Overview

18,000 ACRES, MASTER PLANNED – 35,000 JOBS
CONVENIENT LOCATION

Centrally located in the Metroplex

- **20 minutes** north of downtown Fort Worth
- **20 minutes** south of Denton
- **15 – 20 minutes** northwest of DFW Airport
- **35 – 40 minutes** northwest of downtown Dallas
DEVELOPMENT STATISTICS

- $8 billion invested
- $50.62 billion economic impact
- 33.9 million+ SF developed
- 362 corporate residents
- 65 companies listed on the Fortune 500, Global 500 or Forbes’ Top List of Private Firms
- 37,000+ employees
- Fastest growing area of the nation’s fastest growing metropolitan city (500,000+)
- Population of 1.5 million within 15 miles of Fort Worth Alliance Airport
17.1 MILLION SQUARE FEET DEVELOPED - 13,565 JOBS
Strategic Advantages

Alliance Center

3.6 MILLION SQUARE FEET DEVELOPED - 6,166 JOBS

American Airlines
FedEx
LG Electronics
Patterson Dental Supply, Inc.
Nokia Siemens Networks
RECARO
TAESL
Texas Instruments
Tarrant County College
ATX Air Services
Embry-Riddle Aeronautical University
Bell Helicopter
A Textron Company
DynCorp International
Hillwood
Hillwood Energy
Galderma
Mercedes-Benz Financial Services
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<tr>
<th>INDUSTRY CLUSTERS</th>
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<td><strong>Logistics</strong></td>
<td>BNSF Railway</td>
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<td>DB Schenker</td>
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<td>Nestle</td>
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Strategic Advantages

ALLIANCE GLOBAL LOGISTICS HUB

MULTI-MODAL TRANSPORTATION

- BNSF Railway’s Alliance Intermodal Facility
- BNSF & UP Class I Rail Lines
- Interstate Highway 35W
- Texas Highways 114 and 170
- Fort Worth Alliance Airport
- FedEx Regional Sort Hub
- U.S. Customs & Border Protection – clearance and security
- Centralized Examination Station
Strategic Advantages

ECONOMIC BENEFITS

FOREIGN-TRADE ZONE #196

- 9,600 acres at AllianceTexas
- Ranked #1 GP FTZ in the U.S. (dollar volume of foreign product)
- FTZ analysis performed

TRIPLE FREEPORT INVENTORY TAX EXEMPTION

- Inventory held in Texas for 175 days does not pay inventory tax to taxing authorities
LABOR FORCE – DEMOGRAPHIC STUDY FROM 2000 - 2010

LABOR STATISTICS INSIDE ALLIANCETEXAS

- Total population increase: 114% (more than doubled to 210,000; 1.5 million within 15 miles)
- Increase in 18 yrs+ age group: 115% (143,000)
- 93.4% of population hold at least a high school diploma
- When compared as a city, AllianceTexas ranks the 5th fastest growing in the nation

Access to workforce of 3 million in the DFW Metroplex
DFW Airport Overview
DFW Airport is the only airport in the world able to simultaneously accommodate a combination of seven takeoffs and landings.

- 24-hour Operations
- No Slot Constraints
- No Curfews
- 7 Runways
- 3 Control Towers
- 12 Landing Approaches
- 5 Terminals
- 174 Total Gates
DFW Airport

- $31.6 billion economic impact on the region
- Cargo activity accounting for $16.7 billion
- 4th busiest in operations in the world
- Only airport to land 4 aircraft simultaneously
- 60 million annual passengers
- Home to the world’s largest airline
- 58 international destinations
- National and global gateway
DFW Enjoys Extensive Freighter Service Throughout the World

Scheduled International Freighter Services at DFW
February 2014
American’s Rapid Expansion in Latin America and Asia Provides Tremendous Belly Capacity at DFW

American Airlines Existing and Announced Nonstop Routes from DFW, and Possible Future Destinations

January 2014

Source: Official Airline Schedules, January 2014, [www.diio.net](http://www.diio.net/)
American Airlines’ Wide-body Belly Capacity at DFW

- London Heathrow
- Madrid
- Frankfurt
- Paris
- Seoul Incheon
- Tokyo Narita
- Shanghai PuDong
- Hong Kong
- Sao Paulo
- Rio De Janeiro
- Santiago
- Buenos Aires
- Lima
Other Airlines Offering Wide-body Belly Capacity at DFW

- **Qantas**: Brisbane and Sydney (daily)
- **Korean Air**: Seoul Incheon (daily)
- **Emirates Airlines**: Dubai (daily)
- **British Airways**: London (daily)
- **Lufthansa**: Frankfurt (daily)
- **Qatar Airways**: Doha (daily – beginning July 2014)
- **Etihad Airways**: Abu Dhabi (3x/week – beginning December 2014)
Dallas-Fort Worth: Trade by Region

Europe
Total $10.0 B
95%
5%

Canada and Mexico
Total $3.9 B
29%
71%

Asia
Total $38.7 B
76%
24%

Latin America and Caribbean (Excluding Mexico)
Total $865.5 M
75%
25%

Source: WiserTrade, US Census Foreign Trade Division
With Sufficient Freight Capacity, DFW is Focused on Driving Demand and Developing a Global Logistics Hub

- Market demand-driven facilities and strategic planning
  - We’re not building in the hope that they come; we’re facilitating growth as it comes

- Focus on organic growth by current freight forwarder partners
  - Expansion of branch operations to multi-modal gateway operations

- Attracting new freight forwarder partners
  - Sector-specific forwarders (e.g., perishables, pharmaceuticals)
  - Forwarders in need of geographic coverage (e.g., “center of Sun Belt”)

- Leveraging DFW’s strategic logistics advantages
  - “We’re half-way to everywhere”
  - Texas and Sun Belt economic growth is driving explosive global trade
  - Re-shoring positions DFW perfectly as Asia-Mexico freight gateway
  - AA’s growing Latin America-Asia gateway stimulates belly cargo growth
DFW Land Use Plan
Supports goal to be more competitive in the global travel market by developing a multifaceted center of commerce.

