



2009 Partnering Conference

New Bridges Over Lake Barkley and Kentucky Lake US 68/Ky 80



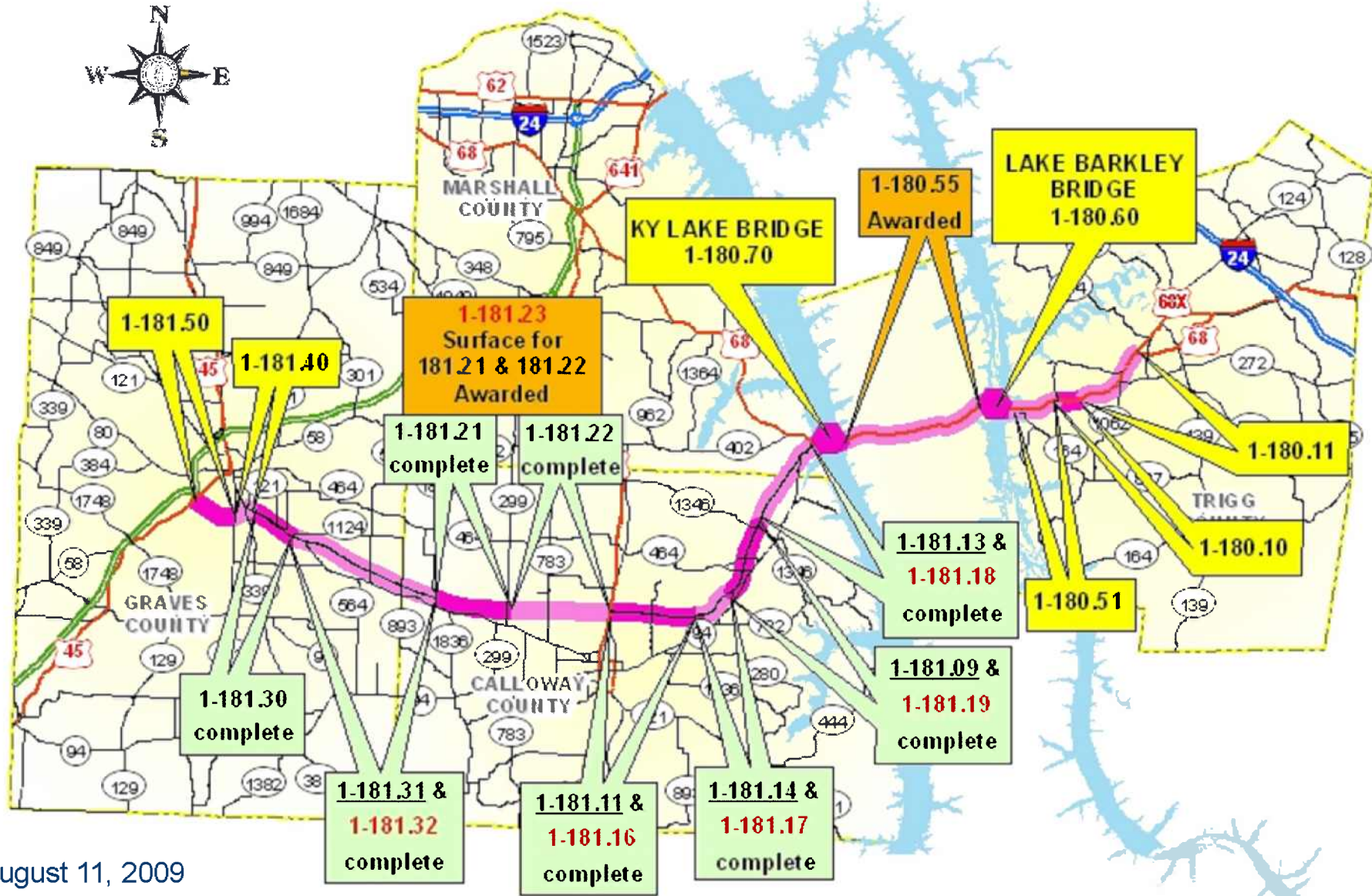
