MARKET RESEARCH

TEAM 06

Greater Lafayette Housing Landscape

Understanding Student Preferences for Potential Opportunities

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1. Executive Summary

This market research study aims to explore the housing preferences of students in Greater Lafayette, focusing on key factors such as price sensitivity, proximity to campus, safety, amenities, and leasing flexibility. The research's primary objective is to assist new and existing housing providers in understanding the most influential factors driving students' housing decisions and in identifying which amenities or services can enhance their appeal.

The study utilized a survey targeting various student segments, including undergraduates, graduate students, Ph.D. candidates, and international students, to gather data on housing preferences and priorities. The analysis, involving both clustering techniques and descriptive statistics, identified distinct student segments and revealed the factors that influence their housing choices, including rent affordability, location, safety, amenities, and lease terms.

The research reveals that key factors influencing students' housing decisions include affordability, proximity to campus, safety, and amenities. Affordability remains a top concern, although rent willingness varies by segment, with some students open to paying a premium for high-end amenities while others prioritize affordability over features. Proximity to Purdue University is crucial across all student clusters, alongside safety, particularly for off-campus housing, where well-lit, secure facilities are highly valued. Preferences for amenities such as in-unit laundry, fitness centers, and 24/7 maintenance differ by segment, with some students preferring community events and social spaces, while others seek more practical features. Additionally, flexible leasing terms are important to specific segments like seniors and international students, and access to public transport and grocery stores significantly influences off-campus housing choices.

Based on these insights, housing providers are recommended to offer a range of price points to cater to different budgets, emphasize proximity in marketing materials, and enhance visible safety features. Tailoring amenities to student segments is also suggested, focusing on luxury features for high-end properties and essential facilities for budget options. Flexible lease terms are encouraged to appeal to students with varying needs, and marketing strategies should be segmented to align with the preferences of different student clusters. Finally, providers should actively gather

feedback to adapt their offerings to evolving student preferences, ensuring competitiveness and higher occupancy in a dynamic market.

This research provides actionable insights that can help housing providers in West Lafayette tailor their offerings to better meet the preferences and expectations of the student population, ultimately enhancing the appeal and occupancy of their properties.

2. Introduction

Purdue University, situated in the college town of West Lafayette, Indiana, is home to a diverse student population with varying housing needs. The Greater Lafayette area, which includes both West Lafayette and Lafayette, offers a range of accommodation options catering to these students. Housing in this area is primarily divided into two categories: on-campus and off-campus. While on-campus housing provides convenience and access to university amenities, it tends to be more expensive and fills up quickly, prompting many students to look for alternative housing options off-campus.

The off-campus housing market is quite dispersed, encompassing private houses, apartments, and large housing complexes managed by various real estate companies such as Granite and Morris Rentals. These housing options vary in size, from studios to one, two, and three-bedroom units, with differing price points, amenities, and locations. While some housing complexes are situated close to the university, others are located farther away, adding to the challenge of choosing a suitable accommodation. Additionally, some properties provide attractive amenities like gyms, clubhouses, and social areas, influencing student preferences.

Research Objectives:

The objective of this study is to understand students' attitudes and preferences toward various housing options in the Greater Lafayette area. Specifically, the research seeks to identify the most important factors for students when selecting housing, such as affordability, proximity to campus, safety, preferred amenities, and leasing flexibility. Additionally, the study aims to explore how these preferences vary across distinct student segments and what types of amenities or services would significantly influence students' housing choices. By addressing these objectives, the study intends to provide actionable insights for property owners, real estate companies, and potential investors to tailor their offerings to student preferences, differentiate their properties, and enhance their appeal in a competitive market.

Scope and Limitations:

This study focuses on the attitudes and preferences of students living in the Greater Lafayette area, targeting different segments such as freshmen, seniors, and international students. While the research provides a comprehensive understanding of key factors influencing students' housing decisions, some limitations must be acknowledged. First, the rent analysis was conducted on a per-person basis, irrespective of the overall leasing arrangement (e.g., whether the unit was a one-bedroom or two-bedroom apartment), to reflect the individual student's willingness to pay. This approach may overlook nuances related to shared housing arrangements. Additionally, the study does not extensively address other potentially influential factors such as specific real estate market trends, long-term investment decisions, or the impact of seasonal demand variations.

