



# INTERSTATE 41 CORRIDOR

North America's largest roundabout project

US Federal "Mega" Project

31 miles of Roadway | \$988 Million (FY09) | 13 Interchanges | 41 Roundabouts

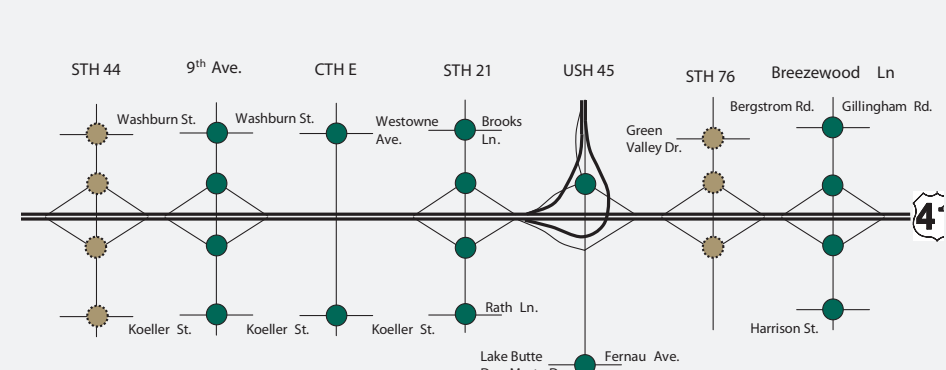
## PLANNING

WisDOT completed an objective study comparing the feasibility of roundabouts vs. signals or stop control at fifteen interchanges and adjacent intersections. Of the 49 ramp terminal and frontage road intersections in the initial study, roundabouts emerged as the preferred solution at 47 intersections.

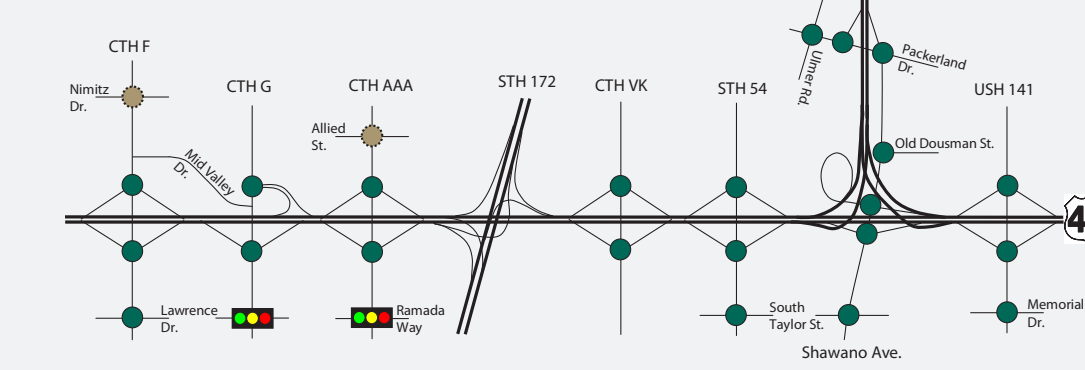
In all cases, roundabouts provide less delay and better expected safety performance than signals. In many cases, roundabouts significantly reduced construction costs by allowing use of a narrower bridge cross section. Noise, emissions and fuel consumption were all superior with roundabouts, and aesthetic opportunities and gateway features were found to be desirable and compatible with area land uses.

Functional layouts and operational performance predictions were developed. The evaluation of roundabouts includes identification of impacts to property, cost implications, operational performance, expected residual intersection capacity and documentation of the decision process for evaluation of roundabouts versus traffic signals.

