



SACOG Board of Directors

November 5, 2008

Endorse the Board Chair's Release of Request for Proposals for Aerial Imagery Collection

Issue: The Board Chair authorized staff to release the attached Request for Proposals. Several jurisdictions have requested that staff explore a consolidated purchase of high-resolution aerial imagery for their jurisdictions in the SACOG region. The attached scope of work was incorporated into a Request for Proposals to solicit vendors to bid on an imagery collection project.

Recommendation: That the Board endorse the decision of the Board Chair to release the Request for Proposals for Aerial Imagery Collection.

Committee Action/Discussion: Due to a lack of a quorum at the October 2008 Board of Directors meeting, staff did not receive authorization to release the attached Request for Proposals. The Board Chair authorized the release to allow staff to keep the schedule for this project requested by our members. Release of the RFP is critical to meet the schedule to have vendor selection and contact approval at the December 18, 2008, Board meeting.

For the last eight years, staff has worked with our member agencies to coordinate aerial imagery collections at regular intervals. In 2006, staff coordinated a project that collected over 1,000 square miles of imagery that was funded by local agencies, homeland security grants and U.S. Geological Survey Partnership funding. Regional high-resolution imagery collections are essential for municipal facility mapping and land use monitoring. Ultimately, these imagery collections support detailed information developed by our local members and displayed on Google and other mapping websites.

The cities of Davis, West Sacramento, Elk Grove, Folsom and Rancho Cordova, along with the County of Sacramento, have asked SACOG staff to explore an updated high resolution aerial imagery purchase. Staffs from these agencies have recently heard that next year's budgets may be more challenging. If so, their municipal imagery sets could grow to be four or five years old if this project does not occur.

By coordinating a regional project through SACOG, these members are eligible to receive U.S. Geological Survey local partnership funding for the collection. The regional GIS committee has requested that SACOG act as the contracting agency. The total project cost includes costs for SACOG to administer the project and to contract with a qualified aerial imagery collection project manager. A separate request will be brought to the Land Use & Housing Committee and the Board for this administrative contract. Staff does not possess the necessary expertise to review the deliverables with the selected vendor.

The Request for Proposals requires vendors to submit proposals by November 18 outlining their proposed collection plan and quality assurance/quality control plan. Vendors are asked to submit a price for two options that cover a range of funding possibilities. SACOG staff will lead participating agencies in negotiations with qualified vendors beginning the week of December 1. Data collection is scheduled for late February to mid April 2009. Agencies who decide to participate in this project will need to make funding and collection area commitments by November 30.

Approved by:

Mike McKeever
Executive Director

MM:SH:gg
Attachment

Key Staff: Gordon Garry, Director of Research & Analysis, (916) 340-6230
Joe Concannon, Supervising Senior Research Analyst, (916) 340-6234
Steve Hossack, Senior Research Analyst, (916) 340-6204

S:\SACOG\BRDPCKTS\2008 Packets\Nov 08\06-Aerial imagery.doc 0900502



SACRAMENTO AREA COUNCIL OF GOVERNMENTS

REQUEST FOR PROPOSALS

**SACOG Regional GIS Committee
2009 High Resolution Imagery
Collection Project**

October 30, 2008

1415 L STREET, SUITE 300
SACRAMENTO, CALIFORNIA 95814
(916) 321-9000

**SACRAMENTO AREA COUNCIL OF GOVERNMENTS
REQUEST FOR PROPOSALS
2009 HIGH RESOLUTION IMAGERY COLLECTION PROJECT**

I.	INTRODUCTION	1
II.	BACKGROUND.....	1
III.	PROJECT SUMMARY AND DESCRIPTION.....	2
IV.	SCOPE OF WORK/SERVICES	3
V.	CONTRACT DELIVERABLES.....	8
VI.	CONTACT PERSONS.....	8
VII.	PROJECT TIMETABLE	9
VIII.	GENERAL CONDITIONS	9
IX.	PROPOSAL CONTENT AND ORGANIZATION.....	12
X.	PROPOSAL EVALUATION AND SELECTION	14
XI.	PAYMENT SCHEDULE.....	15
XII.	PROJECT CANCELLATION	15
PART A: STANDARD AGREEMENT BETWEEN SACOG AND CONSULTANT.....		16
PART B: MAPS OF PROJECT AREAS		
(Shapefiles for all areas are available on the Project FTP Site)		
Map 1. Participating Cities and Project Collection Areas		
Map 2. Existing Elevation Model Areas		
Map 3. Downtown Sacramento Area		

I. INTRODUCTION

SACOG is a voluntary association of governments. Member jurisdictions include: the County of Sacramento (including the cities of Citrus Heights, Elk Grove, Folsom, Galt, Isleton, Rancho Cordova and Sacramento); the County of Yolo (including the cities of Davis, West Sacramento, Winters, and Woodland); the County of Sutter (including the cities of Live Oak and Yuba City); the County of Yuba (including the cities of Marysville and Wheatland); Placer County (including the cities of Auburn, Colfax, Lincoln, Rocklin, Roseville and Town of Loomis) and El Dorado County (including the City of Placerville).

