Overview

- Introduction of Team
- Objectives of Study
- Study Tasks
- Methodology of Study
- Schedule
Team Members

- TxDOT
  - Jennifer Moczygemba, PE – Project Director
  - Orlando Jamandre – Project Manager

- HDR – Prime
  - Luke Bathurst, PE – Project Manager
  - Mark Hemphill – Task Manager, Rail Operations
  - Scott Hale, RTC Modeling

- HNTB – Ph I Continuity, Conceptual Engineering

- Quantum – CE, Regional Expertise, Estimating

- Ximenes – Stakeholder Coordination
Objectives

- Continuation of Phase I Study
- Identify 20-year rail freight growth in and through El Paso region
- Assess effects of freight growth on existing rail infrastructure capacity and velocity
- Assess effects on El Paso region (e.g., grade crossing occupancy times)
- Identify potential projects that would resolve capacity or fluidity issues, and reduce impacts
Study Area
Study Area
Phase I Study

- Completed April 2011
- Inventory of existing rail system
- Assessed rail operations
- Forecasted rail freight growth of 13% in 2035
- Developed Base Case Rail Traffic Controller (RTC) model
- Identified rail system capacity constraints
- Reviewed planned and proposed transportation projects in region
- Assessed roadway/rail grade crossing impacts
- Identified proposed crossing improvements
Phase I Study

- **Current Rail Projects**
  - Cuidad Juárez Grade Separations (5)
    - Expected completion 2015
    - Will eliminate current 9-hour curfew
    - Current avg. traffic is 8.7 BNSF and 1-2 UP trains/day
    - 2043 estimate is 22 trains per day
  - UP Strauss Yard (Santa Teresa)
    - Expected completion in 2015
    - Main track fueling facility
    - Intermodal block swapping

- **Proposed Projects**
  - BNSF El Paso (Santa Fe) Yard Relocation
  - Santa Teresa Rail Bypass and International Crossing
## Phase I Study

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Phase II – Task 1

• Stakeholder Coordination / Participation
  – TXDOT
  – NMDOT
  – City of El Paso
  – El Paso County
  – El Paso MPO
  – City of Sunland Park
  – Camino Real Regional Mobility Authority
  – Greater El Paso Chamber of Commerce
  – El Paso Hispanic Chamber of Commerce
  – El Paso Central Business Association
  – BNSF Railway
  – Union Pacific Railroad
  – US Customs & Border Patrol
Phase II – Task 2

- Perform RTC simulation modeling of rail network for likely 20-year freight growth
  - Identify capacity bottlenecks
  - Identify potential improvements
  - Validate benefits of potential improvements
Phase II – Task 3

• Develop planned and potential improvements that can increase capacity and efficiency of rail operations
• Develop planned and potential improvements that can reduce impacts on El Paso region
• Identify additional railroad crossings for potential improvement (# in Phase I)
  – Grade separations (18)
  – Crossing closures (14)
• Validate benefits of potential improvements using RTC modeling
Phase II – Task 4

- Generate conceptual exhibits and cost estimates for constructing each improvement not otherwise already programmed by public or private entities
- Estimate public benefits
  - Reduction in vehicle travel time and emissions
  - Enhance rail and roadway safety
Methodology

1. Collaborate with Stakeholders
   – Capture local experience
   – Update list of identified planned improvements
   – Understand opportunities and challenges
   – Understand impacts of potential projects

2. Develop Rail Simulation Model
   – Validate Base Case from Phase I
   – Add 20-year rail traffic growth
   – Identify bottlenecks and efficiency issues
Methodology

3. Develop Potential Projects from Rail Model
   – Develop potential benefit
   – Develop potential cost of construction
   – Review initial project list with stakeholders
   – Refine project list based on stakeholder input

4. Refine Potential Projects
   – Quantify benefits in rail operations model
   – Develop conceptual exhibits describing projects
   – Determine conceptual cost estimates
   – Quantify roadway crossing improvements
Methodology

5. Draft Report
   - Obtain stakeholder input on proposed projects
   - Describe projects
     • Purpose and Need
     • Conceptual Exhibits
     • Benefits
     • Costs

6. Final Report
   - Describe RTC Planning Cases
   - Document basis of benefits and costs
   - Propose implementation scenario
Study Schedule

- Kick-Off Meeting – July 2012
- Release of RTC Model – October 2013
- Develop List of Proposed Projects – September 2012 (December 2013)
- Stakeholder Meeting #1 – October 2012 (January 2013)
- Develop Exhibits/Estimates – November 2012 (February 2013)
- Draft Report – November 2012 (February 2013)
- Determine Benefits – January 2013 (April 2013)
- Stakeholder Meeting #2 – April 2013 (June 2013)
- Final Report – April 2013 (June 2013)