

Google Earth

Having Google Earth on your computer is not necessary in order to use the new *myfields.info* field application. It is rather simply a free tool from Google that can if needed, assist you in determining the legal description, GPS coordinates, or just a satellite view of the field, should you need it. So, if you feel you have no use for this app, feel free to not download it.

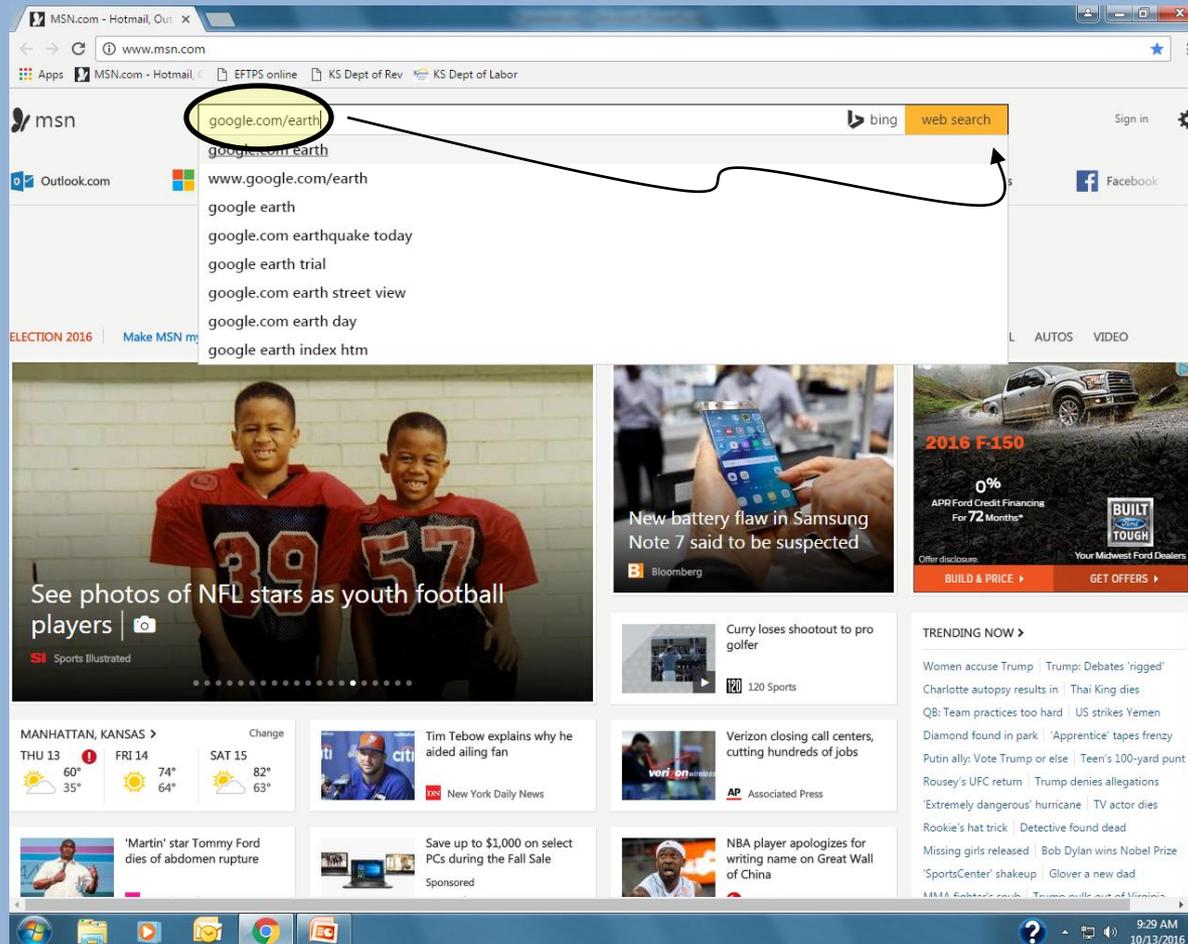
I suspect that many of our members already have access to and use Google Earth or a similar application and will have no need for this presentation.

For those of you that are interested, I put together this rather non-technical outline of the steps involved in downloading Google Earth, and in addition, how to overlay the Public Land Survey System over the basic map in order to obtain the section, township, and range, as well as the GPS coordinates of a field.

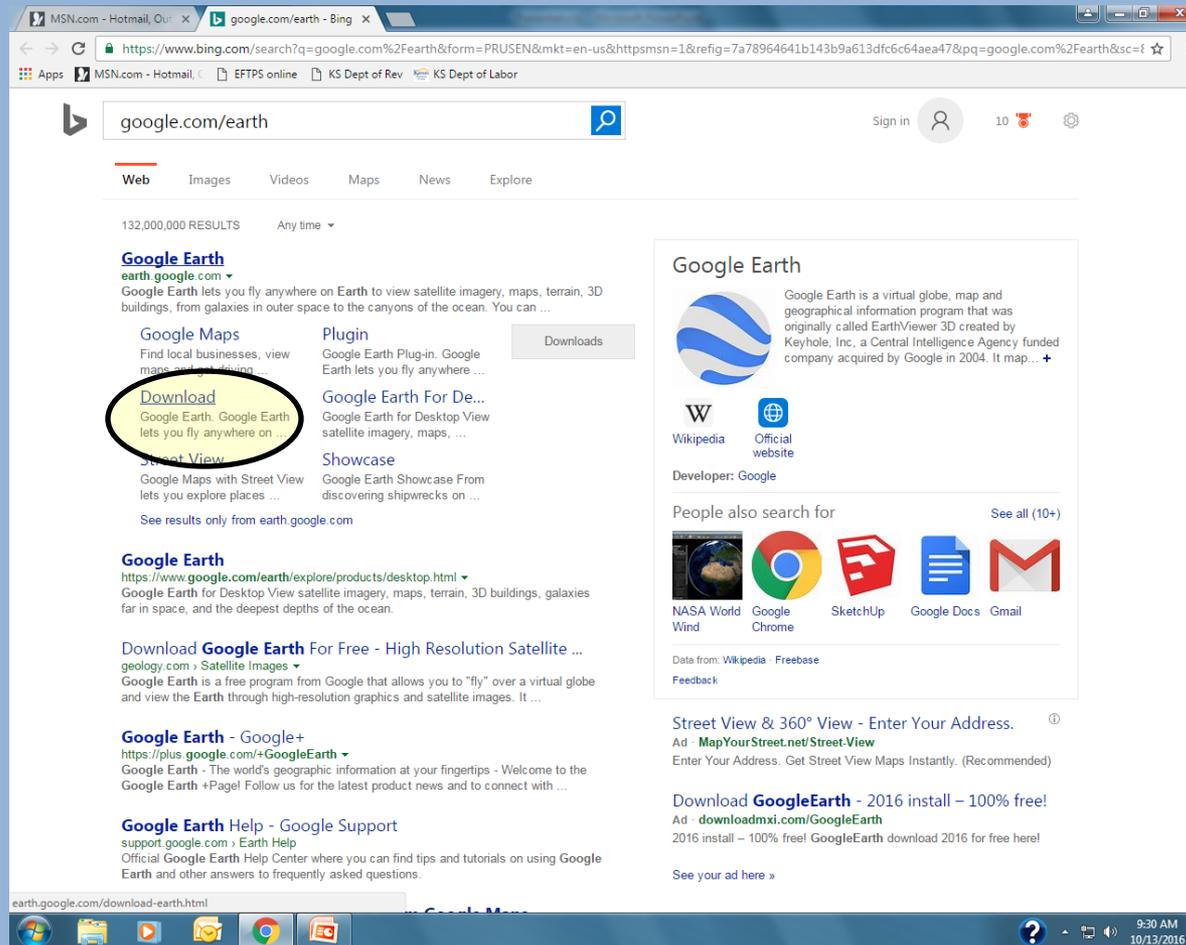
We have endeavored to make our electronic field application through the *myfields.info* as simple as possible. In addition to the legal description of fields submitted to KCIA or OCIA for certification, you will also need the GPS coordinates, otherwise known as the longitude and latitude of the field. Having both of these bits of information for your certified fields handy before starting will make your field application experience more pleasant.

If you already have Google Earth, it is usually a good idea to update it to the newest version.