- Approximately 6,000 acres of developable land
- More than 5,200 gross acres of property will emerge into multiple centers of development
- Strategic location between Dallas and Fort Worth and proximity to a network of highways provide commercial developers with numerous key advantages
Business Model Analysis
Development Districts Map

1. Southgate Plaza Mixed-Use
2. Founders’ Plaza
3. Freeway Commercial – Coppell
4. Northwest Logistics Industrial
5. Southwest Cargo Logistics / Industrial Redevelopment
6. Beltline TOD Mixed-Use
7. North Entertainment – Grapevine
8. Industrial Use – Coppell
9. Aviation Uses
10. Passport Park
11. West Grapevine
12. Bear Creek
13. Walnut Hill Industrial
International Commerce Park (ICP) – Existing Tenants
Northwest Logistics

Global Logistics I & II

Logistics and Distribution
Commercial Development Website and LandHere E-Publication
DFW Airport’s Foreign Trade Zone
On-Airport FTZ

- 2,400 acres on-Airport
  - Pre-designated as FTZ
  - Companies can simply activate with Customs

- 45 buildings, 10 million sq. ft. of warehouse space is FTZ-designated

- New industrial development underway
  - FTZ acreage can easily be moved to accommodate companies
DFW Airport’s Foreign Trade Zone

- 1979 grant of authority, FTZ No. 39
- Serving business at the Port of Dallas/Fort Worth
- DFW’s motivation for becoming grantee:
  - More international trade, more passenger and cargo air traffic
  - Leadership role in regional economic development
- Over $1.4 billion in merchandise received into DFW’s FTZ in 2012
U.S. Foreign Trade Zones
Economic Benefits of FTZs

- No duty on imports until they leave FTZ for domestic destination
- No duty on items brought into FTZ and exported
  - These items never enter Customs territory
- Manufacturing FTZs can elect lower duty rate – component part or finished product
- No state and local personal property tax
  - Imported inventory, or
  - Domestic inventory held for export
- Other logistical and process savings
DFW Airport’s Foreign Trade Zone
Off-Airport Pre-Designated FTZ Sites

- 5,143 acres/2,081 hectares throughout North Texas pre-designated as FTZ
- Any company may locate on this land and simply activate with Customs
- Existing sites include:
  - Southport (Southern Dallas)
  - Meacham Airport (Fort Worth)
  - Dallas Executive Airport
  - Grayson County
  - Railhead (Fort Worth)
DFW Airport’s Foreign Trade Zone
Off-Airport Company-Specific FTZs

- If companies want FTZ status but cannot locate in a pre-designated area, DFW can sponsor company-specific FTZs
- DFW sponsors the following FTZs:
  - GM
  - Sanden
  - Fossil Partners
  - Zale
  - Turbomeca U.S.A.
  - Dal-Tile
  - The Apparel Group
  - Matrix Network
  - Brighton Best International
  - Lasko
  - BMW
Texas Freight Advisory Committee Meeting

February 20, 2014
TEXAS FREIGHT MOBILITY PLAN
GOALS AND OBJECTIVES
Texas Freight Advisory Committee
Fort Worth
February 20, 2014
Goals and Objectives Inputs

- TxDOT Strategic Plan
- Texas Transportation Plan
- Map-21
- Other Transportation Plans

Freight Plan Goals, Objectives & Measures

TFMP Needs and Priorities
Goal Areas

- Safety
- Asset Management
- Mobility and Reliability
- Multimodal Connectivity
- Stewardship
- Customer Service
Goal Areas

2013-2017 Strategic Plan Goals

- Maintain a Safe System
- Address Congestion
- Connect Texas Communities
- Become a Best-in-Class State Agency

DRAFT TTP & TFMP Goal Areas

- Safety
- Asset Management
- Mobility and Reliability
- Multimodal Connectivity
- Stewardship
- Customer Service

MAP-21 National Freight Goals

- Safety, Security, Resiliency
- State of Good Repair
- Advanced Technology
- Economic Efficiency
- Economic Competitiveness
- Environmental
- Performance and Accountability

Economic Competitiveness

Safety

Economic Efficiency

Stewardship

Performance and Accountability

Customer Service

Goals and Objectives
Safety Objectives

- Increase the resiliency of the state’s freight transportation system

- Reduce rates of crashes, fatalities, and injuries on the Primary and Secondary Freight Network
Safety Performance Measures

- Truck related crashes and fatalities
- Rail accidents
- At-grade rail crossing safety
Safety Discussion

- Are there other objectives that should be included under this goal?
- Have we captured the right performance measures?
- Are there other performance measures that should be included?
Asset Management Objectives

- Achieve and maintain a good state of repair for all freight transportation modes

- Improve the overall rating of bridges on the Strategic Freight Network

- Improve the pavement conditions on the Strategic Freight Network
Asset Management Performance Measures

- State of Good Repair on the Strategic Freight Network
Asset Management Discussion

- Are there other objectives that should be included under this goal?

- Have we captured the right performance measures?