SACOG is the federally designated Metropolitan Planning Organization (MPO) for the Sacramento, Davis and Marysville/Yuba City urbanized areas. SACOG is also the state designated Regional Transportation Planning Agency (RTPA) for the counties of Sacramento, Yolo, Sutter and Yuba.

The Sacramento Area Council of Governments (SACOG) Regional GIS Committee is seeking qualified consultants to manage, collect, process, and distribute leaf-off imagery to members in the Sacramento Urbanized Area. The imagery will be used by SACOG jurisdictions to identify and manage municipal infrastructure. Imagery must be collected in leaf-off conditions during February, March and April 2009.

This project will update 6-inch pixel resolution imagery and 1-foot oblique imagery collected in February and April 2006. For 2009, the Committee plans to collect a minimum of 692 square miles of 6-inch pixel resolution and 92 square miles of 1-foot pixel resolution orthoimagery during leaf-off conditions in February, March, and April 2009. The Committee also requests an optional purchase price to expand the project area by 113 square miles of 6-inch pixel resolution and 248 square miles of 1-foot resolution orthoimagery. A decision on the final project area will be made prior to contract negotiations.

II. BACKGROUND

Between February and April 2009, the selected consultant will update orthoimagery and oblique imagery previously collected by the SACOG Regional GIS Committee in 2006. The imagery collected in 2006 has become a central element to many municipal infrastructure management projects.

The orthophotography will subsequently be used to support a variety of needs within the SACOG Regional GIS Committee Membership including generating new planimetric detail for GIS. The data produced from this project will also be used in a number of software systems including ArcGIS, Intergraph, and AutoCAD. All data produced for this project shall meet National Map Accuracy Standards for 1"=100' mapping at a minimum.

III. PROJECT SUMMARY AND DESCRIPTION

The primary project involves providing all of the ground control surveys, flights photography, photo lab work, film scanning, analytical aerotriangulation, terrain extraction, digital terrain modeling and digital image processing needed to produce color digital orthophotography with 6-inch pixel resolution and a horizontal accuracy of +/- 2 feet and 1-foot pixel resolution to meet National Map Accuracy Standards for 1"=100' mapping. Projects should be priced to collect and process 692 square miles of the 6-inch resolution imagery and 92 square mile of 1-foot imagery with options to add additional square miles as outlined in the Scope of Work.

Images must be collected between February and April of 2009 when deciduous vegetation is leafless (referred to herein as "leaf-off").

As an optional task, Proposers should develop an independent project monitoring and quality review plan. The SACOG Regional GIS Committee has reserved eight to ten percent of the project budget for independent project monitoring, quality control and quality assurance review. Proposers may include an option that includes independent project management in their proposals to addresses the need for independent project monitoring and independent quality review of the project processing plan and deliverables.

The project area includes the urbanized areas, plus several adjoining rural areas for SACOG member jurisdictions participating in this project that are listed in Part B: Map 1. The total proposed aerial imagery collection area is 784 square miles as illustrated on the map in Map 1. At the discretion of the SACOG Project Manager, the project area may optionally be expanded to include an additional 361 square miles for portions of the County of Sacramento and service areas of the Sacramento Municipal Utility District as illustrated on the map in PART B: Map 1. Proposals are required to include a cost estimate based on the proposed aerial imagery collection area illustrated in Map 1 and a separate cost estimate for the Option A area illustrated in Map 1.