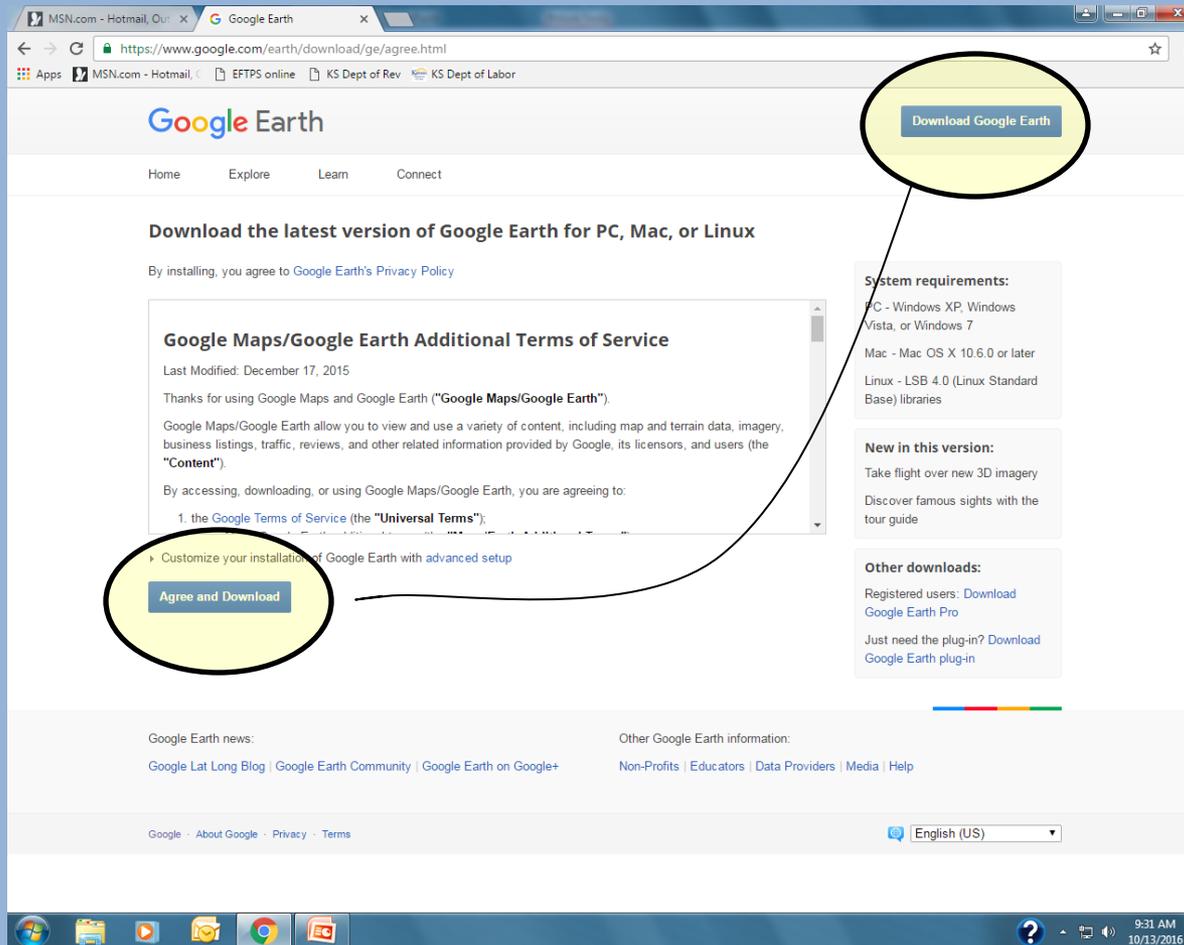
Begin by opening your browser and entering google.com/earth in the search engine.



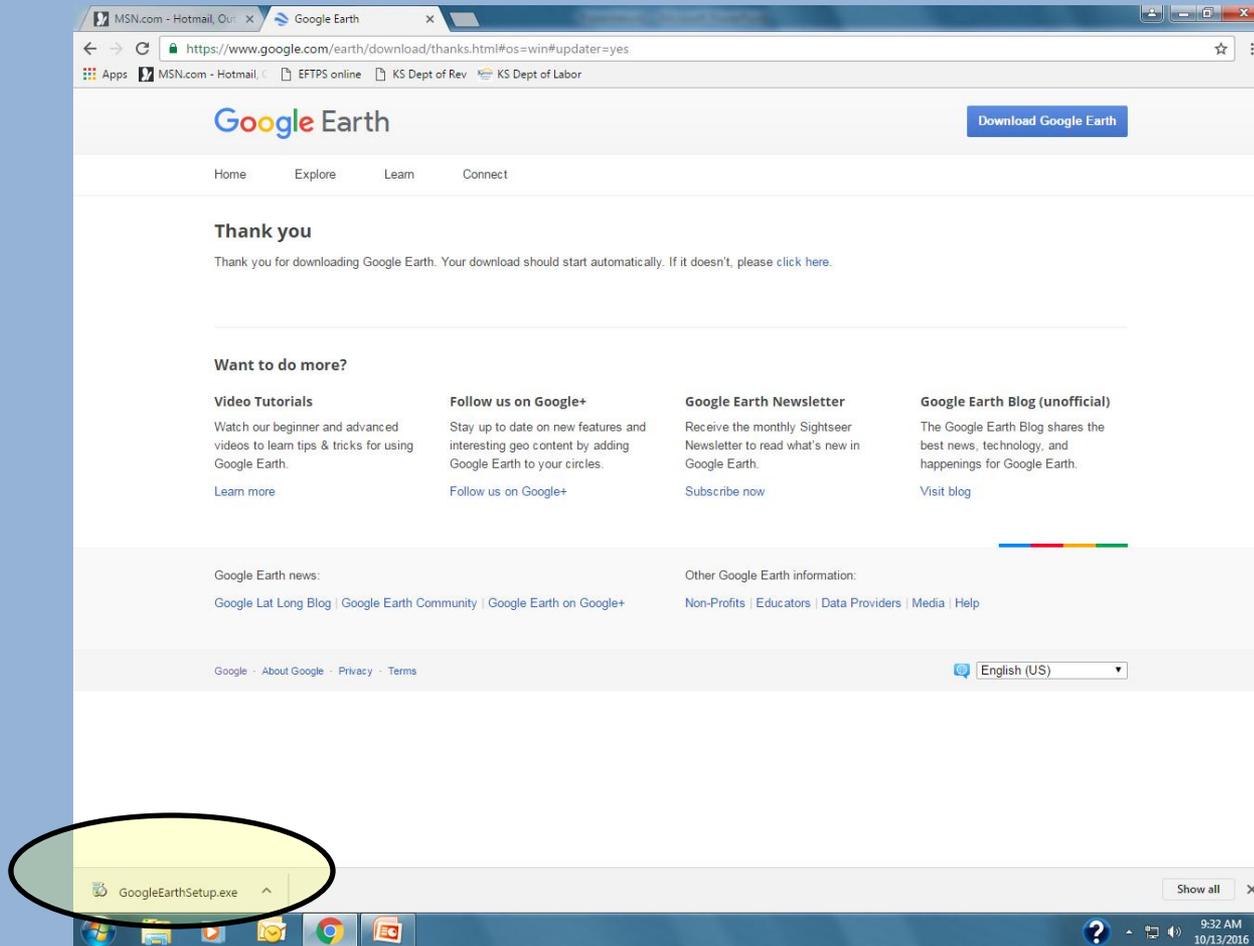
In your search results look for a link to download Google Earth and click on it. I guess as a matter of security, I always try to download applications only from the site that originates it. So, google.com for Google apps, adobe.com for Adobe apps, etc rather than various third-party sites that may offer access to the Google Earth download. However, there is nothing special in how I am doing it.