- Are there other performance measures that should be included?
Mobility and Reliability Objectives

- Reduce the number of Strategic Freight Network miles at unacceptable congestion levels
- Improve travel time reliability on Primary and Secondary Freight Network
- Utilize the most cost-effective methods to improve system capacity (including technology and operations)
- Partner with Federal and Mexican officials to improve border crossing challenges
Mobility and Reliability Performance Measures

- Annual Hours of Truck Delay
- Truck Reliability Index
- Reduction in Freight Bottlenecks
Mobility and Reliability Discussion

- Are there other objectives that should be included under this goal?

- Have we captured the right performance measures?

- Are there other performance measures that should be included?
Multimodal Connectivity Objectives

- Increase Texas supply chain efficiencies by improving the interactions between modes
- Improve first/last mile connectivity between freight modes and major generators
- Improve connectivity between rural and urban freight centers
- Improve Texas Ports’ land-side capabilities to facilitate projected future growth
Multimodal Connectivity Performance Measures

- Annual Hours of Truck Delay
- Truck Reliability Index
- Reduction in Freight Bottlenecks
Multimodal Connectivity Discussion

- Are there other objectives that should be included under this goal?

- Have we captured the right performance measures?

- Are there other performance measures that should be included?
Stewardship Objectives

- Identify potential public and private revenue mechanisms to fund priority freight projects

- Lead efforts to foster greater coordination among the agencies responsible for freight system investment
Customer Service Objectives

- Implement a performance based, prioritization process for freight system investment
- Develop and nurture partnerships with private sector industries, communities, agencies, and other transportation stakeholders
- Increase freight expertise in districts, across departments, and among elected officials
- Enhance workforce recruitment and retention in the transportation and logistics industry
Stewardship and Customer Service Discussion

- Are there other objectives that should be included under these goals?

- How would you measure Stewardship and Customer Service?
Next Steps

- Identifying candidate projects
- Creating a project evaluation and ranking framework
- Developing performance targets
Study Overview

Purpose

• To examine freight issues and needs along the I-45 corridor, and develop and evaluate alternative multimodal options to improve freight flow along the 280 plus-mile corridor.

Duration: 10 – 11 months

Key deliverables

• Corridor Conditions
• Corridor Needs
• Alternatives Assessment
• Freight Corridor Improvement Strategy
• Final report/Executive Summary/Briefing Book
Project Team

**TxDOT**
- Caroline Mays
- Roger Beall

**TxFAC**
- Stakeholder coordination

**Consultant Team**
- Kim Sachtleben, Atkins
- Mark Boggs, Atkins
- Mark Berndt, Olsson
- Vince Mantero, CDM Smith
- Naser Abusaad, Civil Associates
## I-45 Freight Corridor

### Total length of 284.9 miles

### Does not cross any state or international borders

### Connections to Interstate, US, or State Highways

- 5 Interstates: I-10, I-20, I-30, I-345, and I-610
- More than 30 State Highways

### Within 45 miles of 3 major cargo airports

- Alliance
- Dallas/Fort Worth
- Houston Intercontinental

### Within 50 miles of 4 major water ports

- Port of Freeport
- Port of Texas City*
- Port of Galveston*
- Port of Houston

### Serves 14 cities with a population greater than 5,000

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<td>Hitchcock</td>
<td>La Marque</td>
<td>Texas City</td>
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<td>Ennis</td>
<td>Houston</td>
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1. Source: FHWA

* Direct access from I-45
I-45 Freight Corridor

Current Initiatives

• Panama Canal Stakeholder Working Group report encouraged examination of options to enhance freight movements on I-45 between Dallas/Fort Worth and Houston areas

• Development of High Speed Rail

• Union Pacific Houston to Dallas intermodal service, began April 2013

• Environmental Studies
  • Montgomery County line to North of Huntsville
  • South of Dallas to North of Corsicana
Study Schedule

February 2014
- Introduce project

March-April 2014
- Data collection
- Needs analysis

May 2014
- Identified needs

June-July 2014
- Develop alternatives
- Evaluate alternatives

August 2014
- Alternative improvement strategies

September-October 2014
- Prepare study documentation

November 2014
- Study results

December 2014
- Finalize study report

Stakeholder engagement
Next Steps

Data Collection

- Coordinate with the TFMP on data already available
- Identify additional, detailed data needs
- Identify potential stakeholder working group members
- Compile planned improvements

Needs Identification

- Conditions and performance of existing corridor
- Develop 20-year I-45 Corridor freight forecast
QUESTIONS
New Approaches to Public Collaboration

Dean Wise
Vice President, Network Strategy
Rail Handles 40% of US Freight

U.S. Freight By Mode
2009 Ton-Miles

- Rail: 40%
- Truck: 34%
- Pipeline: 14%
- Water: 12%

Source: Bureau of Transportation Statistics
BNSF Railway Overview

- A Berkshire Hathaway company
- 32,500 route miles in 28 states and two Canadian provinces
- 41,000 employees
- Approximately 7,000 locomotives
- 13,100 bridges and 87 tunnels
- Moves one-fourth of the nation’s rail freight
- Operates over 1,500 freight trains per day
- Serves over 40 ports
- Leads rail industry in technological innovation
BNSF Business Mix – YTD 3Q 2013

- North America’s leading intermodal railroad
- World’s largest grain hauling railroad
- The second largest coal hauling railroad
- Premier transporter of building materials
- Leading transporter of imported automobiles
- Leading the rail industry in crude-by-rail

Total units and % change from 2012

Thousands

- Consumer Products: 3,736 (+4.3%)
- Industrial Products: 1,403 (+11.8%)
- Coal: 1,666 (+2.6%)
- Ag: 708 (-7.0%)

