

The UPWP is a two-year transportation planning work program detailing transportation planning, programs and services (work) to be performed by the MPO. The UPWP serves as a guide for transportation and air quality planning activities to be conducted over the course of each MPO fiscal year, beginning on October 1st. The current UPWP, which was approved on July 10, 2009, with a subsequent amendment on October 9, 2009, covers FY 2010 through FY 2011.

2008 Comprehensive Mobility Plan (CMP)

In addition to the FHWA required planning documents, on July 25, 2008, the EPMPO approved the 2008 CMP that was developed by the TxDOT, the CRRMA, the City of El Paso, and the EPMPO. The 2008 CMP was recently amended in January 2010 (Appendix A). The purpose of the 2008 CMP is to identify transportation improvement projects that will be developed in the future in order to enhance mobility in the region. The 2008 CMP does not supersede the FHWA planning documents previously described. Rather it identifies those projects the local community has agreed are needed to improve mobility in the region and is designed to serve as a guide to decision makers for prioritizing allocation of potential newly identified funding sources.

Chapter 4: El Paso Area Transportation Overview

Three major highways serve the City of El Paso: I-10, US 54, and Loop 375. I-10 runs east and west and is the primary thoroughfare through the City. It is the most heavily congested route in the area as it carries a large percentage of international freight traffic, is a coast-to-coast interstate highway, and also provides access to local activity centers including the University of Texas at El Paso. US 54, also known as Patriot Freeway, is the primary north-south arterial and runs from the Mexican border and north to the New Mexico state line. It serves as the primary route to the Fort Bliss Military Reservation. Loop 375 provides a partial loop around the city and connects five international ports of entry from Mexico. However, use of this facility as a bypass is somewhat limited due to the mountainous terrain in the northern section across Franklin Mountains State Park.

Sun Metro, the mass transit department of El Paso, offers bus services for the City of El Paso and limited service into neighboring New Mexico communities and El Paso County. Sun Metro has 58 bus routes operating weekdays with more than 3,000 bus stops throughout the city.[3] Transit service available in the rural area of El Paso County is provided by El Paso County Rural Transit, which currently operates five bus routes outside the city limits.[4] In addition to these existing transit services, the City of El Paso is evaluating alternatives for developing bus rapid transit services in the following four high capacity corridors: Mesa, Dyer, Alameda, and Montana.

The City of El Paso operates three tolled international port of entry bridges along the US / Mexico border:

- Ysleta-Zaragosa
- Good Neighbor (Stanton St.)
- Paso del Norte (Santa Fe St.)

An additional non-tolled bridge, the Bridge of the Americas, is under the jurisdiction of the International Boundary and Water Commission (IBWC).

El Paso's Union Depot train station, located at 700 San Francisco Street, is served by Amtrak's Texas Eagle and Sunset Limited routes. The Texas Eagle route offers daily passenger service between Chicago and San Antonio and continues to Los Angeles through El Paso three days a week (incorporated as part of the Sunset Limited). In FY 2009, there were 9,397 boardings and alightings at the El Paso Station.[5]

The three commercial railroad companies with operations in El Paso include Union Pacific (UP) and Burlington Northern Santa Fe (BNSF) in the US and FerroMex in Mexico. Freight rail service consists primarily of intermodal transfer of freight originating from/destined for other locations. UP provides cross-border rail service between Juárez and El Paso and rail connections to other US destinations. UP recently acquired property in New Mexico and plans to relocate their core operations (fueling, switching, and maintenance) to Santa Teresa. Current estimates are for the New Mexico intermodal facility to be completed between 2010 and 2015. UP plans to keep its El Paso rail yards and its cross-border rail service between El Paso and Juárez. BNSF also operates a major intermodal and bulk transfer facility in El Paso. Rail service for domestic and international freight is provided through both UP and BNSF with direct connection to Mexico via Juárez through FerroMex, a Mexican rail company that connects Mexico City and Guadalajara to various US destinations.

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[3] E-mail correspondence with Sun Metro staff, April 12, 2010.
[4] http://www.elpasotimes.com/news/ci_12934060.
[5] Amtrak Fact Sheet, Fiscal Year 2009, State of Texas, Amtrak Government Affiars: November 2009.

Chapter 5: Population Trends

Current and Historical Population Trends

El Paso is the sixth-largest city in Texas, and the 21st-largest city in the U.S. According to the U.S. Census, the population of El Paso County was approximately 680,000 in 2000. As indicated in *Table 5-1*, the El Paso County population increased to more than 740,000 by 2008, an increase of more than 60,000 people. This represents an average annual growth rate of approximately 1.1 percent.

Table 5-1: **El Paso County Historical Population Growth**

2000	2001	2002	2003	2004	2005	2006	2007	2008	Average Annual Historical Increase
681,115	685,549	690,345	696,970	705,531	712,422	725,559	734,669	742,062	1.1%

Source: Tax Increment Projection Study, Transportation Reinvestment Zone Number One, City of El Paso, Texas

Population Projections

The population in El Paso is expected to continue expanding in the future primarily due to the following three major activities:

Fort Bliss Military Reservation

In 2005, the Department of Defense (DOD) BRAC Commission recommended an expansion of operations at Fort Bliss Military Reservation. By 2012, approximately 100,000 Fort Bliss military and civilian personnel and their families will live in the El Paso Area.[6] According to the Texas State Comptroller, this is the largest projected net gain for any military installation in the U.S. Military and civilian jobs generated by Fort Bliss are estimated at 23,000 in 2009 and will increase to 47,300 by 2012. The MPO's *Transborder 2035 MTP* accounts for the anticipated Fort Bliss growth.

Texas Tech University Medical Sector

The health care industry is another segment of the El Paso economy that is thriving and anticipated to bring continued growth to the area. In 2003, the Texas State Legislature approved a bond issuance to allow expanding the Texas Tech Medical Center (TTMC) into a four-year medical school.[7] The Paul L. Foster School of Medicine, which opened to medical students in the fall 2009, is the first U.S. medical school situated in a city along the border with Mexico. Additionally, the University Medical Center recently initiated a two-phase $250 million expansion project that will significantly improve the availability of health care in the region. Groundbreaking for the first phase of this expansion occurred in the fall 2008. When completed, the first phase expansion will include a new high-tech imaging center, new infusion center, all-private rooms, a new surgery center, doubled emergency department and trauma center and new women's and infants' bed tower.[8] Groundbreaking for the second phase of the expansion occurred in February 2009 and includes construction of the El Paso Children's Hospital: a five-floor 218,000 square foot hospital that will include 50 neonatal intensive care beds, 12 pediatric intensive care beds and 78 pediatric beds and a 354,500 square foot bed tower expansion and renovation.[9]

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6 Tax Increment Projection Study, Transportation Reinvestment Zone Number One, City of El Paso, Texas.
7 Gateway 2030 p 2-7
8 http://www.epcounty.com/comm2/ThomasonExpansionEPTimes112108.htm
9 http://www.robinsmorton.com/default.aspx?id=381

Mexico Maquiladora Industry

The maquiladora industry in Mexico represents the nation's second largest export sector after oil. Despite the recent downturn in maquiladora activity precipitated by the onset of the global recession, the future outlook remains positive. According to a recent article in the El Paso Times, the maquiladora industry is "well poised for growth as better economic times return."[10] According to Bob Cook, president of the El Paso Regional Economic Development Corporation, "auto-related companies are closely watching manufacturing in Juárez. About 35 percent of all maquila industry is auto-related, he said, and companies are preparing to make a move once the economy starts looking up."[11] As a large proportion of management personnel working in maquiladora facilities in Mexico live in El Paso, the additional jobs created from further proliferation of the maquiladora industry will translate to a larger population in El Paso.

The impact of these regional developments on El Paso is reflected in the slightly larger than historical average annual population increase projected for the next several decades. As indicated in Table 5-2, the Texas Water Development Board projects an average annual growth rate of approximately 1.3 percent for the period 2008 to 2060. This equates to an overall increase of more than 740,000 people approximately doubling the 2008 population to 1.5 million in 2060.

Table 5-2. **El Paso County Projected Population Growth**

2008	2010	2020	2030	2040	2050	2060	Average Annual Projected Increase
742,062	826,062	986,443	1,127,206	1,248,609	1,370,012	1,491,415	1.35%

Source: Tax Increment Projection Study, Transportation Reinvestment Zone Number One, City of El Paso, Texas (2008 data); Texas Water Development Board (all other years)

Ciudad Juárez

Across the Rio Grande and the international border from El Paso is Ciudad Juárez, Mexico, which encompasses two-thirds of the total metropolitan area population. Significant to planning for El Paso's future mobility will be consideration of the effect population increases in Ciudad Juárez will have on the demand for transportation infrastructure in El Paso. Today Ciudad Juárez's population is estimated at 1.5 million up from 1.25 million in 2000. According to the EPMPO MTP, Juárez's population is projected to increase to 3 million in 2035. The combined estimated cross-border urbanized area population is estimated to exceed 4.1 million by 2035.

[10] Ready to Rebound, Maquila Industry Expected to Weather Recession Well, Elpasotimes.com, March 11, 2009.
[11] Ready to Rebound, Maquila Industry Expected to Weather Recession Well, Elpasotimes.com, March 11, 2009

Chapter 6: Regional Mobility Needs

The expanse of El Paso's urbanized area, its location and topography, importance as a military and international trade city, and growth projections create a unique transportation planning challenge that, left unaddressed, could impede mobility in the region. El Paso is nearly divided in half by the Franklin Mountains, one of the Chihuahua desert's many mountain ranges. While this geographical feature adds to the city's natural desert beauty, the mountain range also restricts the transportation system and expansion options available to El Paso. Another natural barrier is the Rio Grande River, which largely serves as the international border between the United States and Mexico.

The historical and anticipated population increases described in the previous chapter have placed a strain on the existing transportation infrastructure and without expansion will continue to negatively impact future mobility. According to the MTP, the level of mobility on several roadways in the vicinity of Project 15, the Northeast Parkway, were identified in the regional travel demand model as having severe levels of mobility in 2007 based on a 24 hour volume to capacity (v/c) ratio of greater than or equal to 1.25. I-10 south of Mesa, in the vicinity of sections of Projects 14c and 14d, and through downtown were also identified as having severe levels of mobility in 2007.

Congestion levels are expected to continue to intensify and expand to an enlarged area of metropolitan El Paso, including the northeast area between the mountains and Fort Bliss, which is expected to experience significant residential and commercial growth as a result of the Fort Bliss expansion. Continued expansion of the medical complex will also increase traffic levels as more people desire access to the expanded range of medical service offerings. Additionally, growth of the maquiladora industry is also anticipated to impact future levels of roadway congestion in the region as trade and jobs expand. As population and jobs increase in El Paso the numbers of individuals crossing from Juárez into El Paso daily to go to work, to school, or to conduct business will be an important factor to consider in El Paso's transportation planning.

As a new entity responsible for the development and implementation of toll roads in the El Paso region, the CRRMA will need to adopt policies and practices for operating its toll facilities. Establishing the rules and standards for operating a regional toll system will be important to consider prior to the implementation of any project. These tolling policies must be consistent with the operational requirements of the tolled facilities while providing sufficient flexibility for the RMA to fund their overall mobility program. A policy framework consistent from both an equity and customer service perspective will involve input from key stakeholders to effectively address issues that may arise from competing interests. Timing for development of the regional toll policy prior to opening of the first user-fee facility will result in increased public awareness and can garner acceptance for tolling once the first facility in the system becomes operational.

Developing regional tolling policies requires looking at tolled facilities from a system-wide perspective. The policies and practices should set forth the base toll rates and escalation policies including rates and frequency of escalation. Other provisions should address account setup and payment options, customer service and violations processing, and enforcement. As previously stated, the plan must also establish general guidelines on how toll revenues will be used and clearly state the revenue policies the RMA intends to implement to ensure that future mobility improvements can be funded.

Senate Bill (SB) 792 (scheduled to sunset August 31, 2011), 80th Legislature, Regular Session, 2007 added Transportation Code, 228.0111 and established a process for providing local toll project entities, defined as regional tollway authorities, regional mobility authorities, or counties acting under Transportation Code, Chapter 284, with the first option, or "primacy" to develop, construct, and operate toll projects located within the boundaries of the local toll entity. If a local toll project entity or TxDOT determines that a local entity such as the CRRMA has primacy for a local toll project, the CRRMA and TxDOT are required under the provisions of the Transportation Code to agree on the terms and conditions for the development, construction, and operation of the toll project. The terms and conditions of a project are comprised of the project scope of work, initial toll rate, and toll rate escalation methodology. The proposed toll rate setting policy outlined in the terms and conditions should consider rational and systematic increases in tolls that are consistent with an anticipated debt management policy and that allow for the continued operations and maintenance of the facility.

The preliminary financial analysis (PFA) determines the initial value of the proposed project. If the PFA results yield a positive value, (i.e., there are excess revenues after all financial obligations of the proposed project are met) a more detailed valuation of the proposed project, or "market valuation" is conducted. Per SB 792, if a proposed project has a positive market value, the local entity must agree to construct additional projects in the region equal to the market value or make an equivalent payment to a TxDOT account which would be used by TxDOT to fund construction of additional projects in the region. If the PFA yields a negative value, the requirement for a formal market valuation is waived and a formal agreement of the terms and conditions under which the project will be developed is signed. The CRRMA will need to coordinate a project's terms and conditions with the EPMPO for its approval.

Chapter 8: Public Involvement

The CRRMA identified public communications as a goal in the CRRMA 2009-2014 Strategic Plan: G*oal 1: Develop Public Awareness, Public Interest, and Public Participation in the CRRMA.* Consistent with the goal, the RMA has committed to producing public service announcements and improving accessibility to information by publishing board meeting agendas and minutes, project information, documents, and adopted policies and procedures on its Web site www.crrma.org.

As the CRRMA continues to develop its communications link with the public, the RMA has an opportunity to expand into an outreach program to solicit the public's response to user fee toll roads. With no toll roads in El Paso, the manner in which tolling concepts are introduced to the public is an important aspect of building a positive relationship between the RMA and the community it serves. Paying tolls is not new to El Paso – the three international bridges operated by the City are tolled. However, paying tolls to cross bridges between El Paso and Juárez will likely be perceived differently by motorists than paying tolls to use a local road. It will be advantageous for the CRRMA to understand what the public knows about tolling to assist the agency in crafting its message to introduce toll roads to El Paso. The question of what the public knows can be answered by surveying and polling the community for its response to paying tolls.

Managed lanes planned for the Southern Relief Route and operated with congestion pricing strategies are a more sophisticated method of toll operations and fee collection than a typical toll road. The public will need to be informed about the fundamentals of managed lanes and time of day pricing and the requirement to establish toll rates based on congestion levels in the parallel non-tolled lanes to maintain pre-specified free flow traffic conditions in the managed lanes. In other words, as congestion builds in the non-tolled parallel general purpose lanes, tolls will increase in the managed lanes. Conversely, the toll rates will be lowered in the managed lanes as traffic in the general purpose lanes wanes. The concept of time savings accrued to motorists paying a toll in the managed lanes will need to be conveyed to the community as well as electronic toll collection when there is no cash payment option. The manner in which the "what, when, where, and how" tolling message is framed and conveyed to the community will have a considerable impact on the RMA's recognition for providing mobility solutions in El Paso. Important to this messaging will be framing the RMA's entire program – both tolled and non-tolled improvements. In other words, the RMA is about mobility solutions, not just toll roads. By way of example, the majority of the CRRMA's initial projects are non-tolled facilities. It is important for the RMA to engage the public throughout the program's planning and development process as a well-informed public will be more supportive of the CRRMA's overall program.

Chapter 9: Project Development Process

Project development is the process that takes a proposed transportation improvement from concept through construction. There are several distinct phases a transportation project must go through as part of the project development process. The project development process generally includes: planning, preliminary engineering, environmental analysis, final design, financial plan development, and project delivery. Some of these phases will be conducted concurrently, while others cannot occur until the previous phase has been completed. For example preliminary engineering and environmental analysis are often performed concurrently, while final design and right-of-way acquisition would rarely be performed prior to environmental clearance. *Figure 9-1* provides a graphical depiction of the project development and delivery process. A summary of each of the project development phases is provided below.

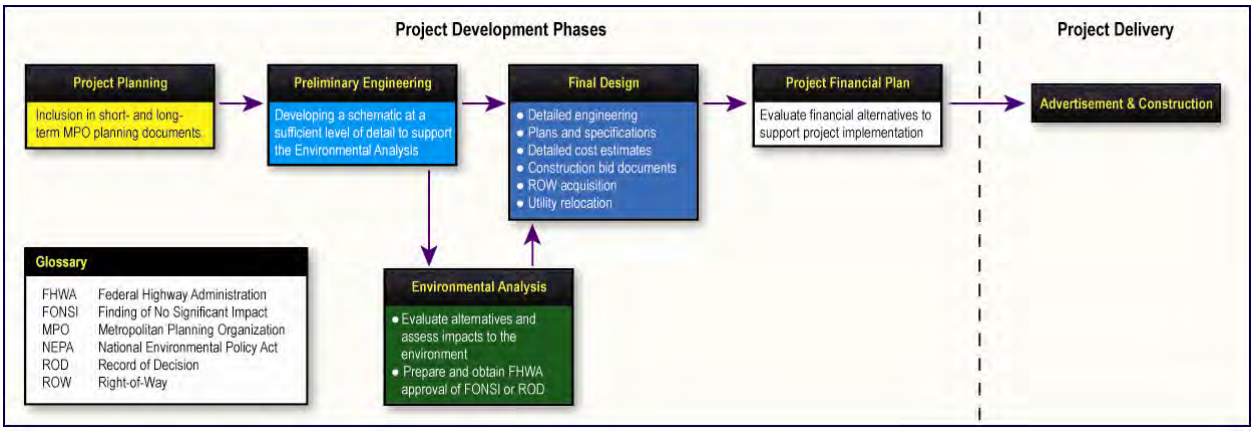


Figure 9-1: **Project Development and Delivery Process**

Project Planning – The El Paso MPO (EPMPO) is responsible for coordinating planning and funding for regional transportation systems. In order for the El Paso region to be eligible for federal funding consideration, it must have a federally approved and financially constrained MTP that addresses, at a minimum, a 20-year planning horizon. The MTP identifies the transportation improvements anticipated over a 20-year period to support project development activities in the area. As an MPO in an EPA-designated non-attainment area, the EPMPO is required to update the multi-year MTP every three years. In addition to the MTP, the EPMPO is also required to develop a four-year TIP that describes the schedule for obligating federal funds to state and local projects. The TIP is essentially a short-range implementation schedule for projects included in the MTP based on the anticipated flow of federal funds and matching state or local contributions. The TIP is updated every year with the latest funding amounts and timelines for completion of transportation projects in the region. All projects identified in the TIP must be included in the MTP to be eligible for federal and/or state funds.