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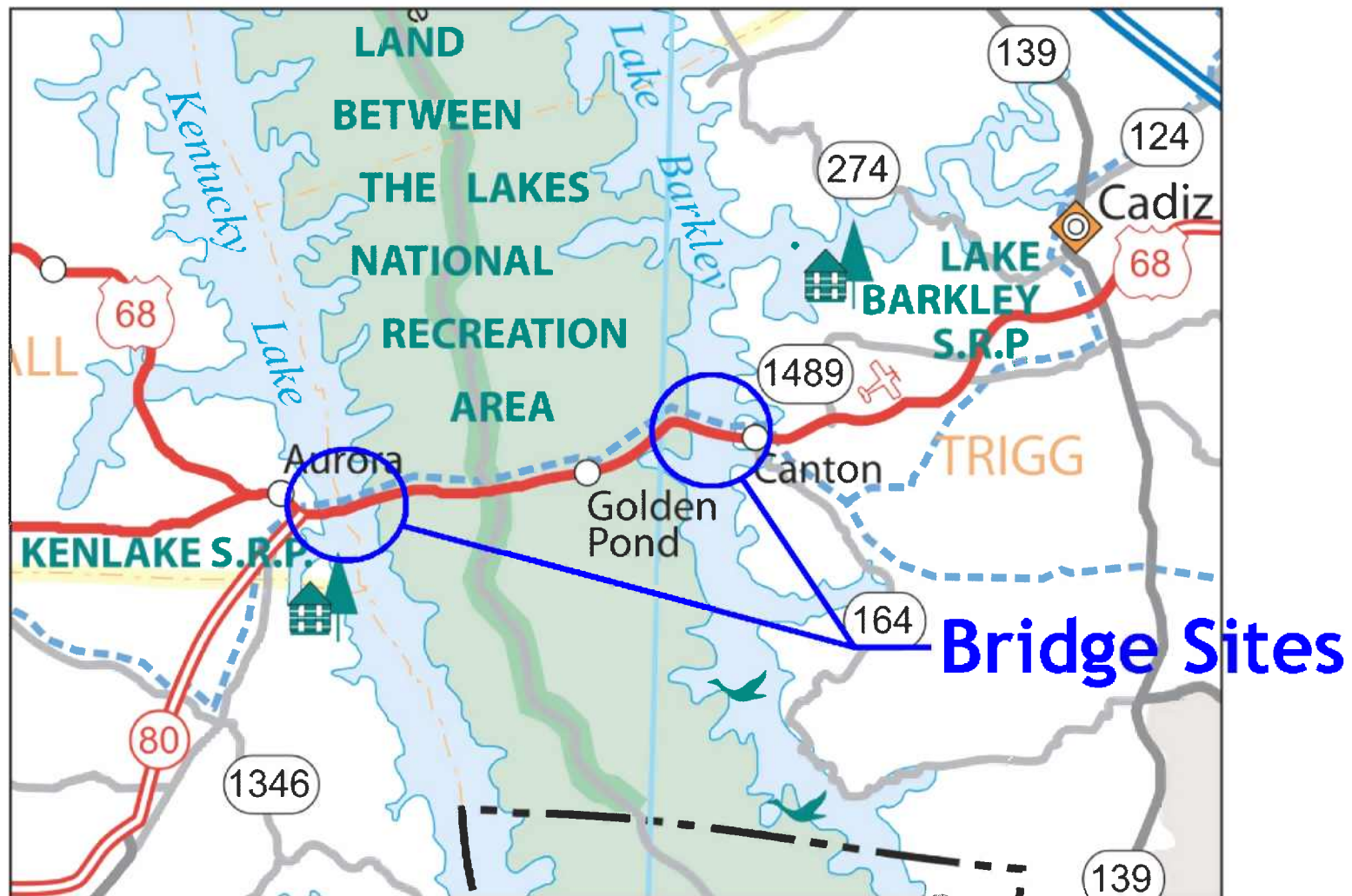
Baker



