



## Using GeoCommunicator's Township GeoCoder

The Township GeoCoder tool and web service provides township geocoding capabilities for location information for fire locations, well locations, utility lines, pipelines, and any other locations represented by latitude and longitude or land description.

The Township GeoCoder data collected and maintained by the Bureau of Land Management (BLM) are available as a tool on GeoCommunicator ([www.geocommunicator.gov](http://www.geocommunicator.gov)) or through a web service. The Township GeoCoder uses the Public Land Survey System (PLSS) land descriptions in NAD83.

The Township GeoCoder tool supports three different conversions: Township and Range to Latitude and Longitude (Township Range tab), Latitude and Longitude to Township and Range (Lat/Long tab), and batch conversions in either direction using a formatted file (File Conversion tab).



GeoCoder Home Page

Connect to the GeoCommunicator website at <http://www.geocommunicator.gov>. Use Internet Explorer as your browser. Pop-Ups and JavaScript must be allowed.

Click 'Township GeoCoder' on the site's left-pane navigation menu. The menu expands and Township GeoCoder's home page opens.

The Township GeoCoder home page briefly describes the application and contains links to more information and specific help topics. Click the 'GeoCoder' link in the expanded left-pane navigation menu.

### Township GeoCoder

[http://www.geocommunicator.gov/NIFC/township-range\\_input.jsp](http://www.geocommunicator.gov/NIFC/township-range_input.jsp)

To use the converter for Township Range conversion, enter State from the drop down menu, Principal Meridian, Township, Fraction, Direction, Range, Fraction, Direction, Section and Section Sub Division (i.e. NE, NENW, LOT 2). Fraction is for a small number of township such as T124 ½.

Click **'Submit'** and the latitude and longitude of the **polygon centroid** are returned. Click **'Zoom'** and a map will come up and zoom to the coordinates. You can do the same thing for Lat/long and get the Township, Range, Section, and Aliquot returned or use the converter to run a file of coordinates or land descriptions.

For the File Conversion method use the following formatting guide:

[http://www.geocommunicator.gov/NIFC/upload\\_sample.htm](http://www.geocommunicator.gov/NIFC/upload_sample.htm)

The screenshot shows a web application titled "Township Range Converter" with three tabs: "Township Range", "Lat/Long", and "File Conversion". The "Township Range" tab is active. The form contains the following fields and options:

- State:
- Principal Meridian:
- Township:  Fraction:  Direction:
- Range:  Fraction:  Direction:
- Section:
- Section Division:

Buttons: "Submit" and "Clear Entries".

**Your Output Information**

- Output Longitude (Decimal Degrees): -104.92697
- Output Latitude (Decimal Degrees): 37.26394
- Output Longitude (DDMMSS): -104° 55' 37.0784"
- Output Latitude (DDMMSS): 37° 15' 50.1759"
- View on LSIS map viewer:

Button: "New Search"

### *Township Converter Showing Output to Lat/Long*

#### **Web Service:**

Township GeoCoder is also available as a Web Service which can be used by developers within their own applications or as another option for conversion.

Township GeoCoder Web Service Description:

<http://www.geocommunicator.gov/TownshipGeocoder/TownshipGeocoder.aspx>

Township GeoCoder Web Service Method Parameters and Results

[http://www.blm.gov/nils/GeoComm/documents/NILS\\_GeoCommunicator\\_Web\\_Services\\_TGC\\_Format\\_s.pdf](http://www.blm.gov/nils/GeoComm/documents/NILS_GeoCommunicator_Web_Services_TGC_Format_s.pdf)