IL ROUTE 53/120

Blue Ribbon Advisory Council

Illinois Tollway
Strategic Planning Committee
August 15, 2012

AGENDA

- Proposed Illinois Route 53/120
  - Design features
  - Cost
  - Funding and financing
- Proposed next steps
- Discussion and questions

BRAC KEY RECOMMENDATIONS

1. Create a transportation system that preserves the environment and nearby communities and enhances connectivity
2. Design a context sensitive roadway
3. Respect and preserve the land
4. An innovative funding plan for an innovative road
5. Create a corridor land-use plan and implementation strategy

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PROPOSED DESIGN FEATURES

- Four lane, 45 mph tolled parkway
- Two options for Illinois Route 120 alignment
- Depressed road profile in many locations
- Detailed design and performance standards
  - Water/stormwater, air, light, noise, vegetation, etc.
  - Mitigation, preservation and compensation

COST ASSUMPTIONS

- Planning-level estimate based on 2020 dollars
- 5 percent annual escalation from 2012 to 2020
- $200-300 million assumed for right-of-way
- Environmental elements are included in cost estimates
  - Design features, such as tunnels, depressed roadway sections, berms and stormwater treatment
  - Funds for land preservation, restoration and long-term stewardship
  - Funds for environmental and noise mitigation

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BASELINE COST ESTIMATES

Baseline Estimate	Alignment 1	Alignment 2
TOTAL COST	**$2.2 - 2.5 billion**	**$2.3 - 2.7 billion**
ANNUAL TOLL REVENUE (2025-2040 gross annual revenue based on 0.20 per mile for passenger cars)	**$40 - 65 million**	**$60 – 95 million**
TOLLS PAY FOR (Bonding capacity for 25- to 35-year term)	**$200 – 230 million**	**$360 – 410 million**
FUNDING GAP	**$1.9 - 2.3 billion**	**$1.9 - 2.3 billion**
Cost for NON-TOLLED portions of the project	*$251 – 269 million*	*$95 – 103 million*

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PROPOSED COST REDUCTIONS

- Refine cost with detailed design
- Accelerate construction
  - Mid-point of construction at 2018, rather than 2020
- Explore lower-cost financing options
  - Current estimates assume 6 percent and 25-year term
- Revise plan to rebuild Illinois Route 120 east of Almond Road
- Consider improved project delivery techniques

PROPOSED FINANCIAL FRAMEWORK

- Tolls on the new Illinois Route 53
- Other tolls in Lake County
- Congestion pricing
- Tolls on existing Illinois Route 53, south of Lake Cook Road to Jane Addams Memorial Tollway (I-90)
- Accelerated opening of the road

OTHER REVENUE SOURCES

- **New county and local sources**
  - Value capture
  - Sales tax
  - Motor fuel tax
- **Federal funds**
  - Highway and transit funds
  - Other, such as wetlands, conservation and bike paths
- **State share**
  - Right-of-way contribution
  - Annual capital/future capital program
- **Revenue from Tollway system**
  - Indexing tolls

BRAC FUNDING SCENARIO (Alignment 2)

TOTAL COST – Alignment 2 (low end of range)	**$2.39 billion**
COST REDUCTIONS - $276 million $59 million – refine/reduce Illinois Route 120 improvements $217 million – accelerate mid-point to 2018	**$2.11 billion**
REVENUE ENHANCEMENTS - $1.34 billion (added to $360 million estimated bonding capacity from tolling new Illinois Route 53/120) $301 million – other Lake County tolls $191 million – toll existing Illinois Route 53 $138 million – indexing and congestion pricing $60 million – revenue earlier (from acceleration) $286 million – new county and local sources	**$1.34 billion**
FUNDING GAP	**$776 million**

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NEXT STEPS

- **Initiate a corridor land use plan**
  - Guided by Lake County and CMAP
  - Include all municipalities along the corridor
  - Produce single vision for development within corridor
- **Develop detailed design concept**
  - Tollway activity to evaluate and refine design and cost estimate
  - Pre-environmental
  - Survey customers willingness to pay
- **Determine how to finance the project**
- **Secure local, state and federal authorizations**

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THANK YOU

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APPENDIX

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Roadway Design

- Depressed roadway (5'-7'), berms (5'-7'), environmental treatments, with mainline depressed interchanges
- Depressed roadway (5'-7'), berms (5'-7'), environmental treatments, narrow median with mainline depressed intechanges
- At-grade roadway, widen and resurface, environmental treatments
- Elevated, open causeway on pylons through wetlands
- At-grade roadway, split couplet

