

## **PART 2: REQUIREMENTS**

### **2.1 Introduction**

The Functional Planning and Policy Division of the Montgomery County Planning Department (“Department”) of the Maryland-National Capital Park and Planning Commission (“Commission”) requests proposals from consultants for transportation planning. The successful consultant will assist the Department in support of a targeted update of the County’s Subdivision Staging Policy (SSP). This effort will include a review of key elements of the adopted Local Area Transportation Review (LATR) and Transportation Policy Area Review (TPAR) with a focus on the identification of innovative methods and/or “best practices” that can be incorporated in these processes to support land use regulation in a manner more consistent with County planning policies. Specifically, the contract includes two (2) Technical Components:

- Assessment of LATR performance metrics in the context of the application of this process in support of: (1) the execution of traffic impact studies for new subdivision applications and (2) the evaluation of a multi-modal transportation network to support alternative development scenarios in long-range Master Plans/Sector Plans, and
- Development of a more robust and effective TPAR transit component process (and associated metrics) that includes the ability to explicitly reflect the traffic implications of the recently adopted *Countywide Transit Corridors Functional Master Plan (CTCFMP)*.

The following schedule is anticipated for the contract:

- Contractor selection, late spring 2014 with notice-to-proceed (NTP) by mid-July, 2014
- Draft literature review for Technical Component A to be completed by late September, 2014
- Development of recommendations for Technical Component A to be completed by late January, 2015
- Draft literature review for Technical Component B to be completed by late October, 2014
- Development of recommendations for Technical Component B to be completed by late March, 2015

### **2.2 Scope of Services**

#### **TECHNICAL COMPONENT A: LATR ASSESSMENT**

##### **Background**

Technical Component A consists of an assessment of Local Area Transportation Review (LATR) performance metrics as applied in the context of the execution of traffic impact studies for new subdivision applications and the evaluation of long-range Master Plan/Sector Plans, including the development of recommendations pertaining to:

- Using alternative metrics for measuring local traffic impacts of major development projects in transit-oriented development (TOD) areas. Examples include using vehicle miles traveled (VMT), multi-modal delay or person throughput, rather than more traditional intersection congestion measures.

- Identifying appropriate metrics for forecasting local traffic impacts in the context of the evaluation of long-range Master Plans/Sector Plans – particularly in existing and evolving TOD areas.
- Considering feasible metrics to supplement those used in the application of the Critical Lane Volume (CLV) and 2010 Highway Capacity Manual (HCM) methods for measuring intersection congestion.

### Task 1. Stakeholder outreach

The consultant will lead the development of an interagency Transportation Impact Study Technical Working Group (TISTWG) consisting of M-NCPPC, MCDOT, County Council staff, DPS, WMATA and SHA. The TISTWG is expected to have a total of roughly 10 members. The TISTWG will hold monthly half-day meetings through the duration of the contract. Occasionally, these meetings will include additional stakeholders including interest groups and consultants.

The consultant will assist in least two evening meetings which the Planning Staff will arrange to obtain broader input to the process.

### Task 2. Literature review

The consultant will review the results of a 2011/2012 survey of the following peer jurisdictions which identifies best practices regarding the evaluation of local transportation impacts of new development and the applicability of these practices to Montgomery County:

- San Jose, CA
- Boulder City, CO
- Broward County, FL
- Orlando, FL
- Boston, MA
- Baltimore City, MD
- Gaithersburg, MD
- Rockville, MD
- New York City, NY
- Westchester County, NY
- Portland, OR
- Alexandria, VA
- Arlington County, VA
- King County, WA
- Seattle, WA

These results are documented in a technical memorandum found here ...

[http://www.montgomeryplanning.org/research/growth\\_policy/subdivision\\_staging\\_policy/2012/documents/latr\\_lit\\_review\\_memo\\_4\\_9\\_2012.pdf](http://www.montgomeryplanning.org/research/growth_policy/subdivision_staging_policy/2012/documents/latr_lit_review_memo_4_9_2012.pdf)

The consultant will update the information provided in this document to reflect additional survey information derived from at least three (3) other jurisdictions selected by the consultant with a particular focus on practices adopted by California jurisdictions in response to SB 743 legislation pertaining to the California Environmental Quality Act (CEQA).

The following items will be documented in the literature review:

- Methodology, analysis tools, and standards for assessing intersection performance across all modes

- Methodology, analysis tools, and standards for assessing development impacts, including
  - Study thresholds and definition
  - Site trip generation, distribution and assignment
  - Multimodal level-of-service considerations
  - Ability to consider the impact of upstream or downstream queuing
  - Impacts assessment and identification of mitigating actions
  - TDM requirements or incentives, including options to reduce either peak period or total vehicle-miles of travel (VMT)
  - Relationship of Traffic Impact Study requirements to transportation impact tax or other funding options
  - Practices for varying standards or practices depending upon
    - the availability of transit services
    - sustainability or design excellence considerations
    - other geographic or special study area considerations

The consultant will include a literature review summary that identifies the best practices identified and their applicability to Montgomery County, considering the following evaluation criteria:

- Relationship of analysis methods and tools to observed system performance
- Data requirements to conduct analyses and agency staff resources to review studies
- Transparency of analysis methods and tools
- Ability of methodologies to guide the development of solutions that reduce the reliance on peak period vehicle travel and support transit-oriented and pedestrian-oriented solutions

The consultant will present a draft report to the TISTWG and include responses to questions from the TISTWG in the final report. The consultant will work with the TISTWG to develop recommended TIS alternatives to test in Task 3 at the November 2014 TISTWG meeting.