Despite these limitations, the findings of this study provide valuable insights into student preferences, guiding property owners and real estate companies in making data-driven decisions to enhance their housing offerings for Purdue University students in the Greater Lafayette area.

3. Research Design

a. Sampling Technique:

A convenience sampling technique, a non-probability sampling method, was employed for this study. In this approach, participants were selected based on their accessibility and availability, without using random selection. This method was particularly suitable for the context of our research, as it allowed for efficient data collection from Purdue University students in the Greater Lafayette area, who are the primary population of interest for understanding housing preferences.

Justification for Convenience Sampling:

The choice of convenience sampling was driven by the need to collect data within a limited timeframe and budget. By targeting easily accessible groups of students—such as those present on campus, engaged in university activities, and active on social media groups—we were able to quickly gather diverse responses. Surveys were distributed online, through WhatsApp, social media platforms and word of mouth. This strategy enabled a rapid collection of data from a wide range of students, including different academic levels and international backgrounds, who could provide insights into housing preferences across various segments.

Inadequacies and Modifications:

One key inadequacy of using convenience sampling is the potential lack of representativeness of the overall student population at Purdue University. Because participants were not randomly selected, certain segments (e.g., students living types of housing, from certain academic programs, or those more engaged in campus life) might be overrepresented or underrepresented. This limitation makes it difficult to generalize the findings to the entire student body, as the sample might not capture the full diversity of student housing experiences and preferences.

To improve the representativeness of the sample and reduce potential biases, a stratified random sampling method could be implemented. In this approach, the student population would be divided into key segments (e.g., based on housing type, academic level, and geographic location within

Greater Lafayette), and participants would be randomly selected from each segment. This would ensure that all relevant subgroups are proportionately represented in the sample, providing a more accurate reflection of the population's housing preferences. However, given the constraints of time and resources for this study, convenience sampling was the most practical and effective option available.

b. Data Collection Method:

The data for this study was collected using an internet-based survey created on Qualtrics. The survey link was shared primarily through various Purdue University WhatsApp groups, which correspond to different majors and academic years. These groups served as an effective way to quickly reach a wide and diverse student population across the Greater Lafayette area. The survey was available from September 23rd to September 30th, providing students ample time to participate with 67 responses received.

Justification for the Internet-Based Method:

The choice of an internet-based survey was driven by the need for quick and efficient data collection from a large and diverse group of students. Since WhatsApp is widely used by Purdue students, this method allowed us to reach various segments efficiently, including different academic levels and housing preferences. Additionally, Qualtrics facilitated seamless data recording, storage, and subsequent analysis, making it a practical tool for managing responses.

Changes with More Time/Money:

With additional time and resources, the data collection process could be enhanced by incorporating a combination of both quantitative and qualitative research methods. Alongside the online survey, in-person interviews and focus groups could be conducted with students to gain deeper insights into their housing preferences, attitudes, and decision-making processes. Such qualitative approaches would allow for more nuanced discussions and richer data collection, offering a deeper understanding of individual preferences, needs, and motivations that may not be fully captured through a survey.

Furthermore, interviews or focus groups with property owners and managers would provide a valuable perspective on market trends, rental practices, and amenity offerings from the supply side of the housing market. These discussions could help to identify gaps between what students seek and what housing providers currently offer, leading to a more comprehensive understanding of the housing landscape.

Incorporating these additional methods would allow for triangulation—the cross-verification of data from multiple sources—which would increase the validity of the findings and provide a broader understanding of student housing preferences in Greater Lafayette.

Limitations of the Data Collection Method:

Although the online survey distributed via WhatsApp was an efficient method given the constraints, it has its limitations. The primary limitation is self-selection bias; only students who are active on WhatsApp and inclined to participate were included, potentially leading to an unbalanced representation of the student body. Moreover, students who are less active on social media or not part of the relevant groups may have been excluded, limiting the survey's reach. Furthermore, the survey was open for only a week and did not offer any incentives to encourage participation, which contributed to a lower response rate. To mitigate this, extending the survey duration and offering incentives (e.g., gift cards or raffle entries) in future research could significantly increase participation and help obtain a more representative sample of the student population.

