



6640 Carothers Parkway, Suite 160
Franklin, TN 37067
Tel (615) 771-2466
Fax (615) 778-9733
www.wilbursmith.com

May 18, 2009

Mr. Tony Giarratana
Giarratana Development
201 4th Avenue N., Suite 1100
Nashville, Tennessee 37219

RE: May Town Center Traffic Impact Study

Dear Ms. Bernards:

Wilbur Smith Associates (WSA) has completed a review of the *May Town Center Traffic Impact Study Review* conducted by RPM Transportation Consultants LLC (RPM) and dated May 14, 2009. Below is a list of issues identified in the report and WSA's responses to these issues. For reference purposes, a technical memorandum number (TM#) and section number (S#), as presented in RPM's report, are provided for each.

Overall, many of the issues identified in RPM's report are minor. WSA is in agreement with some of these and is in the process of addressing them. There are also some minor issues noted in RPM's report that are misinterpretations or that WSA is in disagreement with, and information is provided in this regard. Finally, there some key issues noted in RPM's report that WSA wishes to further address in this letter. WSA believes it would be most efficient to conduct a joint meeting with both consultants and representatives of the Metro Planning Department and the Metro Public Works Department to resolve these issues.

Issues Currently being Addressed by WSA

1. RPM noted that the laneage figure in WSA's study did not accurately identify the laneage on the eastbound approach of Ashland City Highway and Eaton's Creek Road. (TM#1, S#2.1) - WSA agrees that the figure should indicate shared eastbound through / left turn lane instead of a through lane and a left turn lane and is making this correction.
2. RPM noted that the peak hour trips shown for the single-tenant office use exceed the daily trips shown for this use. (TM#5, S2.3; TM#5, S5.0) – As noted in Key Issue #2 in this letter, WSA agrees that trip generation for this use is more appropriately calculated based on individual corporate campuses rather than looking at the total square footage.
3. RPM noted changes that should be made to the capacity analyses, but stated that these changes are considered to be minor issues. (TM#7) – WSA agrees that some changes need to be made to the capacity analyses, but that, overall, this issue is minor and does not impact the recommendations contained in WSA's study. WSA is making appropriate changes.
4. RPM noted that capacities on two roadway segments were incorrectly listed. (TM#7, S 4.1 & S5.1) - WSA agrees in some instances and is making corrections. However, in one instance, the roadway classification was incorrectly listed in our original report. Based on the appropriate classification, the LOS as shown in the WSA report is correct. The roadway classification will be changed to the appropriate classification in the WSA report.
5. RPM noted that the text recommendations for the intersection of the westbound I-40 ramps and Charlotte Pike do not correspond to the improvement figure and notes that the recommended westbound right turn lane cannot meet AASHTO's turn lane length guidelines. (TM#9, S2.0) - WSA agrees that the figure does not match the text. The recommended improvements are correctly identified in the figure and the text should be revised accordingly. WSA also

Albany NY, Anaheim CA, Atlanta GA, Baltimore MD, Bangkok Thailand, Binghamton NY, Burlington VT, Charleston SC, Charleston WV, Chicago IL, Cincinnati OH, Chicago IL, Cincinnati OH, Cleveland OH Columbia SC, Columbus OH, Dallas TX, Dubai UAE, Falls Church VA, Greenville SC, Harrisburg PA, Hong Kong, Hot Springs AR, Houston TX, Iselin NJ, Jasonville FL, Kansas City MO, Kenmore WA, Knoxville TN, Lansing MI, Lexington KY, Lisle IL, London UK, Milwaukee WI, Mumbai India, Myrtle Beach SC, Nashville TN, New Haven CT, Orlando FL, Philadelphia PA, Pittsburgh PA, Portland ME Poughkeepsie NY, Raleigh NC, Richmond VA, Riyadh Saudi Arabia, Salt Lake City UT, San Diego CA, San Francisco CA, St. Paul MN, Savannah GA, Tallahassee FL, Tampa FL, Tempe AZ, Trenton NJ, Washington DC

agrees that the westbound right turn lanes will have to be shorter than AASHTO guidelines due to the proximity of the intersection to the bridge. However, there will be a need for a right turn lane, and WSA believes it is necessary to consider design exceptions in order to provide the additional capacity. It should be noted that the AASHTO guidelines are simply that, guidelines, and recognize the need for exceptions when appropriate.