2013 YTD through Sept. 30, 2013 Total BNSF Volume: 7,513 (+4.1%)
BNSF Capital Commitments

- Replacement Capital
- Expansion
- Other
- PTC
- Locomotive
- Equipment

$ BILLIONS

- 2000: $2.3
- 2001: $1.9
- 2002: $2.1
- 2003: $2.0
- 2004: $2.6
- 2005: $3.1
- 2006: $3.8
- 2007: $3.4
- 2008: $3.4
- 2009: $3.3
- 2010: $2.7
- 2011: $3.6
- 2012: $3.6
- 2013F: $4.3

$ Billions
BNSF’s Risk Reduction Program

*BNSF has a broad-based risk reduction program that ensures all shipments are handled safely and arrive damage- and incident-free*

- **Record capital investments** to ensure network reliability
  - BNSF maintains its infrastructure to *exceed* compliance
  - $41 billion invested in our network since 2000 and a record $4.3 billion in 2013
- **Employee training** for compliance and commitment
  - Employees provided detailed technical and rules training
  - Culture of commitment – approaching others
- **Proactive identification** of equipment & track exceptions
  - BNSF network of detectors to monitor passing railcars for stresses on wheels and other equipment components
  - Track inspectors and railcars equipped with advanced technology to look for flaws in the rail and track structure
- **Community hazmat response** training – 60,000 responders trained to date
- **New protocols** for “key trains”, including crude & ethanol
- Rail industry support for improving **tank car safety**
BNSF Network in Texas

5,100 route-miles
• Owned: 2,586
• Trackage Rights: 2,524

2012 Units (000)
- Originating: 671
- Through: 3,200
- Terminating: 1,330
BNSF in Texas

- 54% of BNSF units move from/to/through Texas
- 8,400 employees
- $950M+ payroll
- $240M capex in 2013
  - Tower 55 in Fort Worth
  - Galveston Causeway Bridge
  - Houston Intermodal Facility
  - San Antonio loop track facility
  - Signal upgrades for PTC
  - 4,400 miles of track surfacing and undercutting
  - Replace 115 miles of rail and 690,000 ties

Products Shipped From Texas

- Industrial Products 35%
- Consumer Products 59%
- Agricultural Products 6%

Products Shipped to Texas

- Coal 25%
- Industrial Products 23%
- Consumer Products 37%
- Agricultural Products 15%
Outlook: Growth and Challenges

2030 Growth Projections

- US population to grow to 364 million
- VMT to grow by 150 percent
- Freight rail to increase by 92 percent
- Texas critical to BNSF network

Challenges

- No national freight policy
- Highway funding pressure
- Increasing fuel costs and driver supply issues
- Increased permitting and environmental requirements; community mitigation concerns

Freight railroads positioned well as private sector infrastructure solution for growth

Source: Global Insight, AASHTO, FHWA
New Approaches to Public Collaboration

• More effective planning and communication between railroads and public sector planners will be a key to future growth.

• New approaches to collaboration are evolving:
  • State freight and rail planning advisory boards
  • Multimodal corridor planning
  • Railroad and DOT long range project coordination
Unprecedented number of freight and rail planning efforts encouraged by MAP-21 legislation, funding availability, and the focus on multimodal planning.

**FP** = Freight Plan – 20 States  
**FB** = Freight Advisory Board – 14 States  
**RP** = Rail Plan – 13 States
Texas DOT Freight Planning Efforts

- Texas is one of the states leading freight planning efforts
- Focus on broad stakeholder analysis of multimodal freight movement needs and trends
- Several Texas railroads are represented on the committee (BNSF, Union Pacific, KCS)
- Meets quarterly, with ongoing analysis and discussion led by TxDOT staff and consultants
BNSF Growth Focus on Corridors

www.corridorsofcommerce.com
BNSF Corridor Approach

- Engage multiple stakeholders (states, cities, private industry)
- Provide clarity on freight movement patterns/outlook and importance of collaborative planning efforts
- Provide a framework for communication and education
- Broaden support and visibility for local projects with regional implications

- Identify projects of regional and national significance
- Increase funding opportunities and cost sharing
Great Northern Corridor

- Serves 8 States and 3 Canadian Provinces
- Over 27 million people and nearly 12.5 million jobs - $1.45T GDP
- Over 1.8 million units moved on the Corridor in 2012
- Nearly $646 million in BNSF capital expenditures in states along the Corridor in 2012
- For study purposes, the “Corridor” includes BNSF’s rail route, first/last mile connections, border crossings, freight terminals, ports, and critical roadways

January 13, 2014
Great Northern Corridor Coalition

- Montana DOT took the lead in forming a GN Corridor Coalition, which now includes 19 members and 14 supporters
- The Coalition sought and received funding for planning studies from FHWA Multistate Corridor Operations and Management Program.

**Coalition’s Vision** - “The Great Northern Corridor is a globally competitive multistate freight corridor consisting of a seamless road and rail network that promotes economic growth for neighboring communities and accommodates the demand for safe, efficient and environmentally sound transportation services.”

