# **Group 1:**

**Project Title:** **The Abandoned Housing Effect on Newark**

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**Project Description/Outline: See Appendix A for Outline**

For this project, data will be gathered related to housing, crime rate, school district, education rate, poverty rate, unemployment rate in Newark. Clean the data. Find how this data affects a property getting abandoned.

Find a relation between the above data and number of abandoned properties Find factors that cause the abandoning of housing in Newark.

**Research Questions to Answer:**

What is the total number of abandoned properties related to surrounding properties?

Are more residential or commercial businesses abandoned?

Has the amount of abandoned properties changed over time?

For the part of Newark with the most abandoned properties, how does that affect crime rates, education statistics, etc.?

**Datasets to be used:**

<https://api.developer.attomdata.com/docs#PropertyDataDictionary>

· Newark abandoned housing data.

<http://data.ci.newark.nj.us/dataset/abandoned-properties/resource/796e2a01-d459-4574-9a48-23805fe0c3e0>

· Newark overall housing data

<https://www.bestplaces.net/housing/zip-code/new_jersey/edison/08820>

· Poverty rate data for Newark

<https://www.bestplaces.net/economy/zip-code/new_jersey/edison/08820>

· Crime rate data for Newark

<https://crime-data-explorer.fr.cloud.gov/api>

<https://www.bestplaces.net/crime/zip-code/new_jersey/edison/08820>

· Education/ School data for Newark

<https://code.org/learn/find-school/json>

· Unemployment data for Newark

<https://www.bestplaces.net/jobs/zip-code/new_jersey/edison/08820>

[**Top 10 APIs for Jobs**](https://www.programmableweb.com/news/top-10-apis-jobs/brief/2020/02/23)

· Cost of living

<https://www.bestplaces.net/cost_of_living/zip-code/new_jersey/edison/08820>

**Rough Breakdown of tasks:**

· Find over all housing in Newark

· Find the abandoned houses in Newark

· Find the Crime rate to abandoned property relation.

· Find the income/ earning/ mean salary rate in chosen area

· Find the Education rate around the abandoned housing

· Poverty rate around the abandoned housing

· Abandoned housing to unemployment rate in same area

· Age ratio in the abandoned housing area

· Does buying abandoned property affect the area growth.

· Find the change over time.

· Comparison of area growth

Arin suggests to take another city too. Perhaps Jersey City, Camden

Draw parallels and ID common factors

6 – 8 visualizations to answer at least 6 questions

**Appendix A**

**Project 1 Outline:**

# **I.** **Total Abandoned Housing in Newark (separated by zip code)**

a. Load all data related to houses in Newark, other reality in Newark.

## **b.** **What is the total of the abandoned properties within each zip code section?**

## **c.** **What is the total of surrounding not abandoned houses?**

d. What percentage of reality in Newark is abandoned?

e. What is the age of abandoned homes?

i. How long have they been abandoned?

f. Map abandoned houses on an actual map.

i. Use google maps for mapping

ii. Map abandoned properties vs. other properties

**II.** **What are the demographic statistics surrounding abandoned houses?**

a. Pull all data related to demographical information including crime rates, education info, income info, poverty rate, sex, age, and race.

**i.** **What is the Crime rate to abandoned properties?**

1. Compared crime rate to abandoned properties.

2. What is the crime rate around abandoned properties compared to surrounding areas?

**ii.** **What is the Education rate around an abandoned properties**

a. Compare education rate in areas with abandoned properties compared to surrounding areas?

**iii.** **What is the income/earning/mean salary?**

1. Compare income info

**iv.** **What is the poverty rate?**

1. Compare poverty rate from abandoned vs. not abandoned.

**v.** **What is the unemployment rate?**

1. Compare poverty rate from abandoned vs. not abandoned.

**vi.** **What is the average age of residents?**

1. Record the average age into groups: (ei. 1-13, 14-18, 19-30, 30-40 et.)

**vii.** **What is the breakdown of female vs. male of residents?**

1. What percentage of females vs. males are in the diff zip code sections?

**viii.** **Breakdown of race within the areas**

1. Diff. in races within each zip code by percentages

**III.** **What properties homes were bought and what is the change?**

**a.** **How many abandoned properties were bought over the last x # of years?**

i. Note the changes on crime rates, education info, income info, poverty rate.

ii. Comparison data of crime rates, education info, income info, poverty rate from time of purchase to most recent data

iii. How much did the area change due to lower # of abandoned properties ?