



DEDICATED TRUCK LANES
FEASIBILITY STUDY

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)
October 7, 2009 – Las Vegas, Nevada

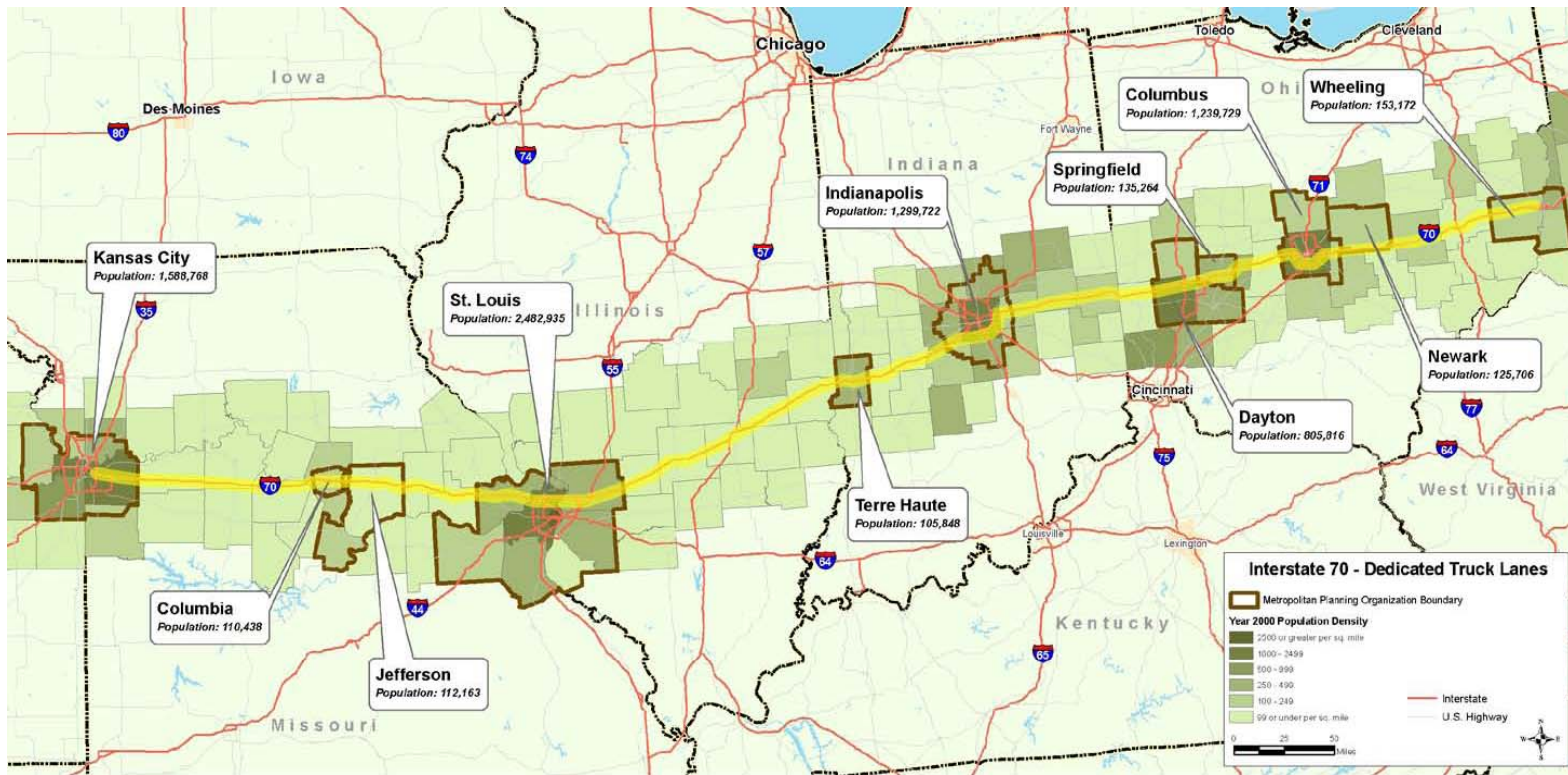
Keith J. Bucklew
Director of Freight Mobility
Indiana Department of Transportation



