

> Presented to: Los Angeles Region Imagery Acquisition Consortium

LAR-IAC Status Meeting **Project Status Overview**




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LOS ANGELES REGION
LAR|IAC
imagery acquisition consortium

> Progress Meeting Infotech
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Purpose of Meeting:

- Project Overview
- Review Current Project Status
- Schedule Compliance
- Expectations for Upcoming Production Tasks
- Questions and Answers Session

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Project Overview

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LAR|IAC
imagery acquisition consortium

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Summary of Project:

Area #1 (Urban Area)

- Project area covers approx 2,900 sq. miles
- Color & CIR Digital Aerial Imagery Acquisition
- 4" Color & CIR Digital Ortho Imagery
- LiDAR Acquisition
- Digital Terrain Model/Digital Surface Model
- 2' Contours

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> Project Summary

LAR-IAC Project Area #1 (Urban 4-inch Ortho)

EXHIBIT C1
Project Area #1: Urban 4-inch Ortho

LEGEND:
 [Red Hatched Box] Project Area #1: Urban 4-inch Ortho
 [Yellow Box] Project Area #2: National Forest
 [White Box] Other Areas

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> Project Summary

Summary of Project:

Area #2 (National Forest)

- Project area covers approx 1,050 sq. miles
- Color (& CIR) Digital Aerial Imagery Acquisition
- Color (& CIR) Digital Ortho Imagery
- Digital Terrain Model/Digital Elevation Model
- 4' Contours (5' contour accuracy)

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> Project Summary

LAR-IAC Project Area #2 (Forest Areas 1-Foot)

EXHIBIT C1
Project Area #2: Digital Aerial Imagery Acquisition, Forest and Lidar Data

LEGEND:
 [Green Hatched Box] Project Area #2: Digital Aerial Imagery Acquisition, Forest and Lidar Data
 [Yellow Box] Project Area #1: Urban 4-inch Ortho
 [White Box] Other Areas

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> Project Summary

Summary of Project:

Area #3 (Catalina Island)

- Project area covers approx 75 sq. miles
- Color (& CIR) Digital Aerial Imagery Acquisition
- Color (& CIR) Digital Ortho Imagery
- LiDAR Acquisition
- Digital Terrain Model/Digital Surface Model
- 2' Contours

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> Project Summary

LAR-IAC Project Area #3 (Catalina Island)

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> Delivery Formats

Delivery Product	Format	Format	Format
Orthophoto	GeoTIFF	JPEG 2000	
Digital Surface Model	ASCII – points	ArcGIS shape file – points	Microstation (dgn) – points, lines
Digital Terrain Model	ArcGIS shape file – points, 3D lines	AutoCAD (dwg) – points, lines	Microstation (dgn) – points, lines
Digital Elevation Model	ArcGIS raster	AutoCAD (dwg)	
Contours	ArcGIS shape file	AutoCAD (dwg)	

- > Digital Surface Model- contains the masspoints (from LiDAR or photogrammetric Compilation)
- > Digital Terrain Model represents the bare earth terrain including the breaklines and mass points
- > Digital Elevation Model represents the bare earth in grid format

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Current Project Status

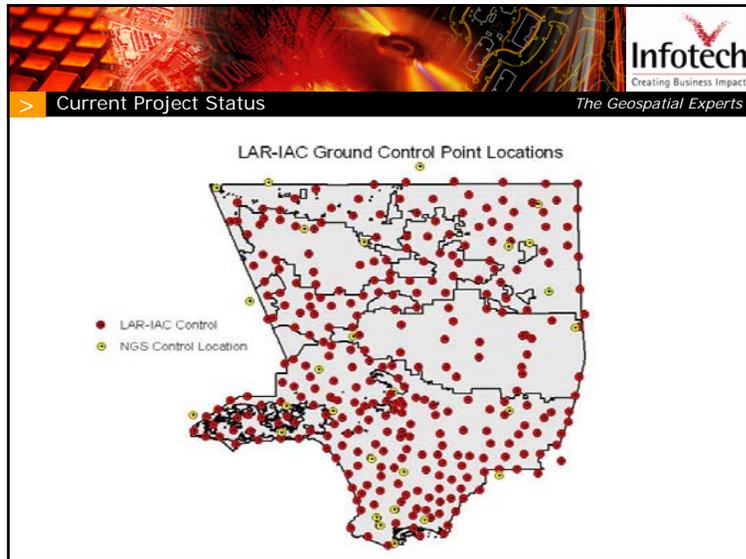
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> Current Project Status