Despite these limitations, the online survey via WhatsApp provided useful data for understanding housing preferences among Purdue students within the available resources and time constraints.

c. Measurement:

Screening:

This question was included to screen respondents, ensuring that only Purdue University students participated in the survey, as they were the primary target group for the study.

Q: Are you a Purdue student?

Customer Demographics and Segmentation:

To segment the sample effectively, information was gathered on respondents' enrollment status, age group, and gender. These demographics helped analyze how different student segments make housing decisions.

Q: Which program are you enrolled in?
Q: What is your age group?
Q: What is your gender?

Customer Preferences and Experience:

Housing Type and Motivation: The survey examined students' current living situation and their reasons for choosing on-campus or off campus housing, if applicable. Understanding these motivations helps reveal the perceived benefits of on-campus living, such as proximity to classes, access to amenities, and affordability.

Q: Where are you currently living?
Q: Why did you choose to live on-campus? (Select all that apply)
Q: What is the most important aspect of on-campus housing that made you choose it?
Q: How likely are you to recommend your current housing to a fellow student?

Understanding Commuting Patterns: To explore the impact of housing location on daily routines and preferences, the survey measured how students commute to campus. This question helped identify the role of proximity, accessibility, and transportation in housing choices, providing insights into the convenience factors that may influence students' selection of housing.

Q: How do you commute to campus?

Customer Spending:

We wanted to understand students' rent affordability and their current financial commitment to housing to provide insights into typical rent ranges paid by students, helping to analyze price sensitivity and budget constraints across different housing options.

Q: What is your current monthly rent (excluding utilities)?

Rent Willingness for Off-Campus Housing: We needed to gauge students' financial willingness to pay for off-campus housing. By comparing this to their current rent, we could understand how much students value off-campus options and whether they are willing to pay a premium for added benefits, amenities, or better locations. This question was strategically placed after asking about the importance of amenities, allowing us to gauge whether students are willing to pay higher rent for additional amenities and services.

Q: How much rent are you willing to pay for off-campus housing (excluding utilities)?

Demand Analysis:

Importance of Housing Features and Amenities: The survey assessed students' preferences for various amenities and features in housing, such as community events, study rooms, sports facilities, shuttle services, maintenance services, and sustainable features. We aimed to measure the percentage of survey respondents who showed interest in various potential amenities that housing companies could offer. Identifying the most valued amenities helps in understanding what services or facilities could significantly impact a student's housing decision.

Q: How important would you say each of these amenities are for you?
Q: On a scale from 1 to 5, how much do you prioritize having a private bathroom in your housing?

Factors influencing Consumer decision:

For students living off-campus or considering the option, the survey measured how factors like proximity to campus and utility centers affect their decision-making.

Q: When selecting the location for your off-campus housing, how important are the following factors? (1 – Very important, 5 – Very unimportant)

Proximity to campus

Proximity to utility centers

Customer satisfaction:

To assess overall satisfaction with off-campus housing, the survey measured how likely students are to recommend their current housing to others. This question helps gauge students' contentment and loyalty toward their housing choice, providing insights into perceived value and potential improvements needed.

Q: How likely are you to recommend your current housing to a fellow student?

d. Analysis Procedures:

The analysis for this project was performed using Python in a Google Colab environment. The following packages were crucial to conducting data cleaning, preprocessing, exploratory analysis, clustering, and visualization:

Pandas: Used for data manipulation, including reading, cleaning, and transforming the dataset into a structured format suitable for analysis.

NumPy: Employed for numerical operations and handling missing data within the dataset.

Scikit-learn (sklearn): The primary package used for machine learning and data preprocessing tasks. It was utilized for implementing K-Means clustering, imputing missing values via SimpleImputer, and scaling the data using StandardScaler.

Matplotlib and Seaborn: These were used to create a variety of visualizations, including bar plots, heatmaps, and distribution graphs, to better understand the dataset and present the clustering results visually.

Data Cleaning and Imputation:

The raw dataset contained both numerical and categorical variables, with missing data in some fields. Missing numerical values were imputed using the median strategy, while categorical variables were filled using the most frequent value (mode) via the SimpleImputer class from sklearn.
Categorical data was converted into a numerical format using one-hot encoding, as required for machine learning algorithms like K-Means.

