

Steps for MN Core SP Applicant Research and Calculation (**GIS steps are in Red**)

- 1) **Create a Basemap with Streets and Tax Lots.** Open a new ArcGIS map document, and add basemap elements including streets from most recent version of LION, and tax lots from the most recent version of MapPluto.
- 2) **Map proposed parking facility as a BBL.** Select the appropriate MapPluto record, then export the selection as a new shapefile named for the project site
- 3) **Create a Parking Study Area of approximately 1/3 mile from the proposed development .** Use Buffer tool in ArcGIS to create a 1,800-foot buffer from the project BBL, then save the buffer as a new shapefile.
- 4) **Map Residential Growth Lookback Sites as points within the project vicinity.** Data provided by DCP includes DOB New Residential Development Data (CofOs for new buildings and conversions for last 10 years, and new building permits for last 2 years with Associations from previous Manhattan Core Special Permit applicants flagged). Other sources include locations for MN Core approved Special Permits for off-street parking that will be built by Project Build Year and are predominately residential (can be found online with LUMIS). All data should be mapped as BBL centroids i.e. PLUTOx and PLUTOy coordinates. **Add the shapefile provided by DCP of DOB Residential Data (mapped to PLUTOxy coordinates) to the Parking Study Map. Additional residential growth sites from Special Permits and other sources should be added to this shapefile.**
- 5) **Map DCA Change Sites as points within the project vicinity.** Data provided by DCP includes DCA Change Sites based on DCA historical data with Associations from previous Manhattan Core Special Permit applicants flagged. Other sources include locations for MN Core approved Special Permits that will be built by Project Build Year, that are not new residential developments. All data should be mapped as BBL centroids i.e. PLUTOx and PLUTOy coordinates. **Add the shapefile provided by DCP of DCA Change Sites (mapped to PLUTOxy coordinates) to the Parking Study Map. Additional DCA Change sites from Special Permits and other sources should be added to this shapefile.**
- 6) **Select Residential Growth Sites and DCA Change sites within the parking study area, conduct research using DCP spreadsheet template, and save results as both Excel worksheets and shapefiles. The data files should include the distance of each site from the proposed development.** Use spatial queries to select Residential Growth Sites and DCA Change Sites within the Parking Study Area; and use a spatial join to calculate the distance from each Residential Growth and DCA Change site to the proposed development site and export these records as two shapefiles. The data tables for these shapefiles should be modified to match DCP templates. Final spreadsheets with research values should be saved as both and Excel worksheets and shapefiles for submission to DCP.
- 7) **Calculate the Parking Residential Parking Growth Ratios (with and without the Proposed Project) using final research from Residential Growth Sites and DCA Change Sites within the Parking Study Area.**
- 8) **Assign Associations to Residential Growth Sites and DCA Change sites with lost DCA parking spaces and/or or unbuilt accessory parking.** The Associations should be assigned using distance calculations from the Residential Growth Sites and DCA Change Sites tables, beginning with the Residential Growth and DCA Change Sites closest to the proposed development and moving out to those further away. Sites

with lost DCA parking spaces and/or or unbuilt accessory parking that have been flagged as Associations by previous Manhattan Core Special Permit applicants may not be used unless there are additional lost DCA parking spaces and/or or unbuilt accessory parking spaces that are not part of the previous Associations. The Association data for the proposed project should be recorded in the Associations spreadsheet template provided by DCP.

- 9) **Prepare final map and shapefiles for submission to DCP. The Parking Study should include a map graphic, and the submission package should include all relevant shapefiles (except the Base Map) and spreadsheets.** Create a final Parking Study map graphic that includes shapefiles for Base Map, Project Site, Parking Study Area, Residential Growth Sites within the Parking Study Area DCA Change Sites within the Project Study Area For the Residential Growth Sites and DCA Change Sites, the map should be labeled with ID numbers that match the relevant Excel spreadsheet records used in the Parking Residential Growth Ratio Calculations. Both the map and the data records should flag Residential Growth and DCA Change sites that are Associations. The applicant does not need to submit a separate shapefile for Associations, but must submit an Associations spreadsheet template which includes fields for the BBL centroid (PLUTOx and PLUTOy coordinates) of each Association site.