

## NOAA Coastal Services Center

<http://www.csc.noaa.gov/>

### **Program Highlights**

#### ***Data Product***

- LIDAR data collected by NOAA and other agencies, such as the U.S. Army Corps of Engineers Joint Airborne LiDAR Bathymetry Technical Center of Expertise, in swath along most of U.S. coast.
- Historical shoreline data with the average accuracy of measured benchmarks at 3.06 m (10 ft), which meets the NOAA guidelines for fixed aids to navigation and objects charted as landmarks

#### ***Advantages***

- LIDAR data covering most of the coast generally have sub-meter vertical and horizontal RMS error
- Shoreline data larger scale than USGS shoreline data
- Data can be downloaded for free in user's choice of vertical datum and projection



#### ***Disadvantages***

- Elevation data in narrow strip along coast only
- Not all of the US coastline has been mapped
- Shoreline data is dated with no update schedule provided

### **Program Overview**

The NOAA Coastal Services Center is an office within the National Oceanic and Atmospheric Administration devoted to serving the nation's state and local coastal resource management programs. The Center, with its partnerships, is acquiring high-resolution topographic data through remote sensing technologies. The primary goal is to work with the coastal resource management community and help practitioners by supplying information or data on topographic issues.

### **Data Details and Availability**

These data are generated through both private sector contracts and in-house efforts. The remotely sensed data sets were created from LIDAR information. The collected LIDAR data are typically targeted at a narrow strip of coastline and are usually a kilometer or less in width. The vectorized shoreline data were created from scanned historical shoreline maps in raster format and are in decimal degrees, referenced to the NAD83 datum. The accuracy of the shoreline datasets is more strict than national standards and four times the accuracy of current U.S. Geological Survey 1:24,000 scale topographic maps. This means that the original T-sheets can be assumed to also meet NOAA guidelines and to be very accurate in their depiction of the shoreline that existed at the time of the surveys. As well, access to shoreline data from a variety of other sources is available through the use of a 'links' page. The data from this site are considered public information and may be distributed freely.

### **Data Applicability to Flood Mapping Program**

Most LIDAR data adheres to FEMA's terrain specifications for mapping floodplains ([http://www.fema.gov/fhm/dl\\_cgs.shtm](http://www.fema.gov/fhm/dl_cgs.shtm)). The metadata records for each LIDAR data set should

be reviewed prior to use on a FEMA project to ensure sufficient accuracy for the project. Some LiDAR data sets also include precise near shore bathymetry. Due to the historical nature of the shoreline data, each dataset should be examined for its potential use with FEMA projects.

**Data Ordering**

These data are available directly through the Coastal Services Center website at <http://www.csc.noaa.gov/crs/tcm/>.