



Installing the QGIS Software 2.14.10 and Getting Started with *FINDER* Quantum

Kent County is used as the example jurisdiction throughout this document. Please substitute your current jurisdiction as applicable.

These instructions will guide you through the installation of the QGIS software included in your product download and tell you how to access the map and data layers using the Maryland Department of Planning's *FINDER* Quantum QGIS custom project file (qgs). QGIS is an official project of the Open Source Geospatial Foundation (OSGeo).

You need administrative rights to install QGIS on your computer using the setup file included in the Kent2015\Quantum folder in your product download. Begin the software installation by browsing to that folder and double-clicking on **QGIS-OSGeo4W-2.14.10-1-Setup-x86_64.exe**.

Once Windows opens the QGIS setup file:

- Select **Run** if Windows asks you if it is OK for QGIS to change your computer.
- When the QGIS Essen (2.14.10) Setup window opens, select **Next**.
- Select **I Agree** when the license window pops up.
- The QGIS installer defaults to the C:\Program Files folder for installation. Select **Next** if this is where you want to install the software, or browse to the location of your choice.
- The QGIS installer only has QGIS checked for installation. Planning suggests that you leave all other options unchecked, as QGIS is sufficient to run all of the map and data layers included in your *FINDER* Quantum product download. When you select Install, the QGIS installer begins the installation process. The software will take up about 500 MB of space on your hard drive – more if you choose to install additional QGIS data.
- When the Complete window appears, select **Finish** to end the QGIS software installation process and return to the Windows desktop.

QGIS will create several icons and one folder on your Windows desktop during installation. These items can be moved into a single folder, or left as is on your desktop:

- MSYS
- **QGIS 2.14 (folder)**
 - **QGIS Desktop 2.14.10** 
 - With and without GRASS 7.0.5 (non-GRASS Desktop is utilized for the walkthrough)
 - QGIS Browser 2.14.10
 - With and without GRASS 7.0.5
 - Qt Designer with QGIS 2.14.10 custom widgets
 - SAGA GIS (2.1.2)
- OSGeo4W Shell
- GRASS GIS 7.0.5

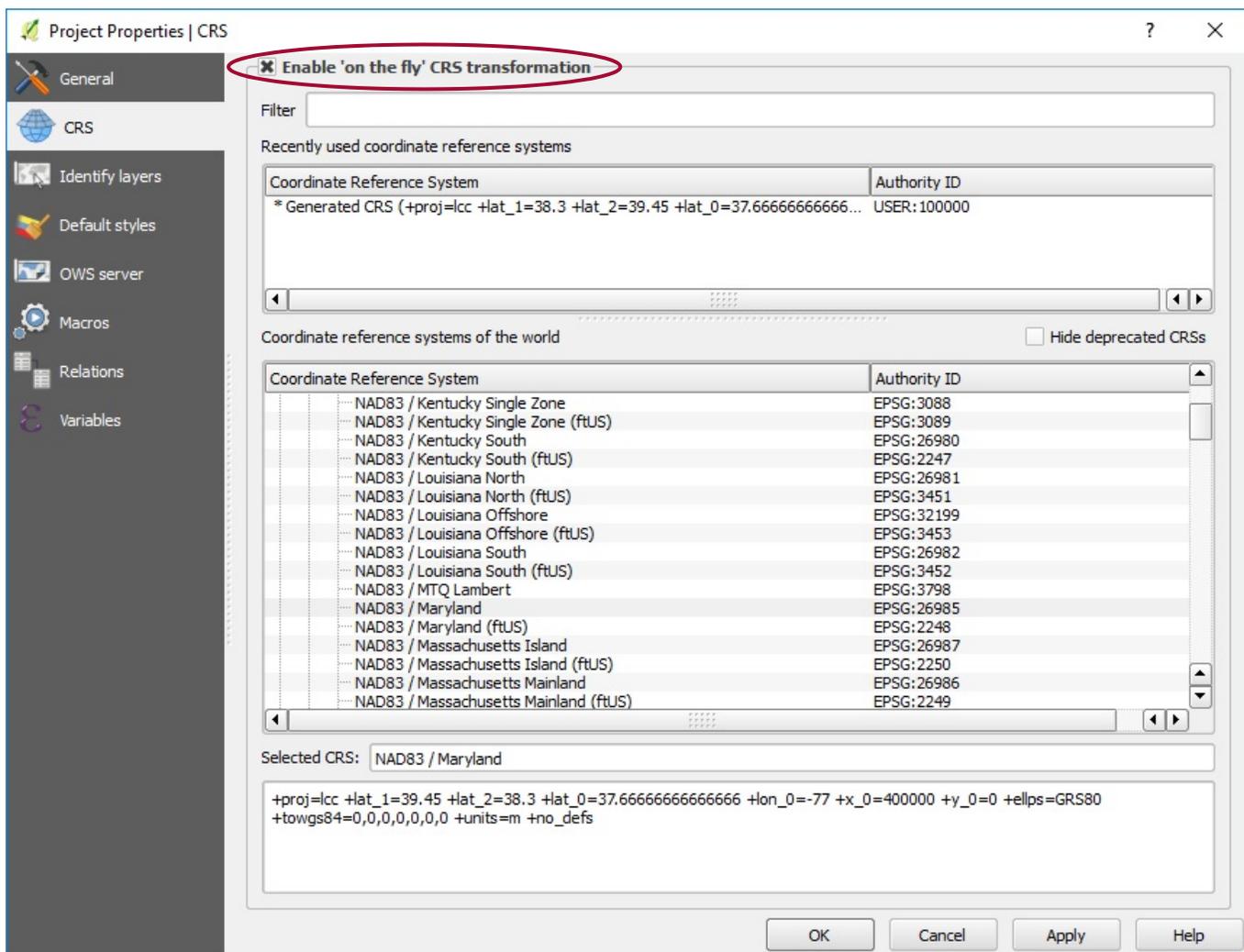
The icon shown in red above is the one that launches the QGIS software.

