

# MAINE GEOLIBRARY ORTHOIMAGERY PROGRAM



## Cost

The funding for the base program is split between the county, state and federal partners. Additional buy-ups are funded by the municipality, COG or other organization requesting the buy-up.

The schedule to the right reflects the cost per square mile for the base two-foot or one-meter imagery collection. It's important to note that a collection requires multiple passes that include some overlap to facilitate post-processing of the imagery, and these overlaps are added to the total square footage for any collection. Every effort is made to keep this overlap to a minimum.

Resolution	Cost per square mile	
	31-1,000 sq. mi.	>1,000 sq. mi.
2 foot	\$58.30	\$52.80
1 meter	\$53.90	\$48.40

For example, although York County is 1,012 square miles, the total square miles collected for the county was 1,297 after the inclusion of overlaps and boundaries. So the total cost of acquisition for two-foot imagery for the county was \$68,500.

## Acquisition Buy-Ups

There are a number of buy-up options, in addition to the base imagery. The table below reflects the pricing; however, keep in

mind, overlap will need to be included in total square miles for these options, as well.

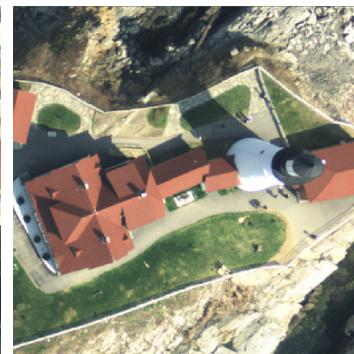
Resolution	Map scale	ASPRS class level	Horizontal accuracy	Cost per square mile	
				31-1,000 sq. mi.	>1,000 sq. mi.
3 inch	1" = 50'	1	6"	\$908.60	\$897.60
		2	1'	\$466.40	\$455.40
6 inch	1" = 100'	1	1'	\$257.40	\$246.40
		2	2'	\$140.80	\$129.80
1 foot	1" = 200'	1	2'	\$92.40	\$81.40
		2	4'	\$58.30	\$47.30



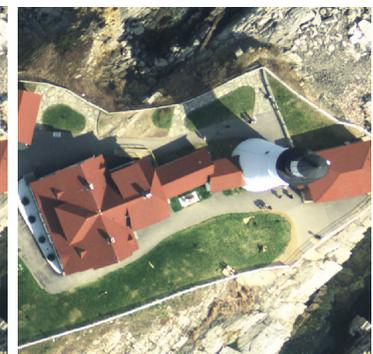
1 meter



2 foot



6 inch



3 inch

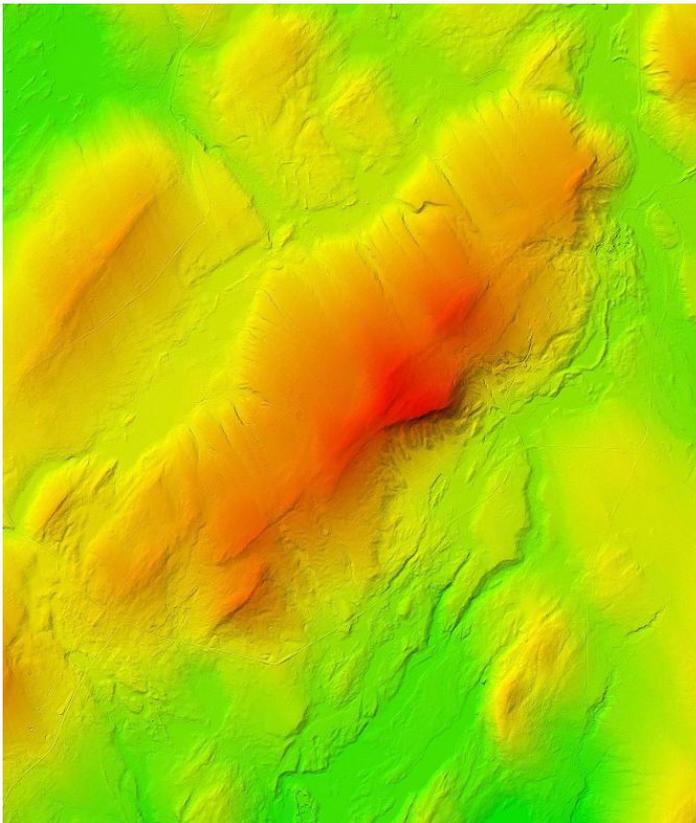
## LiDAR

Light detection and ranging (LiDAR) is an optical remote sensing technology that can measure the properties of a target by illuminating it with pulses of light from a laser. The laser captures information in point clouds, which can then be used to determine the size, shape and distance of a target. Technicians can then use these point clouds to create contours, digital terrain models (DTM) and digital elevation models (DEM). Using automated feature extraction, these point clouds can be rapidly processed to provide a wealth of data that can be used to assist with tax assessment, determine ground cover or create maps that outline the best placement for solar panels.

## The Value of LiDAR

With automated feature extraction, LiDAR (when combined with four-band imagery) can be used to create many value-added products, including:

- Land use/land cover
- Solar potential maps
- Impervious surfaces
- Building footprints
- Planimetrics
- Vegetation classification
- Transmission and utility maps
- Emergency response plans



*LiDAR shaded relief map, 1.5-meter point density, Hogback Mountain, ME*



*Derived product: impervious surface*



WWW.MAINE.GOV/GEOLIB  
MICHAEL SMITH | 207.215.5530  
MICHAEL.SMITH@MAINE.GOV  
WWW.FACEBOOK.COM/MAINEORTHOS  
WWW.TWITTER.COM/MAINEORTHOS  
LINKEDIN GROUP: MAINE ORTHOS

