

DISCLAIMER:
Current Data (Nebraska LiDAR Coverage)
<p>This table is a listing of data within NDNR's LiDAR Repository available for sharing with the public.</p> <p>All data is available as-is through NDNR or directly from LiDAR sources and NDNR does not guarantee any LiDAR dataset's accuracy. Please review the metadata per LiDAR dataset for project-specific accuracy, collection parameters, and format specifications before downloading.</p> <p>Data listed in this table that is not available on the website for instant download may be requested. NDNR will fill data requests as time and resources allow and is under no obligation to provide these complimentary services within any time constraints. There may be other data available from other sources throughout the state that are not reflected on this website. Other data sources which provide data per request and at a fee include the NIROC (contact MAPA) and the PRRIP. Please see available maps to review dataset locations.</p>

GLOSSARY	
Formats	
DEM:	An elevation model created for use in computer software where bare-earth elevation values have regularly spaced intervals in latitude and longitude (x and y). This creates a "grid" or continuous surface; often in the format of a raster grid.
LAS:	Data from LiDAR point clouds which has gone through a QA/QC process to assess/provide accuracy of data and is provided in a binary proprietary format called LAS. In its crudest form, a lidar raw point cloud is a collection of range measurements and sensor orientation parameters. After initial processing, the range and orientation of each laser value is converted to a position in a three dimensional frame of reference and this spatially coherent cloud of points is the base for further processing and analysis. The raw point cloud typically includes first, last, and intermediate returns for each laser pulse. In addition to spatial information, lidar intensity returns provide texture or color information. The combination of three dimensional spatial information and spectral information contained in the lidar dataset allows great flexibility for data manipulation and extraction. In classified point clouds, the data has been processed into ASPRS LAS classes per project specifications.
DTM GRIDs:	An elevation model created for use in computer software of bare-earth mass points and breaklines. DTMs are technically superior to a gridded DEM for many applications because distinctive terrain features are more clearly defined and precisely located, and contours generated from DTMs more closely approximate the real shape of the terrain. Also most often in the format of a raster grid.
Contours:	Lines of equal elevation on a surface. An imaginary line on the ground, all points of which are at the same elevation above or below a specified vertical datum. In the case of LiDAR they can be generated from a "Bare Earth DEM" or classified "Bare Earth LAS points." "Raw" contours are made from just the bare earth data, whereas "pleasing" contours may require ancillary data like breaklines to produce.
DTM Geodatabases:	A grouping of files arranged in feature classes within a geodatabase which may include LAS mass points, breaklines, waterbody polygons, and a TIN; these files can be used to create a DTM GRID.
Hydrographic Breaklines:	A linear feature demarking the edge of a waterbody.
Breaklines:	A linear feature demarking a change in the smoothness or continuity of a surface such as abrupt elevation changes or a stream line.
ESRI TINs:	Traingulated Irregular Network (TIN): A set of adjacent, non-overlapping triangles computed from irregularly-spaced points with latitude, longitude, and elevation values. The TIN data structure is based on irregularly-spaced point, line, and polygon data interpreted as mass points and breaklines and stores the topological relationship between triangles and their adjacent neighbors. The TIN model may be preferable to a DEM when it is critical to preserve the precise location of narrow or small features, such as levees, ditch or stream centerlines, isolated peaks or pits in the data model.
Mass Points:	Irregularly spaced points, each with latitude and longitude location coordinates and elevation values typically used to form a TIN.
Keypoints:	Points that are considered to be a model key-point and should not be withheld from a thinning algorithm.
Orthophotos (tiffs):	Aerial photographs with the accuracy characteristics of a map. Available in tiffs and other data formats. Photos can be collected alongside LiDAR data to improve accuracy of the datasets.
Mr Sid Mosaics:	A mosaic of orthophoto tiffs that varies from being a county in size to the entire project area.

1/9 ARC Shaded Relief	A DEM which shows the shaded relief by considering the illumination source angles and shadows.
Other Terms	
Absolute Vertical Accuracy:	A measure that accounts for all systematic and random errors in a dataset. Absolute accuracy is stated with respect to a defined datum or reference system.
RMSE:	Root Mean Square Error: The square root of the average of the set of squared differences between dataset coordinate values and coordinate values from an independent source of higher accuracy for identical points.