US68/KY80 Corridor



Site Map



Pristine Setting





Kentucky Lake

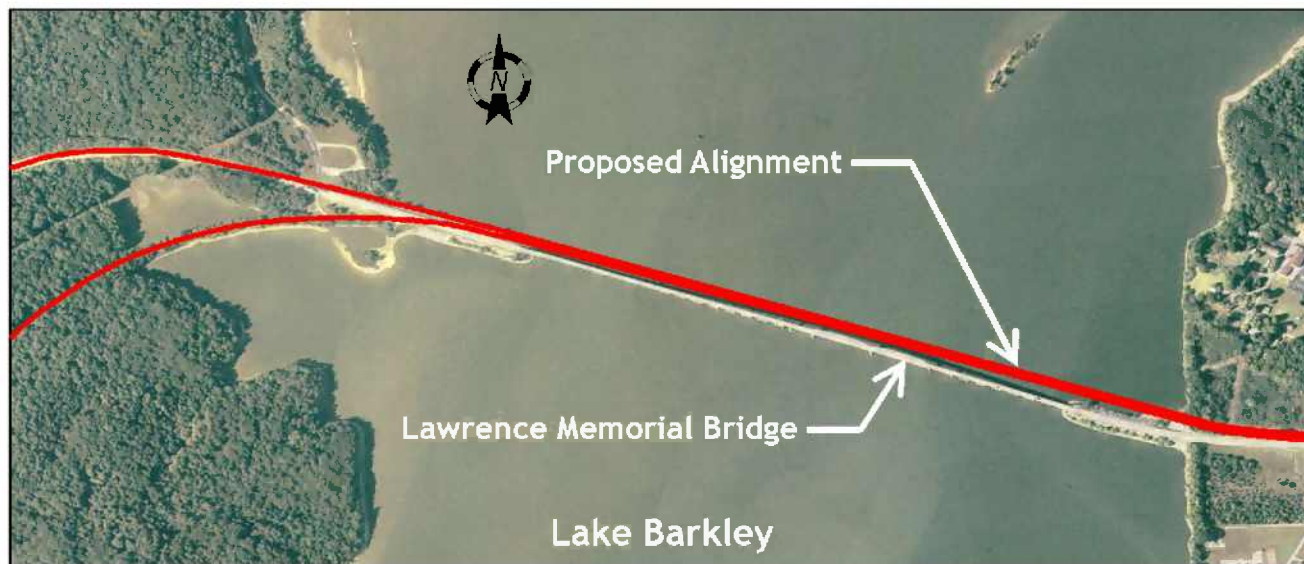
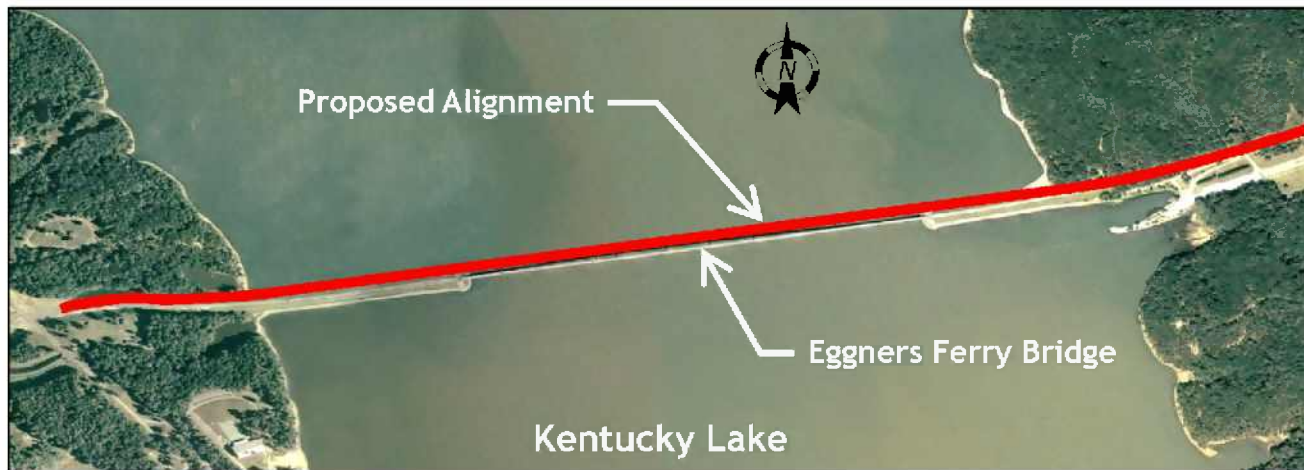


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Lake Barkley

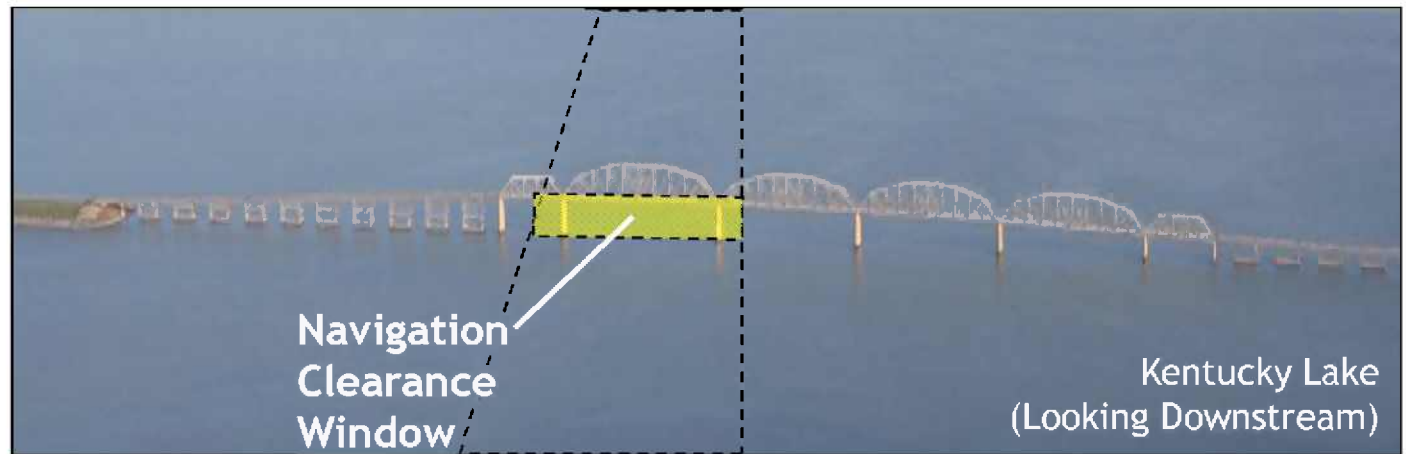


Project Alignment



Navigational Clearance

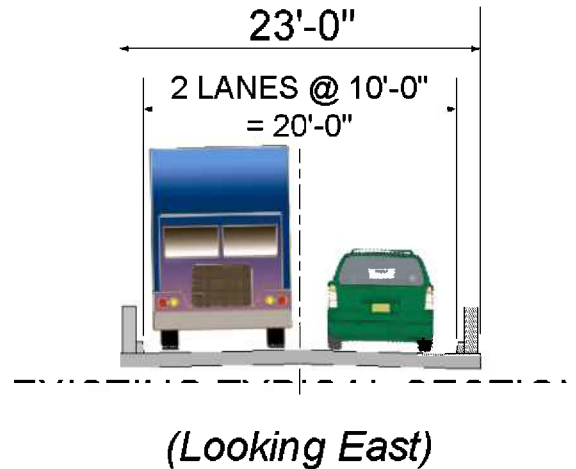
- 502' Minimum Horizontal Clearance
- 60' Minimum Vertical Clearance



