

1.3 Report on Point Density and Nominal Pulse Spacing (NPS) (Swath Data)

The USGS LiDAR Base Specification Version 1.0 states: "An NPS of 2 meters or less is required. Dependent on the local terrain and land cover conditions in the project area, a greater point density may be required on specific projects. Assessment of the NPS will be made against single swath, first-return only data, located within the geometrically usable center portion (typically 90 percent) of each swath, acceptable data voids excluded. NPS will be calculated as the square root of the average area per point. Average along-track and cross-track point spacing should be comparable (within 10 percent)."

The purpose of this section is to report on the LiDAR point density and nominal point spacing by swath file. Averages by swath files (not including overlap), project boundary polygons (including swath overlap), and aggregate project boundary polygons (including swath overlap) are reported.

[Boresighted Files - E:\Pope_Hardin\Swath_LAS](#)

Units: US Survey Feet

File	Number of First Returns	Area of Swath	Point Density	NPS
Average			0.18/1.94 <small>pp Square US Survey Feet/ pp Square Meter</small>	2.37/0.72 <small>US Survey Feet/ Meter</small>
Aggregate	7,249,584,634	20,096,000,028	0.36/3.88 <small>pp Square US Survey Feet/ pp Square Meter</small>	1.66/0.51 <small>US Survey Feet/ Meter</small>