

# 2013 Fairview Ave/Maple Ave Traffic Study

## EXECUTIVE SUMMARY

The Village of Downers Grove initiated the Maple Avenue/Fairview Avenue traffic study in conjunction with two current Village initiatives. The first is the Village's near-term plan to reconstruct Maple Avenue between Fairview Avenue and Cumnor Road, and the second is the planned long-term transformation into a Transit-Oriented Development area as identified in the 2011 Village Comprehensive Plan.

In addition to these primary objectives, the study had these additional objectives as outlined in the Introduction to this report. The traffic study accomplished these objectives, and the findings are as follows:

- *Approximately one-half of the traffic traveling to the south and west on Maple Avenue during the A.M. peak hour and two-thirds of the traffic during the P.M. peak hour between Fairview Avenue and Main Street is through traffic.*
- *In conjunction with the programmed reconstruction of Maple Avenue between Fairview and Cumnor Road, potential improvements include:*
  - Installation of 4-foot bike lanes along the existing bike route (as a Complete Street element).
  - An extended left turn lane on the east leg (to reduce queue spillback and possibly encourage more traffic to head south).
  - Installation of Village Downtown gateway features and additional landscaping to increase the "local roadway feel" of Maple Avenue and to discourage through traffic.
  - Slightly widened turn radii and relocated stop bars (to improve truck turning movements).
  - Slightly relocated crosswalk markings (to prevent the intersection of them within the roadway pavement).
  - To improve signal operations along Fairview Avenue, the Maple Avenue signal should be fully integrated into the existing traffic signal system between Lincoln Avenue and Hill Street, and the system should be re-optimized. Interconnection with the railroad is also a possibility at Maple and Fairview. It is notable that the much of the congestion that occurs along Fairview Avenue between Second Street and Maple Avenue south of Maple is related to commuter train operations and not intersection deficiencies, while south of Second Street, capacity is limited by the three-lane cross-section.
  - Further coordination with DuPage County DOT should occur regarding the changes in capacity on the Fairview Avenue legs of the 55th Street intersection as proposed in the current IDS.

Conceptual alignments, roadway typical cross-sections and intersection lane configurations were developed for three potential roadway network modifications to meet some of the objectives of the Village.

Option 1 is the conversion of Maple Avenue to one-way eastbound operation between Burlington Avenue and Rogers Street.

Option 2 is the realignment of Maple Avenue as a two-lane roadway north to Rogers Street, then east to Fairview Avenue

Option 3 is the realignment of Maple Avenue combined with creation of a one-way pair of Maple Avenue and Burlington Avenue.

Of the proposed options, Option 2 was found to have the least adverse impacts from a traffic standpoint. Option 2 diverts some traffic from Maple Avenue to Fairview Avenue, but keeps traffic on Fairview Avenue within the capacity of the arterial. Option 2 also makes Maple Avenue a less direct route, and may help make the roadway more residential in character.

Finally, Option 2 accommodates the Village's long-term redevelopment plans for the area. It is therefore recommended that Option 2 be carried forward as part of the Village's long-term planning processes.

- A Complete Streets cross-section was developed for Fairview Avenue between Second Street and Maple Avenue, which includes 11-foot vehicle lanes, 5-foot bicycle lanes, parking lanes, and wider sidewalks for streetscape elements such as planter boxes, benches, and lighting. Complete Streets elements have also been shown on the Concept Alignment exhibits for each of the three roadway network modification options.
- Additional possibilities for future roadway network improvements, such as grade separations and Metra station locations were presented, and the advantages and disadvantages of each were discussed. Further studies would be required to refine these possibilities and ensure that they fit