### Task 3. Beta-testing of alternative methods in Montgomery County

Based on the recommendations of the TISTWG and input from stakeholders, the consultant will assess the traffic impacts of a hypothetical 500,000 square foot mixed use development in a selected TOD area of the County using the County's existing LATR/TPAR process and two alternative TIS methods (reflecting the identified supplemental traffic analysis performance metrics) selected by the TISTWG. In addition to the application of these alternative methods in a traditional TIS context, consideration will also be given to the application and utility of these methods in the context of local traffic analyses performed in support of the evaluation of Master Plans/Sector Plans. The study area will include the arterial network within the selected area.

3A. The consultant will collect all data required for the existing LATR/TPAR process and both alternative TIS methods and will track the costs of data collection and analysis for use in documenting resource requirements of the two alternative TIS methods. Data collection is anticipated to occur during October, 2014.

3B. The consultant will prepare draft TIS reports for all three approaches for submission to the TISTWG. The consultant may work independently with M-NCPPC, MCDOT, County Council staff and SHA staff in developing recommended mitigating actions to be included in each alternative.

3C. The consultant will prepare a final report containing the three alternative TIS approaches and recommend LATR revisions appropriate for Montgomery County considering the evaluation criteria described above. These recommendations should also provide guidance on which set of performance metrics are most useful in the context of conducting LATR in support subdivision applications and traffic analyses in support of the evaluation of long-range master plans and sector plans.

3D. The consultant will conduct two full-day training courses for up to a total of ten M-NCPPC and MCDOT staff regarding the methodology and analysis tools required to apply the alternative TIS methods.

#### Task 4. Development of recommendations

The consultant will develop a draft final report for distribution to TISTWG members and incorporate comments from the TISTWG into a final report. The final report should include recommendations for improving our LATR analysis and review systems and must be completed by January, 2015.

## **TECHNICAL COMPONENT B: TPAR TRANSIT COMPONENT REFINEMENTS**

### Background

This technical analysis consists of a study to address outstanding issues related to the application of the transit component of current the Transportation Policy Area Review (TPAR) process as an element for next update of the Subdivision Staging Policy, including the investigation of:

- **Alternative metrics for the transit component of the test.** TPAR currently employs metrics for the evaluation of the adequacy of existing transit service in County policy areas. These metrics are: peak headway, span of service, and coverage within each policy area based on existing service. It is desirable to identify suitable alternative metrics which better reflect transit service adequacy in the context of forecasting transit system performance into the future. Examples of metrics that could be explored include: (1) transit travel time as compared to auto travel time for specific origin-destination pairs and; (2) person-throughput (rather than vehicle throughput) at selected cordon crossings.
- **Identifying the value of Bus Rapid Transit (BRT) improvements in all policy areas of the County.** The County adopted the *Countywide Transit Corridors Functional Master Plan* (CTCFMP) in November 2013. The BRT system in which bus speeds are improved and local bus routes are adjusted to complement the new service could result in an improved level of customer service while actually reducing the revenue-hours of bus service in the BRT corridors (and therefore by extension, to the affected policy areas). Alternative means to incorporate BRT into the TPAR transit level of service evaluation needs to be established.

### Task 1. Literature Review

The consultant will develop a report describing the current area-wide traffic impact study practices and changes under consideration by the following jurisdictions selected as both potentially comparable to Montgomery County and known to be currently operating, implementing or planning transitway

systems, including BRT. Current practices for each jurisdiction will be compiled into a web-based database.

- Fairfax County, VA
- Alexandria, VA
- Arlington County, VA
- Los Angeles, CA
- Pittsburg, PA
- Boston, MA
- Baltimore City, MD
- Washington, DC
- New York City, NY
- Portland, OR
- King County, WA
- Seattle, WA
- Two other jurisdictions selected by the consultant

A key focus of this effort is the identification of the various approaches related to: (1) defining alternative metrics to assess transit level of service; (2) incorporating BRT-related improvements into the determination of transit level of service and; (3) defining policy areas in a manner that better addresses the differentiation of areas served by BRT, such as:

- Urban with Metrorail;
- Suburban without BRT;
- Suburban with BRT and;
- Exurban/Rural.