The contract for the 2009 High Resolution Imagery Collection Project will be an agreement between SACOG and the consultant. Changes to the scope of work may be negotiated before the final contract and work scope are signed. Alternative approaches are welcome and should be discussed in the response to this request. Proposals must include evidence that they have relevant past experience and have previously delivered services similar to the ones outlined in the Scope of Work. (See Section IV)

SACOG will provide contract administration services. The consultant will invoice SACOG for services rendered and SACOG will compensate the consultant for these services as set forth in the agreement. Funding for the consultant services will be provided by SACOG through agreements with the U.S. Geological Survey, the University of California Davis, the County of Sacramento, the Town of Loomis, and the Cities of Citrus Heights, Davis, Elk Grove, Folsom, Galt, Rancho Cordova, Sacramento, West Sacramento and Woodland. The SACOG Board of Directors will award the contract and project deliverables will be reviewed by the SACOG Project Manager.

IV. SCOPE OF WORK/SERVICES

The scope of work is described below. The selected consultant or consulting team will be expected to perform all technical and other analyses necessary to complete the scope of work. The consultant will receive general direction from the SACOG Project Manager. Members of the SACOG Regional GIS Committee are funding this project to collect leaf-off, winter 2009 Imagery that will be delivered in September 2009. Tasks will include the following:

OPTION B : PROJECT MONITORING AND QUALITY REVIEW

This task is included as an option in this Request for Proposals. The Sacramento Regional GIS Committee will review all options submitted; if none are found acceptable, a separate request for proposal on this task will be issued in December 2008. The SACOG Regional GIS Committee has reserved eight to ten percent of the project budget for independent project monitoring, quality control and quality assurance review.

In the optional task, proposers may include independent project management in their proposals to addresses the need for independent project monitoring and independent quality review of the project processing plan and deliverables. At a minimum, the task shall include project plan review, a regular reporting schedule, and a clear communication plan with products and meeting dates between the Imagery Collection and Processing Vendor and the Independent Review Consultant.

Deliverables:

1. A report of the weather conditions in Sacramento from February 15, 2009 through April 30, 2009.
2. Project Plan Review and Draft Monitoring and Quality Review Plan
3. Monthly Reports
4. Quality Review Reports for Each Collection and Processing Deliverable

TASK 1: IMAGERY COLLECTION AND PROCESSING

The Imagery Collection and Processing consultant or consulting team will be expected to perform all technical and other analyses necessary to complete the scope of work for the primary project. The consultant will receive general direction from the SACOG Project Manager or a contractor representing SACOG for this project. It is the intent of the SACOG Project Manager to retain an independent qualified contractor to administer the scope-of-work described in this RFP, to manage the consultant contract, and to provide quality assurance tasks for the deliverables received from the project.

The project involves providing all of the ground control surveys, flying and photography, photo lab work, film scanning; analytical aerotriangulation, terrain extraction, digital terrain modeling and digital image processing needed to produce color digital orthophotography with 6-inch pixel

resolution and a horizontal accuracy of +/- 2 feet. The project plans collect 692 square miles of 6-inch pixel resolution orthoimagery and 92 square miles of 1-foot resolution imagery. As an option, proposers are asked to price an additional 113 square miles of six-inch pixel resolution and 213 1-foot resolution orthoimagery for the areas outlined in PART B: Map 2

Proposals using digital cameras are welcomed, as are alternative approaches using film. All vendor references should include the capture method used on each project.

A LIDAR collection for the Sacramento County area was completed in 2004. Additional LIDAR collection covering other areas in the region was completed in 2006. The resulting LIDAR points and/or digital terrain model from those efforts can be provided to the Consultant for the 2009 orthophotography effort. PART B: Map 2 outlines the areas with LIDAR and/or Digital Elevation Models and the shape files are available on the project FTP Site.

TASK 2: GROUND CONTROL

The Consultant shall be responsible for establishing sufficient ground control to perform the required digital orthophoto processing. The control survey shall be completed in accordance with accepted industry practices and the applicable provisions of the California Land Surveyor's Act. Global Positioning System (GPS) surveys shall be conducted in conformance with the most current Federal Geodetic Control Committee standards. The setting of control by airborne GPS methods is permissible.

The SACOG Regional GIS Committee requires that all ground control coordinates and data products derived from them be furnished in California State Plane Coordinates, Zone 2. Horizontal datum shall be NAD 83 (1991.35 epoch); vertical datum shall be NAVD 1988. Working units shall be in U.S. survey feet. Ground control accuracy shall be second order or better.

Proposers should also examine existing ground control and terrain models to determine if existing data is suitable for completing the scope-of-work and meeting the quality requirements of this project. Proposals should include an evaluation of this data, identify additional data required, and a proposal for collecting this additional data. SACOG will provide files and data of all existing ground control, LIDAR, and terrain models on the project FTP site. Additional information and details will be provided on SACOG's Frequently Asked Questions (FAQ) portion of the project proposal site.

