

Reference System Datum

Horizontal:

Prior to November 4, 2012, NYSDOT CORS positions are based on the North American Datum of 1983, CORS adjustment, NAD83 (CORS96) (EPOCH 2002.0).

After November 4, 2012, NYSDOT CORS positions are based on the [North American Datum of 1983, NA2011 adjustment, NAD83 \(2011\) Epoch 2010.00.](#)

Users must take special note that CORS defined in NAD83 (2011) use [absolute antenna calibrations](#). Absolute values should be used when processing data with CORS coordinates in NAD 83(2011) EPOCH 2010.0

When surveying on local coordinates systems, including prior adjustments of NAD83, the user must determine the appropriate connections to these coordinate systems.

Vertical:

Heights produced from this network are related to the reference ellipsoid for NAD83, GRS80. NYSDOT CORS are not directly connected to the North American Vertical Datum of 1988 (NAVD88), an orthometric height system.

NGS does produce [GEOID](#) models for transforming heights between ellipsoidal and orthometric heights. Users should be aware of the accuracy of these models. Depending upon required survey accuracy, the user must determine required connections to local vertical datum, including NAVD88.

[NA2011](#) yields ellipsoid heights that are inconsistent with GEOID09; therefore, [GEOID12B](#) should be used if transforming ellipsoidal heights to NAVD88 heights.