

## REQUEST FOR PROPOSALS

### RAPID CITY AREA METROPOLITAN PLANNING ORGANIZATION TRAVEL DEMAND FORECASTING MODEL UPDATE

The City of Rapid City in conjunction with the Rapid City Area Metropolitan Planning Organization (MPO) and the South Dakota Department of Transportation (SDDOT) is soliciting proposals from qualified transportation consultants to perform travel demand modeling. The selected firm must be experienced in modeling and have sufficient qualifications and expertise to perform the required modeling tasks in a timely manner in conjunction with MPO and local government staff.

## BACKGROUND

The MPO's existing TModel2 travel demand forecasting model supports the transportation planning process. The 1995 calibrated model is used to predict changes in travel patterns and provide alternatives for determining the future transportation system in response to changes in regional development, demographics and transportation supply. The City is implementing an Arc/INFO based geographic information system to help track changing land use patterns and street network data. The Rapid City Area MPO has been evaluating travel demand forecasting software programs that can integrate travel demand forecasting with the geographic information system. The MPO anticipates changing software platforms from TModel2 to TransCAD to better utilize the geographic information system.

## PROJECT DESCRIPTION

The travel demand forecasting model update project will have two major components. The first component is to convert the existing base year TModel2 data into TransCAD, calibrate the converted model and develop the Year 2025 model as well. The second portion of the update will entail providing recommendations on other travel demand related studies.

## SCOPE OF SERVICES REQUESTED

### *Task 100 Data Review and Collection*

The consultant shall evaluate the City's existing TModel2 data and related documentation to determine the best solution for proceeding with conversion of the calibrated files. The consultant shall coordinate with the MPO staff, City staff and SDDOT staff to develop conversion alternatives and to determine the best alternative in proceeding with data conversion to create a base year and a Year 2025 forecasted model.

### *Task 200 Data Conversion*

The consultant shall create a calibrated, base year, time-of-day, regional model and a Year 2025 forecasted model. The calibrated base year model as well as the Year 2025 forecasted model will consist of all link assignments to be within the maximum desirable deviation as identified in NCHRP 255. The consultant shall provide documentation on all procedures in the data conversion/modeling process undertaken to calibrate the model. The consultant will provide an evaluation of the work done to date when changing the MPO's model from TModel2 to TransCAD. The consultant will provide recommendations for further changes in creating a base year and Year 2025 model.

### *Task 300 Travel Demand Related Studies*

The consultant shall have proven experience in travel demand studies, and understand the foundation and philosophy behind travel demand forecasting models. The consultant shall provide recommendations on other travel demand related studies, i.e., origin and destination studies, travel time studies, employment studies, traffic volume studies (hourly volume recommendation), etc.

***Task 400 Travel Demand Modeling***

The consultant shall assist in performing modeling work as required on various projects after the base year and Year 2025 calibration is complete. The MPO will use the travel demand model to determine the impacts of regional land use developments. The consultant will be asked to advise and assist the MPO with modeling tasks, model validation and land development alternative scenarios for a minimum of one year after the Year 2025 model is calibrated.

**CONSULTANT QUALIFICATIONS**

Consultants who submit proposals should have extensive experience in transportation modeling and be able to use TModel2 and TransCAD software.

**SCHEDULE OF PROPOSAL**

*Proposals shall be governed by the following estimated schedule:*

November 30, 2000 -- Written proposals due at the Rapid City Planning Department

December 8, 2000 -- Interviews of selected respondents at Rapid City City/School Administration Center

December 11, 2000 -- Selection of consultant and initiation of contract negotiations.

**PERFORMANCE PERIOD**

Detailed scheduling of the project will be negotiated during the contract negotiations by the selected consultant and the City.

The date for initiation of the contract as well as the overall contract performance period will be negotiated with the selected consultant based on the tentative time schedule listed below.

Notice to Proceed – December 19, 2000

Submit for Review Recommended Changes to Model – February 19, 2001

Complete Base-Year Model Conversion and Calibration – August 21, 2001

Year 2025 Forecasted Model Calibration – October 21, 2001

Travel Demand Related Studies Recommendation – November 21, 2001

As part of the Request for Proposals response, the responder is invited to submit an alternate time schedule, if appropriate. Final payment, including retainer, will not be made to the consultant until both the calibrated base-year model and the Year 2025 forecasted model are accepted by the City and Rapid City Area Metropolitan Planning Organization.