Winnebago County

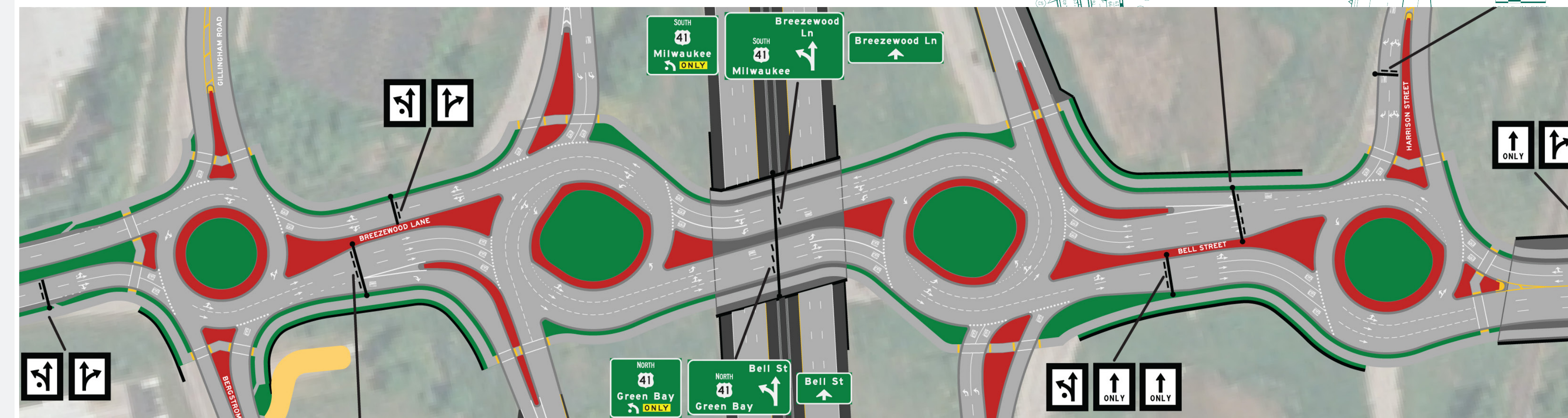
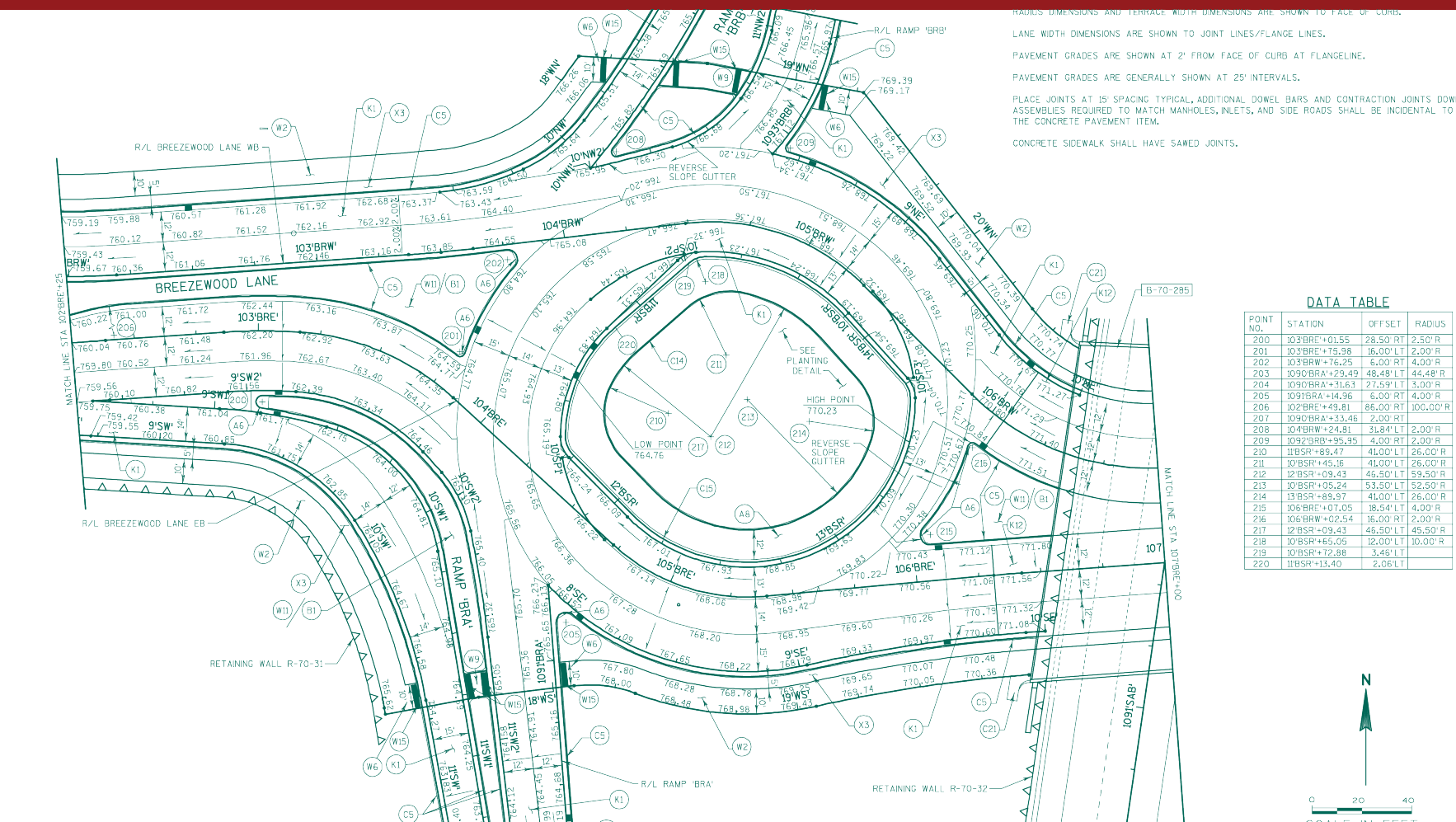


Brown County



## DESIGN

Geometric design and capacity analyses were undertaken based on empirical capacity measurements under widely varying geometries. A system-level evaluation of lane continuity, lane configuration, relative system changes and their effects were evaluated using simulation and first principles with sensitivity testing. Use of empirical geometric analyses and network simulations together provided both robust geometric designs and good confidence in the choice of the system solution.



## OUTREACH

The outreach program for the Interstate 41 roundabouts is the most elaborate conducted for any roundabout project to date. The strategic approach of top-down consultation from state legislators, to bicycle committees and the general public employed original resources and venues including: state fair, mall kiosks, renderings, a driving simulator, flash animations, brochures, commercial trucker focus groups, seniors training, etc. The public outreach goal was to establish trust and credibility within the communities.



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## CONSTRUCTION

Construction of Interstate 41 began in 2009 and included a total of 41 roundabouts. Ourston provided overall design and construction observation assistance for many of the roundabouts. Observation assistance activities included reviewing the layout and installation of curb and gutter, concrete pavement, jointing, pavement marking and signing.

