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Detroit added 16 mi of bicycle lanes this fall, connecting several historic districts. Courtesy of Giffels-Webster Engineers, Inc.

The Motor City moves to embrace bicycles as a transportation option for residents as suburbanization and population decline give the city a “blank palette” of infrastructure.

November 1, 2011--Residents of Detroit, who once were first to catch a glimpse of the latest tail fin or chrome hubcap, are finding surprising vehicles on the city's streets this fall: bicycles. City leaders, seeking a way to capitalize on excess street capacity, have embraced an ambitious plan to create as many as 400 mi of bicycle lanes. Detroit lost 25 percent of its population between 2000 and 2010, according to the U.S. Census Bureau, and now has fewer residents than it did in 1920.

One of the first key components of the bicycle network, a \$550,000, 16-mi grid of lanes connecting several historic neighborhoods in Southwest Detroit, was completed in October, according to Scott Klein, P.E. an executive vice president of Giffels-Webster Engineers, Inc., of Detroit, who developed the city's “Non-Motorized Urban Transportation Master Plan.”

The majority of the first segment—11 mi—is 5 to 6 ft wide and comprises repurposed traffic lanes through Corktown, a part of the city settled in the 1840s by Irish immigrants fleeing the potato famine; Mexicantown, an area rich in Hispanic culture; and Southwest Detroit. The remaining 5 mi of bicycle routes along this stretch share the lanes with other traffic, but are marked with signs to guide cyclists and remind motorists to share the road.

“These are some of the oldest and most historic areas in Detroit,” Clein says. “So they are all old areas built out in the mid-1800s to the early 1920s.” The neighborhoods contain small lots and a mix of business, residential, and industrial buildings. They are among the more vibrant areas of the city, according to Clein, who adds that the new bike lanes serve a significant transportation function for the residents, whose income levels are below average for the metropolitan region.

The project was funded primarily by a grant provided by the Michigan Department of Transportation through the agency’s Transportation Enhancement Activity Program. Other funding and support came from area business groups, including the Southwest Detroit Business Association. The Detroit Department of Public Works serves as the fiduciary.

The new bicycle lanes constitute a key component of the city’s Non-Motorized Urban Transportation Master Plan, which was developed with funding from the State of Michigan. The plan, Clein says, regards bicycles not as recreational vehicles but as a serious transportation option. “We looked at it from two different directions. Where do people want to go? But we also looked at ... what is the available transportation network?” Clein says. Engineers examined proposed sites for bike lanes and placed them on streets where volume and traffic speed would accommodate them best. The network will eventually connect neighborhoods to commercial job centers, sports venues, art museums, and other cultural landmarks in the city.

Clein says that although Detroit isn’t in a financial position to commit to a timetable for implementing the master plan, the city has dedicated staff resources, added bike racks to buses, and included some bike lane projects into the general road budget allotted to larger projects involving those streets. Intersection improvements to accommodate left turns for bicycles and a campaign to educate both bicyclists and motorists about the lanes are under consideration.

Although Detroit’s dramatic population losses are national news, many cities in the Midwest have excess street capacity, according to Michael Darga, P.E., Giffels-Webster’s senior project manager for the Corktown project. “Especially in the Midwest, a lot of our urban cores have similar issues where the downtown developed for the traffic through the 1950s and then between the changing traffic patterns with the interstates ... and population decline, some of the surface streets have excess capacity again,” Darga says.

“Certainly if you wanted to get historical, you could point to the federal highway act in the early 1950s, suburban sprawl, and the changing traffic patterns,” Clein says. “You could discuss the land use master planning and policies that came up around the same time that tried to segregate uses, which then forced the conversion [of streets] from two-way

to one-way to facilitate more movement and the overall general theme of widening roadways to react to traffic demand. The roads were continually expanded.

“We have to think about the fact that many of these roads were originally built when the rights-of-way were laid out and planned. There were no freeways. They were not even in consideration,” Darga says. “So there is this wonderful blank palette, if you will, of transportation infrastructure available.”