**GENERAL INSTRUCTIONS**

## INQUIRIES

Please direct questions to:

Patsy Horton, Senior Planner  
Rapid City Planning Department  
300 Sixth Street  
Rapid City, SD 57701  
(605) 394-4120

## SIGNATURE REQUIREMENTS

Proposals must be signed by a duly authorized official of the responder. Consortia, joint ventures, or teams submitting proposals, although permitted and encouraged, will not be considered responsive unless it is established that all contractual responsibility rests solely with one contractor or one legal entity which shall not be a subsidiary or affiliate with limited resources. Each proposal should indicate the entity responsible for execution on behalf of the proposal team.

## MINIMUM SERVICES OF THE CONSULTANT

The following shall be the basic services and products provided by the consultant.

The consultant agrees to prepare a conversion and calibration procedures manual identifying the conversion and calibration modeling process undertaken with this proposal, make revisions as required, and prepare final document(s) which will include the completion of tasks under the **"SCOPE OF SERVICES REQUESTED"** in addition to graphics, charts, tables, and an executive summary. The consultant will respond in a timely manner to any comments that result from the State/Federal/Public review, and will provide ten (10) copies of all responses. A minimum of ten (10) final reports of the calibrated/validation modeling process will be prepared and submitted for staff and officials within the State Department of Transportation, the Federal Highway Administration, the City of Rapid City, and the Rapid City Area Metropolitan Planning Organization. Originals will also be supplied to the City in camera-ready format.

## PROPOSAL SUBMISSION

The City of Rapid City must receive your proposal no later than 12:00 p.m. MST (noon), Friday, December 1, 2000. The background information, experience and descriptive examples of the responders work must be submitted with information to accompany the proposal at the required time of submittal. Six (6) copies of each proposal must be submitted to the City of Rapid City. Submissions will be directed to:

Transportation Planning Division  
Rapid City Planning Department  
300 Sixth Street  
Rapid City, SD 57701

## ADDENDA AND SUPPLEMENTS TO RFP

In the event that it becomes necessary to revise any part of this RFP or if additional information is necessary to enable the responder to make adequate interpretation of the provisions of this Request for Proposal, a supplement to the RFP will be provided to each responder.

## REJECTION RIGHTS

The City of Rapid City and the Rapid City Area Metropolitan Planning Organization retain the right to reject all proposals and to re-solicit if deemed to be in their best interests.

Selection is also dependent upon the negotiation of a mutually acceptable contract with the successful responder.

#### COST OF PROPOSAL PREPARATION

No reimbursement will be made by the City of Rapid City or any other party to this agreement for any costs incurred prior to a formal notice to proceed under a contract.

#### PROPOSALS TO BE IN EFFECT

Each proposal shall state it is valid for a period of not less than ninety (90) days from the date of receipt.

#### PROHIBITED INTEREST

No member, officer, employee of the City or State, or member of its governing body or of a local public body having jurisdiction within the City's service area, during his or her tenure or one year thereafter, shall have any interest, direct or indirect, in any resultant contract or the proceeds thereof.

#### TAXES

The contract amount submitted by the consultant should take into consideration the fact that all sponsoring entities associated with the proposed project are exempt from all state taxation, including state sales tax.

#### SELECTION PROCESS

A study team will review responses to this Request for Proposal that meet the requirements enumerated and are received prior to the designated closing date.

Upon review of qualified responders, the committee will designate the most qualified firms as finalists based on professional qualifications, costs and financial data. The selected finalists will appear for an oral presentation and evaluation by the committee who then will select a firm. The selected consultant will be notified and contract negotiations will commence. Upon the completion of negotiations, the City of Rapid City, the Rapid City Area Metropolitan Planning Organization and the South Dakota Department of Transportation must approve the contract before any work can begin. Federal funding will be utilized in this study and thus the consultant will be subject to all of the federal contracting requirements.