Preliminary Engineering – Large infrastructure projects will progress through several phases of engineering. Preliminary engineering typically advances a project through the schematic phase and further develops the design of the facilities and system, analyzes the function and operation of the system, evaluates cost efficiencies, refines cost estimates, and prepares for the final design of the project. The preliminary design is refined to a sufficient level of detail necessary to conduct the environmental analysis required under the National Environmental Policy Act (NEPA). Through the environmental analysis process, design modifications may be identified. These modifications would ultimately be incorporated into the final design. A typical project would require approximately 18 months to advance a schematic from initiation to final approval. Green field projects may require less than the average time for preliminary engineering, while interstate expansion projects through urban areas may require additional time.

Environmental Analysis – Transportation projects that require a federal permit, are developed using federal funding, or occur on federal lands are required to undergo an analysis of the project's impact on the environment in accordance with NEPA. According to US Department of Transportation (USDOT), project development guidance in 23 Code of Federal Regulations (CFR) 771.115, there are three classes of action:

1. **Categorical Exclusion (CE)** - Actions that are determined to have no individual or cumulative environmental impact;

2. **Environmental Assessment (EA)** - Actions that are determined to have an impact on the human environment, but the impact is not significant, or the extent of the impact is not certain. The results of the EA determine whether a Finding of No Significant Impact (FONSI) is appropriate or whether a more in depth environmental analysis, an Environmental Impact Statement (EIS) is required; and

3. **Environmental Impact Statement (EIS)** - required for "major Federal actions significantly affecting the quality of the human environment," (NEPA Sec 102(c)).

The length of time required to complete the environmental analysis will depend upon the level of NEPA documentation required. According to the USDOT 2009 Budget, the median time to complete an EA between 2003 and 2007 ranged from 20 to 34 months. The median time to complete an EIS during this same time period ranged from 54 to 68 months. During this time, preliminary engineering activities will likely be occurring concurrently. It is beneficial to initiate the environmental clearance process prior to a project's inclusion in the MPO plans. However, for a project to receive environmental approval, it must be in the MPO plan.

It is important to note that significant changes to a project made following approval of the environmental document may require re-evaluation of the environmental analysis. The level of effort for the re-evaluation is dependent upon the extent of the changes but could be equivalent to or greater than the level of effort undertaken for the original analysis. Typically, design or scope modifications, new or modified laws and regulations, or changes in the project area result in the need for a re-evaluation.

The environmental analysis process requires an evaluation of alternatives for project development that includes an assessment of each alternative's impact on the environment and allows for selection of the preferred alternative. Project schedules and cost estimates developed prior to receipt of environmental clearance will have a much higher level of uncertainty than those developed once the preferred alternative has been selected and approved by FHWA. Expeditious initiation of the environmental analysis process for the projects evaluated in this Plan will provide a higher level of certainty for the overall CRRMA program.

Final Design – For a design-bid-build procurement, this phase of project development occurs after approval of the NEPA environmental document and includes right-of-way acquisition, utility relocation, the preparation of detailed engineering plans and specifications, construction cost estimates and bid documents. Construction advertisement and award is also typically conducted during the final design phase. According to the American Association of State Highway Transportation Officials (AASHTO), the typical time required to develop a detailed design for a major transportation project ranges from two to three years. Right-of-way acquisition and utilities relocation typically requires one to two years to complete.

Transportation infrastructure projects are generally delivered in one of two contracting methods: Design-Bid-Build or Design-Build. There are advantages for each delivery method depending on the key aspects of the project; one method will usually provide greater overall benefits than the other. Design-build procurement combines these activities under a single developer. *Table 9-1* lists some of the attributes of the two contracting methods that would likely factor into the decision for which contracting method to use for a specific project.

Table 9-1. **Design-Bid-Build vs. Design-Build**

Delivery Method Attributes	Design-Bid-Build	Design-Build
Fixed Lump Sum price		•
Ability to transfer risk of Utility and ROW to developer		•
Owner controlled Plans Specifications and Estimate (PS&E)	•	
Ability to advance PS&E during market evaluation process	•	
Ability to select Developer on a best value basis		•
Ability to execute contract with Developer prior to NEPA clearance		•
Ability to implement a phased approach to match available funding	•	

Project Financial Plan - Due to the complexity and scale of today's transportation improvement projects, it is often necessary to seek multiple sources of funding, in addition to toll revenues, to finance infrastructure projects. The financial plan development phase (detailed in Chapter 14) includes the identification of potential funding sources that could be packaged to finance final design, procurement, construction, and life cycle operations and maintenance costs.

Special Requirements for Toll Facilities

In addition to the project development phases of planning, preliminary engineering, environmental analysis, final design, project delivery, and financial plan development previously described, two additional requirements specific to toll facilities pertain to El Paso:

1. **FHWA Approval to Toll I-10** – The projects evaluated in this Plan include the addition of managed lanes on I-10. Approval from the FHWA is required in order for a federal interstate to be tolled. Section 1604(b) of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA–LU) (Pub. L. 109–59; Aug. 10, 2005), authorizes the Secretary of Transportation (Secretary) to carry out 15 demonstration projects to permit States, public authorities, or public or private entities designated by States, the authority to collect a toll from a motor vehicle on an eligible toll facility. This program is referred to as the Express Lanes Demonstration Program. On February 4, 2008, the FHWA issued a Federal Register notice inviting States, public authorities, or other entities as designated by States to apply to participate in the Express Lanes Demonstration Program. Entities interested in implementing managed lanes on an interstate were required to submit an application requesting approval for this activity by May 31, 2009. The TxDOT El Paso District submitted their I-10 Express Lanes Demonstration Project application to FHWA on May 1, 2009. FHWA denied the application because the project has not yet gone through the necessary environmental process to determine the nature of the express lanes project. TxDOT staff has indicated they will submit another application for tolling approval under this program when the project is further along in the project development process.

   To date, the FHWA has signed two agreements under the Express Lanes Demonstration Program both of which are in Texas: the I-635 LBJ Managed Lane Freeway and the IH-820/SH 183 (North Tarrant Express Lanes) projects in the Dallas/Fort Worth Metropolitan Area. Based on the following dates presented in the January 22, 2009, Federal Register Notice announcing and requesting comments on Performance Goals for the Texas Department of Transportation Express Lanes IH-635/IH35E (LBJ Managed Lanes) and North Tarrant Express Lanes Projects, this report assumes a minimum of 23 months for FHWA approval to Toll I-10 in El Paso (17 months as noted below and an additional six months to finalize performance measures) when a subsequent application is submitted.

- Application Submittal: 9/18/07
- Application Approval: 3/19/08 (six months)
- Development of and Federal Register Publication of Performance Measures: 1/22/09 (10 months)
- End of Performance Measure Comment Period: 2/23/09 (one month)

2. **Regional Toll Network Analyses** – On January 29, 2009, the FHWA Texas Division sent a letter to TxDOT stating that "it is imperative that Metropolitan Planning Organizations (MPO) and Regional Mobility Authorities (RMA) within the State with proposed regional toll/managed lane networks identified in their MTPs, such as Austin, El Paso, Hidalgo County and San Antonio also begin working on the development of appropriate regional toll/managed lane network analyses as soon as possible, so that any proposed toll projects can be further processed in compliance with the NEPA and the FHWA regulations…Further advancement of NEPA documents for toll projects will be contingent upon compliance with the requested analyses." In response to this memorandum, TxDOT issued a memorandum on April 27, 2009, announcing the availability of the TxDOT/FHWA Joint Guidance for Project and Network Level Environmental Justice, Regional Network Land Use, and Air Quality Analyses for Toll Roads (April 23, 2009). This guidance requires that any project which is proposed as a toll road facility must consider the indirect and cumulative impacts of tolling on environmental justice populations (minority and low-income) as well as other pertinent environmental resources, at both the project level and toll road system level perspective. The April 23, 2009 Guidance states that a system level analysis would "provide a "big picture" of the overall indirect and cumulative effects of the regional toll road network." The Guidance further states that the resulting information from regional level tolling studies can be incorporated into an MPO's MTP and be applicable until the next update or significant amendment of the MTP.

   The NEPA document for Project 12 (César Chávez from US 54 to Zaragoza) was approved on September 14, 2009. As the sole tolled managed lane project in the region, this project alone does not constitute a toll network that is subject to the Regional Toll Network Analysis. However, upon inclusion of a second connecting toll facility in the MTP, FHWA would likely consider El Paso as having a toll network, thereby triggering the Regional Toll Network Analysis requirement. Based on discussions with TxDOT and MPO staff, a connecting tolled facility is likely to be included in the 2010 update to the MTP (Project 14b). Therefore, the Regional Toll Network Analysis identified in the FHWA January 29, 2009, letter will likely be required before TxDOT-Environmental Affairs Division (ENV) and FHWA would approve NEPA documentation for the remaining toll projects addressed in this Plan. To date, the MPO does not have plans in place to complete the required analysis. Based on interviews with TxDOT staff, TxDOT presumes sufficient data would be available from the César Chávez (Project 12) environmental analysis for the MPO to complete the required analysis in six months with additional time required for FHWA approval.

Contained in the project descriptions are the proposed project configurations (including termini), tolling schemes, toll gantry locations (if available), and data used for the analysis. Each description is accompanied by a project location map.

Project 12 – César Chávez (US 54 to Zaragoza)

The César Chávez project includes the addition of two toll lanes, one in each direction for approximately 8.9 miles from just east of US 54 to just west of Zaragoza Road, as well as rehabilitation of the general purpose lanes (*See Figure 10-1*). Currently, this facility includes four general purpose lanes, two in each direction. The proposed managed lanes would be located to the inside of the existing general purpose lanes, which would remain non-tolled. There are four grade-separated interchanges along this corridor, all of which have Loop 375 on structure with the intersecting road passing underneath. The interchanges are located at Fonseca Drive, Midway Drive, Yarbrough Drive and Padres Drive. The TxDOT schematics reviewed for this Plan (dated February 2009) include two main lane toll gantries. The first toll gantry is located approximately 3,200 feet west of Fonseca Drive and the second is located approximately 5,000 feet east of Yarbrough Drive. According to conversations with TxDOT staff, a third toll gantry will be added to the east of Fonseca Drive prior to Midway Drive as recommended in the Texas Toll Providers' (T2P) review. Ingress/egress to the managed lanes is provided at the beginning and end of the project as

Figure 10-1: **Project 12 Location Map**

well as approximately 3,000 feet east and west of Midway Drive. Based on information included in the December 2008 Loop 375 César Chávez Border Highway and Americas Avenue Final Express Toll Lanes Review Summary, electronic tolling, including transponder and video license plate capture, will be utilized to collect tolls on the proposed facility.

Projects 13 and 14a - Loop 375 Extension (North of Cordova Bridge)

The Loop 375 extension project north of Cordova Bridge includes construction of two managed lanes in either direction for approximately 6.1 miles from just east of Park Street to the IH-10/US 85 interchange immediately south of Sunland Park Drive (*See Figure 10-2*). Loop 375 is currently two lanes in each direction between Park Street and Santa Fe Street (the current Loop 375 terminus). The newly constructed toll lanes would be elevated for the majority of the 6.1 mile length of the project and would generally follow the existing US 85 alignment starting approximately 1.1 miles west of Santa Fe Street. To accommodate the proposed lanes, some realignment of the existing US 85 roadway and ingress/egress ramps would be required. In addition to construction of the managed lanes, the existing Schuster connection to I-10 would need to be realigned to provide for connections at both I-10 and Loop 375. Multiple railroad crossings as well as several railroad tracks run parallel to the project throughout the project corridor.

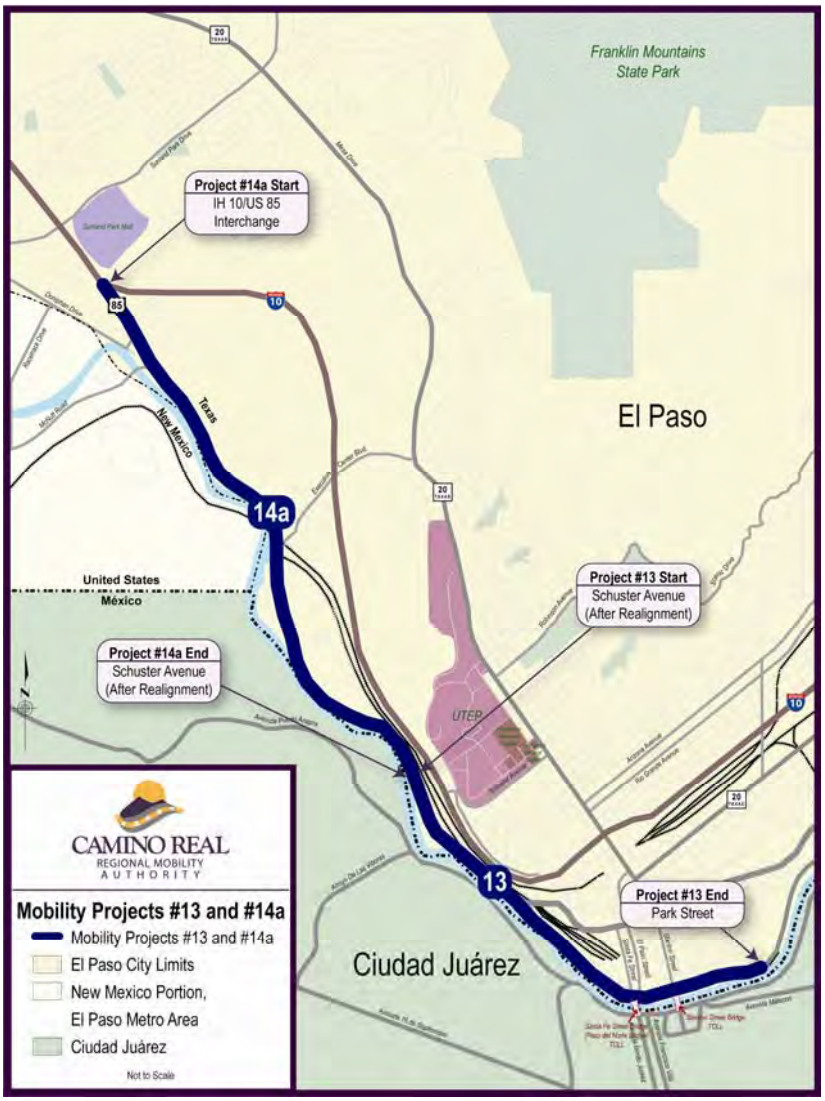


Figure 10-2: **Projects 13 and 14a Location Map**

Based on a review of the current schematics obtained from TxDOT (dated 8/27/2008), ingress/egress ramps for the express lanes would be located at Schuster Avenue, Ruhlen Court and Canterbury Drive. In addition, new ramps would be constructed between US 85 and New Mexico 273. The most current version of the schematics does not identify the proposed locations of the toll lanes' toll gantries. However, a previous version of the schematics published in the Final I-10 Southern Relief Route Mobility and Funding Study (August 2006) identifies two mainlane toll gantries, one between the Santa Fe

Street Bridge and Oregon Street and another between Executive Center Boulevard and American Canal ASARCO. Based on information included in the December 2008 Loop 375 César Chávez Border Highway and Americas Avenue Final Express Toll Lanes Review Summary, which discusses toll collection for projects 12 and 14b, the facility was assumed to utilize electronic tolling, including transponder and video license plate capture.

Project 14b – Loop 375 from Zaragoza to I-10

The Loop 375 from Zaragoza to I-10 project is approximately 3.7 miles in length and includes the addition of two express toll lanes, one in each direction (*See Figure 10-3*). Existing access points to/from Loop 375 are located at Zaragoza Road, FM 258 (Socorro Road), FM 76 (North Loop Drive) and I-10. Currently this facility includes three frontage road lanes and two general purpose lanes in each direction. The managed lanes would be located to the inside of the existing general purpose lanes, which would remain non-tolled. Per interviews with TxDOT staff, schematics have not yet been developed for this project. Schematics for an earlier version of the proposed project were obtained from the Final I-10 Southern Relief Route Mobility and Funding Study (August 2006) and are very similar to the current project description. The schematics obtained from the 2006 study, were therefore utilized to conduct the analysis in this Plan.

Figure 10-3: **Project 14b Location Map**

Based on a review of the available schematics, ingress/egress for the managed lanes would be located at FM 258 (Socorro Road) and to/from I-10 and a single main lane toll gantry would be located between SH 20 (Alameda Drive) and FM 76 (North Loop Drive). There is one grade-separated railroad crossing on this project with Loop 375 crossing over the railroad approximately 1,600 feet east of SH 20. According to the December 2008 Loop 375 César Chávez Border Highway and Americas Avenue Final Express Toll Lanes Review Summary, the proposed facility would have an electronic toll collection system that allows for the use of transponders or video license plate capture.

