

Ohio Surveys – Some References and History
Nancy von Meyer – April 2012

This document is a summary of the information provided by Charlie Hicks in an email and has been combined with other references for a brief overview of some of the terms and concepts associated with Ohio surveys.

Historical Background and References

There are many books and articles that describe the background of the PLSS, the formation of the states and governing rules and instructions for the PLSS.

This link provides a history of Indiana with some background information on the Northwest Ordinance and early PLSS surveys.

http://www.roxalumni.com/member_dosurvey.cfm?SurveyID=12579

James L. Williams is completing book on the Ohio surveys that will be published by the Akron Press. Mr. Williams' book *Blazes, Posts and Stones* a history of Ohio's Original Land Subdivisions should be available in 2012.

Another frequently cited reference about the early US surveys is the book published in 2003 by Andro Linklater "Measuring America: How the United States Was Shaped By the Greatest Land Sale in History".

<http://www.amazon.com/Measuring-America-United-Greatest-History/dp/0452284597>

“In 1790, America was in enormous debt, having depleted what little money and supplies the country had during its victorious fight for independence. Before the nation's greatest asset, the land west of the Ohio River, could be sold it had to be measured out and mapped. And before that could be done, a uniform set of measurements had to be chosen for the new republic out of the morass of roughly 100,000 different units that were in use in daily life. *Measuring America* tells the fascinating story of how we ultimately gained the American Customary System—the last traditional system in the world—and how one man's surveying chain indelibly imprinted its dimensions on the land, on cities, and on our culture from coast to coast.”

Wikipedia has a fairly complete entry on the PLSS. This entry also has many references and embedded hyperlinks to additional information the various parts and rules for the PLSS.

http://en.wikipedia.org/wiki/Public_Land_Survey_System

The Geologic Survey (GS) historic quads will be available in the summer of 2012, online and geo-referenced at the following link (<http://pubs.usgs.gov/fs/2011/3009/>).

The older quadrangle maps show PLSS lines with lots of detail on the map and in the margin.

The Ohio Lands Book, published by the Ohio State Auditor and written by Dr. George W. Knepper Burke is in the fifth edition. It is available as a pdf at this link (<http://www.auditor.state.oh.us/publications/general/ohiolandsbook.pdf>).

For many researchers Christopher Sherman's book is the seminal reference on the history of the Ohio Surveys. Christopher E. Sherman, 1925, Original Ohio Land Subdivisions, (reprinted 1991), Ohio Department of Natural Resources, Division of Geological Survey. This book has been digitized in Google books and includes a wall size map of the original land areas of Ohio.

The American Surveyor published an article by John E. Dailey in December 2004 that has some interesting graphics and a good general background on the Ohio lands surveys
http://www.theamericansurveyor.com/PDF/TheAmericanSurveyor_FabricOfSurveyingOhio_December2004.pdf