The emphasis of the Consultant's work should be directed to the of the suburban category stratifications and take into account the need to reflect the implementation of planned BRT service improvements as these areas evolve over time. As additional background for this task, the consultant will conduct a thorough review of the 2012 TPAR final report and related materials which are found on the following link:

[http://www.montgomeryplanning.org/research/growth\\_policy/subdivision\\_staging\\_policy/2012/documents/SSPappendix2TPAR.pdf](http://www.montgomeryplanning.org/research/growth_policy/subdivision_staging_policy/2012/documents/SSPappendix2TPAR.pdf)

In addition, the consultant will review information provided in the 2012-2016 SSP Resolution and relevant County Council staff report which are found on the following links, respectively:

[http://www6.montgomerycountymd.gov/content/council/pdf/res/2012/20121113\\_17-601.pdf](http://www6.montgomerycountymd.gov/content/council/pdf/res/2012/20121113_17-601.pdf)

[http://montgomerycountymd.granicus.com/Viewer.php?view\\_id=6&clip\\_id=3939&meta\\_id=42582](http://montgomerycountymd.granicus.com/Viewer.php?view_id=6&clip_id=3939&meta_id=42582)

A key element of this review should be strong consideration for the methods and standards identified in the Transportation Research Board's *Transit Capacity and Quality of Service Manual* (2013, 3<sup>rd</sup> Edition) found here:

<http://www.trb.org/Main/Blurbs/169437.aspx>

The following items will be documented in the literature review

- Methodology, analysis tools, and standards for assessing sub-area and County-wide performance across all modes
- Methodology, analysis tools, and standards for assessing development impacts, including
  - Study thresholds and definition
  - Traffic zone-level trip generation, distribution and assignment
  - Multimodal level-of-service considerations
  - Ability to consider the impact of upstream or downstream traffic impacts
  - Impacts assessment and identification of mitigating actions
  - Practices for reflecting non-motorized transportation strategies to reduce either peak period or total vehicle-miles of travel (VMT) and/or improving traffic flow, including: Transportation Demand Management (TDM); Intelligent Transportation System (ITS) Management; and expanded sidewalk and bike lane connectivity.
  - Relationship of Area-wide Transportation Test requirements to transportation impact tax or other funding options
  - Practices for varying standards or practices depending upon
    - the availability of transit services
    - sustainability or design excellence considerations
    - other geographic or special study area considerations

The consultant will include a literature review summary that identifies the best practices identified and their applicability to the TPAR process as an area-wide transportation test in Montgomery County, considering the following evaluation criteria:

- Relationship of analysis methods and tools to observed system performance
- Data requirements to conduct analyses and agency staff resources to review studies
- Transparency of analysis methods and tools
- Ability of methodologies to guide the development of solutions that reduce the reliance on peak period vehicle travel and support transit-oriented and pedestrian-oriented solutions

The consultant will present a draft report for review by Department staff by November 30, 2014. It is anticipated that MCDOT and County Council staff will also review this report in the context of a consultative role. This report will include a list and description of approaches that best reflect the desired TPAR refinements. Based on the comments received from the Department, MCDOT and County Council staffs, the consultant will produce a final report that will include a list and description of the selected refinements to be evaluated in Task 2. The final report must be completed by December 31, 2014.

#### Task 2: Beta-testing of refined TPAR methods in Montgomery County

After the identification of the candidate refinements applicable to TPAR, the consultant will work in collaboration with Department staff to incorporate these refinements into the process and apply the

refined tool in a manner consistent with the recommendations of the recently adopted CTCFMP. The consultant will compare the results derived from this effort to the relevant information provided in the 2012 TPAR report.

2A. Working in collaboration with Department staff, the consultant will apply the refined draft TPAR transit component process to all policy areas of the County using the Department's Travel/4 transportation model. This effort will consist of the evaluation of TPAR transportation adequacy (both roadway and transit) in the context of two planning horizons – year 2024 and 2026. The bulk of this work is anticipated to occur during the period December, 2014 through February, 2015.

2B. The consultant will assess the results derived from sub-task 2A through a comparison of this information with relevant information provided in the 2012 TPAR final report. The consultant will prepare a draft report documenting the results of this assessment for submission to Department, MCDOT and County Council staffs by March 31, 2015.

2C. The consultant will prepare a final report reflecting the comments received from Department and MCDOT staffs in sub-task 2B for submission by April 30, 2015.

### Task 3: Development of Recommendations

The consultant will develop a draft final report Technical Component B with recommendations for refinement of the TPAR Transit test for distribution to Department, MCDOT and County Council staff and incorporate comments from these parties into a final report. The final report must be completed by May 30, 2015.

#### **Presentations and Review of Recommendations**

The consultant should be prepared to make presentations and participate in the review of the methodologies proposed. At least two presentations should be included in the proposal with two additional discussion meetings with both the Planning Board and the County Council.

#### **Deliverables**

The products anticipated include:

- A final report on the literature review for both tasks.
- A final report on the basis for and recommendations regarding appropriate LATR metrics and TPAR transit metrics, along with any other findings of the work.
- A TPAR assessment of roadway and transit service adequacy by policy area for 2024 and 2026 incorporating the selected metrics.
- Any data files, spreadsheets or other supporting materials related to the assessment.