Thank you for your attendance at the open house meeting held on August 2, 2016 for the Illinois Department of Transportation’s (Department) proposed improvement of IL 176 at Nish Road in Nunda Township. Your comments have become part of the meeting record and will be included in the final project report. A total of nine comments were received during the three week comment period and are categorized as follows:

- Indicated the need for some type of traffic signal improvement, but thought the proposed roadway realignment would cause too many property impacts or additional traffic issues (4).
- Support the proposed improvements and the need for a traffic signal (2).
- Support the need for roadway improvements, but opposed a traffic signal installation (2).
- Does not support the need for any improvement at the intersection (1).

As many comments concerned similar issues, this newsletter has been prepared to address your concerns as well as provide you with an overview of other topics. Information and materials from the open house meeting as well as this newsletter can be viewed on the project website at www.idot.illinois.gov/projects/il-176-at-nish-road.

EXISTING DEFICIENCIES

The proximity of the existing intersections of Wright Road at Nish Road and IL 176 at Nish Road only allows two cars to wait on Nish Road to turn onto IL 176 before they begin to block the Wright Road intersection. This condition is made worse by the heavy traffic on IL 176 which does not allow cars to turn from Nish Road onto IL 176. The lack of turning lanes creates backups, particularly on IL 176 which has higher volumes and higher speeds. The proposed project will improve these conditions.

ALTERNATIVES ANALYSIS

During the project development process, several signalized and roundabout intersection alternatives were analyzed. Each alternative was evaluated based on traffic operations, safety, and impacts to the surrounding environment. The signalized alternatives were preferred over the roundabout alternatives because they had less property impacts and offered better traffic operations. The signalized alternatives were then refined to reduce impacts to existing properties, resulting in the Preferred Alternative that was presented at the open house meeting. A five-leg signalized intersection was analyzed, but was not selected because it increased delay at the intersection. Further, in accordance with national engineering guidelines as well as Department policy, signalized intersections with more than four legs decrease levels of safety and efficiency and their use should be avoided.
The goal of this project is to improve safety and traffic operations at the intersection. The installation of a traffic signal at the intersection of IL 176 and Nish Road, along with the addition of turn lanes and realignment of Wright Road, achieves this goal while minimizing impacts. Turn lanes will provide an area for turning vehicles to slow down and execute their turn while allowing through vehicles to continue unimpeded. The traffic signal will create the opportunity for vehicles on Nish Road to turn onto IL 176, decreasing back ups and waiting time on Nish Road. Realigning Wright Road will provide separation between the intersections, reducing confusion and simplifying turning movements. The traffic signal will be equipped with emergency vehicle preemption devices to provide emergency vehicles priority at the intersection.

Impacts to Existing Properties
In response to public comments, the Department made efforts to minimize impacts to existing properties along Riverside Drive. The proposed shoulders along Wright Road were reduced from eight feet to four feet, and the proposed five-foot sidewalk and five-foot buffer were reduced to a five-foot sidewalk and one-foot aggregate shoulder. These refinements shift the limits of construction eight feet farther away from the homes on Riverside Drive.
Traffic Operations on Wright Road
Traffic simulations of the proposed intersection indicate minimal back ups on both Nish Road and IL 176. The traffic signal provides the opportunity for vehicles on Nish Road to clear the intersection while providing sufficient green time to minimize delays on IL 176. The realignment of Wright Road to the west provides additional storage for vehicles compared to the substandard existing conditions where vehicles back up onto Wright Road before turning left onto Nish Road.

Widening of IL 176
Previous roadway studies, such as the IL 176 Strategic Regional Arterial Study that was completed in 2010, investigated concepts to address the existing and future needs of the IL 176 corridor. Improvements to increase the traffic capacity of IL 176, such as widening to provide two lanes in each direction, are not included in the Department’s current multi-year program. Preliminary engineering and environmental studies (Phase I) would be required if improvements to the IL 176 corridor are pursued.

Stopping on a Hill
The Department has established policies for the design of highways which consider such elements as maximum slopes on roadways and distances needed to safely stop a vehicle. The existing hill on IL 176 was analyzed as part of this study and adheres to the Department’s design criteria for vertical curves and maximum slopes. Additionally, sight lines were analyzed to ensure that a driver can safely stop within the distance from the back of the line of cars to the point at which the driver is first able to see them.

Need for Pedestrian and Bicyclist Facilities
According to Illinois Highway Code, bicycle and pedestrian ways shall be given full consideration in the planning and development of transportation facilities. Bicycling and walking are integral components of an efficient transportation network. Effective bicycle and pedestrian accommodations enhance quality of life and health, strengthen communities, increase safety for all modes of transportation, reduce congestion, offer recreational benefits, and benefit the environment. Sidewalk and shared-use path are proposed based on coordination with Nunda Township. They include ADA compliant sidewalk and shared-use path as well as high visibility crosswalks, pedestrian countdown signals, and pedestrian push buttons.
Next Steps and Funding

Highway improvements are typically processed in three distinct phases. Preliminary engineering and environmental studies, known as Phase I, involve coordinating with the public, developing geometry and drainage plans, identifying environmental concerns, and determining right-of-way requirements. The Department is nearing completion of Phase I as we incorporate comments received from the open house meeting and refine the engineering studies and right-of-way requirements. After completion of Phase I, which is anticipated in spring of 2017, the Department can begin preparing contract plans and acquiring the necessary right-of-way (Phase II). The actual construction of the improvement is Phase III and cannot begin until the earlier phases are complete. This improvement is included in the later years of the Department’s FY 2017-2022 Proposed Highway Improvement Program and contingent upon plan readiness, land acquisition, and funding availability through future annual legislative appropriations.

Estimated Construction Cost = $1.6 million