Brooklyn Park Housing Foreclosures and Transit Proximity
## Relationship Between Transit Locations and Housing Foreclosures

Resilient Communities Project

Background:

Brooklyn Park is the 6th largest city in Minnesota. Of the population of 80,000, half are people of color and one fourth speak a language other than English at home. During the housing foreclosure crisis from 2006-2013, approximately one fifth of single family homes in Brooklyn Park faced foreclosure. The city responded to the crisis and used funds from local, state, and federal organizations to assist 230 homes within the city. To tackle the issue, Brooklyn Park implemented the following foreclosure program strategies: prevent foreclosures, secure foreclosed homes and foreclosed homes rehabilitation.

Methodology:

- Create our own Network Dataset of Brooklyn Park
- Focused on 9 bus routes that pass through Brooklyn Park and the future Blue Line stations
- Use a 5-minute walking distance to transit stops
- Calculate the percentage of foreclosures that are transit accessible to determine if there are any patterns
- Calculate housing rebound values on foreclosed homes to see if there is a relationship between transit accessibility and home foreclosures
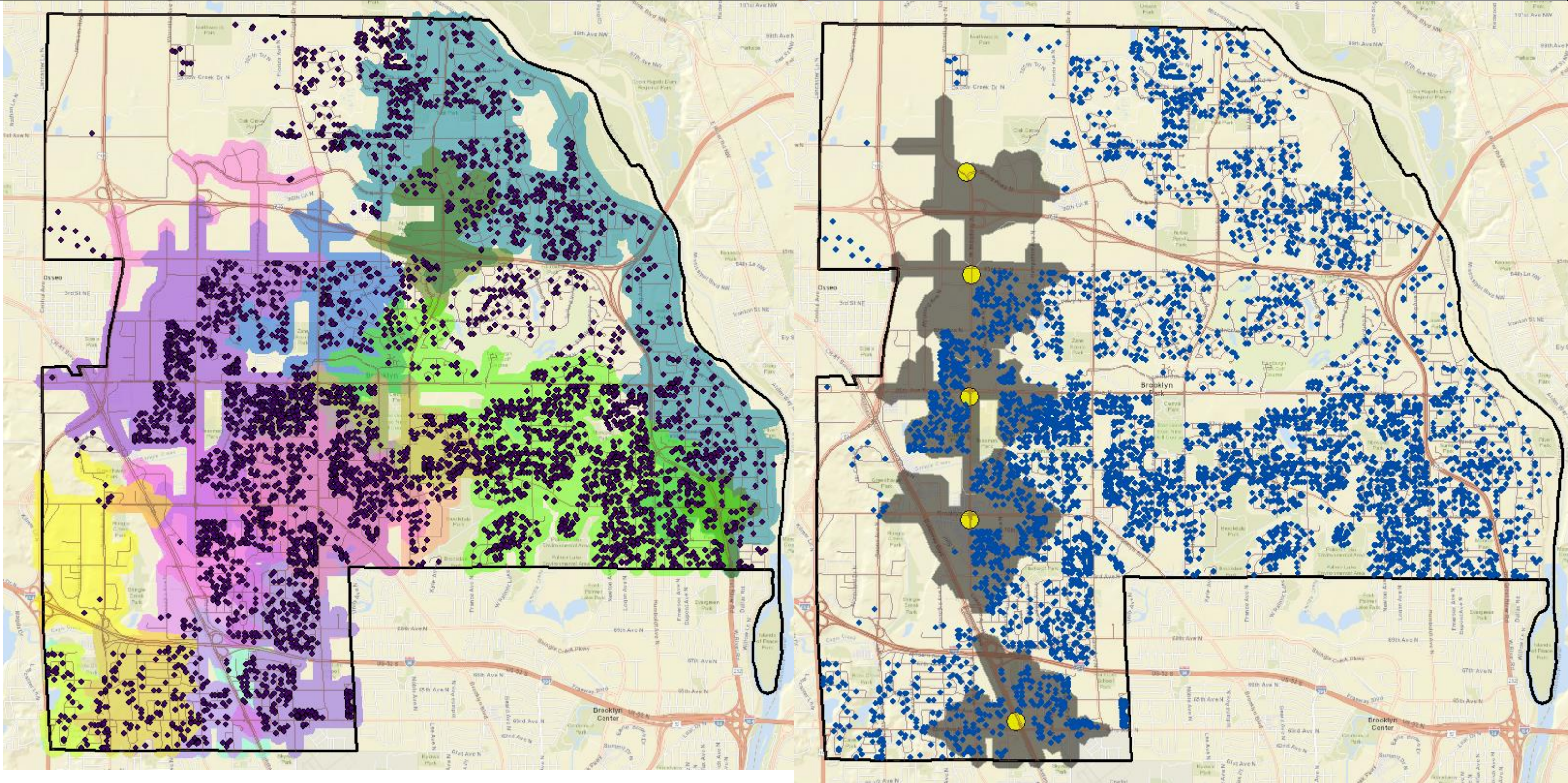
The map on the left is of the 9 bus routes and each of their 15-minute walking distance buffers. Note that there are significant overlaps. On the right are the future Blue Line extension stops with a 15-minute walking distance.
- 93% of foreclosed homes are located within 15 minutes walking distance of a Downtown Minneapolis bus route
- 20% of foreclosed homes are located within 15 minutes walking distance to a future Blue Line extension light rail station

Problem:

To ensure that future housing investments spending is appropriate and effective, the City of Brooklyn Park wishes to investigate if there are any relationships between transit accessibility and housing foreclosures. Transit accessibility can be an important factor in allowing access to employment. The city also wishes to find out if housing values located next to transit are worth more than those that aren't transit accessible.