Project 14c – I-10 Collector Distributors

The I-10 Collector Distributor project (non-tolled) presented in the 2008 CMP was designed to facilitate movement between the US 85/Loop 375 managed lanes and I-10 managed lanes (Projects 14a and 14d respectively) and four main interchanges along the I-10 corridor between SH 20 (Mesa Street) and Executive Center Boulevard (Mesa Street, Resler Drive, Sunland Park Drive, and Executive Center Boulevard) (*See Figure 10-4*). The total length of the project is approximately 4.75 miles and consists of the following:

- Two collector distributor lanes in both directions on I-10 from Mesa Street to Executive Center Boulevard. In some locations the collector distributor is stripe separated from the I-10 main lanes in other locations the separation occurs via a physical barrier;
- Newly constructed ramps at the I-10/ US 85 and Loop 375 interchange to allow for both toll to toll and non-toll to non-toll movement between the I-10 and US 85/Loop 375 facilities; and
- Ramp improvements and realignments at the Mesa Street, Resler Drive, Sunland Park Drive, and Executive Center Boulevard interchanges to provide connectivity to the collector distributor lanes.

Figure 10-4: **Project 14c Location Map**

TxDOT has reinitiated the environmental analysis phase of the project development process for the Border Highway West (BHW) projects, which includes Projects 13/14a and 14d. The environmental analysis process for these projects could potentially require a modification to the toll-to-toll connection provided by the current configuration of Project 14c. Therefore, an alternative Project 14c configuration designed to focus solely on mobility improvements for the I-10 corridor between Mesa and Executive Blvd. (Project 14c – Auxiliary Lanes) was developed for analysis in this Plan. The alternative represents a conceptual level design and has not been

subject to detailed engineering review. Discussions regarding Project 14c in the remainder of this Plan are based on this alternative configuration, which is described in more detail below.

Project 14c – I-10 Auxiliary Lanes

The I-10 Auxiliary Lane project (non-tolled) is designed to relieve ramp-related congestion along I-10 between the Sunland Park Drive and Resler Drive interchanges, and between the Mesa Street (SH 20) and Redd Road interchanges (*see Figure 10-5*). The total length of the project is approximately 1.14 miles in two segments: 0.38 miles from Sunland Park to Resler, and 0.76 miles between Mesa (SH 20) and Redd Road. In summary, the project consists of the following:

- Add one auxiliary lane in both directions on I-10 from the Sunland Park Drive ramps to the Resler ramps;
- Widen existing exit ramps from westbound I-10 to northbound Resler Drive, and from eastbound I-10 to Sunland Park Drive from one to two lanes to improve freeway weaving operations on I-10; and
- Add one auxiliary lane in both directions on I-10 from Mesa Street (SH 20) ramps to the Redd Road ramps.

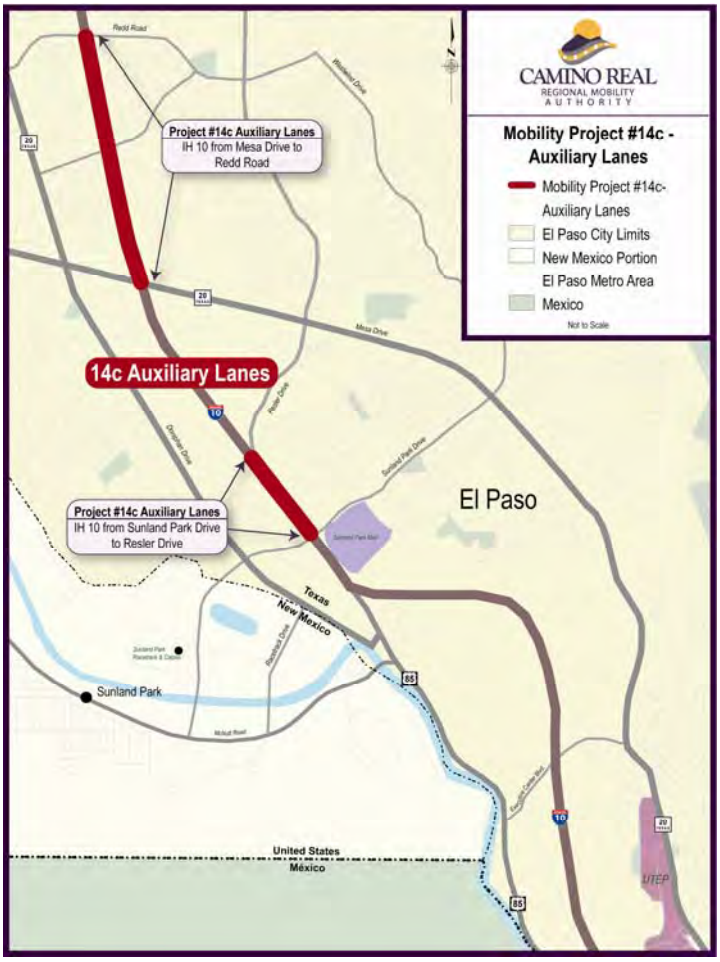


Figure 10-5: **Project 14c – Auxiliary Lanes Location Map**

Project 14d – I-10 Express Lanes from Sunland Park Interchange to Loop 375 (Transmountain)

The I-10 Express Lanes project includes the addition of two express toll lanes, one in each direction, in the median of IH-10 for approximately 7.6 miles from just south of the Sunland Park Drive interchange to Loop 375 (Transmountain Drive) (*See Figure 10-6*). Some reconstruction of the existing ramps at the Loop 375, Hwy 178, Redd Road, Thorn Avenue, Mesa Street, Resler Drive and Sunland Park Drive interchanges would be required. The existing main lanes would remain non-tolled. Per interviews with TxDOT, schematics have not yet been developed for this project. Schematics for an earlier vision of the proposed project were obtained from the Final I-10 Southern Relief Route Mobility and Funding Study (August 2006) and are very similar to the current project description. The schematics obtained from the 2006 study, were therefore utilized to conduct the analysis in this Plan.

Based on a review of the available schematics, ingress/egress ramps for the express lanes would be located at Redd Road and Trade Center Avenue and two main lane toll gantries would be located between Medano Drive and Redd Road and between Resler Drive and Sunland Park Drive. Based on information included in the December 2008 Loop 375 César Chávez Border Highway and Americas Avenue Final Express Toll Lanes Review Summary, which discusses toll collection for projects 12 and 14b, the facility was assumed to utilize electronic tolling, including transponder and video license plate capture.

Figure 10-6: **Project 14d Location Map**

Project 15 – Northeast Parkway

The Northeast Parkway Project is a proposed 21-mile long limited access highway connecting Loop 375 in northeast El Paso near Railroad Drive to Interstate Highway 10 (I-10) in Anthony, New Mexico (NM). Approximately half (10.75 miles) of the project is located within Texas (*See Figure 10-7*). The Texas portion of the project includes the construction of a four-lane facility, two lanes in each direction, from the New Mexico state line near Martin Luther King Jr. Boulevard to Loop 375 near Fort Bliss. Frontage roads are planned to be constructed between Dyer Street and Railroad Drive and a bike path is proposed along the west side of the project from Railroad Drive to Stan Roberts Sr. Avenue. Currently no funding exists for the New Mexico portion of the project, so the current project schematic illustrates an interim connection and terminus at Martin Luther King Jr. Boulevard.

The schematics identify four main lane toll gantries located 1,500-feet west of Stan Roberts Sr. Avenue, 4,200-feet west of US 54, 3,800-feet south of US 54 and 2,450-feet south of Railroad Drive. Ingress/egress to the proposed toll facility is provided at Martin Luther King Jr. Boulevard (beginning of project), McCombs Street, US 54, Dyer Street, Railroad Drive and Loop 375 (end of project). There would be one grade-separated railroad crossing on this project with the Northeast Parkway crossing over the railroad approximately one mile south of Dyer Street. Based on information included in the December 2008 Loop 375 César Chávez Border Highway and Americas Avenue Final Express Toll Lanes Review Summary, which discusses toll collection for projects 12 and 14b, the Northeast Parkway was assumed to utilize electronic tolling, including transponder and video license plate capture.

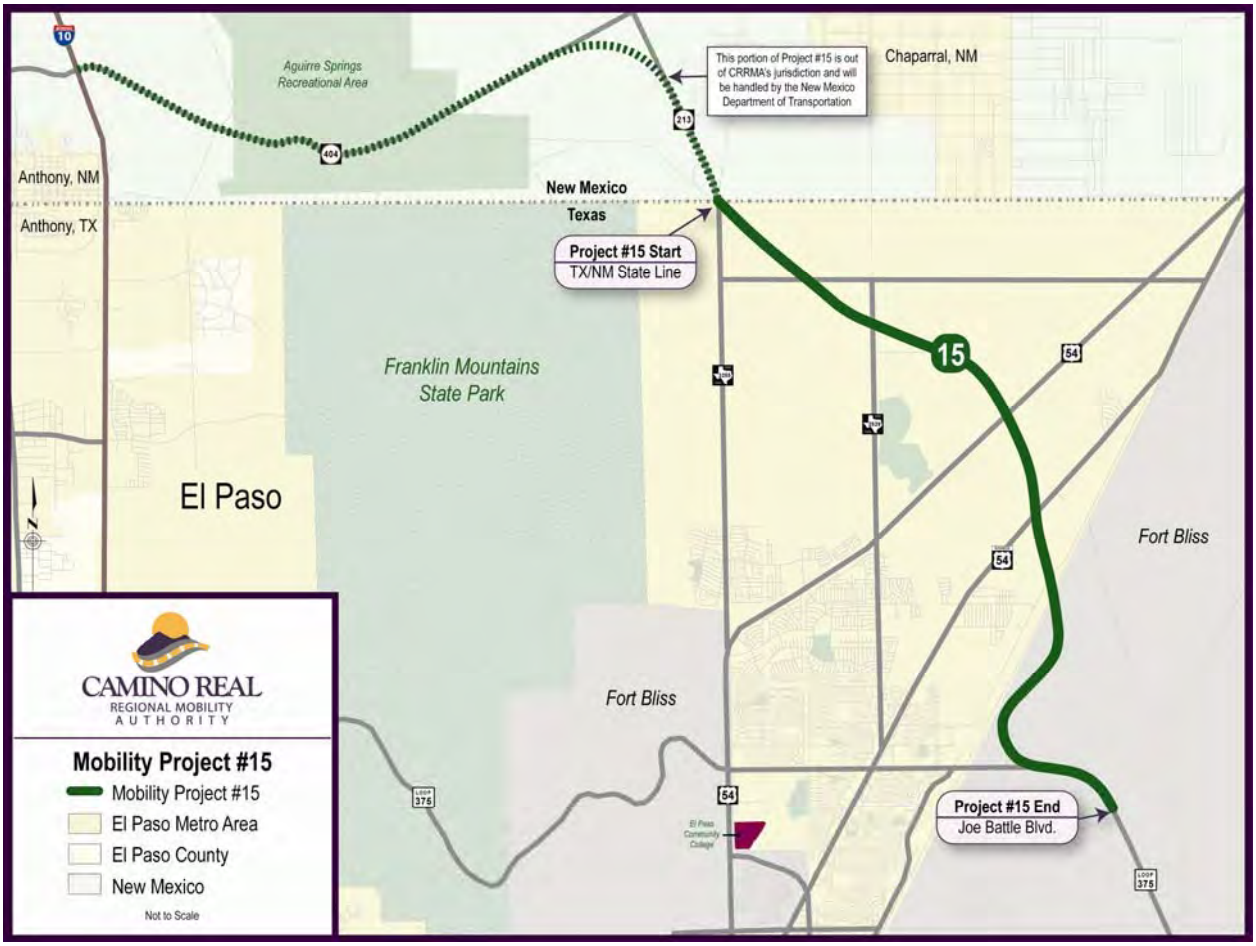


Figure 10-7: **Project 15 Location Map**

The analysis to determine a project's readiness for development considers the status of each project given the following parameters:

- EPMPO planning documents
- Preliminary engineering
- Environmental analysis
- Final design and project delivery
- Market valuation
- Available funds

For each project, an estimated time line to complete the development process and construction is presented graphically. The time line is exclusive of funding availability and shows the estimated length of time it would take to advance the project through the planning stage and construction to opening year based on today's data.

Project 12 – César Chávez (US 54 to Zaragoza)

Planning (Complete): The César Chávez project is included in the Transborder 2035 MTP as a tolled facility. The project is also identified in the 2008-2013 TIP with expenditures identified in FY 2009. The planning phase for the project is complete, as it is identified in both the MTP and the TIP as a tolled facility.

Preliminary Engineering (Complete): A 100 percent schematic for Project 12 has been completed.

Environmental Analysis (Complete): The environmental process for Project 12 concluded with a Finding of No Significant Impact (FONSI) being issued by TxDOT. FHWA concurred with the FONSI on September 14, 2009.

Final Design and Project Delivery (anticipate 12 months for final design and 45 months for construction): As discussed above, the environmental document for the Project was recently approved. The CRRMA and TxDOT must complete the market valuation process required by Senate Bill 792 or mutually agree to a waiver in order to proceed with final design and construction. As with the other projects, as this phase approaches, a decision needs to be made as to whether to proceed with a traditional Design-Bid-Build or a Design-Build project delivery method. Refer to Chapter 7 for a description of the market valuation process.

Figure 11-1 presents an estimate of the time line required to complete the project development process for Project 12 based on the activities completed to date and exclusive of funding availability.

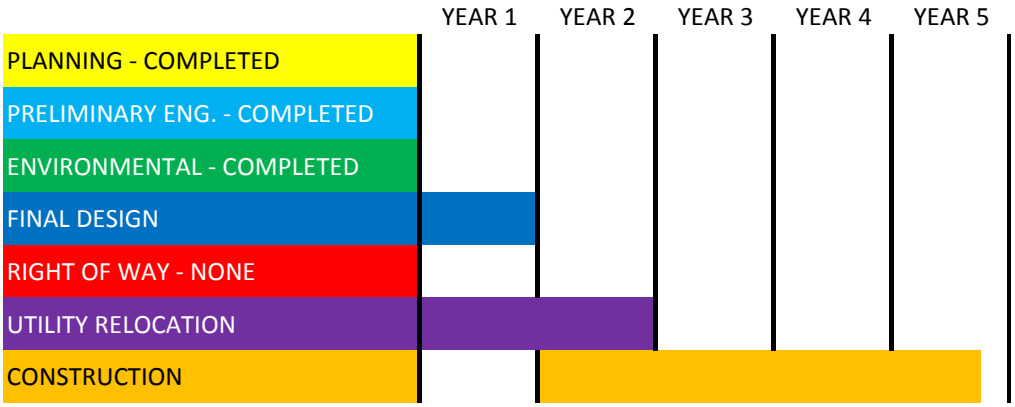


Figure 11-1: **Project 12 Development Timeline**

Available Funds: TxDOT has designated $74 million of Proposition 14 funds and $5 million of Category 10 funds for the proposed César Chávez project. The current CRRMA estimate for the remaining project development activities is $105.6 million in 2009$. This cost is anticipated to increase to $112.7 million through project opening, which is approximately $33.7 million greater than the funds identified. Delivery of the project would be contingent upon identification of additional funds to close the funding gap.

Projects 13 and 14a - Loop 375 Extension (North of Cordova Bridge)

Planning (Incomplete): The Transborder 2035 MTP includes construction of the proposed project between Park Street and Yandell, which is in close proximity to Schuster. The facility is not identified as a tolled facility in the Transborder 2035 MTP and is not included in the 2008-2013 TIP.

The Transborder 2035 MTP does not include a project with the description of 14a, the section of the project from Schuster to the I-10/US 85 interchange. This portion of the proposed project is also absent from the 2008-2013 TIP.

Based on the current status of these projects in both the MTP and TIP, additional time would be needed to complete the planning phase and incorporate these projects as tolled facilities in the regional planning documents. Since the regional planning documents are fiscally constrained and the anticipated cost of Project 13 and 14a is substantial, incorporation of Project 14a in the near term would likely require removal of other transportation facilities from the regional planning documents in order to remain within the identified budget. Additionally, the inclusion of this facility as a tolled facility in the long range plan would require the MPO to complete the FHWA required regional tolling analysis before environmental clearance could be approved. Based on discussions with TxDOT and the MPO, both expressed a regional tolling analysis could be completed fairly quickly as the information required to conduct the analysis is readily available. Based on known funding limitations, a timeline for completion of the planning process that would include incorporation of these projects as tolled facilities in the regional planning documents could not be determined at this time.

Preliminary Engineering (anticipate 12 months): Based on research conducted for the development of this Plan, TxDOT has completed a combined 30 percent schematic design for Projects 13 and 14a. An additional 12 months would likely be required to develop the final schematic and obtain final FHWA approval.

Environmental Analysis (anticipate 60 months): According to the instructions for implementing the NEPA (23 CFR 771.111(f)), transportation improvements must:

1. Connect logical termini and be of sufficient length to address environmental matters on a broad scope; and
2. Have independent utility or independent significance (i.e., be usable and be a reasonable expenditure even if no additional transportation improvements in the area are made)

Projects 13 and 14a have been combined because they reflect a logical transportation plan to improve mobility and provide I-10 congestion relief through central El Paso by providing the missing transportation link on Loop 375 (logical termini). From an environmental impact perspective they should be treated as one, because neither could be justified on its own (be of independent utility). That is to say, constructing one project would obligate construction of the second. Both new construction on new ROW - connecting the existing Loop 375 terminus at Santa Fe Street to US 85 near the Yandell Street overpass - and added capacity, with Loop 375 managed lanes in addition to US 85, are proposed.

TxDOT/FHWA issued a notice of intent to prepare an EIS in 2007, and a number of design concepts have been prepared at varying levels of detail for these projects. These concepts incorporated public and stakeholder input and identification of environmental constraints and issues. TxDOT suspended the EIS, but the notice of intent to prepare

an EIS was never rescinded. Although the region's planning process resulting in the 2008 CMP identified these projects as being in the purview of the RMA, TxDOT recently reinitiated the environmental process for the BHW tolled projects. Completion of this process will need to occur before CRRMA initiates any of the remaining project development activities.