Data Preprocessing:

The dataset was standardized using StandardScaler to ensure that each feature contributed equally to the clustering algorithm. Standardization was essential because K-Means clustering is sensitive to the scale of input data. After scaling, all features had a mean of 0 and a standard deviation of 1.

Exploratory Data Analysis (EDA):

The dataset was initially explored using descriptive statistics to understand the distributions of both numerical and categorical variables. Summary statistics (e.g., mean, median) were calculated for numerical features, while frequency counts were generated for categorical features.
Visualizations were created using matplotlib and seaborn. These included:
Bar plots to display the distribution of categorical variables (e.g., rent willingness, current living arrangements) Majority of respondents (about 50) are Master's students, with smaller groups in PhD, undergraduate, and other programs, indicating housing preferences are likely driven by Master's student needs **(Exhibit 1).**
The largest group of respondents falls in the 23-25 age range, followed by the 26-29 and 18-22 groups, while the 30 and above group is the smallest. This suggests that most housing preferences may be driven by young adults in their mid-20s, likely influencing demand for amenities that cater to this age group. **(Exhibit 2).**
Majority of respondents identify as female, followed by a significant portion identifying as male. A small number chose either "Non-binary/Third Gender" or "Prefer Not to Say." The distribution suggests that housing preferences might lean toward considerations important to female respondents, potentially impacting marketing and amenity preferences. **(Exhibit 3).**
55% of students live off-campus, while 45% live on-campus, highlighting balanced demand for

both types of housing based on factors like proximity, affordability, and amenities. **(Exhibit 4).**

Around 71% of students are willing to pay $500-$1,000 per month, while 12.7% prefer under $500, indicating a mix of affordability-focused and premium seekers. **(Exhibit 5).**

Heatmaps to visualize correlations between variables, helping to identify potential relationships between features like proximity to campus, rent preferences, and amenity importance **(Exhibit 6, 7)**.

Clustering Analysis:

K-Means clustering was used to segment students based on their housing preferences. The optimal number of clusters was determined using the below technique:

Elbow Method: This method involved calculating the Within-Cluster Sum of Squares (WCSS) for different numbers of clusters, allowing us to visualize the point (or "elbow") where adding more clusters did not significantly reduce WCSS **(Exhibit 8)**.

After running K-Means, each cluster was analyzed by calculating the mean for numerical variables (e.g., rent willingness) and the mode for categorical variables (e.g., preferences for specific amenities). This allowed us to characterize each cluster in terms of students' preferences and behaviors.

Visual Representation of Clustering Results:

A heatmap was generated to visually represent the differences between clusters, highlighting variations in student preferences for amenities, rent willingness, proximity to campus, and safety. This visualization provided a clear comparison between the clusters and helped identify the defining characteristics of each group.

Additional visualizations, such as bar plots, were used to display the distributions of specific variables across the entire dataset and within each cluster.

Coding Procedures:

In terms of coding, all procedures were implemented in Python, leveraging the libraries mentioned above. The code was organized to first handle data cleaning and preprocessing, followed by exploratory analysis and visualizations, and finally the implementation of clustering algorithms. No open-ended questions were included in the analysis, so no text analysis or qualitative coding was necessary.

Limitations:

Convenience Sampling: The survey was distributed via social media platforms, which could introduce self-selection bias. As a result, the findings may not fully represent the entire student population at Purdue University, especially students who are not active on social media.

K-Means Limitations: The K-Means algorithm assumes spherical clusters of equal variances, which may not always represent the true structure of the data. Other clustering methods, such as DBSCAN or hierarchical clustering, could be explored in future analyses to confirm the robustness of the results.

4. Results

Based on the clustering analysis and descriptive statistics, several key research insights can be drawn to address the study's objectives of understanding student preferences for housing in the Greater Lafayette area. These insights are derived from analyzing factors such as price, proximity to campus, safety, amenities, and leasing flexibility, and they provide actionable recommendations for property owners, real estate companies, and potential investors.

a. Cluster Analysis: Student Segments and Preferences:

The clustering analysis revealed three distinct segments of students based on their housing preferences, priorities, and rent willingness. These segments demonstrate unique needs and behaviors, which provide insight into how housing offerings can be tailored to address diverse student demands. Here are the key findings for each cluster:

Cluster 1: On-Campus Convenience Seekers

Size: Approximately 35% of the total respondents fall into this cluster.
Profile & Preferences: Students in this group prefer on-campus or near-campus housing, valuing proximity, convenience, and safety over cost. They are less sensitive to rent costs and are willing to pay higher rent for easily accessible, secure housing. They emphasize the need for a short commute to academic buildings and campus facilities.
Amenity Preferences: This group values amenities that enhance safety and convenience, such as secure access, well-lit surroundings, and quick access to university facilities. While rent is a secondary concern, they expect a comfortable and hassle-free living experience.