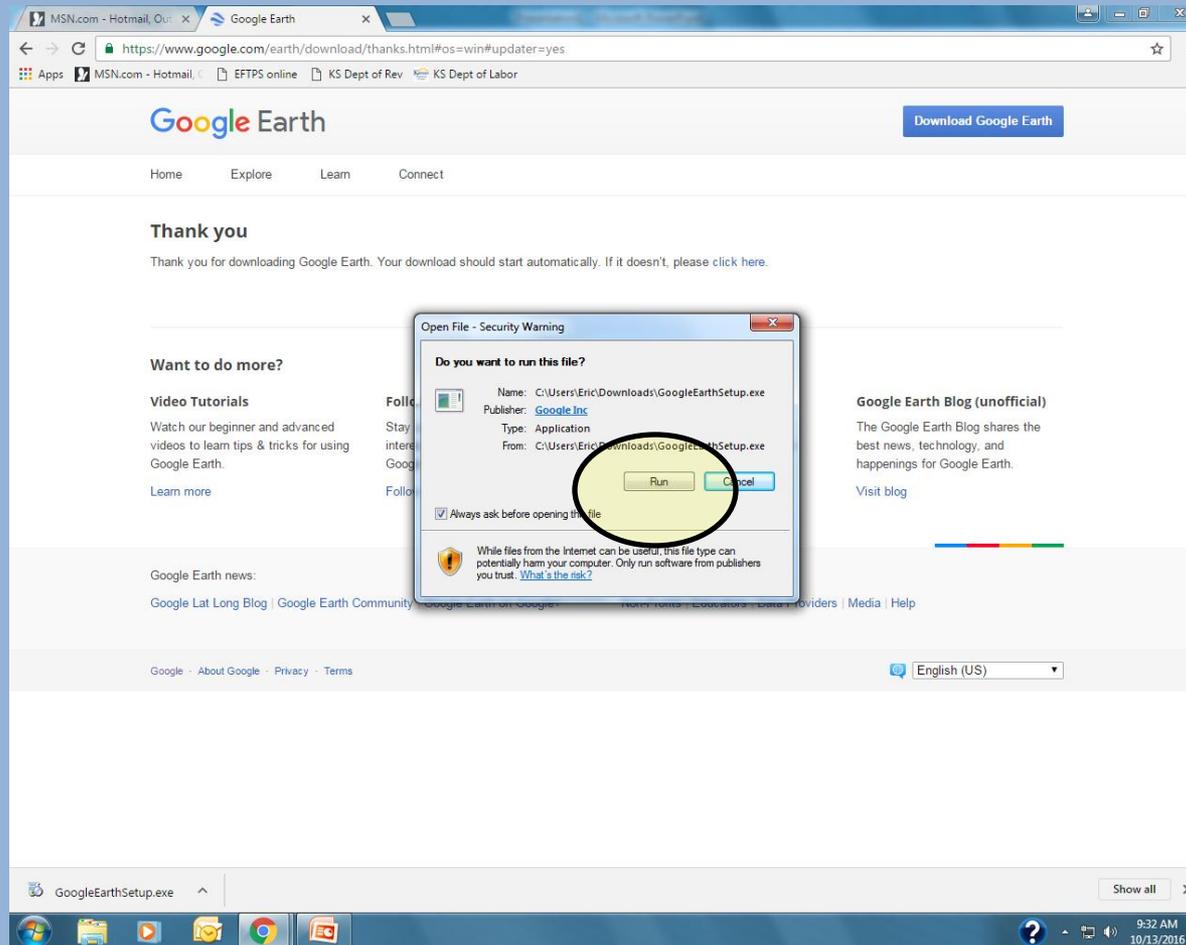
You will have to review the terms of service before being able to download Google Earth. So I suggest you scroll down and at least browse it before hitting the agree button.



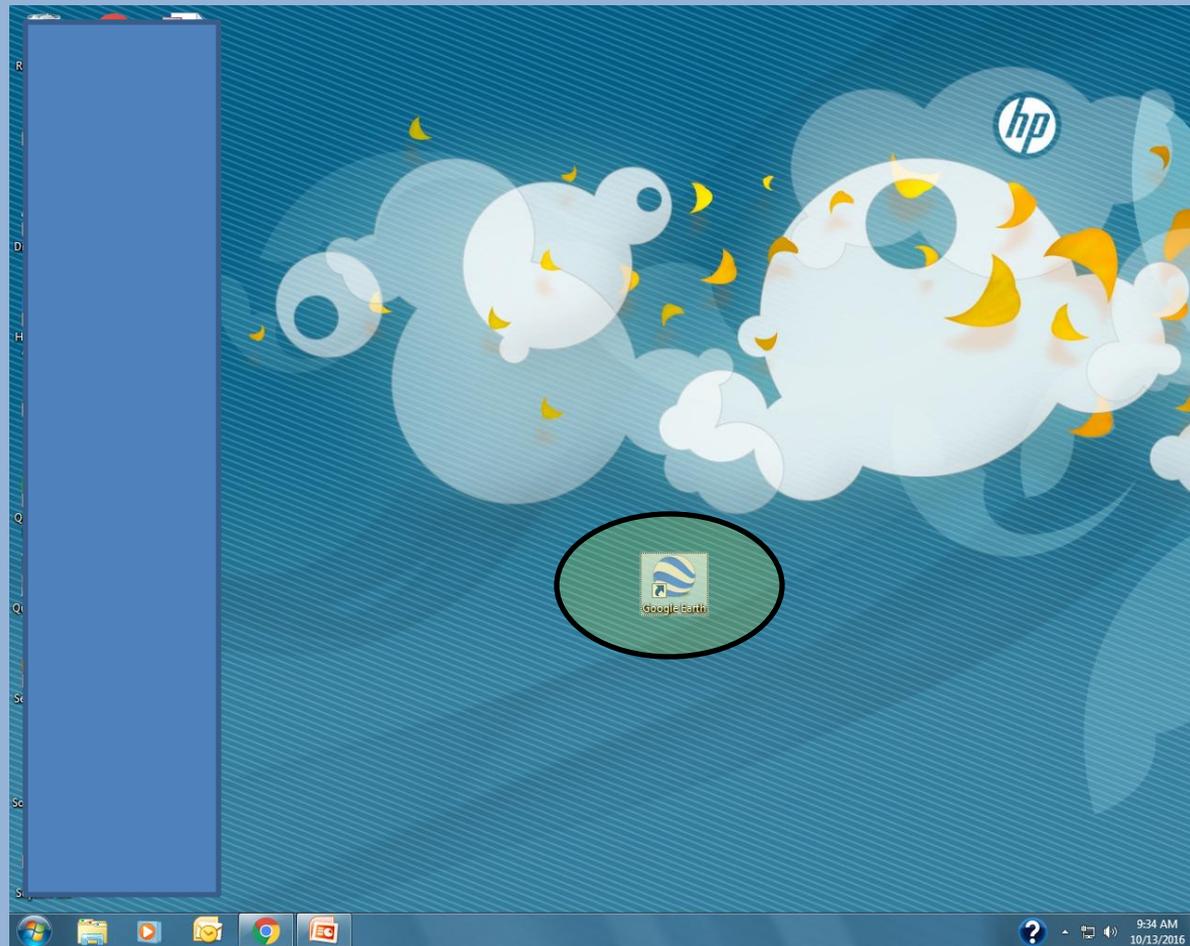
Once the download is complete, you will need to click on the googleearthsetup.exe execute file in the lower left hand corner of the screen.