But before you begin...on the next page there are some setup tasks that need to be completed.

1. First you need to change the QGIS software setup to allow **on-the-fly projection (OTF projection)** because OTF projection is not the default setting in QGIS. OTF will be needed when you bring in additional map layers not included in your *FINDER* Quantum product download, for example, a monthly Sale Database update database that you downloaded from Planning's Open Data GIS Downloads website. Having OTF projection turned on ensures that your new map layer will be brought into the map view area in NAD83 meters and not the default QGIS projection of WGS 84.

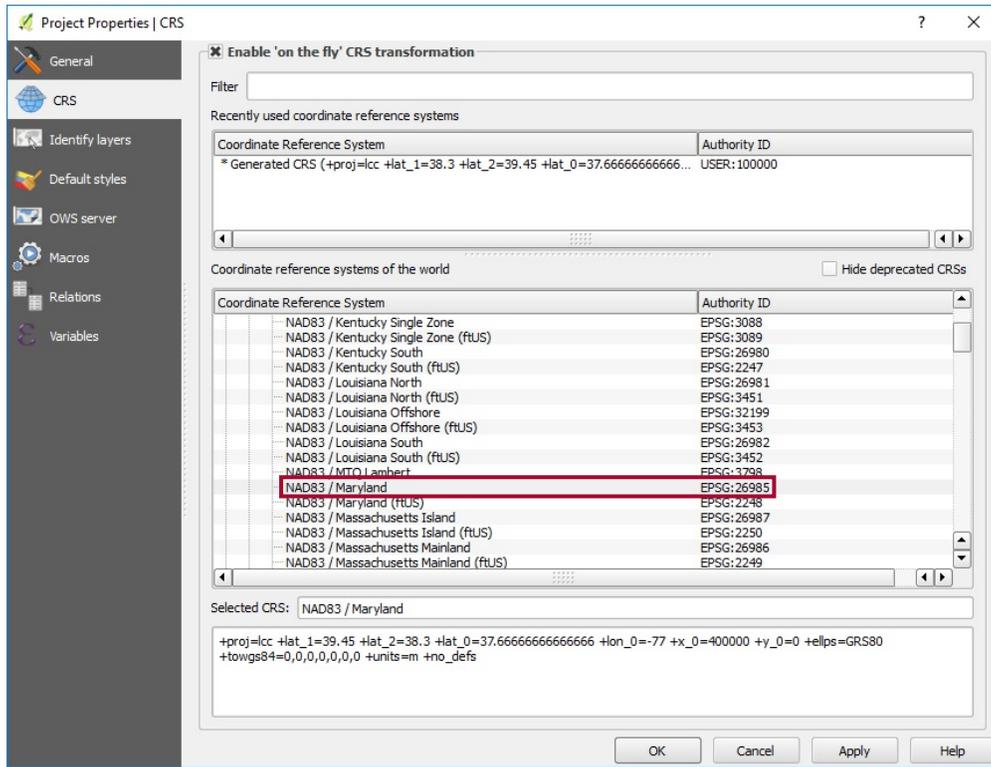
You also need to have OTF projection turned on to get to the next step.