Cluster 2: Premium Off-Campus Seekers

Size: Approximately 25% of the respondents belong to this cluster.
Profile & Preferences: Students in this segment prefer off-campus housing options that offer premium amenities and are willing to pay higher rent for features that enhance their living

experience. They seek luxury aspects like private bathrooms, in-unit laundry, fitness centers, and advanced study spaces. The focus is on lifestyle and comfort rather than affordability.

Amenity Preferences: This cluster values a wide array of amenities, including 24/7 maintenance, advanced study rooms, and fitness facilities, indicating a preference for housing that provides a high-quality, self-contained living environment. They are typically less concerned about being close to campus, provided the property offers a premium experience.

Cluster 3: Budget-Conscious Renters

Size: The largest segment, comprising around 40% of respondents.
Profile & Preferences: Students in this cluster are highly price-sensitive, prioritizing affordability above all else. They are willing to compromise on additional amenities, location, and even safety features to ensure lower rent costs. Basic needs take precedence, and they seek the most cost-effective housing solutions that still meet essential living requirements.

Amenity Preferences: These students prefer practical amenities that do not significantly impact rent, such as in-unit laundry and basic maintenance services. Luxury amenities or additional services are considered unnecessary or not worth the added cost for this group.

Implications for Property Owners: The distinct preferences and behaviors of these clusters underscore the need for a diversified approach to housing options. Cluster 1's demand for convenience and proximity, Cluster 2's willingness to pay for luxury amenities, and Cluster 3's focus on affordability suggest that housing providers should tailor offerings and marketing efforts to align with these segments' specific needs.

b. Housing Selection Factors: Affordability, Proximity, and Safety:

Affordability: Affordability emerged as a top priority in housing decisions, with a strong variation in willingness to pay across student segments. Approximately 70.9% of respondents are willing to pay between $500-$1000 in rent, while only a small portion (12.7%) are willing to pay under $500.

This variation indicates diverse budget preferences among students, with higher-income clusters willing to pay more for premium amenities, while budget-conscious clusters prioritize lower rent.

Proximity to Campus: Over 80% of students identified proximity to campus as a critical factor when selecting housing. Students expressed a preference for properties that minimize commute times, with 45% stating that they would choose housing within a 10–15-minute walk to campus facilities. This reflects a strong desire for convenience and accessibility.

Safety & Security: Safety considerations, particularly for off-campus housing, ranked high among respondents, with 47.3% indicating that security features are “very important” and an additional 29.1% considering them "somewhat important." Students expressed a preference for well-lit surroundings, security cameras, and controlled access systems. This concern is especially pronounced among female students and international students, who reported feeling more secure with visible safety measures.

c. Amenities Preferences Across Student Segments:

High-Priority Amenities: Preferences for amenities vary greatly among students. In-unit laundry, study spaces, fitness centers, and 24/7 maintenance services were identified as top amenities, with 66.6% of respondents rating these as “important” or “very important.” Preferences are linked to segments, with higher-income students valuing amenities like gym access and study rooms, whereas cost-sensitive segments focus on essential services like maintenance and laundry.

Lower-Priority Amenities: Amenities like sports facilities and community events were generally rated as less critical, with only 7.4% of respondents considering community events “very important.” This indicates that while some students value social and recreational features, they are not universally prioritized and should not be the focus for all housing types.

d. Leasing Flexibility Preferences:

The study found that 40% of respondents, particularly international students and seniors nearing

graduation, highly value flexible leasing options, such as short-term leases or month-to-month contracts. This reflects a need for adaptability in lease agreements to accommodate students with varied and potentially unpredictable housing needs.

e. Commuting and Utility Proximity:

Accessibility to Transportation and Utilities: For off-campus students, access to public transportation and proximity to grocery stores or utility centers significantly influence housing choices. About 50% of students expressed a preference for housing within walking distance of these utilities, indicating the value of accessible daily needs. This suggests that housing further from campus must provide convenient access to essential services to attract student renters.