**Coalition Members**

- Montana DOT (Lead Agency)
- Washington DOT
- Oregon DOT
- Idaho DOT
- North Dakota DOT
- Minnesota DOT
- Wisconsin DOT
- BNSF Railway

- Ports: Everett, Seattle, Grays Harbor, Tacoma, Longview, Vancouver USA, Portland, Quincy, Pasco, Northern Montana, Washington Public Ports Association
MidCon Corridor – Up Next

- Traverses 10 states and extends into Manitoba, Canada
- Crucial to US agricultural exports and energy production
- Supports near-shoring and domestic manufacturing
- Major projects in last few years: Tower 55, LPKC, Neches River Railyard (Port of Corpus Christi)
- Several major projects to come
- BNSF would like to engage states along the MidCon to develop a similar coalition
Long Range Project Coordination

- **Systematic review** of long range roadway and rail projects by State DOT and BNSF
- **Goal:** Identify “win-win” opportunities for capital efficiency and operating benefits through mutual accommodation and cost sharing
- **Focus areas:**
  - Road crossings in rail sidings
  - Grade separations
  - Highway projects adjacent to (or over) rail facilities
  - Property swaps and land use optimization
- Piloted process with **Oklahoma DOT**; will engage annually
- Texas next? We’d like to . . .
Collaborative Vision

**State DOT**
- 5-20 Year Plans
- Freight Planning
- Highway Reconstruction

**MPO’s/RPO’s**
- Metro needs
- Freight and Passenger mobility
- Urban Development
- Rural Growth

**BNSF**
- Capacity
- Bottlenecks
- Multi-modal Connectors
- Major structures

**Other Entities**
- Ports
- Industrial Parks
- Manufacturing Centers
- Economic Development organizations

**Joint Infrastructure Projects and PPP’s**
Texas Freight Mobility Plan Components

- Freight Trends, Needs, and Issues
- Freight Policies, Strategies, and Performance Measures
- Ability of State to Meet National Freight Goals
- State’s Strategic Goals and Decision-Making
- Strengths and Problems of State’s Freight Transportation
- Role of Freight in State’s Economy
- State’s Freight Improvement Strategies
- Comprehensive Implementation Plan

Report Outline
Texas Freight Mobility Plan Outline

- Executive Summary
- Chapter 1: Introductions
- Chapter 2: Stakeholder Outreach
- Chapter 3: Texas Freight System
- Chapter 4: Conditions and Performance
- Chapter 5: Needs Assessment
- Chapter 6: Economic Context of Freight
- Chapter 7: Freight Policies and Institutions
- Chapter 8: Decision Making Process
- Chapter 9: Strategies & Recommendations
- Chapter 10: Implementation Plan
Chapter 2: Stakeholder Outreach

- Freight Advisory Committee
- Listening Sessions
- Leadership Summit
- Shipper Surveys
- Trucker/Operator Interviews
- Others
Chapter 4: Conditions and Performance

Chapter 5: Conditions and Performance

- Bottlenecks
- Pavement Condition
- Bridge Condition
- Safety and Crashes
- Level of Service
- At-Grade Crossings
- Other
Chapter 5: Needs Assessment

- Data Collection and Assessment
- Texas Freight Transportation Assets
- Trends, Needs, and Issues
- Strength and Problems of State’s Freight Transportation System
- 20-Year State Freight Forecast
- Freight Impacts on Communities

- System Capacity
- System Operations
- Safety/Security
- Intermodal and Rural Connectivity
- NAFTA and Border Challenges
- Energy/Environment
- Institutional, Industry, and Interagency Cooperation
- Education and Public Awareness
- Funding/Financing
Chapter 6: Economic Context of Freight

- Economic Impact of Freight to the State’s Economic Growth and Competitiveness
- What Industries are most important to the State?
- Which supply chains are important to the State’s exports?
- How does the freight transportation system impact the State’s economic growth and competitiveness?
- Which freight transportation facilities are critical to the State’s economic growth?
Chapter 7: Freight Policies, Strategies, and Institutions

- Funding Programs
- Freight-Related Institutions
- Governance Structure
- Private Infrastructure Owners
- Statutory/Constitutional Constraints
- Regional Freight Planning Activities
- State’s Priorities
Chapter 8: Decision Making Process

- Coordination with other plans
- Coordination with other states
- Coordination of modes
- Coordination with stakeholders
- Prioritization of strategies, projects, and policies
Chapter 10: Implementation Plan

- Schedule
- Funding Consideration
- Potential Revenue Generating Projects
- Proposed Partners
- Confirmation of Performance Measures
- Prioritization
Discussion

- Does the proposed Texas Freight Mobility Plan outline covers all key elements?
- What’s missing?
Introduction

During the course of the study to date, many recommendations have begun to emerge:

- Input from stakeholders
  - Listening sessions
  - Workshop
  - Texas Freight Advisory Committee
- Review of other State plans
- Review of other Texas plans
- Review of network data

Today we will discuss a framework for moving forward to begin developing these recommendations.
RECOMMENDATIONS FRAMEWORK
DISCUSSION

Texas Freight Networks
Preliminary Texas Highway Freight Network

- Preliminary Network identified
- Primary Network
  - Refined using a baseline threshold based upon 20 year TRANSESEARCH Forecasts – 10 million Tons
  - Connectors
- Secondary Network
  - based on remaining segments of the initial preliminary network after the primary network was identified

Source: TxDOT
Developing the Preliminary Texas Highway Freight Network

Preliminary Texas Highway Freight Network
Texas Primary and Secondary Highway Freight Network

Legend
- RR Border Crossings
- Highway Border Crossings
- Major Water Ports
- Major Airports
- Primary Freight Network
- Secondary Freight Network

Texas Department of Transportation
Transportation Planning and Programming Division
Data Analysis, Mapping and Reporting Branch
December 20, 2013
Designation of Freight Networks - Goals

- Focus needed investments to those system elements that provide the greatest gains
- To link modal networks and key freight nodes
- Design and maintain the priority networks for current and future freight capacity needs
- Designate sub-networks for special needs, e.g.
  - OS/OW shipments
  - HazMat shipments

Statewide OS/OW Route Frequencies (FY 04-09)

Source: 2012 Texas Transportation Institute
Freight Network Designation: Discussion

- Is the process undertaken to designate / identify the Texas Freight Network sufficient?
  - Primary Highway Freight Network?
  - Secondary Highway Freight Network?
  - Rail Network?
  - Intracoastal Waterway Network?
Three categories of recommendations

