# PART III TECHNICAL SPECIFICATIONS Transit Facility and Corridor Planning



# 1. GENERAL

## a. Purpose

The Washington Metropolitan Area Transit Authority (Metro) requires the services of a professional on-call multi-disciplinary planning consultant ("consultant") to provide services in support of Metro's transit planning needs relating to transit facility planning and conceptual design, station access planning, joint development planning, real estate transactional support and the environmental clearance process.

## b. Background

# Momentum at http://www.wmata.com/Momentum/

The planning consultant will support Metro staff in pursuing the goals of Metro's strategic plan, *Momentum*, which:

- Ensures that Metro will provide the transit system the Washington region needs to deliver hundreds of millions of trips to residents and visitors each year;
- Provides vision and guidance for decision making to efficiently meet the needs of today while proactively preparing to support the future needs of a healthy, prosperous, and competitive region tomorrow;
- Establishes priorities for near- and long-term action and establishes a vision for its regional role that is consistent with language in the Metro Compact;
- Sets the stage for addressing Metro's chronic funding challenges, and among other items specifically calls for an aggressive effort to secure a reliable and sustainable source of funding for the system; and
- Calls on Metro to fill a critical role in regional transit leadership.

The key elements of *Momentum* that the consultant services will support relate to improving regional mobility and connecting communities by maximizing the existing rail and bus networks though capacity improvements and enhanced access; expanding the system for the future; and supporting the region's economic competiveness through joint development. The consultant services needed focus on work leading to implementation of transit capital projects.

In concert with *Momentum*, Metro's Office of Planning is developing the Regional Transit System Plan (RTSP), which will outline a comprehensive regional transit network for 2040 that will prepare the region's transit system for continued growth. It will be a multimodal plan that is operator neutral and includes all existing operators and modes within the Metro Compact. The output will be a future network that both serves existing areas better and provides service to new areas. Those parts of the plan that would be built and/or operated by Metro will be defined as Metro 2040. Parts of the plan will include:

- Adding new Metrorail lines in the core;
- Extending the reach of the existing system;
- Extending/expanding high quality surface transit;
- Creating additional cross-Potomac connections; and
- Increasing service on commuter rail/bus

The consultant services will support RTSP recommendations related to advancing facility and infrastructure improvements as part of the project development process.

# Six-Year Capital Improvement Program

Metro's Capital Improvement Program (CIP) is focused on safety improvements, the rebuilding of the Metro system, increasing system capacity, and improving the

effectiveness of the current rail and bus networks. Metro is also preparing to make initial investments in Momentum's Metro 2025 initiative projects, as discussed above.

## Conclusion

Metro is striving to serve the region as its foremost transit planning entity and intends to organize the spectrum of the region's transit information. The consultant will thus deliver sophisticated thinking, innovative analytics and superb depictions of task order results.

## c. Description

Several of Metro's Offices are responsible for addressing the challenges described above by supporting initial project development process for capital projects across the agency in such subjects as:

- Transit facility planning and conceptual design including:
  - o Station capacity (new entrances, new mezzanine, infill stations, additional vertical circulation)
  - o Station access (Kiss & Ride, bus, parking, pedestrian and bicycle
  - Bus and rail facility rehabilitation, replacements and expansion
- Joint Development
- Environmental clearance

#### 2. INFORMATION FURNISHED BY METRO

#### a. General Documents

Metro shall furnish the consultant with documents as guidelines for task orders to be performed under this contract. These documents present information relative to the work to be performed by the consultant. It is the responsibility of the consultant, however, to collect data necessary for the task orders and to develop complete and final documentation as defined by the task orders.

The consultant shall not divulge any confidential information which is acquired in the course of performing the work under this contract.

#### 3. SCOPE OF SERVICES

#### a. General

The consultant shall provide the professional and technical staff required to perform the planning task orders, and shall manage and operate this staff from a local office conveniently accessible to (preferably within a 15-minute walk from) the Metrorail system. The local office is not provided or furnished by Metro.

## b. Technical Direction

The work will be conducted under the general direction of the Contracting Officer (CO). Specific individuals will be designated by the Contracting Officer as Contracting Officer's Technical Representative (COTR) with authority as listed in Article 18 of the Special Provisions and as set forth in appointment letter(s), copy of which will be provided to the consultant.

During the prosecution of the work, the consultant shall maintain close liaison with the COTR, who will coordinate the work with the office of the Metro project manager. The consultant shall direct all requests from Metro project manager to the COTR for appropriate action.