WilburSmith
ASSOCIATES



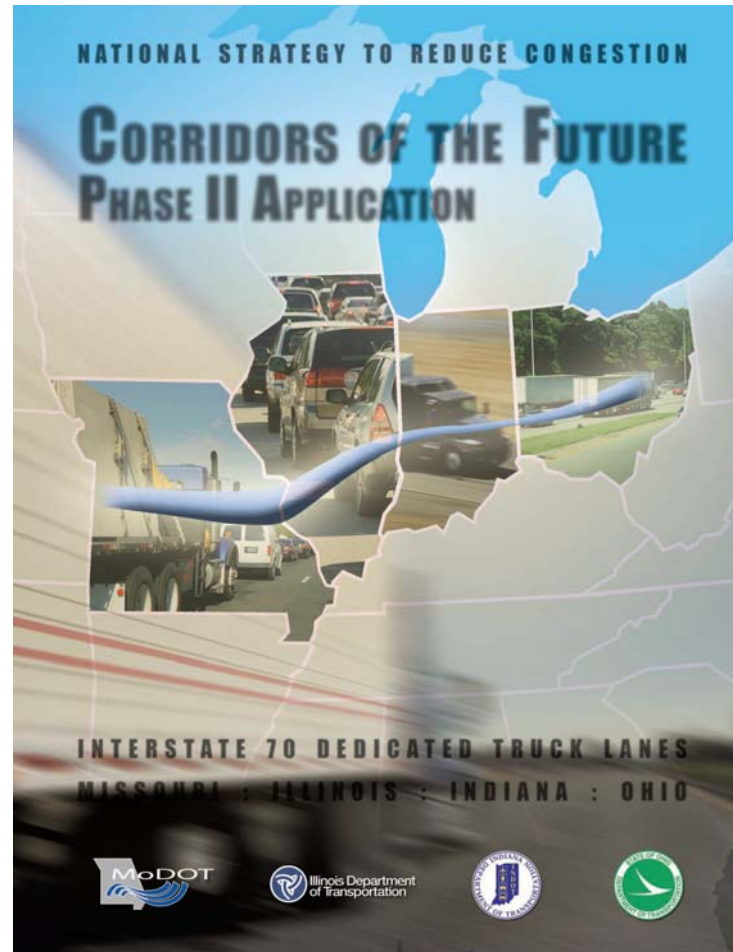
I-70 Project Area





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In the beginning..... 2007



Illinois Department
of Transportation



WilburSmith
ASSOCIATES



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



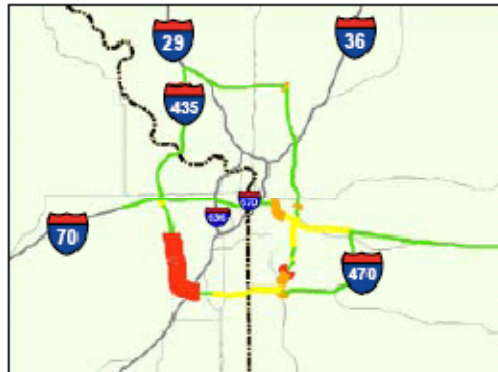
Corridor Conditions - Truck Flows 2035



Source: FHWA FAF 2



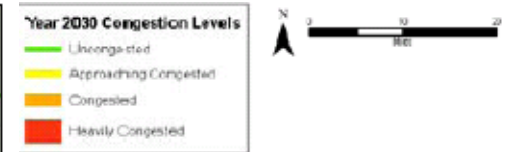
Corridor Conditions - 2030 Urban Area Congestion



Kansas City



Saint Louis



	Urban	Rural
2004 MVMT	55,379	18,527
% of VMT Deficient in 2004	21.55%	0.00%
2030 MVMT	98,173	35,651
% of VMT Deficient in 2030	73.05%	43.90%
Growth	77.27%	92.43%



Indianapolis



Dayton



Columbus

Source: Wilbur Smith Associates, 2007



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

Figure 1-5: 30-Day Average Travel Speeds for 7 Corridors: Southbound and Westbound



