Data Analysis for Chicago Real Estate Investment Recommendations
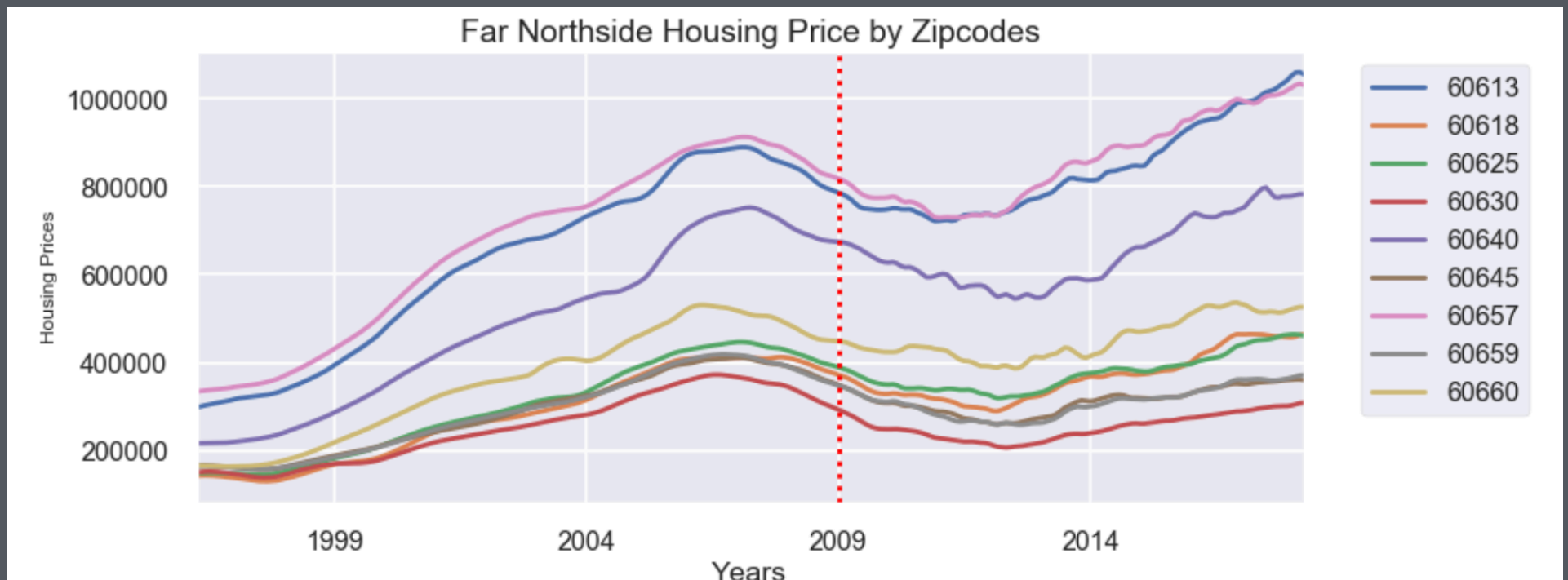
Data

