ARKANSAS
Long Range Intermodal Transportation Plan

LRITP Stakeholder Meetings
June 27-30, 2016
Agenda

- Overview of 2040 LRITP
- Highway Needs
- Non-Highway Needs
- Revenue Forecast
- Funding Gap
- Alternative Future Scenarios
- Performance Results
- MetroQuest Demonstration
- Next Steps
- Interactive Session
Long Range Intermodal Transportation Plan Goals

Safety and Security

Economic Competitiveness

Infrastructure Condition

Environmental Sustainability

Congestion Reduction, Mobility and System Reliability

Multimodal Transportation System
# Highway Needs Assessment (2016-2040)

<table>
<thead>
<tr>
<th>Category</th>
<th>Estimated Multimodal Needs (millions $)</th>
<th>Annual Need (millions $)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bridge</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rehabilitation</td>
<td>$2,804.52</td>
<td>$112.18</td>
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<tr>
<td>Reconstruction</td>
<td>$150.38</td>
<td>$6.02</td>
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<tr>
<td>Replacement</td>
<td>$1,978.10</td>
<td>$79.12</td>
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<tr>
<td><strong>Total Bridge</strong></td>
<td>$4,933.00</td>
<td>$197.32</td>
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<tr>
<td><strong>Highway</strong></td>
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<tr>
<td>Preservation</td>
<td>$8,734.97</td>
<td>$349.40</td>
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<tr>
<td>Reconstruction</td>
<td>$18,231.56</td>
<td>$729.26</td>
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<tr>
<td>Expansion</td>
<td>$3,044.00</td>
<td>$121.76</td>
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<tr>
<td>I-49 and I-69 Corridors</td>
<td>$5,644.00</td>
<td>$225.76</td>
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<tr>
<td>Four-Lane Grid System</td>
<td>$5,886.00</td>
<td>$235.44</td>
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<tr>
<td><strong>Total Highway</strong></td>
<td>$41,540.53</td>
<td>$1,661.62</td>
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<tr>
<td><strong>Interchanges</strong></td>
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<tr>
<td></td>
<td><strong>$820.00</strong></td>
<td><strong>$32.80</strong></td>
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<tr>
<td><strong>Transportation System Support</strong></td>
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<tr>
<td>Safety</td>
<td>$1,750.00</td>
<td>$70.00</td>
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<tr>
<td>Maintenance</td>
<td>$4,540.49</td>
<td>$181.62</td>
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<tr>
<td>ITS</td>
<td>$88.00</td>
<td>$3.52</td>
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<tr>
<td><strong>Total System Support</strong></td>
<td>$6,378.49</td>
<td><strong>$255.14</strong></td>
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<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$53,672.01</strong></td>
<td><strong>$2,146.88</strong></td>
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</table>
Non-Highway Needs (2016-2040)

<table>
<thead>
<tr>
<th>Category</th>
<th>Estimated Multimodal Needs (millions $)</th>
<th>Annual Need (million $)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Public Transportation</strong></td>
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<td></td>
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<tr>
<td>Rural Transit</td>
<td>$4,236.61</td>
<td>$169.46</td>
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<tr>
<td>Urban Transit</td>
<td>$726.95</td>
<td>$29.08</td>
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<td>Other</td>
<td>$723.42</td>
<td>$28.94</td>
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<tr>
<td><strong>Total Public Transportation</strong></td>
<td><strong>$5,686.98</strong></td>
<td><strong>$227.48</strong></td>
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<td><strong>Rail Facility</strong></td>
<td>$1,722.48</td>
<td>$68.90</td>
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<td><strong>Ports and Waterways</strong></td>
<td>$743.46</td>
<td>$29.74</td>
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<tr>
<td><strong>Bicycle and Pedestrian</strong></td>
<td>$1,001.80</td>
<td>$40.07</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$9,154.72</strong></td>
<td><strong>$366.19</strong></td>
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</table>
Baseline Revenue Forecast (2016-2040)

- The baseline revenue forecast assumes:
  - No changes to state or federal legislation which stipulate the amount of revenues AHTD receives.
  - No changes in tax rates, fee levels, or existing revenues.
  - No new revenue sources.
  - No proceeds from newly issued debt, general revenue appropriations from the State, or other special one-time funding.
  - 2.5 percent annual inflation factor

- 25-Year total revenue = $15.4 billion (CY$)
- 25-Year inflation adjusted revenue = $11.0 billion (2014$)

This forecast does not include the recent Arkansas Highway Improvement Plan of 2016 revenue
Baseline Revenue Forecast (2016-2040)

$15.4 billion in current year dollars equates to...

