



LOUISVILLE AND SOUTHERN INDIANA  
BRIDGES AUTHORITY

# **Finance and Construction Planning Committee Meeting**

**March 30, 2011**

# Agenda

- **NEPA process update**
- **Industry Forum**
- **TIFIA Letter of Interest and federal updates**
- **Cost reduction efforts**
- **Forecasting status**
- **Tolling policy development**
- **Public-private partnerships as a delivery model**
- **Next steps**

# NEPA Process

# NEPA

## Project Status

- **Selected Alternative – Record of Decision (September 2003)**
- **Notice of Intent (February 2011) – Supplemental EIS**
  - **Proposed design modifications/cost savings**
  - **Tolling**
  - **Passage of time**

# NEPA

## Process Milestones

- **Purpose and Need, Alternatives**
- **Draft SEIS**
  - **Public comment and hearing**
- **Final SEIS**
- **Amended Record of Decision**

# NEPA

## Public and Agency Involvement

- **Agency coordination – federal, state, tribal, local**
- **Existing groups – Regional Advisory Committee, Area Advisory Teams**
- **Public meetings and hearings**

# NEPA

## Other Process Issues

- **Section 106 Historic Consultation**
  - Consulting parties, historic preservation advisory teams
- **Planning process – LRTP, TIP**
- **Air quality**
- **Permitting – U.S. Army Corps of Engineers, U.S. Coast Guard, etc.**

# Industry Forum



# Industry Forum

- **Held in Louisville on February 16-17**
- **Over 900 registrants:**
  - **Major contractors, developers and investors**
    - **6 of Top 10 U.S. Contractors in attendance\***
  - **70 percent Kentucky and Indiana businesses**
    - **Numerous regional DBE firms**

\*Based on 2010 Engineering News-Record rankings



# Industry Forum (continued)

## One-on-one meetings

- Met with 8 large developer/concession/construction groups:
  - ACS/Dragados
  - Bechtel
  - Balfour Beatty
  - Odebrecht
  - Meridiam
  - Cintra/Ferrovial
  - Kiewit/Traylor
  - Fluor/HDR
- More firms requested meetings, now scheduled for early April
- Each meeting focused on a standard list of topics for discussion

# Key Takeaways

## Individual Firm Meetings

- Impressed with bi-state collaboration and forum quality
- Need for single project “owner” representing the interests of both states
- Delivery schedule can be accelerated materially
- Heavy preference for performance targets rather than detailed design specifications (greater opportunity to innovate)
- Significant market capacity and appetite for project of this size
- Local/regional/DBE businesses will play core role in project delivery
- Bid preparation will be expensive, and potential bidders will want the NEPA process to advance in parallel with their commitment of resources

# Key Takeaways

## Networking Session

- Roundtable discussion sessions involving more than 100 participants
- Strong desire to understand the procurement approach as soon as possible
  - Important to continue outreach to local/DBE businesses
  - Need for frequent sharing of information about project
- Facilitated team building and sharing of ideas between large firms and local companies
- Significant need for local talent and resources to complete a project of this magnitude

# TIFIA Letter of Interest and Federal Updates



# TIFIA Letter of Interest

- **The Authority, in conjunction with KYTC and INDOT, submitted a letter of interest to the TIFIA program on March 1 requesting financing of up to \$1.3 billion**
- **TIFIA received 34 LOIs (compared to 39 in 2010) for combined assistance of \$14 billion for projects exceeding \$48 billion in total cost**
- **Many of the LOIs were for toll-backed road/bridge projects; others include transit and port facilities**
- **Next step is invitation to submit formal application; TIFIA has not yet indicated when invitations will be announced**

# National Infrastructure Bank Proposals

- Latest proposals
  - President's Budget
  - Kerry-Hutchinson-Warner Build Act (Building and Upgrading Infrastructure for Long-Term Development Act) to create American Infrastructure Financing Authority (AIFA)
- Potential to provide low-cost, flexible loans and other credit assistance for revenue-supported projects similar to TIFIA program

