# TRANSPORT FINANCE FOR BROOKLYN

Prepared by Rayn Riel in Fall 2014 at Tufts University GIS Center Assisted with data from NYC Department of City Planning (2014) and City University of New York (CUNY) Mapping Service at Urban Research Center (2010)

## COMMERCIAL VALUE CAPTURE DISTRICTS

STEP 1: Identify commercial land use parcels near public transportation PART 1: Select subway station entrances within a quarter-mile of bus routes in Brooklyn, NY PART 2: Spatially join land use parcels within quarter-mile buffers of selected MTA entrances PART 3: Calculate and summarize areas of commercial land uses for the selected entrances

#### MAP 1

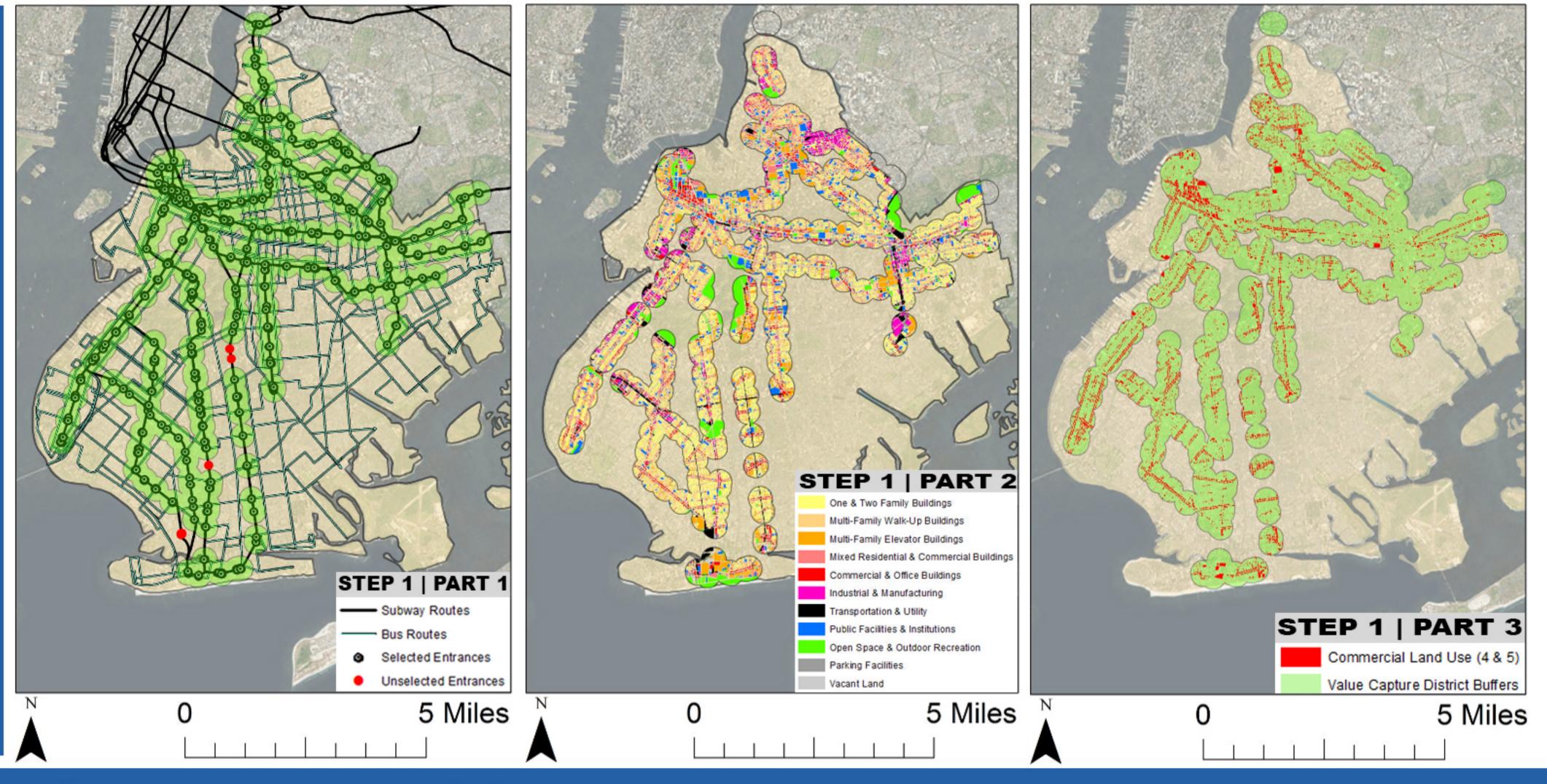
Subway routes have many stations and many more entrances at each station. MTA data provided by the City University of New York (CUNY) Mapping Service at the Urban Research Center has been used for buffers. Entrances within a 1/4 mile of a bus route have been selected and all others are excluded from GIS analysis.