...$11.0 billion in inflation adjusted dollars (a 28 percent loss in purchasing power)
Highway Funding Gap

- **Needs**: $53.7 Billion
- **Revenue**: $10.5 B
- **Highway Funding Gap**: $43.2 Billion
- **Annual Highway Funding Gap**: $1.7 Billion
Alternative Future Scenarios

- Portray different scenarios to allocate resources
- Scenarios combine essential elements
  - Goals & objectives, needs, funding, and priorities

1. Develop framework
2. Develop menu of strategic choices
3. Test different resource allocation emphasis
4. Portray alternatives and explain outcomes
5. Understand consequences and trade-offs
• **Focus**
  – Maintain and preserve the existing highway and bridge system
  – Higher priority on highway and bridges on the National Highway System (NHS)
Think Locally – Trade Globally

• Focus
  – Enhance infrastructure investments that support industry retention and attraction
  – Allocate funds to increase capacity and improve system conditions on key corridors to improve freight efficiency and connectivity
Connecting Communities – Forging Opportunities

• **Focus**
  – Increase capacity to improve economic competitiveness.
  – Allocate funds to complete the Four-Lane Grid System.
Bigger Cities – More Mobility

• **Focus**
  – Allocate funds to alleviate urban congestion
  – **Emphasis on:**
    • Congested corridors
    • Increasing transit operations
    • Preserving the existing urban system
    • Addressing gaps in the bicycle and pedestrian network
Annual Needs = $10.8B

Pavement Performance

Peak

Optimal

Current Condition = 67.8%

Moderate

Keep it Smooth = $355M

Think Locally = $300M

Connecting Communities = $250M

Bigger Cities = $252.7M
Bridge Performance

Annual Needs = $197.32M

- Keep it Smooth = $95M
- Think Locally = $55M
- Connecting Communities = $45M
- Bigger Cities = $55M

Current Condition = 5.04%

Percent Poor NHS Bridge Deck Area

Investment Level

- Peak
- Optimal
- Moderate

Arkansas Long Range Intermodal Transportation Plan
Smart Transportation (ITS) Performance

Annual Needs = $3.52M

- Peak
- Optimal
- Moderate

Current Spend = $2.7M
- Keep it Smooth = $2.7M
- Think Locally = $7.7M
- Connecting Communities = $7.7M
- Bigger Cities = $7.7M
Maintenance Performance

Annual Needs = $181.62M

Peak
Optimal
Moderate

Current Spend = $93M

Keep it Smooth = $93M
Think Locally = $93M
Connecting Communities = $93M
Bigger Cities = $93M

Arkansas Long Range Intermodal Transportation Plan
Safety Performance

Annual Needs = $70M

Current Spend = $35M

Keep it Smooth = $35M
Think Locally = $35M
Connecting Communities = $35M
Bigger Cities = $35M
Public Transportation Performance

Annual Needs = $29.08M

Current Spend = $4M

Peak

Optimal

Moderate

Keep it Smooth = $9M
Think Locally = $11.7M
Connecting Communities = $11.7M
Bigger Cities = $80.02M
Bicycle & Pedestrian Performance

Annual Needs = $40.07M

Current Spend = $1M

Peak

Optimal

Moderate

Keep it Smooth = $1M

Think Locally = $1M

Connecting Communities = $1M

Bigger Cities = $10M
What if? Analysis

Budget = $600.72M

**Pavement**
- % Good NHS Miles
  - 70.3

**Bridge**
- % Poor NHS Deck Area
  - 5.5

**Capacity**
- Avg. Freeway Speed (mph)
  - 54.9

**Safety**
- % Safety Needs
  - 95
What if? Budget Reduction

**Budget**
- $600.72M
- -$100.00M
- $500.72M

**Pavement**
- % Good NHS Miles
- 70.3 (Maintain Performance)

**Bridge**
- % Poor NHS Deck Area
- 9.3 (+3.8)

**Capacity**
- Avg. Freeway Speed (mph)
- 53.2 (-2.7)

**Safety**
- % Safety Needs
- 60 (-35)
Arkansas Long Range Intermodal Transportation Plan

Budget = $600.72M
+$100.00M
$700.72M

What if? Budget Increase

Pavement

% Good NHS Miles

Investment Level

70.3 (Maintain Performance)

Bridge

% Poor NHS Deck Area

Investment Level

3.9 (-1.6)

Capacity

Avg. Freeway Speed (mph)

Investment Level

54.9 (Maintain Performance)

Safety

% Safety Needs

Investment Level

100 (+5)
What if? Wanted Peak

Pavement

% Good NHS Miles

Investment Level

90 (+19.7)

Bridge

% Poor NHS Deck Area

Investment Level

10 (+3.5)

Capacity

Avg. Freeway Speed (mph)

Investment Level

55 (+0.1)

Safety

% Safety Needs

Investment Level

60 (-35)

Budget = $600.72M
+$539.30M
Min Required = $1140.72M
MetroQuest Live Demonstration

www.wemovearkansas.com/metroquest.html
Takeaways

• Links resource allocation to system performance
• Informs leadership on critical decision points
• Helps establish realistic priorities under current funding
• Provides guidance on setting reasonable targets
• AHTD needs more funding to
  – Maintain infrastructure conditions
  – Improve economic competitiveness
  – Connect communities
  – Invest in non-highway improvements
• Clarifies AHTD’s difficulty in meeting statewide expectations of stakeholders and general public
Next Steps

• June-August
  – Use MetroQuest to engage statewide stakeholder input on priorities, alternative future scenarios, and funding levels
  – Complete draft LRITP
  – AHTD internal review
  – TPAG meeting #3

• September
  – Finalize LRITP
  – 30-day public comment period

• October-November
  – Website and video
  – Present to Commission to approve LRITP
INTERACTIVE SESSION
Questions

Long Range Intermodal Transportation Plan

Project Website
http://www.wemoveararkansas.com

Project Email
AR_LRITP@ahtd.ar.gov

Project Facebook Page
https://www.facebook.com/ARLRITP2040/