

Lake Interchange Traffic Study

June 11, 2012

Scope of Services

Review work done to date

The CONSULTANT will collect the available information on the alternatives proposed and the traffic analysis that has been done. As a minimum, this includes the original land development and roadway/ramp configuration concepts proposed to the City, The traffic diversion forecasts provided by SEWRPC, and the traffic analysis of existing operational conditions and a suggested alternative configuration done by Traffic Analysis and Design, Inc. for WisDOT.

The City will Provide:

- Map of current average weekday traffic volumes
- Existing available and current Turning movement counts
- 24 Hour weekday Hose counts summarized by hour with morning and evening peak periods broken down into 15 minute intervals.
- Traffic signal timings
- 2010 Parking Facility Inventory and Occupancy Maps

Develop Three Alternatives

The CONSULTANT will develop and prepare exhibits of three alternatives. The goal of these alternatives is to:

- Create one or more developable parcels in an area located south of Clybourn Street, and east of Cass Street
- Open Clybourn to two-way traffic between Lincoln Memorial Drive and Van Buren Street
- Maintain access to the Third Ward, Discovery World, and the Art Mueseum
- Minimize reconstruction of IH 794 other than access ramp modifications
- No Traffic Queuing onto the Freeway from Freeway Off-Ramps
- Accommodate traffic destined for I-794 in the study area

One alternative is to include a combination of the original land use and roadway configuration concepts provided to the City from various contributors and sources as noted in the Work to be Reviewed. Other alternatives to be developed will include other roadway and/or operational improvements necessary to eliminate or minimize traffic congestion in

the area, and to maximize access to IH-794 while eliminating the on and off ramps to and from IH 794 to the west in order to minimize traffic diversion onto other portions of the freeway or local street system.

Analysis of Alternatives

The CONSULTANT will conduct traffic analysis needed to evaluate levels of traffic demand and characteristics of traffic operation for each alternative. This is to be used to identify areas of congestion to be created when compared to existing conditions, as well as the location and duration of any oversaturated conditions anticipated to develop.

The study area is to include existing and proposed freeways, ramps and surface street facilities in an area bounded by Harbor Drive, Michigan Street, Water Street and Chicago Street. Detailed analysis is to include only those roadways where new traffic patterns are likely to create a difference in level of service of more than one Service Level on any one movement, and in the immediate vicinity of new or improved roadway facilities included in the alternative.

The analysis will include projections of traffic demand or diversion within the study area due to the changes in roadway configuration and resultant new traffic patterns, as well as geometric and operational changes needed to mitigate any congestion which is anticipated to develop under the various alternatives. The design year traffic projections will be taken from the forecast work done by WisDOT for the traffic analysis mentioned above. Traffic generated by adjacent development identified by City staff will be added into the analysis. While any reduction in freeway access is likely to create diversion of traffic from the study area, all traffic demand currently in the study area should be accommodated by the proposed alternatives. This analysis will include all traffic demand currently utilizing roadway facilities within this area to access I-794.

For purposes of defining congestion in this analysis, Level of Service "C" is to be defined as "becoming congested" and Level of Service "D" is to be defined as "congested". Oversaturated links are also to be identified. It is recommended that the 2000 Highway Capacity Manual procedures be used for the analysis of traffic operation, with the exception of the HCM2000 signalized intersection queuing model. The analysis is to be based on current traffic demand on freeways, ramps and surface streets in the study area, with additional traffic demand anticipated to be developed by the new developable parcels. (Note that Synchro is not an acceptable HCM methodology.)

The CONSULTANT will develop a conceptual cost estimate for each of the alternatives. WisDOT average unit prices for the Milwaukee area will be used. The cost estimating procedure will be consistent with WisDOT estimating practices since this may be incorporated into a WisDOT project.

Deliverables

The CONSULTANT will prepare a draft report to document the results of this alternatives analysis. The report will include a description and conceptual layout exhibit of each

alternative analyzed, a tabular summary of improvements included in each alternative including both geometric and operational changes necessary, the anticipated traffic operating conditions and level of congestion as determined in the analysis of each of the alternatives, and a summary of costs for each of the alternatives developed. A copy of a summary of anticipated traffic demand and results from capacity analyses completed are to be included as an appendix to the report for each alternative analyzed. Exhibits in the report will be 11x17 format. Six copies of the draft final report are to be provided to the City for review and comment.

The CONSULTANT will prepare a Final Report on the alternatives analysis based on comments received on the draft report from the City. The Consultant will allow two weeks for review and comments on the draft report. Twelve copies of the final report are to be provided to the City.

Meetings and Presentations

The CONSULTANT may request up to three face to face progress meetings with City staff during the course of this study. A review meeting will be held to discuss resolution of comments to the draft report. One meeting may include coordination with WisDOT.

Additionally, the CONSULTANT will make a presentation of findings and recommendations of this study to the City and Project Stakeholders. One hundred scale exhibits will be prepared for the presentation. A second presentation of the study findings and recommendations will be made to a Committee of the Common Council of the City of Milwaukee if needed.

If Authorized:

Develop Alternative that includes Full Build-out of the Lake Interchange

The CONSULTANT will develop an additional alternative interchange configuration for the long term full build-out that includes the reconfiguration of the interchange and the City Streets that connect to the interchange ramps. This alternative will include revisions to the freeway through the Lake Interchange.