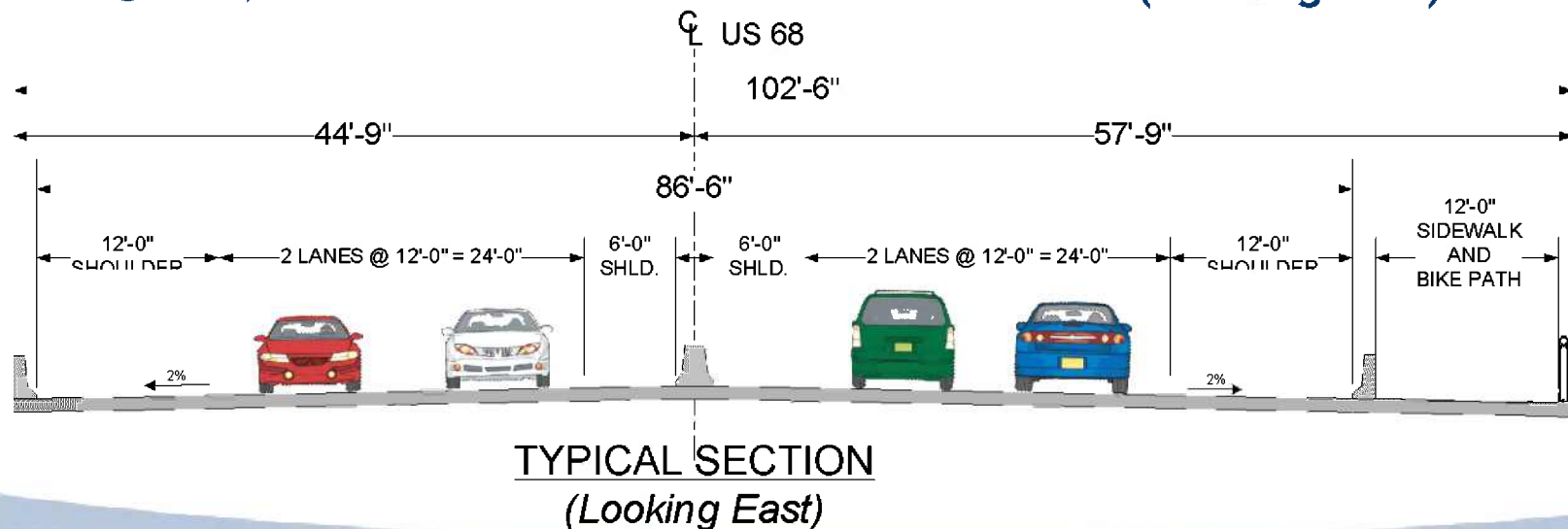
FONSI Bridge Cross Section



**Kentucky Lake
(Looking East)**



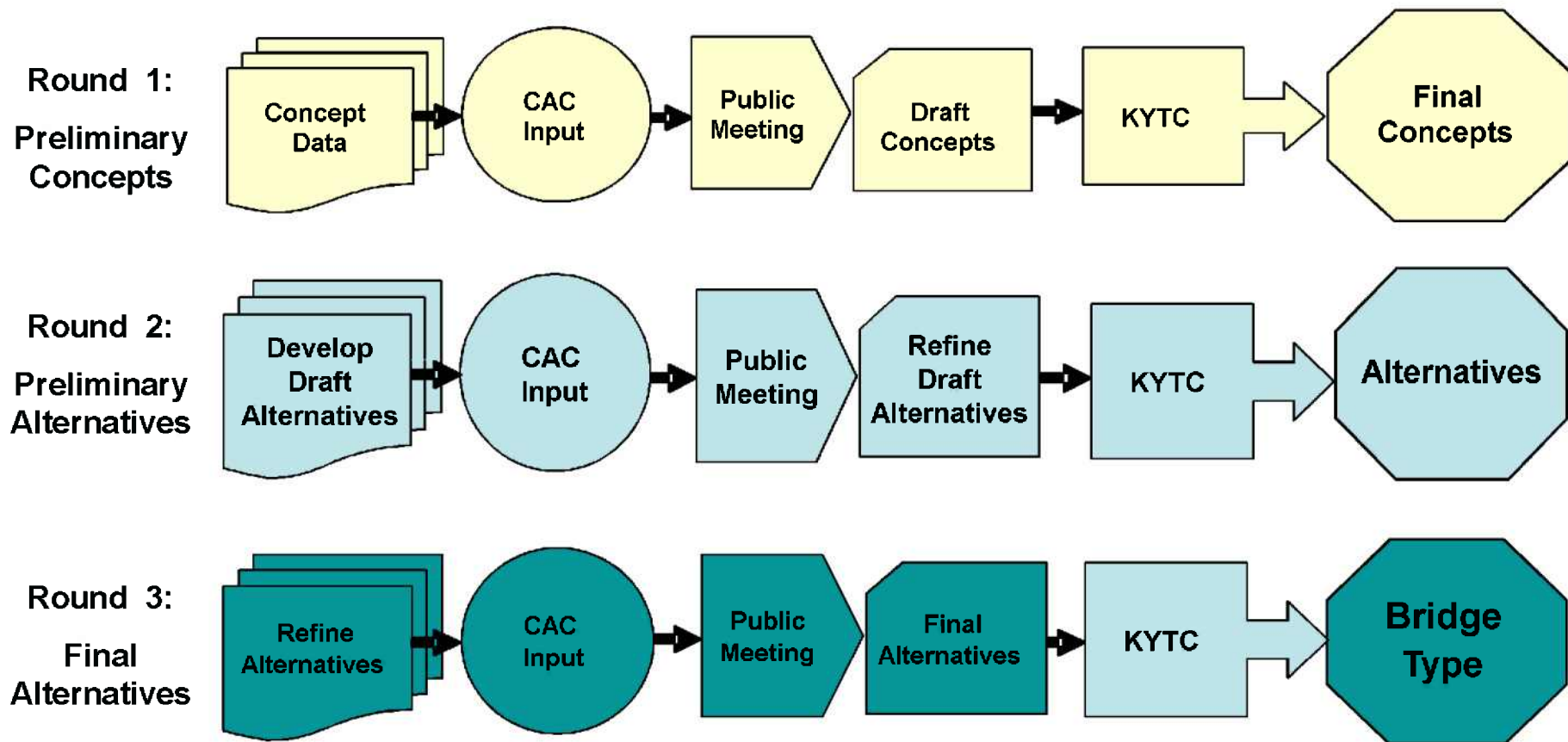
**Lake Barkley
(Looking East)**



Just A Little Narrow



Bridge Type Selection Process





Citizens Advisory Council

16 Person Committee

- 4 Elected Officials
- 2 Industry Representatives
- 3 Chamber of Commerce, Tourism Representatives
- 3 Planning, Development Agency Representatives
- 2 Friends of L.B.L. Representatives
- 1 Ky. Western Waterland Representative
- 1 US Forestry Service Representative

Counties Represented

Calloway

Marshall

Trigg

CAC Meeting

- July 18, 2007
- Lake Barkley State Resort Park
- 14 Attendees

Public Meeting

- July 19, 2007
- Lake Barkley State Resort Park
- 308 Attendees

Round 1



25 Bridge Concepts (8 Arches, 12 Cable Stays, 2 Girders and 3 Trusses)

Round 1 Results

Girder

- Generally favorable to the public
- Least favored by the CAC

Truss

- Lowest rated

Arch

- Generally less preferred than cable-stayed

Cable-Stayed

- Highest rated

9 Preliminary Alternatives

- A-1 Vertical Rib Tied Arch
- A-2 Basket-Handle Tied Arch
- C-1 Single Inverted “Y” Tower Cable Stay
- C-2 Single “H” Tower Cable Stay
- C-3 Median Two Tower Cable Stay
- C-4 Diamond Two Tower Cable Stay
- C-5 Single Leaning Tower Cable Stay
- G-1 Steel Girder
- T-1 Arched Truss

