Using the LSIS
Township Geocoder

The Township Geocoder tool provides township geocoding capabilities to aid fire fighting efforts and the analysis of historical fire data. The National Integrated Fire Center (NIFC) maintains a historical fire database within which fire start locations are contained. Historically, fires were reported in terms of Township, Range and Section. With modern maps and Global Positioning Satellite (GPS), latitude and longitude values are now typically used to report fire locations.

The Township Geocoder data collected and maintained by the BLM are now available as a streaming internet map service accessible from any computer with access to the Internet. The application is available through the BLM's GeoCommunicator. The Township Geocoder can only be used on lands where there are Public Land Survey System (PLSS) descriptions, as shown in the data availability index on the LSIS viewer. The Geocoder does not work with alternate source or flat files.

The following instructions will guide you through an interactive web mapping session where you can convert between Latitude/Longitude and Township, Range, and Section values.

The Township Geocoder tool allows conversion in three different ways: Township and Range to Latitude and Longitude (Township Range tab), Latitude and Longitude to Township and Range (Lat/Long tab), or multiple conversions of either one by a formatted file (File Conversion tab). To start, select the correct tab that matches the desired conversion.

Connect to the GeoCommunicator website http://www.geocommunicator.gov/.

GeoCommunicator offers three

Applications

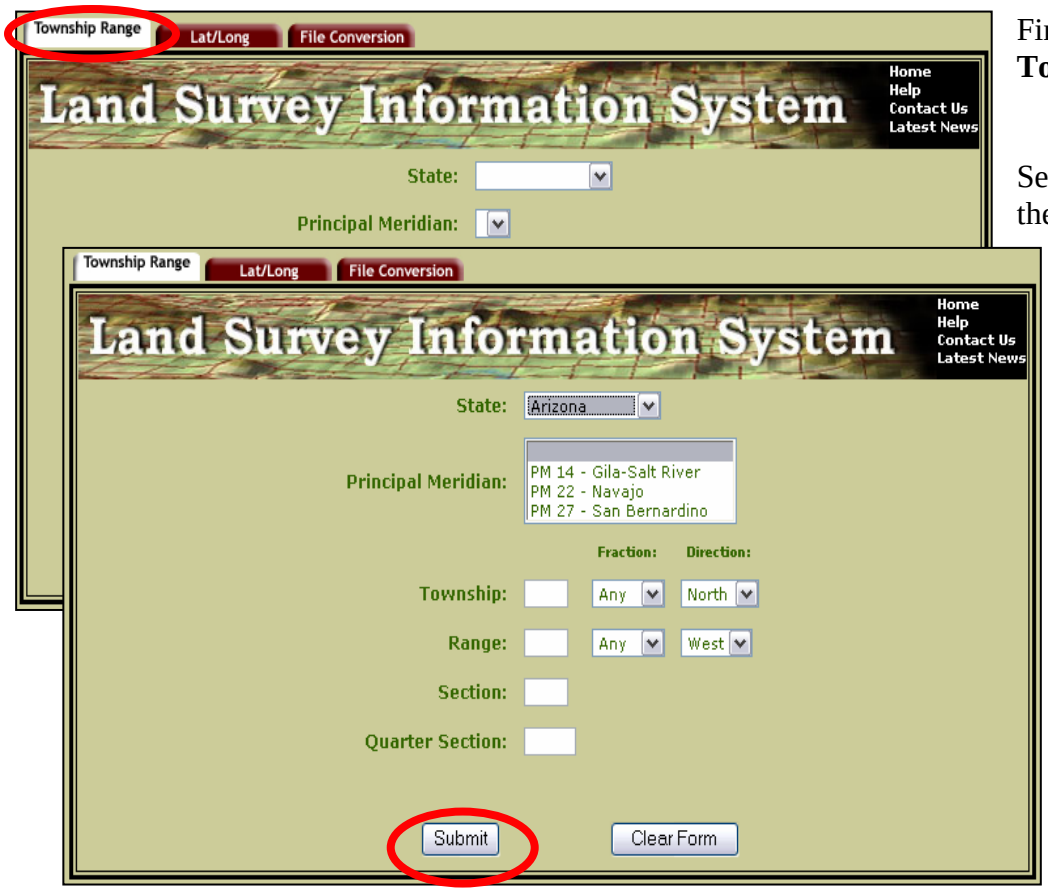
- Land & Mineral Use Records
- Federal Land Stewardship
- Land Survey Information System

Click "**Land Survey Information**".

Click **"Township Geocoder".**

Click **"Viewer".**

1 – Township and Range to Latitude and Longitude



First, click the **Township Range** tab.

Select the **State** from the dropdown box.