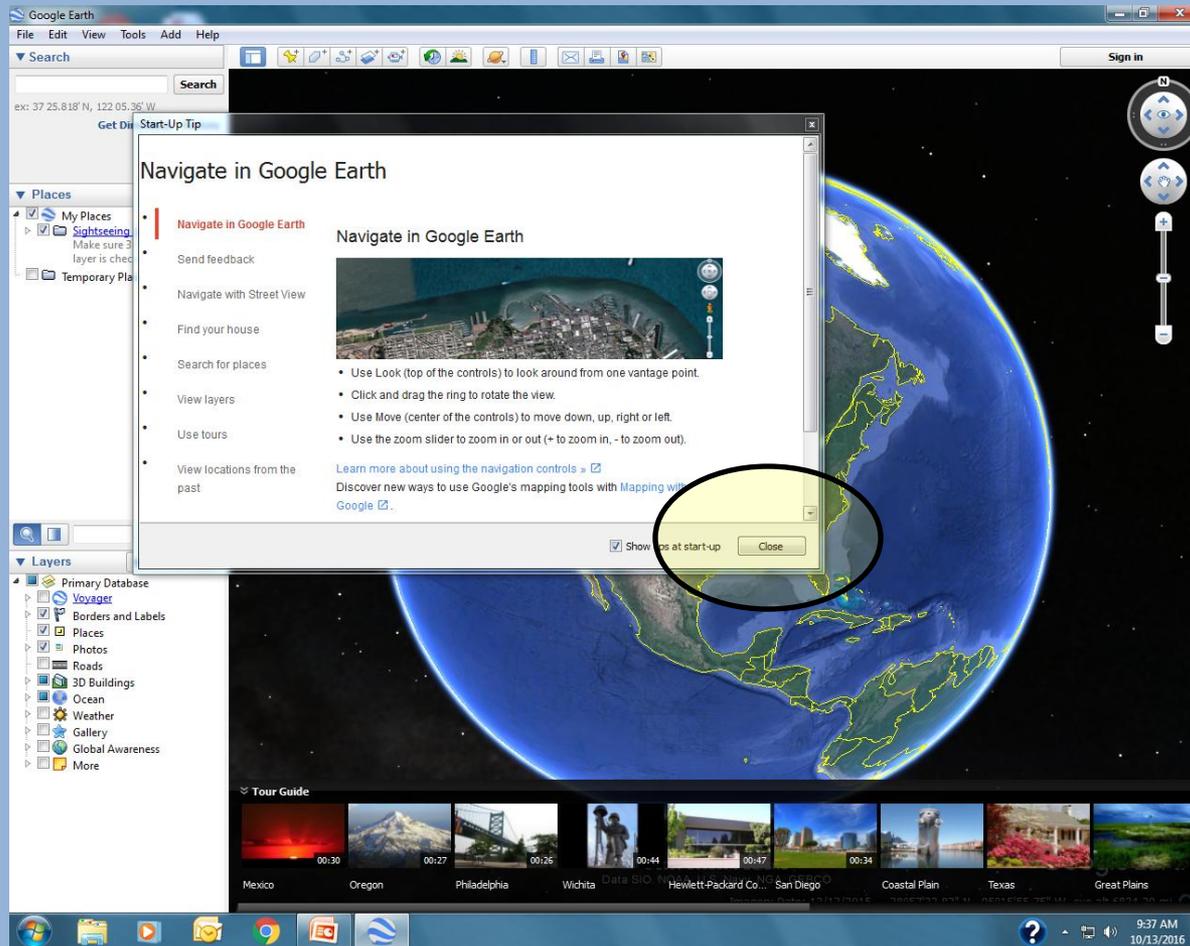
This screen will pop up. Click “Run”



A shortcut icon will be placed on your desktop. You will open Google Earth by double-clicking this icon

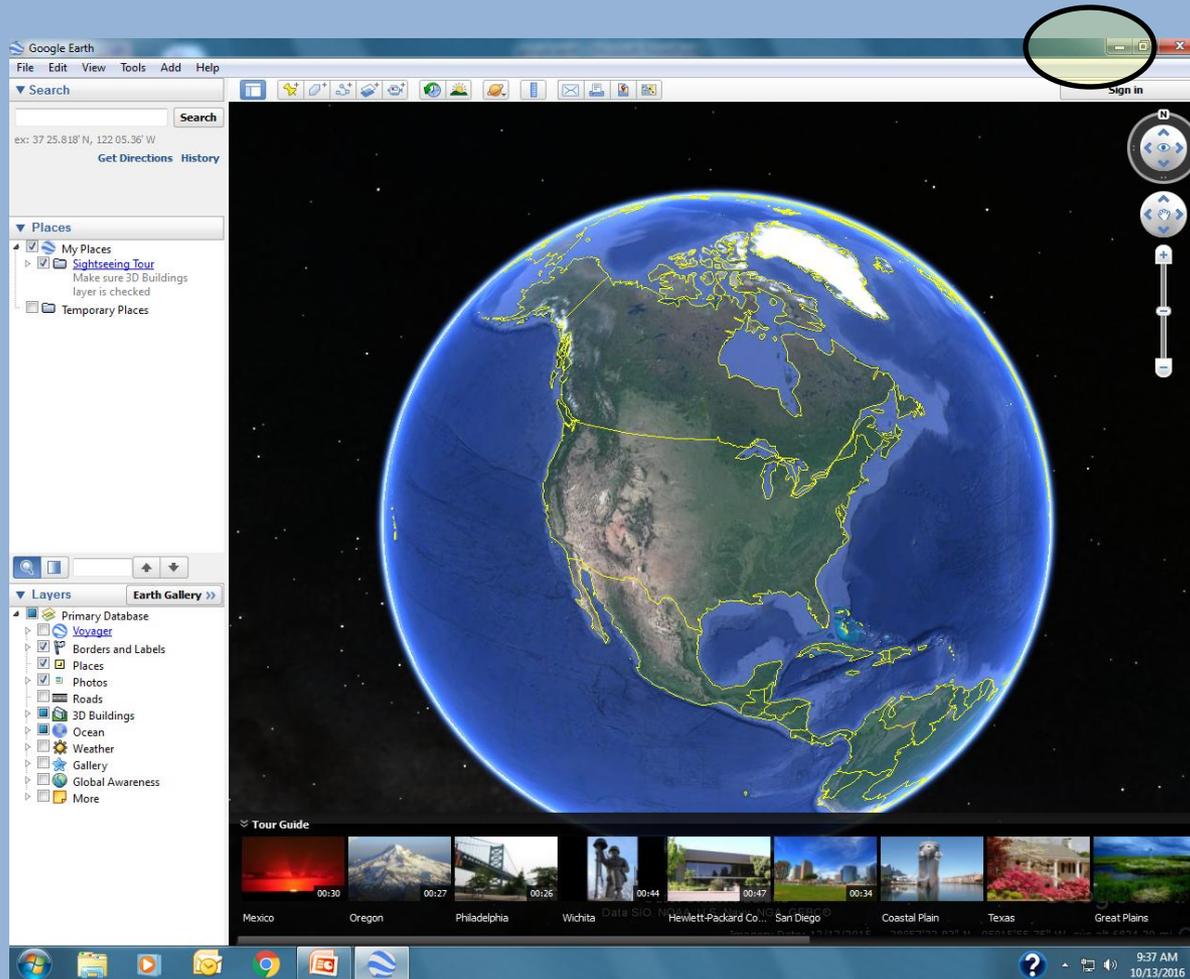


You can read about how to use Google Earth, or click close to close this window.

