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Table of Contents

List of Exhibits.....	iv
List of Abbreviations	vii
Executive Summary	x
Chapter 1 Introduction	1
Chapter 2 Development Plan.....	3
Chapter 3 Environmental Considerations.....	69
Chapter 4 Maintenance and Operations Plan	123
Chapter 5 Benefit Cost Analysis.....	129
Chapter 6 Finance Plan	137
Chapter 7 Risk Assessment.....	167
Appendix A – Expansion Section and Relief Route Information Sheets	
Appendix B – Supporting Technical Analysis	

List of Exhibits

Exhibit 2.1-1 Ports to Plains Corridor	4
Exhibit 2.1-2 Existing Traffic Volumes, Volume to Capacity Ratios (V/C), and Level of Service (LOS)	8
Exhibit 2.1-3 Travel Time Results (Existing Conditions).....	9
Exhibit 2.1-4 Traffic Model Summary Results	11
Exhibit 2.1-5 Existing 2-Lane Section Accident Rates	12
Exhibit 2.1-6 Existing 4-Lane Section Accident Rates	13
Exhibit 2.1-7 Average Accident Rates for 2-Lane and 4-Lane Roadway.....	13
Exhibit 2.1-8 Urban Accident Rates on Existing Corridor Roadway Facilities	14
Exhibit 2.1-9 Criteria Definition of "Improved" Corridor.....	16
Exhibit 2.1-10 Corridor Typical Sections (Rural Areas).....	17
Exhibit 2.2-1 Existing Intermodal Airport Facilities	25
Exhibit 2.2-2 South Corridor Signing Plan.....	28
Exhibit 2.2-3 North Corridor Signing Plan	29
Exhibit 2.2-4 Rest Areas.....	31
Exhibit 2.2-5 Border Crossing Traffic	33
Exhibit 2.2-6 Existing Border Crossing Locations – Laredo.....	33
Exhibit 2.2-6 Existing Border Crossing Locations – Eagle Pass.....	34
Exhibit 2.2-6 Existing Border Crossing Locations – Del Rio	34
Exhibit 2.3-1 Market Packages selected in the Oklahoma Statewide ITS Architecture.....	40
Exhibit 2.3-2 High Priority Market Packages in Texas Regional ITS Architectures	41
Exhibit 2.3-3 Highly Rated Functionality Statement	44
Exhibit 2.3-4 Recommended ITS Market Packages	45
Exhibit 2.3-5 Recommended Ports to Plains ITS Projects.....	47
Exhibit 2.3-6 Relationship Between Projects and Market Packages	48
Exhibit 2.3-7 Annual Capital Costs of Recommended ITS Projects	56
Exhibit 2.3-8 Annual Operations and Maintenance Costs of Recommended ITS Projects	57
Exhibit 2.4-1 Expansion Sections Total Costs	60
Exhibit 2.4-2 Relief Routes Total Costs	61
Exhibit 2.4-3 Group 1 and Group 2 Structures	61
Exhibit 2.4-4 Expansion Section Prioritization	63
Exhibit 2.4-5 Relief Route Prioritization.....	64
Exhibit 2.4-6 Corridor Improvement Implementation Plan	65
Exhibit 3.2-1A South Watersheds and Major Rivers.....	74
Exhibit 3.2-1B North Watersheds and Major River	77
Exhibit 3.2-2 Sections and Relief Routes with Special Status Rivers and Streams.....	75

List of Exhibits (continued)

Exhibit 3.2-3 Sections and Relief Routes with a High Potential for Wetland Impacts80

Exhibit 3.2-4 Sections that Cross FEMA-Mapped Floodplains.....83

Exhibit 3.2-5 Sections and Relief Routes with Significant Riparian Areas.....85

Exhibit 3.2-6 Sections and Relief Routes with High Potential for Impacting Protected Species88

Exhibit 3.2-7 Sections and Relief Routes with Known or Potential Archaeological Resources.....93

Exhibit 3.2-8 Sections and Relief Routes with Known or Potential Historical Resources.....94

Exhibit 3.2-9 Sections and Relief Routes with Known or Potential Paleontological Resources97

