

# County of Los Angeles INTERNAL SERVICES DEPARTMENT

9150 E. Imperial Hwy. Downey, California 90242

> Telephone: (323) 267-2103 FAX: (323) 264-7135

"To enrich lives through effective and caring service"

June 14, 2016

Ken Farfsing City Manager City of Carson

Dear Ken Farfsing,

# LOS ANGELES REGION IMAGERY ACQUISITION CONSORTIUM (LARIAC5) AND KICK-OFF MEETING

Established in 2005, the Los Angeles Region Imagery Acquisition Consortium (LARIAC) has delivered highly accurate digital aerial imagery and elevation datasets to participants at substantial cost savings, and has become a national model for collaborative data acquisition. LARIAC participants include 45 cities, 20 County departments, 11 local, state, and federal agencies, and 7 educations institutions.

To ensure the currency of the aerial imagery, we are working with consortia members to plan and initiate the next round of LARIAC – **LARIAC5**. This document describes LARIAC, highlights its benefits, provides a status update, and discusses the proposed scope, schedule, and cost. Your portion of the cost of LARIAC5 will not exceed **\$48,384**, which is the same cost as LARIAC4.

# **KICK-OFF MEETING**

We invite you to attend the LARIAC5 Kick-Off Meeting, which will include detailed project discussions, presentations by existing participants, and the opportunity to ask questions. This meeting will allow you to gather more information about LARIAC5 and discuss project benefits with other participants.

The Kick-Off Meeting will be held on:

Thursday, July 28<sup>th</sup>, 2016 10:00 AM – 12:00 PM Room 150 Hall of Records 320 West Temple Street Los Angeles, CA 90012

Please RSVP at: http://egis3.lacounty.gov/dataportal/lariac/lariac5-kick-off-meeting/

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To conserve paper, we will also E-mail a digital copy to current LARIAC participants. These participants are listed on Attachment I.

# LARIAC BACKGROUND

LARIAC is a consortium of the County of Los Angeles, in partnership with cities and agencies, which collaboratively acquires valuable digital aerial data, including imagery and elevation data. Leveraging the buying power of the combined agencies, LARIAC has reduced costs and enabled participants to acquire more data than would be possible individually.

We estimate LARIAC has saved participants over \$15 million in direct acquisition costs to date.

The LARIAC Website (<a href="http://egis3.lacounty.gov/dataportal/lariac/">http://egis3.lacounty.gov/dataportal/lariac/</a>) provides comprehensive information about the project, including detailed data descriptions and samples, product guides, documentation, and agreements.

## DIGITAL AERIAL IMAGERY AND ELEVATION BENEFITS

Digital aerial imagery and elevation data provide valuable support for decision making within agencies, as well as cost savings for operations. High quality imagery data enables staff to "see" before they go, and reduces field work and information collection costs. Some examples include:

- **Public Safety:** Fire and Police personnel can "see" the location of incidents and addresses, improving dispatching, crime analysis, incident response, and officer safety.
- **Public Works**: Reduces the need for field visits, supports traffic and pavement management, storm drain and flood protection, and enhances project planning and infrastructure management.
- **Planning:** Improves code enforcement, site plan review, and understanding the impacts of new projects.
- **Economic Development:** Improves outreach to businesses by providing detailed site information for potential developments and surrounding areas.
- **Disaster Planning and Response:** Improves planning and response before, during, and after disasters, and provides the foundation for a Common Operating Picture.
- **Community Outreach:** Improves communication with residents by providing a picture of the area of discussion, increasing citizen engagement.
- **Operational Efficiency:** A consistent view of a city or agency supports collaboration, integration, and efficiency to lower operational costs.

