Accommodating Pedestrians

What Was the Need?

Many challenges to pedestrians in the state of New Jersey can be mitigated through design interventions. This study focuses on issues of accommodating pedestrians throughout the state. Engineers and planners follow guidelines and regulations for roadways in order to accommodate pedestrians. Several manuals regulate and offer guidelines for roadway and highway design in New Jersey. These include: New Jersey Residential Site Improvement Standards (RSIS), New Jersey Roadway Design Manual (NJ RDM), and the Manual on Uniform Traffic Control Devices (MUTCD). While they are great resources, these manuals are not always consistent with one another. This report offers a brief review of NJDOT roadway design guidelines and makes recommendations for the manuals listed above.

New Jersey Bicycle and Pedestrian Resource Center of the Alan M. Voorhees Transportation Center at Rutgers University researched the disconnect between regulations and pedestrian accommodations. The purpose of this study was not to rewrite the existing state pedestrian guidelines, but rather to discover current lack of initiatives, guidance, and standards. Carefully identifying and addressing these issues could reduce pedestrian deaths and injuries by making the pedestrian experience safer.

What Did We Do?

As one might imagine, conflicts between pedestrians and vehicles happen often at intersections. However, intersections are dynamic places where many elements work to improve how and where pedestrians and vehicles cross paths. Crosswalks, stop lights, curb radii, and bus stops, all of which are regulated by these manuals, play key roles in this orchestra of traffic.

VTC offers a detailed analysis of the existing planning practice and design standards that affect pedestrians and suggests several critical changes that would improve the safety of pedestrians in New Jersey. This report also highlights key factors in the decision-making process at the state and local levels as it pertains to pedestrian facilities. Where needed, new standards that affect such decisions are suggested. Recommendations for each manual are also listed in the report.

What Did We Learn?

Guidelines in New Jersey are, in fact, very comprehensive and cover a wide range of concerns of pedestrians. It is clear that what is proper treatment for one intersection may not be suitable for another. Yet, while many design questions are circumstantial, some standards are more universal than others. Further, the overall provisions made for pedestrians are accommodating, but not encouraging. The design of several exemplary places in the state encourage pedestrian use and these examples ought to be followed.
What’s Next?

While the guidelines for pedestrian design in New Jersey cover an extensive range of scenarios, some improvements can be made. Adopting a common consensus on standards would help to maintain consistency on all roadways in the state. Additionally, details that aid implementation and enforcement are currently lacking and should be adopted.

Once progress to simplify and unify the state’s standards is underway, improvements should be made to address the unique character of the place. Currently the classification of roadways are not based on local context. By following an approach used in some places in Europe, guidelines and standards should reflect the non-transportation functions of a roadway. Currently, the U.S. system does not contain the implicit understanding that roadways serve many purposes beyond that of simply carrying vehicular traffic. Streets are places of commercial and social encounter; they are part of public realm and often serve social activities just as much as they serve automobile travel. More and more urban planners embrace a perception of streets as serving varied functions and functional classifications should also incorporate non-transportation functions to facilitate suitable design.

"The slower speeds enforced by traffic calming mean fewer crashes. Those that do occur are less severe. Research on traffic impact severity shows that the impact of a vehicle moving at less than 20 mph does not usually inflict serious injury to the pedestrian."

— Gute Argumente: Verkehr, Germany 1991