Exhibit 3.2-10 Sections and Relief Routes with Potential for Noise Impacts 100

Exhibit 3.2-11 Sections and Relief Routes with Potential for Environmental Justice Impacts 102

Exhibit 3.2-12 Sections and Relief Routes with Potential Relocations..... 104

Exhibit 3.2.13 Relief Routes with Potential Cumulative Impacts 107

Exhibit 3.2-14 Sections with Public Lands that May Be Impacted..... 109

Exhibit 3.2-15 Sections and Relief Routes with Irrigated Farmland..... 111

Exhibit 3.2-16 Sections and Relief Routes with Known or Potential Hazardous Materials 113

Exhibit 3.4-1 Environmental Considerations Summary Table..... 118

Exhibit 4.3-1 Preventive Maintenance of Asphalt Concrete Pavement (ACP) 125

Exhibit 4.3-2 Routine Maintenance Total Costs Comparisons 125

Exhibit 4.3-3 Total Preventive Maintenance Costs 126

Exhibit 4.3-4 ITS Maintenance Costs..... 127

Exhibit 4.3-5 Total Combined Maintenance Costs 127

Exhibit 5.1-1 Project Costs..... 129

Exhibit 5.2-1 Benefits from Crash Reduction..... 130

Exhibit 5.2-2 Summary of Transportation User Benefits 131

Exhibit 5.3-1 Total Employment Benefits in the Corridor Counties 134

Exhibit 5.3-2 Total Employment Benefits in all Counties in the States..... 135

Exhibit 5.3-3 Summary of Economic Development Benefits 136

Exhibit 6.1-1 Federal-Aid Highway Program Apportionments by State 139

Exhibit 6.1-2 State Highway Program Receipts and Disbursement 140

Exhibit 6.2-1 Designated Funds for Specific CORBOR Projects and Activities 144

Exhibit 6.3-1 Case Study Projects..... 149

Exhibit 6.3-2 Summary of Alternative Finance Approaches Used by Case Study Projects 150

Exhibit 6.3-3 Key Features Underlying Use of Alternative Finance Methods by Representative
 Highway Expansion Projects 151

Exhibit 6.4-1 Distribution of Program Capital Costs by Phase by State Base 153

List of Exhibits (continued)

Exhibit 6.4-2 State Funding Programs for Committed and All Other Projects.....	154
Exhibit 6.4-3 Total Program Costs by State	157
Exhibit 6.4-4 Federal Earmarks for Ports to Plains Corridor Segments Proposed in TEA-LU	158
Exhibit 6.4-5 Summary of Key Assumptions for Finance Scenario.....	160
Exhibit 6.5-1 Illustrative Distribution of Program Funding Sources by Scenario	161
Exhibit 6.5-2 Total Uses of Funds.....	163
Exhibit 6.5-3 Annual Uses of Funds.....	164
Exhibit 7.1-1 Risk Assessment Matrix.....	168
Exhibit 7.2-1 Financial Risk Summary, Expansion Sections.....	171
Exhibit 7.2-2 Financial Risk Summary, Relief Routes	172
Exhibit 7.2-3 Environmental Risk Summary, Expansion Sections.....	177
Exhibit 7.2-4 Environmental Risk Summary, Relief Routes.....	178
Exhibit 7.2-5 Specific Local Response to Relief Routes.....	181
Exhibit 7.2-6 General Questionnaire Response by Category.....	182
Exhibit 7.2-7 Local, State, and Federal Government Participation at Public Meetings.....	183
Exhibit 7.2-8 Regional, State, and Federal Government Representation.....	184

