

# COUNTY OF EL DORADO Procurement & Contracts

ATTN: Purchasing Agent
330 Fair Lane
Placerville, CA 95667

## REQUEST FOR PROPOSAL #10-918-073

**DUE: 3:00 PM - May 20, 2010** 

Sealed Proposals must be clearly marked on the outside of the package with:

"RFP #10-918-073 MAILROOM DO NOT OPEN"

**Purchasing Agent** 

## TRAVEL DEMAND FORECASTING MODEL UPDATE

The El Dorado County Procurement and Contracts Division, through its Department of Transportation (also referred to as "County"), is requesting proposals from qualified, professional, engineering firms for the provision of updating the County's existing traffic model.

This request for proposal (RFP) defines the scope of services and outlines the requirements that must be met by Proposers interested in providing such services. Proposers shall carefully examine the entire RFP and any addenda thereto, and all related materials and data referenced in the RFP or otherwise available, and shall become fully aware of the nature and the conditions to be encountered in performing the service. Proposers are advised to read all sections of this RFP prior to submitting a proposal.

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#### 1. Introduction

El Dorado County's Department of Transportation (DOT) is soliciting professional engineering services from consulting firms with experience and expertise in travel demand forecast modeling to update the County's existing traffic model. The successful firm will be highly qualified and experienced in developing similar models and will have a thorough knowledge of local and regional models in the greater Sacramento area.

#### 2. Background

El Dorado County has a mix of rural and urban areas with numerous traffic issues. During the past ten years the western portion of El Dorado County has experienced rapid growth and development, becoming increasingly urbanized. In addition, continued commercial and housing development in the eastern area of Sacramento County has increased the need for regional planning to address long range forecasting.

The existing traffic model was created in 1993 and needs to be updated and expanded. The updated new model will incorporate DOT's Capital Improvement Program (CIP) and the County's General Plan land use designations. The new model will be used to determine roadway infrastructure needs for future development.

The County's goal is to have a traffic demand model that will help guide the County through the next twenty years of development. The County intends to keep the model current, updating it as needed to incorporate new development.

The new traffic model will be used not only by the County but also by private companies and public agencies. Having an up-to-date model is essential for updating the County's Traffic Impact Mitigation (TIM) Fee Program and the County's General Plan. This model is also important for Caltrans in studying traffic impacts of new development projects on State highways.

In order to facilitate the traffic model update, DOT is currently in the process of updating the Traffic Analysis Zones (TAZs), expanding them from about 200 in the old model to three or four times that number. DOT believes expanding the TAZs will improve the ability of the new traffic model to forecast impacts due to new development. The TAZ expansion will be completed before the update of the traffic model begins.

## 3. Key Components Required in the Updated Traffic Model

A. <u>Data collection for land use/socio-economic information updates (approximately 100,000 parcels):</u> One of the primary inputs to the model is the land use and the socio-economic data. Parcel data may include, but not be limited to, the type of land use, number of employees, square footage, household incomes, and number of residents.

The land use and socio-economic update will include multiple resources in verifying the existing land use. This work should be closely coordinated with El Dorado County's Development Services Department (DSD), adjoining cities, counties, the California Department of Transportation (Caltrans), and Sacramento Area Council of Governments (SACOG) for information that can be used in the model update.

B. <u>Traffic data collection for base year:</u> Traffic counts for several important roadways within the County will need to be collected for the base year 2008. Daily AM and PM peak hour traffic counts will be used to calibrate the traffic volume forecasts from the new model. DOT already collects traffic counts on many roadways within the County. Any new traffic counts not already available for the base year will be collected by DOT.