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

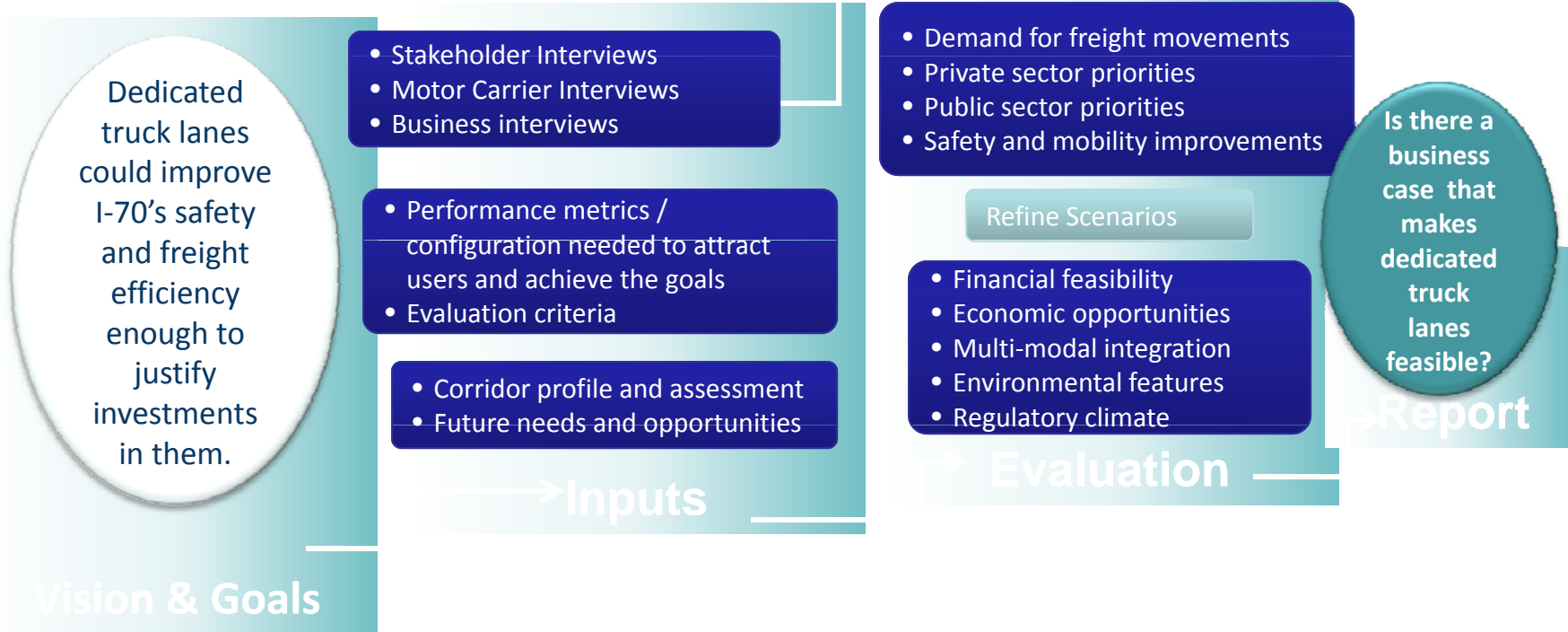


Where we are....

- Study efforts began June 25-26, 2009
- Initial stakeholder outreach
- Data collection underway
- Analytical approach being finalized



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



DRAFT



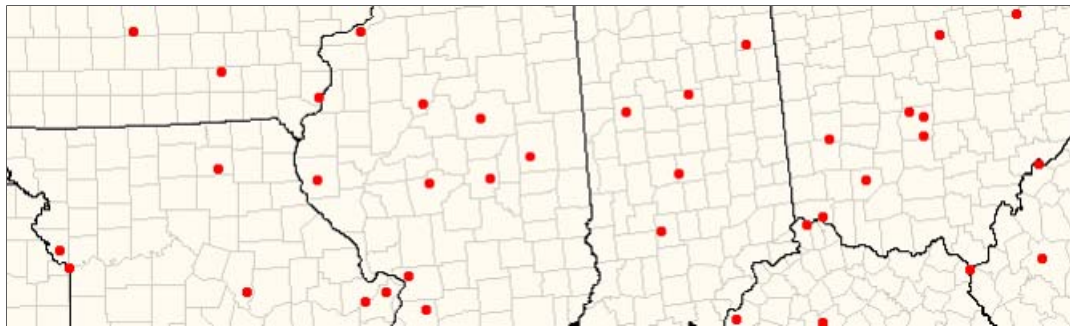
Where we are...

