

**REQUEST FOR PROPOSALS (RFP)**  
MetroGIS OBJECT/DATA MODELING  
June 1996

**I. GENERAL PROVISIONS**

The Metropolitan Council hereby solicits a proposal to enter into a contract for the performance of an Object/Data Modeling Procedure for the MetroGIS Initiative. Eight copies of the proposal should be mailed or delivered to the Metropolitan Council, Mears Park Centre, 230 East 5th Street, Saint Paul, Minnesota, 55101, attention: Jennifer Saleen, GIS Department.

The Council, by this Request for Proposal, does not promise to accept the lowest or any other proposal and specifically reserves the right to reject any or all proposals, to waive any formal proposal requirements, to investigate the qualification and experience of any proposer, to reject any provisions in any proposal, to obtain new proposals, to negotiate the requested services and contract terms with any proposer, or to proceed to do the work otherwise. Proposals not sufficiently detailed or in acceptable form may be returned for completion or may be rejected by the Council. All proposals **received no later than 12 Noon on August 5, 1996**, will be considered by the Council; and in the event that a proposal is accepted, the Council will notify the successful proposer in writing within five working days following its consideration of the proposal.

The Council does not discriminate in the selection of contractors on the basis of race, color, creed, religion, national origin, sex, sexual orientation, age, marital status, status with regard to public assistance, or disability. The Council shall not accept a consultant bid or proposal in excess of \$50,000 from, or execute a consultant contract in excess of \$50,000 with a contractor having more than 20 full-time employees on a single working day during the previous 12 months, unless the contractor has a valid certificate of compliance from the Minnesota Department of Human Rights signifying the department's approval of the contractor's affirmative action plan. The Minnesota Department of Human Rights has specific requirements for affirmative action plans. For information on requirements and how to obtain a certificate of compliance, call (612) 296-5663 or (toll free) 1-800-657-3704. (Ask for Human Rights Department).

The Council shall act affirmatively to promote and enter into contracts with targeted group businesses (TGBs). A TGB is a small Minnesota business which is at least 51 percent owned and controlled by women, people of color, and/or people with disabilities. To be recognized as a TGB, a firm must be currently certified with the Minnesota Department of Administration, or must submit an application for certification by the proposal deadline. To obtain an application for TGB certification, call the MN Department of Administration's Material's Management Helpline at 612-296-2600.

Proposals shall include representations signed by an authorized contracting officer as follows:

This proposal constitutes an offer by the undersigned to enter into a contract to perform the described services for the compensations specified herein and containing the terms and conditions in the standard Council contract for consultant services or required by applicable state or federal law or regulations.

The undersigned agrees not to discriminate against any employee or applicant for employment on the basis of race, color, creed, religion, national origin, sex, sexual orientation, age, marital status, status with regard to public assistance, or disability, and to take affirmative action to assure that all employees are treated equally with respect to training, hiring, rates of pay, and other forms of compensation. The undersigned further agrees to take affirmative action to include the participation of targeted group businesses wherever possible in the performance of this proposal.

These representations shall be made either in the front of the proposal document or in a transmittal letter.

Contents of the proposal document should include:

- A. Description of Proposed Services and Products
- B. Proposed Period of Performance
- C. Requested Compensation for Proposed Services

The following material should be placed in appendices or in a separate document:

- A. Related experience.
- B. Qualifications and resumes of key personnel.
- C. A description of services to be performed by TGBs and the amount to be paid to them.
- D. For proposals over \$50,000, a copy of the prime contractor's valid certificate of compliance from the Minnesota Department of Human Rights certifying approval of the contractor's affirmative action plan, or a signed affidavit (see Attachment 2, if any), indicating that the contractor did not have more than 20 full-time employees on a single working day during the previous 12 months. (No assumptions should be made on the budget for this contract based on this requirement.)
- E. References.
- F. Letters of commitment to participate in this project from any subcontractors.