List of Abbreviations

SEP15	Special Experimental Program 15
AADT	Average Annual Daily Traffic
AASHTO	American Association of State Highway and Transportation Officials
ACE	Automated Commercial Environment
ACP	Asphalt Concrete Pavement
ASTM	American Society for Testing and Materials
AVL	Automated Vehicle Location
B/C	Benefit Cost Ratio
BANs	Bond Anticipation Notes
BEA	Bureau of Economic Analysis
BLM	Bureau of Land Management
BNRR	Burlington Northern Railroad
CAD	Computer Aided Dispatch
CAPUFE	Caminos y Puentes Federales de Ingresos y Servicios Conexos
CBP	Customs and Borders Protection
CCTV	Closed Circuit TV
CDMP	Corridor Development and Management Plan
CDOT	Colorado Department of Transportation
CE	Categorical Exclusion
CERCLIS	Comprehensive Environmental Response, Compensation & Liability Information System
CMAQ	Congestion Mitigation and Air Quality Improvement
CORBOR	National Corridor and Border Program
CPI	Consumer Price Index
CSI	Container Security Initiative
CTE	Colorado Tolling Enterprise
C-TPAT	Customs-Trade Partnership Against Terrorism
CV	Commercial Vehicle
CVISN	Commercial Vehicle Information Systems and Networks
CVO	Commercial Vehicle Operations
DMS	Dynamic Message Sign
DOT	Department of Transportation
E9-1-1	Emergency 9-1-1
EA	Environmental Assessment
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
ESA	Environmental Site Assessment
EO	Environmental Overview
ETC	Electronic Toll Collection
FAST	Free and Secure Trade
FCC	Federal Communications Commission
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FM	Farm to Market
FONSI	Finding of No Significant Impact
GARVEE	Growth Anticipation Revenue Vehicles
GIS	Geographic Information Systems
GRIP	Governor Richardson's Investment Partnership
HAR	Highway Advisory Radio
HAZMAT	HAZardous MATerial(s)
HB	House Bill
HBRR	Highway Bridge Replacement and Rehabilitation

List of Abbreviations (continued)

HMVM	100 Million Vehicle Miles
HTF	Highway Trust Fund
I-	Interstate Highway
ISTEA	Intermodal Surface Transportation Equity Act
ITS	Intelligent Transportation Systems
LPST	Leaking Petroleum Storage Tank
LUST	Leaking Underground Storage Tank
M&O	Maintenance and Operations
MPO	Metropolitan Planning Organization
MOU	Memoranda of Agreement
NAAQS	National Ambient Air Quality Standards
NAFTA	North American Free Trade Act
NBI	Nation Bridge Inventory
NEPA	National Environmental Policy Act
NHS	National Highway System
NHPA	National Historic Preservation Act
NLCD	National Land Cover Data Set
NMDOT	New Mexico Department of Transportation
NNL	National Natural Lands
NOAA	National Oceanic and Atmospheric Administration
NPV	Net Present Value
NRCS	National Resource Conservation Services
NRHP	National Register of Historic Properties
NWI	National Wetland Inventory
O&M	Operations and Maintenance
ODOT	Oklahoma Department of Transportation
OMB	Office of Management and Budget
PABs	Private Activity Bonds
PDO	Property Damage Only
RIMS	Regional Industrial Multiplier System
ROD	Record of Decision
ROW	Right-Of-Way
RWIS	Road Weather Information Systems
RV	Recreational Vehicle
SAFETEA	Safe, Accountable, Flexible and Efficient Transportation Equity Act
SB	Senate Bill
SEP	Special Experimental Program
SH	State Highway
SHPO	State Historic Preservation Office
SIBs	State Infrastructure Banks
SREP	Southern Rockies Ecosystem Project
STIP	Statewide Transportation Improvement Program
STP	Surface Transportation Program
TEA 21	Transportation Equity Act of the 21st Century
TEA-LU	Transportation Equity Act: A Legacy of Users
TIFIA	Transportation Infrastructure Finance and Innovation Act
TIP	Transportation Improvement Program
TMC	Traffic Management Center
TNRCC	Texas Natural Resources Conservation Commission
TPWD	Texas Parks & Wildlife Department
TRANS	Transportation Revenue Anticipation Notes
TRB	Transportation Research Board
TxDOT	Texas Department of Transportation

List of Abbreviations (continued)

U.S. or US	United States
USACE	U.S. Army Corps of Engineers
USFS	United States Forest Service
USFWS	United States Fish & Wildlife Service
USGS	United States Geological Survey
VHT	Vehicle Hours Traveled
VMS	Variable Message Sign
VMT	Vehicle Miles Traveled
WASHITO	Western Association of State Highway and Transportation Officials
WIM	Weigh-in Motion
WWW	World Wide Web

Executive Summary

The Departments of Transportation from Colorado, Texas, New Mexico, and Oklahoma developed this Corridor Development and Management Plan (CDMP) for the Ports to Plains Corridor. The CDMP outlines a series of priorities and steps to improve the corridor and serves as an essential tool for securing federal funding for corridor development.