#### PROJECT APPROACH

The responder should identify the study process utilized on other significant projects of similar scope and magnitude as well as the process envisioned for this project. The specific procedures and methods proposed for coordinating the requirements of the Federal Highway Administration, the South Dakota Department of Transportation, the City of Rapid City, and the Rapid City Area Metropolitan Planning Organization shall be detailed in the proposal.

#### QUALIFICATIONS, COSTS AND FINANCIAL DATA

Those firms submitting proposals will be evaluated according to the qualification of the firm in terms of experience, the ability to perform and manage the work, the ability to work within a

schedule, and within a fixed budget. The firm is asked to submit a description of prior work that is related to the scope of work previously described. Particular emphasis will be placed on the qualifications of the firm's key staff, such as the project manager and all staff involved in the project.

The contract for the scope of work will be based on a fee schedule with a not-to-exceed amount. Project fee and cost estimates are not considered binding evaluation criteria. Each firm submitting a proposal must provide a time and cost estimate for each task of the study based on the services enumerated and the assumed project time frame. The submission should also include an hourly fee for additional travel demand modeling assistance, if requested, after the proposed contract and work tasks are complete.

### SPECIALIZED EXPERIENCE

The selected firm must be experienced in travel demand modeling and have sufficient qualifications and expertise to perform the required modeling tasks in a timely manner in conjunction with MPO and local government staff. The following criteria will be weighted in evaluating the qualifications of each consultant.

#### Capacity/Capability (20%)

- (a) Key personnel and individual relevant experience and capability, and outside consultants.
- (b) Diversity of skills - transportation planning, land use, travel demand forecasting, and familiarity with Federal regulations governing the transportation planning process.
- (c) Total number of firm employees in project technical disciplines and current workload of personnel.

#### Technical Ability and Understanding of Requirements (55%)

- (a) Technical approach proposed for meeting tasks.
- (b) Understanding and experience in meeting tasks.
- (c) Understanding and experience in calibrating a travel demand forecasting model.
- (d) Project schedule.
- (e) Personnel assigned to tasks.
- (f) Quality of examples of previous work.

#### Project Organization and Management (5%)

- (a) Project team.
- (b) Management Procedure - work reports.
- (c) Quality Control.
- (d) Transportation Planner/Engineer and MPO relationship.

#### Past Record of Performance (5%)

Completion time - quality - efficiency

Volume of Related Work Previously Awarded (15%)

GENERAL EXPERTISE REQUIRED

The services envisioned within this Request for Proposal includes all of the transportation planning and traffic engineering disciplines necessary for the completion of the project desired.

MISCELLANEOUS

All previously mentioned information will be made available to the selected consultant, as well as, the latest available traffic counts, the Rapid City Major Street Plan, existing and projected land use by dwelling units and non-residential square footage by land use neighborhood areas.

The City of Rapid City, the Rapid City Area Metropolitan Planning Organization and the South Dakota Department of Transportation retain the right to amend the contract with the successful responder to include other possible areas of concern with this project. All documents and products from this project will become the City's property.

NON-DISCRIMINATION/AMERICANS WITH DISABILITIES ACT

The successful consultant shall comply with the requirements of Title 49 CFR Part 21 and Title VI of the Civil Rights Act of 1964. The successful consultant shall submit upon request quarterly Title VI (civil rights) State of Contractor reports to the South Dakota Department of Transportation. The successful Consultant shall provide services in compliance with the Americans with Disabilities Act of 1990.

CONTRACT PROVISIONS AND ASSURANCES

Federal funds received by the Rapid City Area Metropolitan Planning Organization will be used as a component of the overall funding of this project. Accordingly, the selected consultant will be required to comply with all applicable Federal regulations and contracting provisions required by the Federal funding authority, including 49 CFR Part 31 - Allowable Costs, Civil Rights, Minority Business Enterprise, and other applicable assurance provisions. Additionally, the contract must be in compliance with state and local requirements applicable to such contracts.

**SUMMARY**

All plans, calculations, maps, digital files, reports, correspondence, minutes of meetings, and related data generated for the study will be included in the final documents submitted to the City of Rapid City.