# **LARIAC BENEFITS**

High resolution data provided through LARIAC data offers key benefits when compared to aerial imagery from online providers ("free mapping websites" like Google or Bing), and off-the-shelf vendors. These include:

- Enhanced resolution (4-inch rather than 1-foot) shows greater detail and provides more information (you can see manhole covers and road striping);
- Unparalleled accuracy (+/- 2-feet accuracy) ensures information captured from the imagery is in the right location, supporting facilities management, planning, and operations;
- Breadth of products (orthogonal and oblique imagery, building footprints, and elevation data) to support of city or agency's business needs;
- Multiple access methods, including desktop, handheld, and mobile, as well as local and remotely hosted solutions to eliminate agency hardware and software costs;
- Variety of formats, including GIS-ready, CAD-ready, and compressed formats to enable use within existing applications in the field;
- Historical data from earlier acquisitions to provide change detection; and
- Complete control of the data, including the use by your contractors. LARIAC
  participation covers data use and deployment across or agency in all applications, from
  planning to emergency services to public works.

One of the key benefits of LARIAC is cost sharing, which lowers costs as more cities and agencies participate. Cost savings are passed back to participants, and the more participants join, the lower the cost.

To date, 74 cities, County departments, and agencies have benefited through these cost savings. These entities are listed in Attachment I. We invite you to contact these participants to learn more about their use and benefit from the LARIAC.

# LARIAC5

LARIAC5 is in its fifth round (LARIAC5) of digital aerial data acquisition, scheduled for winter 2016-17 with delivery by September 2017.

LARIAC5 will update its highly accurate orthogonal and oblique imagery, as well as derived data including building outlines and land cover. Elevation data, which was acquired in 2016 as part of LARIAC4, and which is currently processing for delivery, will not be updated.

Major new additions to LARIAC5 include near infrared imagery, as well as the addition of a new product, multiple imagery acquisitions

# **LARIAC5 Product List**

# Orthogonal Imagery

- 4-band orthogonal imagery (including color infrared) at 4-inch resolution in the urban areas, and 1-foot in the National Forest.
- Multiple formats (TIFF, JPEG2000, and compressed ECW).
- 3-band orthogonal imagery acquired 4 times a year (4-inch resolution) for internal use provided as a map service.

# **Oblique Imagery**

- 3-band color oblique imagery at 4-inch resolution.
- Online hosted access for desktop and mobile devices.

## **Building Outlines**

Building outlines updated for all buildings over 400 square feet.

## **Derived Data**

Updated 2017 Land Cover at high resolution.

#### **GIS Viewer Access**

• Enhanced access to the LARIAC data, current parcel information, other County GIS data, and mapping and GIS tools through the County's GIS Viewer.

The table below shows the various LARIAC data acquisitions.

<u>Data</u>	<u>2006</u>	<u>2008</u>	<u>2011</u>	2014	<u>2017</u> (LARIAC5)
Orthogonal Imagery (4-inch)	X (including Infrared)	X	Х	X (including 2012 and 2103 1- foot imagery)	X (including Infrared imagery and multiple acquisitions per year)
Oblique Imagery	X	X	X	X	X
Building Outlines		X		X	X
Elevation Data	X			X	
Derived Data (tree canopy, solar insolation, slop, hillshade, height model, land cover, etc.)	Х			Х	Х

# **LARIAC5 COSTS**

While final costs will be determined upon contract execution, we anticipate that overall LARIAC5 contract costs will be approximately the same as LARIAC4, based upon the addition of multiple acquisitions per year offsetting the elimination of terrain data acquisition. Any costs

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that are lower than estimated will be shared among LARIAC participants, and if more participants join LARIAC, costs will be adjusted accordingly.

Your portion of the cost of LARIAC5 will not exceed **\$48,384**. To provide funding flexibility, the County will accept payments from two fiscal years to reduce the budget impact of a single, large payment. It will also allow you to include any reduction in price from additional participants joining LARIAC5 in your second payment.

# **LARIAC5 PARTICIPATION**

If your city or agency is interested in joining LARIAC5, please complete, sign, and return the attached "Letter of Intent" on your business letterhead. The County understands the Letter of Intent is subject to final approval by your City Council or authorizing Board of Directors.

To confirm your city/agency's commitment to participating in funding LARIAC5, complete and return the attached "Participant Agreement," authorizing the County to invoice your city/agency for the initial payment.

