City of Portsmouth Portsmouth, New Hampshire Fire Department

# SEACOAST PLANNING AND IMPLEMENTATION EVACUATION SERVICES PROCEDURE

## **REQUEST FOR PROPOSAL**

Sealed Proposals, plainly marked RFP # 17-10, "Seacoast Planning and Implementation Evacuation Services Procedure" on the outside of the mailing envelope, addressed to the Finance/Purchasing Department, City Hall, 1 Junkins Avenue, Portsmouth, NH 03801 will be accepted until 2:00 p.m. on October 28, 2009.

**SCOPE OF WORK:** The City of Portsmouth's Fire Department invites sealed proposals for professional planning services related to the planning and implementation of a hurricane evacuation procedure. Proposals must present evidence of the firm's qualifications and experience with similar planning and implementation efforts.

Request for Proposal may be obtained from the Finance/Purchasing Department on the third floor of City Hall 1 Junkins Ave, Portsmouth, New Hampshire or on the City's web site at <u>www.cityof</u> <u>portsmouth.com</u>. Addenda to the proposal document, if any, including written answers to questions, will be posted on the City of Portsmouth website under the project heading at least two (2) days prior to the proposal due date. <u>Continue below for the complete RFP.</u>

The City of Portsmouth reserves the right to reject any or all proposals, to waive technical or legal deficiencies, and to accept any proposal that it may deem to be in the best interest of the City.

If you have any questions please contact the Purchasing Coordinator at (603) 610-7227.

# REQUEST FOR PROPOSALS FOR SEACOAST PLANNING AND IMPLEMENTATION EVACUATION SERVICES PROCEDURE

## I: Introduction

The City of Portsmouth is coordinating the development of up-to-date evacuation plans for hazards that can affect the Seacoast communities of New Hampshire. These hazards can be defined as natural (hurricane, flood), technological (industrial accident), transportation-related (tanker spill), or terrorist-related (WMD, other). The City seeks an experienced, qualified Consultant to develop and implement hazard evacuation planning.

#### **II: Purpose and Need**

The movements of large numbers of people represent a demand-capacity problem. The demand side of the relationship represents estimates of the number of people who must be moved from the area at risk. The capacity side of the relationship represents the ability of the transportation infrastructure to accommodate the estimated number of evacuation trips in the available time.

The goal of minimizing evacuation time requires the planners to maximize the efficiency of the population movement through the choice of modes of travel and the routing structure identified. It is vital to be able to estimate the time required for evacuation to identify the "lead time" necessary to make decisions such as evacuate or shelter in place. For example, if the evacuation of coastal areas threatened by a hurricane requires 2 days, the order to evacuate must be issued to the public at least 2 days prior to the hurricane's landfall.

Evacuation planning must also include provision for a number of special population groups. First, provision must be made for the transit-dependent population. People without access to personal automobiles must be provided with a transit option for evacuation. Depending on the transit options available in a community, this option may require the mobilization of transit bus resources, school bus resources, commuter rail, and other modes of public transit.

The second population group that must be identified are people with special needs. These people may require transport assistance in the form of ambulances or wheelchair-capable vehicles. Included with this group are schoolchildren at school, people in group homes, hospitals, and care facilities. Plans for evacuating jails must be part of an overall evacuation plan.

## **III: Scope of Services**

To facilitate the evacuation planning process, the following comprehensive task structure has been identified. Phase I is an evacuation planning effort; Phase II represents a review with stakeholders of evacuation implementation plans and procedures developed in Phase I. The contract with the selected consultant will be for the Phase I and Phase II services described in this Request for Proposal.

The City reserves the right to enter into a contract amendment for Phase III services which are described in this document with the selected Consultant. Phase III services include the procurement and installation of hardware identified in Phase I and Phase II as infrastructure improvements to facilitate an evacuation.

**SCOPE OF WORK** 

# Phase I

- Task 1 Project Initiation
- Task 2 Review Existing Evacuation Procedures & EOPs
- Task 3 Data Collection
- Task 4 Identify Protective Action Zones
- Task 5 Hazard Scenario Development
- Task 6 Demand Estimation
- Task 7 Trip Generation
- Task 8 Transportation Resources
- Task 9 Identify Reception Centers
- Task 10 Traffic Modeling
- Task 11 Evacuation Routing
- Task 12 Identification of Infrastructure and ITS Improvements to Facilitate Evacuation
- Task 13 Traffic Management
- Task 14 Prioritize Recommended Improvements
- Task 15 Documentation
- Task 16 Project Management (Tasks 1-16)

## Phase II

- Task 17 Comprehensive EOP Assessment
- Task 18 Interoperability Communications Assessment
- Task 19 Risk Management Assessment
- Task 20 Health & Human Needs Assessment
- Task 21 Training and Exercising
- Task 22 Community Outreach
- Task 23 Identification of funding sources
- Task 24 Documentation
- Task 25 Project Management (Tasks 17-24)

# Phase III

Task 26 - Purchase and Install Recommended Hardware

# PHASE I:

## **Task 1 - Project Initiation**

A meeting will be held with the City of Portsmouth EM/NHBEM and other sponsoring agencies. Following the announcement of the project, a meeting with local stakeholder groups will be organized to introduce the project and to request cooperation and input from the public. A work plan and a schedule of activities will be presented.