The Plan

This CDMP was developed to enhance the efficiency of the Ports to Plains Corridor. It contains several elements that improve the transportation network's ability to move people and goods. Nearly 1,400 miles long, the corridor consists of 511 miles of 4- to 6-lane roadway, 755 miles of 2-lane roadway, and 113 miles of roadway in metropolitan areas. The Ports to Plains Corridor includes the following construction elements:

- Widening 755 miles of 2-lane roads to 4-lane divided roads;
- Constructing 15 relief routes around larger towns;
- Adding amenities needed by commercial vehicle operators;
- Improving or constructing connective interchanges;
- Improving or constructing overpasses for railroad crossings;
- Replacing obsolete or deficient bridges;
- Installing corridor-specific signs; and
- Integrating an intelligent transportation system.

This plan allows staged implementation of the construction elements, using a prioritization process that first ranked projects based on engineering considerations (such as safety and efficiency), then adjusted the scheduled implementation to fit existing planning on the corridor and reasonable funding and construction times. Capital improvement projects were assigned to one of four priority groups: Group A (first five years), Group B (second five years), and so on.

The total costs associated with this investment include both the capital expenditure to improve the roadway and the operations and maintenance spending that will occur once the roadway improvements are completed. These costs, expressed in millions of 2004 dollars are summarized below. The costs also are shown discounted at 7.0 percent following Office of Management and Budget (OMB) guideline for investment appraisal.

Corridor Development Plan: Study Recommendations



Existing (2004)



Group-A (2005-2010)

1. The corridor Development Plan shown is part of the Ports to Plains Corridor Development and Management Plan, and is not necessarily an indication of State DOT programmed projects.
2. Relief Route construction may include initial 2-lane facilities, followed by 4-lane construction by corridor completion.

Corridor Development Plan: Study Recommendations



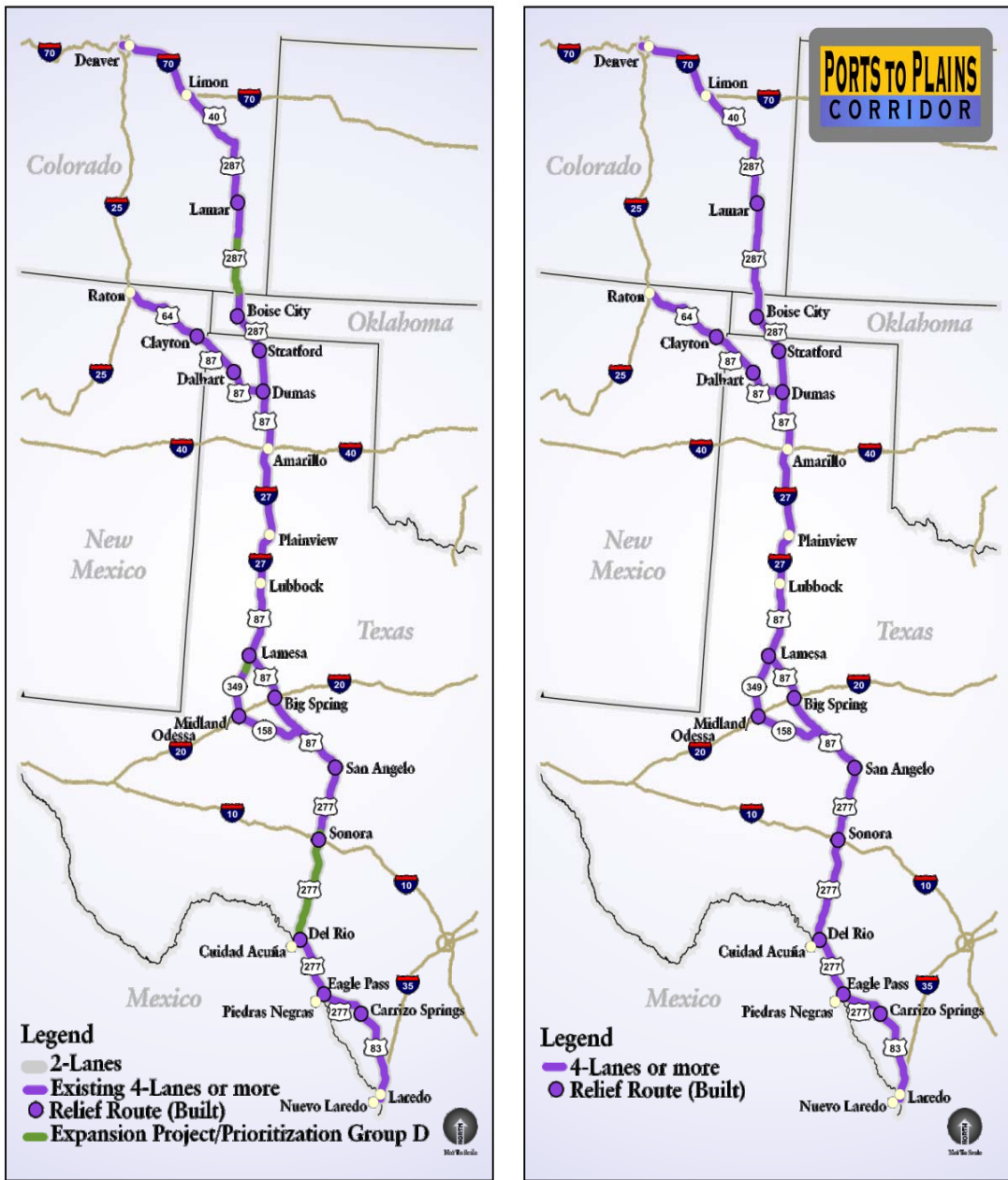
Group-B (2011-2015)