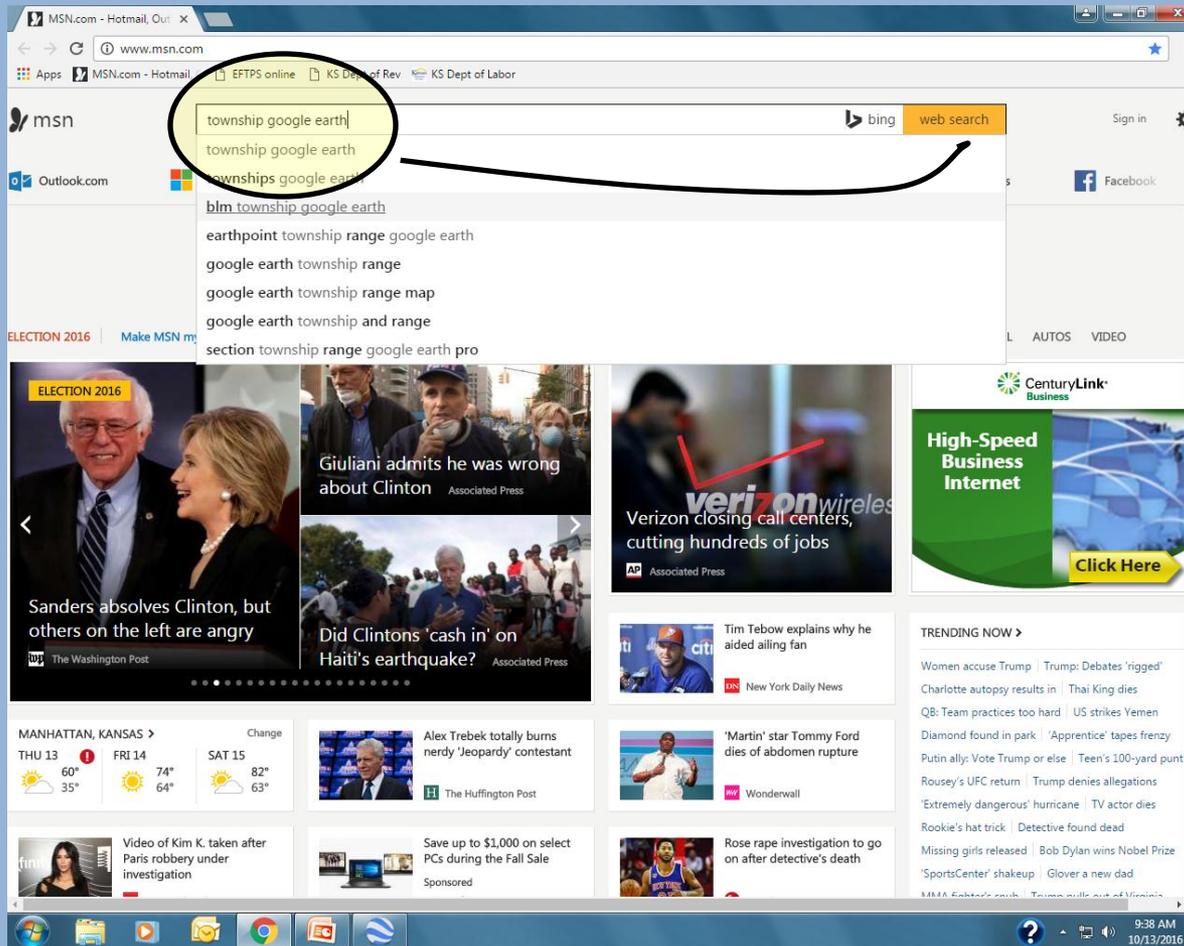


So now you have Google Earth on your computer. You can now go anywhere, be it the Washington Monument or the Eiffel Tower, or London simply by typing the destination into the search box in the upper left corner. It's really kind of cool.

However, legal descriptions are not available until we add a township layer. Which we do in the next few steps. So diminish Google Earth by clicking the “–” upper right button.



I did a search for “township google earth” and hit search.



Use your internet search engine to search for “PLSS in Google Earth” or try this link: <http://www.earthsurvey.us/plss/plss.html>

When this window pops up click on the “PLSGE” link to download PLSS

Earth Survey

Search Earth Survey Search

Home
About
Contact
FAQ
Tools
White Papers
Publications

PLSS in Google Earth (PLSGE)

This page briefly describes a free application that runs in the Google Earth desktop client. Please install [Google Earth](#), download [PLSGE](#), and return to this page to learn more. Additional documentation is provided by the [PLSGE white paper](#).

The principal component of PLSGE is a Google Earth implementation of the Bureau of Land Management (BLM) GeoCommunicator map service. It retrieves multiresolution images of the BLM Public Land Survey System (PLSS). Protracted townships west of the antimeridian are provided by the Alaska Spatial Data Management System (SDMS).

1. Position the area of interest (AOI) in the viewer.
2. Check the radio button beside the *Townships*, *Meridians*, or *Special Surveys* network link. Use the *Townships* overlay to find townships and sections. Use the *Special Surveys* overlay to find other divisions.
3. On subsequent uses, reposition the AOI and ensure that the network link is checked and selected. When *Refresh Mode* is *Automatic*, the overlay is refreshed two seconds after camera movement stops. When *Refresh Mode* is *Manual*, choose *Refresh* from the *Edit* menu, or right-click and select *Refresh* in the context menu ([explain](#)).

© 2016 Google - Image State of Oregon

Figure 1. Townships Overlay

Coverage includes Alabama, Alaska, Arizona, Arkansas, California, Colorado, Florida, Idaho, Illinois, Indiana, Iowa, Kansas, Louisiana, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Mexico, North Dakota, Ohio, Oklahoma, Oregon, South Dakota, Utah, Washington, Wisconsin, and Wyoming. Check the *Meridians* overlay to display the coverage area. Click on the *Availability* folder name to test the PLSS map service.

The map service will not return an image for the *Townships* overlay if the target resolution is greater than 1 millidegree per pixel. Service parameters are adjusted to allow township displays at target resolutions up to 2 millidegrees per pixel with a corresponding decrease in label size. Zoom in to display sections, aliquots, and lots where available.

PLSGE also includes an implementation of the GeoCommunicator Identify service and a facility to draw

9:40 AM
10/13/2016

When downloading is complete, click on the file at the bottom, lower left.

Earth Survey

Search Earth Survey Search

PLSS in Google Earth (PLSGE)

This page briefly describes a free application that runs in the Google Earth desktop client. Please install [Google Earth](#), download [PLSGE](#), and return to this page to learn more. Additional documentation is provided by the PLSGE [white paper](#).

The principal component of PLSGE is a Google Earth implementation of the Bureau of Land Management (BLM) GeoCommunicator [map service](#). It retrieves multiresolution images of the BLM Public Land Survey System (PLSS). Protracted townships west of the antimeridian are provided by the Alaska Spatial Data Management System (SDMS).

1. Position the area of interest (AOI) in the viewer.
2. Check the radio button beside the *Townships*, *Meridians*, or *Special Surveys* network link. Use the *Townships* overlay to find townships and sections. Use the *Special Surveys* overlay to find other divisions.
3. On subsequent uses, reposition the AOI and ensure that the network link is checked and selected. When *Refresh Mode* is *Automatic*, the overlay is refreshed two seconds after camera movement stops. When *Refresh Mode* is *Manual*, choose *Refresh* from the *Edit* menu, or right-click and select *Refresh* in the context menu ([explain](#)).

© 2010 Google - Image State of Oregon

Figure 1. Townships Overlay

Coverage includes Alabama, Alaska, Arizona, Arkansas, California, Colorado, Florida, Idaho, Illinois, Indiana, Iowa, Kansas, Louisiana, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Mexico, North Dakota, Ohio, Oklahoma, Oregon, South Dakota, Utah, Washington, Wisconsin, and Wyoming. Check the *Meridians* overlay to display the coverage area. Click on the *Availability* folder name to test the PLSS map service.

The map service will not return an image for the *Townships* overlay if the target resolution is greater than 111degree per pixel. Service parameters are adjusted to allow township displays at target resolutions in 2 millidecades per pixel with a corresponding decrease in label size. Zoom in to display sections.