Please return either the signed "Letter of Intent" or "Participant Agreement" to:

Attention: Satya Choday County of Los Angeles Internal Services Department Mailstop #42 9150 Imperial Highway Downey, CA 90242

We look forward to seeing you at the July 28<sup>th</sup> kick-Off Meeting. If you have any questions, please contact Christine Lam at (562) 940-3844 or <a href="mailto:clam2@isd.lacounty.gov">clam2@isd.lacounty.gov</a> or the LARIAC Outreach Manager, Nick Franchino at (213) 893-0881 or <a href="mailto:nfranchino@planning.lacounty.gov">nfranchino@planning.lacounty.gov</a>.

Sincerely,

Christine Lam

Christan

CC: Mr. Alex Rocco Attachments (4)

# ATTACHMENT I

# **LARIAC PARTICIPANTS**

	LARIAC1	LARIAC2	LARIAC3	LARIAC4
	Citie	S		
City of Agoura Hills	X		X	-
City of Arcadia				Х
City of Azusa	X	Х		Х
City of Bellflower			X	-
City of Beverly Hills	Х	Х	Х	Х
City of Burbank	X	Х	X	Х
City of Carson	X	Х	X	Х
City of Cerritos	Х	Х		Х
City of Claremont		X	X	Х
City of Covina	X	Х		Х
City of Culver City	Х	Х	Х	Х
City of Diamond Bar	X	X		-
City of Downey	X		X	Х
City of Duarte				Х
City of El Monte				X
City of El Segundo	X	X	X	Х
City of Gardena				Х
City of Glendale	Χ	Х	X	Х
City of Hermosa Beach	X	X	X	Х
City of Industry	Х	Х	Х	Х
City of Inglewood	X	Х	X	Х
City of Irwindale	X	Х		-
City of La Canada Flintridge	Х	Х	Х	Х
City of La Habra Heights	Χ	Х		-
City of Lakewood	X	Х	X	Х
City of Lancaster	Х			
City of Long Beach	Х		X	Х
City of Los Angeles	X	X	X	Х
City of Manhattan Beach	Х	Х	Х	Х
City of Monrovia	X			
City of Monterey Park	X	X		Х
City of Norwalk				Х
City of Palmdale	X			
City of Pasadena	X	X	X	X
City of Rancho Palos Verdes				Х
City of Redondo Beach	X	Х		X
City of San Dimas			X	X

	LARIAC1	LARIAC2	LARIAC3	LARIAC4
City of Santa Clarita	Х	Х	Х	Х
City of Santa Fe Springs	Х		X	
City of Santa Monica	Х	X	Х	X
City of South El Monte	Х	Х		
City of South Pasadena			Х	
City of Torrance	Х	X	Х	X
City of Westlake Village	Х			Х
City of Whittier	Х	X	Х	X
<u> </u>	ounty Dep	artments		
Agricultural Commission/Weights and Measures	X	Х	Х	Х
Chief Executive Office/Office of Emergency Management	X	X	X	Х
Department of Animal Care & Control		Х	X	Х
Department of Beaches & Harbors	Х	Х	Х	Х
Department of Children & Family Services		X	Х	Х
Department of Community & Senior Services		X	X	X
Department of Health Services	Х	X	Х	Х
Department of Mental Health		X	Х	Х
Department of Parks & Recreation	Х	Х	Х	Х
Department of Public Health	Х	Х	Х	Х
Department of Public Social Services		X	X	X
Department of Public Works	Х	X	Х	Х
Department of Regional Planning	Х	Х	Х	Х
Fire Department		Х	Х	Х
Internal Services Department	Х	Х	Х	Х
Office of the Assessor	Х	Х	Х	Х
Probation Department		Х	Х	Х
Public Library		Х	Х	Х
Registrar-Recorder/County Clerk	Х	Х	Х	Х
Sheriff's Department		X	Х	Х
Local, State, and Federal Agencies				
Alameda Corridor Transportation Authority		Х		
Caltrans	X			
LA County Sanitation Districts	X	X	X	X
LARGIN (LA Region Gang Information Network)	X	X		
Port of Los Angeles	Х	X	X	Х
Santa Catalina Island Conservancy	Х	X	Х	Х