## **II. PROJECT BACKGROUND**

General: This project will be conducted for the MetroGIS initiative. The idea behind the MetroGIS is to create a stakeholder-governed mechanism that permits sustainable, wide-spread sharing of geo-referenced data among public sector organizations that serve the seven-county, Twin City Metro Area.

Persons knowledgeable of Geographic Information Systems (GIS) from a number of key MetroGIS stakeholder interests (public, academic, utility, and private sector) were invited by the Metropolitan Council to attend a December 1995 planning retreat to discuss the creation of a regional GIS. The retreat was facilitated by professional facilitators affiliated with the Humphrey Institute of Public Policy

at the University of Minnesota. The participants identified over 250 action items, 15 strategic issues, several high priority action items, and agreed on 6 high level initiative goals. The group also agreed to remain intact to guide this initiative and has since become known as the MetroGIS Coordinating Committee.

Significant progress has been made since the retreat to define the MetroGIS and to begin to address the variety of technical and institutional issues that must be resolved to implement the MetroGIS. From January to April 1996, the 21-person MetroGIS Coordinating Committee came to agreement on several foundation elements, including: 1) a MetroGIS Statement of Intent; 2) agreement on an organizational structure that includes a Policy Board, Coordinating Committee, and four advisory teams: data access, data content, policy, and standards; 3) agreement on a purpose statement for each of the advisory teams, and 4) agreement on a preliminary work plan that anticipates a time frame of 24-30 months to address the 15 identified strategic issues.

As of this writing, 64 persons have agreed to participate in the creation of the MetroGIS via the Coordinating Committee and its four Advisory Teams. These persons represent a variety of stakeholder organizations (all levels of government, non-profit, utilities, and private sector interests) that serve the Metro Area.

MetroGIS Data Content Team's Charge: This project addresses the highest priority of the Data Content Advisory Team -- "identify the data sets and their characteristics which provide the greatest utility for the Metro Area GIS data user community".

The target MetroGIS data users are likely to be predominately local and metropolitan government interests with some state and federal interests interacting from a metropolitan perspective. (Local government interests are defined as cities, townships, school districts, watershed districts and watershed management organizations, soil and water conservation districts, counties, and organizations that are an extension of said interests: economic development partnership, school district consortia, etc. The term "metropolitan government" means public organizations whose jurisdiction is the seven county, Twin City Metro Area.)

Attachment 3 outlines a process that has been accepted by the MetroGIS Coordinating Committee to guide this project. This process utilizes six focus groups organized by significant government responsibility:

- Community Development, Planning, and Research.
- Human, Social, and Educational Services, Public Health (code enforcement, Licensing, and Nursing) and Libraries.
- Parks, Environmental Protection, Natural Resources.
- Property Records.
- Public Safety and Judicial.
- Public Works, Utilities, Transportation, Communication.

These six focus groups are being populated with persons that have appropriate experience from a variety of interests and include representatives from all levels of government.

These groups will be charged with the task of identifying, from their group's perspective, generalized categories of geo-referenced data that are regionally significant. "Regionally significant" means that a data set maintained by one organization has significant utility by other governmental organizations that serve the Metro Area. The more multi-jurisdictional applicability across the various focus groups, the more regionally significant. The Data Content Team has expressed particular interest in identifying the "core" geographic features, feature identifiers that can link these features to externally maintained databases, and the organizations that maintain these databases.

Future Statewide Data Modeling Project: The Minnesota Land Management Information Center, the Metropolitan Council, and the Governor's Council on Geographic Information submitted a grant request to the US Geological Survey in June. This grant, if approved, would be used to replicate the object modeling process described in this document for state interests. If approved, these funds would also be used to define how local, metropolitan, and state data needs are similar to and different from the seven framework data elements that have been identified for the National Spatial Data Infrastructure (NSDI) program. Since the results requested in this RFP will serve as a prototype for other levels of government, a well conceived process and well documented results are important.