Proposals should also include a proposed flight and control plan. The planning map shall be of a known, even engineering scale, and shall indicate the proposed control locations, stereo model layout, and flight plan, including flying height during the collection. The mapping limit line shall also be plotted on the planning map. The mapping limit includes SACOG proposed project areas shown on PART B: Map 1. Flight plans should be proposed as a west to east flight lines.

All labor and materials related to the ground control survey, including research and permits, shall be the responsibility of the Consultant.

Deliverables:

1. One bound set of all field data and derived information, including horizontal and vertical coordinates for all control positions
2. One ArcGIS compatible file detailing the flight plan and containing the control point positions

TASK 3: AERIAL PHOTOGRAPHY

Color aerial photography shall be acquired using a precision aerial mapping camera equipped with a focal length lens and forward motion compensation. Consultant shall furnish the SACOG Project Manager with a calibration report for the camera that is current within 3 years.

Acquisition of aerial photography shall be conducted on a clear day/s during late February, March, or Early April 2009, between 10:00 a.m. and 2:00 p.m. Pacific Standard Time when the sun angle is not less than 30 degrees. Photography will not be undertaken when the ground is obscured by haze, smoke, fog or dust. Deciduous vegetation must be leafless (leaf-off). The scale of the photography shall be 1"=800.' Orthophoto mapping limit boundaries shall fall within neat model limits of the photography. Consultant shall be liable for ensuring that all photography complies with industry standard tolerances for flight altitude, tilt, sidelap, endlap, and crab.

Proposals also must include an explanation of consultants proposed method for correcting distortion in Downtown Sacramento. Any distortions resulting from building height and lean must be corrected, removed, or reduced in the final orthophotography. An area map delineating this area is included as PART B: Map 3. A shapefile of the area is available on the project FTP site. Any distortion in other features, such as bridges, overpasses, and large towers must also be corrected in any of the final orthophoto images. All imagery for the downtown area must be completely orthogonal and buildings cannot reflect any tilt. Proposals should provide details on the number of flight lines and be specific on the percentages for side lap and overlap to address this issue.

If film is used, all exposed film shall be processed using best available technology. All negatives shall be clear, sharp, and free of blemishes or damage. Each individual frame shall be labeled with the date and time of photography, photo scale, the name of the SACOG Regional GIS Committee Member jurisdiction, flight line number, and exposure number. Consultant shall be responsible for storage of the negatives, unless and until delivery is requested by the SACOG Regional GIS Committee.

Deliverables:

1. Collection Progress Reports (See Section XII for Cancellation Clause)
2. One camera calibration certificate
3. One photo index sheet

4. Film proposals shall include a deliverable of the proposed film scans from four pre-determined pilot areas included with scanner settings for discussion with the Independent Review Consultant.

TASK 4: ANALYTICAL AEROTRIANGULATION

The SACOG Regional GIS Committee encourages use of analytical aerotriangulation to reduce field control costs, and to verify integrity of the survey. Best available technology shall be utilized. The use of softcopy analytical aerotriangulation, or digital aerotriangulation, is acceptable. The consultant shall document the process and methods used.

Consultant shall deliver a bound copy of the analytical aerotriangulation results. Coordinates and residual values shall be reported for all points. RMS values and ground elevation accuracy shall be completed and reported for the final adjustment. Discarded points shall be noted and discussed.

Deliverables:

1. One copy of the documented aerotriangulation process
2. One copy of aerotriangulation results

TASK 5: DIGITAL ORTHOPHOTOGRAPHY

Digital orthophotography shall be produced using the digital terrain models, control data, camera calibration data, and raw raster imagery scanned from the aerial negatives as input. The rectification process shall involve the solution of the appropriate photogrammetric equations for each pixel in the output image. Solution of photogrammetric equations at anchor points only, and warping the content of the original image between anchor points (rubber-sheeting) shall not be permitted.

If non-digital collection methods are proposed, aerial negatives or film diapositives shall be converted to digital raster images using a precision photogrammetric scanner. Proposers shall state their proposed scanning resolution and the type of scanner to be utilized. The SACOG Regional GIS Committee Membership specifically forbids interpolation of digital raster images to a resolution finer than that achieved by the scanning device.