# Federal Tolling Programs Update

- **Continued coordination with Office of Innovative Program Delivery and Division Administrators regarding federal tolling authority in conjunction with NEPA process**
- **Federal policy framework still solidifying, with positive signs for projects that result in added capacity**

# Cost Reduction Efforts

# Cost Reduction Efforts

**Governors, Mayor identified more than \$500 million in potential project savings**

- **Rebuild Kennedy Interchange in place**
- **Reduce East End bridge, roadway and tunnel from six lanes to four lanes**
- **Complete the Big Four Bridge pedestrian / bike path under a separate project**

# Directional Drilling



# Forecasting

# Time of Day Model and Forecasting

- **Development of new project Time of Day (TOD) model**
  - Tool for further analysis
- **Model broken into 4 time of day periods**
- **Forecasts**
  - help guide design decisions
  - established after refinement of project TOD outputs
  - will be updated on an ongoing basis
- **Required for**
  - numerous NEPA analyses
  - tolling policy decisions

# Elements of TOD Model

- **Separate car and truck models**
- **Updated socioeconomic**
- **Latest traffic data (by cars and trucks)**
- **Video license plate survey of trips through the KIPDA region (by cars and trucks)**
- **Transit model included**
- **Updated capacity/assignment methodologies**
- **Includes traffic signals**
- **Tolling methodology**

# Tolling Policy Considerations

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## Pricing

- **Vehicle classes**
  - Cars vs. trucks
  - Number of axles
- **Time of day**
  - Peak vs. off-peak hours
- **Schedule for rate adjustments**
  - Indexation
- **Discounts**
  - Frequent user/commuter plans
  - Residency, vehicle occupancy, number of trip requirements

# **Tolling Policy Considerations**

## **Technology and Other**

- **Violations and enforcement**
- **Transponder distribution arrangements**
- **Billing and user account policies**
- **Regional interoperability and reciprocity**

# Example: E-ZPass Discount Programs

Toll Agency	Discount Program
Port Authority Staten Island Bridges Plan	Under plan, 20 trips are purchased in advance, and must be used within 35 days. Discounted toll rate is \$4.00 at each of the facilities.
Port Authority Carpool Commuter Plan	For commuters with 3 or more occupants in a vehicle traveling on Port Authority facilities. Discounted rate per trip is \$2.00. Must use a staffed toll lane.
South Jersey Transportation Authority Frequent User Plan	Enrolled customers who make 30 or more trips using their E-ZPass tag within a 35-day time frame will receive discounted rates for the following 35-day period.
DRBA Commuter Discount Package	Entitles enrolled users to 25 trips on the Delaware Memorial Bridge at \$.75 per trip, when taken within a 30-day period.
DRBA Frequent Traveler Discount Package	Entitles enrolled E-ZPass users to 20 trips on the Delaware Memorial Bridge at \$1.00 per trip when taken within a 90-day period.
DRPA Commuter Discount Plan	Under this plan, all trips will be included on the account statement at the standard rate of \$4.00. Shortly after the end of each month, patrons making more than 18 trips in the preceding calendar month will receive a \$6.00 rebate.
Tappan Zee Bridge Carpool Commuter Plan	Requires a monthly minimum of 20 trips on the Tappan Zee Bridge at a discounted rate of \$0.50 vs. the full toll of \$5.00 per trip. Each trip must have a vehicle occupancy of three or more people, and must drive in the staffed lanes.
Tappan Zee Bridge Commuter Plan	Provides a discounted toll rate for enrolled customers and requires a monthly minimum of 20 trips on the Tappan Zee Bridge in order to receive the toll rate of \$3.00 vs. the full toll of \$5.00 per trip.
MTA B&T Staten Island Resident Program	Provides toll discounts to E-ZPass customers who meet residency requirements (based on zip code). Residents pay \$5.76 per trip on the Verrazano-Narrows Bridge vs. the full toll of \$13.00.