- Policy/Institutional
- Programs
- Projects
# Proposed Topic Areas

1. System Capacity  
2. System Operations  
3. Safety/Security  
4. Intermodal and Rural Connectivity  
5. NAFTA and Border Challenges  
6. Energy/Environment  
7. Education/Public Awareness  
8. Institutional, Industry and Interagency Cooperation  
9. Funding/Financing
1. System Capacity: Overview and Issues

- Eliminate highway bottlenecks
- Identify alternative routes – redundant capacity
- Dedicated or special use lanes for trucks
- Rail capacity constraints
1. System Capacity: Recommendations - Highway

Programs and Projects

- Eliminate highway bottlenecks on Freight Network – redesign and capacity additions where needed
- Expand the highway network through dedicated or special use lanes for trucks (truck only lanes)
- Invest in Highway Freight Network
  - Add lanes where needed
  - Bypass lanes for trucks
- Address Bridge Vertical Clearance Issues on Freight Network

Policy / Institutional

- Revise design standards for Freight Network
- Raise truck size and weight
1. System Capacity: Recommendations – Rail and Maritime

Projects and Programs

- Improve modal connections
  - Improve landside highway access to ports, airports & rail terminals
  - Port and Rail connectivity
- Eliminate key grade crossings; consolidate & separate
- Expand double track rail network
- Identify and develop potential new rail corridors?
- Increase the depth of the GIWW

Policy

- Enhance / expand the role of shortline railroads?
1. System Capacity: Discussion

- Do you have specific recommendations beyond those already mentioned?
- Do you consider any of these recommendations to be “low hanging fruit?”
2. System Operations: Overview and Issues

- Need: Real-time information!
  - Statewide traffic information & incident management
  - Commercial driver information
  - Smart routing for commercial vehicles
  - Changeable message / advisory signage

- Need for dedicated heavy weight freight corridors

- Understand costs due to delays and bottlenecks on freight network operations

- Clearly define by-pass routes

- Others?
2. System Operations: Recommendations

Programs and Projects

- Statewide integration of ITS
  - Develop a statewide incident management program
  - Develop a statewide traffic management center
  - Use ITS to increase efficiency on Freight Network, e.g. management & operations plan
  - Facilitate information-sharing between jurisdictions

- Enhance and ensure adequate signage on Highway Freight Network

- Signal timing/coordination on Secondary Freight Network

- Interchange Operational Improvements at Primary and Secondary Freight Networks

- Special or dedicated truck only use lanes on Freight Network
2. System Operations: Recommendations

**Policy / Institutional**

- Statewide coordination of construction activities on Freight Network

- Expand existing truck lane restrictions on Primary Freight Network

- Utilize HOV lanes for truck traffic
2. System Operations: Discussion

- Are there areas of progress in the state or nation that serve as models for operational improvements?

- Do system operational recommendations extend beyond highway networks? What might some of these solutions be?

- Safety is a major focus of TxDOT

- Issues related to freight include:
  - Lack of truck parking
  - Numerous at grade-crossings
  - Poor roadway design
  - Lack of public education

Programs and Projects
- Eliminate modal conflicts (e.g. at-grade rail crossings)
- Address safety “hot spots” on the Freight Network
- Implement a database for sharing information regarding problem motor carriers

Policy/ Institutional
- Increase public education for passenger car drivers
  - How to safely drive around large trucks
  - How to safely maneuver at-grade rail crossings
- Evaluate the potential of private companies developing and/or operating private truck parking areas.
- Revisit TxDOT rest area policies for truck parking
- Conduct a statewide truck parking needs analysis
3. Safety/Security: Discussion

- Are their infrastructure or operational recommendations for non-highway modes that could increase safety of the traveling public?
4. Intermodal and Rural Connectivity: Overview and Issues

- Lack of strong connectivity between the modes detracts from their efficient and productive use
- Lack of regional corridors to connect rural and urban areas
- Need for better port-rail connections
- Adequate and available access points, e.g. truck-rail facilities, promotes the use of alternative modes beyond truck
- Need to connect to neighboring states’ infrastructure
- Access to other modes besides truck in the south and west regions of the state
- Rural regions are isolated from urban areas
- Need to connect US Interstate to Mexico’s infrastructure
4. Intermodal and Rural Connectivity: Recommendations

Programs and Projects

- Facilitate investment in Secondary Freight Network
  - To address rural/urban connectivity
  - Identify key energy and agriculture routes for investment
  - Upgrade, maintain and expand Farm-to-Market roads
  - Construct relief routes to ensure traffic flows in small towns
- Use incentives to expand intermodal options (Class III & short line rail)
- Ensure direct rail access to ports
- Facilitate expansion of rail access to rural areas of the state
- Incentivize longer hours of operations at ports

Policy / Institutional

- Pursue legislation to expand state DOT’s oversight, management, and support of other modes (not just auto).
4. Intermodal and Rural Connectivity: Discussion

- What other strategies would address intermodal and rural connectivity?
5. NAFTA and Border/Ports-of-Entry: Overview and Issues

- Texas shares a common border with Mexico and is subject to not only the direct exchange of freight, but also a significant amount of pass-through freight as well.

- The increasing role of the Mexican economy within global trade dramatically impacts Texas border crossings.

- Border crossings are subject to extreme traffic congestion.
Programs and Projects

- Re-visit one stop model for inspections
- Provide dedicated crossings for freight
- Adjust border crossing times to off-peak commuter hours
- Provide incentives / tax breaks to change when trucks get to the border
5. NAFTA and Border/Ports-of-Entry: Recommendations (cont.)