The SACOG Regional GIS Committee Membership will provide existing digital elevation data (LIDAR points and digital terrain model) for some of the project area for use by the consultant. Other parts of the region may provide digital terrain models for collection area, or may require the vendor to propose new LIDAR collection if existing data is not suitable. The consultant shall evaluate the use of this data in addition to producing a new digital terrain model for use in orthorectifying the imagery. Proposals should describe the approach and requirements for this data.

If required, new terrain models may be produced by any appropriate method available. This includes photogrammetric data extraction through interactive means or autocorrelation. LIDAR

technology may also be utilized. Where automated data extraction is used, it is required that all point information be corrected to ground level. While the SACOG Regional GIS Committee has not set specific requirements for mass point or break line density. Consultants must ensure that both the DTM and derivative data products meet the accuracy requirements of the project.

Digital orthophotography shall be created as color .TIF files. Pixel resolution shall be 6-inches and 1-foot for the areas outlined in Part B: Map 1. Separate tiling schemes are required for the Sacramento/Placer and Davis/Woodland areas. Individual orthophoto image files shall match their corresponding tiles in the SACOG Regional GIS Committee Membership's map sheet grid (available on the project FTP Site). Tiles shall be mosaicked so the images appear to be completely seamless when displayed or plotted. Radiometric adjustment shall be performed to balance brightness and contrast of the imagery over the entire project or through any geographically contiguous project area.

Consultant shall be responsible for georeferencing all orthophoto tiles and providing TFW world header files for each tile of the SACOG Regional GIS Committee Membership grid. The file naming convention will be approved by the SACOG Regional GIS Committee.

For each SACOG Regional GIS Committee Member geographic area, a single, project wide image shall also be created and delivered as a MrSID file with 10:1 compression or an alternative compression rate approved by the SACOG Regional GIS Committee Membership. A special .ECW deliverable is required for the tile surrounding the City of Citrus Heights.

Deliverables:

1. One set of CD-ROM (DVD) disks with 24-bit color .TIF files and world header files
2. One set of CD-ROM (DVD) disks with 24-bit color .SID files and world header files
3. SACOG Regional GIS Committee Member geographic area 24-bit color .SID files and world header file, .ECW Deliverable for the City of Citrus Heights
4. One set of DTM data in an ArcGIS compatible format for each SACOG Regional GIS Committee Member geographic area

TASK 6: PILOT PROJECT

The SACOG Regional GIS Committee Membership will require delivery of a pilot project after ground control, image acquisition and analytical aerotriangulation have been completed for the entire SACOG Regional GIS Committee Membership. This will involve production of four to six digital orthophoto tiles in a pilot project area selected jointly by the SACOG Regional GIS Committee Membership and the photogrammetric consultant. Production of the balance of the orthophoto sheets will be predicated on timely and successful completion of the pilot project by the photogrammetric consultant. It is expected that the Independent Review Consultant will review the scanned films and scanner settings for at least four different times of day and shadow type locations in the project area.

The SACOG Regional GIS Committee Membership also reserves the right to make changes in the specifications and scope of work in this document based upon results of the pilot project, and negotiate changes in the contract.

Deliverables:

1. Four to six digital orthophoto tiles

TASK 7: QUALITY ASSURANCE/QUALITY CONTROL

Proposers shall discuss their internal quality assurance/quality control programs, outlining the steps taken and the individuals responsible for ensuring the integrity of the final product. Proposers shall include the names and contact information of managers for all phases of the project. The Independent Review Consultant will need direct contact with these managers to complete the outlined monitoring tasks.

TASK 8: PRODUCT DELIVERY

In addition to all above specified deliverables, the consultant shall include delivery of the all digital products on exchangeable USB2/Firewire External hard drives. All imagery and software shall be priced as a load and leave event.

All imagery and associated data delivered as part of this project are to be provided by the selected consultant free from restrictions regarding use and distribution. SACOG and their regional GIS Committee Membership will place all data from this project in the public domain.

V. CONTRACT DELIVERABLES

See the above descriptions of the deliverables included in scope of work.

VI. CONTACT PERSONS

Joe Concannon
GIS Coordinator
Sacramento Area Council of Governments
1415 L Street, Suite 300
Sacramento, CA 95816
916-340-6234
jconcannon@sacog.org

Pre-proposal communication shall be conducted the through the Request for Proposals Frequently Asked Questions (FAQ) Site. Interested parties must register through the RFP section of the SACOG website to be notified on updates to the site. Questions may be emailed to the contact above for response through the Frequently Asked Questions section of SACOG's RFP Website.

