

CBD TRAFFIC SIGNAL SYSTEM MODERNIZATION CITY OF ELGIN, ILLINOIS



CHALLENGE

Enhance the flow of traffic through downtown Elgin and evaluate changes to the system of one-way streets.

An aging traffic signal system resulted in uncoordinated traffic flow in the Central Business District (CBD), increasing congestion and leaving motorists frustrated. Several redevelopment projects were poised to increase both pedestrian and vehicular traffic in the CBD. Planning studies indicated a need to analyze alternates to the existing one-way traffic flow to improve circulation in the CBD.

RESULTS

HLR's study and design efforts resulted in new traffic signal equipment with central office control and emergency vehicle preemption. HLR completed the engineering under budget and construction is scheduled to be completed in Spring 2007.

CONSTRUCTION BUDGET
\$3.6 MILLION

SOLUTION

HLR conducted a feasibility study to analyze different options for traffic flow (one-way vs. two-way) and assessed the impact of new traffic from the various redevelopment projects..

They conducted a number of informational meetings with the City Council and the Downtown Neighborhood Association to maximize stakeholder participation in the study. The result was a decision to retain the one-way couple on Highland Avenue and Chicago Street.

With this analysis concluded, HLR:

- Designed a fiber-optic interconnect that took advantage of existing electrical conduit in the downtown with modifications to provide a direct connection to City Hall
- Worked with the City's Information Services Department to provide a network link to the City's Public Works facility located several miles from the downtown
- Prepared plans and specifications to replace the outdated equipment at 11 intersections with new equipment that improved both pedestrian and vehicular safety
- Designed emergency vehicle preemption for the 11 intersections in the CBD along with 2 intersections along State Street (IL Route 31)
- Implemented new traffic signal coordination plans to decrease congestion and improve traffic circulation in the downtown



NEW TRAFFIC SIGNALS IN DOWNTOWN ELGIN