- C. Convert current model from MINUTP software application: The existing model was developed using MINUTP software which is outdated and no longer maintained. Much of the County's socio-economic and land use data is now in the County's Geographical Information System (GIS) program, thus the consultant will develop the new model in a software application that can integrate existing roadway network and land use data available in the County's GIS program.
- D. <u>Incorporate new Traffic Analysis Zones (TAZs)</u>: The consultant will incorporate the new TAZ structure into the update of the traffic model. The new TAZ structure will include not only TAZs in El Dorado County, but also several on the western edge of the County (e.g., City of Folsom, Rancho Cordova, etc.), which generate traffic impacts on the County's road network.
- E. <u>Expand Roadway Network</u>: The consultant will update and expand the existing road network to include new roadways, High Occupancy Vehicle (HOV) lanes, and roadways in neighboring municipalities to reflect the actual travel characteristics in the region. The roadways with significant traffic and the ones with regional importance that bring traffic into El Dorado County need to be included in the roadway network to create a realistic picture of the trips in the County driven by adjacent areas in the region.
- F. <u>Update Trip Generation Module</u>: The consultant will update the trip generation module of the traffic model to include current information such as household income levels and ages for each land use type. Trip generation will be developed for each parcel and will be aggregated over each TAZ. The trip generation module should estimate the number of vehicle trips that originate and terminate in each TAZ for purposes such as home based work, non-home based work, such as commuting, etc.
- G. <u>Update Trip Distribution Module</u>: The consultant will update the trip distribution module of the traffic model using census data or other travel survey data available. Trip destinations may be within a TAZ, between two TAZs, or an external trip outside of the County. The trip distribution module currently uses a gravity model.
- H. <u>Update Mode Choice Module</u>: The consultant will update the mode choice module to reflect bus ridership inside and outside of the County and will be used to develop the proportion of auto versus transit trips. The mode choice module should also include updated auto and bus occupancies.
- I. <u>Update Network Assignment Module</u>: The consultant will update the network assignment module to reflect route selection based on attractiveness of each of the routes into and out of El Dorado County. Route selection will reflect the congestion on different roadways during peak hours of travel. The current module uses an iterative, capacity constrained algorithm, using roadway capacities based on the 2000 Highway Capacity Manual (HCM).
- J. Model Calibration: Once the model's trip generation, trip distribution, mode choice, and network assignment modules are updated, the consultant will calibrate the model by comparing actual travel and trip data with the model estimates. The actual traffic counts will be compared to the model's generated volumes at each step of trip generation, trip distribution, mode choice and network assignment, and adjustments made such that the overall error is +/- 5% or better.

- K. Model Validation: The consultant will verify the forecasting accuracy of the model by comparing its estimates of base year roadway segment traffic volumes with the actual traffic counts in the same year. Caltrans' guidelines regarding forecasting model validation should be followed as appropriate. The model's ability to forecast future traffic demand will be deemed acceptable when all of the following are true:
  - 1. The model's trip forecast in the base year is within 5% of the actual traffic counts for all key roadway segments in the model.
  - 2. Key regional partners (i.e., SACOG, Caltrans, El Dorado County Transportation Commission) review the model results and deem them to be acceptable.
- L. <u>Deliverables:</u> The consultant will provide the County with the following deliverables:
  - 1. A completed, new model incorporating the elements described above and the underlying software program. These are to be installed and work properly on at least two County-owned computers that will ultimately be used by DOT staff;
  - 2. A report summarizing the model update process and outputs;
  - 3. At least two (2) presentations of two to four (2 to 4) hours in duration to County staff. The presentations should provide an overview of what the model does and how to interpret the results of running three to four sample new development scenarios (these scenarios are to be developed jointly with DOT staff);
  - 4. In-depth training for at least two DOT staff who will be using the model to evaluate the trip generation of proposed new developments;
  - 5. A short reference document for DOT staff who will be running the model once completed;
  - 6. Up to forty (40) hours of consulting time after the model has been completed to answer any questions that may arise from DOT staff running the model. Note that this time is not to be used to resolve programming problems with the model once it is completed. Programming errors are to be fixed by the consultant at no charge to the County.

The new model will be completed and successfully transferred to the County, including training staff on how to run the model, by March 31, 2011.

## 4. Scope of Work

The following is a basic outline to be used in developing the scope of work that will be prepared as part of the proposal. If the outline will be prepared in a different order, please note it in the proposal.