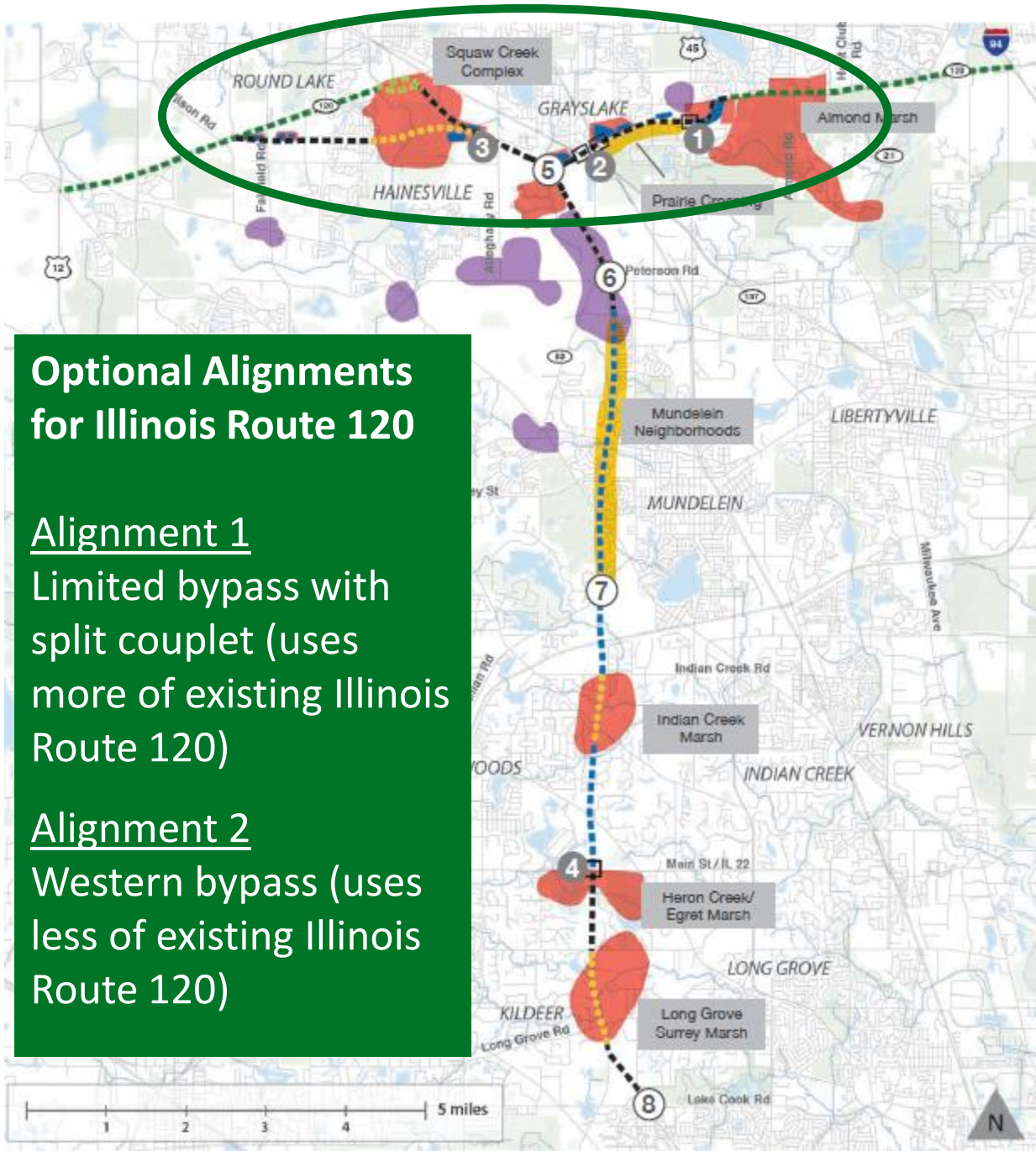
Specific Interchange and Crossing Design

1. Mainline depressed interchange
2. Tunnel or underpass beneath railroad tracks
3. At-grade intersection
4. Mainline depressed interchange with standard median

⑤-⑧ Intersection/Interchange location - *specific type needs to be determined*

Land Use

- Priority sensitive lands *(includes lands initially identified for further protection, restoration and/or mitigation)*
- Residential areas
- Potential new economic development areas
- Sites identified for stormwater treatment



Optional Alignments for Illinois Route 120

Alignment 1
Limited bypass with split couplet (uses more of existing Illinois Route 120)

Alignment 2
Western bypass (uses less of existing Illinois Route 120)

