## Converting State Plane Coordinates to Latitude and Longitude

1. In MicroStation, go to Applications> Geopak> Survey> Survey and on the Survey menu bar go to Geometry>Conversions $>$ Geodetic This will bring up the Geodetic Coordinate Conversions dialog box.

| \$ Geodetic Coordinate Conversions |  | $\square \square$ |
| :---: | :---: | :---: |
| File Geographic Coordinate Systems |  |  |
| Source System <br> System Name : EPSG:2274 <br> NAD83 / Tennessee (ftUS) <br> Projection: LM <br> System Units : Foot [1] <br> Vertical Datum : NAVD 88 <br> Vertical Units : USFoot | File GPK File Point DEM | Target System <br> System Name: LL84 <br> WGS84 Lat/Long's. Degrees. $\mathbf{- 1 8 0}=\Rightarrow$ <br> Projection : LL <br> System Units : DEGREE [51] <br> Vertical Datum : NAVD 88 <br> Vertical Units : USFoot |
| Source Point | (0) ConvertInverse | Target Point |
| Name : $\square$ Store |  | Name : |
| North: 0.000000 | Convert > | Lat : 340912.47637 N |
| East: 0.000000 | <Convert | Lon: 923031.19537 W |
| Height : 0.000000 |  | Height : 0.000000 |
|  |  | V Display in Output Window |

The Source System should be set automatically from the DGN file coordinate system settings and the Target System may already be set as well. If your systems are not set as shown above, go to the drop down option Geographic Coordinate Systems> Select.

The Select Geodetic Data dialog opens.


Select the "..." buttons to the right to set the Source \& Target coordinate systems.

## 2. Source System:

If not set automatically, set the Source System to
EPSG 2274 - NAD83 / Tennessee (ftUS)


Double click the desired coordinate system or select and click OK.

## 3. Target System:

If not set already, set the Target System to
LL84 - WGS84 Lat/Long's Degrees. -180 ==> +180


Double click the desired coordinate system or select and click OK.
4. In the Geodetic Coordinate Conversions dialog, click on the Point option.
5. Set Vertical Datum under Source and Target to NAVD 88.
6. Set the Vertical Units to USFoot.
7. Enter state plane north and east coordinates you wish to convert under Source Point.
8. Set translation option in center to Convert.
9. Once all settings are made click on the top Convert button to generate latitude and longitude for the state plane coordinate values.

10. A text window will appear with the results of the conversion. To save these results to a text file, go to File> Save in the Geodetic Coordinate Conversions dialog, browse to your project folder and give the file a name.

11. To clear the text window for another conversion go to File> New.

Note:
To convert from latitude and longitude to state plane coordinates, use a blank space between degrees, minutes and seconds under Target Point and use the bottom Convert button.

## Converting Latitude and Longitude Coordinates to Decimal Degrees with Google Maps

## Example:

Enter latitude of $36^{\circ} 09^{\prime} 55.23$ " N and longitude $86^{\circ} 46^{\prime} 49.83$ " W to the search box without degree, minute and second as shows below then click search. The decimal degrees appear at the bottom of the image underlined in red.


## Finding Latitude and Longitude Coordinates in Decimal Degrees with Google Earth

1. Specify the coordinates to be shown in decimal degrees. In Google Earth, go to Tools>Options.

2. Under the Show Lat/Long Heading, select decimal degrees.

3. Now when you go into Google Earth and pinpoint the center of the project, it will read the Lat/Long values as decimal degrees.

