**Situation Target Proposal (STP) – Seattle Housing Crisis Analysis**

Prepared by: Team 7

1. **Data Sources:**

* [Seattle Housing Characteristics Data](•%09https:/data.seattle.gov/dataset/Housing-Characteristics-Seattle-Neighborhoods/qkiz-c544/about_data)
* [Mandatory Housing Affordability Fee Areas](https://data.seattle.gov/dataset/Mandatory-Housing-Affordability-MHA-Fee-Areas/q66c-v42d/about_data)
* [Rent Burden Data](•%09https:/data.seattle.gov/dataset/Rent-Burden-Greater-than-50-/7xdn-bk5j/about_data)
* [Housing Affordability - RSJI | seattle.gov](https://www.seattle.gov/rsji/racial-equity-research/housing-affordability)
* [MHA\_Overview.pdf (seattle.gov)](https://www.seattle.gov/documents/Departments/HALA/Policy/MHA_Overview.pdf)
* [Seattle Housing Market: House Prices & Trends | Redfin](https://www.redfin.com/city/16163/WA/Seattle/housing-market)
* [Seattle GeoData (arcgis.com)](https://data-seattlecitygis.opendata.arcgis.com/)

1. **Situation:**

According to an analysis by Puget Sound Sage, nearly half of the population in Seattle is unable to afford housing. Additionally, the article states “2 out of 5 people in Seattle are low-income, only 1 in 5 newly built homes are affordable to them and their families” (Puget Sound Sage, 2024). Seattle’s housing situation has created an environment of immense competition for low-income and median-income residents and families in the struggle to obtain affordable housing.

Team 7 aims to analyze the housing insecurity in Seattle to explore how the excessive cost of living in Seattle, particularly regarding housing affordability, contributes to the city's growing problem of housing insecurity. Understanding the significant factors in this situation will help to develop effective solutions to combat this crisis. This document outlines the current stage of the project, as well as the next steps Team Seven believes are necessary to complete this project successfully.

**What**

1. **What specific factors are contributing to housing insecurity in Seattle?**
   * **Fact**: Housing costs, income levels, availability of affordable housing, and regulatory policies.
   * **Opinion**: Some might believe that lack of affordable housing is the primary factor, while others might argue that regulatory policies are more influential.
   * **Assumption**: The assumption that high housing costs are the main driver of housing insecurity without considering other contributing factors.
2. **What is the current state of housing affordability in different Seattle neighborhoods?**
   * **Fact**: Average housing costs and income levels in various neighborhoods.
   * **Belief**: Some might believe that neighborhoods with high-income levels have better affordability, which might not always be true.

**When**

1. **When did housing insecurity begin to significantly increase in Seattle?**
   * **Fact**: Historical data showing trends in housing insecurity over time.
   * **Feeling**: Residents may feel that housing insecurity has worsened recently, but data will provide a clear timeline.
2. **When are the peak times for housing affordability issues throughout the year?**
   * **Fact**: Seasonal variations in housing costs and availability.
   * **Assumption**: The assumption that housing affordability issues are consistent throughout the year without accounting for seasonal fluctuations.

**Where**

1. **Where are the most affected areas in Seattle regarding housing insecurity?**
   * **Fact**: Data on neighborhoods with the highest rates of housing insecurity.
   * **Belief**: There might be a belief that certain well-known areas are the most affected, which should be verified with data.
2. **Where can individuals and families find resources or assistance for housing issues?**
   * **Fact**: Locations of social service agencies, community programs, and support centers.
   * **Feeling**: Feelings of frustration from individuals who are unaware of available resources.

**Why**

1. **Why are certain neighborhoods experiencing higher levels of housing insecurity than others?**
   * **Fact**: Factors such as income disparities, housing supply, and regulatory environments.
   * **Belief**: Some might believe that economic inequality is the primary cause, while others might point to inadequate housing policies.
2. **Why have existing policies and regulations not effectively addressed housing insecurity?**
   * **Fact**: Analysis of current policies and their effectiveness.
   * **Opinion**: Opinions may vary on whether policies are outdated or poorly implemented.

**How**

* What steps can be taken to bridge this disparity?

Current Analyses:

* Relevant analyses about other economic factors such as the unemployment rate in Washington state, the national unemployment rate and national inflation rate will help develop this project as we develop a comprehensive investigation of Seattle’s. housing crisis

1. **Target:**

What characteristics are prevalent in this housing crisis analysis?

* The income distribution plays a vital role in the economy, especially considering Seattle’s booming tech industry and the corresponding impacts on the wealth gap.
* The housing supply and demand will highlight the imbalance of restrictions between the lower class and the upper class.
* Researching other government entities and policy makers might reveal additional factors affecting Seattle’s housing market

Predictions and projections for the housing and income economy

* Team 7 hypothesizes that there is a connection between Seattle’s housing market and the overall distribution of income level in the greater Seattle area. Through this project, we aim to analyze and model the relationship between housing costs in Seattle and other related variables.

1. **Proposal: Caylin**

Action Steps:

|  |  |  |
| --- | --- | --- |
| Action | To Be Completed By | Due By |
| Clean Data of Null data | Caylin | 9/20/2024 |
| Create variables to narrow down data | Caylin | 9/20/2024 |
| Import in R and create documentation block | Caylin | 9/20/2024 |
| Connect data to R file and double check results | Caylin | 9/20/2024 |
| Convert clean data to GitHub | Caylin | 9/20/2024 |
| Identify what, when, where and create variables in R file with comments | Christoph | 10/4/2024 |
| Research and add supporting evidence for what, when, and where. | Christoph | 10/4/2024 |
| Identify why, who, how and create variables in R file with comments | Thao | 10/4/2024 |
| Research and add supporting evidence for what, when, where | Thao | 10/4/2024 |
| Identify data correlations between data sets. | Fatima | 10/18/2024 |
| Add supporting research to correlations between data sets. | Fatima | 10/25/2024 |
| Write a prediction about the data using research gathered. | Fatima | 11/01/2024 |
| Develop clustering model to group and identify segments of data.  Develop and fit regression model | Caylin | 11/08/2024 |
| Find a correlation using the identified variables | Caylin | 11/08/2024 |
| Publish to GitHub | Caylin | 11/08/2024 |
| Create visualizations to illustrate results of the analysis | Fatima | 11/15/2024 |
| Use models to create predictions and identify potential solutions | Thao & Christoph | 11/22/2024 |
| Valid and organize results | Caylin & Fatima | 11/22/2024 |
| Create final presentation/ confirm that all requirements are met | Team 7 | 12/06/2024 |
| Turn in Final Presentation | Team 7 | 12/13/2024 |

1. **Possible Major Barriers to Success:**

* To achieve success, we must carefully select datasets from reliable and sound sources. Additionally, when preparing these datasets, cleaning measures must be skillfully utilized to maintain the integrity of the dataset without causing any bias or other issues with the data. Carefully documenting and organizing the steps taken throughout the project will help to minimize issues by allowing reproducible and validated results to be obtained.
* Another regulatory barrier is outside factors, our scope even with the data being so small when wanting to scope factors like the government it might be difficult to portray and see the implementation of the policy when analyzing the data.

### Help Required:

Team 7 will from time to time require the assistance of Professor Lapin if we are in need of support after first exhausting all other available resources.

**Article Citation**

*Seattle City Council introduces New Affordable Housing Policy Options*. Puget Sound Sage. (n.d.). <https://pugetsoundsage.org/new-affordable-housing-policy-options/>