Policy / Institutional

- Utilize ITS and dynamic pricing when possible
- Define an acceptable border crossing queue time
- Collaborate to expand trusted shipper programs/prescreening Market the use and development of Foreign Trade Zones.
- Explore partnering with the private sector to provide 3rd party security
- Consider funding partnerships:
  - US Customs and Border Protection/Department of Homeland Security
  - Mexican government
  - Industry partners
- Connect border crossing projects to other TxDOT goals/priorities.
5. NAFTA and Border/Ports-of-Entry: Discussion

- What should TxDOT’s role be on border crossing facilities?

- Are any of the strategies identified unworkable? Why?
6. Energy/Environment Overview and Issues

- The environmental permitting process is time consuming.
- Alternative fuel sources present an opportunity to reduce emissions, but are expensive.
  - More important in non-attainment areas
- Infrastructure is not yet in place for alternative fuels.
  - Lack of fueling stations & distribution network
  - Lack of commercially available LNG locomotive models

- Energy sources can have specific transportation needs.
  - Fracking wells: high truck traffic on rural roads
  - Wind turbines: OSOW; Texas is US leader in wind capacity
6. Energy/Environment: Recommendations

**Programs**
- Encourage off-peak/24 hour operations
- Explore partnerships with the private sector to implement truck stop electrification

**Policy / Institutional**
- Support conversions to CNG for drayage and to LNG for long-haul
- Incorporate freight considerations into NEPA
- Streamline environmental permitting process
- Collaborate to become leader in sustainable transportation construction and operations
- Prioritize projects with environmental and air quality benefits in areas of non-attainment
- Consider environment in transportation planning goals
6. Energy/Environment: Discussion

- What steps if any should TxDOT take to encourage the adoption of CNG/LNG?

- Does current demand for wind turbines affect the need for OS/OW routes in Texas? Will it in the future?
7. Education/Public Awareness: Overview and Issues

- Effective freight planning is dependent upon public awareness of key freight issues
- There is a lack of understanding from the public on economic and quality of life benefits that freight provides
- Truck driver shortage
7. Education/Public Awareness: Recommendations

Policy / Institutional

- Create and educational campaign to communicate with the public how to safely drive with trucks
- Educate that efficient goods movement provides savings to consumers and businesses
- Encourage MPOs and other planning agencies to participate in existing, free training programs (e.g., the U.S. DOT’s free monthly webinar “Talking Freight.”)
- TxDOT should partner with educational institutions to promote driving as a career
7. Education/Public Awareness: Discussion

- Does the business community in Texas view transportation as a big enough issue to partner on public education efforts?

- By tonnage nearly 70% of goods moving by truck on Texas Highways stay in the state: Could or should Texas become the training ground for the nations truck drivers?
Without the cooperation of other agencies or integration with other TxDOT or external agency plans, TxDOT implementation efforts may not meet the goals of the individual plan.

- Communication between agencies and departments
- Collaboration to accommodate varying planning horizons
- Also vital to explore partnerships with the private sector
8. Institutional, Industry, Interagency Cooperation: Overview and Issues

Policy / Institutional

- Coordinate with neighboring states to ensure efficient movement of freight between states
  - Multistate extensions of key freight corridors

- Coordinate among Texas agencies (DPS, railroad commission, economic development, etc.)

- Develop more public-private partnerships to support railroad expansion

- Enhance coordination with local governments to identify freight infrastructure needs potentially requiring special State assistance
What are some of the strategies to address public and private sector coordination to address freight mobility?
9. Funding/Financing: Overview and Issues

- Critical to identify alternative and innovative funding sources for freight projects
- Need to focus funding on high priority freight corridors
- Freight projects don’t receive fair evaluation in the project selection/prioritization process
- Need alternative measures for allocating funding
- Need to explore alternative funding mechanisms
- Consensus around the fairness of user-pay systems
- Need to balance existing funding needs
9. Funding/Financing: Recommendations

Policy / Institutional

- Increase fuel taxes
- Research foreign direct investments
- Consider changes to State law to allow alternative financing options including:
  - Toll lanes and congestion pricing
  - Increase/incentivize “tolled” truck parking facilities
  - Provide incentives (e.g. TxTag or HOT lanes credit) to encourage trucks to use approved routes and/or suggested bypasses during congestion
  - VMT-based fees
  - Performance-based funding
  - Carload/container lift fee (for rail improvements, including tunnels),
  - State rail infrastructure tax credit

Needs and Preliminary Recommendations Feb. 20, 2014
9. Funding/Financing: Recommendations (cont.)

Policy / Institutional

- Public/Private Partnerships for TMCs and ITS infrastructure
  - Statewide Traffic Management Center
  - Statewide Incident Management
  - Joint-funding with Mexico for improved border operations
- Aggressively pursue Federal funding programs that can be used to support freight investments
  - TIGER (Next round April 2014)
  - TIFIA
- Competitive grant/loan programs
  - TIGER type programs at the state level
- Work with freight organizations to highlight infrastructure investment opportunities and benefits to legislative members
The need for additional transportation funding was explored by the 2030 Committee in 2011. One of their recommendations was that users be required to pay for services they consume. What is the best way to do that?
Texas Priority Freight Networks

Nine Topics

1. System Capacity
2. System Operations
3. Safety/Security
4. Intermodal and rural Connectivity
5. NAFTA and Border Challenges
6. Energy/Environment
7. Education/Public Awareness
8. Public and Private Sector Coordination
9. Funding/Financing

Three Categories
Summary

- Does the proposed framework of nine key topic areas work?
  - What’s missing?
  - Can some areas be further combined?
TEXAS RURAL RAIL TRANSPORTATION DISTRICTS

Texas Freight Advisory Committee
Fort Worth
February 20, 2014
Background – Why an RRTD?