# Task 2 – Review Existing Evacuation Procedures & EOPs

Government agencies may have existing plans and procedures for dealing with emergencies where an order to evacuate is a possible response. Consultant shall review existing New Hampshire plans and procedures along with any public information brochures available.

# Task 3 -Data Collection

The Consultant will obtain readily available traffic data from the State of New Hampshire:

- 1. Base Mapping: Existing available GIS base mapping of the study area in an electronic format.
- 2. *Population and Demographic Data Collection:* Census tract data will be obtained in terms of both population and demographic information. It is anticipated that this data will be available through the 2000 Census, as updated by state or local agencies. Such demographics may include:
  - General population
  - Employees
  - Transients in the area
  - Non-Ambulatory Residents
  - School Children Populations
  - Transit Dependent Residents
  - Senior Citizens/Group Homes
  - Residents with Special Needs
  - Other special facility-based groups
- 3. *Mass Transit Information:* Generic public transit service data including route information, service characteristics, stations/stops and daily service schedules will be obtained. An inventory of transit assets and drivers, as well as projected mobilization times will be requested.
- 4. *Roadway Inventory:* A field survey of the roadways will be conducted. The survey will identify the key geometric features of the roads that comprise the local highway network.

# **Task 4 - Identify Protective Action Zones**

Consultant shall review the FEMA coastal hurricane flood mapping to determine the extent of the study area. For emergency planning and response purposes, it is necessary to subdivide the coastal area into a set of Protective Action Zones (PAZs). This is necessary to serve as a framework for the dissemination of public information and to identify the area at risk for any hazard scenario. These PAZs are specified to satisfy several requirements:

- Be responsive to known potential hazards (e.g., areas subject to flooding)
- Be well-defined and easily recognizable by the public
- Be sized so as to facilitate the planning process and the emergency response activities
- Be easily aggregated to form an Emergency Planning Zone (EPZ) in response to a specific emergency condition.

# Task 5 - Hazard Scenario Development

Coastal evacuation can be ordered in two scenarios: good weather, in advance of an approaching storm, or in bad weather conditions where some roadway flooding may already be present. Other scenarios may be appropriate and will have to be defined. This task will define the range of evacuation environmental conditions to be considered.

#### **Task 6 - Demand Estimation**

For each hazard scenario, the population of the PAZ within the area at risk must be identified and stratified into resident, transient, and employee population groups. U.S. Census data, updated by local sources of information will serve as the basis for these estimates.

Consultant shall estimate the number of people who depend upon public transit for evacuation. Nonambulatory persons who need special transportation resources must also be estimated. They are either housed in private homes or in special facilities whose residents require medical transport (*e.g.*, ambulances, vans, and specially equipped buses).

Population demographics will be identified. The number of households, the number of vehicles used for evacuation will be determined.

## **Task 7 - Trip Generation**

The trip generation characteristics of an evacuating population are an important determinant of the evacuation planning and time estimation process. Consultant shall present a methodology for estimating the trip generation characteristics of the population.

#### **Task 8 - Transportation Resources**

Transport resources must be provided to evacuate people from special facilities, as well as to service the evacuation needs of residents who are transit-dependent at the time of the emergency.

Consultant shall develop an inventory of transport resources (i.e., buses) that could be available for evacuation purposes. In addition to buses for the transit-dependent population, resources required by the mobility impaired population must also be identified. The number and location of available ambulances, wheelchair vans, and other means of transport must be identified. The time required to mobilize these resources prior to beginning the evacuation must be estimated.

## **Task 9 - Identify Reception Centers**

Those evacuated by transit vehicles will be transported to reception centers. Those who evacuate by private vehicle may have the option of traveling to reception centers. These reception centers would be located outside the area and must be able to accommodate the arriving persons, including those with mobility and other special needs.

Consultant shall estimate the number of people who require shelter during a hurricane event. This number may vary depending on the area to be evacuated.

The number of people to be supported in shelters shall be used to develop an estimate of the number of shelters needed. A preliminary list of shelters must be developed. Consultant must estimate the capability of each identified shelter. Specific shelter operational plans for routing and for parking must be developed.

#### **Task 10 - Traffic Modeling**

Consultant shall establish evacuation time estimates for the selected evacuation/hazard scenarios.