# Example Toll Schedule

## Orlando – Orange County Expressway Authority

Toll Schedule as of April 5, 2009

Roadway	2 Axles <sup>(A)</sup>	3 Axles	4 Axles	5 Axles	6 Axles
<b>S.R. 528</b>					
Airport Plaza	\$1.00	\$1.50	\$1.75	\$2.25	\$2.25
Beachline Main Plaza <sup>(B)</sup>	\$1.50	\$2.75	\$3.50	\$4.25	\$4.25
International Corporate Park <sup>(C)</sup>	\$1.25	\$1.25	\$1.25	\$1.25	\$1.25
<b>S.R. 408</b>					
Good Homes Road <sup>(D)</sup>	\$0.25	\$0.25	\$0.25	\$0.25	\$0.25
Hiwassee Main Plaza	\$0.75	\$1.50	\$1.75	\$2.25	\$2.25
Hiwassee Road	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50
Pine Hills Main Plaza	\$1.00	\$1.50	\$1.75	\$2.25	\$2.25
Old Winter Garden Road	\$0.75	\$0.75	\$0.75	\$0.75	\$0.75
John Young Parkway (S.R. 423)	\$0.75	\$0.75	\$0.75	\$0.75	\$0.75
Orange Blossom Trail <sup>(E)</sup>	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50
Mills Avenue <sup>(E)</sup>	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50
Bumby Avenue <sup>(E)</sup>	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50
Conway Road	\$0.75	\$0.75	\$0.75	\$0.75	\$0.75
Andes/Semorán Blvd	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00
Conway Main Plaza	\$1.00	\$1.50	\$1.75	\$2.25	\$2.25
Semorán Boulevard (S.R. 436)	\$0.75	\$0.75	\$0.75	\$0.75	\$0.75
Dean Road	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50
Dean Main Plaza	\$0.75	\$1.50	\$1.75	\$2.25	\$2.25
Rouse Road	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50
<b>S.R. 417</b>					
John Young Main Plaza	\$1.25	\$1.75	\$2.25	\$2.75	\$2.75
John Young Parkway (S.R. 423)	\$0.75	\$0.75	\$0.75	\$0.75	\$0.75
Orange Blossom Trail <sup>(E)</sup>	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50
Landstar Boulevard	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50
Boggy Creek Main Plaza	\$1.25	\$1.75	\$2.25	\$2.75	\$2.75
Boggy Creek Road <sup>(E)</sup>	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00
Lake Nona Boulevard <sup>(E)</sup>	\$0.75	\$0.75	\$0.75	\$0.75	\$0.75
Narcoossee Road	\$0.75	\$0.75	\$0.75	\$0.75	\$0.75
Moss Park Road <sup>(E)</sup>	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50
Innovation Way <sup>(E)</sup>	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50
Lee Vista Boulevard	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50
Curry Ford Main Plaza	\$0.75	\$1.50	\$1.75	\$2.25	\$2.25
Curry Ford Road (S.R. 552)	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50
Valencia College Lane <sup>(E)</sup>	\$0.25	\$0.25	\$0.25	\$0.25	\$0.25
Colonial Drive (S.R. 50)	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50
University Main Plaza	\$0.75	\$1.50	\$1.75	\$2.25	\$2.25
University Boulevard	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50
<b>S.R. 429</b>					
Forest Lake Main Plaza	\$1.25	\$1.75	\$2.25	\$2.75	\$2.75
West Road	\$0.75	\$0.75	\$0.75	\$0.75	\$0.75
S.R. 438 <sup>(E)</sup>	\$0.25	\$0.25	\$0.25	\$0.25	\$0.25
C.R. 535	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50
Independence Main Plaza	\$1.25	\$1.75	\$2.25	\$2.75	\$2.75
New Independence Parkway	\$0.75	\$0.75	\$0.75	\$0.75	\$0.75
<b>S.R. 414</b>					
Coral Hills Main Plaza <sup>(E)</sup>	\$1.00	\$1.50	\$2.00	\$2.50	\$2.50
Keene Road <sup>(E)</sup> <sup>(E)</sup>	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50
Hiwassee Road <sup>(E)</sup> <sup>(E)</sup>	\$0.25	\$0.25	\$0.25	\$0.25	\$0.25

