Southwest Hoboken Traffic and Safety Design Improvements

Southwest Hoboken, defined in this project as the land south of First Street and west of Willow Avenue, is in need of redevelopment. The current traffic situation in the area does not provide for a safe environment for pedestrians, motorists and cyclists alike. Traffic congestion causes air and noise pollution and costs motorists excessive amounts of time and money. Community development in Hoboken has traditionally been sporadic, disjoined and had not taken into account the true desires of its residents. The elected officials in Hoboken had started to look to external organizations and individuals for advice and new ideas in solving traffic issues. The project team was formulated with the goal of providing recommendations for both short-term and long-term design solutions for the area in question that were both economical and desired by the community.

Through a Road Safety Audit and the use of traffic modeling and simulation software, the team developed design alternatives that relieve traffic congestion and improve safety for the entire roadway network. Community input was accumulated by way of an end user survey, intended to assess potential design aspects and their benefits with the opinions of residents, business owners and other users of the study area and its roads. The survey results were used to populate comparative values in an economic decision matrix designed to assist decision-makers in choosing the best possible design for the future development of southwest Hoboken’s streets to the interest of the public.

The project team compiled an abundant list of improvements for both safety and congestion relief separately and analyzed the impact of each on the community. These improvements were then incorporated into network design solutions which included a simple general maintenance upgrade, a more complex traffic-calming plan, a traffic signal modernization and optimization plan, the installation of an additional traffic signal and an intricate plan to create a one-way couple reconfiguration of southwest Hoboken’s traffic network.