Requested services shall include, but may not be limited to:

4.1	Incorporate updated TAZs into the new model		
4.2	Support DOT as needed in land use data collection		
4.3	Support DOT as needed socio-economic data collection		
4.4	Existing roadway network data collection		
4.5	Existing roadway network base map creation		
4.6	Support DOT as needed in traffic data collection		
4.7	Trip Generation		
4.8	Trip Distribution		
4.9	Mode Choice creation		
4.10	Network Assignment		
4.11	Model Calibration		
4.12	Model Validation		
4.12a	Review by peer agencies/County		
4.12b	Approval from peer agencies/County		
4.13	Model Documentation		
4.14	Final approval of the model (by DOT)		
4.15	Training of DOT staff on how to use the model and follow-up support		
4.16	Overview Presentations for County staff		
4.17	Comprehensive updated model: Base Year Model (2008)		
4.18	Model Development Report (technical memo with findings and outputs)		
4.19	Model software and training for staff		

## Task 4.1 The Base Year Model shall include the following:

- a. Database with the land use and socio-economic data and any other data used
- b. Technical memo summarizing the findings
- c. A technical memo summarizing the findings including but not limited to:
  - 2008 land use assumptions and relation to the General Plan
  - network and zone changes
  - hardware and software needs
  - software evaluation and selection
  - integration of GIS into the model
  - model output summaries
  - model operations and maintenance necessary for model upkeep.

#### 5. Documents Available for Review

- A. El Dorado County Travel Demand Forecasting Model Development Report —
  October 1999. Copies of this report are available for review at both of the El Dorado
  County Department of Transportation offices, located at 2850 Fairlane Court, Placerville, CA and 4505
  Golden Foothill Parkway, El Dorado Hills, CA.
- B. Sample Professional Services Agreement included as Attachment A.

#### 6. Proposal Format

The proposal shall not exceed <u>fifty</u> (50) single-sided printed pages excluding cover sheet, table of contents, and attachments. Resumes included with the proposal shall not exceed three (3) single-sided printed pages per person.

Concise, responsive proposals formatted on 8 1/2" x 11" page must include the following:

- **6.1.** Transmittal letter Not to exceed one (1) page, identifying the firm, address and telephone number of the principal person representing the firm, signed by a person authorized to execute an agreement with the County and listing all of the contents of the proposal.
- **6.2.** Understanding of the Scope of Work Provide a detailed discussion of the services to be rendered. Include a discussion of deliverables and expected time of delivery of each phase. Consultants are encouraged to explain in detail their understanding of the scope of work and to identify any supplemental tasks deemed necessary to enhance the project or reduce the costs. The proposed Scope of Work should include a detailed work plan with tasks and an accompanying schedule. The Scope of Work may include suggestions for augmenting, streamlining, or clarifying the work effort. Firms are encouraged to be creative in preparing proposals that demonstrate the most effective means of accomplishing the objectives of the project.
- 6.3. Project Team Include an organizational table for personnel to be used for the project showing the proposed principal in charge, project manger, and key staff. Provide a narrative description of the qualifications and experience of each key person along with their proposed responsibilities. A resume may be included for each person shown on the table of organization.

If subconsultants or joint consultants are proposed, include a description of any relevant association with the proposed subconsultants, not to exceed one (1) page each. Provide examples of past projects on which the lead firm has worked with each subconsultant. List the names, addresses, and telephone numbers of any proposed subconsultants or joint consultants. Provide a description of the team's project management approach, including philosophy to ensure effective communication with personnel from various agencies and entities that will be involved in the project.

**6.4** Project Schedule – Provide a detailed schedule for the completion of the services required for the project. Provide a timeline chart outlining the days required to complete each task as outlined in the proposal for this project. Show critical path elements of the project and discuss any constraints in meeting the County's desired deadline.

- 6.5. Statement of Qualifications Provide a description of the firm and its expertise, includir identification of the firm's primary services, office locations, ability and capacity to do the work, and professional and support staff members. Include a brief history of the firm as well as descriptions of similar projects completed within the past five years. Describe familiarity with El Dorado County standards. Identify staff, including subconsultants, and their responsibilities for example projects if they are proposed for assignment to this project. Provide references including names, addresses, and telephone numbers.
- **6.6.** Contract Requirements All proposals must contain a statement that the prospective consultant has reviewed the language and provisions contained within the Sample Professional Services Agreement attached hereto (Attachment A) and that the prospective consultant concurs with the provisions contained within said Agreement, and can and will enter into the Agreement without alterations.
- **6.7.** Insurance Requirements All proposals must contain a statement that liability limits shown in Sample Professional Services Agreement (Attachment A) will be met.