Arch A-1



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Arch A-2



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Cable Stay C-1



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Cable Stay C-2



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Cable Stay C-3



Cable Stay C-4



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Cable Stay C-5



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Girder G-1



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Truss T-1



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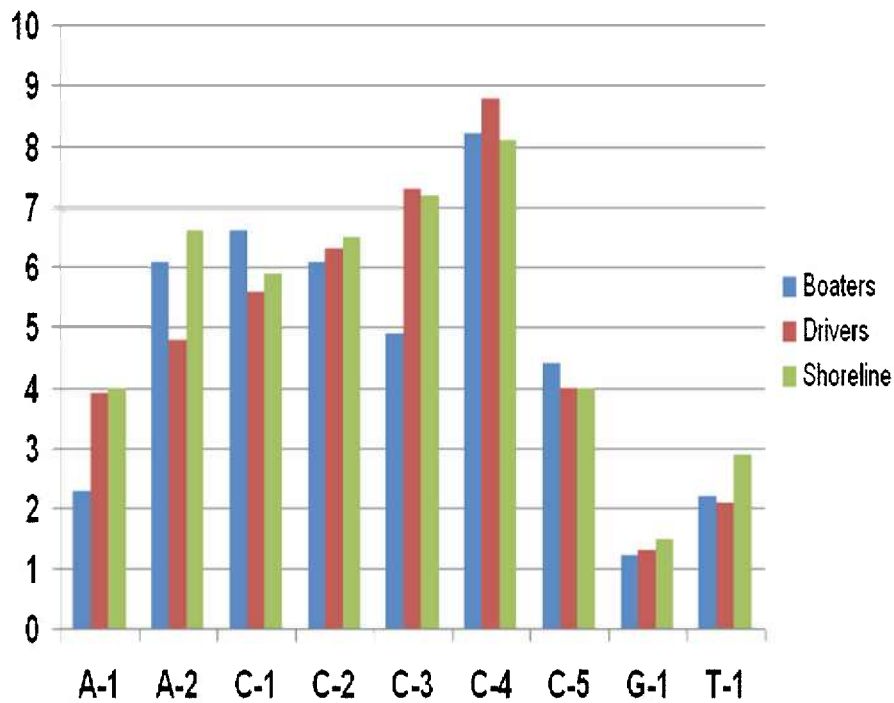
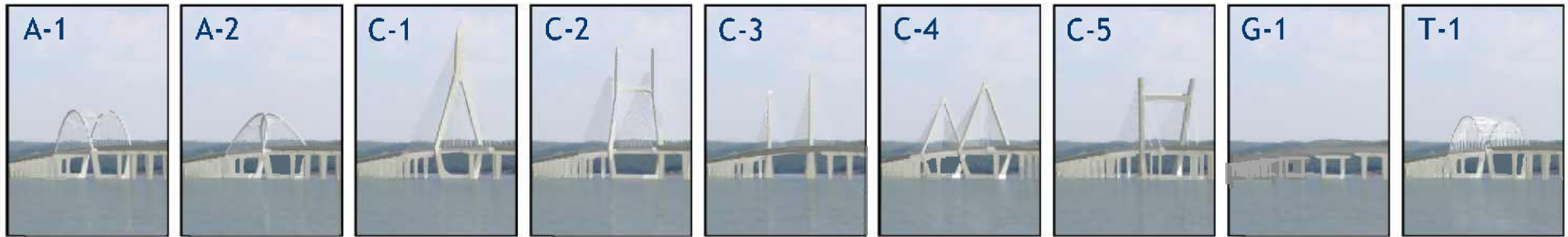
CAC Meeting

- October 17, 2007
- Ken Lake State Resort Park
- 12 Attendees
- Boat Tour

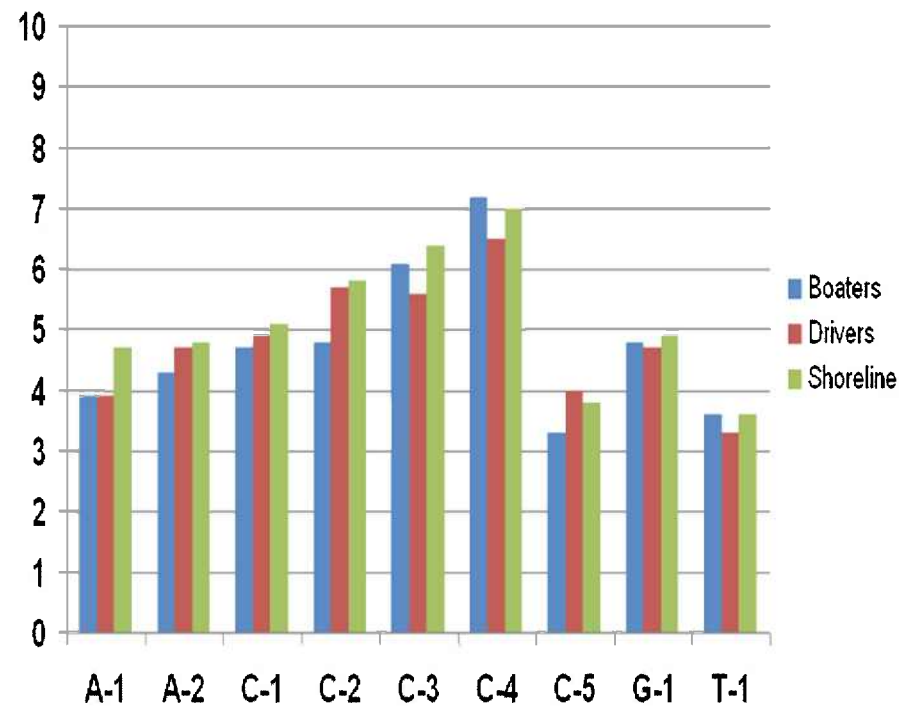
Public Meeting

- October 18, 2007
- Ken Lake State Resort Park
- 166 Attendees

Round 2 Results



CAC Results



Public Results

Round 3



Preliminary Costs 102'-6" wide bridge

Option	Kentucky Lake	Lake Barkley	(2008\$)
<i>Alternative 1</i> Diamond Tower Cable Stay	\$ 240 M	\$220 M	\$ 460 M
<i>Alternative 2</i> Single Tower Cable Stay	\$ 220 M	\$ 210 M	\$ 430 M
<i>Alternative 3</i> Girder	\$ 200 M	\$ 190 M	\$ 390 M
<i>Alternative 4</i> Median Tower Cable Stay	\$ 250 M	\$ 240 M	\$ 490 M
<i>Includes 20% Contingency</i>			