An EIS is normally required for 1) a new controlled-access freeway, or 2) a highway project of four or more lanes on a new location. Based on a review of project specific data, preparation of an EIS is appropriate since projects 13 and 14a meet both EIS criteria. Additionally, the magnitude of the project in terms of cost, transportation and environmental impact to the El Paso region is potentially significant and warrants preparation of an EIS.

The following environmental issues are of particular importance to this project:

- **Noise** - The project is in close proximity to densely settled residential areas.
- **Residential and commercial displacements** - The project is superimposed on an existing urban setting and it is likely relocations would be necessitated.
- **Access management** - A corollary to displacements would be to maintain access to existing adjoining properties. Loop 375 and US 85 (Paisano) currently have varying degrees of access control.
- **Environmental Justice/Community Cohesion** - Low income and minority neighborhoods adjoin the proposed project.
- **Cultural Resources** - Numerous historic districts and sites, with both state and national standing, adjoin the project.
- **Hazardous Materials** - The project adjoins the old ASARCO copper smelter and the project area is likely saturated with hazardous materials. Additionally, the project is located in the vicinity of several railroad facilities which may also contain hazardous materials.
- **Section 4(f) evaluations** – An assessment of the presence of parks and recreational facilities and historic properties needs to be conducted to determine if a Section 4(f) evaluation is needed.
- **American Canal realignment** - The International Boundary and Water Commission (IBWC) plans to realign the American Canal where it crosses under Paisano and this work should begin shortly. The Canal is listed in the National Register of Historic Places, and is thus protected under Section 4(f) of the DOT Act. Coordination of the design effort with the IBWC will minimize schedule and 4(f) impacts.

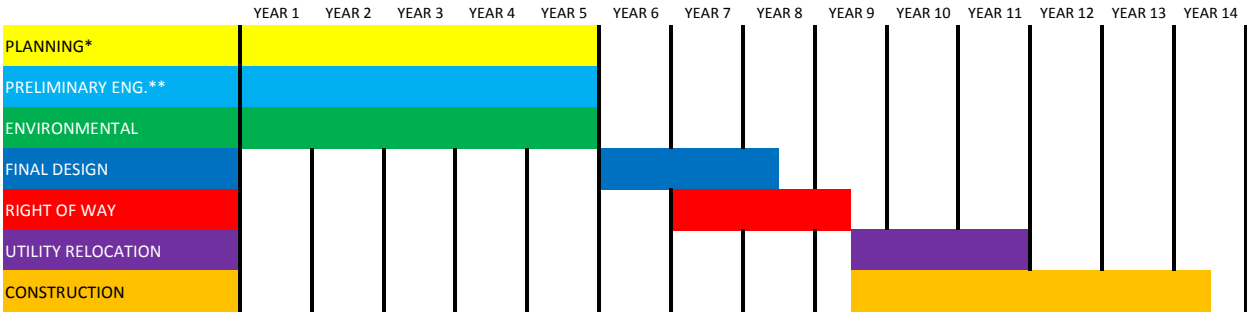
Among the issues noted above, remediation of hazardous materials is likely to be significant. The Texas Commission on Environmental Quality (TCEQ) has prepared a remediation plan for the 422-acre ASARCO site and it recently consummated an agreement with a third party to implement a $52 million hazardous material containment plan. Groundwater contamination is the major issue to be addressed by the remediation plan (through containment "cell" construction, slurry wall construction along Paisano and the placing of 80 extraction wells along Paisano). Based on a review of project schematics, Projects 13 and 14a would likely require a small amount of new ROW from the former ASARCO copper smelter site, and therefore, close coordination of the design with the remediation plan would be needed. However, assuming TCEQ's plan is implemented, no remediation obligation would be imposed on the CRRMA.

Agency consultations and coordination would be a significant cost and time element. Among the federal, state and local agencies involved would be: TxDOT, Department of Homeland Security (Immigration and Customs Enforcement and Customs and Border Protection), IBWC, U.S. Environmental Protection Agency (EPA), State Historic Preservation Officer, U.S. Fish and Wildlife Service, Union Pacific and Burlington Northern and Santa Fe Railroads, Texas Parks and Wildlife, U.S. Army Corps of Engineers, EPMPO and City of El Paso.

Based on discussions with TxDOT staff, a five-year time frame was assumed to be needed to complete the EIS and obtain a Record of Decision (ROD). The complexity and magnitude of environmental issues, agency coordination among numerous federal, state and local agencies and other stakeholders may elongate the process.

Final Design and Project Delivery (anticipate 42 months for final design/ROW and 60 months for construction): Final design has not been initiated for the proposed project. One important factor that needs to be considered as this phase approaches is whether to proceed with a traditional Design-Bid-Build or a Design-Build project delivery method. There are a number of potential utility and railroad conflicts, which would likely be an issue during the procurement process if the Design-Build option is chosen. Additionally, there are some potentially difficult ROW acquisitions because of the narrow width of the existing ROW. Some up-front investigation into these issues would need to be performed in order to determine if Design-Build is feasible and to identify the risks the potential bidders would have to consider.

Figure 11-2 presents an estimate of the time required to complete the project development process for Projects 13 and 14a based on the activities completed to date and exclusive of funding availability and MPO planning activities that need to be completed.



**Environmental Clearance would not be given until the planning activities have been completed. Planning timeline shown is not necessarily indicative of the time required to complete the activities, which are dependent upon the MPO's commitments and priorities, but rather represents the need for the project to be included in the Metropolitan Transportation Plan in order to finalize the environmental clearance process.*

***Preliminary engineering activities are expected to be completed in 12 months. However, a five-year timeframe is presented because approval of preliminary engineering documents cannot be obtained until completion of the environmental process.*

Figure 11-2: **Projects 13 and 14a Development Timeline**

Available Funds: Funding has not been identified for this project.

Project 14b – Loop 375 from Zaragoza to I-10

Planning (TBD): The proposed project, Loop 375 Americas, is currently identified as a non-tolled facility in the Transborder 2035 MTP. The project has not yet been programmed for funding in the 2008-2013 TIP. Based on interviews with TxDOT and MPO staff, this project is to be designated as a tolled facility in a 2010 update to the MTP.

Preliminary Engineering (anticipate 18 months): Based on information obtained from TxDOT, no schematics are available for Project 14b. For purposes of developing the overall project schedule, an average of 18 months was assumed to be needed for completion of the Preliminary Engineering phase.

Environmental Analysis (anticipate 12 months): The project entails the provision of two toll express lanes on Loop 375 between the Zaragoza Port of Entry (POE) and I-10. As the toll lanes are programmed for the median and it appears sufficiently wide to accommodate them, environmental issues should be minimal. New structures would be

required over a number of major arterials (e.g., North Loop, Alameda, Socorro) and the Union Pacific Railroad Bridge.

Project environs consist of commercial uses and activities with little apparent environmental sensitivity. Some agricultural uses also adjoin the ROW.

The following items are the project environmental issues/constraints, none of which are out-of-the-ordinary.

- Cultural resource (Franklin Canal)
- 4(f) *de minimis* coordination.
- Section 404 permitting (Waters of the US)
- Tribal consultation

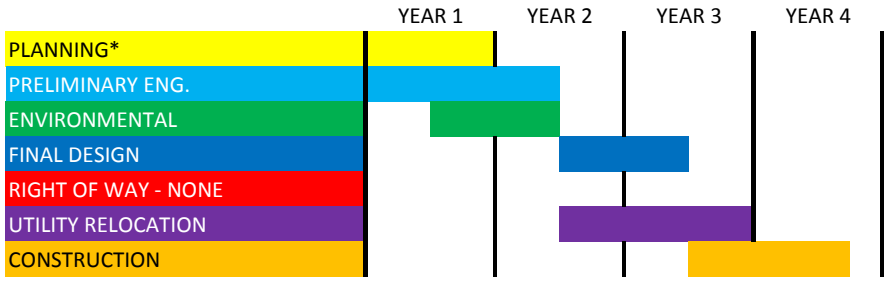
Impact mitigation costs are likely to be an insignificant element of total project development costs.

Review of the project area and published resources suggest that a CE is the appropriate level of environmental documentation and that a one year review and approval time frame is reasonable. However, as was the case for Projects 13 and 14a, the MPO would need to complete the FHWA required regional tolling analysis before the environmental analysis process can be completed.

If this project is developed subsequent to Project 12, it would trigger the FHWA-required toll system environmental justice study. Due to the relatively minimal effort required to obtain environmental clearance for Project 14b, advancing this stage of the project development process as soon as possible will save critical time and money when additional funds become available to fund design and construction activities.

Final Design and Project Delivery (anticipate 12 months for final design and 18 months for construction): Final design has not yet been initiated for Project 14b. As with the other projects, as this phase approaches a decision needs to be made as to whether to proceed with a traditional Design-Bid-Build or a Design-Build project delivery method. No ROW needs to be acquired, utility relocations are minimal and the engineering appears straight forward. Therefore, the schedule advantages normally associated with a Design-Build project delivery will be minimal if present at all. However, Design-Build would offer the fixed lump sum price advantage.

Figure 11-3 presents an estimate of the time that would be required to complete the project development process for Project 14b based on the activities completed to date and exclusive of funding availability and MPO planning activities that need to be completed.



**Environmental Clearance would not be given until the planning activities have been completed. Planning timeline shown is based upon information obtained from the MPO that Project 14b will be identified as tolled in the 2010 update of the MTP.*

Figure 11-3: **Project 14b Development Timeline**

Available Funds: Funding has not been identified for this project.

Project 14c – I-10 Collector Distributors

Planning (Incomplete): The I-10 collector distributor project is identified in the Transborder 2035 MTP, and it was previously identified in the 2008-2013 TIP with $100,000 allocated for FY 2009. However, in November 2008, funds for this project were deprogrammed and reallocated to other projects. TxDOT has reinitiated the environmental analysis phase for the BHW projects (Projects 13/14a and 14d). The environmental analysis process for these projects could potentially require a modification to the toll-to-toll connection provided by the current configuration of Project 14c. Depending upon the extent of any potential modifications, the MTP may need to be updated to reflect a modified design.

Preliminary Engineering (anticipate nine months): A schematic has been developed to approximately the 30 percent level for Project 14c (dated 9/5/2007). Based on a review of this schematic, an additional nine months would likely be needed to develop the final schematic and obtain final approval.

Environmental Analysis (anticipate 60 months): TxDOT published a notice of intent to conduct an EIS for the BHW Extension which extends for approximately 13.8 miles from I-10 east of State Highway (SH) 20 (Mesa Street) to Loop 375 at US 54 on September 7, 2007. The environmental analysis process for the BHW projects could potentially require a modification to the toll-to-toll connection provided by the current configuration of Project 14c. Based on interviews conducted to develop this Plan, TxDOT initiated scoping for the EIS, but did not complete the process. A notice rescinding the original intent to prepare the EIS was never published. Although the region's planning process resulting in the 2008 CMP identified these projects as being in the purview of the RMA, TxDOT recently reinitiated the environmental process for the BHW tolled projects. Completion of the environmental process for the BHW projects will need to occur before CRRMA initiates any of the remaining project development activities for Project 14c – I-10 Collector Distributors.

The following list contains the environmental issues/constraints anticipated for this project.

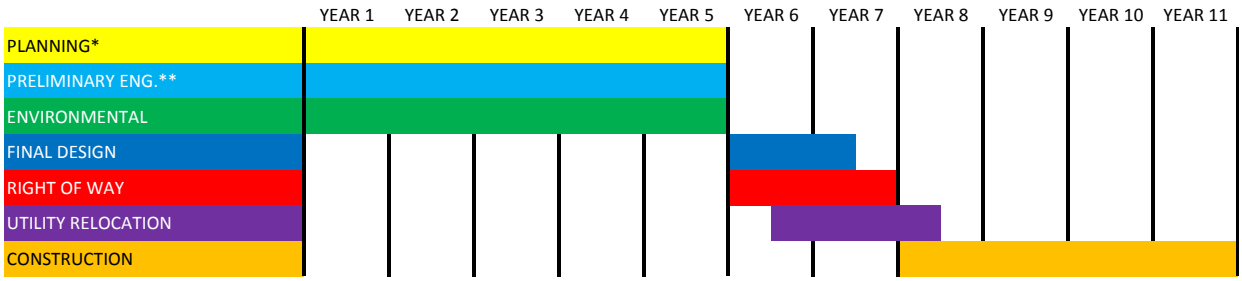
- **Displacements** - residential and commercial
- **Access Management** - revised access to businesses
- **Noise** - residential community at US 85/I-10 Interchange
- **Environmental Justice** - small residential community at US 85/I-10 Interchange

Environmental impact mitigation does not appear to be a substantial consideration for either final design or construction budgeting.

Based on discussions with TxDOT staff, a five-year time frame was assumed to be needed to complete the EIS and obtain a ROD for the BHW projects. The complexity and magnitude of environmental issues, agency coordination among numerous federal, state and local agencies and other stakeholders may elongate the process.

Final Design and Project Delivery (anticipate 24 months for final design/ROW and 48 months for construction): Final design has not yet been initiated for Project 14c. Similar to the other projects, an important factor that needs to be considered as this phase approaches is whether to proceed with a traditional Design-Bid-Build or a Design-Build project delivery method. Additionally, this project overlaps Project 14d and careful consideration needs to be given to the design to ensure there are no conflicts between the two projects. Some utilities would likely need to be relocated and some ROW acquired. However, neither one of these items should significantly impact the project schedule.

Figure 11-4 represents an estimate of the amount of time required to complete the project development process for Project 14c based on the activities completed to date and exclusive of funding availability and MPO planning activities that need to be completed.



**The MTP reflects the current configuration which may be revised through the environmental process being conducted by TxDOT for the BHW projects. The MTP may need to be updated to reflect any configuration changes identified. Therefore, the timeframe depicted is not necessarily indicative of the time required to complete planning activities, but rather represents the need for the most current configuration of the project to be included in the Metropolitan Transportation Plan in order to finalize the environmental clearance process.*

***Preliminary engineering activities are expected to be completed in nine months. However, a five-year timeframe is presented because approval of preliminary engineering documents cannot be obtained until completion of the environmental process.*

Figure 11-4: **Project 14c – Collector Distributors Development Timeline**

Available Funds: No funds have been identified for this project.

Project 14c – I-10 Auxiliary Lanes

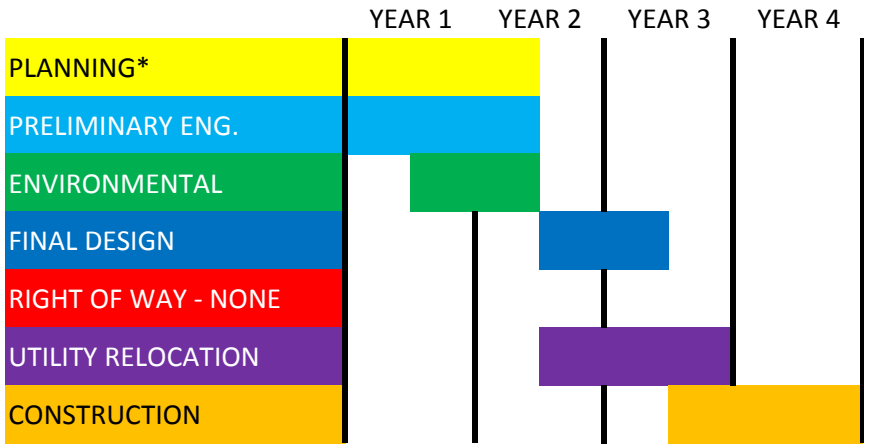
Planning (Incomplete): The I-10 collector distributor project is identified in the Transborder 2035 MTP, and it was previously identified in the 2008-2013 TIP with $100,000 allocated for FY 2009. However, in November 2008, funds for this project were deprogrammed and reallocated to other projects. The Transborder 2035 MTP would likely need to be modified to reflect the alternative configuration presented in this Plan that includes the addition of auxiliary lanes in select locations along I-10 between Mesa and Executive Center Blvd.

Preliminary Engineering (anticipate 18 months): The I-10 auxiliary lane configuration was developed for this Plan at a conceptual level only. For purposes of developing the overall project schedule, an average of 18 months was assumed to be needed for completion of the Preliminary Engineering phase.

Environmental Analysis (anticipate 12 months): The project entails the addition of one auxiliary lane in each direction between Sunland Park to Resler, and between Mesa (SH 20) and Redd Road. At the conceptual level, it appears that no additional ROW would be required to construct the auxiliary lanes. Therefore, environmental issues should be minimal and a CE is likely to be the appropriate level of environmental documentation. For purposes of developing the overall project schedule, a one year review and approval time frame is reasonable.

Final Design and Project Delivery (anticipate 12 months for final design and 18 months for construction): Final design has not yet been initiated for Project 14c-Auxiliary Lanes. As with the other projects, as this phase approaches a decision needs to be made as to whether to proceed with a traditional Design-Bid-Build or a Design-Build project delivery method. No ROW needs to be acquired and the engineering appears straight forward. Therefore, the schedule advantages normally associated with a Design-Build project delivery will be minimal if present at all. However, Design-Build would offer the fixed lump sum price advantage.

Figure 11-5 presents an estimate of the time that would be required to complete the project development process for Project 14c-Auxiliary Lanes based on the activities completed to date and exclusive of funding availability and MPO planning activities that need to be completed.



**Environmental clearance would be not given until the planning activities have been completed. Planning timeline shown is not necessarily indicative of the time required to complete the activities (which are dependent upon the MPO's commitments and priorities) but rather represents the need for the proposed project configuration to be included in the Metropolitan Transportation Plan in order to finalize the environmental clearance process.*

Figure 11-5: **Project 14c – Auxiliary Lanes Development Timeline**

Available Funds: No funds have been identified for this project.