	LARIAC1	LARIAC2	LARIAC3	LARIAC4
US Geological Survey		Х	Х	Х
Amigos de Los Rios			Х	
US National Guard			X	Х
Los Angeles Air Force Base			Х	Х
Metropolitan Transit Authority (MTA)				Х
Ed	ducational l	nstitutions		
Palos Verdes on the NET			Х	
California Poly Pomona				Х
California State University Long Beach	Х	X	Х	
California State University Los Angeles		Х		Х
Rio Hondo Community College				Х
University of Southern California (USC)	Х	Х	Х	
University of California at Los Angeles (UCLA)	Х	Х	X	

# **ATTACHMENT II**

# **SAMPLE LETTER OF INTENT**

# <Current Date>

Satya Choday County of Los Angeles Internal Services Department Mailstop #42 9150 Imperial Highway Downey, CA 90242

Dear Mr. Choday:

It is our intent to participate in the 2016-17 Los Angeles Region Imagery Acquisition Consortium (LARIAC5). LARIAC5 will acquire 4-inch color orthogonal, 4-inch oblique aerial photography, building representations (outlines), and updated imagery multiple times per year. We understand the estimated cost will not exceed \$48,384. Recognizing that our final commitment is contingent upon approval by our organization. It is understood this approval must be obtained prior to confirming our participation in this project.

If you have questions, please contact < Name and Title of Primary Contact> at < Telephone, Fax and E-mail Address>.

Sincerely,	
Signature	Print Name
Title	 Date

# **ATTACHMENT III**

# PARTICIPANT AGREEMENT BY AND BETWEEN THE COUNTY OF LOS ANGELES AND PARTICIPATING ENTITIES FOR THE LOS ANGELES REGION – IMAGERY ACQUISITION CONSORTIUM 5 ("LARIAC5") PROJECT

# PARTICIPANT AGREEMENT BY AND BETWEEN THE COUNTY OF LOS ANGELES AND PARTICIPATING ENTITIES FOR THE LOS ANGELES REGION – IMAGERY ACQUISITION CONSORTIUM 5 ("LARIAC5") PROJECT

This Participant Agreement (Agreement) is made and entered into by and between the County of Los Angeles (County), a political subdivision of the State of California, and **City of Carson**, a California city, special district, or agency. Each individual city, district, or agency is referred to herein individually as a "Participating Entity" and collectively as the "Participating Entities". The County and the Participating Entities are hereinafter referred to collectively as the "Parties" and each individually as a "Party".

- A. **WHEREAS**, County has planned to acquire new digital orthogonal and oblique aerial imagery in the winter of 2016-2017 Project;
- B. **WHEREAS**, County has become aware that various Participating Entities have similar projects currently underway or plans to undertake similar projects in the near future;
- C. **WHEREAS**, in order to avoid the duplication of efforts and costs by the Parties, the Parties desire to pool their resources to collectively undertake the Project; and
- D. **WHEREAS**, the Parties intend to participate in the Project upon the terms and conditions set forth herein below.

**NOW, THEREFORE**, in consideration of the mutual covenants herein set forth and the mutual benefits to be derived therefrom, the Parties agree as follows:

#### 1. Purpose

The purpose of this Agreement is to provide a vehicle for the collective participation in the Project by the Parties. The Project shall focus on the acquisition of certain aerial imagery digital data which may include, but are not limited to, products listed in Attachment A ("Digital Data"). It is the intent of the Parties that Digital Data shall be acquired under this Agreement for areas within the County of Los Angeles covered by the jurisdictions of the Parties.

# 2. Responsibilities of the County

- A. Identify and provide specifications for Digital Data (or their derivatives) to the contractors hired to complete the Project.
- B. Develop all necessary procurement documents for necessary services to be provided by one or more qualified contractors in connection with the acquisition and administration of the Digital Data.
- C. Select the most qualified contractor or contractors to provide the necessary services in connection with the acquisition and administration of the Digital Data and thereafter, manage the entire acquisition and administration of the Project.
- D. With the assistance of one or more selected contractors, provide Quality Control (QC) for all Digital Data delivered under this Agreement.
- E. Arrange for the delivery of the Digital Data (or portions thereof) to the Participating Entity upon Project completion.
- F. Provide monthly reports to the Participating Entities on the status of the Project.