Issues Related to Misinterpretations or that WSA is in Disagreement With

1. RPM noted that the laneage figure in WSA's study did not accurately identify the laneage on the westbound approach of Charlotte Pike at the intersection with River Road and the Marketplace access. (TM#1, S2.1) - WSA believes that the laneage figure was misinterpreted by RPM as two right turn lanes and a through lane (to Charlotte Pike). The figure is actually intended to show a right turn lane (to the Marketplace access), a right turn lane (to River Road), and a through lane (to Charlotte Pike) and is accurate.
2. RPM noted that the laneage figure in WSA's study did not accurately identify the laneage on the westbound approach of Alabama Avenue at 46th Avenue. (TM#1, S2.1) - Alabama Avenue is one-way, eastbound, at this intersection. Therefore, as shown in the laneage figure in WSA's study, there is not a westbound approach on the east leg of the intersection.
3. RPM noted that the laneage figure in WSA's study did not accurately identify the laneage on the northbound Briley Parkway off-ramp at Centennial Boulevard. (TM#1, S2.1) - Per RPM's study, the northbound approach has a left turn lane with a merging right turn lane. The laneage figure in WSA's study identifies separate left and right turn lanes because the channelized right turn provides storage lane functions as a separate lane.
4. RPM noted that a base year should have been established for the manual traffic counts since the counts were conducted at different times. (TM#1, S3.0) - For the manual traffic counts included in WSA's study, eleven of the counts conducted for the study were conducted between December 2007 and June 2008. Because the counts were conducted within a number of months, the counts were considered to be 2008 volumes. Metro Public Works provided traffic counts for five additional locations, and these counts were conducted in February and March of 2006. Per Metro Public Works, these counts were conducted recently and are considered to still be accurate for the current year for purposes of the study. Therefore there was no need to establish a base year for traffic counts.
5. RPM noted that WSA did not coordinate the modeling procedures with Metro, the MPO, and TDOT. (TM#2, S2.0) - This is not correct. WSA had extensive coordination with both Metro Public Works and the MPO when establishing the use of the MPO's model. Model files and outputs were provided to both agencies, and both agencies were in agreement with the results and use of the model. TDOT was included in some of the coordination efforts. However, TDOT's role in this process was for informational purposes and deferred the majority of the coordination to Metro Public Works and the MPO.
6. RPM noted that WSA did not include a complete listing of the MPO's LRTP projects. (TM#3, S1.0) RPM also stated that the listing of projects in WSA's study was "partially true", which implies that the projects were not listed accurately. (TM#3, 3.0) - WSA believes these statements are misinterpretations of the information presented in WSA's study. The intention of WSA's study was to identify LRTP and other planned major projects that are located within the *Traffic Impact Study* study area, not to list every project included in the LRTP. A listing of projects outside the study area would be irrelevant to the May Town Center analysis and would be an unnecessary addition to the traffic study report.
7. RPM noted that, according to the *Trip Generation Handbook*, May Town Center is not considered to be a multi-use development for purposes of trip generation and trip reductions. (TM#5, S3.1) - WSA acknowledges that the definition of a multi-use development as presented in the *Trip Generation Handbook* does not fit May Town Center and that this manual compares larger projects (such as May Town Center) to a central business district (CBD). WSA wishes to note that the *Trip Generation Handbook* goes on to say that

"CBD developments "typically have a mixture of diverse employment, retail, residential, commercial, recreational, and hotel uses. Extensive pedestrian interaction occurs because of the scale of the downtown area, ease of access and proximity of the various uses. Automobile occupancy, particularly during the peak hours, is usually higher in the CBD than in outlying areas. Some downtowns have excellent transit service. For these reasons, trip generation characteristics in a downtown

environment are different from those found in outlying or suburban areas. The focus of the data presented throughout Trip Generation is on sites in suburban settings with limited or no transit service and free parking. Accordingly, trip generation characteristics in this chapter, and specifically in the case of capture rates at multi-use developments, are directly applicable only to sites outside the traditional downtown.”

