NYC's Data Geocoding System

According to Department of City Planning (DCP), the X, Y coordinates in many of New York City's, data sets are based on the State Plane Coordinate (SPC) system**.

In this system, each state of the U.S. is subdivided into zones small enough to model as planar areas using Cartesian coordinates; the X and Y coordinate axes oriented due east and due north, respectively. The origin selected is a point well to the southwest of the entire zone to insure positive values for the X and Y coordinates within the zone.

NAD83/New York-Long Island is the SPC zone for NYC.

Most of NYC's tabular data sets that contain X and Y coordinates are geocoded through DCP's Geosupport System, which is derived from a number of DCP data sets, including GIS file, LION. The X,Y coordinates returned by Geosupport are derived from LION.

The SPC system** assumes that, in a small enough geographic area, the earth's surface can be considered flat without introducing a significant error. In the SPC system, one unit of X or Y represents one foot of distance on the ground. The advantage of the SPC system over other map projection systems is the ease of calculating the distance between two points.