5. Recommendations

Based on the key findings of the research, the following recommendations are provided to housing providers and real estate managers in the Greater Lafayette area to align their offerings with student preferences and increase appeal and occupancy:

1. Implement Tiered Pricing Strategies:

Summary of Findings: Students show varying degrees of rent sensitivity, with some willing to pay more for premium amenities, while others prioritize affordability.
Recommendation: Offer a range of pricing options to cater to both budget-conscious students and those seeking premium amenities. By providing basic, affordable units as well as higher-priced, amenity-rich units, housing providers can capture a larger portion of the student market and address diverse financial preferences.

2. Emphasize Proximity and Accessibility in Marketing:

Summary of Findings: Proximity to campus is one of the most important factors influencing students' housing decisions, with most students seeking accommodation within a short walk to campus facilities.
Recommendation: For properties close to Purdue University, emphasize the advantage of reduced commuting times and convenient access to campus facilities in marketing materials. For properties located farther away, highlight available transportation options such as shuttle services or public transport connections to mitigate distance.

3. Enhance and Promote Safety Measures:

Summary of Findings: Safety is a critical concern for off-campus students, with a preference for secure, well-lit, and controlled-access properties.
Recommendation: Invest in visible safety measures like enhanced lighting, security cameras, and gated or controlled access systems. These features should be prominently advertised, as they are

key decision-making factors for students and can significantly improve the appeal of a property.

4. Tailor Amenities to Specific Market Segments:

Summary of Findings: Preferences for amenities vary greatly across student segments, with high-priority features including in-unit laundry, study rooms, fitness centers, and 24/7 maintenance. Preferences differ between students willing to pay for luxury and those seeking cost-effective housing.

Recommendation: For premium properties targeting higher-paying segments, focus on providing luxury amenities such as gyms, private study spaces, and community events. For budget-friendly housing, prioritize essential amenities like in-unit laundry, 24/7 maintenance, and proximity to grocery stores or utility centers. Tailoring amenities to the preferences of target segments can optimize costs and maximize value.

5. Offer Flexible Leasing Terms:

Summary of Findings: Lease flexibility is highly valued by seniors nearing graduation and international students, who often have uncertain timelines and seek short-term or month-to-month lease options.

Recommendation: Introduce flexible lease terms, such as short-term leases, month-to-month contracts, or summer subletting options. This flexibility will attract students who may not want to commit to longer lease durations and provide a competitive advantage in the market.

6. Develop Segment-Specific Marketing Strategies:

Summary of Findings: The study identified three distinct student segments with unique preferences: (1) on-campus convenience seekers, (2) premium off-campus seekers, and (3) budget-conscious renters.

Recommendation:

For Cluster 1 (On-Campus Convenience Seekers): Highlight the benefits of proximity to campus, safety, and hassle-free living.

For Cluster 2 (Premium Off-Campus Seekers): Focus marketing messages on luxury amenities, community events, and enhanced living experiences.
For Cluster 3 (Budget-Conscious Renters): Emphasize affordability, practical amenities, and essential features that meet basic living needs.
Tailoring marketing strategies to the unique needs of each segment will enhance property attractiveness and occupancy rates.

7. Continuously Collect Feedback and Adapt Offerings:

Summary of Findings: Student preferences are evolving rapidly, influenced by academic schedules, international student dynamics, and lifestyle changes.

Recommendation: Implement regular feedback mechanisms, such as online surveys, focus groups, or suggestion boxes, to stay attuned to the changing preferences and needs of the student population. Use this feedback to adapt offerings, add relevant amenities, and adjust pricing or lease terms as needed to stay competitive in the market.

