Changing Dangerous and Drab to Safe and Fab

by Richard J. Spina and Jean M. Hartline, ASHE Northwest Ohio Section

Ranked as one of the most beautiful campuses in the nation, the University of Toledo (UT), in northwest Ohio has been known for rambling walkways, canopies of mature trees and the iconic University Hall building with its 10-story clock tower on its northern border. However, as the university continued to grow and expand southward with new dormitory buildings and a large "Gateway" project with restaurants and retail establishments, the Dorr Street (SR 246) corridor on the south side of campus remained an eyesore. With more than 20,000 students on the adjoining campus, negotiating the Dorr Street corridor by foot or by car was a nightmare. As the university planned for the Gateway project, Dorr Street continued to be a problem. The turning point was the eventual ranking of Dorr Street as the 18th most likely location in the state for crashes in its classification as an urban arterial roadway.

The Dorr Street Corridor Project involved partnerships that united the goals and objectives of the City of Toledo, UT and the Ohio Department of Transportation (ODOT). The City directed roadway improvements to upgrade local infrastructure, improve safety, enhance mobility, promote greater livability among students and neighborhood residents and create a positive environment for local business. UT wanted to eliminate the eyesore that the Dorr Street corridor had become, with improved aesthetics to match the university's investment of new dormitories and the Gateway restaurants and retail development on its southern border. ODOT needed to address the severe crash problem along the corridor and safely accommodate the 25,000 vehicles that used the corridor every day.

The improvements to Dorr Street started in 2009 with the Dorr Street Corridor Vision Plan, which included input from 10 community and neighborhood agencies. The Vision Plan set the groundwork for the future of Dorr Street by uniting the local partners to a common vision and goal. The partnership started with a small seed project involving the Mannik & Smith Group (MSG), the City and UT in 2010 to prepare a safety study and safety funds application for the corridor. As a result, ODOT awarded Toledo $44 million in federal safety funds for roadway improvements to address the problem.
UT’s role as a project partner was vital to improving the appearance of the corridor. UT contributed $500,000 for aesthetic improvements, including bollards, columns, plantings, irrigation and decorative lighting, using color and texture to transform the corridor. UT also funded $1 million to bury unsightly overhead utilities.

The preliminary engineering for the project involved the evaluation of several improvement scenarios, including jug handles (ramp that changes the way traffic turns left at an at-grade intersection), left-turn lanes, medians, Michigan left U-turns (at-grade intersection design, which replaces each left turn with a U-turn and a right turn) and roundabouts. Ultimately, the preferred alternative involved improvements to widen the one-mile corridor from west of Byrne Road to east of Secor Road by 17 feet, add a median and left-turn lanes, extend the median from Secor Road to west of Townview Drive (within the existing pavement width), improve signalization, add pedestrian improvements including sidewalks, crosswalks and pedestrian storage islands (for staged crossings); and provide access management (medians with U-turn bays for displaced left turns).

Challenges on the project primarily involved four areas: 1) balancing the needs for all stakeholders; 2) minimizing right-of-way impacts; 3) relocating utilities; and 4) meeting the design schedule. The first and foremost challenge involved satisfying the diverse objectives of the university and an array of large and small businesses with the surrounding neighborhood to create a transportation corridor that would enhance UT and the commercial establishments, yet preserve the area’s character issues such as cut-through traffic and traffic calming needed to be addressed with medians in the right locations to serve all users. Additionally, there were several businesses that were concerned about access and their ability to maintain viability in an access, managed corridor. To overcome these issues, the project included an outreach program that involved not only public meetings but also one-on-one meetings with businesses and concerned residents.

Property impacts along the corridor were minimized by limiting the widening and closely evaluating the alignment to avoid impacts that would result in total property takes. The 17-foot widening of the roadway was designed primarily for the south side of Dorr Street to take advantage of vacant land that was owned by UT. Ten feet of rights of way were reduced to 10 feet wide, which resulted in saving at least three businesses from total property takes.

An additional challenge was corralling the utilities to meet the aggressive schedule for their relocations. This was accomplished by establishing the agreement on avoidance, impacts and relocations early in the project design process and the continual follow-up with utilities. Major power transmission lines needed to be relocated in areas where lines were not being buried. AT&T also had two 48-inch banks of fiber communication line located four feet under the pavement that needed to be avoided.

The project schedule was extremely tight with only 14 months for design, environmental studies and right-of-way acquisition of 23 parcels, with the sale date set for the final week of the fiscal year. Missing the fiscal year could jeopardize project funding and result in cancellation of the project. Property takes on the university’s campus required a state procedure ending with the governor’s signature—a process that could take six months. To resolve this, the university executed right-of-entry agreements that allowed the project to proceed while the final land sale was awaited. As a result, the schedule was not only met but delivered six weeks in advance of the target date.

The transformation of the Dorr Street corridor has changed the face of UT’s south campus, adjacent businesses and the surrounding neighborhood. The industrial appearance has been replaced with a driving experience that is calmer, safer and more visually appealing. The project was open to the public in June 2015 and is expected to be an impetus for continued development. In March 2016, the Dorr Street Corridor Project was awarded the Outstanding Achievement Award from the American Council of Engineering Companies of Ohio.

The complete Summer 2016 edition of the ASHE Scanner, published by the American Society of Highway Engineers, can be found at http://www.ashe.pro/scanner.html.

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