

	<p align="center">DCHC MPO GIS/Database/Web</p>	<p>Date: 11/21/2013 Date Last Updated: 11/21/2013</p>
		<p align="center">Standard of Procedure Number: 1</p>
<p>Objective: Documenting DCHC MPO Spatial Data Projection Standards Inputs: Shapefile(s), Geodatabase(s), Raster(s), DEM, and others etc. Outputs: Data with standardized coordinate system, projection, units Comment:</p>		

DCHC MPO Spatial Data Projection Standards

1. DCHC MPO has accepted North Carolina State Plane (Lambert_Conformal_Conic), NAD83 (horizontal datum) and NAVD88 (vertical datum) as a standard for GIS files. Therefore, all final GIS files destined to DCHC MPO GIS database should be in this coordinate system. This coordinate system with NAD83 as horizontal datum in ArcGIS is listed as:

NAD_1983_StatePlane_North_Carolina_FIPS_3200_Feet

2. In the case of horizontal coordinate system transformation NADCON algorithm will be used to convert NAD23 to NAD83 datum.

3. Vertical coordinates will be transformed from NGVD29 to NAVD88 using VERTCON software from National Geodetic Survey.

(http://www.ngs.noaa.gov/PC_PROD/pc_prod.shtml#MANUALS for manual and <ftp://ftp.ngs.noaa.gov/pub/pcsoft/vertcon/> for PC version software)

4. VERTCON : It is a PC application computes the modeled difference in orthometric height between the North American Vertical Datum of 1988 (NAVD 88) and the National Geodetic Vertical Datum of 1929 (NGVD 29) for a given location specified by latitude and longitude. This conversion is sufficient for many mapping purposes. PC software is available for download.