#### 7. Fee Proposal

A fee proposal shall be included in the proposal under separate sealed cover. The fee proposal will be used as basis of negotiation for the Professional Services Agreement with the highest ranking firm. If agreement is not reached with that firm, the next highest ranked firm may, at the discretion of the County, be given an opportunity to negotiate an agreement.

The fee proposal shall include a current hourly rate schedule for the firm and any subconsultants to be used as well as the unit rates to be charged for all miscellaneous project-related services such as reproduction, deliver etc. Rate schedules must include rates that will be effective through the entire term of the agreement, which is anticipated to end in March 31, 2011.

In addition to the current hourly rate schedule, the fee proposal shall include a project estimate describing all costs and employee/subconsultant hours required to complete all tasks outlined under the Scope of Work.

#### 8. Proposal Submittal and Inquiries

Proposers must submit one (1) original and six (6) copies of their proposal, along with any addenda, in a sealed envelope or container, clearly marked "RFP #10-918-073 – MAILROOM DO NOT OPEN", no later than 3:00 PM – May 20, 2010 to:

County of El Dorado Procurement and Contracts 330 Fair Lane Placerville, CA 95667

Proposers submitting less than the required number of copies of their proposal will be rejected and considered "non-responsive."

It is the responsibility of the Proposer to assure that the proposal is received in the Procurement & Contracts Division prior to the proposal opening deadline date and time. Proposals received beyond the proposal opening deadline will not be accepted and will be returned unopened. The time stamp clock located in the office of the Procurement and Contracts Division will serve as the official time clock.

For questions regarding the Request for Proposal process, contact Bonnie H. Rich, Sr. Department Analyst at (530) 621-5940.

Questions regarding this RFP must be submitted in writing to the Procurement and Contracts Office and must be received no later than 4:00 PM – on May 12, 2010. All envelopes or containers must be clearly labeled "RFP #10-918-073, QUESTION" for convenience purposes. Envelopes or containers not clearly labeled may be overlooked and not responded to. Questions will be accepted by facsimile (fax) or electronically; however, the County makes no guarantees as to the successful transmission and receipt of questions submitted by facsimile or electronically. The County reserves the right to decline a response to any question if, in the County's assessment, the information cannot be obtained and shared with all potential organizations in a timely manner. A summary of the questions submitted, including responses deemed relevant and appropriate by the County, will be provided to selected firms on or about May 14, 2010.

All inquiries submitted by U.S. mail should be sent to:

Procurement and Contracts 330 Fair Lane Placerville, California 95667 RFP #10-918-073 Question

All inquiries submitted by facsimile should be sent with a cover letter, including the number of pages sent to:

Procurement and Contracts Attn: Bonnie H. Rich (530)295-2537 RFP #10-918-073 Question

All inquiries submitted by e-mail should be sent to:

bonnie.rich@edcgov.us

with the subject line to read:

RFP #10-918-073 Question

In order for the County to respond to firms submitting questions, all inquiries shall include a return e-mail address or fax number.

Proposers are cautioned that they are not to rely upon any oral statements that they may have obtained. Proposers shall direct all inquiries to the County Purchasing Agent and shall not contact the requesting department directly regarding any matter related to this Request for Proposal.

#### 9. Conflict of Interest

Prospective consultants warrant and covenant that no official or employee of the County or any business entity with an official of the County has an interest, has been employed or retained to solicit or aid in procuring of any resulting agreement, nor that any such person will be employed in the performance of such agreement without immediate divulgence of such fact to the County. Each prospective consultant's proposal shall contain a statement to the effect that the consultant is not currently committed to another project that would constitute a conflicting interest with the projects defined in the Request for Proposal (RFP).

#### 10. Modification or Withdrawal of Proposal

A Proposer may withdraw its final proposal at any time **prior** to the opening deadline date and time by submitting a written request for its withdrawal to the County Purchasing Agent, signed by an authorized agent of the firm. Proposers may thereafter submit a new or modified proposal **prior** to the opening deadline date and time. Modifications offered in any manner, oral or written, will not be considered.