#### **Task 11 - Evacuation Routing**

Given the population distribution within an area defining the EPZ and the surrounding highway system, Consultant shall identify those evacuation routes which service the movement of people away from the hazard location.

The assignment of evacuation routes must satisfy two objectives: (1) Minimize the time evacuees spend within the area at risk (i.e. the EPZ), and (2) routing evacuees in the general direction away from the coast. Both objectives are designed to minimize the population exposure to the hazard.

#### Task 12 - Identification of Infrastructure and ITS Improvements to Facilitate Evacuation

The task involves the development of a list of potential infrastructure and intelligent transportation system (ITS) improvements that would either expedite the evacuation process, permit improved communications and safety for evacuees, and/or decrease evacuation time by forestalling the impacts of existing, identified traffic bottlenecks. Recommendations will be made for the installation of these aids and cost estimates presented.

## Task 13 - Traffic Management

Consultant shall develop a traffic management plan designed to permit an orderly flow of evacuees. The plan will extend from the coastal evacuation area to the host/shelter areas.

## **Task 14 - Prioritize Recommended Improvements**

If infrastructure improvements are identified in Task 12, Consultant shall estimate order of magnitude construction/ implementation costs. Preliminary concepts shall be conceptually laid on plan sheets and refined sufficiently enough to obtain macro scale quantities. This is a general exercise in order to provide a prioritized list of the recommendations.

## **Task 15 - Documentation**

Consultant shall document the results of the Seacoast Evacuation Planning study (Phase I). A draft report is due following the 12<sup>th</sup> project month. Following City of Portsmouth/NHBEM review of the draft, a final report will be issued. The report will be issued in three hardcopies and in format on CD.

## **Task 16 - Project Management**

The Consultant shall conduct briefings for the project sponsoring agencies and for stakeholder groups. Bi-monthly meetings will be conducted unless a change is authorized by the City of Portsmouth Office of Emergency Management. The Consultant will be responsible for the meeting agenda, and presentation materials. The City of Portsmouth Office of Emergency Management will be responsible for providing a meeting venue. The use of telephone conference calls and for web-based conferences will be considered.

The Consultant shall provide monthly progress reports and monthly budgetary breakdowns to document progress on the project to the Emergency Management Coordinator for the City of Portsmouth.

#### PHASE II

### **Task 17 - Comprehensive Emergency Operations Planning Assessment**

Consultant shall develop a risk assessment that incorporates a review of existing plans and evaluation for compliance with EMAP criteria, NIMS and all other required State, Federal and regional standards and industry best practices. Emergency planning documents shall be created relevant to the evacuation/ transportation infrastructure.

Consultant shall develop a comprehensive training and exercise plan to ensure that each department is aware of its roles and responsibilities during an emergency.

#### **Task 18 - Interoperability Communications Assessment**

Communication is the core element of all emergency operations. There is a need for communication and coordination between agencies and with the public. Rapid, continuous, and error-free communication is crucial during an evacuation. Integrated communication systems form a sound basis for pro-active decision-making. The Consultant shall assess the existing emergency communications capabilities and produce recommendations for improving and coordinating communications.

#### Task 19 - Risk Management Assessment

Consultant shall prepare a risk management assessment identifying and prioritizing hazards that can impact the emergency planning and recovery operations. The risk assessment may propose methods to reduce the vulnerability to specific hazards. So that recommendations and additional information are incorporated into the Emergency Operations Plan.

#### Task 20 - Health and Human Needs Assessment

Consultant shall review and comment as appropriate on New Hampshire's plans that analyze and integrate how local area hospitals, schools and other potential reception centers need to be designated as part of the area's critical/vital infrastructure.

Consultant shall also identify and reach out to vulnerable populations and work with the City and region leadership to build a consensus on how to deal with vulnerable populations.

## Task 21 - Training and Exercising

The Consultant shall provide the framework for emergency planning training and exercise plans that is consistent with the projects requirements and with guidance of the Department of Planning and Environment. Training programs will follow NIMS and the curriculum prescribed by DHS.

#### Task 22 – Community Outreach

The Consultant will develop a framework or approach for public participation. The lessons learned and best practices developed as a result of the Katrina Hurricane of August, 2005 in the Gulf Coast States shall be used as a guide to developing a community outreach program. This program would look to develop prototypes of public outreach and information materials, including brochures, informative radio and television announcements.

#### Task 23 - Funding Opportunity Research

The Consultant shall augment and support the City of Portsmouth's efforts in finding and securing Federal funding and grant opportunities for the City and region to implement the recommendations that result from the proposed study.

## Task 24 - Documentation

Consultant shall document the results of the Phase II studies. A draft report is due following the 12th project month. Following city and state review of the draft, a final report will be issued. The report will be issued in three hardcopies and in PDF format on CD.