Project 14d – I-10 Express Lanes from Sunland Park Interchange to Loop 375 (Transmountain)

Planning (Incomplete): The I-10 Express Lanes project is identified as two separate projects in the Transborder 2035 MTP. The first project identified in the plan includes the widening of I-10 from Sunland Park to Mesa. The second project extends the widening from Mesa to Transmountain. The MTP does not indicate that the widened facility would be tolled. Neither of the two projects is identified in the 2008-2013 TIP. Additionally, as Project 14d requires tolling an Interstate facility, approval from FHWA for the Express Lanes Demonstration Project would also be required. FHWA rejected TxDOT's initial proposal to toll the Interstate; therefore, the planning timeline is unknown.

Preliminary Engineering (anticipate 18 months): Based on information obtained from TxDOT, no schematics are available for Project 14d. For purposes of developing the overall project schedule, an average of 18 months was assumed to be needed for completion of the Preliminary Engineering phase.

Environmental Analysis (anticipate 60 months): TxDOT published a notice of intent to conduct an EIS for the BHW Extension which extends for approximately 13.8 miles from I-10 east of State Highway (SH) 20 (Mesa Street) to Loop 375 at US 54 on September 7, 2007. Portions of Project 14d lie within the project limits specified in the 2007 Federal Register notice. Based on interviews conducted to develop this Plan, TxDOT initiated scoping for the EIS, but did not complete the process. A notice rescinding the original intent to prepare the EIS was never published. Although the region's planning process resulting in the 2008 CMP identified these projects as being in the purview of the RMA, TxDOT recently reinitiated the environmental process for the BHW tolled projects. Completion of this process will need to occur before CRRMA initiates any of the remaining project development activities.

Project environs consist of commercial uses and activities with little apparent environmental sensitivity. I-10 does cross numerous arroyos; some habitat evaluations and agency coordination will be required. The following items are the environmental issues/constraints for this project:

- Cultural resource investigations
- Access Management
- Wildlife/habitat surveys

Based on discussions with TxDOT staff, a five-year time frame was assumed to be needed to complete the EIS and obtain a ROD. The complexity and magnitude of environmental issues, agency coordination among numerous federal, state and local agencies and other stakeholders may elongate the process. Additionally, as was the case for Projects 13, 14a and 14b, the MPO would need to complete the FHWA required regional tolling analysis before the environmental analysis process could be completed.

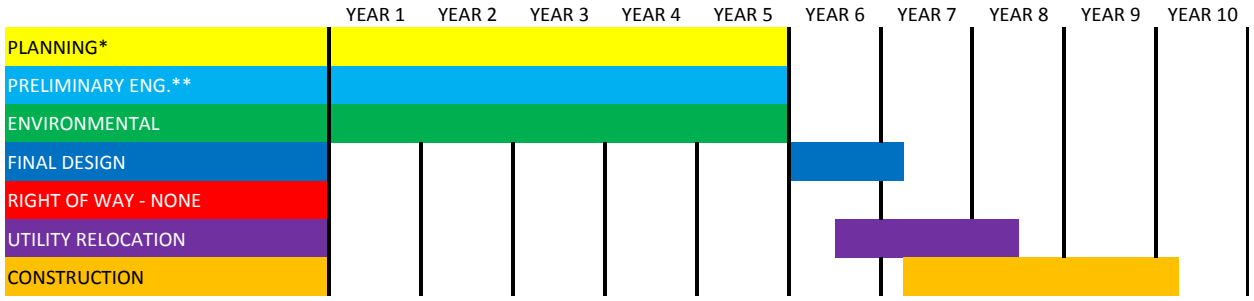
Final Design and Project Delivery (anticipate 15 months for final design and 36 months for construction): Final design has not been initiated for the proposed project. Similar to Project 14c, the following considerations must be given special attention:

1. Determine contracting method for project delivery: design-build or design-bid-build.

2. Project 14d overlaps a portion of Project 14c. Therefore, design of the two projects should be examined for compatibility to ensure that there are no conflicts.

Project 14d would be constructed entirely within the existing ROW. Several utility relocations are anticipated, but schedule delays should be avoided with typical coordination measures.

Figure 11-6 presents an estimate of the time that would be required to complete the project development process for Project 14d based on the activities completed to date and exclusive of funding availability and MPO planning activities that need to be completed.



**Environmental Clearance would not be given until the planning activities have been completed. Planning timeline shown is not necessarily indicative of the time required to complete the activities, which are dependent upon the MPO's commitments and priorities. In addition, FHWA's approval of tolls on I-10 is questionable and could extend the planning timeline.*

***Preliminary engineering activities are expected to be completed in 18 months. However, a five-year timeframe is presented because approval of preliminary engineering documents cannot be obtained until completion of the environmental process.*

Figure 11-6: **Project 14d Development Timeline**

Available Funds: No funding has been identified for this project.

Project 15 – Northeast Parkway

Planning (complete): The Northeast Parkway project is included in the Transborder 2035 MTP as a tolled facility. The project is also identified in the 2008-2013 TIP with construction expenditures identified in FY 2009. No funds have been specifically identified in the TIP for preliminary engineering or ROW acquisition.

Preliminary Engineering (anticipated to be completed in October 2010): A Preliminary Engineering Report was completed for the Northeast Parkway in 2007. Approval of the project schematic is pending approval of the environmental document.

Environmental Analysis (anticipate approval in October 2010): Project 15's environmental analysis and public involvement process are being conducted by TxDOT. A tiered environmental impact assessment approach is being implemented with a final draft Tier 1 EA document submittal to TxDOT-ENV in February 2010 and a projected draft Tier 2 EA document submittal to TxDOT-ENV anticipated in July 2010. Approval of the Tier 2 document is expected in October 2010. Public hearings are programmed for each document's review/approval process, but there may be additional public involvement required in New Mexico that is not covered in TxDOT's scope of effort. As stated previously, project specific approvals are not likely to be granted until the MPO has completed the Regional Toll Network Analysis required by FHWA.

Final Design and Project Delivery (anticipate 24 months for final design and 36 months for construction): Final design has not been initiated for the proposed project. Because this is a new roadway corridor, ROW needs to be purchased. Additionally, there are multiple crossings of existing roadways and railroad tracks and some utility conflicts would need to be resolved. Finally, a decision would need to be reached on whether to proceed with a Design-Build or Design-Bid-Build project delivery method.

Figure 11-7 presents an estimate of the time required to complete the project development process for Project 15 based on the activities completed to date and exclusive of funding availability and MPO planning activities that need to be completed.

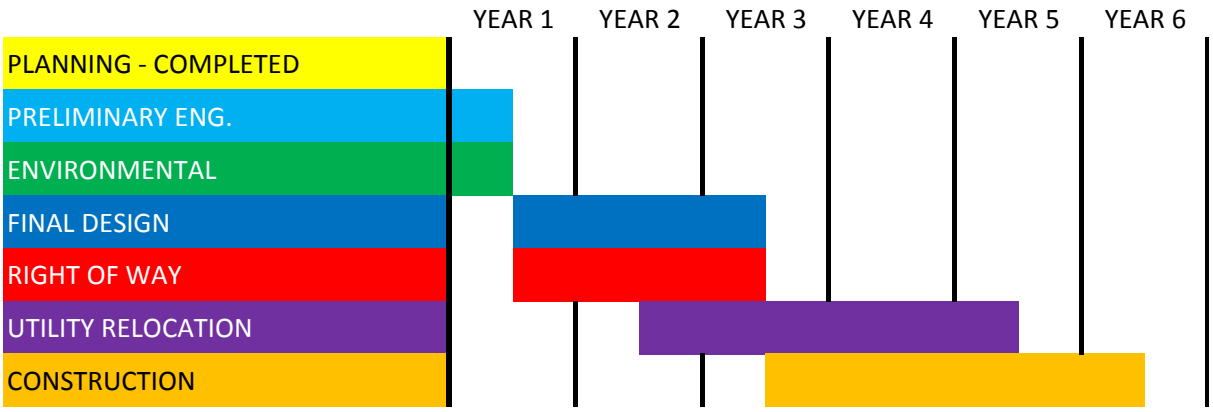


Figure 11-7: **Project 15 Development Timeline**

Available Funds: Construction expenditures for this project are identified in the 2008-2013 TIP. TxDOT has advised the RMA that funds for the project evaluated in this Plan are limited to the $230 million identified in the 2008 CMP, of which $79 million is dedicated to Project 12 and $151 million is available to all the other projects evaluated in this Plan. Further discussions regarding the availability of funding are provided in Chapter 13.

Chapter 12: Project Cost Estimates

This section summarizes the project development and construction cost estimates prepared by the CRRMA for each of the projects included in this report. The purpose of the cost estimating process is to identify those costs that the CRRMA would incur if they assume primacy for the 2008 CMP projects. Therefore, the cost estimates presented in this section do not include those activities that have been completed or are expected to be conducted by the TxDOT El Paso District. More detailed estimates for each project are provided in Appendix B.

Table 12-1 presents a summary of the CRRMA project development and capital cost estimates for each of the tolled projects in the 2008 CMP in 2009$. As discussed in previous chapters, this Plan includes an analysis of one conceptual level alternative configuration to Project 14c, which is a non-tolled project that is included in the tolled project section of the 2008 CMP because it provides the link between the Loop 375 and I-10 tolled managed lanes (Projects 13/14a and 14d respectively). The cost estimates presented in Table 12-1 include a high-level cost estimate for the Project 14c - Auxiliary Lanes alternative. Estimates for the other 2008 CMP tolled projects were developed by the CRRMA based on a detailed review of the most current project schematics or other project information provided by TxDOT. Schematics or conceptual level drawings upon which each of the cost estimates is based are presented in Appendix C.

Table 12-1. **Project Development and Construction Costs for 2008 CMP Tolled Projects (2009$)**

Project	Phase	Cost	Project	Phase	Cost
12	Planning (EPMPO)	COMPLETED	14C Auxiliary Lanes	Planning (EPMPO)	$0**
	Preliminary Engineering	COMPLETED		Preliminary Engineering	$279,000
	Environmental Analysis	COMPLETED		Environmental Analysis	$72,000
	Final Design & Project Delivery*	$105,585,157		Final Design & Project Delivery*	$13,170,749
	Total	**$105,585,157**		**Total**	**$13,521,749**
13/14A	Planning (EPMPO)	$0**	14C Collector Distributor	Planning (EPMPO)	$0**
	Preliminary Engineering	$0**		Preliminary Engineering	$0**
	Environmental Analysis	$0**		Environmental Analysis	$0**
	Final Design & Project Delivery*	$674,279,050		Final Design & Project Delivery*	$143,324,049
	Total	**$674,279,050**		**Total**	**$143,324,049**
14B	Planning (EPMPO)	$0**	14D	Planning (EPMPO)	$0**
	Preliminary Engineering	$879,000		Preliminary Engineering	$0**
	Environmental Analysis	$72,000		Environmental Analysis	$0**
	Final Design & Project Delivery*	$37,106,964		Final Design & Project Delivery*	$197,644,359
	Total	**$38,057,964**		**Total**	**$197,644,359**
			15	Planning (EPMPO)	COMPLETED
				Preliminary Engineering	COMPLETED
				Environmental Analysis	$0**
				Final Design & Project Delivery*	$269,854,450
				Total	**$269,854,450**

**Includes final design, right-of-way, utility and construction costs*
***No CRRMA funds required to complete. Costs to be incurred by others*

The estimated cost for each of the seven projects included in *Table 12-1* represents the cost if project activities were to commence in 2009. Due to limitations in the availability of funding, all of the projects cannot be initiated in 2009. Therefore, the costs presented would need to be inflated based upon the year in which the activities are anticipated to commence. Proposed start dates for each of the projects presented in Table 12-1 based on anticipated funding levels is discussed in further detail in Chapter 13.

Chapter 13: Toll Implementation Schedule

Implementation scenarios to develop the CRRMA toll projects are presented in this chapter. Scenarios identify the time and funds available to complete each task of a scenario. Currently the funds identified by the EPMPO for the toll projects are insufficient to complete all of the tolled projects. Project costs were inflated 3.5 percent annually for construction and 5 percent annually for right-of-way acquisition to represent the anticipated funds that would be needed in the year the planned project activities would occur.

The implementation schedules identify options to utilize the available funding. Existing funding identified in the 2008 CMP January 2010-draft update includes $79 million designated for Project 12 and $151 million not committed to a specific project. According to TxDOT, of the $151 million of available funds, approximately $81.3 million would be available in 2015, $45.25 million in 2018, and $24.75 million in 2019. Both schedule scenarios assume that Project 12 has a shortfall of $33.7 million and Project 14b will be fully funded. This assumption was based on the following:

1. The 2008 CMP has dedicated funding for development/construction of Project 12;
2. Development of Project 14b provides the connection to I-10 and Project 12, thereby completing the alternative route to I-10; and
3. The cost to complete Project 14b is small relative to the other 2008 CMP projects and can be fully funded with the available funds.

Figures 13-1 and 13-2 present two potential project development scenarios for the period 2010 through 2020, the period during which the $230 million of known funding ($79 million committed to Project 12 plus $151 million of uncommitted funds) is available. Both funding constrained timeframes assume that $79 million is available to fund continued advancement of Project 12. As previously discussed, an additional $33.7 million will be required to complete construction of Project 12. *Figures 13-1 and 13-2* all assume that the $151 million of EPMPO funds will not be available to cover the funding shortfall on Project 12 that occurs in 2012.

As previously stated, TxDOT has reinitiated the environmental process for the BHW tolled projects. This process may result in realignment of these projects. Due to the uncertainty regarding these projects and the need for TxDOT to complete the environmental clearance process before the CRRMA can pursue additional project development activities, an analysis that prioritizes available funding sources to the BHW projects was deemed not appropriate at this time.

Figure 13-1 illustrates schedule scenario 1. This scenario assumes all funds becoming available in 2015, 2018, and 2019 are allocated to completion of Project 14b and purchase of right of way for Project 15. Under this scenario, almost $14M would be remaining in 2020. These remaining funds could be used to initiate preliminary engineering and environmental analysis activities on the BHW projects that are defined through the environmental process currently underway by the TxDOT El Paso District. The BHW project activities are not presented on the schedules at this time due to uncertainties regarding the ultimate project scopes and costs which will be better defined upon completion of the environmental process. Alternatively, the funds could be used to implement mobility improvements on I-10 by advancing Project 14c – Auxiliary Lanes. This implementation approach is reflected in Scenario 2 which is discussed below.

The second schedule scenario, depicted in *Figure 13-2*, assumes all funds becoming available in 2015, 2018, and 2019 are allocated to completion of Project 14b and development and construction of Project 14c-Auxiliary Lanes. Any remaining funds are allocated to acquisition of right-of-way for Project 15. Approximately 91 percent of the right-of-way can be acquired under this scenario leaving a $7.9 million shortfall. All remaining Project 15 tasks as

well as all tasks associated with Projects 13/14a and 14d remain unfunded. A more detailed breakout of the schedules presented in *Figures 13-1 and 13-2* is presented in Appendix D.

The schedule scenarios presented represent two options the CRRMA has developed for advancing their program of projects. It is important to note that after development of Project 14b, there is sufficient funding available between 2012 and 2020 to fully develop Project 14c-Auxiliary Lanes. However, there is insufficient funding to fully develop any of the other projects. Advancing projects in anticipation of future funding, particularly preliminary engineering and environmental clearance will save critical time and money when additional funding does become available.