- Technical modeling under way
 - Travel demand
 - Commodity movements (FAF)
 - Econometric
 - Toll revenue
- Range of concepts being discussed

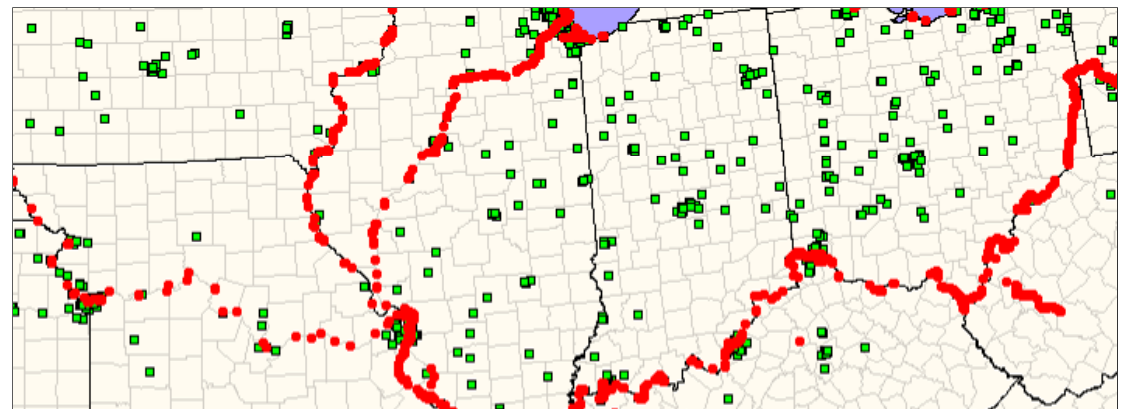
Study Status – Freight & Commodity Analysis

Freight generator data

Airports



Intermodal
Terminals & Ports



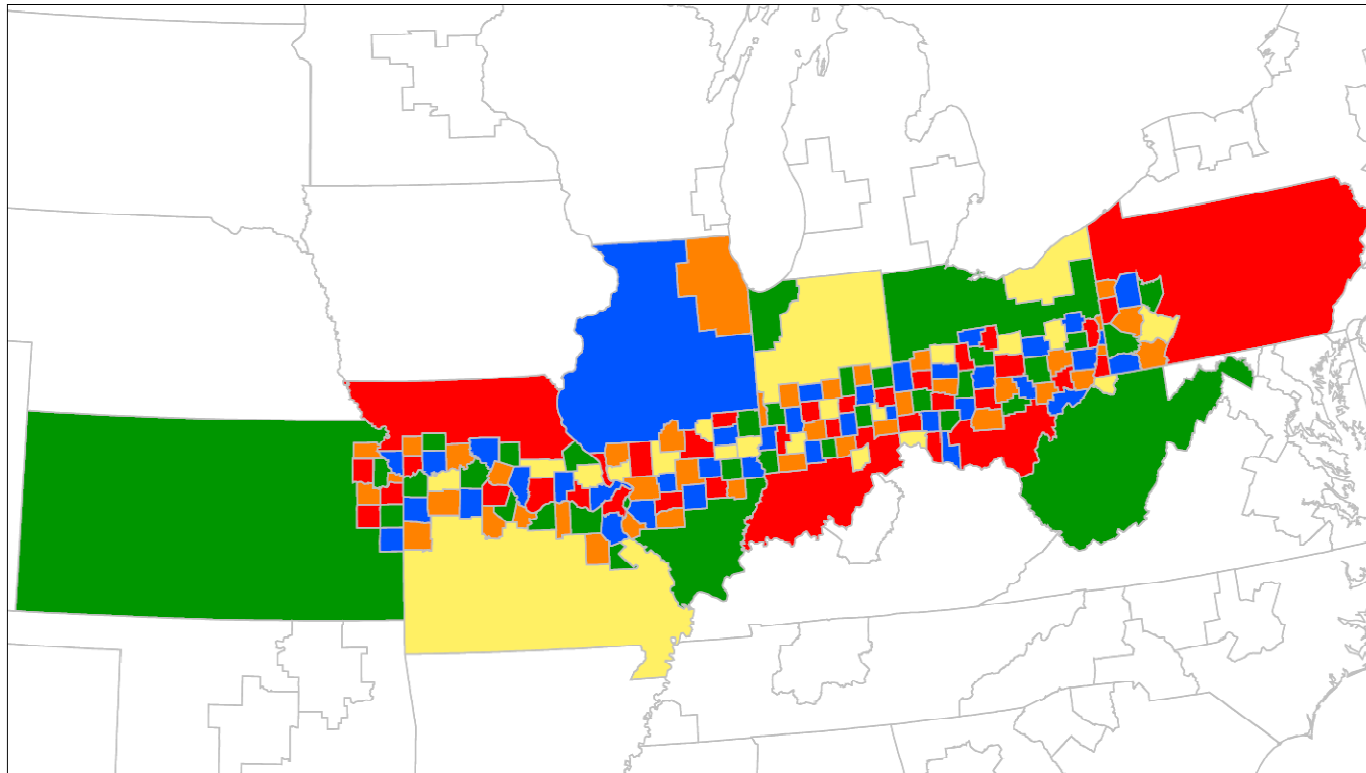


I-70 Corridor project area connects to:

- 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





: Example Slip Ramp Configuration

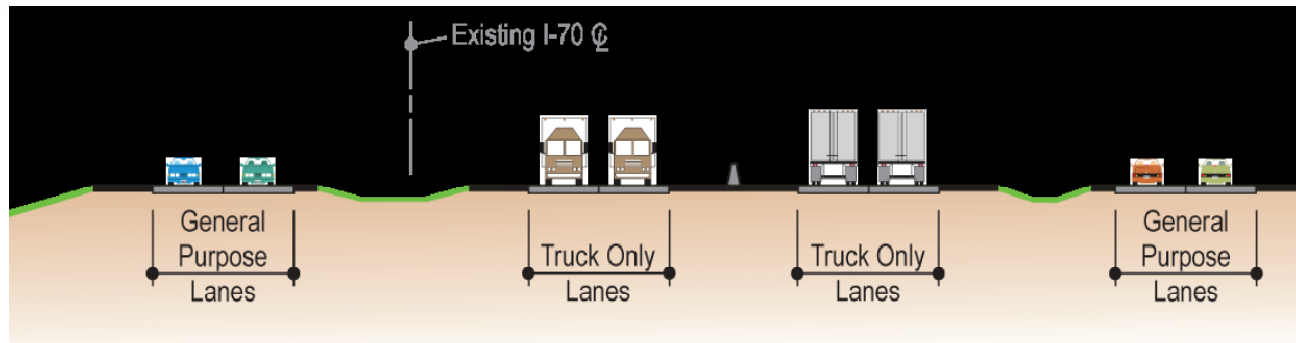
Range of Concepts:

