

Off System Traffic Distribution of O'Hare West Bypass at Franklin Avenue Interchange

FROM: CH2M HILL
DATE: August 27, 2009
PROJECT: Elgin O'Hare-West Bypass

This memorandum summarizes traffic analyses performed to evaluate impacts of the Franklin Avenue interchange along the south leg of the West Bypass on adjacent local roadways. Information presented is regarding projected travel redistribution and impacts in the vicinity of Franklin Avenue, Green Street and Taft Road resulting from the Build Alternative (203) under consideration by the Elgin O'Hare - West Bypass study.

1. Analysis Area

- The analysis area for this traffic study is bounded by IL 19 on the north, Manheim Road on the east, York Road on the west, and I-294 (tollway) on the south. Land use in this area is primarily industrial and commercial. The area is nearly completely developed; hence locally-generated traffic demand is not projected to increase substantially in the future.
- Preliminary traffic assignments in the analysis area were reviewed to determine the effects of the O'Hare West Bypass on local roadways, and, in particular, to evaluate the potential impacts of the entrance and exit ramp connections at Franklin Avenue.
- As part of the development of a concept layout for the Bypass corridor, a service interchange was developed to provide improved local access to the area. The representative concept is a half single point diamond interchange with West Bypass and I-294.

2. 2007 and 2030 Traffic Volumes

The attached Traffic Demand Exhibit shows 2007 Average Daily Traffic (ADT), 2030 Baseline ADT, and 2030 ADT for Build Alternative 203. Some key traffic volume characteristics are as follows:

- IL 19, York Road and Manheim Road serve as study area connectors to interstate corridors, thereby providing regional connectivity in the 2007 and 2030 Baseline scenarios.
- There will be marginal growth in travel demand between 2007 and 2030.

3. Build Alternative 203 Traffic Redistribution

Build Alternative 203 provides a north-south access controlled facility in the study area connecting I-90 and I 294 along with west side of O'Hare Airport thereby attracting trips from other major north-south corridors.

- With inclusion of the West Bypass, some of the traffic previously using adjacent north-south streets (Wolf Road, and County Line Road) and connecting east-west streets (IL 19, Franklin Avenue, Green Street, Jefferson Street and Grand Avenue) would be diverted to the Bypass as it offers a more efficient travel route. Therefore, future traffic on most of the local streets will not increase and would be comparable to 2007 and 2030 Baseline traffic volumes.
- For the South leg of West Bypass, a new interchange is proposed to/ from I-294 with Franklin Avenue. This interchange lies between County Line Road and Wolf Road in the vicinity of Franklin Park industrial complex. The new interchange supports adjacent land uses by providing direct access to O'Hare West Bypass through Green Street to and from the west and Franklin Ave to and from the east. The overpass bridge for the Union Pacific Railroad along this segment (just west of proposed ramp termini) is being proposed to be widened to 4 lanes. The section of Green Street/Franklin Ave on either side of the interchange will be utilized as a collector/distributor serving local land uses. Hence, as part of the interchange improvements, it is suggested that the Franklin Ave segment east of County Line Rd be widened to 2-lanes in each direction. This would extend the existing four lane section on Green Street (becoming Franklin Ave) to Wolf Road and eliminate the "traffic bottleneck" along this segment. The proposed widening will help establish a continuous homogenous segment along Green St/Franklin Ave that would assist in traffic distribution to the adjacent land uses in the vicinity of the interchange.
- Based on planning level capacity analysis, the Build Alternative 203 traffic volumes for the roadway segment along Grand Avenue between County Line Road and Wolf Road would only slightly exceed the approximate threshold for widening the four lane cross section to six lanes. However, this segment is not in the immediate proximity of the new interchange ramps. In order to maintain continuity in cross section on Grand Avenue to the east and west, and since the roadway segment is not in the immediate proximity of the Build Alternative interchange, it is not recommended that this section of Grand Avenue be widened.
- Similar to Grand Avenue, forecasted daily traffic on York Road between Green Street and Jefferson Street would marginally exceed the approximate threshold for improvement. However since this segment is not in the proximity of the new interchange ramps, widening is not recommended. It would be advantageous to maintain a consistent cross section with the sections of York road to the north and south.

The above analysis and conclusions/findings are based on planning level methodology and preliminary travel forecast data from the travel demand model. Any traffic increases on the local streets associated with the roadway alternatives will be reviewed and improvements will be investigated in detail during the preliminary design stages of the project.