## 11. Rejection of Proposals

Prospective consultants interested in being considered must submit proposals in compliance with this RFP. Failure to meet the minimum requirements of this RFP shall be cause for rejection of the proposal. The County may reject any proposal if it is conditional, incomplete, contains irregularities, or is deemed to be substandard. Also, the County reserves the right to reject any or all proposals for any reason whatsoever. The County may waive immaterial deviation in a proposal. Waiver of an immaterial deviation shall in no way modify the proposal documents or excuse the proposing firm from full compliance with any requirements of the Agreement if the prospective consultant enters into an agreement.

#### 12. Selection Process

Based upon the information provided by each consulting firm, the County will develop a ranked list of consultants. The proposals will be evaluated by County staff based upon criteria which may include the following:

- Quality of response
- Experience with similar projects
- Familiarity with El Dorado County and Caltrans traffic modeling guidelines
- Record of performance
- Knowledge of local transportation issues
- Relevant experience of key team members
- Use of local staff to complete the work contemplated under the project
- Thoroughness, clarity, relevance and quality of the material presented
- Demonstrated ability to rapidly respond to changing conditions
- History of meeting schedules and budgets
- Acceptance of the terms of the attached Sample Professional Services Contract

12.1. Responsiveness of Proposals - All proposals shall be in writing and fully responsive to this RFP. Non-responsive proposals or proposals found to be irregular or not in conformance with the requirements and instructions contained herein and will not be considered or evaluated. Other conditions that may lead to the selection committee's decision not to evaluate a proposal include lack of experience, expertise or adequate resources to perform the required work, and/or failure to perform or meet obligations on previous contracts.

12.2. Final selection - Selection of a consultant is typically based upon ranking of proposals. However, the County reserves the right to request oral interviews with candidate firms prior to final selection. Once the County selects the top ranked firm, the County will negotiate the cost for services. In the event no agreement is reached on cost, the County may select the next highest ranked firm to negotiate a cost for services. This process may continue with successive candidate firms at the discretion of the County.

## 13. Award of Agreement

Response and selection for the project will not necessarily result in an agreement with the County. Proposal opening and evaluation or analysis does not constitute awarding of an agreement. Award of the agreement will be made by the County's Board of Supervisors. The Agreement is not in force until it is awarded and fully executed by the El Dorado County Board of Supervisors.

#### 14. County Responsibilities

The County will be responsible for assigning a Project Coordinator for overall project management, for schedule review and approvals, for timely reviews and approvals of project submittals, and for overall contact administration, including coordination with other regulatory agencies, consultants, the County's Board of Supervisors, other County departments, the El Dorado County Transportation Commission, SACOG and the general public.

The County reserves the right to perform any portion of the scope of services with County personnel, as the County may determine is necessary and appropriate, subject to the availability of resources.

## 15. Professional Services Agreement

The firm selected for this project will be required to execute a Professional Services Agreement with the County. The Agreement will begin immediately following execution of the Agreement by the County. This is estimated to occur in June 2010, but may be postponed at the County's discretion.

Execution of an agreement with the County does not guarantee the County will use the consultant's services. The County will be under no financial obligation to provide a minimum amount of work to the consultant.

15.1. Costs Incurred in Submitting a Proposal - This Request for Proposal does not commit the County to pay any costs incurred by any individual, firm, partnership or corporation in the submission of responses to this RFP, or in making any necessary studies or designs for the preparation therefore, nor to procure or contract for any articles or services. Submitted proposals shall remain the property of the County.

#### 16. Tentative Schedule

Please consider the following information in preparing your proposal. All dates are tentative except for the proposal submittal due date.

Item	Date
Proposal Submittal Due Date	May 20, 2010
Consultant Selected	June 3, 2010
Consultant Agreement Documentation	July 1, 2010
Board of Supervisor's Award Agreement	August 3, 2010
Project Completion	March 31, 2011

#### 17. Public Records Act

All proposals shall become public information at the conclusion of the selection process, with the exception of those portions of a proposal that are identified at the time of submittal by the Proposer as trade secrets and/or which are deemed by the County as not being public documents that must disclosed under the Public Records Act, or other appropriate statutes and regulations. Pricing and service elements of the successful proposal will not be considered proprietary information. Proprietary information shall be submitted in a separate sealed envelope clearly labeled as proprietary with the RFP number on the outside of the envelope. All materials submitted in response to this Request for Proposal shall become the property of the County and will not be returned.

