

City of Carmel

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One Civic Square, Carmel, IN 46032

NEWS RELEASE

Date: November 17, 2016
Contact: Nancy Heck (317) 571-2474
Release: Immediate

Carmel celebrates historic grand opening!

100th roundabout at Carmel Drive & Range Line Road

CARMEL, IN – The City of Carmel celebrated the grand opening of its 100th roundabout today. This marks a milestone in a 20-year initiative to transform a transportation network that had previously been littered with failing, traditional suburban traffic lights, four-way stops and other poorly functioning dangerous intersections. The network-wide incorporation of modern roundabouts has transformed Carmel’s roadways into a smooth-flowing network that has dramatically reduced accidents. Carmel’s roadway designs improve the quality of life for residents by increasing safety, creating a more sustainable street network and reducing daily commute times.

Mayor Jim Brainard joined other officials by cutting the ribbon at the roundabout, located at the intersection of Carmel Drive and Range Line Road, one of the city’s busiest. The public was invited to join in the celebration that included live music, food and drink and a celebration pyrotechnics display launched from the center of the new roundabout.

Carmel began 2016 with an already impressive 97 roundabouts. Earlier this week, roundabout number 98 was opened at the intersection of Carey Road and Hawthorne Drive West; followed by number 99, which opened earlier today at 116th Street and Gray Road. The addition of these new roundabouts – with several more to be added in 2017 and 2018 – further solidifies Carmel’s standing as the city with the most roundabouts in America.

“This is a great day in the history of Carmel as we celebrate the opening of this milestone roundabout while also recognizing the continued transformation of our city into a more

sustainable and environmentally responsible community,” said Mayor Brainard. “For the past two decades, we have been aggressively building roundabouts. These smart and functional traffic moving devices are key components for providing a safe and efficient roadway network in Carmel and help us provide a high quality of life for our citizens.”

“Roundabouts not only save us time in our daily commutes, they save our lives. The most recent federal highway studies have shown roundabouts reduce the number injury accidents by 80 percent when compared to conventional intersections controlled by traffic lights or stop signs. Think about that. Roundabouts eliminate T-bone crashes because all traffic is moving in the same direction.”

By eliminating the need for electricity and costly bulbs and reducing harmful fuel emissions roundabouts have also proven to be environmentally friendly. During most times of the day and night, traffic flows smoothly through the intersections, eliminating the stopping and idling, which wastes fuel and contributes to poor air quality. Carmel drivers not only save money in fuel, they also help keep our air cleaner.

The first roundabout was constructed in Carmel in 1996 – at the intersection of River Road and Main Street (131st Street at the time) – during Mayor Brainard’s first year in office. The Mayor first encountered roundabouts during his college trips to Europe, when he came to appreciate both their efficiency and aesthetic appeal. In the 1990s and early 2000s, Carmel was booming with population growth and corporate growth, increasing the demand on the local transportation network.

The extreme growth in population and employment brought growing traffic demand on Carmel’s roadway network. To meet this demand, Carmel needed an innovative approach to expanding the capacity of its transportation infrastructure without compromising the City’s beauty or the residents’ quality of life. Mayor Brainard saw the potential for roundabouts to serve as the fulcrum of a livable transportation network that would meet the growing traffic needs and preserve the integrity of the community.

As Carmel began its aggressive roundabout projects, roundabouts were unknown in most parts of the United States. Central Indiana residents unfamiliar with the benefits of roundabouts voiced opposition to this new intersection configuration and favored more familiar intersection controls such as the stop sign or traffic light. Many also expressed concerns about the potential for driver confusion when maneuvering through a roundabout. Mayor Brainard knew that people

generally are skeptical of change, and chose to maintain his efforts to utilize roundabouts despite public resistance. The key to success in this effort would be to effectively educate the public on the safety, cost, efficiency and environmental benefits of roundabouts as well as how to properly drive in a roundabout.

The design of modern roundabouts is the primary characteristic which makes them much safer than traditional intersections. The entry lanes are angled, so cars must slow to 15 to 20 miles-per-hour to enter the intersection. This angled, low speed entry all but eliminates the possibility of high speed, right-angle crashes. Roundabout engineers point to the significantly lower number of potential conflict points in a roundabout versus a traditional intersection as another reason for their increased safety. A single lane roundabout has only eight potential conflict points where a similar signalized perpendicular intersection has 32 potential conflict points. In addition, all vehicles travel in the same direction in a roundabout, requiring entering drivers to only look to the left to perceive conflicts.

Roundabouts have proven to be a more affordable intersection option in many cases within the City of Carmel. When an intersection is scheduled for improvement, City engineers evaluate the specific site to determine if a roundabout can meet the necessary traffic demand in a cost feasible manner. The City Engineer's office has found that on average, roundabouts in Carmel have cost \$125,000 less to construct than signalized intersections. Roundabouts are also much less expensive to maintain than signalized intersections, saving Carmel taxpayers money. Estimates for electricity savings alone are as much as \$5,000 per intersection.

The increased traffic efficiency saves 24,000 gallons of gas per year per roundabout, based on federal highway studies, leading to reduced vehicular emissions and improved air quality. The environmental benefits of roundabouts are gaining recognition nationally and internationally. In 2008, the U.S. Conference of Mayors awarded Mayor Brainard with Climate Protection Award for his leadership in Carmel's roundabout program and for its resulting energy and reduction in harmful gas emissions which lead to global warming.

Although the City of Carmel was already a very desirable place to live, the use of roundabouts on the roadway network has served to further enhance the quality of life in the community. Carmel's roundabouts have been designed to accommodate pedestrians and bicyclists crossings, encouraging the use of alternative, non-motorized modes of transportation. Roundabouts also provide the opportunity to introduce greenspace within the public rights-of-

way in areas that would otherwise be paved. The City of Carmel has taken advantage of this newly created greenspace by adding landscaping sculptures, fountains and other interesting features in roundabout center islands that give each intersection and surrounding neighborhood an increased sense of identity. These unique features, along with the benefits to public safety, reduction in travel time, fuel consumption savings, air quality and other environmental benefits, all contribute to the improvement of quality of life in Carmel.

Mayor Brainard believes that creating sound infrastructure is vitally important to continuing Carmel's successful growth. Finding ways to move traffic more safely and efficiently is a priority, and roundabouts help Carmel accomplish that goal in a cost-effective manner.

And, over time, once skeptical Carmel residents and those who drive through the area have grown to love the roundabouts.

“When roundabouts were first installed in the area, I got a lot of phone calls from people who did not like the change. Ironically, some of the greatest opponents to roundabouts are now their greatest fans,” said Mayor Brainard. “Once drivers learn to navigate a roundabout, they can see the vast improvement in the traffic flow and safety of the roundabouts. Now, I get people calling my office begging us to install a roundabout at an intersection in their neighborhood.”

For the latest information on roundabouts, visit the following site:

<http://safety.fhwa.dot.gov/intersection/innovative/roundabouts/>