VII. PROJECT TIMETABLE

October 30, 2008	Issue Request for Proposals
November 18, 2008	Closing Data for Proposals
November 24, 2008	Finalists contacted to schedule interviews (if needed)
November 29 – December 2, 2008	Conduct interviews (if needed); recommend consultant; Short list vendors reserve flight time
December 18 – December 19, 2008	Contract award, execute contract
December 19, 2008	Start of Project/Begin Work

Proposals must be received by SACOG, in both hard copy and electronic form as further described below, no later than 5:00 PM on November 18, 2008. If mail delivery is used, the proposer should mail the proposal early enough to provide for arrival by this deadline. Proposer uses mail or courier service at their own risk. SACOG will not be liable or responsible for any late delivery of proposals. Proposers shall submit one originally signed proposal and four copies in a sealed envelope or package clearly marked "Proposal for 2009 High-Resolution Imagery Collection Project" The Proposal must also be submitted in electronic version via e-mail to the Project Manager, as further specified in Section IX below.

By submitting a proposal, the proposer certifies that his or her name or the consultant firm's name, as well as the name of proposer subcontractors, does not appear on the Comptroller General's list of ineligible contractors for federally assisted projects.

VIII. GENERAL CONDITIONS

A. Limitations

This Request for Proposal (RFP) does not commit SACOG to award a contract, to pay any costs incurred in the preparation of proposals in response to this request, or to procure or contract for services or supplies. SACOG expressly reserves the right to reject any and all proposals or to waive any irregularity or informality in any proposal or in the RFP procedure and to be the sole judge of the responsibility of any proposer and of the suitability of the materials and/or services to be rendered. SACOG reserves the right to withdraw this RFP at any time without prior notice. Further SACOG reserves the right to modify the RFP schedule described above.

Until award of a contract, the proposals shall be held in confidence and shall not be available for public review. No proposal shall be returned after the date and time set for the opening thereof. All proposals become the property of SACOG. Upon award of a contract to the successful proposer, all proposals shall be public records.

B. Award

SACOG may ask RFP finalists to present oral briefings of their proposals. All finalists may be required to participate in negotiations and submit such price, technical, or other revisions of their proposals as may result from negotiations. SACOG also reserves the right to award the contract without oral briefings or discussion, based upon the initial written proposals. Accordingly, each initial proposal should be submitted on the most favorable terms from a price and a technical viewpoint.

C. RFP Addendum

Any changes to the RFP requirements will be made by written addenda issued by SACOG and shall be considered part of the RFP. Upon issuance, such addenda shall be incorporated in the agreement documents, and shall prevail over inconsistent provisions of earlier issued documentation.

D. Verbal Agreement or Conversation

No prior, current, or post award verbal conversations or agreement(s) with any officer, agent, or employee of SACOG shall affect or modify any terms or obligations of the RFP, or any contract resulting from this RFP.

E. Precontractual Expense

Precontractual expenses include any expenses incurred by proposers and selected contractor in:

1. Preparing proposals in response to this RFP
2. Submitting proposals to SACOG
3. Negotiations with SACOG on any matter related to proposals.
4. Other expenses incurred by a contractor or proposer prior to the date of award of any agreement.

In any event, SACOG shall not be liable for any precontractual expenses incurred by any proposer or selected contractor. Proposers shall not include any such expenses as part of the price proposed in response to this RFP. SACOG shall be held harmless and free from any and all liability, claims, or expenses whatsoever incurred by, or on behalf of, any person or organization responding to this RFP.

F. Signature

The proposal will also provide the following information: name, title, address and telephone number of individual with authority to bind the consultant or consultant firm and also who may be contacted during the period of proposal evaluation. The proposal shall be signed by an

official authorized to bind the consultant or consulting firm and shall contain a statement to the effect that the proposal is a firm offer for at least a sixty (60) day period. Execution of the contract is expected by December 19, 2008.

G. Contract Arrangements

The successful consultant is expected to execute a contract similar to SACOG's Standard Agreement, which meets the requirements of SAFETEA-LU. A copy of SACOG's Standard Agreement is attached as Part A. While \$1 million per occurrence in commercial general liability coverage is required, under special circumstances SACOG may consider a lesser amount of insurance coverage, but not an amount less than \$500,000 per occurrence.