# 3. The Participating Entity Has the Right to

- A. Participate in identifying and providing technical specifications for the Digital Data (or their derivatives).
- B. Provide currently available geodetic points (with necessary standards and accuracy) for County's QC process.
- D. Acquire additional digital aerial products from the contractors through this agreement, provided that a Statement of Work is provided. County assumes no liability for the completion of these products.

# 4. <u>Mutual Responsibilities; Maximum Contribution</u>

The Parties shall be mutually responsible for the following:

A. Financing the acquisition and administration of the Digital Data including, but not limited to, costs related to QC and the subsequent distribution thereof. The total cost of such acquisition and administration (Total Cost) shall be allocated among the Parties and the Participating Entities. The portion of the Total Cost allocated to a Party hereunder shall be hereinafter referred to as the Party's "Maximum Contribution." Each Participating Entity will transfer its Maximum Contribution to a special trust account which has been established by the County for this Project (Trust Account) and as further described in Paragraph 5 of this Agreement.

# The Maximum Contribution of the Participating Entity shall be \$48,384.

B. In the event the Project is terminated for any reason before the execution of any contract with a contractor for the provision of goods and/or services in connection with the Project, each Participating Entity shall be refunded its Maximum Contribution (or such portion of the Maximum Contribution as shall have been paid to the County by such Participating Entity) in its entirety.

# 5. Payment of Maximum Contribution; Administration of Trust Account

- A. A Participating Entity shall have the following options in paying its Maximum Contribution to the County hereunder:
  - i. The Participating Entity may elect to pay its Maximum Contribution to County in its entirety upon execution of this Agreement.
  - ii. The Participating Entity may elect to pay its Maximum Contribution to County as follows: (a) fifty percent (50%) of the Maximum Contribution upon its execution of this Agreement; and (b) fifty percent (50%) upon delivery of the Digital Data to the Participating Entity.
- B. The Trust Account established by the County in connection with the Project, shall be subject to the following:
  - i. All funds held in the Trust Account shall be used solely for the payment of contractors selected by County to provide goods and services in connection with the Project.
  - ii. Any funds held in the Trust Account not expended upon the completion of the Project or the termination of this Agreement shall be held, administered, and returned to Parties based on their prorated contribution to the total costs of the Project.

# 6. <u>General Terms and Conditions</u>

- A. This Agreement shall take effect upon execution and shall remain in effect through final delivery of all Digital Data and through the duration of the license-use term.
- B. The term of this Agreement may be extended by an Amendment to this Agreement.
- C. It is the intention of the Parties that the Participating Entity shall receive, with the delivery of the Digital Data, an unlimited irrevocable perpetual, royalty-free license. The license may be used to, modify, edit, reuse, reproduce,

translate, create derivatives, compile, other works based upon the Digital Data, and combine the data with other contents selected by the Participating Entity in its own operation, with an unlimited number of seats; including, but not limited to Internet and intranet applications, copying, and printing.