Other comprehensive references include the following

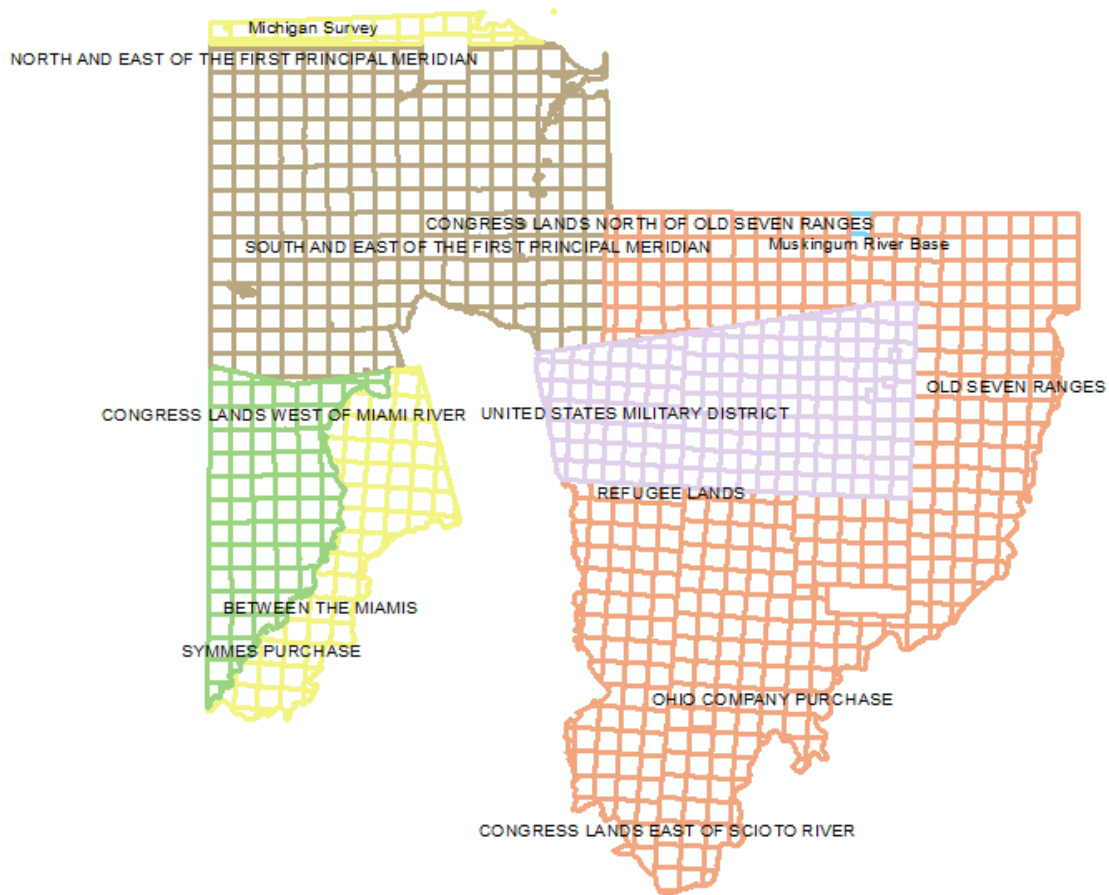
Thrower, Norman J. W., 1966, Original Survey and Land Subdivision, Chicago: Rand McNally, for the Association of American Geographers, Monograph 4.

White, C. Albert, 1982, A History of the Rectangular Survey System, BLM, Washington: Government Printing Office.

PLSS and Survey Systems (non-PLSS) in Ohio

The Public Land Survey System (PLSS) areas of the United States are lands that were at one time in the public domain and whose survey was controlled and directed by the United States. There are thirty public domain states with Ohio being the testing ground for the development of the PLSS components and surveying rules.

There are many named areas for the Ohio Surveys. Some of these names reflect the intended purpose of the land, some reflect the method of acquisition and others reflect the survey instruction reference system for either the survey or numbering of areas in the surveys. Figure 1 is an overview of these named areas.



PLSS Areas

Old Seven Ranges; a.k.a., the Original Seven Ranges; Seven Ranges; First Seven Ranges.

This is a PLSS area and represents the first PLSS surveys in the US. The Townships and ranges in this area are numbered from the Ohio River and this area is identified as one of the “Ohio River base” PLSS areas.

Congress Lands North of the Old Seven Ranges; a.k.a., Congress Lands of Northeastern Ohio; Congress Lands 1799-1804.

This is a PLSS area. The Townships and Ranges are numbered from the Ohio River and are identified as one of the “Ohio River base” PLSS areas.

Congress Lands East of the Scioto River; a.k.a. East of the Scioto; Congress Lands 1798-1802; Congress Lands 1795-1802).

This is a PLSS area. The Townships and Ranges are numbered from the Ohio River and are identified as one of the “Ohio River base” PLSS areas. There is an area within this survey that references the Scioto River with three smaller surveys. These include

(1) Langham's Survey as "land lines based on Ohio River base"
(2) Worthington's Survey as "land lines based on first Scioto River base"
(2) Mathew's Survey as "land lines based on second Scioto River base." For the Mathew's Survey for township XIII, the note was "land lines based on third Scioto River base."

These areas are numbered from the Ohio river and the duplicate and triplicate numbering are handling in the duplicate (or replicated) township numbering in the Cadastral data Content Standard.

Between the Miamis -- North of Symmes Purchase; a.k.a., Congress Lands Between the Miamis; Congress Lands East of the Miami River; Congress Lands 1802-1805; also T. E. of Riv. (for "Townships East of River"). The combination of this public survey area with the adjacent Symmes Purchase makes up the Between the Miami Rivers Survey, a.k.a. Between the Miamis.)

This is a PLSS area. The Townships and Ranges are numbered from the Miami River. The Townships are numbered east and ranges north. There are also several duplications in the township numbering in this area.