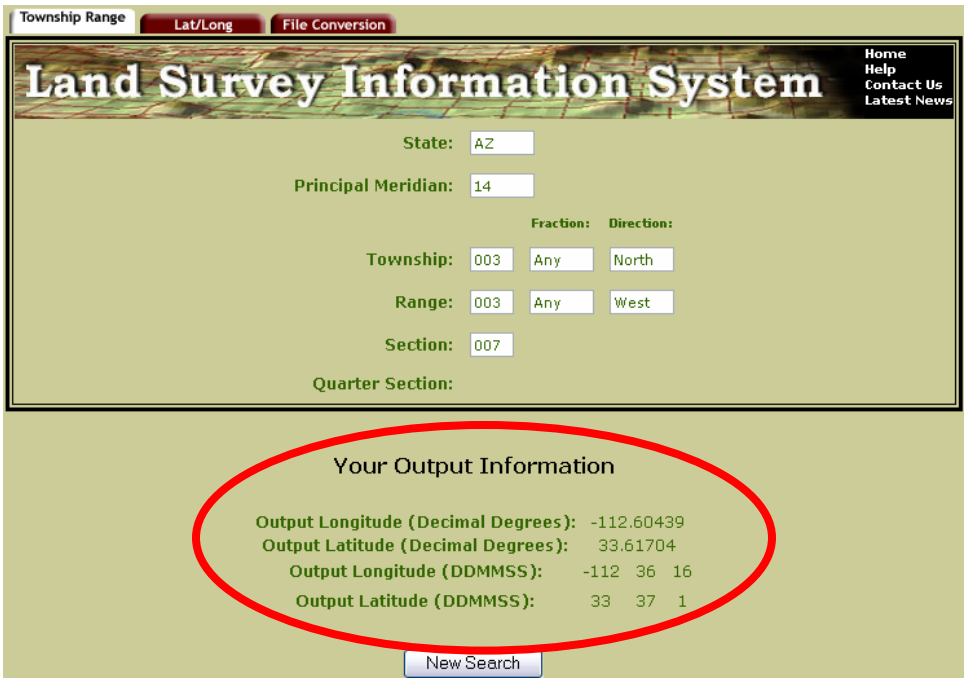
Select the **Principal Meridian** from the list.

Input the **Township and Range** number and direction along with the **Section** number.

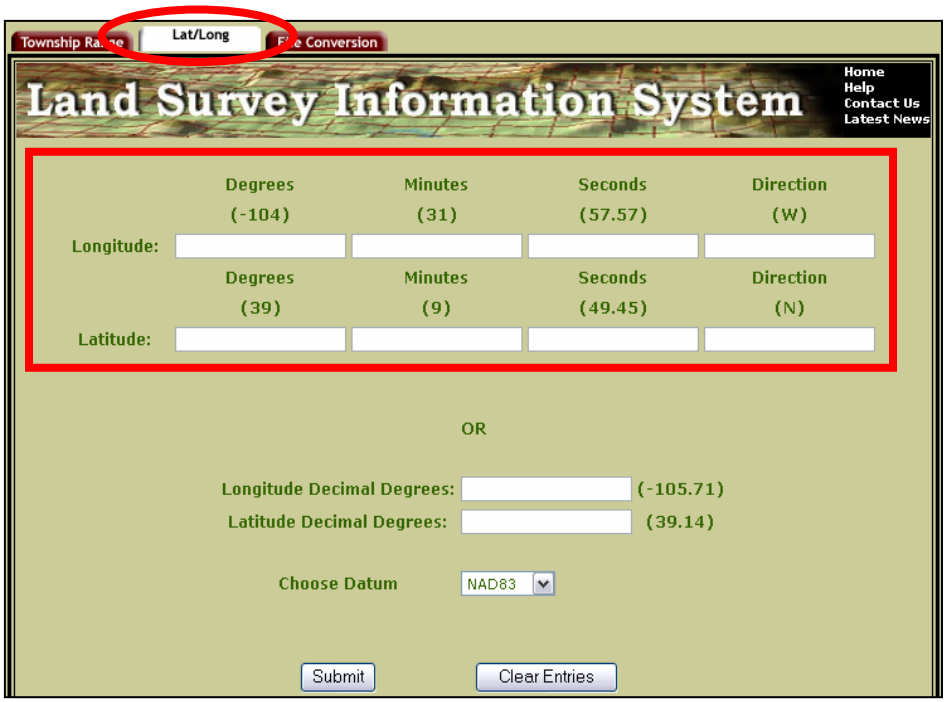
Quarter Section can be entered but is not required.

Select **Submit**.

After pressing the submit button, the bottom of the page now displays the location in decimal degrees and the more defined degrees, minutes, and seconds.