Geodetic Control -100% completed

Accomplishments :

- 335 Total Ground Control Points (GCPs) in project area
- Dual Frequency GPS Receivers Used
- All GCPs are paneled or painted to be visible in aerial photography



Current Project Status

Digital Aerial Image Acquisition – 100% completed

- Three (3) state-of-the-art digital sensors (DMC)
- Color and CIR Digital Aerial Imagery Acquisition
- 3,000' above mean terrain for Urban Area, Catalina Island
- 9,000' above mean terrain for National Forest
- 3 distinct regions, allocated to individual team members

Current Project Status

Digital Aerial Image Acquisition (Area 1)

Accomplishments

- 100% of the imagery acquired on schedule

Challenges

- Air Quality
- Corrupt imagery for @ 80 frames in Area 1
- Small area within the southern portion of the County needed to be recollected

Current Project Status

Digital Aerial Image Acquisition (Area 2)

Accomplishments

- 100% of the imagery acquired on schedule
- No Major Issues

Challenges

- Air Quality
- Minor snow coverage

Solutions:

- Reviewed the few tiles with TAG and received approval to proceed.

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> Current Project Status



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> Current Project Status

Digital Aerial Image Acquisition (Area 3)

Accomplishments

- 100% of the imagery acquired on schedule
- No Major Issues

Challenges:

- Corrupt imagery files for a portion of the Island (40 frames)
- Cloud cover – Bad Weather Conditions
- Approximately 20% of the island needs to be recollected

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> Current Project Status

Image processing

- Area 1
 - 100% complete
- Area 2
 - 100% Complete
- Area 3
 - 100% Complete



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> Current Project Status

LiDAR Acquisition -100% completed:

- Project Area 1 and 3 only
- Two (2) state-of-the-art sensor ALS50
- 9,500' above mean terrain
- LiDAR will be acquired for Urban Area and Catalina Island

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> Current Project Status

LiDAR Processing – 100% completed:

- Boresighting – 100%
- Autofilter – 100%
- Hand-editing – 100%

In progress correction of QC calls of the DTM by Dewberry

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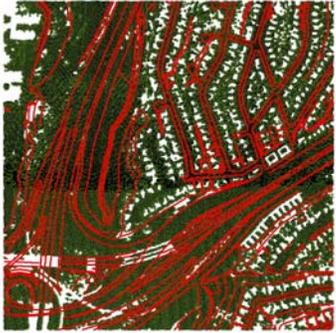
> LiDAR Sample – Area 1



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> LiDAR Sample – Area 1

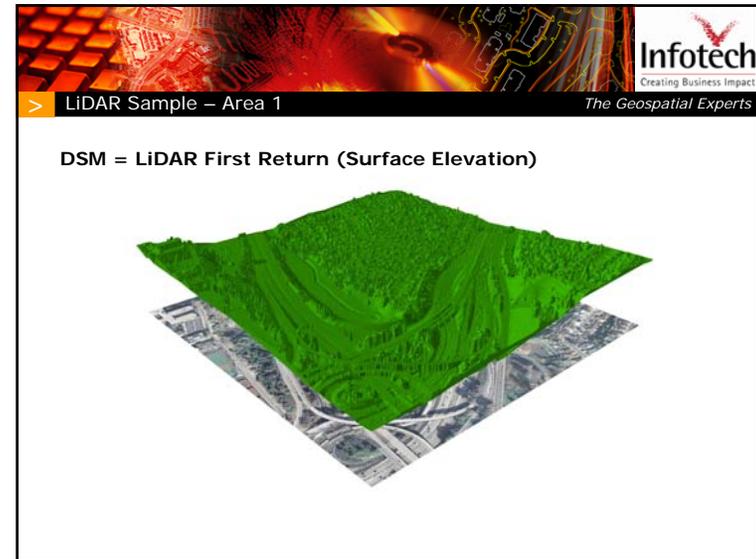
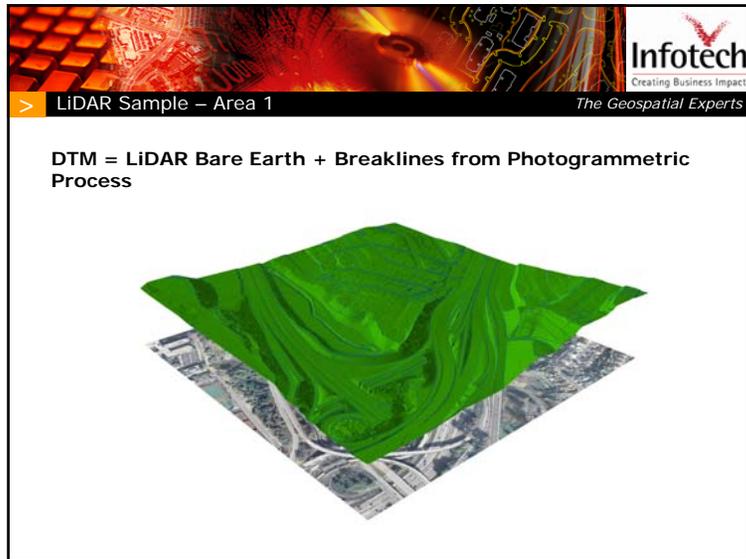
DTM = LiDAR Bare Earth + Breakline from Photogrammetric Process