Example Truck-Car Separated Interchange

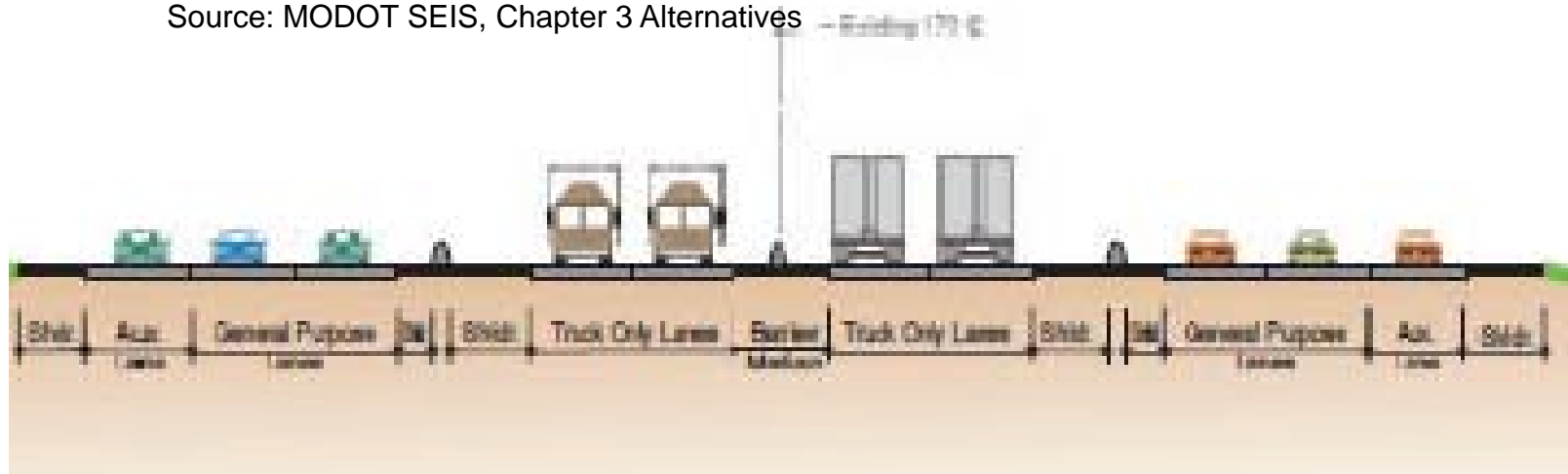




Range of Concepts: Ex. Hard Configuration



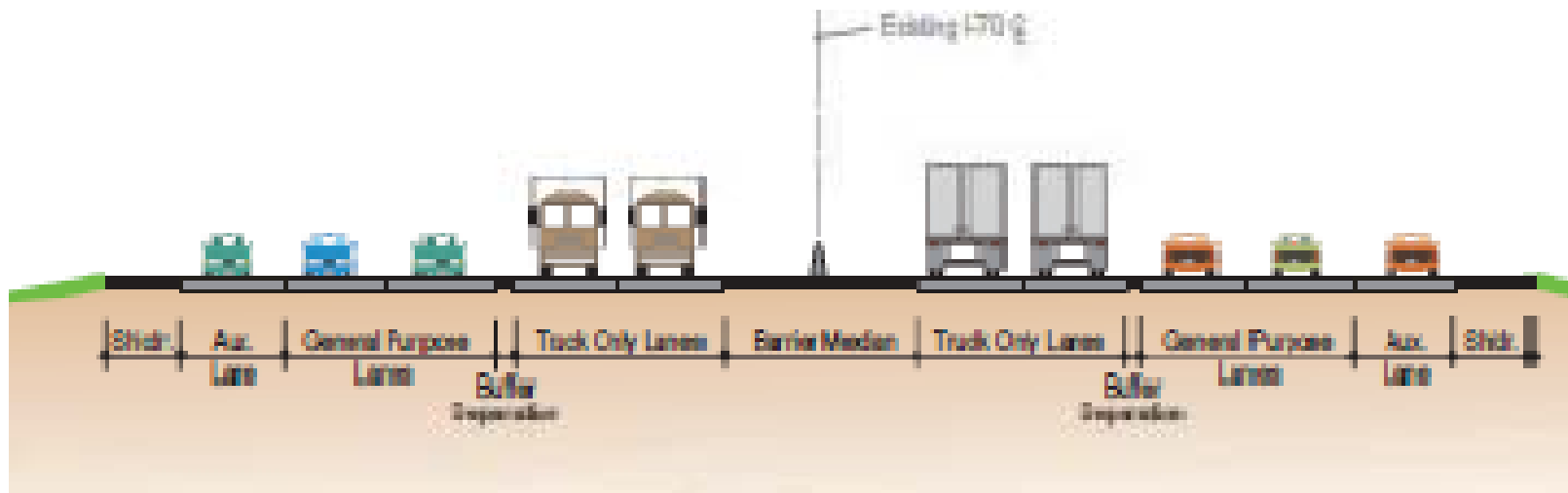
Source: MODOT SEIS, Chapter 3 Alternatives



Source: ROD FHWA MO EIS-09-01 FSEIS I-70 Corridor



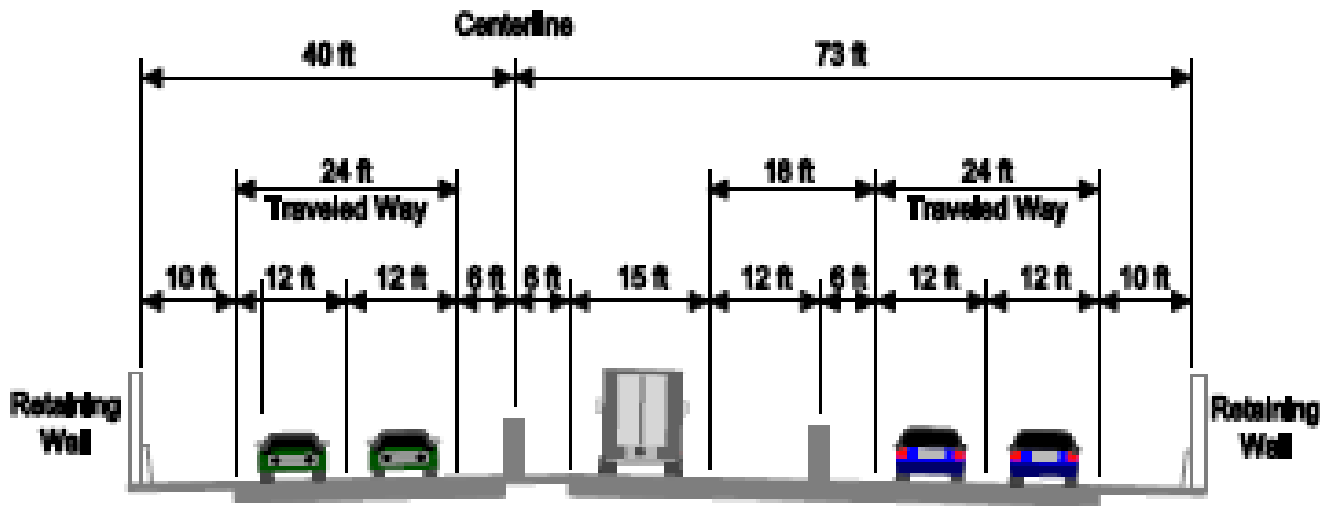
Range of Concepts: Ex. Soft Configuration