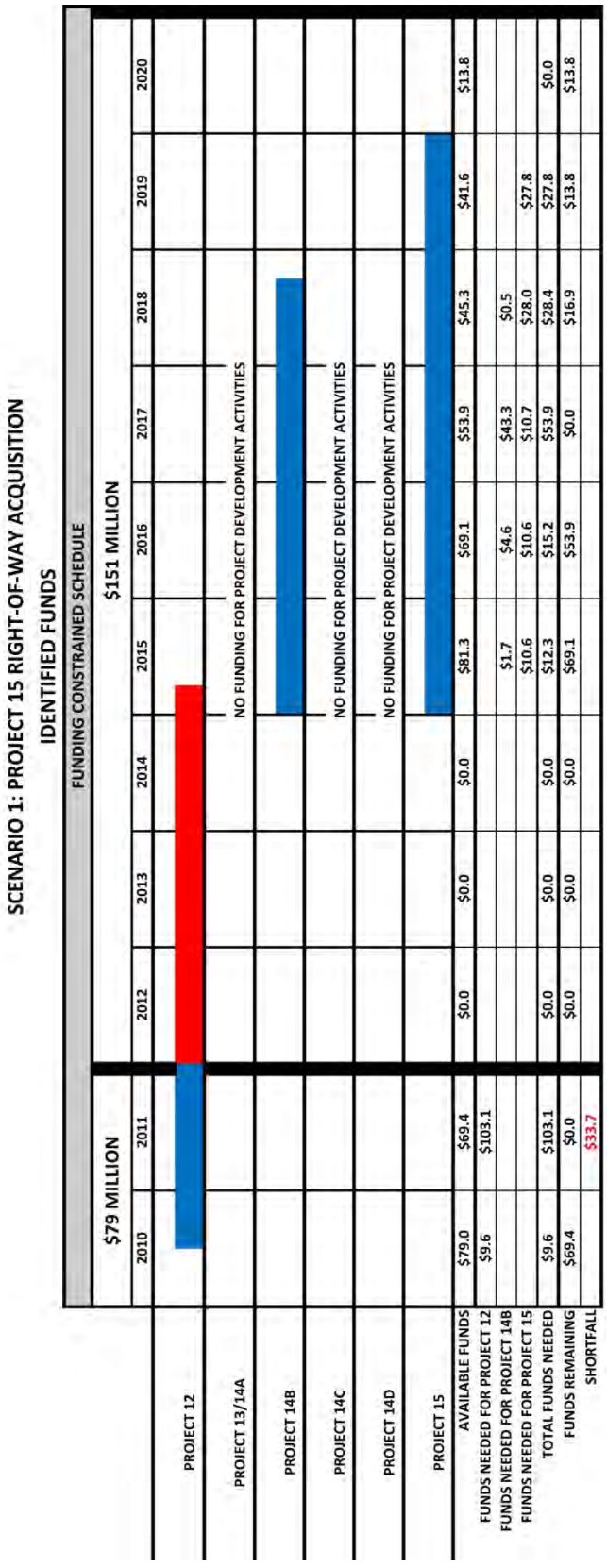
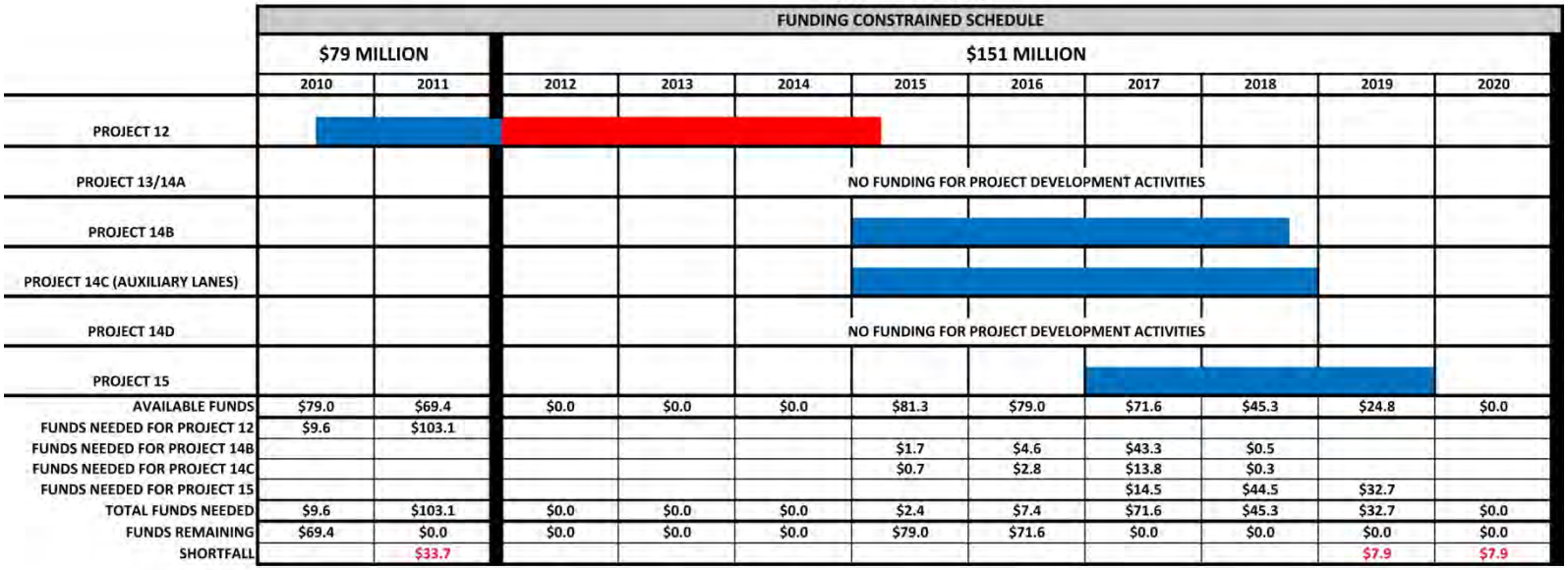


Figure 13-1 Scenario 1: Project 15 Right-of-Way Acquisition - Identified Funds

SCENARIO 2: PROJECT 14C (AUXILIARY LANES) DEVELOPMENT & PROJECT 15 RIGHT-OF-WAY ACQUISITION

IDENTIFIED FUNDS



	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
AVAILABLE FUNDS	$79.0	$69.4	$0.0	$0.0	$0.0	$81.3	$79.0	$71.6	$45.3	$24.8	$0.0
FUNDS NEEDED FOR PROJECT 12	$9.6	$103.1									
FUNDS NEEDED FOR PROJECT 14B						$1.7	$4.6	$43.3	$0.5		
FUNDS NEEDED FOR PROJECT 14C						$0.7	$2.8	$13.8	$0.3		
FUNDS NEEDED FOR PROJECT 15								$14.5	$44.5	$32.7	
TOTAL FUNDS NEEDED	$9.6	$103.1	$0.0	$0.0	$0.0	$2.4	$7.4	$71.6	$45.3	$32.7	$0.0
FUNDS REMAINING	$69.4	$0.0	$0.0	$0.0	$0.0	$79.0	$71.6	$0.0	$0.0	$0.0	$0.0
SHORTFALL		$33.7								$7.9	$7.9

NOTES:

1. BASE COST ESTIMATES WERE PREPARED IN 2009 DOLLARS. SCHEDULE REPRESENTS INFLATED COSTS BASED ON YEAR ACTIVITY INCURRED. ANNUAL INFLATION RATES USED TO ESTIMATE FUTURE COSTS ARE AS FOLLOWS: 5% FOR RIGHT-OF-WAY AND UTILITIES AND 3.5% FOR ALL OTHERS (I.E. PRELIMINARY ENGINEERING, ENVIRONMENTAL, FINAL DESIGN, CONSTRUCTION & CE&I).

NO FUNDS AVAILABLE IN 2012 THROUGH 2015 TO COMPLETE PROJECT 12.

Figure 13-2: **Scenario 2: Project 14c (Auxiliary Lanes) Development & Project 15 Right-of-Way Acquisition - Identified Funds**

Chapter 14: Financing Plan

For the CRRMA to develop the proposed toll projects in the El Paso region, available funds to finance the projects need to be identified. This section of the report summarizes various funding sources that may be available to the CRRMA to help finance its projects.

The financial plan for development and construction of Projects 12 and 14b consists of funds identified by the EPMPO. Depending upon the toll implementation scenario selected, the financial plan for Project 14c – Auxiliary Lanes could also be fully funded using EPMPO funds. Right-of-way acquisition for Project 15 is either fully funded or partially funded depending upon the implementation scenario selected. However, there is insufficient EPMPO funding to cover project development and construction costs for Projects 13/14a, 14d, and 15. A financial plan for continued development and construction of these projects that consists of a combination of various alternative funding mechanisms needs to be developed.

Several traffic and revenue forecasts have been developed for the projects presented in this Plan. However, these forecasts are at a conceptual level and were developed as a screening tool to guide decision-makers with identifying potential toll road projects. More detailed revenue forecasts that allow for an analysis of the availability of toll revenue for debt financing needs to be conducted before a financial plan that includes a combination of the types of funding mechanisms discussed in this chapter can be developed.

Financing infrastructure improvements with the collapse of the credit markets and the worst global economic downturn since the Great Depression has challenged transportation agencies to seek alternative financing mechanisms. Furthermore, the Federal SAFETEA-LU transportation funding and authorization bill that governs surface transportation spending expired as of September 30, 2009. On March 18, 2010, President Barack Obama signed the Hiring Incentives to Restore Employment Act (HIRE Act) which authorized a transfer of $19.5 billion to the Highway Trust Fund (HTF) to support current programs through December 31, 2010.

The subprime mortgage crisis, triggered by a dramatic rise in mortgage delinquencies and foreclosures in the United States, caused major adverse consequences for banks and financial markets around the globe. The magnitude of bad sub-prime mortgage debt overwhelmed the global financial markets and money became scarce. As a consequence, lenders tightened their standards for loans, which resulted in limited resources for infrastructure development. Monoline Bond Insurers (monolines) that insured the timely interest and principal payments on bonds have declined in number and potency. As bad debt, exacerbated by the sub-prime lending debacle surpassed their assets, monolines were unable to meet their financial commitments. Thus, monoline insurers, once the bulwark for insured and wrapped loans, today are minor contributors in the system to finance infrastructure projects.

While global debt markets have tightened, there still remains a large amount of private equity seeking infrastructure investments for a variety of reasons. Globally, infrastructure funds raised $24.7 billion in 2008, compared to $34.3 billion in 2007 and $17.9 billion in 2006. There are currently more than 75 infrastructure funds seeking to raise $100 billion. Much of the funds already raised have had difficulty finding projects in which to invest. The problem for them is not lack of financing, but lack of suitable projects. For example, Goldman Sachs raised more than $6 billion for an infrastructure fund in 2006, and has yet to find sufficient projects to invest the full amount. Pension funds around the world are seeing positive returns from their infrastructure investments (and looking to invest more) as their investments in other asset classes have been substantially reduced. As an equity investor in the North Tarrant Express (NTE) public-private partnership (P3) concession project in Tarrant County, Texas, the Dallas Police and Fireman's Pension Fund is the first U.S. pension fund to invest in a P3 transportation infrastructure project. Other U.S. pension funds, such as the California Public Employees Retirement System (CalPERS), are seeking suitable transportation infrastructure projects in which to invest.

In this environment of constrained resources, techniques to finance infrastructure projects have forced a much broader reliance on multi-sources of funds cobbled together into a financial package. Funding sources such as federal and state government loans and/or loan guarantees used to leverage bond financing that were once considered "innovative" have become a necessity today to finance infrastructure projects. Government entities are turning to P3 as a mechanism to infuse private equity into projects that, when open, will operate under long-term concession agreements. Bond rating agencies (Standard and Poor's, Moody's, and Fitch ratings) are scrutinizing toll road projects more judiciously from a revenue stream and capital and life cycle cost perspective especially start up green field projects that lack a tolling history.

Federal Funds

Federal funds are distributed to the states under the 2005 legislation, SAFETEA-LU. Unfortunately, for projects that have not yet begun and do not have earmarked funds, there have been significant rescissions in the recent year and anticipated funds for many projects are no longer available.

The **Highway Trust Fund (HTF)** is the source of funding for most of the programs in SAFETEA-LU, distributing funds to various programs per SAFETEA-LU. For fiscal year 2009, the HTF faced a $7 billion deficit fulfilling existing commitments to ongoing projects around the country, and funds to cover the shortfall were transferred from the General Fund to cover the gap.[12] The HTF faced a similar shortfall in 2010. However, on March 18, 2010, President Obama signed the Hiring Incentives to Restore Employment Act (HIRE Act) which authorized a transfer of $19.5 billion to the HTF to support current programs through December 31, 2010.

As described by the FHWA, The **Highway for LIFE Pilot Program** is a discretionary program that provides funding to demonstrate and promote state-of-the-art technologies, elevated performance standards, and new business practices in the highway construction process that result in improved safety, faster construction, reduced congestion from construction, and improved quality and user satisfaction. A project for this program is eligible if it:

- Constructs, reconstructs, or rehabilitates a route or connection on an eligible Federal-aid highway.
- Uses innovative technologies, manufacturing processes, financing or contracting methods that improve safety, reduce congestion due to construction, and improve quality.
- Meets additional criteria as determined by the Secretary.

A total of $75 million is authorized through 2009 for incentive grants to fund up to 20 percent but not more than $5 million of the total cost of a qualifying project. A maximum of 15 projects may receive incentive funds in a given fiscal year, but the goal is to approve and provide funds to at least one project in each state by 2009. A state may also use up to 10 percent of its Interstate Maintenance (IM), National Highway System (NHS), STP, and Congestion Mitigation and Air Quality Improvement (CMAQ) Program funds for these projects; up to 100 percent federal share is allowed.[13] In 2009, Colorado, Florida, Maine, Texas, Utah, Vermont, Washington, D.C., and Wisconsin were named recipients of Highways for LIFE incentive funding for grants of up to $1 million each. [14] The Highway for LIFE Pilot Program was originally established as a five-year program scheduled to end in 2009. Per discussions with FHWA staff, the HIRE Act signed by President Obama on March 18, 2010 extends the Highway for LIFE Pilot Program through December 2010.

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[12] http://www.fhwa.dot.gov/highwaytrustfund/index.htm Accessed on 11/2/2009.
[13] http://www.fhwa.dot.gov/safetealu/factsheets/highways4life.htm. Accessed on 11/2/2009.
[14] http://www.fhwa.dot.gov/hfl/projects/fy09.cfm. Accessed on 11/2/2009, verified on 3/3/10.

The **National Highway System Program** provides funding for improvements to rural and urban roads that are part of the NHS, including the Interstate System and designated connections to major intermodal terminals. Under certain circumstances, NHS funds may also be used to fund transit improvements in NHS corridors. From fiscal years 2005 to 2009, $2.4 billion was available to Texas, and augmented by $4.6 billion from the equity bonus. (The funds from this program originally contributed to the TxDOT State Infrastructure Bank.)[15] Per discussions with FHWA staff, the original end date of the National Highway System Program was September 30, 2009. The program has received several extensions, the most recent being the HIRE Act signed by President Obama on March 18, 2010, which extends the program through December 31, 2010.[16]

The **Surface Transportation Program** provides flexible funding that may be used by states and localities for projects on any federal-aid highway, including the NHS, bridge projects on any public road, transit capital projects, and intracity and intercity bus terminals and facilities. From fiscal years 2005 to 2009, $2.6 billion was available to Texas, also augmented by the $4.6 billion equity bonus fund.[17] Per discussions with FHWA staff, the original end date of the Surface Transportation Program was September 30, 2009. The program has received several extensions, the most recent being the HIRE Act signed by President Obama on March 18, 2010, which extends the program through December 31, 2010.[18]

The **National Corridor Infrastructure Improvement Program** is a discretionary program that provides funding for construction of highway projects in corridors of national significance to promote economic growth and international or interregional trade. This program replaces the TEA-21 Section 1118, National Corridor Planning and Development program. These grants are distributed by the FHWA. Funding for projects will be awarded through a selection process conducted by the Secretary that:

- Requires states to submit an application.
- Gives priority to projects in corridors that are part of, or will be part of, the Dwight D. Eisenhower National System of Interstate and Defense Highways after completion, and to projects that will be completed within five years of allocation of funds for the project.
- Highway construction projects in corridors of national significance will be selected with consideration of the extent to which:
    - The corridor links two existing segments of the interstate system.
    - The project facilitates major multi-state or regional mobility, economic growth, and development in areas underserved by highway infrastructure.
    - Commercial traffic in corridor has increased since enactment of North American Free Trade Agreement (NAFTA) and where traffic is projected to increase in the future.
    - International truck-borne commodities move through the corridor.
    - The project will reduce congestion on an existing segment of the interstate.
    - The project will reduce commercial and other travel time through a major freight corridor.
    - Federal funds will be leveraged.

The **Equity Bonus Program** provides additional funds to states to address equity issues, including rate of return on contributions to the HTF, low population density, low-moderate income, and a 2002 Interstate fatality rate greater than one per 100M vehicle miles traveled (VMT), among other concerns. Funds from the Equity Bonus are distributed to the IM, NHS, Bridge, Surface Transportation (STP), Highway Safety Improvement Program (HSIP),

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15 http://www.fhwa.dot.gov/safetealu/fundtables.htm Accessed on 11/2/2009.
16 Telephone conversation with Keven Adderly, FHWA, on April 12, 2010.
17 http://www.fhwa.dot.gov/safetealu/factsheets/stp.htm. Accessed on 11/3/2009.
18 Telephone conversation with Keven Adderly, FHWA, on April 12, 2010.

and CMAQ programs, except for $2.64 billion. The $2.64 billion not distributed to other programs has the same eligibility requirements as STP (except for that program's safety set aside, the transportation enhancement set aside, or the sub-allocations to sub-state areas) and is generally subject to 80 percent limit on federal share. Funds from the Equity Bonus distributed to other programs take on the requirements of those programs (including federal share requirements).[19]

Loans

Transportation Infrastructure Finance and Innovation Act

The Transportation Infrastructure Finance and Innovation Act (TIFIA) of 1998 provides federal credit assistance to large-scale transportation projects determined to be of national significance. TIFIA assistance is limited to 33 percent or less of total project costs (from environmental clearance through construction costs). The TIFIA credit program offers three distinct types of financial assistance:

- Secured (Direct) Loan: Maximum of 35 years from substantial completion. Repayments must start five years after substantial completion.
- Loan Guarantee: Guarantees a project sponsor's repayments to non-Federal lender. Loan repayments to lender must commence no later than five years after substantial completion of the project.
- Line of Credit: Contingent loan available for draws as needed up to 10 years after substantial completion of the project.[20]

TIFIA requires that the "owner" of the project submit the TIFIA application including a financial plan. Acceptance of the Plan of Finance is required before authorization of federal funding. Requirements for the TIFIA-required Financial Plan are similar in many aspects to the requirements for an FHWA initial Financial Plan. The submittal of a TIFIA application negates the project owner from submitting an additional separate Financial Plan to FHWA. Public-private partnerships can apply directly to FHWA for TIFIA assistance.

State Infrastructure Bank

SAFETEA-LU authorizes states to enter into agreements with the Secretary to establish State Infrastructure Banks (SIB) with revolving funds eligible to be capitalized with federal transportation funds authorized for fiscal years 2005-2009. The SIB allows borrowers to access capital funds for at or lower than market interest rates. For initial capitalization in 1997, Texas matched federal funds used to capitalize the SIB on an 80-20 basis federal/non-federal, except for the highway account, which applies a sliding scale provision. Today TxDOT's SIB operates as a self-sustaining fund to provide financial assistance to improve transportation infrastructure in Texas. Loans from the SIB can be soft loans, or subordinate debt, with variable repayment schedules and extended terms and subsidized interest rates. The Central Texas Regional Mobility Authority (CTRMA) received a SIB loan in 2009 for the development of the U.S. 290 East project. The City of El Paso also received a SIB loan in 2009 to pay for improvements to the Paso Del Norte International Bridge.

The SIB highway account can include up to 10 percent of the funds apportioned to the state for the NHS program, the STP, the Highway Bridge Program, and the Equity Bonus. The Texas Transportation Commission has approved 90 loans, over $382 million, from the SIB. As a revolving loan program, TxDOT's SIB collects about $20 million a year and has a cash reserve of $84.5 million, which can be leveraged. As of October 2009, there are $44 million of

[19] http://www.fhwa.dot.gov/safetealu/factsheets/equitybonus.htm. Accessed on 11/3/2009.
[20] http://www.dot.ca.gov/hq/innovfinance/tifia.htm. Accessed on 11/3/2009. Verified on 3/3/10.

uncommitted funds in the SIB. Additionally, as discussed later in this section, in 2009, the Texas Legislature appropriated $1 billion of Proposition 12 monies to capitalize the SIB for the purpose of making loans to public entities.