### MAP 2

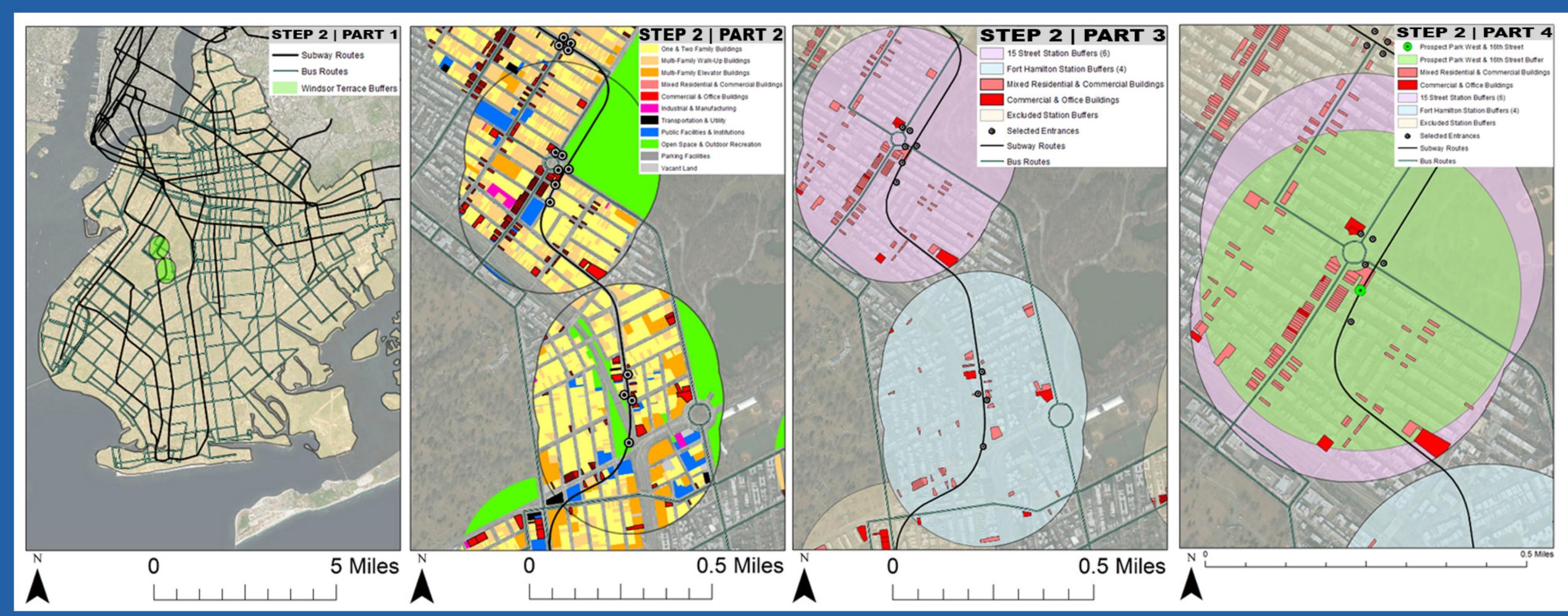
Land use has been selected within a 1/4 mile of these selected ubway entrances. All entrances are joined with land use parcel data.

#### MAP 3

These buffers have been analyzed for commercial land uses, which include mixed-use buildings and office buildings, according to NYC Department of City Planning's PLUTO parcels.



STEP 2: Identify the entrance(s) nearest the most commercial land uses PART 1: Select the buffers for the two stations in my neighborhood, Windsor Terrace, BKLYN PART 2: Analyze land use data in Excel for 15th Street Station and Fort Hamilton Station PART 3: Summarize areas of commercial land uses for the two Windsor Terrace stations PART 4: Discover the MTA station entrance nearest to the most commercial land uses



STEP 3: Propose value capture districts in commercial areas of Brooklyn PART 1: Organize selected commercial parcels into a value capture district with zoning PART 2: Coordinate zoning amendments with the MTA and Department of City Planning PART 3: Developers expanding transit-accessible parcels must contribute to MTA finances

EXAMPLE: Windsor Terrace's two stations (15th Street and Fort Hamilton) have been analyzed for value capture via transit-accessible commercial parcels. Within a quarter-mile of (6) 15th Street entrances, 2.84% of acres are commercial. Within a quarter-mile of (4) Fort Hamilton entrances, 1.4% of acres are commercial. The Prospect Park West & 16th Street entrance at 15th Street is the nearest to the most commercial land uses, with 3.38% of acres within a quarter-mile being commercial. Parcels closer to transit are more valuable, and mixed-use developers would pay the MTA in order to receive bonus floor-area-ratio (FAR) and/or up-zoned height restrictions. The creation of value capture districts can be streamlined by prioritizing with the MTA and NYC based upon the proportion of commercial parcels nearest subway entrances. Avoiding non-commercial uses increases the political feasibility of value capture districts, and of creating a mechanism for a stable source of revenue for public transport.