- E-PASS users are eligible for discounts based on frequency of use
- The discount is computed and credited at the end of each month

Notes:  
 (A) Includes motorcycles.  
 (B) The tolls collected for this plaza includes an allocation to FDOT. The FDOT allocation at this location is: \$.25 - 2 axle, \$.60 - 3 axle, \$.75 - 4 axle, \$.100 - 5 and 6 axle vehicles.  
 (C) The tolls collected for this plaza includes an allocation to FDOT. The FDOT allocation at this location is: \$.26 regardless of the number of axles.  
 (D) Future plazas.  
 (E) No toll rate increase on April 5, 2009.



# Example Toll Schedule

## North Texas Tollway Authority

Dallas North Tollway  
(rates effective Dec. 11, 2010)

Locations	Northbound		Southbound		Two Axles		Three Axles		Four Axles		Five Axles		Six or More Axles and Special Permits	
	Entrance From	Exit At	Entrance From	Exit At	Toll Tag	Zip@ Toll Tag	Toll Tag	Zip@ Toll Tag	Toll Tag	Zip@ Toll Tag	Toll Tag	Zip@ Toll Tag	Toll Tag	Zip@ Toll Tag
Mainlane Plaza 1					1.26	1.89	2.52	3.78	3.78	5.67	5.04	7.56	6.30	9.45
Mockingbird Lane	■				0.92	1.38	1.84	2.76	2.76	4.14	3.68	5.52	4.60	6.90
Northwest Highway	■				0.62	0.93	1.24	1.86	1.86	2.79	2.48	3.72	3.10	4.65
Royal Lane	■				0.33	0.53	0.66	1.06	0.99	1.59	1.32	2.12	1.65	2.65
Spring Valley Road		■	■		0.22	0.42	0.44	0.84	0.66	1.26	0.88	1.68	1.10	2.10
Belt Line Road		■	■		0.29	0.49	0.58	0.98	0.87	1.47	1.16	1.96	1.45	2.45
Keller Springs Road (South)					0.44	0.66	0.88	1.32	1.32	1.98	1.76	2.64	2.20	3.30
Mainlane Plaza 2	■				0.90	1.35	1.80	2.70	2.70	4.05	3.60	5.40	4.50	6.75
Frankford Road	■				0.22	0.42	0.44	0.84	0.66	1.26	0.88	1.68	1.10	2.10
FM 544		■	■		0.22	0.42	0.44	0.84	0.66	1.26	0.88	1.68	1.10	2.10
Main Plaza 3					0.80	1.20	1.60	2.40	2.40	3.60	3.20	4.80	4.00	6.00
Parker Road	■				0.48	0.72	0.96	1.44	1.44	2.16	1.92	2.88	2.40	3.60
Spring Creek Parkway	■				0.27	0.47	0.54	0.94	0.81	1.41	1.08	1.88	1.35	2.35
Gaylord Parkway		■	■		0.22	0.42	0.44	0.84	0.66	1.26	0.88	1.68	1.10	2.10
Lebanon Rd.		■	■		0.33	0.53	0.66	1.06	0.99	1.59	1.32	2.12	1.65	2.65
Stone Brook Parkway		■	■		0.42	0.63	0.84	1.26	1.26	1.89	1.68	2.52	2.10	3.15
Cotton Gin Road/Main Street		■	■		0.68	1.02	1.36	2.04	2.04	3.06	2.72	4.08	3.40	5.10
Mainlane Plaza 4					1.41	2.12	2.82	4.24	4.23	6.36	5.64	8.48	7.05	10.60
Eldorado Parkway (FM 2934)	■				0.51	0.77	1.02	1.54	1.53	2.31	2.04	3.08	2.55	3.85

- TollTag rates are 14.5 cents per mile – 50% less than cash rates
- Starting in 2011, rates increase by 5.6% every odd year

# Public-Private Partnerships



# Project Delivery Options

- Key variable: who is responsible for key project risks?