Applications must address the proposed use of requested financial assistance, proposed collateral, and the latest bond rating of the applicant (or other evidence of creditworthiness). Upon final approval of the project, the applicant must agree to provide collateral and security for repayment, repay the financial assistance at specified interest rates over the time periods according to repayment schedules, have periodic audits, and reimburse the state for costs or losses of funds resulting from a failure to perform by the applicant.

Section 129 Loans

Section 129 of Title 23 permits states to use federal-aid funds for reimbursement of loans to public or private entities for toll projects that are eligible for federal-aid funding. The loans must be repaid with a dedicated, non-federal source and the federal share of the project is limited to 80 percent.

Section 129 loans can be made at any time, but not to cover costs of work already completed. The loans from the state must be repaid beginning within five years after the project is completed and opened to traffic, and must be completed within 30 years after the date federal funds are authorized for the loan or first increment of the loan.

Section 129 loans can be subordinated loans, which can make traditional bonding more attractive in the market. Texas used a Section 129 loan as part of the financing plan for the George Bush Turnpike in Dallas.

Bonds

Tax-Free Municipal Bonds

Municipal bonds are issued by governmental entities, or their agencies including public authorities primarily to capitalize infrastructure or needed governmental services. Municipal bonds may be general obligations of the issuer or secured by specified revenues. Interest income received by holders of municipal bonds is often exempt from federal income tax and from the income tax of the state in which they are issued, although some bonds issued for certain purposes may not be tax exempt. This makes the issuance of bonds an attractive source of financing to many municipal entities, as the borrowing rate available in the open market is frequently lower than what is available through other borrowing channels. The tax-free status allows the issuing government agency to borrow money at a lower interest rate. Investors buy these tax-free issues because on a tax-equivalent basis the returns are at or above the interest rate they would earn on a comparable-risk taxable bond. Municipal bonds have typically been the major source of funding for public infrastructure throughout the nation.

Private Activity Bonds

Private Activity Bonds (PAB) are tax-free municipal security proceeds used by a private entity. PABs are a source of funding used to attract private investment in projects that have a distinct public benefit, such as water and sewage facilities, public and low-income housing, and for transportation infrastructure. The tax exemption increases the normally low value of the investor return, allowing public infrastructure projects to better compete for private investment dollars. Previously, airports and maritime ports were the only eligible transportation projects, but with the passage of SAFETEA-LU in 2005, PABs can now also be used for highways. PABs for highways must still be used by private entities, essentially limiting them to public-private partnerships.

The Texas Bond Review Board writes that PABs may be used if the project meets any of the following tests:

1. Private Business Use Test - more than 10 percent of the proceeds are to be used for any private business use;

2. Private Security or Payment Test - payment on principal or interest of more than 10 percent of the proceeds is to be directly or indirectly secured by or payments are to be derived from a private business use; and

3. Private Loan Financing Test - proceeds are to be used to make or finance loans to persons other than governmental units.

PABs for highway projects are not subject to the general state annual volume cap for PABs, but rather are subject to a separate national cap of $15 billion for highway and surface freight transfer facilities. Allocation is granted by the Secretary of Transportation, who administers the program for these two types of facilities. There is limited information about the application process for PABs to be used for highways. As of January 2010, Texas has been allocated $3.05 billion for the TxDOT North Tarrant Express (NTE) and IH-635 (LBJ Freeway) managed lanes projects. Since PABs and TIFIA can be both applied to the same project, together TIFIA and private activity bonds should provide substantial incentives for private equity investment in highway and freight projects.[21]

Build America Bonds

As part of the American Recovery and Reinvestment Act of 2009 (ARRA), the Build American Bond (BAB) program was created. The BAB program authorizes state and local officials to issue BABs starting in 2009 and extending to 2010. All projects which could otherwise receive tax-exempt governmental bonds are eligible for these bonds. As an incentive for the state and local governments, the state and local governments will receive a direct federal subsidy payment equal to 35 percent of the total coupon interest paid to investors.[22]

Texas Proposition 12 Bonds

Passed in November 2007, Proposition 12 authorized the TTC to issue state general obligation bonds, backed by the State's General Revenue Fund, for up to $5 billion for transportation projects. In 2009, the Texas Legislature passed House Bill (HB) 1 allowing for issuance of $2 billion of these bonds. The legislation devotes $1 billion of those funds to capitalize the SIB leaving $1 billion for the TTC to allocate to transportation projects.[23]

Texas Proposition 14 Bonds

Passed in 2003, Proposition 14 authorized the TTC to allow TxDOT to issue notes or borrow money from any source for up to two years and allowed for these funds to be repaid from future deposits to Fund 6. The Constitution will appropriate Fund 6 monies annually to cover TxDOT's debt. In late 2008, the TTC signed its intent to issue $1.5 billion in Proposition 14 bonds to be used to further Texas transportation projects.[24]

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21 http://www.fhwa.dot.gov/ipd/p3/tools_programs/pabs.htm. Accessed on 11/3/2009. Verified on 3/3/10.
22 http://www.irs.gov/pub/irs-drop/n-09-26.pdf . Accessed on 11/3/2009.
23 http://www.h-gac.com/taq/commitees/TPC/2009/10-oct/docs/ITEM%2010%20--%20Proposition%2012%20Bonds.pdf. Accessed on 11/3/2009.
24 http://www.keeptexasmoving.com/index.php/enews/1052. Accessed on 11/2/2009.

Texas Proposition 15 Bonds

On November 6, 2001, Texas voters approved Proposition 15 creating the Texas Mobility Fund. Proposition 15 gives TxDOT the ability to fund transportation based on future revenues. As of the end of fiscal year 2009, the Texas Mobility Fund had a $4.8 billion deficit.[25]

Other

Toll Equity Grants

TxDOT's contributions to the RMAs for the cost of the acquisition, construction, maintenance, or operation of a toll facility of a public or private entity may be made in the form of toll equity grants, which are funds made available under the Transportation Code and approved by the TTC. The primary purpose of the department's financial participation is to make the most efficient use of limited funds by leveraging other sources of project funds, particularly proceeds from bonds. This enables toll facilities to be built more quickly.

A public or private entity authorized by state law to construct or maintain a toll facility is eligible to request financing. A public entity may apply for either a loan or a grant, while a private entity may only request a loan.

Toll equity offers two significant benefits:

- It can accelerate completion of a project that would have taken much longer to develop.
- It can be used to encourage entities such as regional mobility authorities to issue debt to finance the remaining cost of the project. As a result, the department will save funding equal to the amount of debt issued by the public or private entity. The unspent funds could then be used for other needed projects.

The CTRMA signed a toll equity grant agreement with TxDOT for the development of the 183A toll road for construction costs and operations and maintenance of the road for its initial five years of operation.

Transportation Development Credits (toll credits)

Transportation Development Credits allow states to apply the value of non-federal fund expenditures for highways toward the required state match on other projects using federal money. States can use Transportation Development Credits to cover all or a portion of the non-federal share of a project's funding. In order to use toll credits, a state must meet "maintenance of effort" (MOE) criteria requiring that the state's previous year highway spending equaled or exceeded the previous three years' average spending. Toll credits can be applied to a project after its authorization.

To use toll credits, a state is required to establish a special account to track the credits. FHWA must approve amounts placed into toll credit accounts. Toll credits are earned based upon the revenues generated by the toll authority and the amount expended on toll projects. As of October, 30 2008, Texas had a toll credit balance of $664 million.[26]

[25] http://www.dot.state.tx.us/txdot_library/publications/finance/mobility_fund.htm. Accessed on 11/2/2009. Verified on 3/3/10.
[26] http://ftp.dot.state.tx.us/pub/txdot-info/adm/2009/agendas/minute_orders/jan28/1.pdf. Accessed on 11/3/2009

Pass-Through Financing

Pass-Through financing is an innovative financing opportunity which allows local governments and private entities to accelerate transportation projects. Upon approval of the pass through financing application, the local government or private entity can develop, construct, maintain and/or operate a project and be reimbursed a portion of the project costs by TxDOT. The repayment schedule is tied to actual usage on the road, and TxDOT will make periodic payments based on each vehicle that uses the project. Both toll and non-toll projects are eligible for pass through financing.[27]

Texas Comprehensive Development Agreements (CDA)

The Texas legislature under HB 3588, HB 2702, and SB 792, created innovative funding and project delivery mechanisms to advance toll project development in Texas. Procedures were created to enable private equity investment in Texas toll roads under P3 and private sector operations of toll facilities by way of concession agreements between TxDOT and the private entity. Examples of this type of finance, design, build, operate, and maintain methodology are the SH 130 Sections 5 and 6 toll road and the North Tarrant Express (NTE) managed lanes project. Design/build and design/build/maintain are other types of transportation infrastructure procurements enabled under CDA agreements. SB 792 places a moratorium on any CDA entered into on or after May 1, 2007 between a toll project entity (defined as TxDOT, RTAs, RMAs, or county toll authorities) and a private participant that allows the private participant to operate or collect revenue from the toll project. It also prohibits a toll project entity from selling a project to a private entity. There are exceptions to the moratorium for several projects, including projects located in El Paso that were in an approved MPO plan prior to May 1, 2007.

Public Private Partnership Availability Payment Scheme

An availability payment scheme is where the private (P3) sector investor receives payment based on ensuring that the service or capacity in infrastructure is made available irrespective of actual traffic or use. Thus the term "availability" refers to the availability of the road to users. Disruption in the availability of the roadway to users can result in a penalty withholding payment to the P3 provider that is part of the contractual agreement with the state.

The first such projects of this type in the U.S. are in Florida – both reached financial close in 2009. The I-595 P3 project is on a 10.5-mile portion of the highway in Broward County, north of Miami; the Port of Miami Tunnel (POMT) Project reached financial close on March 3, 2009. Construction of the tunnel will cost $607 million, with additional operation and maintenance during the construction period bringing the total to $903 million. The Miami Access Tunnel (MAT) consortium will provide the upfront construction costs, the State of Florida will pay 50% of the total design and construction costs and all of the operation and maintenance costs. The other 50% will come from the local governments – Miami-Dade County and the City of Miami.[28] This is a major development for the U.S. P3 market in which the concessionaire has typically borne the toll revenue risk. The Florida Department of Transportation (FDOT) retains the toll revenue risk on the I-595 Project. The POMT project is not tolled.

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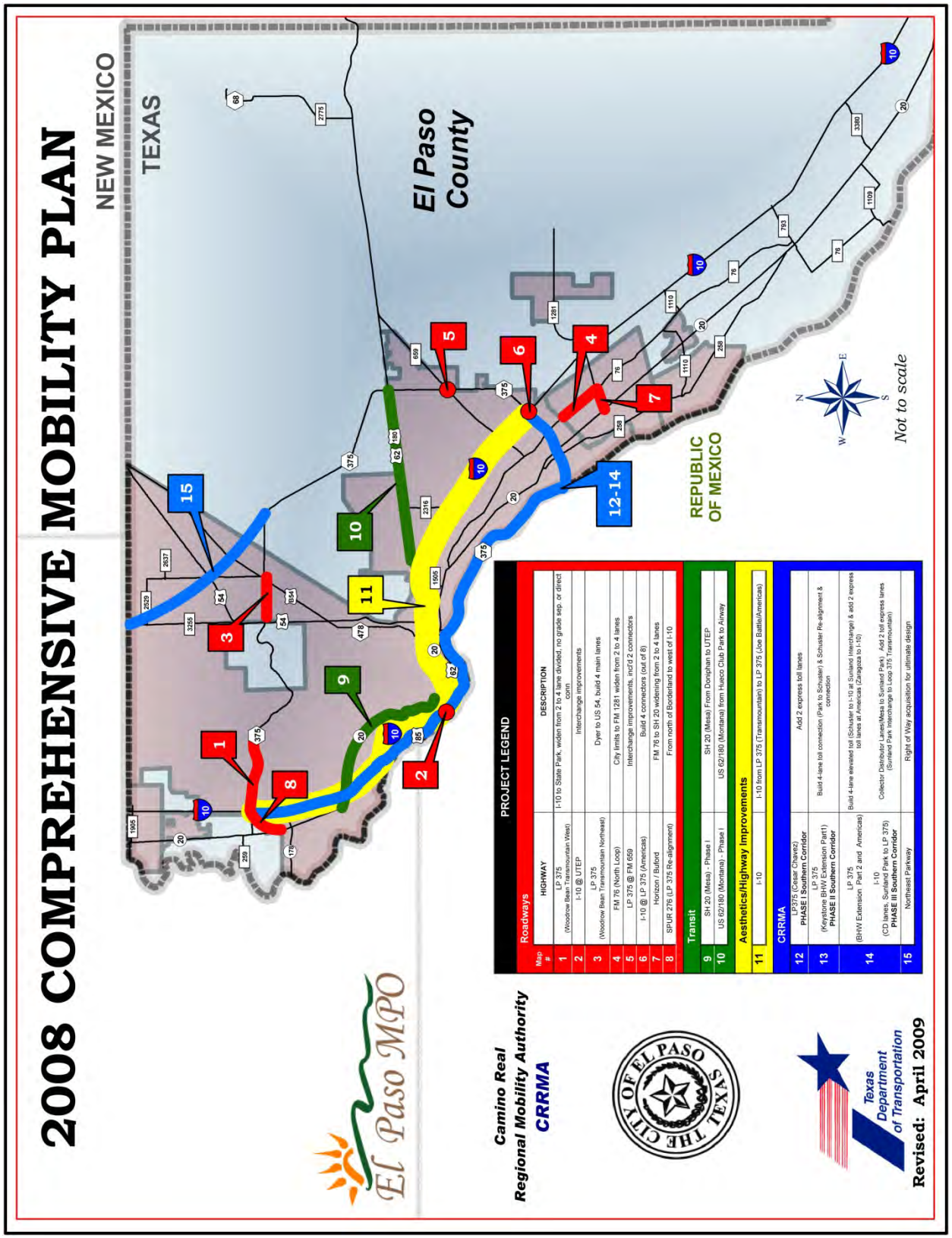
[27] ftp://ftp.dot.state.tx.us/pub/txdot-info/library/pubs/bus/open4biz/pass_through_finance_feb09.pdf. Accessed 11/3/2009.
[28] "Port of Miami Tunnel Reaches Financial Close." Business Monitor Online, 10/16/09.


2008 COMPREHENSIVE MOBILITY PLAN
NEW MEXICO
TEXAS
El Paso County
REPUBLIC OF MEXICO
Not to scale
PROJECT LEGEND
Roadways
Map #
HIGHWAY
DESCRIPTION
1 LP 375 (Woodrow Bean Transmountain West) I-10 to State Park, widen from 2 to 4 lane divided, no grade sep. or direct conn
2 I-10 @ UTEP Interchange improvements
3 LP 375 (Woodrow Bean Transmountain Northeast) Dyer to US 54, build 4 main lanes
4 FM 76 (North Loop) City limits to FM 1281 widen from 2 to 4 lanes
5 LP 375 @ FM 659 Interchange improvements, incl'd 2 connectors
6 I-10 @ LP 375 (Americas) Build 4 connectors (out of 8)
7 Horizon / Buford FM 76 to SH 20 widening from 2 to 4 lanes
8 SPUR 276 (LP 375 Re-alignment) From north of Borderland to west of I-10
Transit
9 SH 20 (Mesa) - Phase I SH 20 (Mesa) From Doniphan to UTEP
10 US 62/180 (Montana) - Phase I US 62/180 (Montana) from Hueco Club Park to Airway
Aesthetics/Highway Improvements
11 I-10 I-10 from LP 375 (Transmountain) to LP 375 (Joe Battle/Americas)
CRRMA
12 LP375 (Cesar Chavez) PHASE I Southern Corridor Add 2 express toll lanes
13 LP 375 (Keystone BHW Extension Part1) PHASE II Southern Corridor Build 4-lane toll connection (Park to Schuster) & Schuster Re-alignment & connection
14 LP 375 (BHW Extension Part 2 and Americas) I-10 (CD lanes, Sunland Park to LP 375) PHASE III Southern Corridor Build 4-lane elevated toll (Schuster to I-10 at Sunland Interchange) & add 2 express toll lanes at Americas (Zaragoza to I-10) Collector Distributor Lanes(Mesa to Sunland Park) - Add 2 toll express lanes (Sunland Park Interchange to Loop 375 Transmountain)
15 Northeast Parkway Right of Way acquisition for ultimate design
Camino Real Regional Mobility Authority
CRRMA
El Paso MPO
Texas Department of Transportation
Revised: April 2009

2008 Comprehensive Mobility Plan - Updated

JANUARY 2010 - DRAFT

El Paso District

UPDATES LEGEND:
- January-10
- November-09
- October-09
- April-09

(In Millions)