Group-C (2016-2020)

1. The corridor Development Plan shown is part of the Ports to Plains Corridor Development and Management Plan, and is not necessarily an indication of State DOT programmed projects.
2. Relief Route construction may include initial 2-lane facilities, followed by 4-lane construction by corridor completion.

Corridor Development Plan: Study Recommendation



Group-D (2021-2025)

Complete

1. The corridor Development Plan shown is part of the Ports to Plains Corridor Development and Management Plan, and is not necessarily an indication of State DOT programmed projects.
2. Relief Route construction may include initial 2-lane facilities, followed by 4-lane construction by corridor completion.

Project Costs

	Costs (Millions of 2004 Dollars)	Costs (Millions of 2004 Dollars @ 7.0%)
Colorado	\$610.2	\$303.1
New Mexico	\$173.7	\$98.7
Oklahoma	\$177.0	\$107.1
Texas	\$1,908.7	\$929.6
Total	\$2,869.5	\$1,438.5

Both routine and preventive maintenance actions are analyzed to identify the different needs, challenges, and problems arising along the corridor. The Maintenance and Operations (M&O) plan identifies actions that can be taken to address these different challenges. The cost of maintaining and operating the existing corridor over the next 20 years is estimated at over \$1 billion. The net cost of M&O for the improvements is \$143 million.

Included in this CDMP is an Intelligent Transportation System (ITS) Plan that recommends a series of projects for intended to complement the four states' existing ITS activities. The projects are divided into the following subgroups:

- Traffic Management Projects (upgrades to signal and school zone flasher systems)
- Commercial Vehicle Operations (CVO) Projects (weigh/inspection station improvements, automated truck inspections, and fleet permitting and registration)
- Emergency/Incident Management Projects (agreements among government agencies, promotion of tower sites for expanded cell phone service, and oversized mile markers)
- Traveler Information Systems Projects (message signs and 511 system upgrades)
- Maintenance and Construction Management System Projects (road weather information and work zone construction safety systems)
- Operational Support Project (additional staff support at transportation management centers)
- Projects Funded by Other Organizations (projects funded by private trucking companies and other organizations)

The ITS Plan identifies a total of \$32 million in capital costs and \$57 million in ITS M&O costs.

The Benefits

The economic value of transportation benefits are summarized in the following exhibit.