This text acknowledges that trip generation calculations and trip reduction factors for CBD areas vary from the data contained in *Trip Generation* and the *Trip Generation Handbook* and tend to result in fewer trips due to the mix of uses, pedestrian activity, automobile occupancy, and transit service.

As noted in Key Issue #2 in this letter, RPM indicated that, in order to strictly conform to procedures outlined in the *Trip Generation Handbook*, the trip generation calculations should have been calculated on a building-by-building basis rather than based on the total square footage / number of units per use. The text quoted above indicates that this RPM assumption is not accurate. RPM also references trip reduction factors for multi-use developments that are contained within the *Trip Generation Handbook*. However, as noted by RPM, May Town Center does not conform to the manual's definition of a multi-use development. WSA continues to believe that it has made an accurate use of *Trip Generation* and *Trip Generation Handbook* as it pertains to May Town Center.

8. RPM noted that WSA's study included various internal trip reduction factors based on land use and that the updated trip generation provided by WSA in a letter to Metro Public Works, dated January 14, 2009 included a 40% reduction factor for all of the land uses. RPM questioned why the factors had changed and stated that the factors were not appropriate. (TM#5, S3.0) - WSA would like to answer this question. Prior to conducting the July 2008 study, WSA coordinated extensively with Metro Public Works on the trip generation calculations, reduction factors, and resulting values. Metro Public Works was in agreement with the trip generation and reduction factors, as well as the resulting overall reduction factor of 40%. As the development plan continued to evolve, WSA utilized an average 40% trip reduction factor for each of the uses in order to estimate total trips. The updated trip generation provided in the January 14, 2009 letter corresponds to this overall 40% reduction
9. RPM noted that the sum of internal trip reductions cannot exceed the sum of the exiting trips generated by the residential land uses during the AM peak hour. (TM#5, S3.1) – WSA believes that it is not reasonable to assume that there will be no trips originating from other uses within the development and destined for uses within the development (such as office-to-office trips, etc.) during the AM peak hour. For this reason, WSA believes it has made appropriate use of trip reduction factors.
10. RPM questioned the trip reduction factors used by WSA and developed factors that it feels are more appropriate. (TM#5, S3.1 & S3.2) As an example, RPM stated that a quality restaurant should have a 0% internal trip reduction factor during the AM peak hour. (TM#5, S3.1). - WSA believes that a portion of the trips generated by a quality restaurant during the AM peak hour will originate within May Town Center and that a 0% internal trip reduction factor is not representative of this condition. However, rather than debate trip reduction factors for individual land uses, WSA believes it is important to note that the resulting overall trip reduction percentages determined by RPM and by WSA are very similar.
11. RPM noted that WSA's trip distribution assumptions regarding trips originating / terminating along Centennial Boulevard / Cockrill Bend Boulevard are too high. (TM#5, S4.0) - WSA believes the assumptions are appropriate and would like to note that WSA coordinated extensively with Metro Public Works and the MPO when determining the trip distributions for May Town Center.
12. RPM noted that WSA's TIS recommended that all (approximately 370) of the MPO's LRTP project be constructed as planned. (TM#9, S2.0) – RPM misinterpreted this recommendation. WSA's actual recommendation was referring to the LRTP projects identified within the study area, as these projects will have the most significant impact on the study area.
13. RPM questions the feasibility of some of the recommended intersection improvements because of the possible need to acquire right-of-way. (TM#9) – WSA agrees that right-of-way may need to be acquired to accommodate some improvements and that other improvements may be accommodated within existing right-of-way. The intention of the recommended improvement figures in WSA's study is to demonstrate any impact on adjacent properties. As indicated in the figures, the recommended intersection improvements are not expected to have any negative impacts on the

adjacent properties even though some right-of-way may be necessary. Acquisition of right-of-way for roadway and infrastructure improvements is a common, and most usually necessary, activity.