1. Disadvantaged Business Enterprise (DBE) Policy: It is the policy of SACOG, the California Department of Transportation ("Caltrans"), and the U.S. Department of Transportation that Disadvantaged Business Enterprises ("DBE's") shall have the maximum opportunity to participate in the performance of contracts financed in whole or in part with Federal funds. DBE's are for-profit small business concerns as defined in Title 49, Part 26.5, Code of Federal Regulations ("CFR").
2. DBE Obligation: The consultant or its subcontractor agrees to ensure that DBEs have the maximum opportunity to participate in the performance of contracts and subcontracts financed in whole or in part with Federal funds provided under this agreement. In this regard, all consultants or subcontractors shall take all necessary and reasonable steps in accordance with 49 CFR Part 26 to ensure that DBEs have the maximum opportunity to compete for and perform contracts. Consultants and their subcontractors shall not discriminate on the basis of race, color, national origin, or sex in the award and performance of DOT-assisted contracts.
3. Title VI of the Civil Rights Act of 1964: The consultant agrees to comply with all the requirements imposed by Title VI of the Civil Rights Act of 1964 (49 USC 2000d) and the regulations of the U.S. Department of Transportation issued thereunder in 49 CFR Part 21.
4. Equal Employment Opportunity: In connection with the performance of the contract, the consultant shall not discriminate against any employee or applicant for employment because of race, color, age, creed, sex or national original. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship.

Each proposal, to be considered responsive, must include the following:

1. Consultant's affirmative action program, if required pursuant to the equal employment opportunity requirements of the U.S. Department of Labor Regulations (41 CFR Part 60, *et seq.*). These regulations require certain contractors to develop and maintain

affirmative action programs, including service contractors (non-construction) with 50 or more employees and a federally assisted contract of \$50,000 or more.

2. Discussion of the consultant's proposed use of DBEs, if any, in the performance of this work, including the following:
 - The names and addresses of DBE firms that will participate
 - The description of the work each named firm will perform
 - The dollar amount of participation by each DBE firm

Additionally, the Disadvantaged Business Enterprise Information Form, attached hereto as Exhibit "B," must be completed.

3. Conflict of Interest: Consultants and consultant firms submitting proposals in response to this RFP must disclose to SACOG any actual, apparent, or potential conflicts of interest that may exist relative to the services to be provided under Agreement for consultant services to be awarded pursuant to this RFP.

If the consultant or firm has no conflict of interest, a statement to that effect shall be included in the proposal.

IX. PROPOSAL CONTENT AND ORGANIZATION

Proposals should be limited to specific discussion of the elements outlined in this RFP. The intent of this RFP is to encourage responses which meet the stated requirements, and which propose the best methods to accomplish the work within the stated budget.

The organization of the proposal should follow the general outline below. Each proposal should consist of a technical proposal (items 1-7 below) and a cost proposal (item 8).

Form of Proposals: Proposals must be submitted in both hard copy and electronic form to Joe Concannon, 1415 L Street, Suite 300, Sacramento, CA 95816, jconcannon@sacog.org, no later than the closing date and time and with the proper number of copies, all as specified in Section VII above. The electronic form shall be a PDF version of the fully signed Proposal and shall be e-mailed to the Project Manager.

A. Transmittal Letter

The transmittal letter should include the name, title, address, phone number, and original signature of an individual with authority to negotiate on behalf of and to contractually bind the consultant or consulting firm, and who may be contacted during the period of proposal evaluation. Only one transmittal letter need be prepared to accompany all copies of the technical and cost proposals.

B. Table of Contents

A listing of the major sections in the proposal and the associated page numbers.

C. Introduction

In this section, the proposer should demonstrate an adequate understanding of the role and relationships of SACOG.

D. Technical Approach

This should include:

1. A summary of the proposed approach
2. An explanation of the consultant's intended role as related to the role of SACOG and the Independent Review Consultant.
3. A thorough explanation of the consultant's proposed course of action. References should be made to RFP requirements and the consultant's plans for meeting those requirements. If the consultant proposes major changes to the RFP approach, those changes should be specified clearly. The consultant should specify its technical approach, especially data elements to be sampled, staff to be interviewed, and documents to be reviewed, etc.
4. An itemized description of the proposed project schedule (including visits, draft and final deliverables) and the deliverables to be produced. The proposal must include a proposed Final Delivery Date when all products are to be delivered and the project completed for final payment.

E. Review of Project Terrain Models

The proposer must include an evaluation of the SACOG supplied terrain models and their suitability for use in the project. SACOG will provide the models through the project FTP site. The models consist of the 2006 LIDAR for the City of West Sacramento, 2004 LIDAR for all of the 6-Inch pixel resolution imagery area in Sacramento and 10 meter USGS elevation models for Placer County and Rural Sacramento County.