To turn on OTF projection, go to the **Project Menu** and select **Project Properties** to open the Project Properties window. Next, select the **Coordinate Reference System (CRS)** tab and check **Enable 'on the fly' CRS transformation** as shown below. Note that the **Coordinate reference systems of the world** area of the Project Properties window is greyed out until you select the checkbox.



- Now you can set up the correct projection for QGIS. The QGIS default projection is WGS 84. Once you check on **Enable 'on the fly' CRS transformation**, you can access the list of possible projections shown in the **Coordinate reference systems of the world** area of the Project Properties window. You need to change the QGIS projection to Planning's default projection of NAD83 meters before opening Planning's *FINDER* Quantum QGIS custom project file (Kent15F_Qgis.qgs).

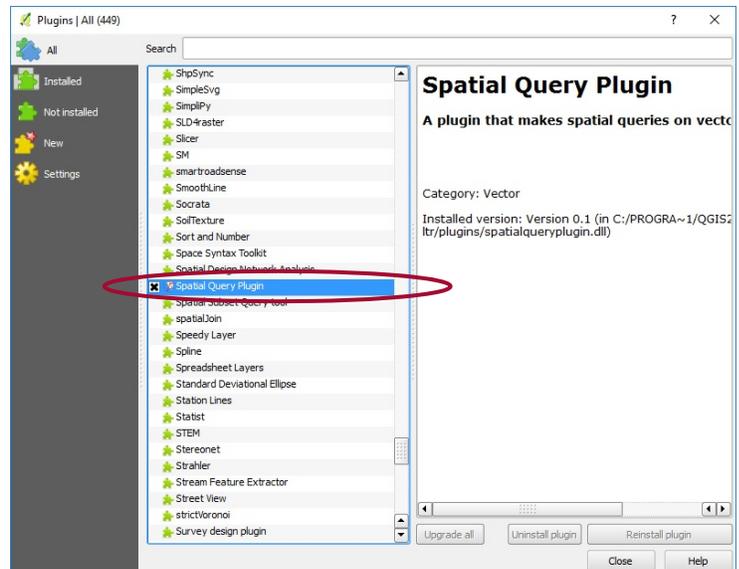
The correct setting to select is **NAD83/Maryland ESG: 26985** as shown below. This setting is listed under the **Lambert Conformal Conic** major category. Once you have made your selection, click on the **Apply** button and then the **OK** button to register your selection.



- Finally, load the **Spatial Query and Coordinate Capture Plugins**. Both are commonly used tools in *FINDER* Quantum – you will need to have these plugins installed in order to use the tools.

To install the plugins, go to the **Plugins Menu** and select **Manage and Install Plugins** to open the Manage Plugins window. Use the slider arrows to slide down and select **Spatial Query** plugin and click on the checkbox to turn on the plugin, as shown to the right. Repeat for **Coordinate Capture** and then click on the **OK** button.

That's it...now continue on to the next page to get started with *FINDER* Quantum.





To get started, double-click on the QGIS Desktop icon (shown below) found in the QGIS 2.14.10 desktop folder.



- QGIS Desktop 2.14.10

Once the program opens, go to the **File Menu**, click on **Open Project** and use the pull-down menu to navigate to the Kent2015 root folder included in your *FINDER* Quantum product download. If your computer is several years old, you may want to copy the Kent2015 folder and all sub-folders – about 750 MB of map and data layers – to your local hard drive to improve performance.

To begin working with the *FINDER* Quantum map and data layers, open the Kent2015 folder, click on the **Kent15F_Qgis.qgs** project file and select Open. The next screen you see will be the major roads and the county boundary displayed over One Meter NAIP Imagery.



Your *FINDER* Quantum product download includes the version of the QGIS software that was current as a stable-build long-term release (LTR) at the beginning of the current *FINDER* Quantum Edition year:

QGIS version QGIS 2.14.10 released in March 2016

The Maryland Department of Planning will update the QGIS software included in this product at the beginning of each new Edition year. Users are welcome to download and install any QGIS software updates released by Open Source Geospatial Foundation (OSGeo) – however, please note the following:

- Planning neither substantiates nor warrants that Planning's *FINDER* Quantum QGIS custom project file (qgs) will be fully operational with any future QGIS software updates, and
- Planning will not provide ongoing support for any *FINDER* Quantum operational issues that users may encounter if those issues are determined to be caused by a version of the QGIS software later than QGIS version 2.14.10 released in March 2016.