- D. The Participating Entity shall have the right to transfer, sublicense, and distribute any form of media either now known or hereinafter desired the Digital Data to its subcontractors or consultants on projects which are outsourced from its own operations. In this connection, the Participating Entity shall require each subcontractor or consultant to whom the Digital Data is transferred to execute a written acknowledgement and agreement to abide by such Participating Entity's license to use the Digital Data. Such acknowledgement and agreement is provided in Attachment B (Authorized User Confidentiality and Non-Disclosure Agreement).
- E. Notwithstanding any provision of this Agreement to the contrary, a Participating Entity shall not have the right to sell, resell, or otherwise transfer its license to use the Digital Data to any other person or entity.
- F. This Agreement may be amended or modified by County only after collaboration and consultation with the Participating Entities.
- G. Nothing in this Agreement shall be construed to give any person or entity, other than the Parties hereto, any legal or equitable right, remedy, or claim under or in respect to this Agreement or any provision herein contained. This Agreement and the provisions hereof are intended to be and are for the sole and exclusive benefit of the Parties.
- H. No Party may terminate its participation under this Agreement after the execution of contract(s) for the acquisition of the Digital Data without the prior written consent of County.
- I. Any other California city, special district, or agency may become a Participating Entity under this Agreement if:
  - (i) Such entity executes this Agreement, and
  - (ii) Such entity makes its Maximum Contribution to County as provided for under this Agreement. Any such contribution shall be deposited into the Trust Account and administered in accordance with subparagraph 5.B of this Agreement.
- J. This Agreement may be executed in counterparts and the signed counterparts shall constitute a single instrument. The signatories to this Agreement represent that they have the authority to bind their respective party to this Agreement.

**IN WITNESS WHEREOF**, the parties have executed this Participant Agreement for the Los Angeles Region – Imagery Acquisition Consortium 5 Program on the date indicated below.

PARTICIPANT ENTITY City of Carson	COUNTY OF LOS ANGELES INTERNAL SERVICES DEPARTMENT
Ву:	By:
Date:	Date:
APPROVED AS TO FORM: ALESHIRE & WYNDER, LLP	
Sunny K. Soltani, City Attorney [NDP]	

#### **DIGITAL DATA**

All data will be acquired in 2017 unless otherwise noted.

# **Orthogonal Imagery**

- 4-band orthogonal imagery (including color infrared) at 4-inch resolution in the urban areas, and 1-foot in the National Forest.
- Multiple formats (TIFF, JPEG2000, and compressed ECW).
- 3-band orthogonal imagery acquired 4 times a year (4-inch resolution) for internal use provided as a map service.

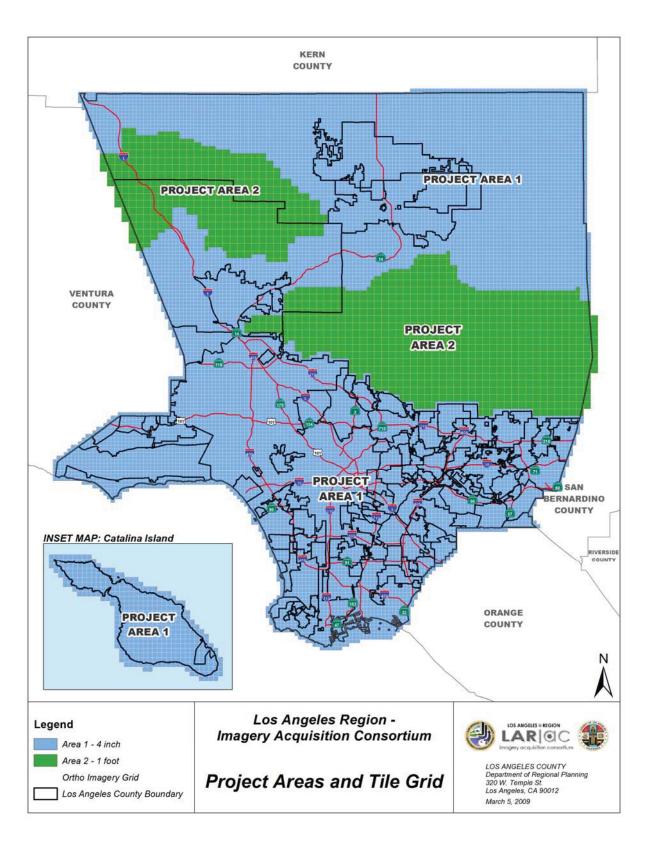
# **Oblique Imagery**

- 3-band color oblique imagery at 4-inch resolution.
- Online hosted access for desktop and mobile devices.

# **Building Outlines**

• Building outlines updated for all buildings over 400 square feet.

**Map 1: Areas for Orthogonal Imagery Products** 



Map 2: Areas for Oblique Imagery Products

