I-70 Dedicated Truck Lanes

Nova Ordo – A New Way Ahead

Dedicated Truck Lanes Feasibility Study

Non Nova Sed Nove –
Not new things, but in a New Way

Trucking Industry Mobility and Technology Coalition (TIMTC)
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I-70 Project Area
In the beginning.......... 2007
Corridors of the Future Program (CFP)

- CFP an initiative under USDOT’s “National Strategy to Reduce Congestion”
  - Explore innovative financing
  - Improve flow of goods
  - Enhance quality of life

- I-70 one of 6 corridors selected and funded

- $5 million discretionary grant from FHWA
  - $2 million to Missouri DOT - SEIS
  - $3 million for I-70 Corridor Feasibility Study
Vision and Goals

- Reduce congestion & enhance mobility
- Improve reliability
- Improve safety
- Enhance economic development
- Reduce impacts to environment
- Improve security
- Facilitate intermodal integration
Corridor Conditions - Truck Flows 2035

Source: FHWA FAF 2
Corridor Conditions - 2030 Urban Area Congestion

Kansas City

Saint Louis

Indianapolis

Dayton

Columbus

Corridor Conditions - Safety

In 2004 the I-70 project area had:

- More than 10,000 crashes
- 18% were truck involved crashes
  - 36% of the truck involved crashes involved fatalities mainly to passenger car drivers and occupants
- 2.3 million vehicle hours of incident-induced delay
Corridor Conditions - North and Eastbound
Speeds on I-70 lag behind other Midwest corridors

Figure 1-4: 30-Day Average Travel Speeds for 7 Corridors: Northbound and Eastbound

Source: American Transportation Research Institute (ATRI), June, 2006
Corridor Conditions - South and Westbound
Speeds on I-70 lag behind other Midwest corridors

Source: ATRI, June 2006
Phase 2 CFP Application Proposed:

Separating trucks from passenger cars as a solution to:

- Improve safety
  - Conflicts and fatalities will be reduced
- Reduce congestion
  - Vehicles accelerate and decelerate at different speeds
- Improve the Quality of Life
Phase 2 CFP Application Proposed:

- A feasibility study to testing the hypothesis that:
  - Separation is the solution
  - A business case can be made for DTL’s

- Corridor length makes the study the first of its kind internationally
I-70 Dedicated Truck Lanes Feasibility Study

scope:

Define and evaluate:

- The need and demand for dedicated truck lanes
  - as one option for improving safety and moving freight more efficiently; and

- Whether investments in dedicated truck lanes
  - alone or in combination with investments in other modes are justified
Where we are....

- Study efforts began June 25-26, 2009
- Initial stakeholder outreach
- Data collection underway
- Analytical approach being finalized
Dedicated truck lanes could improve I-70’s safety and freight efficiency enough to justify investments in them.

Vision & Goals

Phase 1 Analytical Approach:
I-70 Dedicated Truck Lanes Feasibility Study

Inputs

• Stakeholder Interviews
• Motor Carrier Interviews
• Business interviews

• Performance metrics / configuration needed to attract users and achieve the goals
• Evaluation criteria
• Corridor profile and assessment
• Future needs and opportunities

Evaluation

• Demand for freight movements
• Private sector priorities
• Public sector priorities
• Safety and mobility improvements

Conceptual Scenarios to test

Is there a business case that makes dedicated truck lanes feasible?

Refine Scenarios

• Financial feasibility
• Economic opportunities
• Multi-modal integration
• Environmental features
• Regulatory climate

Report

DRAFT
Where we are…

- Technical modeling under way
  - Travel demand
  - Commodity movements (FAF)
  - Econometric
  - Toll revenue
- Range of concepts being discussed
Study Status – Freight & Commodity Analysis

Freight generator data

Airports

Intermodal Terminals & Ports
I-70 Corridor project area connects to:

- 17 passenger and air cargo airports
- All 7 class 1 U.S. Railroads
  - cross or parallel I-70
- Water ports on the Missouri, Mississippi, and Ohio Rivers
Level of detail - Travel Demand Modeling and Toll Revenue Analysis
Range of Concepts: Design and Technology
Range of Concepts:

Example Truck-Car Separated Interchange

Example Slip Ramp Configuration
Range of Concepts: Ex. Hard Configuration

Source: MODOT SEIS, Chapter 3 Alternatives

Source: ROD FHWA MO EIS-09-01 FSEIS I-70 Corridor
Range of Concepts: Ex. Soft Configuration

Source: ROD FHWA MO EIS-09-01 FSEIS I-70 Corridor
Range of Concepts: High Tech Design
Options Automated – Limited Access / Unbalanced Lane

Aerial View

I-70 TRUCK ONLY CONCEPT TYPICAL SECTION

Median barrier separation
Range of Concepts: Technology Integration (examples)

- ITS
- Advanced Traffic Management Systems
- Traveler Information
- Emergency Management
- Weight in Motion / Virtual Weight-in-Motion
- Vehicle Infrastructure Integration (VII)
- Electronic Tolling / Congestion Pricing
- Roadside Parking
Where we are…

- First technical reports within a month
- Web site available within 1-2 weeks
- More stakeholder outreach as findings become available
- Phase 1 Report in March, 2010
I-70 Dedicated Truck Lanes - Milestones

- Sept 2006 FHWA Announces CFP
- Nov 2006 Phase I CFP Application
- May 2007 Phase II CFP Application
- Sept 2007 FHWA Selects CFP Finalists
- Feb 2008 USDOT-FHWA Provides guidance
- Dec 2008 I-70 CDA & MOU Completed
- Feb 2009 RFP for Feasibility Study
- March 2010 Phase I Feasibility Study
- March 2011 Phase II Feasibility Study
Thank You

www.i70dtl.org

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