

The Esri Data and Maps and StreetMap North America for ArcGIS 10.1 contain a complete street network data set for the U.S. and Canada.

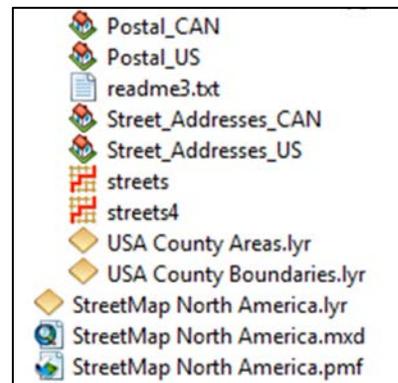
This dataset represents streets, highways, roads with and without limited access, secondary and connecting roads, local and rural roads, roads with special characteristics, access ramps, and ferries within the United States and Canada. This data set contains road network features such as arterial classification, speed, and direction of travel. It contains address ranges for all addressable features with addresses.

This network dataset can be used in Network Analyst for a wide variety of network analysis, including Service Area and OD Cost Matrix analysis.

You have practiced these analyses when using the Network Analyst Tutorial in Exercise 5.

There are two street network datasets: streets and streets4.

The streets.rs and street4.rs expose hierarchy into two different ways for the hierarchy On option in the route and other solvers. The streets.rs has fewer roads on the top level hierarchy and will give you fast performance. But in some cases it can give you longer paths in areas of the country that has a very sparse highway network. So if you start to see "longer" paths then use the streets4.rs



Try both and compare!

Create service area polygons using the streets and streets4 network dataset!
Here are a few tricks to make things easier:

1. First, load a base map from ArcGIS Online and zoom-into your area of interest, for example Westfield or any other city in the USA.
2. Geocode, digitize, or somehow create a point layer for the location of our campus, the location of the Westfield police station, or Noble Hospital.
3. Add the streets or streets4 network dataset to your map.
Click Yes when asked if you want to add all feature classes that participate.
This will take a long time to draw on the screen – hit Esc to stop the drawing.
The network dataset is still loaded, it's just the drawing that takes forever!
4. Re-produce a service area analysis as you have practiced in Exercise 5 of the Network Analyst Tutorial.
5. Try-out the different parameters, impedances, breaks, etc.
Also: compare the two network datasets!

Practice – this will become very easy with practice!