November 20, 2015
LTA Board Meeting

BUMC Public-Private Partnership Development Proposal
Three Purposes of Project

- Relieve I-10 MRB and I-10 System in EBR
- Relieve existing congestion in Airline
- Stimulate redevelopment of declining Corridor
- Sections of Airline Corridor north of Florida Bld.
($1.5B to $2.0B)

- Use existing assets to gain full value of new system
- Modernization of key interchange
- No significant right-of-way acquisition
- End-to-end travel for free
- No tolls on old bridge
- AECOM $800 million cost

BUMP DESIGN AND COSTS
3. AECOM's Request

2. System Traffic Characteristics

1. Revenue & Finance

Agenda

Proposal

BUMP Public-Private Partnership Development
- Toll rates
- Toll sensitivity curves
- Traffic growth rate
- Average daily traffic (opening year)
- Truck %
- Ramp up factor
- Revenue days (annualization)
- Revenue daily distribution
- Revenue capture rates
- Value of time

Key Areas of Discussion from Peer Review
Project Costs

- Infrastructure (old MRRB, Interchanges, Right-of-Way)
  - Utilize $800 million to $1.2 billion of existing
  - Million new construction

General agreement AECOM/CHNB = $775 - $800

Capital Costs
Traffic & Revenue Estimates

Revenue Forecast Comparison (2014$)
Revenue Difference = +3% NPV

- Denver: 321
- Houston (total system): 325
- Austin (3): 327
- Dallas (4 projects): 335 days per year
- Consultant Base:
  - Example projects are HNTB's Independent TR&R
  - AECOM uses 325
  - HNTB uses 315

Annualization Factor (toll days per year)

Traffic & Revenue Estimates
Revenue Difference (+1.3%) = +17% NPV

- Assumes no induced growth due to new roadway
- 1.3% is substantiated by regional growth trends
- Recommends higher growth over first 20 years
- HNTB's independent T&R consultant (Baer)
- HNTB uses 0.35% annual growth in corridor
- Traffic increasing on I-70 system at 2.7% per year
- Increase over 20 years
- Population (23%) and employment (21%) forecast to

Traffic Growth

Traffic and Revenue Estimates
Traffic & Revenue Estimates

Revenue Forecast Comparison (2014$)

Traffic Growth
HNTRB Evaluation
Annualization

2020
2025
2030
2035
2040
2045
2050
2055
$0.0
$50.0
$100.0
$150.0
$200.0
$250.0
$300.0
$350.0
$400.0
$450.0
$500.0
$550.0
$600.0
$650.0
$700.0
$750.0
$800.0
$850.0
$900.0
Revenue Difference at $15 = +8% NPV

- $15/hour Industry Option
- $20/hour

- Baton Rouge Loop Implementation Plan Toll Study
- US 290 E (Austin) -- $15/hour
- Comparable
- HNTB uses $10/hour

Value of Time

Traffic & Revenue Estimates
Traffic & Revenue Estimates
Revenue Difference = +24% NPV

- Use $0.20/mi with 1% increase per year
- SH 130 (Austin)
- SH 121 (Dallas)

Examples projects are:

- Periodic adjustments are being used in Texas
- Based on historical increases in disposable income
- Periodic adjustment is a standard practice in industry
- HNTB uses $0.20/mi with no increase over time

Basic Toll Rate

Traffic & Revenue Estimates
Traffic & Revenue Estimates
Revenue Difference = +12% NPV

- Observed
  - Dallas, managed lanes: 50% increase in toll rate
  - Charlotte, NC: 27% revenue increase modeled
- Recent examples of static tolls vs. dynamic tolls:
  - Managed congestion to maintain free flow
  - Higher toll rate during peak periods, very low at night
day
  - Variable toll rate based on congestion and/or time of

Dynamic Pricing Opportunity

Traffic & Revenue Estimates
Traffic & Revenue Estimates
### Table 4: Average Weekday Traffic Ranges

<table>
<thead>
<tr>
<th>Assumptions</th>
<th>Scenario</th>
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<tbody>
<tr>
<td>Bump Traffic and Toll Revenue Sketch Level General Review</td>
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#### Assumptions

<table>
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<tr>
<td><strong>Opening Year</strong></td>
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<tr>
<td><strong>Average Weekday Traffic</strong></td>
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<tr>
<td><strong>Average Year</strong></td>
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<tr>
<td><strong>Likely</strong></td>
<td>29,300</td>
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<tr>
<td><strong>Conservative</strong></td>
<td>13,900</td>
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<tr>
<td><strong>Aggressive</strong></td>
<td>46,400</td>
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</tbody>
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**Note:** Does not include ramp-up factor.

Demand attributed to the Bump.

The traffic growth between 2014 and 2022 account for the additional traffic between 2014 and 2022 will increase at an annual rate of 2.0%.

Assuming 30% of the traffic scennario will be in the Bump, annual traffic growth between 2014 and 2022 will increase at an annual rate of 1.3%.

Assuming 20% of the traffic scenario will be in the Bump, annual traffic growth between 2014 and 2022 will increase at an annual rate of 0.65%.

Assuming 10% of the traffic scenario will be in the Bump, annual traffic growth between 2014 and 2022 will increase at an annual rate of 0.4%.
3. AECOM's Request

2. System Traffic Characteristics

1. Revenue & Finance

Agenda

Proposal

BUMP Public-Private Partnership Development
I-10 and Bump Average Daily Traffic
Existing Conditions
2037 Projected Conditions With No Build
I-10 and Bump Average Daily Traffic
2037 Projected Conditions with Build
I-10 and Bump Average Daily Traffic

Note: Based on dynamic tolling, which yields most conservative diversion effect.
2037 Projected Conditions with Build
I-10 and I-10 Bump Average Daily Traffic

Note: Based on dynamic tolling, which yields most conservative diversion effect.
Without Improvements to I-10

2032 Daily Volumes to I-10

College to I-10 / I-12 Split

I-10 Bridge
Agenda

1. Revenue & Finance
2. System Traffic Characteristics
3. Conclusions and Request

Proposal

BUMP Public-Private Partnership Development
region.

Benefits to traffic in the Baton Rouge
area may be needed, it is likely
that gap financing may be needed through tolls.

Conclusions
to long term agreement.

Numerous "off ramps" in PPP process prior planning phase.

If needed, would be made by LTA at end of final decision to provide gap financing, only

Conclusions
BUMP project enhancements that we have developed over the last 9 months.

We are anxious to present additional enhancements with Louisiana’s P3 legislation. For competing proposals in accordance with the project be advertised.

Request