West of the Great Miami; a.k.a., East of the First Meridian Survey; Miami River Survey; Congress Lands West of the Miami River; Congress Lands 1798-1801; West of Miamis; also T. N. of Riv. (for "Townships North of River" I assume). This area, along with an adjacent piece of Indiana, is also known as Congress Lands - First Meridian Survey.

This is a PLSS Area. The ranges in area are numbered from the First Meridian, which is also the Ohio-Indiana State Line but the Township numbering is from the Miami River. This is most noticeable in the northern part of this area. For simplicity the reference for this PLSS area has been described as the First Meridian.

Congress Lands; a.k.a., Congress Lands Based on the First Principal Meridian; Northwestern Ohio and the South and East of First Principal Meridian; a.k.a., Congress Lands 1819; South and East; South and East Governed by the First Principal Meridian and Base Line; East and South of the 1st Principal Meridian Survey; Congress Lands South and East.

This is a PLSS area. The Townships and Ranges are referenced to the First Principal meridian.

North and East of First Principal Meridian; a.k.a., Congress Lands 1820-1821; North and East; East and North of the 1st Principal Meridian Survey; Congress Lands North and East.

This is a PLSS area. The Townships and Ranges are referenced to the First Principal meridian.

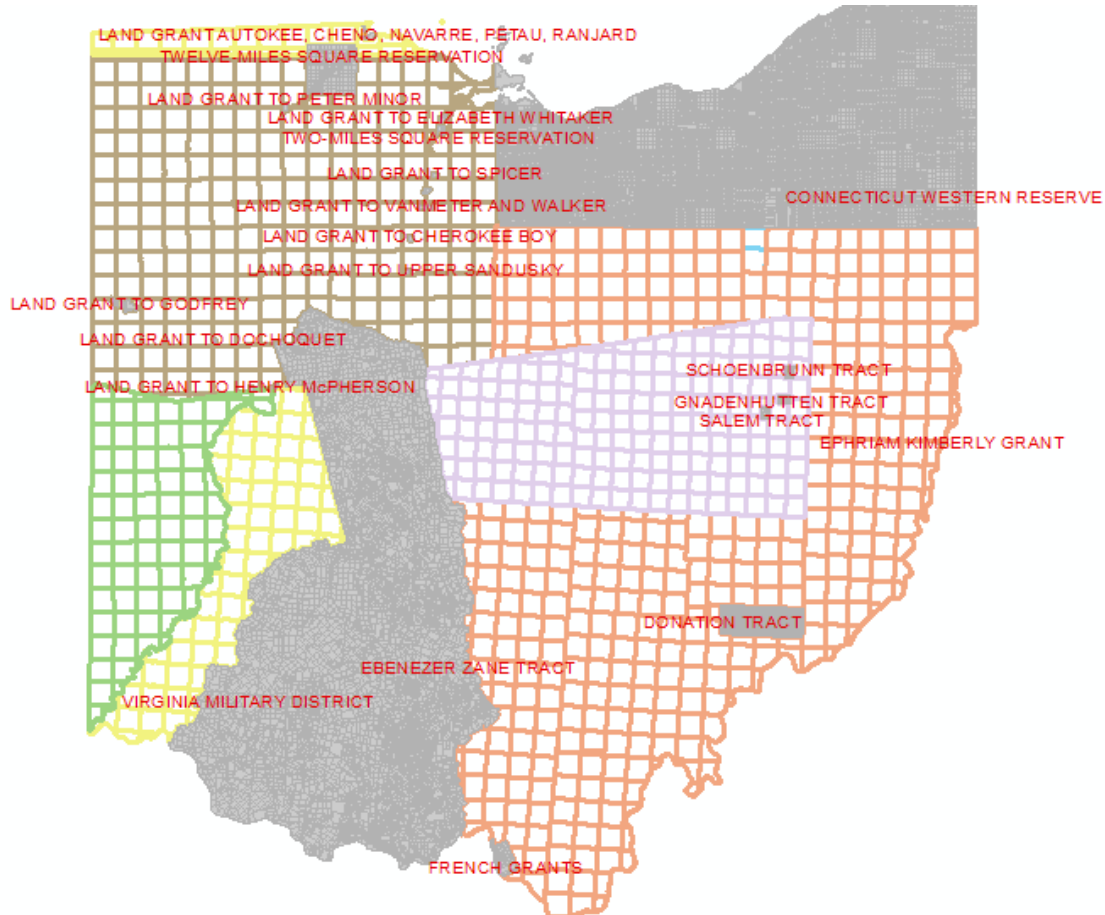
Some Ohio PLSS maps just label all the areas listed above as "Congress Lands" or "US Congress Lands" or "Congress Lands by Greenville Treaty". Some sources consider all of Ohio, except the Connecticut Western Reserve, to be Congress Lands.