- Zillow

  - Housing prices by zip codes

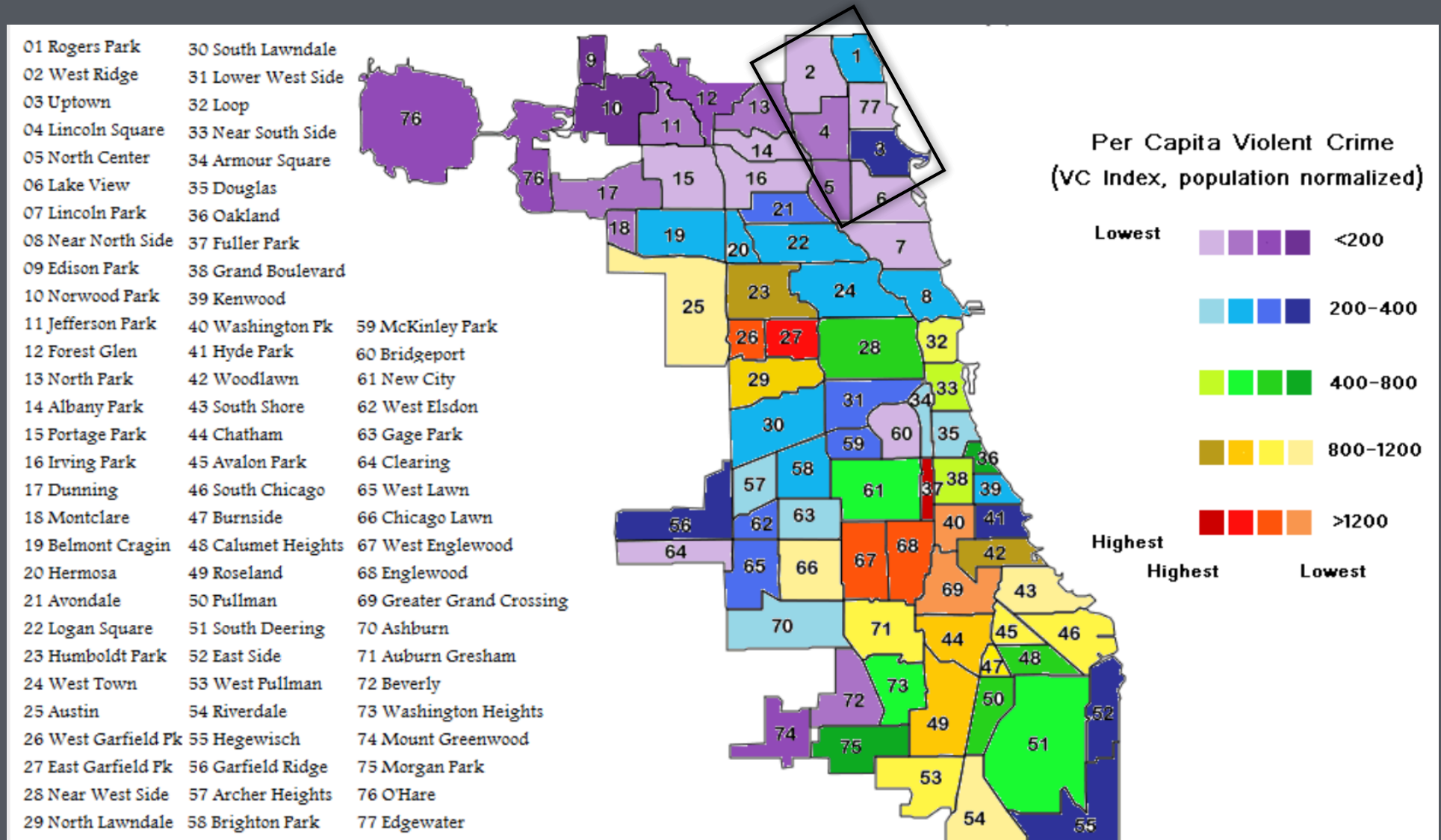 - A monthly time horizon:

    Starts 4/1/1996 ➡ Ends 4/1/2018

Rationale

- Why far Northside of Chicago

  1. Less investment costs than comparable neighborhoods

  2. Safe / Chicago's tier 1 classification / low crime rates

Far Northside Housing Price by Zipcodes

Rationale

01 Rogers Park
02 West Ridge
03 Uptown
04 Lincoln Square
05 North Center
06 Lake View
07 Lincoln Park
08 Near North Side
09 Edison Park
10 Norwood Park
11 Jefferson Park
12 Forest Glen
13 North Park
14 Albany Park
15 Portage Park
16 Irving Park
17 Dunning
18 Montclare
19 Belmont Cragin
20 Hermosa
21 Avondale
22 Logan Square
23 Humboldt Park
24 West Town
25 Austin
26 West Garfield Pk
27 East Garfield Pk
28 Near West Side
29 North Lawndale

30 South Lawndale
31 Lower West Side
32 Loop
33 Near South Side
34 Armour Square
35 Douglas
36 Oakland
37 Fuller Park
38 Grand Boulevard
39 Kenwood
40 Washington Pk
41 Hyde Park
42 Woodlawn
43 South Shore
44 Chatham
45 Avalon Park
46 South Chicago
47 Burnside
48 Calumet Heights
49 Roseland
50 Pullman
51 South Deering
52 East Side
53 West Pullman
54 Riverdale
55 Hegewisch
56 Garfield Ridge
57 Archer Heights
58 Brighton Park

59 McKinley Park
60 Bridgeport
61 New City
62 West Elsdon
63 Gage Park
64 Clearing
65 West Lawn
66 Chicago Lawn
67 West Englewood
68 Englewood
69 Greater Grand Crossing
70 Ashburn
71 Auburn Gresham
72 Beverly
73 Washington Heights
74 Mount Greenwood
75 Morgan Park
76 O'Hare
77 Edgewater

Per Capita Violent Crime
(VC Index, population normalized)

Lowest

<200

200-400

400-800

800-1200

>1200

Highest

Highest   Lowest

Metrics

1. Mean/Average values

2. Forecast: 10 year time horizon

3. ROI

4. Managing Risks

   - Select investments with smaller ROI declines at market crash

   - Withstand market declines & liquidity constraints with longer investment cycles