Summary of Transportation User Benefits

User Benefit	Benefits (Millions of 2004 Dollars)	Benefits (Millions of 2004 Dollars @ 7%)
Safety	\$381.2	\$114.3
Vehicle Travel Time	\$541.9	\$151.5
Vehicle Operation Cost	-\$11.1	-\$3.1
Total	\$912.0	\$262.7

The benefits are expressed in millions of 2004 dollars at a 7.0 percent discount rate. The numbers reflect the sum of benefits from 2011 to 2030.

Comparing the total of discounted transportation benefits in the Exhibit to the total project costs yields a Benefit Cost Ratio of 0.18. The conclusion, based on this ratio, is that the project is not justified based on American Association of State Highway and Transportation Officials (AASHTO) Red Book criteria to evaluate highway investments. Of note, however, AASHTO criteria for Benefit Cost Analysis do NOT address economic benefits associated with highway improvements. The economic benefits projected to occur if the corridor improvements are identified in the following exhibit.

Summary of Economic Benefits

Benefit Category	Jobs	Total Income 2006-2030 (Millions 2004 \$ @ 7%)
Construction (person years)	1,700	\$28
Distribution & Some Manufacturing (2030)	39,600	\$4,258
Roadside Services (2030)	2,000	\$216
Tourism (2030)	300	\$27
Total	43,600	\$4,529

The Ports to Plains Corridor does not meet the project feasibility test based on transportation benefits and costs alone. The project is motivated more by the economic development prospects that it affords than by transportation benefits. The economic analysis has identified four potential sources of economic benefits. If all sources came to fruition, the total economic benefits measured by income to residents would exceed the project cost by a ratio of 3.15.

Finance Plan

Financing for the Ports to Plains Corridor will require new traditional and alternative funding sources. Of the \$2.87 billion in identified projects, federal and state funds totaling \$331 million are currently committed. This leaves more than \$2.5 billion in new funds that will be needed over the next 20 years. An overall capital structure schedule was developed using the four different priority groupings broken down by state.

The Finance Plan considered the following traditional funding sources:

- Federal highway program funds from motor fuel and vehicle-related tax revenues for facility development, expansion, rehabilitation, and preservation;
- Special Federal highway programs, including earmarks, discretionary grants, and demonstration funding;
- State highway program funds for capital, maintenance, operations, and preservation; and
- Local matching funds.

These traditional funding sources are struggling to keep pace with growing transportation needs and do not appear to be sufficient to meet the identified capital and M&O needs. Thus, the following alternative sources are necessary to finance this corridor.

- Federal earmarks;
- Special state programs;
- Local government contributions from general or special taxes and/or fees;
- Right-of-way donations;
- Sharing of bridge toll revenue;

- Railroad participation in grade separation projects;
- State Infrastructure Banks or federal loans and credit supports;
- Utility easement revenues;
- Grant anticipation bonds; and
- Tolls (direct and/or indirect).

Potential Risks

The risk assessment process evaluated factors that may affect project development. Four areas of focus were used to evaluate the level of risk in financial, environmental, social, and political arenas. The evaluation was conducted by using a variety of inputs, including applicability of potential and traditional funding sources; inventories of environmental sensitivities; surveys distributed at public meetings and through a web site; interviews and personal interactions with community leaders and residents; and research into the political setting surrounding the corridor.

The result of the assessment is a summary of distinguishable opportunities that have created or could create momentum, and an assessment of any sensitive issues that could impede CDMP implementation. Where possible, action is prescribed that can help maintain momentum and manage potential risks.

Potential political risks for the Ports to Plains Corridor were not readily evident. In fact, strong support for this corridor was documented from all public sector perspectives- local, state, and federal. The same level of support is generally evident from a social perspective as well.

Communities, businesses, trucking associations, and interested members of the public also offered strong support for the CDMP. Observed and identified social risks were limited to discrete locations such as relief routes, and the potential negative impact to the regions of the states where traffic will divert from and to the Ports to Plains Corridor. However, the level and occurrence of this latter type of risk was very limited, and certainly insufficient to offset the overall support for the CDMP. And these types of social risks are not uncommon for this type of corridor.

From the evaluations, failure to acquire funding for the corridor presents the greatest potential risk to completing the CDMP within a 25-year time frame. Absent a long-term commitment of federal dollars, completion of the trade corridor faces a significant financial risk.