KYTC Practical Solutions Initiative

- All projects re-evaluated
- All projects “right-sized”/budget set
- Cost savings realized/project backlog reduced
- Safety and mobility maintained

CAC Meeting

- November 20, 2008
- Lake Barkley State Resort Park
- 7 Attendees

Public Meeting

- November 20, 2008
- Lake Barkley State Resort Park
- 150 Attendees

Round 3 Results

- Consider Lower Cost Bridge Types
 - Additional Types Explored
 - Vertical Rib Tied Arch
 - Basket-Handle Tied Arch
- Consider Reduced Bridge Width
 - Reduced approximately 28 feet
- Bridge Type - Be Aesthetically Pleasing
- Stay on Schedule

Alternative 5 Vertical Rib Tied Arch





Alternative 6

Basket-Handle Tied Arch

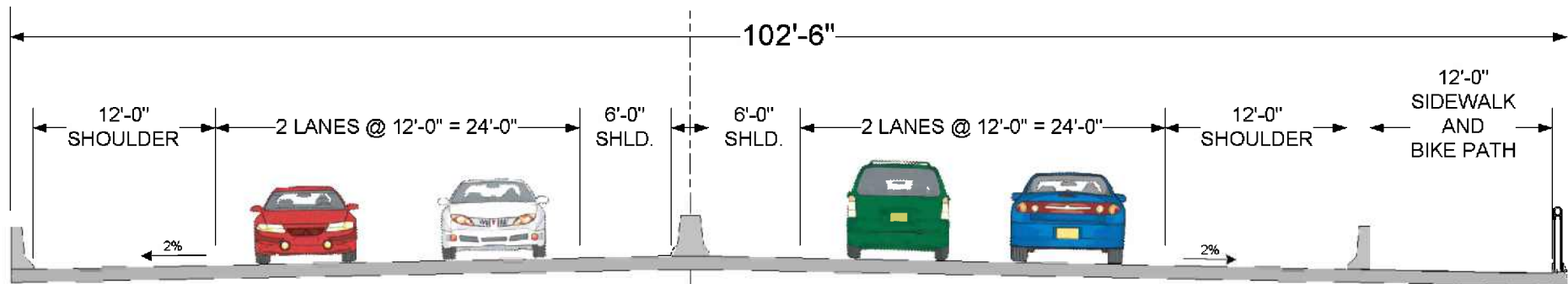


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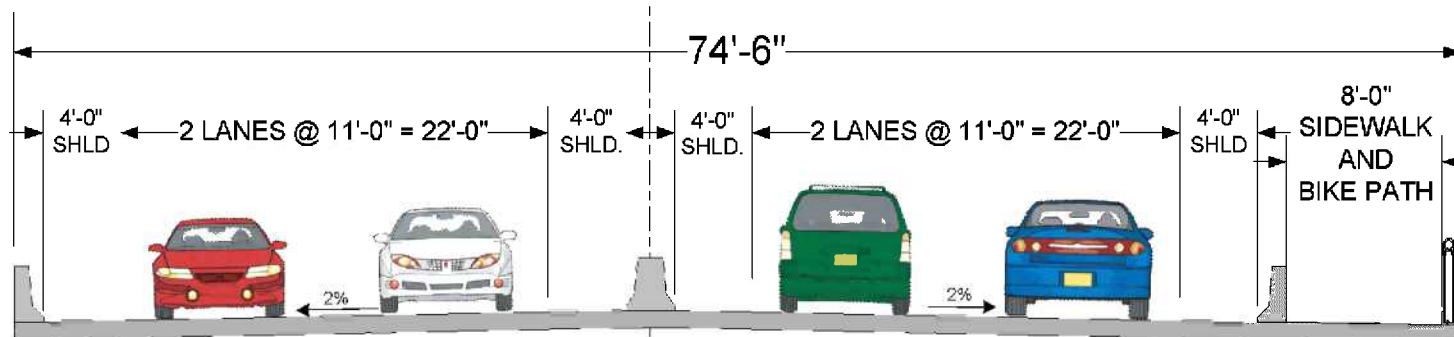


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Bridge Cross Section Options



ORIGINAL TYPICAL SECTION



REDUCED SECTION

Preliminary Costs Summary

Option		Kentucky Lake	Lake Barkley	Total (2008\$)
<i>Alternative 1</i> Diamond Tower Cable Stay		\$ 190 M	\$ 180 M	\$ 370 M
<i>Alternative 2</i> Single Tower Cable Stay		\$ 180 M	\$ 170 M	\$ 350 M
<i>Alternative 3</i> Girder Bridge		\$ 160 M	\$ 150 M	\$ 310 M
<i>Alternative 4</i> Median Tower Cable Stay		\$ 200 M	\$ 190 M	\$ 390 M
<i>Alternative 5</i> Vertical Rib Tied Arch		\$ 160 M	\$ 160M	\$ 320 M
<i>Alternative 6</i> Basket-Handle Tied Arch		\$ 160 M	\$ 160 M	\$ 320 M