## c. Objectivity Review

The consultants must not have any financial or other interest in the outcome of the task orders and, in accord with regulations of the federal government's Council of Environmental Quality, will sign disclosure statements for task orders that involve federal environmental impact procedures. The Metro staff in cooperation of other staffs of jurisdictions and agencies will prepare primary recommendations, particularly for the selection of an alternative by the Metro Board of Directors and by other governing bodies. The consultant will not participate in the preparation of primary recommendations or in their presentation to these decision-making bodies.

## d. Tasks to Be Performed

The consultants will perform a range of planning and conceptual design tasks over the term of this contract, which could include any or all of the following:

# Project Planning and Development

- Conduct feasibility studies and conceptual design for station capacity and access; and bus and rail facilities.
- Conduct transit corridor development studies including Alternatives Analysis.
- Fulfill Federal New Starts /Small Starts project development.
- Conduct environmental analyses and fulfill NEPA and other requirements.
- Prepare General Plans of route and facilities.

## Station Capacity and Station Access

- Establish existing conditions for Metrorail stations and station areas within a specified radius, typically ½ mile, including transit ridership, station capacity (vertical circulation, faregate transaction rates, platform loading) and station access for all modes (pedestrian, bicycle, bus, shuttles and private automobiles) and identify existing capacity constraints and deficiencies.
- Identify necessary station and access improvements within a specified radius, typically ½ mile, based on future development at and in the vicinity of Metrorail stations including:
  - Station Capacity (utilizing simulations as needed to analyze existing conditions and future needs)
    - Additional vertical circulation (stairs, escalators and elevators)
    - Additional faregates and fare vendors
    - Improved circulation within station
    - New mezzanines
    - New entrances
    - New infill stations
    - Constructability
    - Order of magnitude cost estimates
  - Station Access Planning
    - Enhanced pedestrian and bicycle access and connections (sidewalks, multi-purpose trails, bike stations, bike racks/lockers)
    - Additional and/or reconfiguration of bus bays, Kiss & Ride and parking facilities.
    - Improved circulation within the station area for pedestrians, bicycles, buses, shuttles and private automobiles
    - Improved signage and wayfinding.

### Bus and Rail Facilities

- Provide rail facility planning and conceptual design, including identifying the need for expanded or new rail car storage and maintenance facilities and developing conceptual designs of the facilities.
- Provide bus facility planning and conceptual design, including identifying the need for expanded or new bus storage and maintenance facilities and developing conceptual designs of the facilities.
- Create concept plans and drawings for bringing Metrobus stops on WMATA and jurisdictionally-owned rights-of-way to compliance with ADA and WMATA Guidelines for the Design and Placement of Transit Stops. Drawings shall:
  - Include such elements as concrete landing pads, curbs, sidewalks, curb ramps, crosswalks, retaining walls, signage, and other surface elements required to make stops compliant and create accessible pathways to the nearest intersection
  - Be sufficiently detailed in order to ensure compliance with ADA and WMATA guidelines, including surveys as needed
  - Provide sufficient information to allow construction cost estimation such as dimensions and quantities
  - Demonstrate that facilities can be constructed inside public rights-of-way without encroaching on private property
  - Comply with all standards applicable to the jurisdiction/right-of-way owner and contain sufficient information to secure a public space/construction permit from the same
- Conducting the necessary environmental analyses to fulfill NEPA and preparing the required NEPA documentation as well as other requirements for the following resources:
  - Noise and vibration
  - o Air
  - Water
  - Natural resources including wetlands, forest stand conservation and endangered species
  - Environmental justice
  - Hazardous materials

# Traffic Engineering

- Provide traffic engineering to support station access and joint development planning and conceptual design, using SYNCHRO and/or VISSIM to analyze:
  - Existing and future no build conditions in and around Metro stations and other Metro facilities in a specified radius typically, ½ - 1 mile.
  - Future build conditions in and around Metro stations and other Metro facilities in a specified radius, typically ½ - 1 mile, as a result of various proposed development scenarios.

#### Civil Engineering

- Provide civil engineering services at the conceptual level of design with respect to:
  - o Baseline mapping
  - Property and utility surveys
  - Stormwater calculations
  - o Brownfield and wetland delineation
  - o Transit alignment
  - o Plans and Profiles

- Proposed grading for site facilities
- Facilities layout verification using Autoturn

# Conceptual Site Plans and Designs

- Develop conceptual site plans for land use and facilities surrounding existing and planned Metrorail stations described above.
- Develop alternative design concepts for station capacity and access improvements, and bus and rail facilities described above.