### **III. DESCRIPTION OF PROJECT PROCESS AND SCOPE OF WORK**

Refer to Attachment 3 for a diagram of the process that is envisioned by the MetroGIS Coordinating Committee. Attachment 4 shows the relationship of the MetroGIS process to the NSDI Demonstration Grant process, if funded. For the MetroGIS process, the contractor will be expected to perform the following tasks:

#### 1) Pre-Forum Preparation Meeting

The contractor must be available to participate in a pre-forum preparation meeting at the offices of the Metropolitan Council. A date within the following periods is envisioned: August 19-22 or September 3-6. The specific date is to be chosen at the discretion of the Metropolitan Council.

The following information shall be provided in the contractor's proposal concerning this meeting: preferred meeting date(s); topics to be covered; length of meeting; methodology to be used to facilitate the focus groups; discussion of how this methodology supports the subsequent Data Modeling Session; discussion of how the methodology will answer the questions listed in Attachment 5; method for recording the work of each focus group for reference during and after the sessions; and a discussion of the related experience of the contractor's forum participants.

At this meeting, the contractor will elaborate on the information provided in the proposal. Core information to be elicited from each focus group is to be agreed upon, the materials to be sent to the participants prior to the focus group sessions are to be defined and responsibility assigned,

the method of focus group facilitation is to be explained, the Focus Group Forum agenda is to be agreed upon, and logistical needs for the Forum are to be identified and responsibility assigned.

## 2) Focus Group Forum

The current plan is to hold the Focus Group Forum on Thursday, September 19, 1996. A facility has been reserved and focus group participants are being sought with this understanding. The current thinking is that the following activities will occur on the day of the Focus Group Forum:

A. The contractor will provide training for the persons that will be facilitating each of the Focus Group Sessions.

The thought is to use local persons who have group facilitation experience to facilitate each of the focus group sessions. These persons are to be experienced facilitators but are not expected to have data modeling experience. To ensure that each of the six focus group sessions is facilitated in a like manner, the contractor is to hold a training session prior to the Forum for these persons to explain the objectives of the forum process, the facilitation method and materials, and how the work of the groups is to be documented.

B. The Focus Group Forum is anticipated to consist of a one-half day session. The expectation is that the consultant will provide an overview of the process to the participants of each group in a single large group setting to set the stage for the focus groups. This overview should include a brief explanation of how the information generated from the focus groups will be used to develop the final data model.

Following the overview session, the participants would break into their respective Focus Groups to discuss the business functions and decisions that their organizations are charged with and identify the data that is currently used or desired to address these responsibilities.

At the conclusion of the Forum, the participants would reconvene as a large group. The accomplishments of each focus group would be displayed, participants thanked for their work, explain the manner by which the work of the focus groups will be used to develop a final data model, and candidate participants for the subsequent sessions identified.

## 3) Synthesis of Information Generated By Focus Groups

The contractor shall provide a report that consolidates the information received from the focus groups. This report shall:

A) Include a draft entity-relationship diagram, working definitions of the entities, and other appropriate support documentation.

B) Identify items that need clarification or reconciliation at the subsequent Data Modeling Session.

#### 4) Data Modeling Session Preparation

The proposal must include a discussion of how the contractor will communicate (by conference call, meeting, etc.) with MetroGIS staff concerning procedures, personnel, logistics, etc. for the Data Modeling Session. The date of and Modeling Session attendees are to be determined at the time of the Focus Group Forum. The date of the Modeling Session shall be subject to the availability of a facility and the prospective participants. The contractor shall outline in their proposal the general nature of the topics to be discussed at this preparation meeting and provide a suggested lead time prior to the Data Modeling Session.

#### 5) Data Modeling Session

The participants of the Data Modeling Session are to include 1-2 persons from each focus group, 1-2 persons from the MetroGIS Standards Team, and other participants as appropriate, not to exceed a total of 15 persons. Optional dates for this session shall be set at Focus Group Forum.

The purpose of this Data Modeling Session is to use a cooperative data modeling process to refine the object model developed in Section III (3), that results in greater detail about the entities and their attributes, reconciliation of conflicts, and full definition of the entities and their relationships.