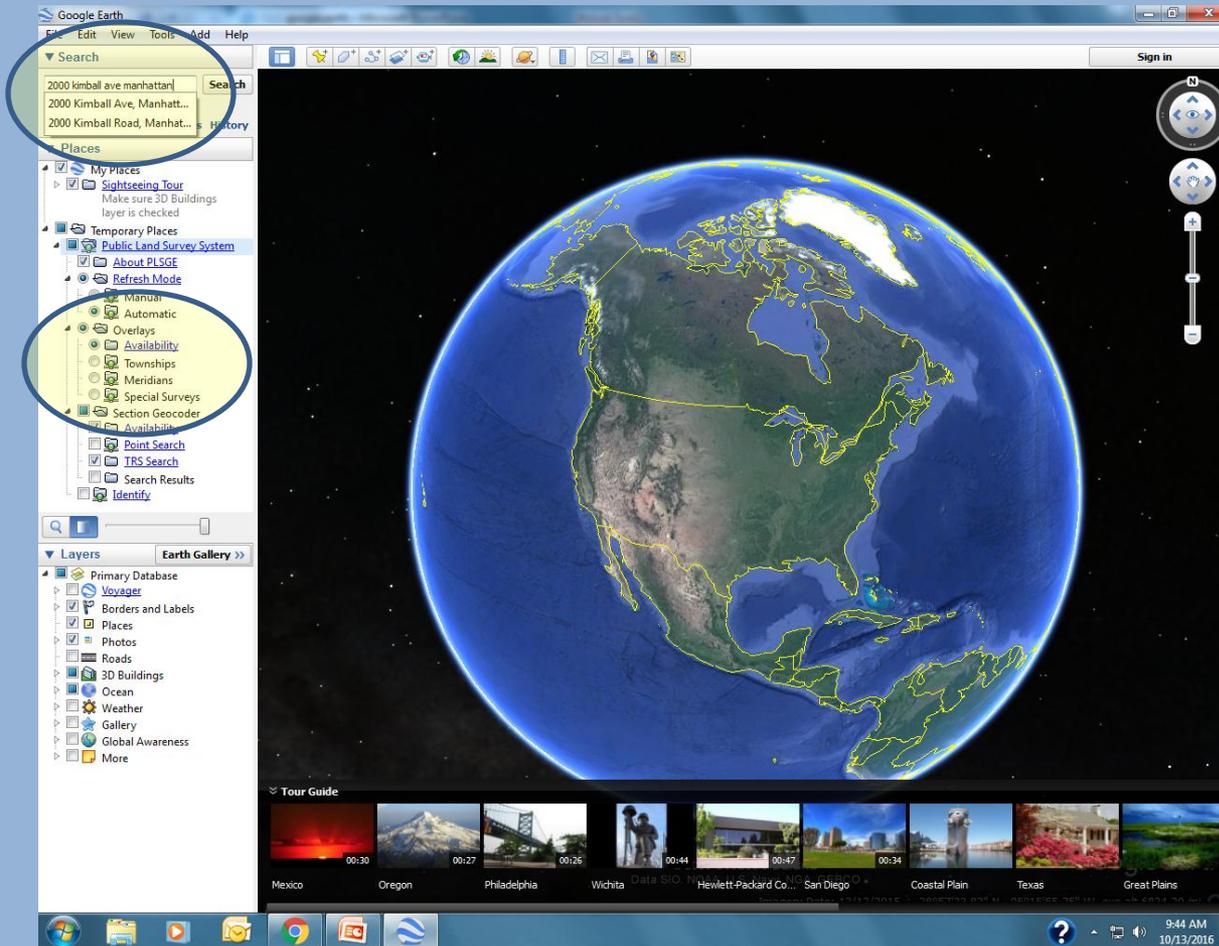
www.metzgerwillard.us/plss/plss.kml

p1ss.kml

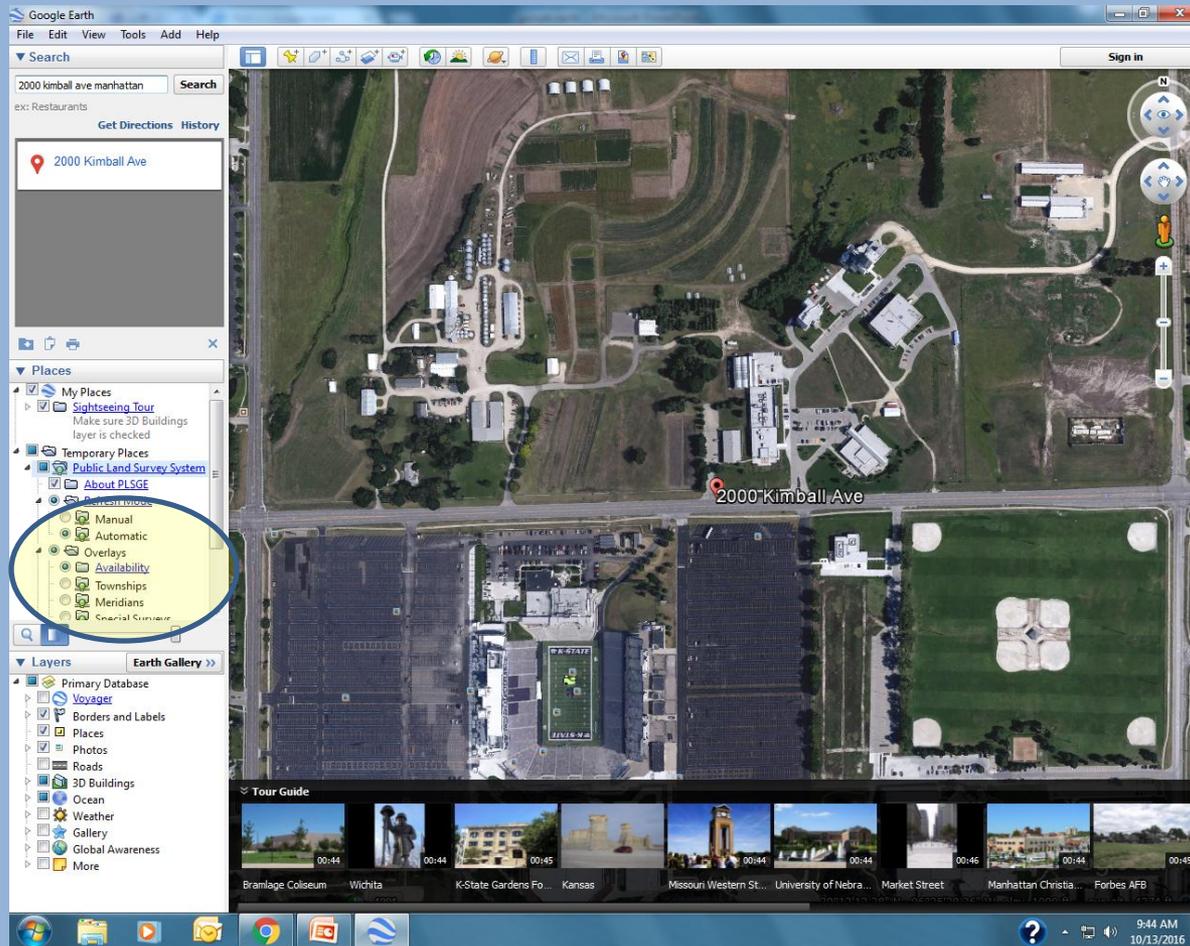
Show all X

9:40 AM
10/13/2016

Notice that now we have a township overlay. When this is selected, township legal description will be overlain on the map and you will be able to obtain section, township and range. Lets find the KCIA office by typing its address in the search box.

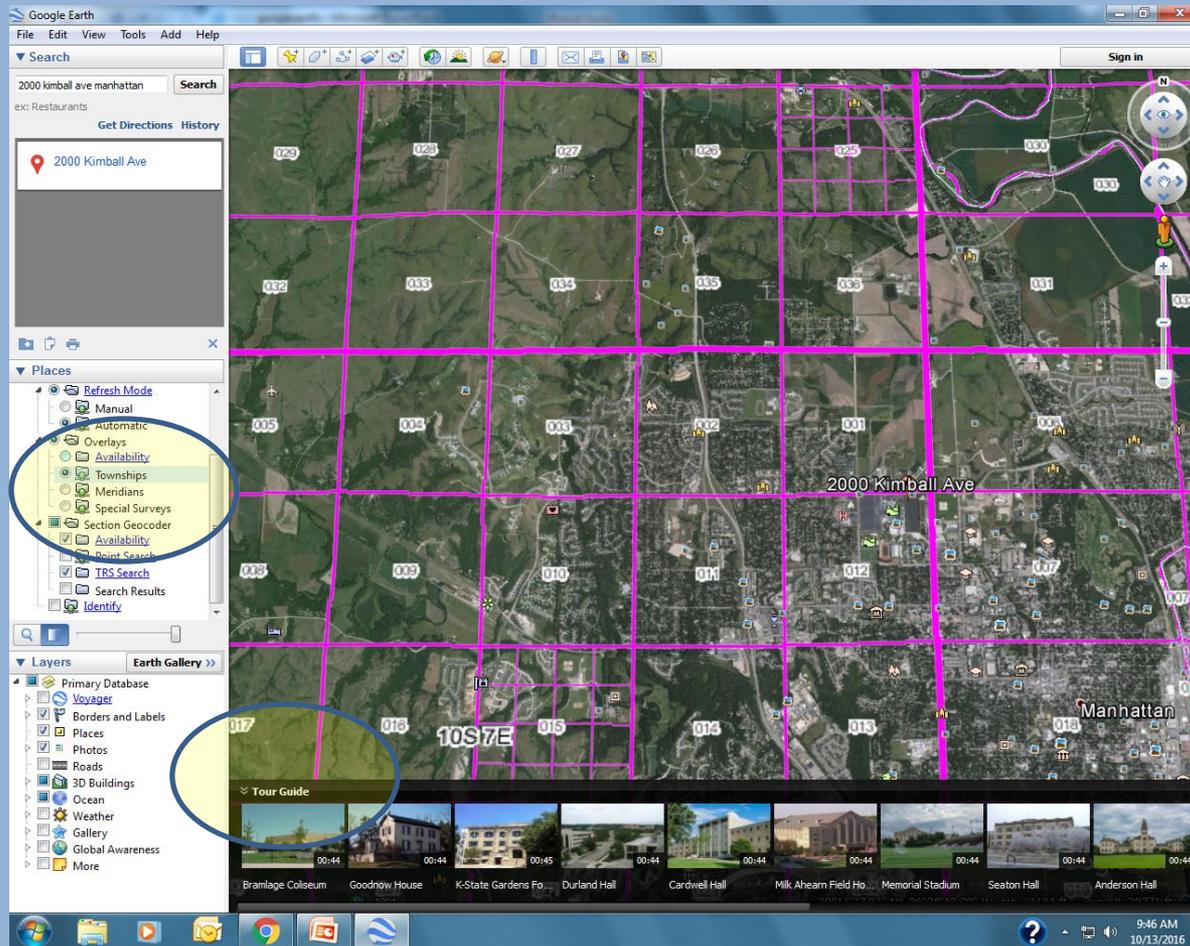


The red pinpoint locates the KCIA office. Notice in the circled area on the left, that township has not been selected. Lets click on the button to select townships and do our search again.