Note: Many of the station areas around the Metro stations are transitioning from suburban activity centers to more urbanized areas with TOD at and in the vicinity of the Metro stations. The design concepts should ensure that the transit functionality is maintained within the context of TOD.

Qualifications: Response should include summaries of at least five applicable projects completed within the last 5 years. At least two projects should demonstrate staff and firm expertise in transit facility planning and design related to rail station access and capacity. At least two projects should demonstrate firm expertise in bus and rail facility planning and design. At least one project should demonstrate the firm expertise transit corridor planning. At least one project should demonstrate firm expertise in the environmental clearance process including NEPA. At least one project should demonstrate the firm expertise in performing traffic engineering analyses. Three projects should be in within the Washington/Baltimore region. Response should highlight proposed staff members experience in the applicable projects highlighted in response to demonstration of firm's expertise. Staff members proposed should have at least 8 years' experience in the following areas: transit facility planning and design, bus and rail corridor planning, traffic engineering and the NEPA environmental clearance. Projects should demonstrate proposed personnel's experience, skill and creativity in new approaches to strategic planning and data analysis.

# Real Estate and Joint Development Analyses

- Transactional support for Metro excess property and joint development
- Auction and brokerage services for Metro excess property
- Analyze financial feasibility of proposed joint development projects, to provide a basis for negotiation with potential developers.

**Qualifications:** Response should include summaries of at least three applicable projects, completed within the last 5 years, demonstrating proposed staff and firm experience in real estate transaction support, auction and brokerage services and financial analyses related to joint development projects. Response should highlight specific staff members with at least 8 years' experience. Projects should demonstrate proposed personnel's experience, skill and creativity in new approaches to strategic planning and data analysis.

## Public Involvement and Agency Coordination

In support of the above, the consultant will have the resources and expertise for the following:

• Identify, develop and apply best practices for stakeholder outreach and public participation strategies. These practices and strategies are to be guided by Metro's agency-wide public participation plan.

- Activities may include but are not limited to:
  - Electronic Media: Incorporate extensive online, web-based programs and social media, as well as new in-person strategies, to expand and enhance public involvement.
  - Logistics: Schedule outreach events in each project area, including preparation activities. Identify and reserve meeting or event locations in each project area.
  - Materials: Prepare and distribute informational materials, which may include flyers, FAQs, brochures, postcards, comment forms, story boards etc. This may include staffing outreach activities prior to community events such as distributing handouts/ brochures to passengers exiting a rail station to advertise an upcoming event in their community, or canvassing within a community to ensure wide materials distribution on the study area.
  - Staffing: Organize and co-staff public events, including the coordination of logistics/equipment, translating materials for distribution.
  - Data Collection: Collect comment forms and summarize the comments received at each event. This may include administering a survey to event participants either in paper format or electronically
  - Assist Metro in coordination with the spectrum of agencies and jurisdictions at the local, state, regional and Federal levels.
  - Attend or participate and document in meetings and conferences with officials of Metro, governmental agencies or others.

**Qualifications:** Response should include a detailed description of three comprehensive public outreach efforts for projects implemented by the firm within the past 5 years. Response should highlight specific staff members with at least 8 years' experience in the creative and innovative design and execution of major public outreach efforts in the Washington region.

## Specialty in Digital Communications and Graphics

In support of all of the above, the consultant will have the resources and expertise for the following:

- Consumer-ready material, including web pages, interactive content and mobile platforms.
- Superior written communication that explains the findings of technical work to a wide variety of audiences, both expert and non-expert alike.
- State-of-the-art GIS (Metro's platform is ESRI ArcGIS Enterprise) and also mapping products and interactive applications in general audience formats (i.e. Google maps, Sketch Up, HTML 5, Flash).
- Stellar desktop publishing.

**Qualifications:** Response should include eight sample work products, including project graphics, GIS maps and webpages, produced by proposed staff members, within the past 3 years.

In the past three and one-half years of the current on-call planning support services contract, Metro has issued the following task orders that relate to the above disciplines. The sums do not reflect monetary amounts or duration of task orders.