Cost Estimate Summary

Figure 11: Cost Estimate for Alignment 1

$2,221,360,000

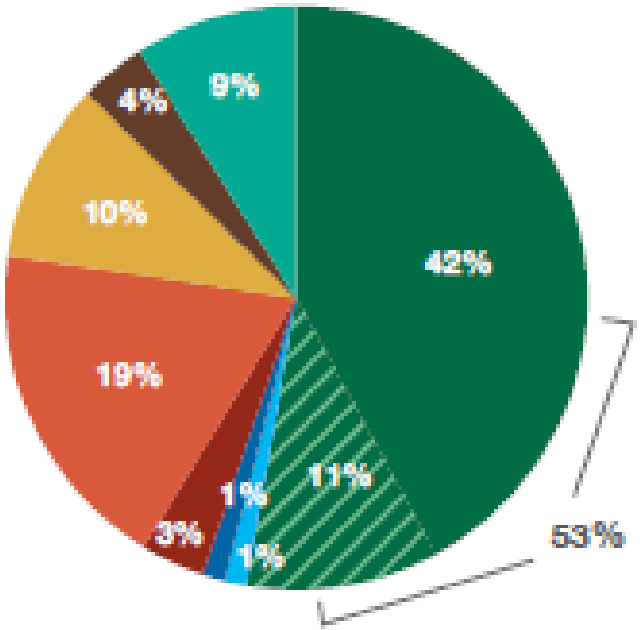
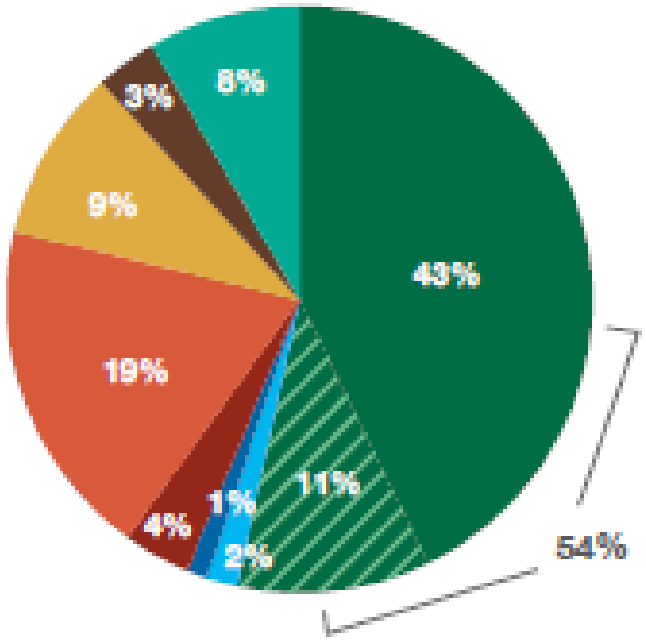


Figure 12: Cost Estimate for Alignment 2

$2,389,280,000



- Roadway construction
- Supplemental environmental
- Toll and ITS infrastructure
- Maintenance of traffic
- Environmental and noise mitigation
- Engineering
- Construction contingencies
- Restoration and stewardship fund
- Right of way

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Amounts Represented in Pie Charts

Figure 10: Cost Estimates for Alignments 1 and 2 (Low end of range*)

	Alignment 1	Alignment 2
Corridor Plan**	$1,000,000	$1,000,000
Roadway Construction***	$1,171,450,000	$1,276,270,000
Toll and ITS Infrastructure	$26,550,000	$40,720,000
Maintenance of Traffic	$28,260,000	$27,330,000
Environmental and Noise Mitigation	$78,360,000	$88,120,000
Engineering	$412,240,000	$447,920,000
Construction Contingencies	$222,500,000	$226,920,000
Restoration and Stewardship Fund	$81,000,000	$81,000,000
Right-of-Way	$200,000,000	$200,000,000
Total	$2,221,360,000	$2,389,280,000

* This cost breakdown shows the low end of the range of project cost estimates. For the full cost range, please see the Baseline Estimates, page 54.

** The Corridor Plan cost estimate is not depicted in the charts below because it represents less than 0.05% of the total cost.

*** Roadway Construction includes roadway items, bridges and retaining walls, and supplemental environmental components.

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Baseline Estimates and Bonding Capacity

Figure 9: Baseline Estimates for Alignments 1 and 2

Baseline Estimates	Alignment 1	Alignment 2
Total Cost	**$2.220B - $2.513B**	**$2.388B - $2.706B**
Cost Range for TOLLED Portions	$1.969B - $2.244B	$2.293B - $2.603B
Cost Range for NON-TOLLED Portions	$251M - $269M	$95M - $103M
Revenue (2025-2040 gross annual revenue based on $0.20 per mile for passenger cars)	$40M - $65M	$60M - $95M
Bonding Capacity (25-35 year term)	$200M - $230M	$360M - $410M
Funding Needed for Total Project (from Other Sources)	**$1.990B - $2.313B**	**$1.978B - $2.346B**
Funding Need for TOLLED Portions	$1.739B - $2.044B	$1.883B - $2.243B

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BRAC Revised Cost Assumptions

Figure 14: Revised Cost Assumptions for Alignment 2.