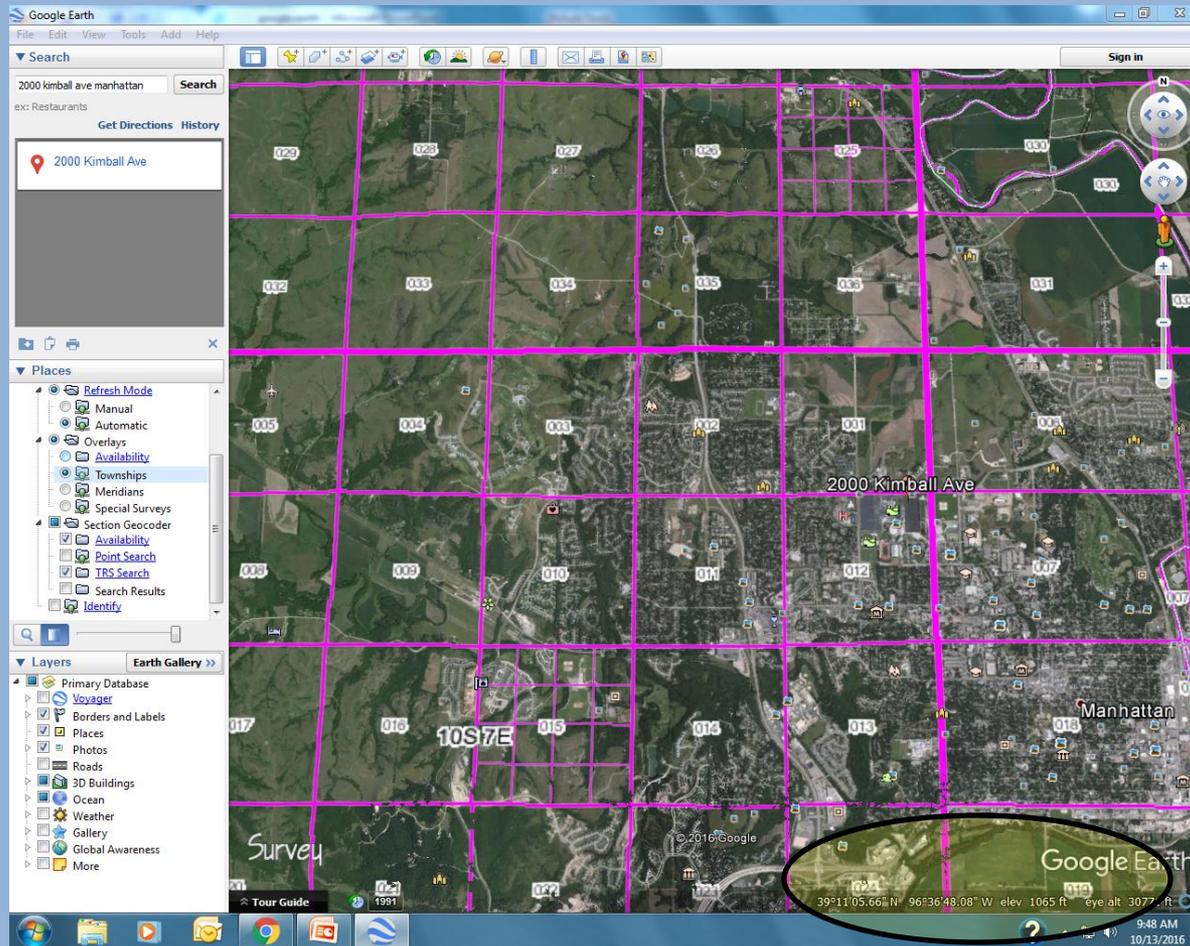


Now obviously, I zoomed out to better illustrate what checking the township overlay does to the map. You can now see individual sections and also the township and range.

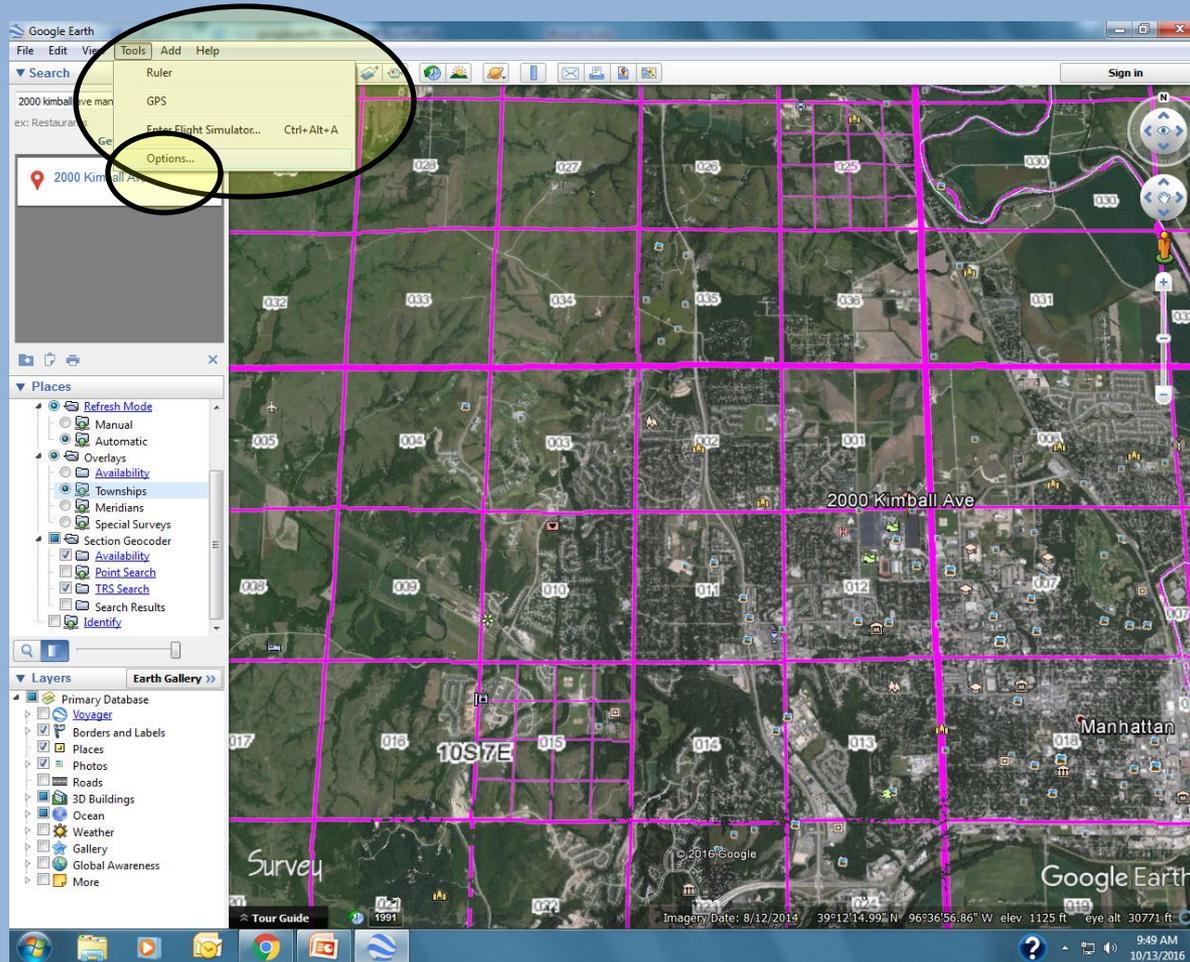
Click to diminish the Tour Guide and get it off the map.