	Design	Construction	Operate/ Maintain	Financing	Traffic	Revenue
Design-Bid-Build (Traditional)	○	○	○	○	○	○
Design-Build	●	●	○	○	○	○
Design-Build-Operate- Maintain	●	●	●	○	○	○
Design-Build-Finance- Operate-Maintain (Availability Payment)	●	●	●	●	○	○
Design-Build-Finance- Operate-Maintain (Shadow User Fee)	●	●	●	●	●	○
Design-Build-Finance- Operate-Maintain (Real User Fee)	●	●	●	●	●	●

○ – Risk retained by Public Sector

● – Risk transferred to Private Sector



# Public-Private Partnerships (P3's)

## Key Questions

- **What are they? (and what they are not)**
- **Why are they done?**
- **How are they done?**
- **How is value measured?**

# Public-Private Partnerships (P3's)

## What Are They?

- A contractual agreement between public and private sector partners that allows for more private sector participation in project delivery than is traditional
- Public sector already outsources many elements of project delivery and maintenance
- P3 bundles a broader range of services under a single long term contract, including some mix of the following:
  - Design, construction, financing, operations and/or maintenance
- Performance-based contracting is the key to effective P3s



# Public-Private Partnerships (P3's)

## What They Are Not . . .

- **NOT “privatization”**
  - Public sector retains ownership of assets
- **NOT public loss of control**
  - Public sector controls key aspects (toll setting, safety and performance standards, etc.) through contract
- **NOT a threat to labor**
  - Public sector can specify how labor is to be handled, and new projects create new jobs
- **NOT a higher cost alternative**
  - Choose the P3 approach when whole-life cost of P3 is lower than conventional approach

# Public-Private Partnerships (P3's)

## Why Are They Done?

- **“Time is money” for both public and private partners – P3 aligns incentives**
- **Better control of project costs**
  - **Enhanced opportunities to drive down costs (i.e., value engineering, constructability/traffic management innovation)**
  - **Avoidance of cost overruns**
- **Schedule acceleration and certainty**
  - **Guaranteed completion dates**
- **Single point of accountability and responsibility**
- **Performance requirements throughout project lifecycle**

# Public-Private Partnerships (P3's)

## How Are They Done?

- **Public sponsor selects private partner through competitive bid process**
- **P3 contracts define key performance requirements up front, to be met under long-term contract**
- **Effective P3 projects combine the global expertise of large firms with the skills and insights of local, regional and specialty contractors**

# Public-Private Partnerships (P3's)

## How Is Value Measured?

### Public Sector Comparator

- Hypothetical, risk adjusted, whole-life cost of a project assuming traditional procurement
- Provides detail and benchmark when considering alternative delivery methods

### Shadow Bid

- Aspects of project financing, risk transfer, innovations and efficiencies from perspective of private sector
- Provides information benchmark when considering alternative delivery methods