Roadways

CSJ	Map #	HIGHWAY	DESCRIPTION	Ready to Let Year	Constr Cost (YOE) Total Project Cost	Cat 1 Preventive Maint. & Rehab.	Cat 2 Metro Area Corridor Projects	Cat 5 CMAQ	Cat 7 STP Metro Mobility	Cat 10 Misc.	Cat 11 District Discr.	CBI Coord Border Infrastr	Estim. TRZ Bond	Estim. Toll Revenue Bond	ARRA TTC	ARRA MPO	Prop 14	Prop 12	Other TBD	Comments	Project Developer
2552-01-033	1	LP 375 (Woodrow Bean Transmountain West)	I-10 to State Park, widen from 2 to 4 lane divided. With grade separations at major streets, 2 direct connects and frontage roads.	2011	$80.0		$0.0					$0.0						$80.0		Pending approval TPB 1-2010 TPB 10-2-09	TxDOT
2121-02-123	2	I-10 @ UTEP	Interchange improvements	2010	$12.0		$0.0			$0.5		$11.5								TPB 10-2-09	TxDOT
2552-01-036	3	LP 375 (Woodrow Bean Transmountain Northeast)	Dyer to US 54, build 4 main lanes - Including interchange underpass at US 54	2011	$80.0		$60.0					$0.0	$20.0							TPB 4-3-09 TPB 10-2-09	CRRMA
0674-01-037	4	FM 76 (North Loop)	City limits to FM 1281 widen from 2 to 4 lanes	2011	$17.0	$8.0					$9.0										TxDOT
2552-03-034	5	LP 375 @ FM 659	Interchange improvements, incl'd 2 connectors	2011	$32.0		$17.0						$15.0								CRRMA
2121-04-065, etc.	6	I-10 @ LP 375 (Americas)	Build 2connectors (out of 8) Original CMP	2010	$50.0		$5.0					$15.0	$30.0		$0.0					TPB 4-3-09 TPB 10-2-09	CRRMA
2121-04-082			Build 2connectors (out of 8) ARRA Project	2010	$96.0										$75.0	$21.0				TPB 4-3-09 TPB 10-2-09	
8056-24-001, etc.	7	Horizon / Buford	FM 76 to SH 20 widening from 2 to 4 lanes	2012	$9.0	$2.0	$3.0		$4.0												TxDOT
0608-01-001	8	SPUR 276 (LP 375 Re-alignment)	From north of Borderland to west of I-10	2011	$27.0		$5.0		$16.0	$6.0									$0.0		TxDOT
				subtotal (1)	$403.0	$10.0	$90.0	$0.0	$20.0	$6.5	$9.0	$26.5	$65.0	$0.0	$75.0	$21.0	$0.0	$80.0	$0.0		

Transit

0001-02-054	9	SH 20 (Mesa) - Phase I	SH 20 (Mesa) From Doniphan to UTEP	2010	$25		$23	$2													City of El Paso
0374-02-089	10	US 62/180 (Montana) - Phase I	US 62/180 (Montana) from Hueco Club Park to Airway	2011	$2		$2	$0													City of El Paso
				subtotal	$27	$0	$25	$2	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0		

Aesthetics/Highway Improvements

2121-01-080	11	I-10	I-10 from LP 375 (Transmountain) to LP 375 (Joe Battle/Americas)	2010	$10		$5						$5								CRRMA
				subtotal	$10	$0	$5	$0	$0	$0	$0	$0	$5	$0	$0	$0	$0		$0		
			Non-Toll Projects Total (1)		$440.0	$10.0	$120.0	$2.0	$20.0	$6.5	$9.0	$26.5	$70.0	$0.0	$75.0	$21.0	$0.0	$80.0	$0.0		

CRRMA

		HIGHWAY	DESCRIPTION	Ready to Let Year	Total Project Cost	Cat 1 Preventive Maint. &	Cat 2 Metro Area	Cat 5 CMAQ	Cat 7 STP Metro Mobility	Cat 10 Misc.	Cat 11 District Discr.	CBI - Coord. Border	Estim. TRZ Bond	Estim. Toll Revenue	ARRA TTC	ARRA MPO	Prop 14		Other TBD	Comments	Project Developer
2552-04-029	12	**PHASE I Southern Corridor** LP375 (Cesar Chavez)	Add 2 express toll lanes	2011	$79					$5							$74			TPB 4-3-09	CRRMA
2552-04-027	13	**PHASE II Southern Corridor** LP 375 (Keystone BHW Extension Part1)	Build 4-lane toll connection (Park to Schuster)	TBD	$226		$151														CRRMA
2121-02-127 (Schuster)			Schuster Re-alignment with connection to I-10 and Loop 375																		
2552-04-900	14	**PHASE III Southern Corridor** LP 375 (BHW Extension Part 2 and Americas)	Build 4-lane elevated toll (Schuster to I-10 at Sunland Interchange) & add 2 express toll lanes at Americas (Zaragoza to I-10)	TBD	$426									$250					$281		CRRMA
2552-03-900																					
2121-02-901 (CDs)		I-10 (CD lanes Sunland Park to LP	Collector Distributor Lanes (Mesa to Sunland Park)																		
2121-01-062 2121-02-119			Add 2 toll express lanes (Sunland Park Interchange to Loop 375 Transmountain)																		
0924-06-136	15	Northeast Parkway	Right of Way acquisition for ultimate design	TBD	$30		$0							$0							CRRMA
				RMA Total	$761	$0	$151	$0	$0	$5	$0	$0	$0	$250	$75	$0	$74	$0	$281		

Note (1): Subtotals reflect sum of construction costs for some project and total project cost for others.

Appendix B: Cost Estimates

Project	Phase	Cost
12	Planning (EPMPO)	COMPLETED
	Preliminary Engineering	COMPLETED
	Environmental Analysis	COMPLETED
	Design-Build Procurement Costs	$800,000
	Final Design	$5,154,000
	Right-of-Way	NONE
	Utility Relocation	$3,223,157
	CE&I	$9,449,000
	RMA Costs	$859,000
	GEC Management and Oversight	$0*
	Public Marketing	$200,000
	Construction	$85,900,000
	Total	**$105,585,157**
13/14A	Planning (EPMPO)	$0**
	Preliminary Engineering	$0**
	Environmental Analysis	$0**
	Design-Build Procurement Costs	$800,000
	Final Design	$32,796,000
	Right-of-Way	$13,876,000
	Utility Relocation	$14,515,050
	CE&I	$60,126,000
	RMA Costs	$5,466,000
	GEC Management & Oversight	$0**
	Public Marketing	$100,000
	Construction	$546,600,000
	Total	**$674,279,050**
14B	Planning (EPMPO)	$0**
	Preliminary Engineering	$879,000
	Environmental Analysis	$72,000
	Design-Build Procurement Costs	$800,000
	Final Design	$1,758,000
	Right-of-Way	NONE
	Utility Relocation	$1,339,964
	CE&I	$3,223,000
	RMA Costs	$293,000
	GEC Management & Oversight	$293,000
	Public Marketing	$100,000
	Construction	29,300,000
	Total	**$38,057,964**

Project	Phase	Cost
14C Auxiliary Lanes	Planning (EPMPO)	COMPLETED
	Preliminary Engineering	$279,000
	Environmental Analysis	$72,000
	Design-Build Procurement Costs	$800,000
	Final Design	$558,000
	Right-of-Way	NONE
	Utility Relocation	$1,303,749
	CE&I	$1,023,000
	RMA Costs	$93,000
	GEC Management and Oversight	$93,000
	Public Marketing	$0***
	Construction	$9,300,000
	Total	**$13,521,749**
14C Collector Distributor	Planning (EPMPO)	$0**
	Preliminary Engineering	$0**
	Environmental Analysis	$0**
	Design-Build Procurement Costs	$800,000
	Final Design	$7,080,000
	Right-of-Way	$1,980,300
	Utility Relocation	$1,303,749
	CE&I	$12,980,000
	RMA Costs	$1,180,000
	GEC Management & Oversight	$0**
	Public Marketing	$0***
	Construction	$118,000,000
	Total	**$143,324,049**
14D	Planning (EPMPO)	$0**
	Preliminary Engineering	$0**
	Environmental Analysis	$0**
	Design-Build Procurement Costs	$800,000
	Final Design	$9,864,000
	Right-of-Way	NONE
	Utility Relocation	$2,752,359
	CE&I	$18,084,000
	RMA Costs	$1,644,000
	GEC Management & Oversight	$0**
	Public Marketing	$100,000
	Construction	$164,400,000
	Total	**$197,644,359**
15	Planning (EPMPO)	COMPLETED
	Preliminary Engineering	COMPLETED
	Environmental Analysis	$0**
	Design-Build Procurement Costs	$800,000
	Final Design	$10,344,000
	Right Of Way	$58,309,200
	Utility Relocation	$7,213,250
	CE&I	$18,964,000
	RMA Costs	$1,724,000
	GEC Management & Oversight	$0*
	Public Marketing	$100,000
	Construction	$172,400,000
	Total	**$269,854,450**

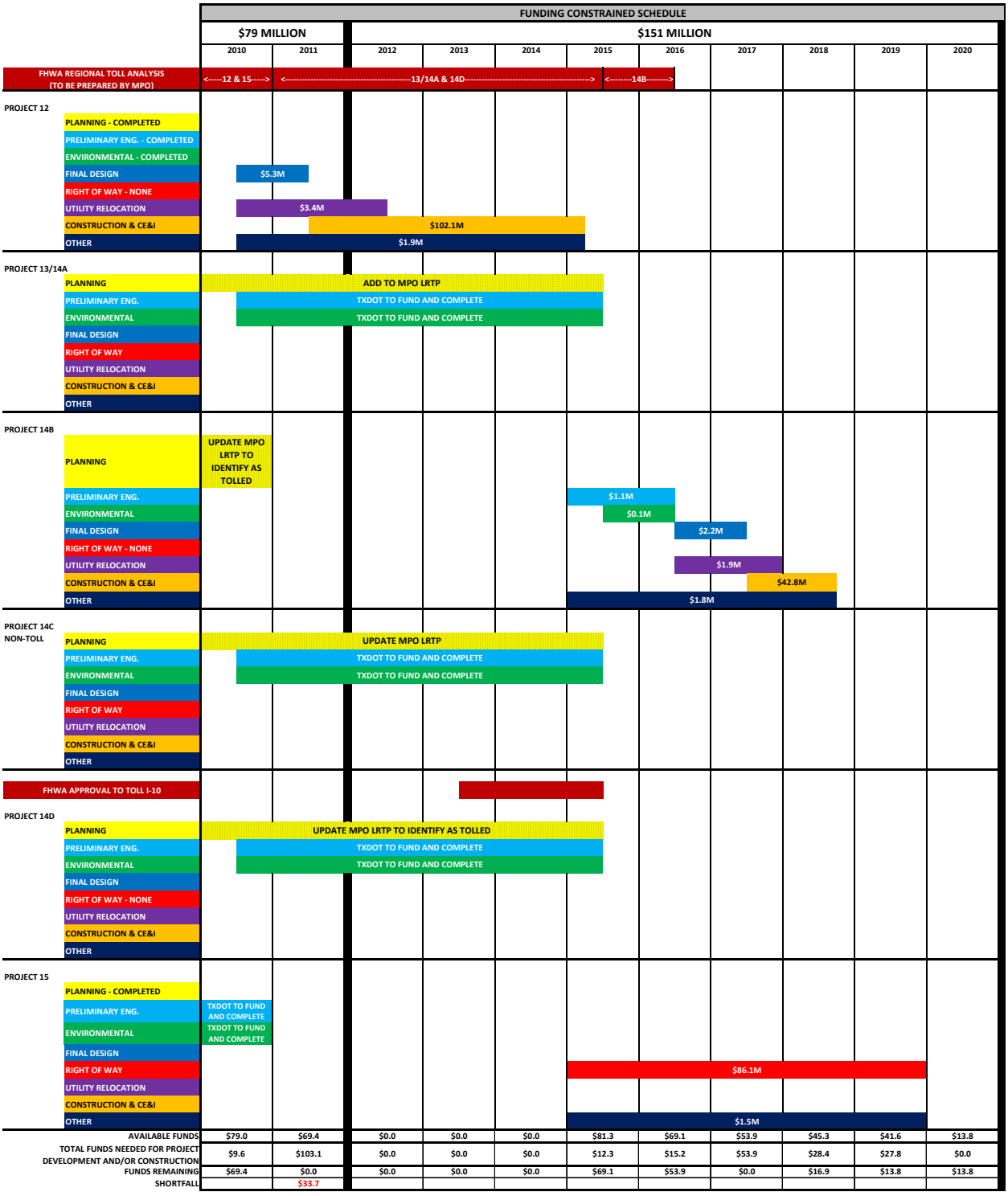
**Assumes Preliminary Engineering completed.*
***No CRRMA funds required to complete. Costs to be incurred by others*
****No marketing required, non-tolled facility.*

Appendix C: Schematics

These are included in the accompanying CD-ROM, “Appendix C – Schematics,” located inside the back cover.

Appendix D: Detailed Summary Schedules

SCENARIO 1: PROJECT 15 RIGHT-OF-WAY ACQUISITION
IDENTIFIED FUNDS



NOTES:
1. BASE COST ESTIMATES WERE PREPARED IN 2009 DOLLARS. SCHEDULE REPRESENTS INFLATED COSTS BASED ON YEAR ACTIVITY INCURRED. ANNUAL INFLATION RATES USED TO ESTIMATE FUTURE COSTS ARE AS FOLLOWS: 5% FOR RIGHT-OF-WAY AND UTILITIES AND 3.5% FOR ALL OTHERS (I.E. PRELIMINARY ENGINEERING, ENVIRONMENTAL, FINAL DESIGN, CONSTRUCTION, ETC.).
2. OTHER COSTS INCLUDE PROCUREMENT COSTS, RMA COSTS, PUBLIC MARKETING COSTS & GEC MANAGEMENT & OVERSIGHT COSTS. OTHER COSTS ARE SPREAD OUT OVER THE LIFE OF THE PROJECT.
3. PROJECT 12 SCHEDULE AND ESTIMATE INCLUDES CONSTRUCTION OF MANAGED LANES AND RESURFACING OF GENERAL USE LANES.

CAN OCCUR ANYTIME PRIOR TO COMPLETION OF ENVIRONMENTAL DOCUMENT. NO CRRMA FUNDS REQUIRED TO COMPLETE.

SCENARIO 2: PROJECT 14C (AUXILIARY LANES) DEVELOPMENT & PROJECT 15 RIGHT-OF-WAY ACQUISITION
IDENTIFIED FUNDS

FUNDING CONSTRAINED SCHEDULE

	$79 MILLION		$151 MILLION								
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
FHWA REGIONAL TOLL ANALYSIS (TO BE PREPARED BY MPO)	<-----12 & 15----->	<----------13/14A & 14D---------->				<-------14B-------->					
PROJECT 12											
PLANNING - COMPLETED											
PRELIMINARY ENG. - COMPLETED											
ENVIRONMENTAL - COMPLETED											
FINAL DESIGN	$5.3M										
RIGHT OF WAY - NONE											
UTILITY RELOCATION	$3.4M										
CONSTRUCTION & CE&I	$102.1M										
OTHER	$1.9M										
PROJECT 13/14A											
PLANNING	ADD TO MPO LRTP										
PRELIMINARY ENG.	TXDOT TO FUND AND COMPLETE										
ENVIRONMENTAL	TXDOT TO FUND AND COMPLETE										
FINAL DESIGN											
RIGHT OF WAY											
UTILITY RELOCATION											
CONSTRUCTION & CE&I											
OTHER											
PROJECT 14B											
PLANNING	UPDATE MPO LRTP TO IDENTIFY AS TOLLED										
PRELIMINARY ENG.						$1.0M					
ENVIRONMENTAL						$0.1M					
FINAL DESIGN							$2.2M				
RIGHT OF WAY - NONE											
UTILITY RELOCATION								$1.9M			
CONSTRUCTION & CE&I									$42.8M		
OTHER						$1.8M					
PROJECT 14C NON-TOLL											
PLANNING	UPDATE MPO LRTP										
PRELIMINARY ENG.						$0.3M					
ENVIRONMENTAL						$0.1M					
FINAL DESIGN							$0.7M				
RIGHT OF WAY											
UTILITY RELOCATION							$1.8M				
CONSTRUCTION & CE&I									$13.5M		
OTHER						$1.2M					
FHWA APPROVAL TO TOLL I-10											
PROJECT 14D											
PLANNING	UPDATE MPO LRTP TO IDENTIFY AS TOLLED										
PRELIMINARY ENG.	TXDOT TO FUND AND COMPLETE										
ENVIRONMENTAL	TXDOT TO FUND AND COMPLETE										
FINAL DESIGN											
RIGHT OF WAY - NONE											
UTILITY RELOCATION											
CONSTRUCTION & CE&I											
OTHER											
PROJECT 15											
PLANNING - COMPLETED											
PRELIMINARY ENG.	TXDOT TO FUND AND COMPLETE										
ENVIRONMENTAL	TXDOT TO FUND AND COMPLETE										
FINAL DESIGN											
RIGHT OF WAY								$90.5M			
UTILITY RELOCATION											
CONSTRUCTION & CE&I											
OTHER									$1.2M		
FUNDS AVAILABLE	$79.0	$69.4	$0.0	$0.0	$0.0	$81.3	$79.0	$71.6	$45.3	$24.8	$0.0
TOTAL FUNDS NEEDED FOR PROJECT DEVELOPMENT AND/OR CONSTRUCTION	$9.6	$103.1	$0.0	$0.0	$0.0	$2.4	$7.4	$71.6	$45.3	$32.7	$0.0
FUNDS REMAINING	$69.4	$0.0	$0.0	$0.0	$0.0	$79.0	$71.6	$0.0	$0.0	$0.0	$0.0
SHORTFALL		$33.7								$7.9	$7.9

NOTES:
1. BASE COST ESTIMATES WERE PREPARED IN 2009 DOLLARS. SCHEDULE REPRESENTS INFLATED COSTS BASED ON YEAR ACTIVITY INCURRED. ANNUAL INFLATION RATES USED TO ESTIMATE FUTURE COSTS ARE AS FOLLOWS: 5% FOR RIGHT-OF-WAY AND UTILITIES AND 3.5% FOR ALL OTHERS (I.E. PRELIMINARY ENGINEERING, ENVIRONMENTAL, FINAL DESIGN, CONSTRUCTION, ETC.).
2. OTHER COSTS INCLUDE PROCUREMENT COSTS, RMA COSTS, PUBLIC MARKETING COSTS & GEC MANAGEMENT & OVERSIGHT COSTS. OTHER COSTS ARE SPREAD OUT OVER THE LIFE OF THE PROJECT.
3. PROJECT 12 SCHEDULE AND ESTIMATE INCLUDES CONSTRUCTION OF MANAGED LANES AND RESURFACING OF GENERAL USE LANES.

CAN OCCUR ANYTIME PRIOR TO COMPLETION OF ENVIRONMENTAL DOCUMENT. NO CRRMA FUNDS REQUIRED TO COMPLETE.