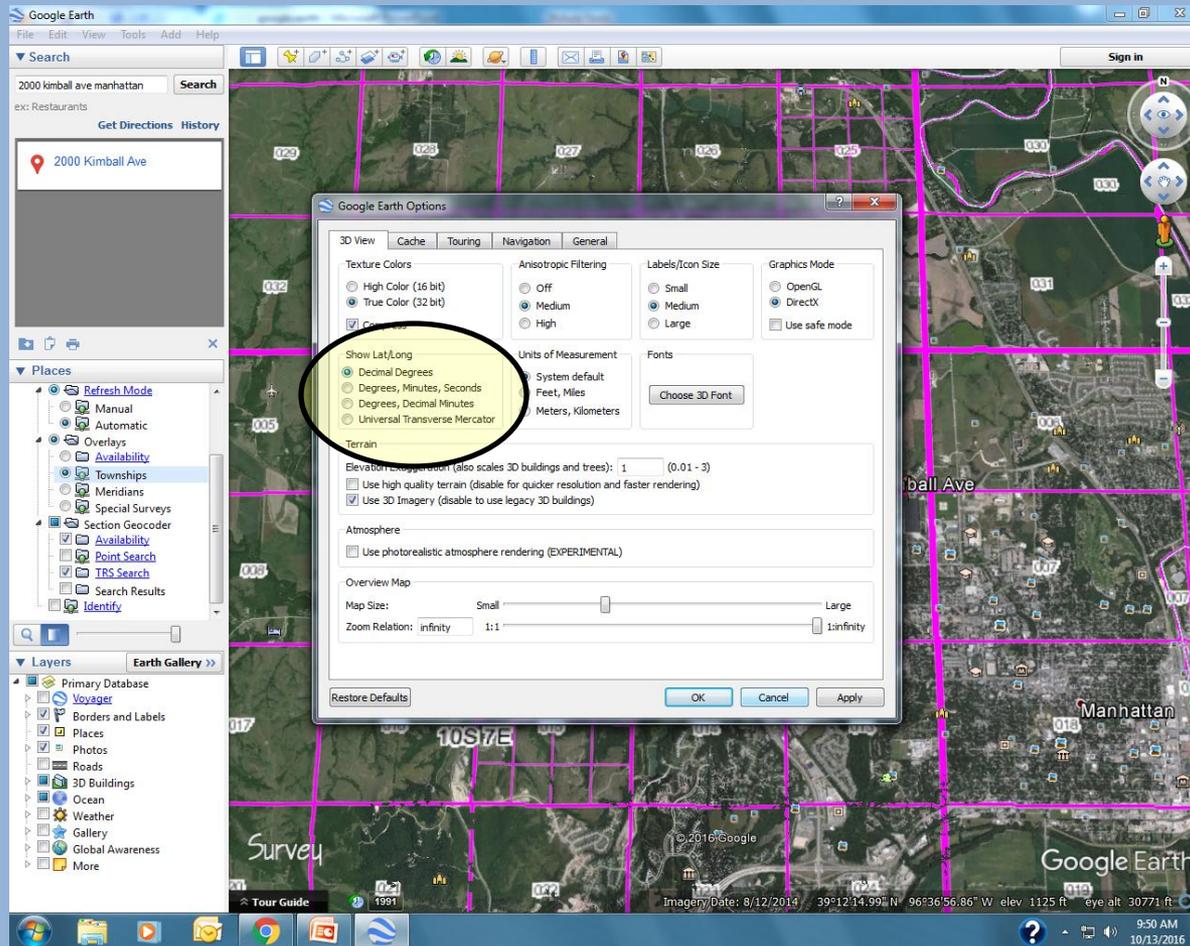
At the lower right corner, you will notice that longitude and latitude are given. Notice how these values change as you move the cursor around. The default download setting is in degrees and minutes, but our field application will require the units to be in decimals, so we have to change this setting.



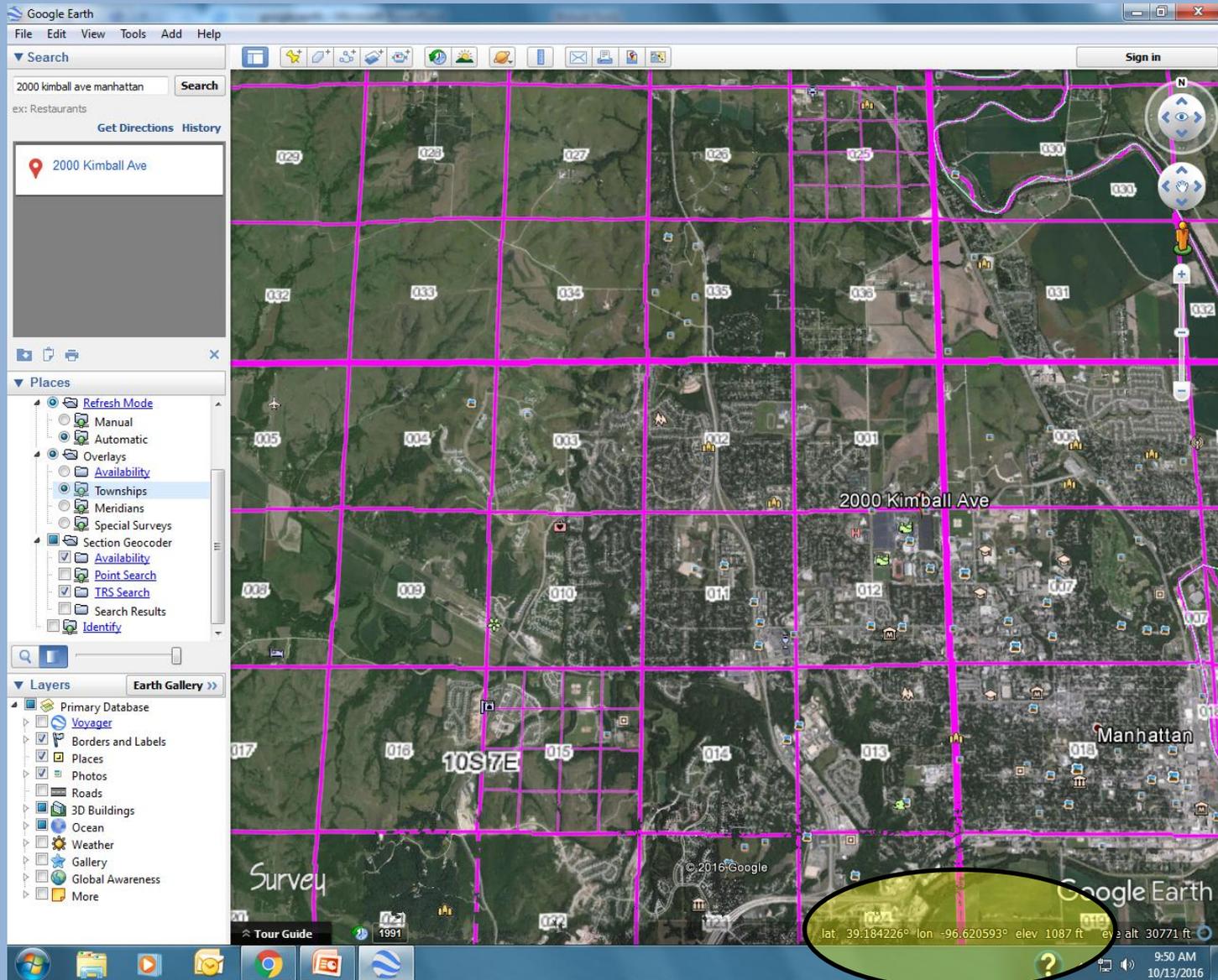
To select the proper format for longitude and latitude, from the tools menu choose “Options”.



From options, under “Show Lat/Long” select “Decimal Degrees”.



The GPS coordinates are now in the proper format for use in myfields.info.



- So this is how to use Google Earth to get the legal description of a field, or how to get the GPS (longitude and latitude) of that field. There are apps that can be purchased that will search by the legal description, if you wish to use these. The method shown here is using programs to which access is free.
- This is not the only way, and you may have a different way of accomplishing the same thing