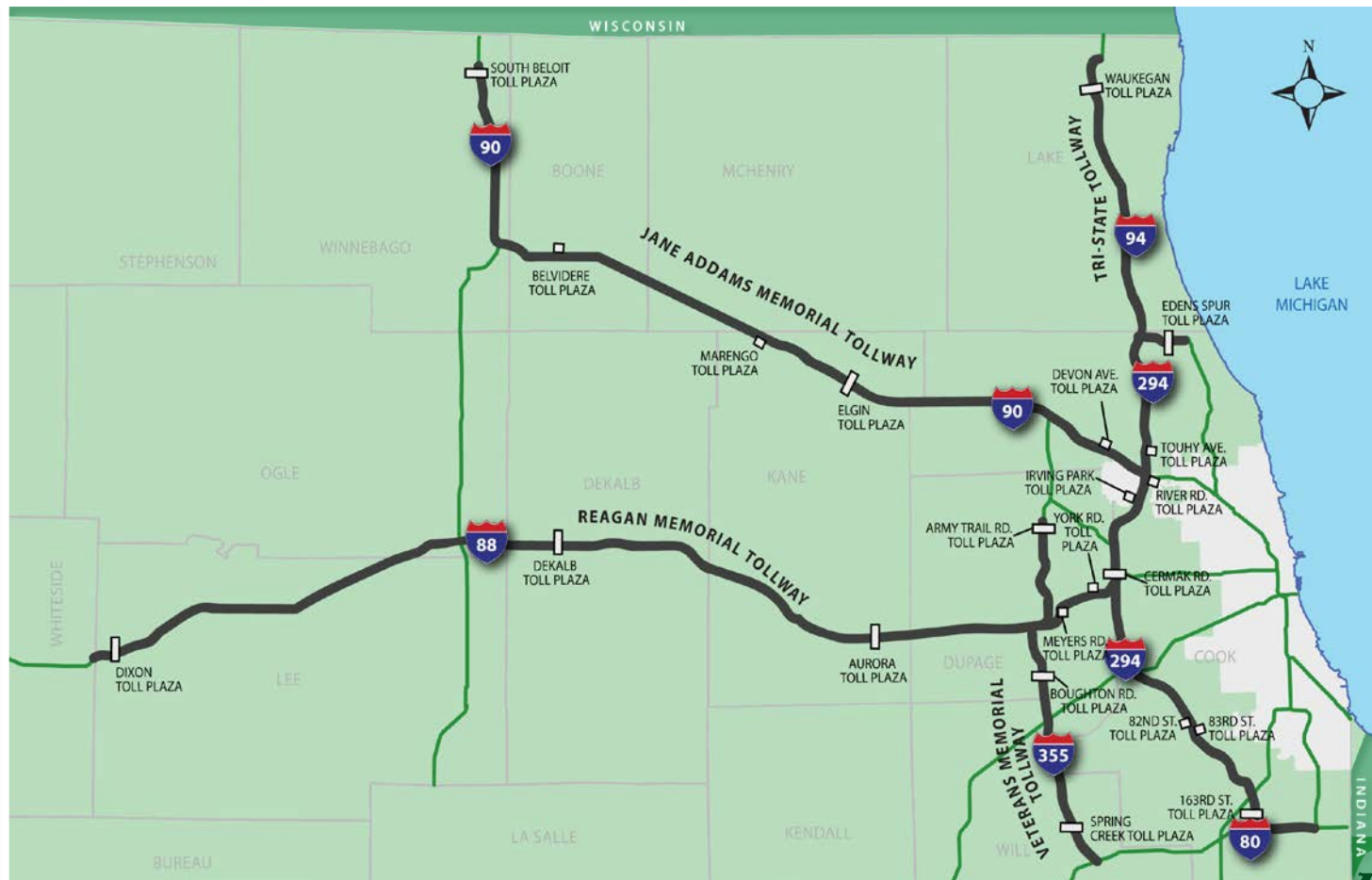




Accelerated Construction Using Precast Concrete Pavement Systems

*FHWA Webinar
May 30, 2013*

The Illinois Tollway



More Sustainable Concrete Pavement Rehabilitation / New Construction

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&
Get Out
&
Stay Out!



Why Precast Patching Has Value, Especially in the Middle Lanes



First Precast Application in 2002 – Urettek Method





Proprietary Fort Miller System Introduced in 2007





Competition Needed in More Ways than One

- **More than 1 precast concrete pavement system was proven to be needed in 2008**
- **To some extent, precast concrete has to compete with high performance cast-in-place concrete**

Tollway's Generic System Developed in 2009



Tollway System Provides Options for Dowel Bar Retrofitting

Standard wide mouth retrofitting method



New pre-drill / narrow mouth procedure



Tollway's Generic System Successfully Placed Last 3 Years Using Both Methods

With wide mouth retrofits



With narrow mouth retrofits



Isolated Joint / Slab Repair Applications



New Construction Applications



Large Area Consecutive Slab Repair Applications



Ramp Reconstruction Applications



Overnight Intersection Reconstruction Applications





Applications for 2013

- I-55 EB to I-294 NB super elevated ramp – warped continuous
- I-294 to I-80 ramp – warped isolated
- End of ramps at intersections – warped continuous
 - I-88 at Highland Ave.
 - I-88 at Spring Road
- I-355 patching / overlay – isolated flat
- I-88 patching / diamond grind – isolated flat

Future Tollway Needs for Precast

- Bridge approach slab replacements overnight
- New integral abutment bridge approach slabs
- Ramp Plaza Replacements





Thank you