#### 6) Synthesis of Information Generated At Data Modeling Session

The contractor shall synthesize the results of the Data Modeling Session and prepare a report that includes:

- A) A detailed entity-relationship diagram.
- B) Descriptions of entities, attributes, and relationships.
- C) A thorough explanation of the meaning of the information in Section III (6)(A)and(B) to persons not expert in data modeling, including documentation of the issues raised and how they were (are to be) addressed.
- D) Documentation and a ranking of regionally significant georeferenced data needs for the MetroGIS.

#### 7) Presentation of Draft Final Report

Eight copies of this report shall be submitted to the Project Manager for review and comment by MetroGIS staff. Following MetroGIS staff comment, the contractor will be expected to present the revised draft report to persons that participated in the Data Modeling Session, and others as appropriate, for additional comment.

#### 8) Submittal of Final Report

A digital copy (Microsoft Word Version 6.0), two hard copies and an original hard copy of the final version of the report, as revised to address comments received from Sections III (6) and (7), shall be submitted to the Project Manager within two weeks of Project Manager's acceptance of a final draft report.

#### 9) Presentation at a Later Date

This project is proposed to be a prototype for a state government data modeling effort that is to begin after this project concludes. As a separate itemized budget item, the contractor is asked to provide a cost to present the final report, if the need should arise.

### **IV. EXPECTATIONS**

The contents of the proposal shall be organized in the following order:

1) A 2-3 page Executive Summary of the proposed services, products, time frame, and fee.

2) Description of proposed services and products

A. Explain the methods proposed to address each of the tasks stated in Section III. An alternative approach or time line to those specified herein may be proposed. The reason(s) for preferring an alternative shall be fully explained.

B. Identify the key personnel to perform the work and the proposal writer(s) and explain their qualifications for the task assigned.

C. Describe the management and personnel assignments proposed to ensure timely completion of each task and the overall project in accordance with the prescribed time frame. Provide an itemized listing of the person hours, fee per hour per person, time frame, and total cost for each task. Also provide a separate itemized estimate of out-of-pocket expenses for travel, etc. for each task.

D. Specifically describe how each task listed in Section III will be accomplished. State the contractor's qualifications and experience to successfully accomplish these tasks within the prescribed time frame.

### 3) Description of qualifications for specific tasks

The proposal shall include an explanation of the contractor's qualifications and related experience to:

- A. Train facilitators and facilitate the focus group process.
- B. Integrate the work of the focus groups to identify, document, and rank regionally significant data.
- C. Facilitate a cooperative data modeling process leading to a synthesis as described in Section III (3).
- D. Determine and document data/object/attribute relationships.
- E. Consolidate the information received from the Data Modeling Session into a final written report understandable by non-modeling experts.

### 4) Qualifications of Key Personnel

Submit resumes for the lead and major supporting personnel who will be assigned to the project. The persons proposed must be able to be available to perform the work as described in the proposal. If consultants, advisors, or subcontractors are to be used, the arrangements must be described and resumes of key personnel from the subcontracting firm(s) must be identified.

### 5) Participation of TGB's; Affirmative Action Compliance

Identify in the proposal the services under this contract that will be provided by TGB's. For proposals over \$50,000, attach a copy of the prime contractor's current certificate of compliance from the Minnesota Department of Human Rights, or a signed affidavit (see Attachment 2) indicating that the contractor did not have more than twenty full-time employees during the previous twelve months.

### 6) References

Provide a list of three to five clients (include addresses and telephone numbers) for whom you have performed services similar to those described in the RFP within the past three to five years.

### 7) Financial Statement

Each Contractor shall submit a financial statement to establish responsibility and the fiscal competency to perform the work outlined in the proposal.

8) Letter(s) of commitment to participate in the project from any subcontractor.

## **V. SELECTION CRITERIA AND AWARD**

All proposals submitted in response to this RFP will be evaluated by a team of persons from the Metropolitan Council, and others as appropriate, that staff or participate in the MetroGIS initiative. The Metropolitan Council reserves the right to select a contractor for this project without discussion of the proposals with the respondents.