# Task 25 - Project Management

The Consultant will conduct briefings for the project sponsoring agencies and for stakeholder groups. Bi-monthly briefings will be conducted, unless a change is authorized the City of Portsmouth Office of Emergency Management. The Consultant will be responsible for the meeting agenda, and presentation materials. The City of Portsmouth Office of Emergency Management will be responsible for providing a meeting venue. The use of telephone conference calls and for web-based conferences will be considered.

The Consultant shall provide monthly progress reports and monthly budgetary breakdowns to document progress on the project to the Emergency Management Coordinator for the City of Portsmouth.

# Phase III

## Task 26 – Estimate, Purchase and Install Recommended Hardware

Consultant shall estimate the cost of signs, markings, and variable message units recommended as part of Task 14 and supervise or use its own forces to purchase and install hardware.

## Additional work may include:

Identification/Development of a procedure to determine who, under certain hazard scenarios; will have authorization to order a full or partial evacuation of the Seacoast, NH area, and how that message will be disseminated to applicable parties. In the event of emergency declaration/evacuation order from the State, the Governor is the authorizing entity.

# **IV: Submittal Requirements**

The Consultant shall submit three (3) bound copies of a non-price proposal and one (1) separate sealed original price proposal for planning services to complete the scope of services described in Phase I and Phase II. Proposals will be accepted until October 28, 2009 at 2:00 p.m. at the Finance/Purchasing Department, City Hall, 1 Junkins Avenue, Portsmouth, New Hampshire, 03801.

The following items shall be included in the non-price proposal submission in the following order.

- 1. <u>Firm Description</u> Provide by way of a cover letter a brief description of the firm including firm size and areas of specialization, location of corporate headquarters, and potential satellite office proposed to handle this project. Please also identify the principal contact for the firm.
- 2. <u>Project Team</u> Provide names and resumes of key professional staff who would be assigned to the project. Each team member's education and experience shall be listed. The team leader shall be designated.

- 3. <u>Relevant Experience</u> Provide the details of relevant experience and past performance of the Consultant and its team members on comparable evacuation planning projects. Consultants are required to give sufficient information of their experiences to permit the City to understand and verify the exact nature of the contributions made by the Consultant to the projects listed.
- 4. <u>References</u> Provide the name, title, locations and phone number of persons who can substantiate the Consultant's referenced experiences as listed in Item #3 above.
- 5. <u>Statement of Project Requirements</u> The Consultant shall state in succinct terms its understanding of what is required by this Request for Proposal.
- 6. <u>Scope of Services</u> Describe in narrative form the Consultant's approach and technical plan for accomplishing the services listed herein. The Consultant is encouraged to elaborate and improve on the tasks listed in the RFP. The Consultant shall submit a schedule for completing the scope of services by **November 16, 2009**.
- 7. <u>Price Proposal</u> The Consultant shall submit in a separate sealed envelope a price required to complete the services described in Phases I and II in the proposal. The fee schedule should be broken down by proposed task including labor, overhead, profit and reimbursable expenses. A cover letter must be included which is signed by an authorized owner or agent of the firm, committing the firm's resources to complete the project on time and within the fee.

# V: Selection Criteria

All responsive submittals shall be reviewed and the City may conduct interviews of short-listed firms. Each Consultant shall be evaluated based on the following criteria:

- A. Consultant's Qualifications for this project, this will include firm's overall resources.
- B. Qualifications of project manager, lead designers, and other key staff.
- C. Previous experience with similar planning projects.
- D. Understanding of project objectives.
- E. Responsiveness to City's requirements reflected in proposed approach/scope.
- F. References.

Upon review of the non-price proposals and after conducting interviews, if so used, the City shall rate the firms in order of preference. The City shall then open the price proposals of the three top-rated firms and may adjust the ranking. The top-rated firm shall be notified of its standing and invited to negotiate with the City. If the City is unsuccessful in reaching a satisfactory contract with the top rated firm, it may terminate the negotiations without prejudice and commence negotiations with the second rated firm. If no agreement can be reached with the second-rated firm, the City shall move to the third, and so forth. Once negotiations are terminated with a firm, they may not be reopened.

The City reserves the right to enter into a contract amendment for Phase III services which are described in this document with the selected Consultant and for such other additional work as may be necessary to accomplish the purposes described in this document.

# **VI: Reservation of Rights**

The City of Portsmouth reserves the right to reject any and all proposals, to waive technical or legal deficiencies, and to accept any proposals that are deemed to be in the best interest of the City, and to negotiate terms and conditions of any proposal leading to acceptance and final execution of a contract.

By submitting a proposal the Consultant consents to the City undertaking such investigation as it deems necessary to investigate and verify Consultant's qualifications, reputation and experience. Consultant may be requested to execute releases. Failure to execute a release for information, if requested by the City, may result in disqualification.