The Ohio Company Purchase; a.k.a., Ohio Company Land. This includes "First Ohio Company Purchase" and "Second Ohio Company Purchase."

This is a PLSS area. The Townships and Ranges are numbered from the Ohio River and are identified as one of the "Ohio River base" PLSS areas.

Survey Systems – Non-PLSS Areas

The original survey systems in Ohio that were not part of the PLSS are lands that were either occupied prior to survey, were claimed by colonies or set aside as grants of land. The grants of land in Ohio are not the same as the Land Grants in the western states, which were lands owned by foreign entities.



Some of the larger survey areas include the following.

The Fire Lands; a.k.a., Firelands; Fire Lands of the Connecticut Western Reserve; Sufferers Lands. This is an area contained entirely within the Connecticut Western Reserve (a.k.a., Western Reserve; Connecticut Land Company; the Reserve; New Connecticut). Some Ohio PLSS maps (including the original Sherman map) show the entire area as simply the Connecticut Western Reserve. A few maps have the Fire Lands as an area distinct from the Connecticut Western Reserve (CWR).

The Connecticut Western Reserve; a.k.a., Western Reserve; Connecticut Land Company; the Reserve; New Connecticut.

The Twelve Mile Square Reserve; a.k.a., Twelve-Mile Square Reservation.

The Refugee Tract; a.k.a., Refugee Lands.

At the end of the Revolution, the newly created United States found itself with an unpaid army and a lot of very large debts. And while the new country had little money, it had a lot of land. So the new country took the obvious course and paid its soldiers and creditors in land and then offered much of what remained for sale. It was the promise of that new and inexpensive land that drew people like David Nelson and his family to Ohio.

At length they found it along Alum Creek in what then was called the Refugee Tract. Set aside for people from Nova Scotia who had lost land because of their loyalty to the American Revolution, the tract began at the Scioto River and ran east between what is now Fifth Avenue and Refugee Road.

After the claims of the refugees were settled, the balance of the tract was made available in open sale. David Nelson and his family acquired some of these lands along Alum Creek.

U.S. Military District; a.k.a., U.S. Military Survey; U.S. Military Reserve; U.S. Military Lands.

Virginia Military District; a.k.a., Virginia Military Survey; Virginia Military Reserve

There are also other non-PLSS grants of lands including the Two Mile Reservation, The Donation Tract, French Long Lots and numerous smaller individual grants identified by the original grantee or pre-survey settlement land owner.

State of Ohio Digital Survey and PLSS Data Set

A poster of the Ohio surveys was developed by James McDonald, Joseph G. Wells, James W. Wright, Christian D. Steck, Lawrence H. Wickstrom, Brian D. Gara, and Lap Van Nguyen with cartography by Donovan M. Powers. The poster is available at this link.

http://www.ohiodnr.com/geosurvey/pub/dms/dms_mg02/tabid/7238/Default.aspx

The State of Ohio captured and corrected the PLSS layer from the DLG coverages. Ohio EPA merged the PLSS layer for all the DLG quads to create a statewide coverage. However, they did not correct errors from the original data set. We've started with their coverage and are correcting it. We are finding things such as wrong assignment of township and range fence lines digitized as section lines, etc. The DLG PLSS layer only contains the regular section lines as found on the 7.5' quadrangles. Unfortunately, Ohio uses some 13 different land subdivision schemes including such subdivisions as: river lots, Virginia Survey Military lots, undivided quarter townships, village lots, fractional sections, allotments, tracts, etc. OEPA digitized most of these in CAD and captured from some lines from the Digital Line Graphs (LG's at that time, not all DLG's were available then). This data was combined and supplemented with additional digital data, added topology and merged with the regular PLSS to form a statewide, inclusive subdivision coverage good to 1:24,000 scale.

This statewide coverage was then imported in the national Cadastral Data Content Standard, Publication format. In the process of building the standardized data many historical references, original government land office (GLO) plats were reviewed and the names of survey areas, PLSS references and land division types were standardized.