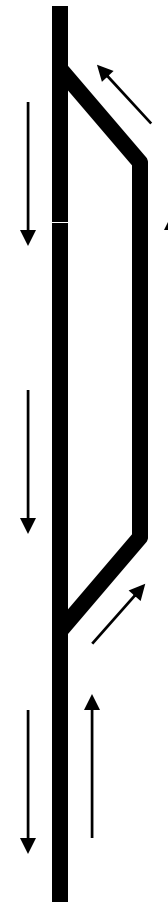
Source: ROD FHWA MO EIS-09-01 FSEIS I-70 Corridor



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

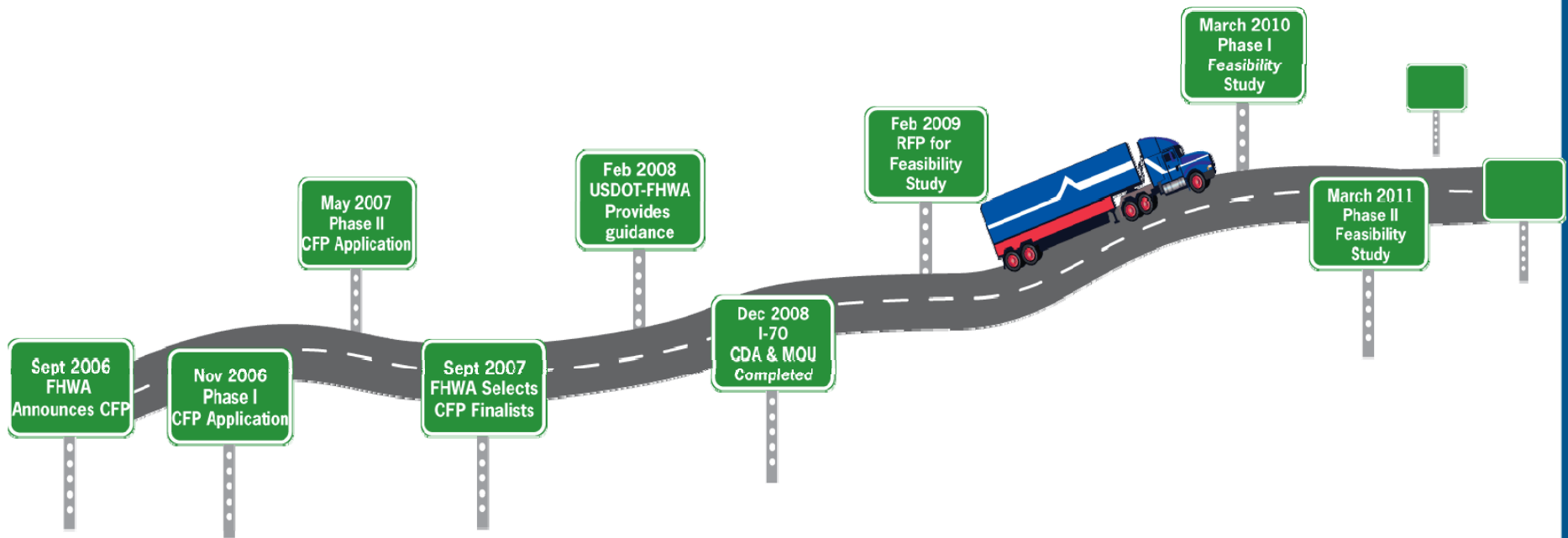


Where we are...

- 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





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Thank You
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