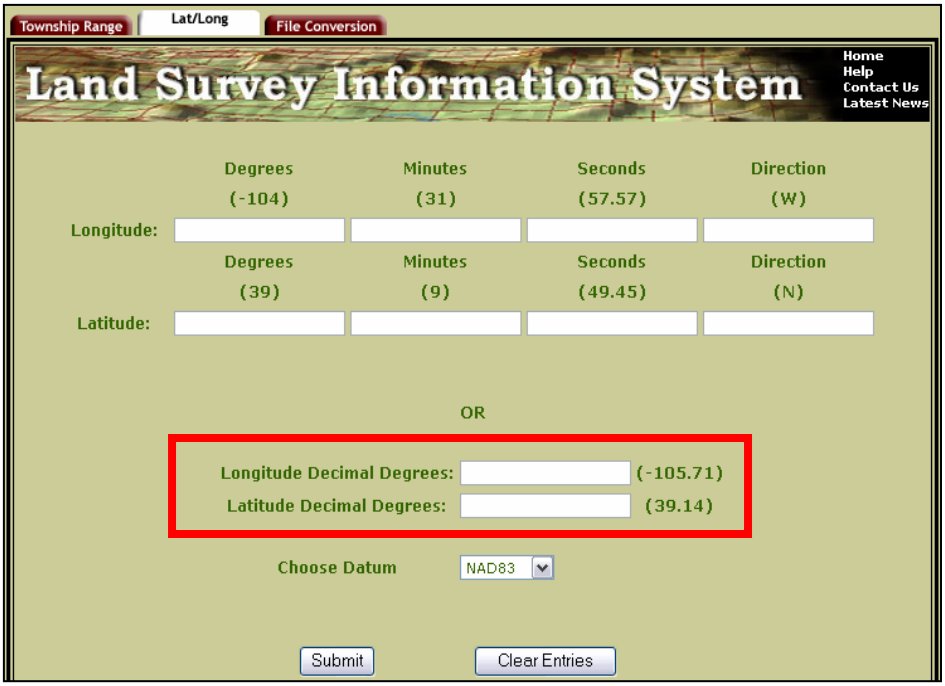
2 – Latitude and Longitude to Township and Range
The latitude and longitude can be input in two different ways: specifying **Degrees, Minutes, Seconds, and Direction** or by the single **Decimal Degrees** number.



First, click the **Lat/Long** tab.

2a – Degrees, Minutes, Seconds, Direction
When using this method, degrees and minutes cannot have any decimal places (the seconds can). The direction is one letter (N, E, S, W).

Click **"Submit".**

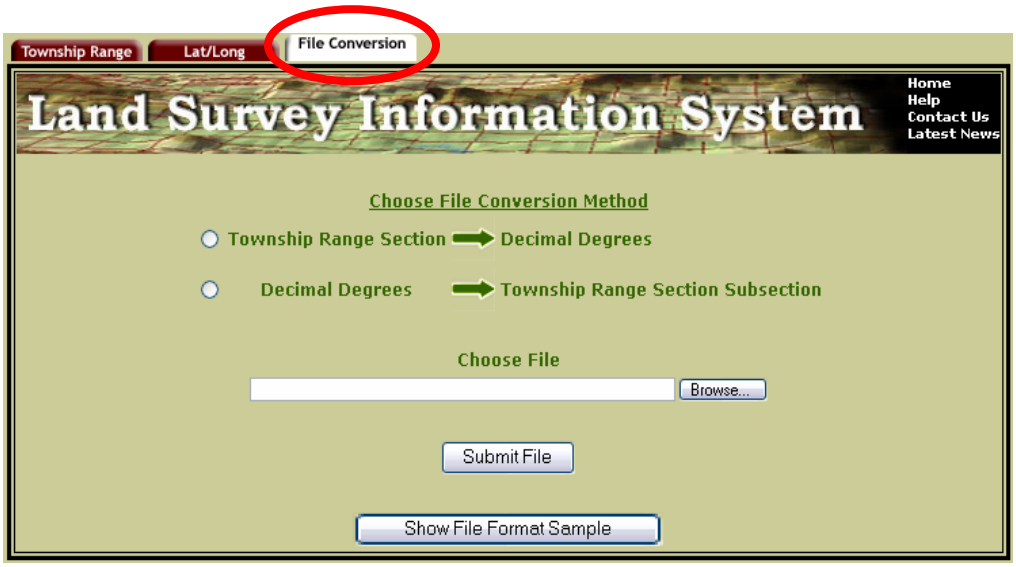


2b – Decimal Degrees
When using this method, note that signs are negative for West (Township) and South (Range).

Click **"Submit".**

3 – File Conversion

Multiple conversions of one type can be done at one time by creating a specifically formatted file. The two types are township, range, and section to decimal degrees or decimal degrees to township, range, and section.



Click the **File Conversion** tab.

Select the desired conversion type and create an appropriate file.

See Sample Input/Output File Formats for help.

Click the **Browse** button to locate and upload the file. After submitting, a file listing the conversions will be made available at the link given at the bottom of the page.