OPEN DATA / NEW YORK CITY

LOWER MANHATTAN

Parcels, building heights and a 3D camera tour



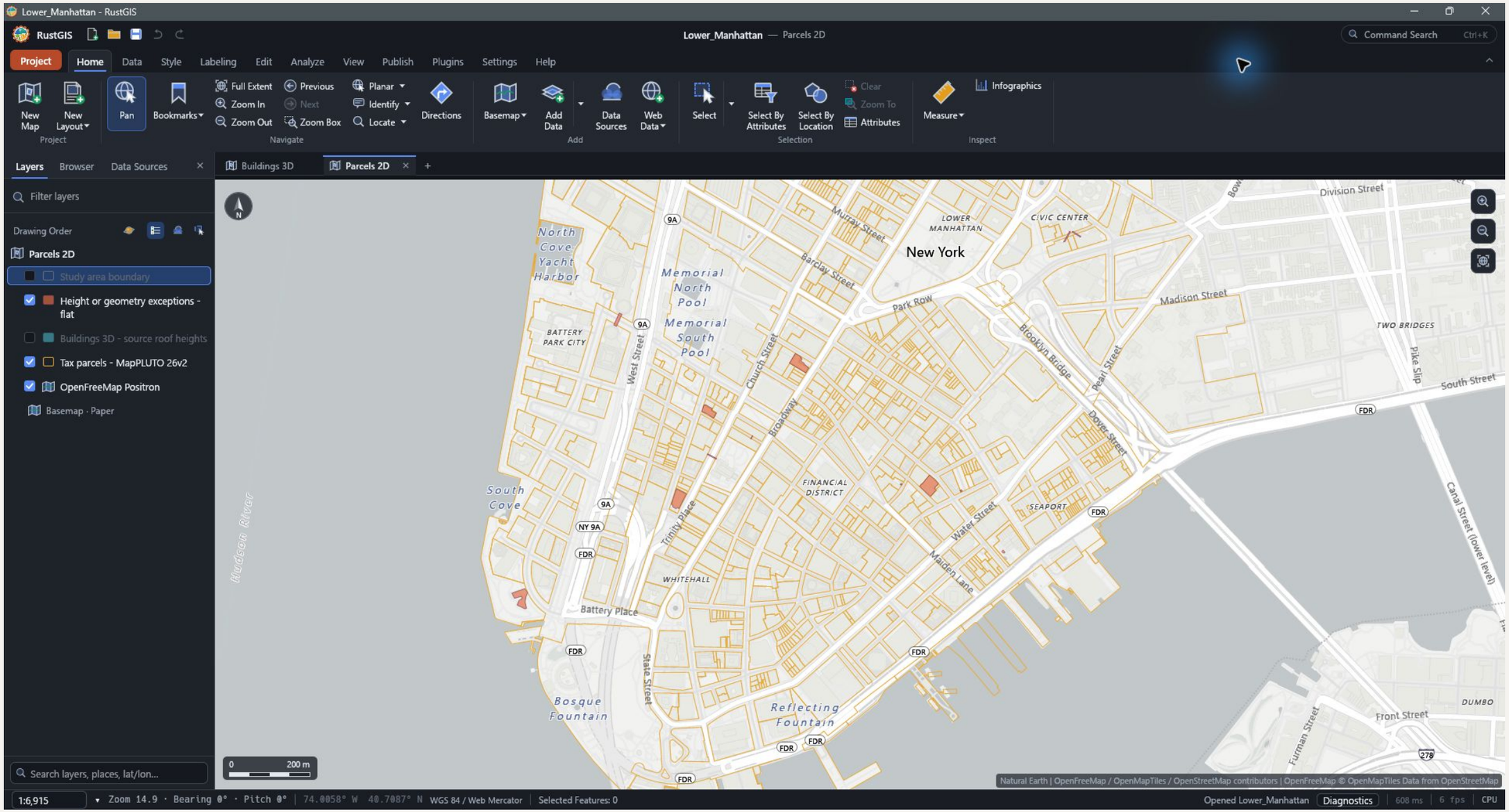
834 tax parcels

895 height-based extrusions

904 detailed exterior objects

Cover: official 2014 exterior geometry + MapPLUTO 26v2 parcels. Schematic ground; no vertical exaggeration.

Parcel boundaries in RustGIS



Gold lines: MapPLUTO tax parcels. **Orange features:** height or geometry exceptions shown flat. The 3D building layer is hidden in this parcel view so land boundaries remain visible.

Native RustGIS screenshot. Basemap: OpenFreeMap / OpenMapTiles / OpenStreetMap contributors; on-screen attribution retained.

From source data to a reusable GIS project

01

Retrieve

Select the study area. Query official MapPLUTO parcels and OTI building footprints, retaining BBL, BIN and DOITT identifiers.

02

Validate

Check counts and polygon validity. Keep land parcels separate from building outlines. Document missing heights and unusual features.

03

Build

Convert roof heights from feet to metres. Extrude 895 suitable footprints in RustGIS; display 13 exceptions flat. Save 2D and 3D views.

04

Animate

Use the separate 2014 exterior mesh for roof and setback detail. Overlay parcel boundaries, then render the documented camera path.

Parcel = land boundary. Footprint = building outline. A simple 3D building needs its footprint and height above ground. Roofs, setbacks and accurate terrain placement require additional information.

The 24-second MP4 is included in this GIS project package. It is rendered from the actual source mesh and parcel geometry in a standalone WebGL scene. The JSON/CSV camera path and interactive tour are supplied for reuse.

Study extent: longitude -74.0205 to -74.0000; latitude 40.6990 to 40.7165. Whole intersecting features retained.

Sources, dates and what the model represents

01 / TAX PARCELS

NYC Department of City Planning - MapPLUTO 26v2
834 land parcels. Administrative lot boundaries; they are not building outlines or a property survey.
Open official source

02 / BUILDING FOOTPRINTS + HEIGHTS

NYC Office of Technology and Innovation - Building Footprints
908 source features retrieved on 9 November 2026. Roof height in feet is multiplied by 0.3048 for metres. 895 extrusions; 13 documented exceptions.
Open official source

03 / DETAILED EXTERIOR GEOMETRY

NYC OTI - Community District 101 3D Buildings
2014 aerial survey. The selected area contains 904 objects and 108,033 triangles. This supplies the roof/setback geometry shown in the cover and video.
Open official source

Interpretation: these are exterior visualization products. The 2014 mesh may omit later changes; a 2026 download does not make all measurements current. Neither dataset describes the internal structural frame. Source dates remain visible in the video.

GeoJSON/GeoPackage: EPSG:4326. Detailed mesh: UTM zone 18N with source-declared EGM96 elevations; origin metadata is included. Extrusions use a flat ground plane. No terrain survey or Google Maps geometry/textures were used.

Included: native RustGIS project, reusable layer data, 4K stills, full-HD video, camera path and separate GIS-only post captions.