

ALLEGHENY COUNTY (PITTSBURGH) – NEIGHBORHOOD AFFORDABILITY

Kelly Rhoton

3/31/19

INTRODUCTION

Pittsburgh remains one of the most affordable cities in the United States. When families are looking for an area to purchase a home, they use many factors such as school district rating, affordability, commute time, walkability, and the proximity to venues like restaurants, parks or libraries. I will use various datasets to evaluate the most affordable neighborhood in Pittsburgh based on a family with children with a budget of less than \$400,000 for a home.

I intend to answer the following questions:

- Which neighborhoods have the best school district? (Student success, test scores, etc.)
- Are there parks, libraries and other venues nearby?
- Will a family who wants a high performing school district have to live far away from the city?

DATA ACQUISITION AND CLEANING

- **Data Section**
 - Foursquare API for school location and neighborhood classification

Figure 1 Allegheny County Parks (Foursquare)

| | name | categories | address | cc | city | country | crossStreet | distance | formattedAddress | labeledLatLngs | lat | lng |
|---|---|--|---------------------------------|----|------------|---------------|--------------------------------|----------|---|--|-----------|------------|
| 0 | Polish Hill Skatepark At West Penn Park | Skate Park | 450 30th Street | US | Pittsburgh | United States | NaN | 647 | [450 30th Street, Pittsburgh, PA 15219, United... | [['label': 'display', 'lat': 40.45551808040449... | 40.455518 | -79.970753 |
| 1 | Agnes R. Katz Plaza ("Eyeball Park") | Plaza | 7th Street | US | Pittsburgh | United States | Penn Ave | 2769 | [7th Street (Penn Ave), Pittsburgh, PA 15222, ... | [['label': 'display', 'lat': 40.44310432038924... | 40.443104 | -80.000371 |
| 2 | Point State Park | State / Provincial Park | Commonwealth Pl | US | Pittsburgh | United States | NaN | 3395 | [Commonwealth Pl, Pittsburgh, PA 15222, United... | [['label': 'display', 'lat': 40.44124588473702... | 40.441246 | -80.007942 |
| 3 | Robert E. Williams Memorial Park | Park | Adelaide Street, Pittsburgh, PA | US | Pittsburgh | United States | adelaide st. and milwaukee st. | 1558 | [Adelaide Street, Pittsburgh, PA (adelaide st.... | [['label': 'display', 'lat': 40.45462145752845... | 40.454621 | -79.958904 |
| 4 | Apple Ross Park | Electronics Store | 1000 Ross Park Mall Drive | US | Pittsburgh | United States | in Ross Park Mall | 9743 | [1000 Ross Park Mall Drive (in Ross Park Mall)... | [['label': 'display', 'lat': 40.543806, 'lng':... | 40.543806 | -80.007995 |
| 5 | Morrow Park City Apartments | Residential Building (Apartment / Condo) | 5250 Liberty Avenue | US | Pittsburgh | United States | NaN | 3021 | [5250 Liberty Avenue, Pittsburgh, PA 15224, Un... | [['label': 'display', 'lat': 40.4567578, 'lng':... | 40.456758 | -79.940575 |

- Allegheny County Real Estate Transactions - <https://data.wprdc.org/dataset/real-estate-sales> which will give home sales for the last seven years

Figure 2 Allegheny County Real Estate Sales

| | PROPERTYCITY | MUNIDESC | SALEDATE | PRICE | SALEDESC |
|-----|--------------|-----------------------|-----------|----------|------------|
| 24 | PITTSBURGH | 4th Ward - PITTSBURGH | 4/23/2013 | 157000.0 | VALID SALE |
| 34 | PITTSBURGH | Penn Hills | 8/30/2016 | 123944.0 | VALID SALE |
| 103 | ALLISON PARK | Hampton | 5/24/2012 | 135000.0 | VALID SALE |
| 104 | MONROEVILLE | Monroeville | 5/24/2012 | 150000.0 | VALID SALE |
| 176 | PITTSBURGH | Castle Shannon | 6/4/2012 | 99900.0 | VALID SALE |
| 218 | MC KEESPORT | Liberty | 7/20/2018 | 68000.0 | VALID SALE |
| 230 | PITTSBURGH | O'Hara | 6/1/2015 | 267000.0 | VALID SALE |
| 294 | MARS | Pine | 4/10/2013 | 97000.0 | VALID SALE |
| 316 | PITTSBURGH | O'Hara | 6/4/2012 | 72450.0 | VALID SALE |
| 377 | CORAOPOLIS | Moon | 9/27/2012 | 142000.0 | VALID SALE |

- School Digger API for school rankings and performance metrics
<https://www.schooldigger.com/go/PA/county/Allegheny/search.aspx>

Figure 3 Ranked School Districts

| s.state | address.stateFull | address.street | address.zip | address.zip4 | ... | privateHours | privateOrientation | rankHistory | rankMovement | schoolLevel | schoolName |
|---------|-------------------|--------------------|-------------|--------------|-----|--------------|--------------------|--|--------------|-------------|----------------------------------|
| PA | Pennsylvania | 738 Dorseyville Rd | 15238 | 1102 | ... | None | None | {'year': 2018, 'rank': 1, 'rankStars': 5, 'ra... | 1 | Elementary | Fairview Elementary School |
| PA | Pennsylvania | 2401 Rochester Rd | 15143 | 8606 | ... | None | None | {'year': 2018, 'rank': 2, 'rankStars': 5, 'ra... | 1 | Elementary | Franklin Elementary School |
| PA | Pennsylvania | 165 Crescent Dr | 15228 | 1045 | ... | None | None | {'year': 2018, 'rank': 3, 'rankStars': 5, 'ra... | -2 | Elementary | Markham Elementary School |
| PA | Pennsylvania | 41 Forest Road | 15015 | | ... | None | None | {'year': 2018, 'rank': 4, 'rankStars': 5, 'ra... | 3 | Elementary | Bradford Woods Elementary School |
| PA | Pennsylvania | 171 Sunrise Dr | 15642 | 8838 | ... | None | None | {'year': 2018, 'rank': 5, 'rankStars': 5, 'ra... | 4 | Elementary | Sunrise Elementary School |

- School District Tax Rates - <https://apps.alleghenycounty.us/website/millsd.asp> . This will be a factor in affordability.