

Project: *John Carroll University, Signal Upgrade Project*

CUY-Belvoir (CR 284) (PID 92121)

Owner: John Carroll University

Contact: Mr. Rich Bretz
John Carroll University
20700 North Park Drive
University Heights, Ohio 44118
Tel: (216) 397-4310

Construction Value:

Description: This particular project incorporated a unique measure to ensure pedestrian crosswalk safety across the heavily traveled Belvoir Boulevard roadway. Belvoir Boulevard is a thirty five (35) mile per hour Urban Collector as classified by the Ohio Department of Transportation and runs directly through the middle of John Carroll University. After a traffic calming analysis was performed, it was determined that the project should include the use of a “road diet” and “speed tables” to effectively ensure the safe crossing of students within the university.

After completion of the design incorporating the “road diet” and “speed table” concepts, Belvoir Boulevard transitioned from a four lane roadway with center grass medians, to a two lane roadway with center grass medians. Reducing the number of lanes in the roadway moves the curbs farther out into the roadway creating a “tunnel” affect, naturally reducing the traveling speed of passing motorists.

This project also included the removal and re-design of the existing traffic signals at 1 location in between the two speed tables. A special type of tactical pushbutton was used at the pedestrian crosswalks. This pushbutton vibrates when activated and issues an audible message for the visually impaired when it is safe to cross the street. The new traffic signal design incorporated the use of audible emergency vehicle preemption and in road loop detection.