Discipline	Number
Systems, capital and access planning	
Bus planning	39

Rail planning	7
Station planning	20
Real estate analyses and support	12
Annual Program Management	1

## e. Process for Issuing Task Orders

- Metro will provide forecasts of upcoming task orders to the consultant.
- In the preparation of a new task order, the Metro project manager may discuss the technical aspects of the task order with the consultant via the Metro Office of Procurement and Materials.
- The Metro Office of Procurement and Materials will electronically transmit a request for technical and price proposals (RFP) with a final definitive Scope of Work/Services (SOW/S) to the consultant. The SOW/S will define the scope of the task order and will include the task order number, title, scope of work explanation, schedule that includes milestones, deliverables and their due dates, the Metro technical contact person, and any additional instructions. Metro will provide an EXCEL worksheet that the consultant must use for its price proposal; the worksheet will reflect the milestones and deliverables of the SOW/S.
- The consultant shall prepare a proposal based upon the transmitted SOW/S. The
  proposal shall identify the technical approach to satisfy the SOW/S and the firm
  (prime planning consultant, subconsultant or combination thereof) that will
  perform the work, and which individuals who will be assigned to the task order.
- The consultant will electronically submit their technical proposal and sealed price proposals to the Metro Office of Procurement and Materials within two weeks of the RFP transmittal date, unless a different time is indicated in the RFP.
- Metro will negotiate a fixed price task order, if possible. Indefinite quantity with fixed billing rates, and a Cost-plus-fixed-fee method may also be employed.

#### f. Task Deliverables

The SOW/S will define the deliverables that Metro will need from a task order. The deliverables may be technical reports, environmental evaluations, Federal Environmental Assessments, Federal Environmental Impact Statements, Federal New Starts templates and reports, public hearing reports, financial plans and General Plans.

#### g. Invoices and Progress Reports

The basis of invoices by the consultant and of payment by Metro will be by deliverables and milestones, as accepted by Metro. In other words, the consultant may not base its invoice solely on percent progress, unless authorized by the COTR. Metro will provide an EXCEL worksheet for the calculation of the invoice and a WORD template for the preparation of a progress report.

#### h. Quality Control Program

The consultant shall develop and be responsible for executing a Quality Control (QC) Program for all of services. This program shall require internal reviews and checks by supervisors, and independent QC checks by well qualified technical staff to confirm that acceptable quality is provided. A Quality Assurance/Quality Control (QA/QC) plan, consistent with ISO 9001:2000, shall be submitted to Metro for approval. ISO Certification is not required.

The consultant will designate a Quality Control Manager. A certification is required for this position. The designated QC Manager is subject to the approval of the Contracting Officer. All draft deliverables, including documents and data, must go through quality

control by the QC manager to ensure there are no major inconsistencies and fundamental errors.

#### i. Use of Procore

Metro uses the web-based project management platform, Procore. Metro will create a Procore site for each task order, into which Metro and the consultant will use the Procore functions (tabs) of e-mails, prime contract, requests for information, submittals, transmittals, meetings, photos, drawings, documents and directory. For instance, the planning consultant will submit its invoice and progress report to Metro via Procore and will upload its deliverables, at minimum the final deliverables, under the Documents tab.

#### 4. ADDITIONAL REQUIREMENTS

## a. General Requirements

For all categories of planning services, Metro requires the following items:

- All work shall be in accordance with the instructions, directives, criteria, specifications, drawings, technical manuals and other instructions furnished by Metro.
- Planning analyses and evaluations shall comply with the most stringent environmental criteria as defined by Federal statutes, rules and guidance, State of Maryland, Commonwealth of Virginia, and District of Columbia.
- All Metro manuals and other data furnished by Metro, as designated by the Contracting Officer, shall be returned to the COTR within thirty (30) calendar days after the date of acceptance of the work to be accomplished under the applicable task order.
- After submission of the deliverables, the consultant shall make any corrections thereto as may be necessary.
- All correspondence shall be referenced to the appropriate task order number. Matters relating to the contract, task order, change proposals, billings, etc., shall be addressed and sent to the COTR. Correspondence between the consultant and third parties will include a copy to the COTR.

#### 5. CONTRACT REPORTING PROCEDURES

#### a. Reports

The consultant shall submit, via a Procore site for task order program management, Status Reports on all task orders to Metro on a regular basis (no less frequently than every quarter). The report shall be updated and contain current information. The report shall contain the following information:

- 1. A chronological listing of task orders.
- 2. The date that the task order was received.
- 3. The task order number.
- 4. The planning consultant's staff assigned to the task order.
- 5. The expected task order completion date.
- 6. The task order's expected total budget, the authorized "Not-to-Exceed" amount, and expenditures to date.
- 7. The current status of each task order, including a list of major milestones, status of deliverables, any addition or reduction to the scope of work.

## b. Meetings

The consultant will participate in periodic status meetings with Metro staff to review status of all outstanding task orders.

RFP

