

**TRANSPORTATION MOBILITY AND SAFETY DIVISION  
CONGESTION MANAGEMENT SECTION  
CONSULTANT PREQUALIFICATION REQUIREMENTS  
(REVISED 4/02/2015)**

Transportation Mobility and Safety Division consultants shall submit at least one key person per role for each discipline. For each engineer per discipline, submit examples of department of transportation or similar work sealed by each engineer and completed within the last 5 years - Electronic submittals only. If work was performed for or submitted to TMSD, only a reference to the work is necessary. If previously pre-qualified in these areas, no examples are required, unless requested by the reviewing unit. Also, submit documentation verifying the following requirements:

- Experience/examples that meet the miscellaneous requirements for each discipline
- Key personnel meet the registration required, if applicable
- Key personnel are permanent employees of the consultant
- Consultant meets the firm registration required, if applicable
- Congestion Management prequalifications are by individual.

Documentation should include project lists and descriptions including names and current contact information of clients and owners, resumes, references, certificates, experience descriptions and details, etc. If a consultant has previously completed work for the NCDOT, this work will also be considered for prequalification. For questions about these prequalification requirements, contact Renee B. Roach, P.E. of the Transportation Mobility and Safety Division at (919) 773-2800.

Discipline Code	Discipline	Unit	Congestion Management Section Type of Work	Key Personnel Required	Individual Registration Required	Firm Registration Required
00026	Capacity Analysis – Intersections and Corridors	Traffic Management – Congestion Management	Traffic Analysis of interrupted flow operation - This may include signalized and unsignalized intersection analysis, and corridor operation. Analysis methodology should follow Highway Capacity Manual (2010) procedures, primarily found in Volume 3, Interrupted Flow. This analysis is primarily macroscopic, although simpler microscopic procedures may be used.	Yes	Yes	No
00027	Capacity Analysis - Freeways and Interchanges	Traffic Management – Congestion Management	Traffic Analysis of uninterrupted flow operation - This may include freeway merge, diverge and weaving segments, mainline operation, and design and review of interchange concepts. Analysis methodology should follow Highway Capacity Manual (2010) procedures, primarily found in Volume 2, Uninterrupted Flow. This analysis is primarily macroscopic.	Yes	Yes	No

Discipline Code	Discipline	Unit	Congestion Management Section Type of Work	Key Personnel Required	Individual Registration Required	Firm Registration Required
00028	Capacity Analysis Interchanges	Traffic Management – Congestion Management	Not used (combined with 027)			
00029	Capacity Analysis Intersections	Traffic Management – Congestion Management	Not used (combined with 026)			
00030	Capacity Analysis - Roundabouts	Traffic Management – Congestion Management	Traffic Analysis of roundabout intersections - This includes capacity analysis of roundabout operation using specialized software (as listed in the Congestion Management Traffic Analysis Guidelines.) Some preliminary design detail work/knowledge may be included. Analysis methodology should follow Highway Capacity Manual (2010) procedures, primarily found in Volume 3, Interrupted Flow. This category is separate from the general intersection category (026) because of the specialized nature of roundabout design and operation.	Yes	Yes	No
00046	Corridor Studies	Traffic Management – Congestion Management	Not used (combined with 026)			
00115	Independent Review of Traffic Impact Studies	Traffic Management – Congestion Management	Not used (combined with 252)			

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00127	Interchange Modification/Justification Reports	Traffic Management – Congestion Management	Interchange Modification or Justification Reports (IMR/IJR) – This includes all steps in preparation of IMR/IJR documents for submittal to FHWA. Steps include advanced traffic simulations, freeway and interchange analysis, and providing detailed information for FHWA IMR/IJR process steps. Pre-qualification in both 027 and 256 will be required.	Yes	Yes	No
00252	Traffic Impact Studies	Traffic Management – Congestion Management	Preparation of Traffic Impact Analysis/Study (TIA/TIS) for NCDOT Review – This includes all steps in completing and submitting a TIA/TIS for Department review, primarily for a private developer seeking access to the State Highway System. Submittals in this category may also be for Municipal projects. Adherence to all Department policies and guidelines, including the Policy on Street and Driveways Access to North Carolina Highways and the NCDOT Congestion Management Capacity Analysis Guidelines. Pre-qualification in this category is not required for a firm/engineer to submit a TIA for NCDOT review, as the department cannot dictate which professional engineer can be hired by a private entity. Pre-qualification in this category indicates that the engineer in question has demonstrated adherence to all relevant policies and practices, and as such simplifies the Department’s review and evaluation of the requested access. The primary purpose of this category is to indicate the likely review time of the submitted report by the Congestion Management Section.	Yes	Yes	No

Discipline Code	Discipline	Unit	Congestion Management Section Type of Work	Key Personnel Required	Individual Registration Required	Firm Registration Required
00256	Traffic Simulations Using Advanced Modeling Software	Traffic Management – Congestion Management	Traffic Simulations of Complex Networks – This includes proficiency with advanced simulation modeling software to analyze more complicated road networks. This work may be required for completion of documents involving freeway interchanges, and alternative intersection design that cannot be reasonably completed by macroscopic analysis software. Software packages used for this category include, but are not limited to, TSIS-CORSIM, VISSIM, Paramics and TransModeler. Because of its limitations for use for uninterrupted flow, the Synchro/SimTraffic software package is not included for qualification in this category.	Yes	Yes	No