14. RPM questions the feasibility of constructing a southbound left turn lane on 51st Avenue at Alabama Avenue due to the limited room under the bridge. (TM#9, S3.0). - WSA agrees that there is limited space under the bridge. When identifying the need for the turn lane, WSA anticipated narrowing some of the existing lanes and possibly reducing or eliminating one or both of the sidewalks.
15. RPM noted that significant right-of-way acquisition will be required to implement the roadway improvements along Centennial Boulevard / Cockrill Bend Boulevard for Scenario 2. (TM#9, S3.0) –WSA agrees with this statement and has previously discussed this with the developer. The improvements recommended for Scenario 1 will require additional right-of-way and will have some impact on adjacent properties. However, the improvements are not expected to require the taking of parcels / businesses. Over the next 20 years, it is likely that some redevelopment will occur along Centennial Boulevard / Cockrill Bend Boulevard. As properties redevelop, right-of-way should be reserved for the recommended roadway cross-section. It will also be likely that additional land will need to be purchased to obtain all of the necessary right-of-way. WSA’s study includes a recommendation that May Town Center not be permitted to continue development beyond Scenario 1 unless Centennial Boulevard / Cockrill Bend Boulevard is improved as noted for Scenario 2.
16. RPM noted that the IMS did not include existing conditions analyses. (TM#10, S1.0) – WSA did not include analyses for the existing conditions because the interchange modifications are being proposed by a private developer and no improvements are being proposed to the existing interchange unless May Town Center is developed. WSA can include analyses for the existing conditions if requested by TDOT.
17. RPM noted that WSA did not include capacity analyses for several ramp sections. (TM#10, S2.1 & S3.1) – WSA did not show LOS for major merge and major diverge areas. In accordance with the *Highway Capacity Manual*, the major merge and major diverge sections have been analyzed by evaluating the capacity of the freeway segments immediately before and after these areas. Only roads / intersections under the jurisdiction of TDOT were analyzed as part of the IMS. WSA believes this is the appropriate analysis and that analysis of other roadway segments etc. is unnecessary. WSA will provide additional information if requested by TDOT.

Key Issues

1. RPM noted that the MPO’s E+C model should have been used instead of the LRTP model. (TM#2, S1.0 & S2.0; TM#3, S1.0 & S3.0) – May Town Center is a regional project and has a projected buildout of 20 years. WSA believes it would not be appropriate to evaluate this project without considering the MPO’s LRTP network. WSA had extensive coordination with both Metro Public Works and the MPO when establishing the use of the MPO’s model. Model files and outputs were provided to both agencies, and both agencies were in agreement with the results and use of the model.
2. RPM noted that the trip generation values should have been calculated on a building-by-building basis (assuming a number of buildings and the square footages / number of units for each building, calculating the trip generation for each building, and then adding the subtotals together to determine the total trip generation for that land use) instead of looking at the total square footage / number of units for each land use (TM#5, S2.2) - While WSA agrees that the methodology proposed by RPM provides a reasonable estimation of traffic for the proposed single-tenant office use, WSA believes this methodology overestimates traffic for the other proposed land uses and that the traffic projections for these land uses are more appropriately represented in WSA’s study. The trip generation values provided by WSA were developed through extensive coordination with Metro Public Works.
3. RPM questioned why WSA used daily traffic volumes to evaluate roadway segments rather than peak hour traffic volumes. (TM#6, S2.0) – May Town Center is a regional project that emphasizes “green” principles, including conservation of land and open space. As such, WSA recognizes a need to balance regional planning principles (such as evaluating roadway improvements based on daily traffic volumes) with more site-specific principles (such as evaluating roadway improvements based on peak hour traffic volumes) which are typically applied to smaller projects. WSA evaluated traffic operations at the study intersections based on peak hour traffic volumes. However, WSA believes that the study roadway segments are more appropriately evaluated based on daily traffic volumes.

4. RPM noted that the internal intersection along the entrance road will be a limiting factor to roadway capacity. (TM#6, S3.0) – WSA agrees that the design of this intersection is critical and has been working with the developer to determine appropriate solutions for the internal intersection. One option being considered is making the intersection a grade separated interchange with ramps serving the corporate loop roads.

WSA continues to be in agreement with the recommendations presented in the July 2008 *Traffic Impact Study*. We believe that the proposed bridge and access improvements will sufficiently accommodate the proposed development. We will continue to coordinate with Metro, the MPO, and the Tennessee Department of Transportation to answer questions, address concerns, and resolve any remaining issues.

Respectfully,

A handwritten signature in cursive script that reads "Rebecca Brooks". The signature is written in black ink and is positioned below the word "Respectfully,".

Rebecca Brooks, P.E.