F. Project Task Management

Proposers must prepare an explanation of the project management system and practices to be used to assure that the project is completed within the scheduled time frame and that the quality of the delivered products will meet the quality requirements outlined in Part IV - Scope-of-Work..

G. Consultant and Subcontractor Staff

The proposal must describe the qualifications and experience of each professional who will participate in the project, including a resume for each member of the project team. A project

manager must be designated, and an organizational chart showing the manager and all project staff must be included. A matrix must be presented indicating the effort, either in percentage of the total project or in person-hours, which will be contributed by each professional, during each phase or task making up the project. If a subcontractor will be used, the proposer must include a letter from the subcontractor committing to perform at least the work shown for subcontractor professional in the above-described matrix.

H. Consultant Qualifications and References

The proposal must describe the nature and outcome of projects previously conducted by the consultant which are related to the work described within the RFP. Descriptions should include client contact names, address, phone numbers, descriptions of the type of work performed, approximate dates on which the work was completed, and professional staff who performed the work. If a subcontractor is proposed, two to three similar qualifications and references should be provided for the subcontractor. Up to two samples of the consultant's work on closely related projects can also be included with the proposal, if available. Additionally, the proposer must complete the Debarment Certification Form, attached hereto as Exhibit "C." The proposer must also complete the Levine Act Disclosure Statement attached hereto as Exhibit "D."

References should include a minimum of three Independent Contractor References and three project references for the proposed collection methodology.

I. Cost Proposal

The cost proposal shall describe both the total and the detailed price for which the consultant will commit to complete the total scope of work and end products. The cost proposal detail shall describe estimated costs (only the total amount is a binding offer) for each professional's time, for the completion of each proposed task, for travel and per-diem (if applicable), and for materials and supplies. Failure to provide adequate cost data will result in the proposal rejection as unresponsive.

X. PROPOSAL EVALUATION AND SELECTION

A proposal review panel made up of SACOG and member agency staff from the SACOG Regional GIS Committee will evaluate the proposals. Proposers may be telephoned and asked for further information, if necessary, and may be expected to appear for oral interviews. Previous clients may also be called. The panel will make recommendations to the SACOG Executive Director on the basis of the proposal, oral interview, and reference check. SACOG reserves the right to select a consultant based solely on written proposals and not convene oral interviews.

Upon receipt of the proposals, a technical evaluation will be performed. Each of the major sections of the proposal will be reviewed and evaluated with criteria designed to help judge the quality of the proposal. Evaluation criteria will include such considerations as:

- Understanding of the background and requirements of the project.

- The overall and technical approaches to be followed and the tasks to be performed, including detailed steps and resources required and proposed project schedule.
- The relative allocation of resources, in terms of quality and quantity, to key tasks including the time and skills of personnel assigned to the tasks and consultant's approach to managing resources and project output.
- Cost analysis and justification.
- Education and experience of proposed personnel (preferably 5 years experience)
- Review of Project Terrain Models

In addition, the participation of qualified Disadvantaged Business Enterprises (DBE's) in this project is strongly encouraged. (See Section VIII. G. above.)

XI. PAYMENT SCHEDULE

The consultant will be paid in arrears, based upon the payment schedule agreed to in the contract. The payment schedule will be based on review and acceptance of the deliverables by the Independent Review Consultant. The Imagery and Processing Consultant should forward a copy of all invoices for payment for work performed and associated expenses by the 15th day of the following month. All payments shall be contingent upon acceptance of the products by SACOG. At SACOG's discretion, SACOG may withhold ten percent (10%) of the payments until the successful completion of the project and the delivery and acceptance of all final products. As set forth in the attached Agreement, Contractor shall pay liquidated damages for each calendar day of delay beyond the final delivery date.

XII. PROJECT CANCELLATION

This project is planned to collect clear 6-Inch and 1-foot pixel resolution orthoimagery for urbanized portions of the SACOG region during leaf-off conditions. The sun-angle prevents collection before mid-February in this region and trees can leaf as early as late March. The SACOG Regional GIS Committee requires a progress reports on the collection March 20, 2009, and April 1, 2009, to evaluate the potential for true leaf-off conditions.

The Imagery Collection and Processing consultant will receive seven days notice on either March 23 or April 2 that the project has been cancelled. The consultant will be reimbursed for verified collection costs that were incurred if the delay of the project plan was due to weather. Non-weather delays shall be deducted on a per day basis based on the proportion of non-weather over weather day collection delays.