The selection team reserves the right to conduct oral interviews with contractors that it believes best satisfy the expectations stated in this Section. If such interviews are pursued, their occurrence, time, and place shall be at the discretion of and scheduled by the Metropolitan Council.

1) Contractors must meet the following requirements:

- A. Compliance with the requirements for certificates of compliance from the Minnesota Department of Human Rights (for consultant contracts over \$50,000).
- B. Avoidance of conflicts of interest prohibited under state and local laws.

2) Once all of the above requirements have been met, contractors shall be selected on the basis of compliance with the following criteria:

- A. Completeness of proposal and demonstrated grasp of the work to be done under this contract.
- B. Specialized experience in object/data modeling and professional competence of the proposer and its personnel (including a joint venture) as demonstrated in the proposal.
- C. Previous experience of the proposer in performing similar projects.
- D. The quality and completeness of the conceptual and technical approach to the conduct of the study.
- E. Project cost, weighted against project scope and concept as outlined in the proposal. A low bid shall not be the sole determinant.
- F. The extent to which targeted group businesses, including subcontractors, if any, will participate in the proposed project.
- G. Capacity of the proposer to perform the work (including any specialized services) within the time limitations, taking into consideration the current and planned workload of the proposer and its personnel (including a joint venture) as demonstrated in the proposal.
- H. Past record of performance on contracts with the Council or with others, including such factors as control of costs, quality of work, and ability to meet schedules.

## **VI. REQUIRED PERIOD OF PERFORMANCE**

The tasks stated in Section III shall be completed by November 27, 1996, and in accordance with a schedule of activities to be agreed to by the parties prior to execution of a contract.

## **VII. MANNER OF PAYMENT**

Payments are to be made on a fixed fee basis. Payments will be based upon invoices submitted by the contractor showing labor hours, labor costs, overhead, and other direct costs. The frequency of payments is to be a subject of negotiation with the contractor. The contractor's preferences and any requirements should be stated in the proposal.

## **VIII. ATTACHMENTS**

### **ATTACHMENT 1. STANDARD COUNCIL CONTRACT FOR CONSULTANT SERVICES**

The standard Council contract for consultant services should be attached to the Request for Proposal so that consultants will know the Council's contract requirements.

### **ATTACHMENT 2. CONTRACTOR AFFIDAVIT**

For any RFP for which the contract manager anticipates the submission of proposals in excess of \$50,000, the contractor affidavit for contractors who did not have more than 20 full-time employees on a single working day during the previous 12 months should be attached to the RFP.

### **ATTACHMENT 3. CONCEPTUAL MetroGIS DATA MODELING PROCESS**

### **ATTACHMENT 4. NDSI DEMONSTRATION PROGRAM PROCESS**

### **ATTACHMENT 5. LIST OF QUESTIONS TO BE ANSWERED BY THE PROCESS**

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STATEMENT--EXEMPTION FROM AFFIRMATIVE ACTION PLAN REQUIREMENTS

\_\_\_\_\_, being duly sworn on oath, deposes and states that:

(name)

1. I am the \_\_\_\_\_ of \_\_\_\_\_.  
(title) (company name)

2. I have been properly authorized to make and sign this statement on behalf of the company.

3. \_\_\_\_\_ is a \_\_\_\_\_ business  
(company name) (U.S. state or country)  
with its principal place of business at \_\_\_\_\_.  
(company address)

4. At no time during the twelve (12) months prior to  
(bid/proposal deadline)  
did \_\_\_\_\_ have more than twenty (20) full-time  
(company name)  
employees anywhere in the United States on a single working day.

Date: \_\_\_\_\_

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Title/Office:

For \_\_\_\_\_

STATE OF \_\_\_\_\_ )  
 ) ss.  
COUNTY OF \_\_\_\_\_ )

Subscribed and sworn to before me  
this \_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_.

\_\_\_\_\_  
Notary Public

My commission expires \_\_\_\_\_

(SEAL)