



CITY OF CARSON

Legislation Text

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Report to Mayor and City Council

Tuesday, August 15, 2017

Discussion

SUBJECT:

CONSIDER A PARTICIPANT AGREEMENT BETWEEN THE COUNTY OF LOS ANGELES FOR THE LOS ANGELES REGION - IMAGERY ACQUISITION CONSORTIUM 5 ("LARIAC5") PROJECT (CITY COUNCIL)

I. SUMMARY

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 education institutions. The City has been a member of each of the first four LARIAC collaborations.

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. The City's portion of the cost of LARIAC5 will not exceed **\$48,384**, which is the same cost as LARIAC4.

II. RECOMMENDATION

1. APPROVE entering into a participant agreement between the County of Los Angeles for the Los Angeles Region - Imagery Acquisition Consortium 5 ("LARIAC5") Project for an amount not to exceed \$48,384.00.
2. AUTHORIZE the Mayor to execute the agreement, after approval as to form by the City Attorney.

III. ALTERNATIVES

1. TAKE whatever action the City Council deems appropriate.

IV. 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 (<http://egis3.lacounty.gov/dataportal/lariac/>) 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 cost.

LARIAC BENEFITS

High resolution data provided through LARIAC 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.

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

The City's 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 the City to include any reduction in price from additional participants joining LARIAC5 in the second payment.

V. FISCAL IMPACT

Funds for the cost of the "LARIAC5" Project is included in the general fund budget for FY 2017/18 in account no. 01-70-870-290-6004 in the amount of \$48,384.00.

VI. EXHIBITS

1. Proposed Participant Agreement. (pgs. 5 - 24)

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