Foreclosures and Transit Service Areas in Brooklyn Park
By: Nicole Helgeson, Patrick Haney and Arie Peterson

Legend:
- 15 Min from Major Transit Stop
- Foreclosures 2005 to 2016
- Brooklyn Park Roads
- Transit Service Area
- BrooklynPark
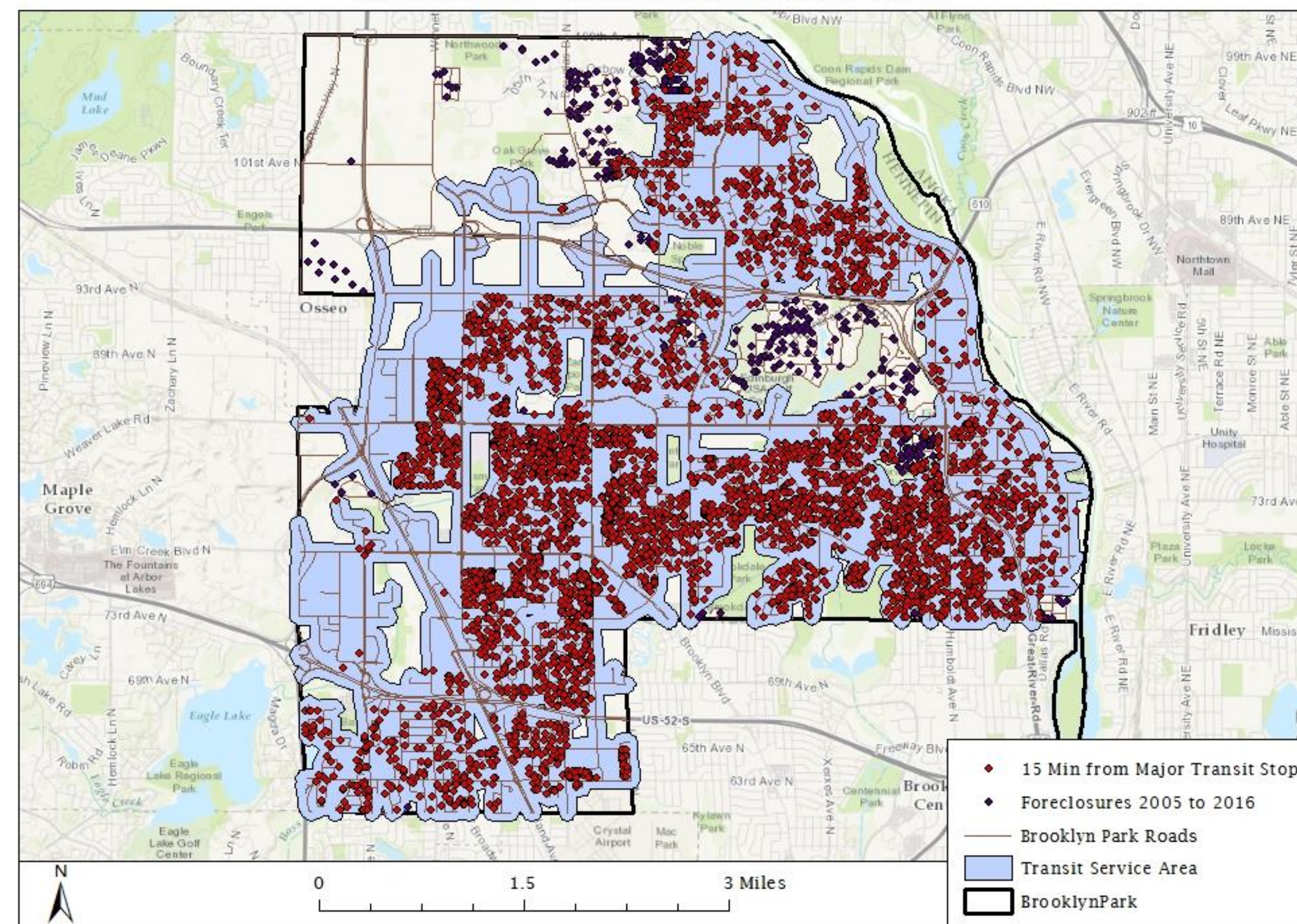
Results:

Objective #1
- In general, there was good coverage (i.e. accessibility) of bus routes and stops within Brooklyn Park.
- Two popular routes cover large portion of city and foreclosed areas.
- Very few foreclosed homes were outside of "walkable area".

Objective #2
- Homes located outside the 15 minute walk area were resold for much higher ($100,000 average) more than other homes.

Possible further work
Look at Demographics (i.e. race, poverty level, access to vehicle) and access to transit. We can also set different break times on the Network Analyst polygons, studying the value of foreclosed homes inside a 5 minute, 10 minute or 20 minute walk zone.

Objectives

Objective #1:
Visual exploration of possible association among transit accessibility and foreclosures.

Objective #2:
Examine the relationship between transit accessibility and rebound values.

Data sources:
MN Geospatial Commons
- Road network
- Brooklyn Park municipal boundary
- Bus stops and routes
- Blue Line extension stations

City of Brooklyn Park
- Foreclosure point data (2015-2016)