March 23, 2015

To: All NOACA TLCI Project Sponsors

Re: Basic Design and Traffic Requirements for TLCI Studies

The ODOT District 12 Planning and Engineering Department offers the sponsors of TLCI grants the following guidance on handling critical aspects of highway design and traffic analysis as part of TLCI studies to ensure recommendations meet ODOT minimum requirements if advanced to the design phase.

1. Identify whether the location is a federal truck route. If so, it is required that any proposed improvements provide one effective 12’ lane in each direction. While it is possible to request a waiver to this requirement from FHWA, waivers require additional study that is expensive and time-consuming. Sponsors are advised by District 12 to generally avoid making proposals that assume a waiver will be granted unless the sponsor is willing to bear the expense of the preparing a waiver and risk it not being approved.

2. The minimum lane width for urban arterials is 11’. Any further reduction beyond this minimum will require a design exception as part of the design process.

3. At least 1’ additional width must be provided on all lanes adjacent to curb. Any proposal to eliminate this minimum “shy” distance would require a design exception. Design exceptions eliminating this feature are rarely granted.

4. A planning-level traffic analysis is needed for proposals to eliminate through lanes or turn slots. At a minimum, the analysis should meet the following:
   a. Evaluate critical elements, usually signalized intersections in an arterial network.
   b. Conduct capacity analyses using either HCS, Synchro, or SIDRA (for roundabouts.)
   c. Existing traffic volumes from recent turning movement counts may be used to forecast design hourly volumes if they are considered representative. The counts should be seasonally adjusted and converted to design hourly volumes using methodology presented in the ODOT Certified Traffic Manual. Contact NOACA to obtain a simple growth rate for roadway segments within the study area. A simple growth rate may be applied to existing design hour volumes to compute opening day and design year hourly volumes. Traffic prepared in this fashion is referred to as “planning level traffic” and is suitable for use in a TLCI traffic analysis.
   d. Although TLCI planning-level traffic analyses do not require ODOT approval, District 12 requests that they be submitted for information. ODOT assumes that the pre-qualified consultants have prepared these correctly.

5. Sponsors are advised that a more detailed traffic analysis will be required for alternates advanced to preliminary design. These “design level” traffic analyses will be reviewed by ODOT during the design phase.

6. Any proposal to change the alignment of a state highway as part of a TLCI study should be made to ODOT District 12 in writing to advise ODOT that a change is being considered in conjunction with the study.

Please contact District 12 Traffic Planning Engineer Brian Blayney at 216-584-2102 if you have any questions regarding these guidelines.