- In 1980, the United States’ railroad industry was federally deregulated by the Staggers Rail Act
- It allowed railroads to abandon redundant and light destiny lines to control their costs
- These abandonments resulted in greatly reducing the number of rail company bankruptcies but provided for the loss of miles of track and right-of-way that could have been available for future transportation or utility needs
- In 1981 the State passed legislation to preserve abandoned rail for future use through the formation of RRTDs
Background – Purpose of an RRTD

- Preserve existing rail service for rural agricultural and industrial shipping
- Economic development with the intent to develop new spur lines to accommodate growing business opportunities
Background – What is an RRTD?

- A Rural Rail Transportation District (RRTD) is a public body and a political subdivision of Texas to provide for the continued operation of railroads to prevent cessation due to railroad abandonment.

- An RRTD consists of a county, or multiple counties, which contain a rail line that is being or has been abandoned and has carried no more than three million gross ton miles/year.
What are the powers of an RRTD?
• Acquire construct, sell, lease, and operate rail facilities and rolling stock
• Eminent Domain
• Issue bonds
• Cannot levy or collect taxes in order to fund their activities

What are the duties of an RRTD?
• Shall meet at least once a month to conduct the district business
• Adopt an annual operating budget with public notice
• May not abandon a rail line for which State funds have been loaned or granted
Rural Rail Transportation Districts

- RRTDs: 42
- Single-County: 28
- Multi-County: 14
- Total Counties covered: 95
### Growth Trends in RRTDs Formed over the Past Decade

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<th>Formed Prior to 2002*</th>
<th>Formed Since 2002*</th>
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<tr>
<td>Number of RRTDs</td>
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<td>42</td>
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<tr>
<td>• Single-County RRTDs</td>
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<tr>
<td>• Multi-County RRTDs</td>
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<td>2</td>
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<tr>
<td>Number of Participating Counties</td>
<td>70</td>
<td>25</td>
<td>95</td>
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*RRTDs “Prior to 2002” as documented in 0-4007 series plus South Plains and Middle Rio Grande.*
Gulf Coast Rail District

Year Created: 2007 (under Transportation Code Section 171)

Counties (5): Fort Bend, Galveston, Harris, Montgomery, Waller, also includes City of Houston and Port of Houston Authority

Powers: Eminent Domain; intermunicipal commuter rail powers

Motivation for Forming: Abandonment, freight rail and grade crossing issues

Asset Ownership: None

Successes: Belt Junction, West Belt grade separations, Bringhurst pedestrian bridge, planning funds through H-GAC
### Recent RRTD Activities

<table>
<thead>
<tr>
<th>Category</th>
<th>Activities</th>
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<tbody>
<tr>
<td>Railroad Right-of-Way/Rail Line Ownership</td>
<td>- Purchase of Abandoned or Spur Lines</td>
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<td></td>
<td>- Freight Operations</td>
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<tr>
<td>Other Railroad-Related Activities</td>
<td>- Study of New Lines</td>
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<tr>
<td></td>
<td>- TIGER Grant Applications for Rehabilitation</td>
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<tr>
<td>Economic Development</td>
<td>- Industrial Park Development</td>
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<td>- Preservation of Existing Spur Lines</td>
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<td>Non-Railroad Related Activities</td>
<td>- Trail Development</td>
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<td>- Potential Toll-Road in Abandoned Corridor</td>
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<td>Interaction with Other Special Districts</td>
<td>- Regional Mobility Authority Plans</td>
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<td></td>
<td>- Commuter Rail District</td>
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<tr>
<td>RRTD Asset Ownership beyond RRTD Boundaries</td>
<td>- Purchase of ROW that Extends outside Counties in District/State</td>
</tr>
</tbody>
</table>
The Success Factors

Elements of a Successful RRTD

• A board that holds regular meetings, has little turnover, and has a background in shipping or freight oriented business

• Financial capabilities, which include access to capital funding, business and economic development opportunities, and a generally healthy local economy

• Ownership and control of the right-of-way and associated facilities

• Good business operational practices, including a viable business plan, a good operator, and connections with larger (Class I) railroads
Cen-Tex RRTD

Year Created: 1990
Counties (5): Brown, Comanche, Erath, Hood, Johnson
Motivation for Forming: Abandonment
Asset Ownership: RRTD; operating rights to Fort Worth and Western Railroad
Successes: Public ownership of ROW; FWWR moved 36,000 carloads in 2008
Year Created: 1994

Counties (5): Collin, Franklin, Hopkins, Hunt, Titus

Motivation for Forming: Abandonment

Asset Ownership: TxDOT; Leases to RRTD, who leases the operations to Blacklands Railroad

Successes: working on potential toll road between Wylie and Lavon, NCTCOG feasibility study; Blacklands Railroad requesting RRIF loan to upgrade track to Class 2
Nueces and San Patricio County RRTD

Year Created: 2001, 2002

Counties (1 each): Nueces, San Patricio

Motivation for Forming: Abandonment/Economic Development

Asset Ownership: None

Successes: Hold joint meetings; Focus on Port of Corpus Christi and La Quinta Terminal access
Revisions to statutes to improve success: lack of sunset provisions for inactive districts, ability to generate revenue, coordination with statewide planning efforts

Loss of eminent domain through SB 18 Compliance effective 9/01/2013.

The number of RRTDs statewide, especially single-county RRTDs, has grown over the past decade.

TxDOT and RRTD’s should develop a framework for establishing an effective partnership.
Questions?

Contact:
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