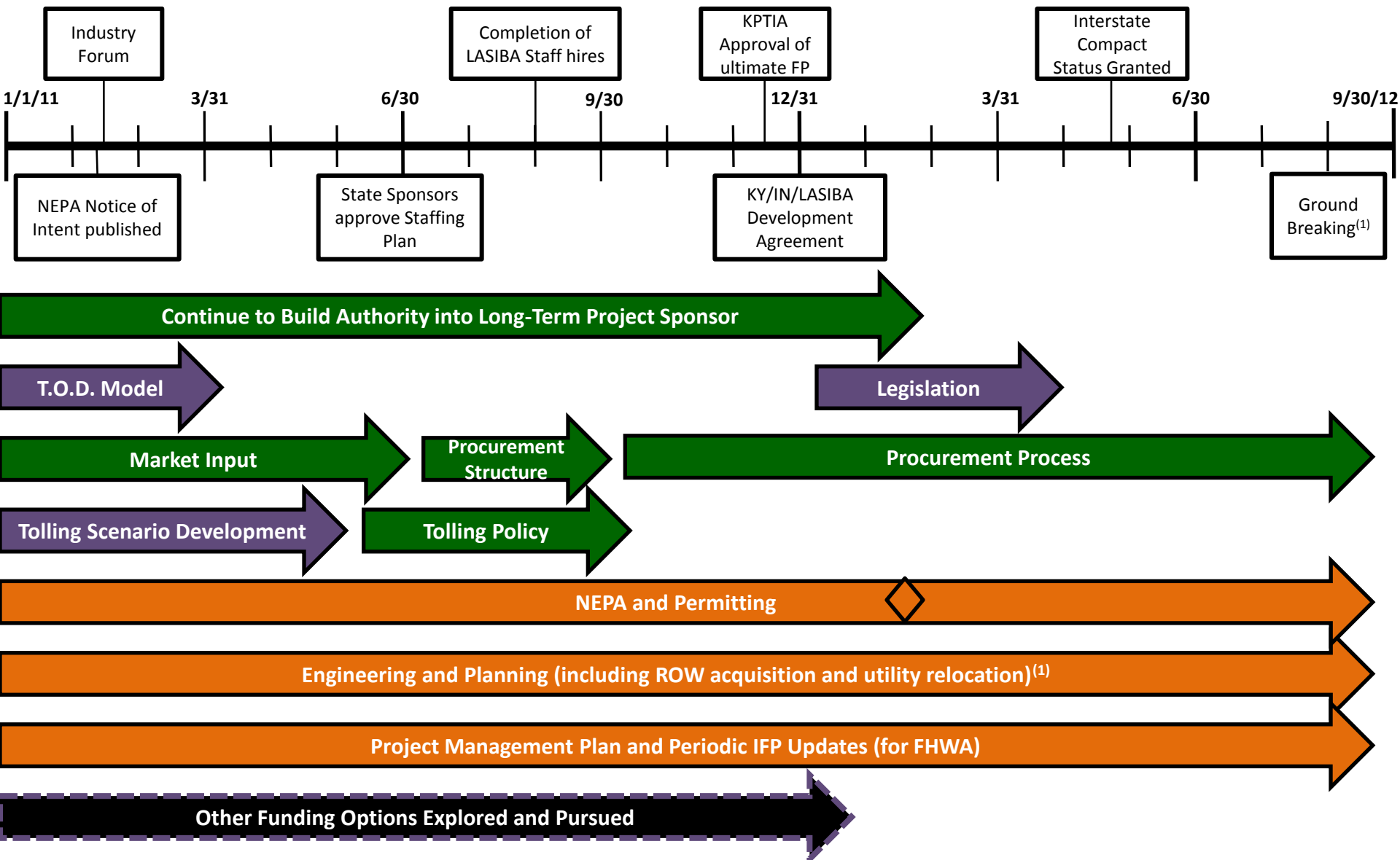
### Value for Money Analysis

- Comparison of Public Sector Comparator and Proposer model outputs
- Financial performance (NPV of cash flows) and output of risk analysis
- Answers question of value using traditional procurement versus alternative delivery methods

# Next Steps

# Next Steps

- **Continue targeted market outreach efforts**
- **Begin Value for Money analyses**
  - **Require input of revenue forecasts from traffic modeling team**
  - **Results inform decisions on procurement and delivery approach**
- **Continue exploring issues to be addressed in development agreement and interstate compact alternatives**
- **Continue progressing NEPA effort**
  - **Cost reduction**
  - **Tolling considerations**



	State Sponsors lead		LASIBA leads
	Shared and Coordinated Roles		Requires new legislative action

(1) Must be consistent with NEPA process