74'-6" wide bridge



Bridge Type Selection

Preliminary Costs Include

- Environmental Commitments
- Shore to Shore Bridge
- 6,200 Ft Roadway Approaches
- 11,700 Ft Ped/Bikeway



April 2, 2009 CAC Meeting

- Follow up to November 20, 2008 Meeting
- Location: Lake Barkley State Resort Park
- 8 Attendees
- 6 Final Alternatives With Costs Presented
- Unanimous CAC Recommendation for Basket-Handle Arch

Bridge Type Selection



Ky Lake



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Ky Lake



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Lake Barkley



Lake Barkley



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Aerial



Drivers View



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Pedestrian View



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Boaters View



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Lake Barkley



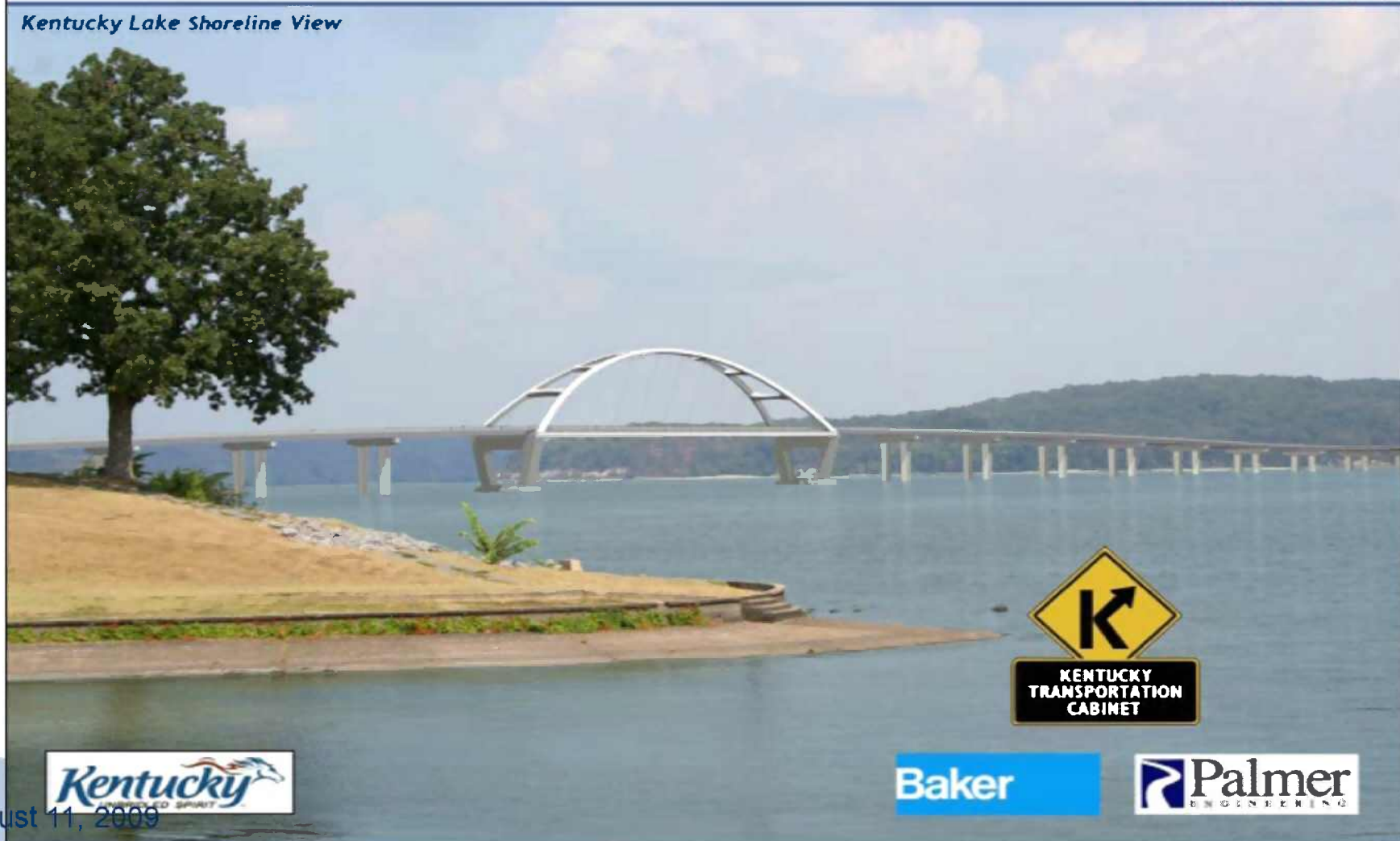
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Animations

Alternative 6 - Basket-Handle Tied Arch



Kentucky Lake Shoreline View



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Schedule

Late 2009

- Preliminary and Final Design Begins

2011-12

- Construction Begins