Project Cost Estimate (detailed on pages 54 and 55)	**$2.39B**
Revised Cost Assumptions	
Refine/Reduce 120 Improvements*	$59M
Accelerate Midpoint to 2018 (provides approx 10-11% savings)	$217M
Refine Cost Escalation (cost assumes no escalation for next two years)	$ Unknown
Contingency Reductions** (cost includes 9.8% contingency rather than standard 18%)	$ Included
Revised Project Cost Estimate	**$2.11B**

*There are still many variables and options along the IL 120 Corridor. It may be premature to overstate potential savings from refinements along this section.

** The current contingency in the project is 9.8% of the total project cost. This represents 22% of the construction cost. A typical project at this phase would include a 30% construction contingency.

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BRAC Revenue Options – Alignment 2

Figure 15: Revenue Options for Alignment 2.

Revised Project Cost Estimate	$2.11B
Revenue Options	**Bonding Capacity (1.5X Coverage)**
Tolling New Facility (53/120)	$360M
Other Lake County Tolls (IL 132 Toll, Increased Waukegan, Tolling at Border)	$301M (minimal cost)
Tolling for Existing 53 (reconstruct and toll Route 53 from Lake Cook Road to I-90, excludes cost of upgrading I-90 interchange)	$191M (net revenue when accounting for additional cost)
Indexing and Congestion Pricing	$138M (no additional cost)
Revenue Earlier (accelerated project assumes revenues one year earlier)	$60M
New County and Local Sources (hypothetical example includes TIF, includes TIF value capture, 0.25% sales tax, motor fuel tax @ 35.5 mpg)	$286M (no additional cost)
Revised Revenue Total	**$1.34B**
Additional Funding Needed from State, Federal and Tollway Sources	**$776M**
State Funding (in addition to transfer of existing right of way)	$???
Federal Funding	$???
Tollway System Funding	$???

OTHER PROJECT EXAMPLES

- Similar projects exist, but none are exactly like the proposed Illinois Route 53/120
- **Chisholm Trail Parkway in Texas** (NTTA, TxDOT and others)
  - Tolled parkway (all-electronic tolling) connecting Fort Worth to Cleburne
  - Highly context-sensitive
  - Speed and number of lanes depend on context
    - Lanes range from 3 to 2 to 1 in each direction
    - Speed ranges from 70 to 60 to 50 mph

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TOLLED EXAMPLE: Chisholm Trail Parkway

- 27.6 mile tolled parkway
- $1.4 billion total cost
- Currently under construction
- Complete in 2014

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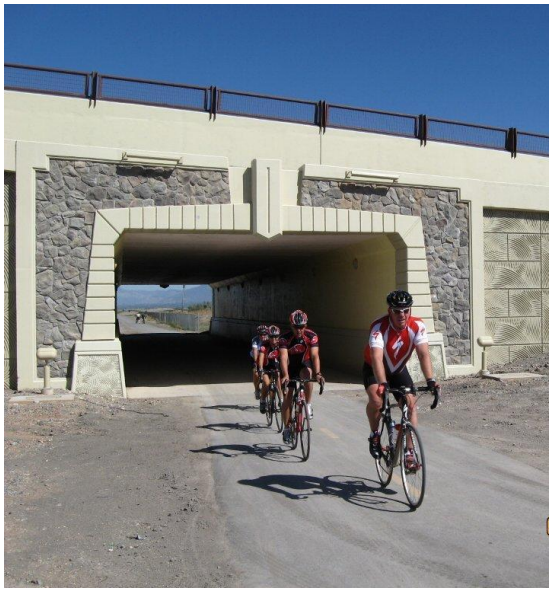
NON-TOLLED EXAMPLE:
Legacy Parkway and Preserve in Utah

- 14 mile, non-tolled parkway
- Four-lane, low speed
- Highly context-sensitive
- Meandering design with bike / pedestrian / equestrian trail
- Completed in 2008



Legacy Parkway and Preserve Details

- Gateways to introduce motorists to the Parkway and surrounding communities
- Meandering roadway instead of straight freeway design
- Unique landscaping
- Unusual structural design features including bridge monuments and barriers
- Independent multi-use and equestrian trails alongside the Parkway
- "Greenways" that blurs the boundary between the Parkway and community
- Lower overall speed limit provides a pastoral driving experience
- Commercial trucks of five axles or 80,000 RGVW are generally prohibited from using the Parkway. But thanks to special signage on I-15 and I-215, they are able to use it during special traffic emergencies.