#### 18. Valid Offer

Proposals shall remain valid for 120 days from the due date. The County reserves the right to negotiate with the successful Proposer any additional terms or conditions not contained in their proposal which are in the best interest of the County or to otherwise revise the scope of this RFP.

This RFP does not constitute a contract nor an offer of employment. The cost of preparation of proposals shall be the obligation of the Proposer. All proposals, whether accepted or rejected, shall become the property of the County and will not be returned. Unnecessarily elaborate responses, enclosures and specialized binding are not desired, and may be construed as an indication of Proposer's lack of cost consciousness.

## 19. County's Rights

The County reserves the right to:

- 1. Request clarification of any submitted information
- 2. Waive any informalities or irregularities in any qualification statement
- 3. Not enter into any agreement
- 4. Not select any consultant
- 5. Cancel this process at any time
- 6. Amend this process at any time
- 7. To award more than one contract if it is in the best interest of the County
- 8. Interview consultants prior to award
- 9. To request additional information during an interview

Failure to comply with any of the requirements contained herein may result in disqualification. It is the responsibility of all Proposers to read ALL sections of this RFP prior to submitting a response.

#### 20. Award

Award shall be recommended to the Proposer whose proposal best meets the needs of the County. The County reserves the right to reject any or all proposals, and to solicit additional proposals if deemed in the best interest of the County to do so. The decision of the County Board of Supervisors shall be final in making such determination.

The successful Proposer will receive written notification of the award, along with instructions for finalizing the agreement documents. Receipt of the fully executed agreement will serve as Proposer's notice to proceed with services.

## 21. Business License Requirement

It is unlawful for any person to furnish supplies or services, or transact any kind of business in the unincorporated territory of El Dorado County without possessing a County business license unless exempt under County Code Section 5.08.070. Contact the Tax Collector's Office at 360 Fair Lane, Placerville, CA 95667, or phone (530) 621-5800, for further information.

It is not a requirement to possess a County business license at the time of proposal submittal. Successful Proposers may be required to possess a County business license to award contract.

The County of El Dorado is an equal opportunity employer (EOE). Minorities, Females and Handicapped are encouraged to participate.

Your participation in the RFP process is important to El Dorado County!

#### STATEMENT OF NO RESPONSE

If Vendor is not submitting a response to this BID, RFP, RFI, RFQ, etc, please complete and return this form to: El Dorado County Procurement and Contracts, 330 Fair Lane, Placerville, CA 95667, or fax to (530) 295-2537. Failure to respond to a BID, RFP, RFI, RFQ, etc, or submit a 'Statement of No Response' three (3) times in succession will result in removal from the County's bidders list.

Board of Supervisors Procurement Policy C17, Section 8.2: Removal of a vendor from the bidders list may be for:

- (a) Failure to respond to more than three (3) consecutive formal invitations to bid; or
- (b) Failure to respond responsibly to more than three (3) notices to bid; or
- (c) Failure to perform after an award of a bid; or
- (d) Other reasons that show the bidder to be a non-responsive or non-responsible bidder.

The Purchasing Agent must review and approve the removal of a vendor from the bidders list. The Purchasing Agent shall notify the vendor in writing that said vendor has been removed from the bidders list. Vendors removed from the bidders list shall have an opportunity to request reinstatement at any time, and may submit a bid notwithstanding if they have been removed from the list. The request for reinstatement must be submitted to the Purchasing Agent on such forms as provided by the Purchasing Agent

Invitation # (BID, RFP, RFI, RFQ, etc.):		
Name of Firm:		<del></del>
Address:		
Signature:		
Telephone Number:	Date:	
	Date:Date:	
	se for the following reason(s) (please check all the	
The above has declined to submit a bid respon	use for the following reason(s) (please check all the and/or service or an equivalent.	
The above has declined to submit a bid respon  We do not offer this commodity ar	ase for the following reason(s) (please check all the ad/or service or an equivalent.  RFP.	