

Matanuska Susitna Borough LiDAR/Imagery Project

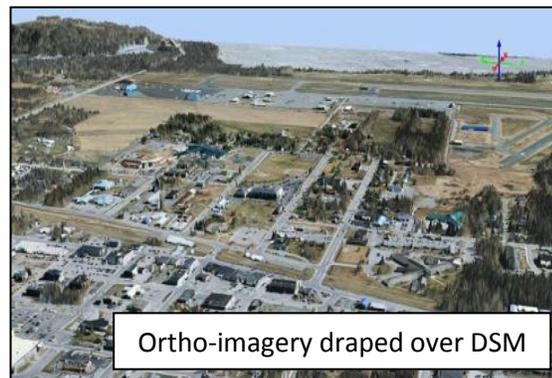
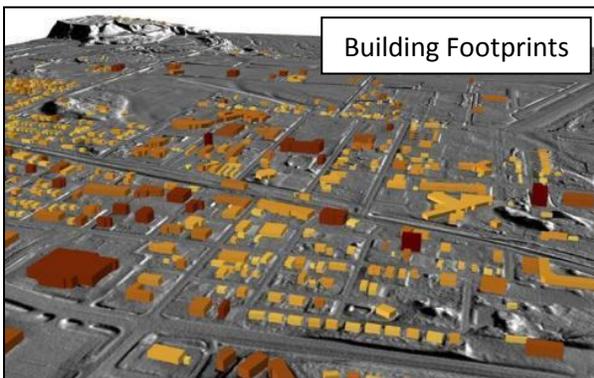
Project Summary

The project objectives included the acquisition of high resolution Light Detection and Ranging (LiDAR) and aerial photography data for 3680 sq/mi of the Matanuska-Susitna Borough, as well as the development of a digital elevation model, contours, ortho-rectified imagery, and additional products. See *Attachment A* for the project map.

Project Deliverables

All the deliverables are public domain.

- ½ ft, Orthorectified, 4-band Imagery for a 270 sq/mi urbanized area
- 1 ft, Orthorectified, 4-band Imagery for the entire 3680 sq/mi area
- Point Cloud Data w/ 1m true nominal pulse spacing (nps) and 0.6m nps through overlapping flights
- Automated “Vegetation” Classification; low (1-6ft), medium (6-15ft) and high (>15ft)
- 1 m First Return Digital Surface Model (DSM) (aka top of canopy)
- 1 m Bare Earth Digital Elevation Model (DEM) w/ hydro-flattening
- 1 m First Return Hillshade
- 1m Bare Earth Hillshade
- 1m Intensity Images
- 2 ft Contours
- Building Footprints @ 97% accuracy
- Hydro Breaklines



Delivery Blocks and Status

The project has been divided into 7 blocks/areas. The table below shows the status of data availability for each block. See *Attachment A* for the project map (which shows all blocks).

Block	Size	Imagery		LiDAR & Ancillary Products
		1/2 ft Resolution	1 ft Resolution	
Point MacKenzie	583 sq/mi	N/A	Available	Available
Willow	567 sq/mi	N/A	Available	Available
Caswell Lakes	537 sq/mi	N/A	Available	Available
Talkeetna	597 sq/mi	N/A	Available	Available
North Susitna	421 sq/mi	N/A	Available	Available
Matanuska	472 sq/mi	Available	Available	Available
Core Area	503 sq/mi	Available	Available	Available

N/A = Product not available for the area; **Available** = Prepared for distribution and available

Ordering and Downloading Data

The Mat-Su LiDAR and Imagery project is important to a wide range of users. Some are only interested in one or two particular products or areas, while others want all products in all areas. As a result, there are two options for ordering data.

Option 1

All LiDAR and Imagery products, for the entire project area, can be ordered from the MSB Borough GIS division. For more information or to order all the data please contact:

Eric Goudey : Eric.Goudey@matsugov.us : 907-861-8403

Option 2

Data can be downloaded from a Geographic Information Network of Alaska (GINA) webpage (<http://matsu.gina.alaska.edu/>). This allows for individual products to be directly downloaded, however download times can be long because of the large file sizes. GINA also serves up web mapping services of the imagery and hillshades. The GINA webpage is funded by the Alaska Energy Authority.

Project Partners and/or Funding Sources

- Coastal Impact Assistance Program (CIAP)
- United States Geological Survey (USGS)
- Alaska Energy Authority (AEA)
- United States Fish and Wildlife Service (USFWS)
- The Nature Conservancy (TNC)
- National Oceanic and Atmospheric Administration (NOAA)
- Mat-Su Salmon Partnership
- United States Army Corps of Engineers (USACE)
- Alaska Pacific University (APU)
- Matanuska Susitna Borough (MSB)

Additional Information

Project questions can be addressed to:

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Data ordering questions can be addressed to:

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