Recommendation

- Top 5 forecasts by ROI (predictions for 10 yrs)

Zip Code	ROI
60618	42.105
60640	38.229
60657	32.757
60613	32.371
60660	30.886

Recommendation

- Top 5 zip codes ranked by min historical loss

- Focusing on top 3 or "throwing out" bottom 2

Zip	10 Year ROI %	% Loss After Crash	
60613	32.37	-0.03	
60660	30.87	-11	
60657	32.76	-12.5	
60618	42.11	-14.29	
60640	28.23	-23.33	

Top Zip Code Housing Prices
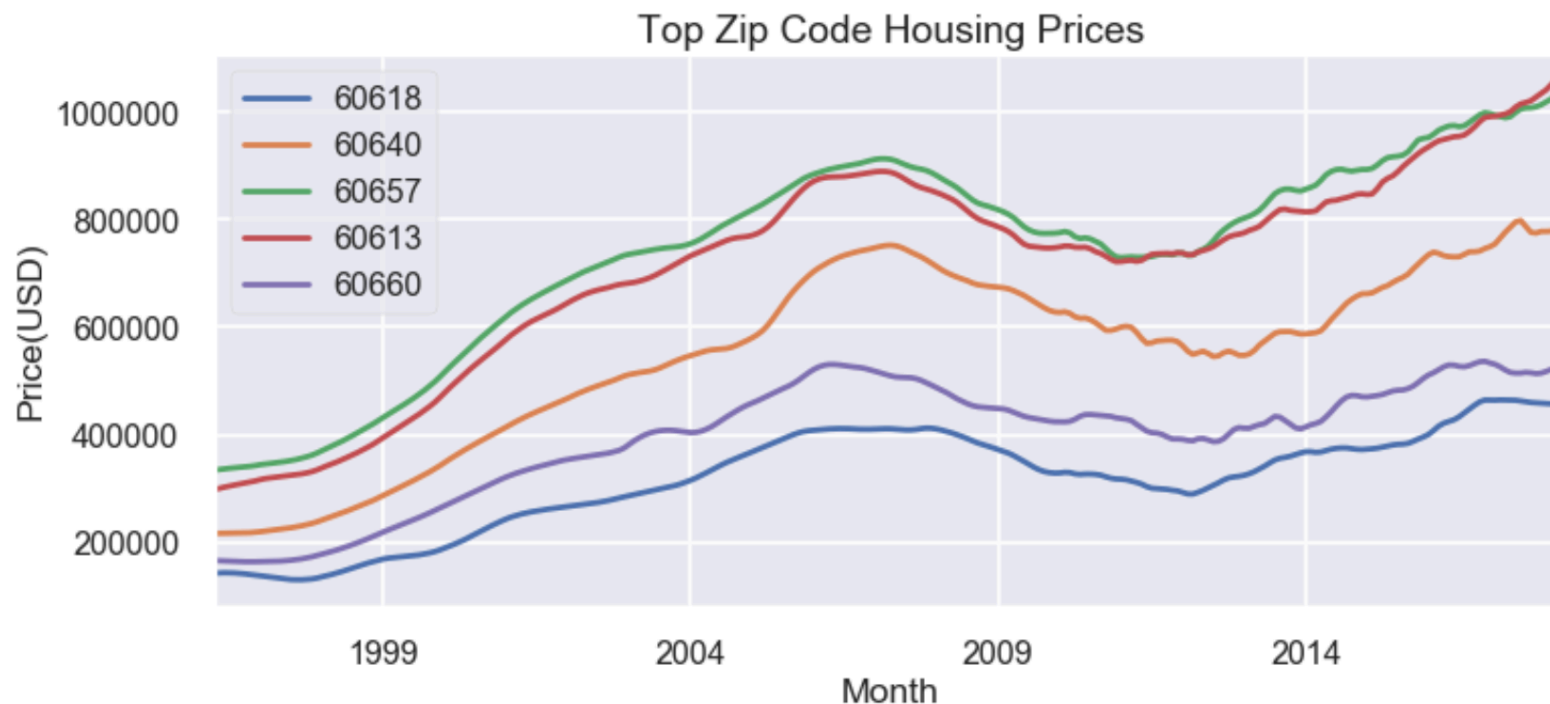
Future Work

- Expand Chicago real estate investments by investing into other neighborhoods

    1. Predictions for speculative markets where there's a high risk to reward ratio

    2. Manage by risk factors first & ROI predictions second

Thanks!