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> LiDAR Sample – TIN for DTM Data

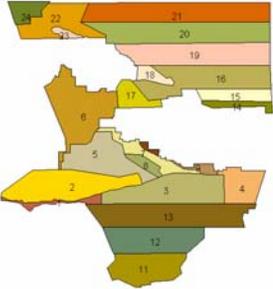




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> Current Project Status

Area 1 AT Blocks



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> Current Project Status – Ortho Generation

Area 1: 12,412 Tiles

- 4597 tiles Completed RGB & CIR
- 37% complete

Area 2: 1,182 Tiles

- 627 tiles completed RGB & CIR
- 53% complete

Area 3: 369 Tiles

- In Progress



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> Current Project Status – Breakline Generation

Area 1: 12,412 Tiles

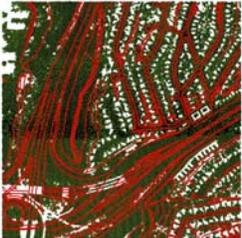
- 5237 tiles completed
- 43% complete

Area 2: 1,182 Tiles

- 768 tiles completed
- 65% complete

Area 3: 369 Tiles

- In Progress



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> Current Project Status – DTM & DSM

Area 1: 12,412 Tiles

- 4597 tiles completed
- 37% complete

Area 2: 1,182 Tiles

- 768 tiles completed
- 65% complete

Area 3: 369 Tiles

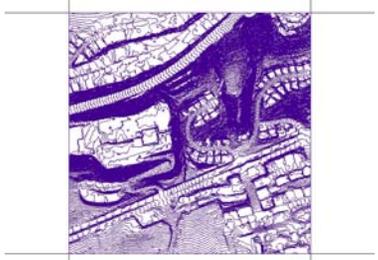
- In Progress



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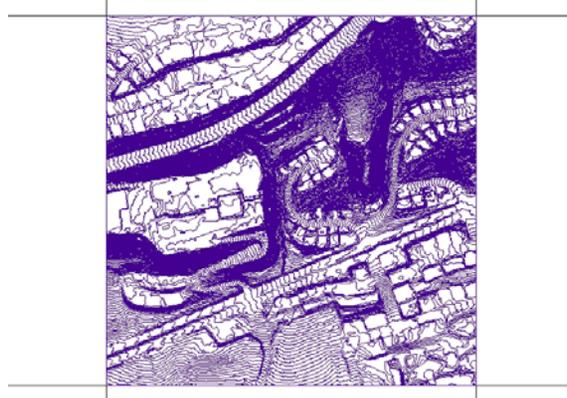
> Current Project Status – Contour Generation

- Area 1: 12,412 Tiles**
 - 3934 tiles completed
 - 32% complete
- Area 2: 1,182 Tiles**
 - 532 tiles completed
 - 45% complete
- Area 3: 369 Tiles**
 - In Progress



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> Contour Generation – Data Sample



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> Project Status Monitoring Application (PSMA)



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> Project Status Monitoring Application (PSMA)