6. Appendices

Exhibit 1

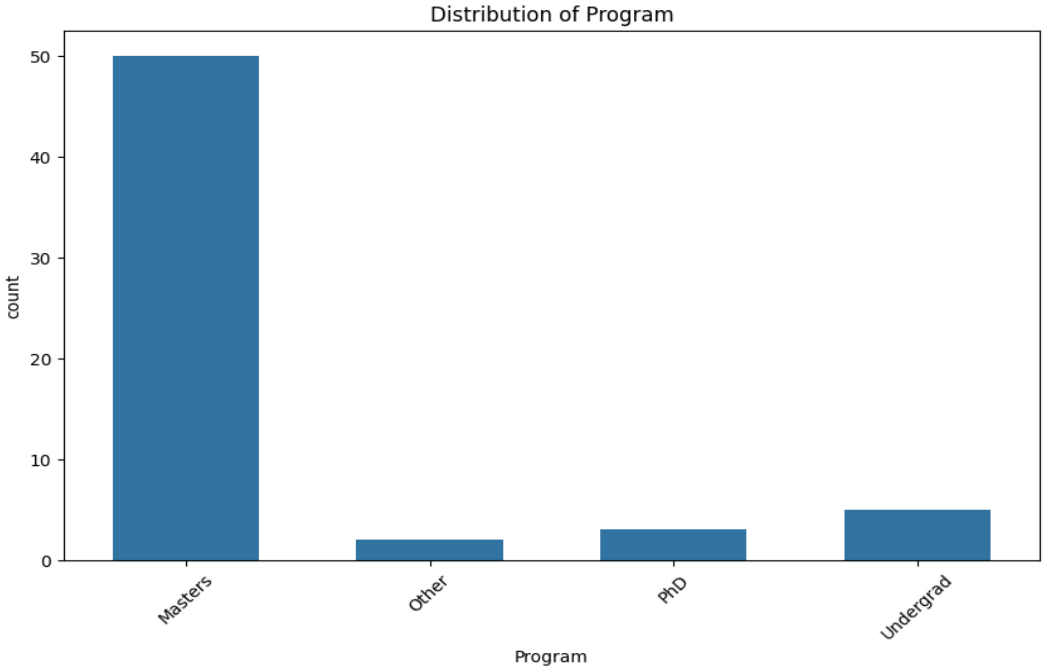
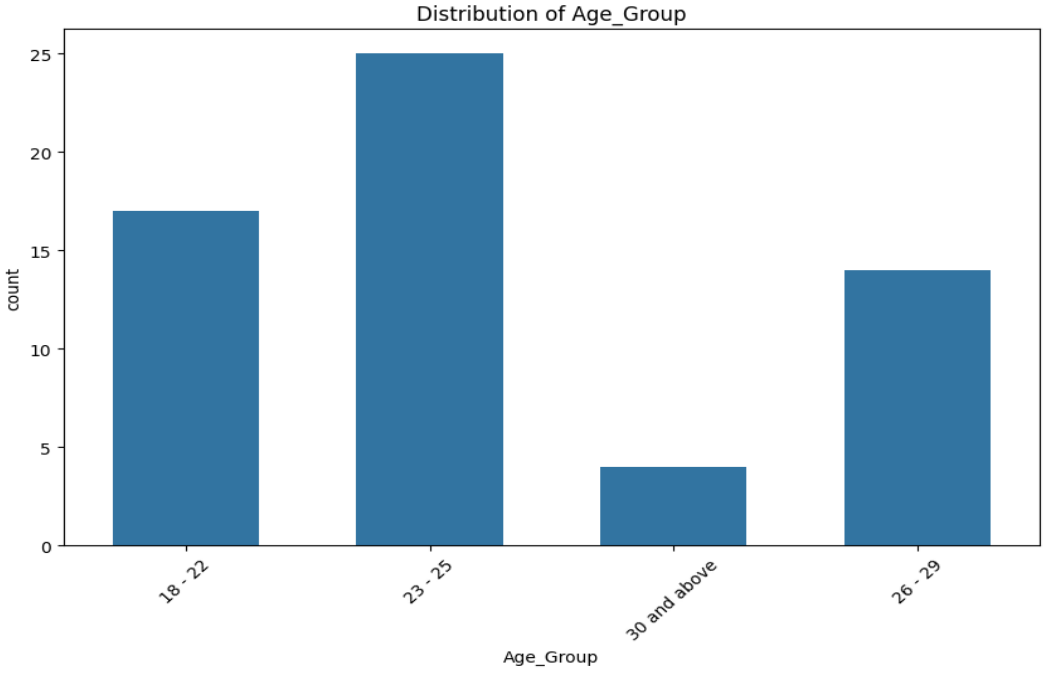


Exhibit 2



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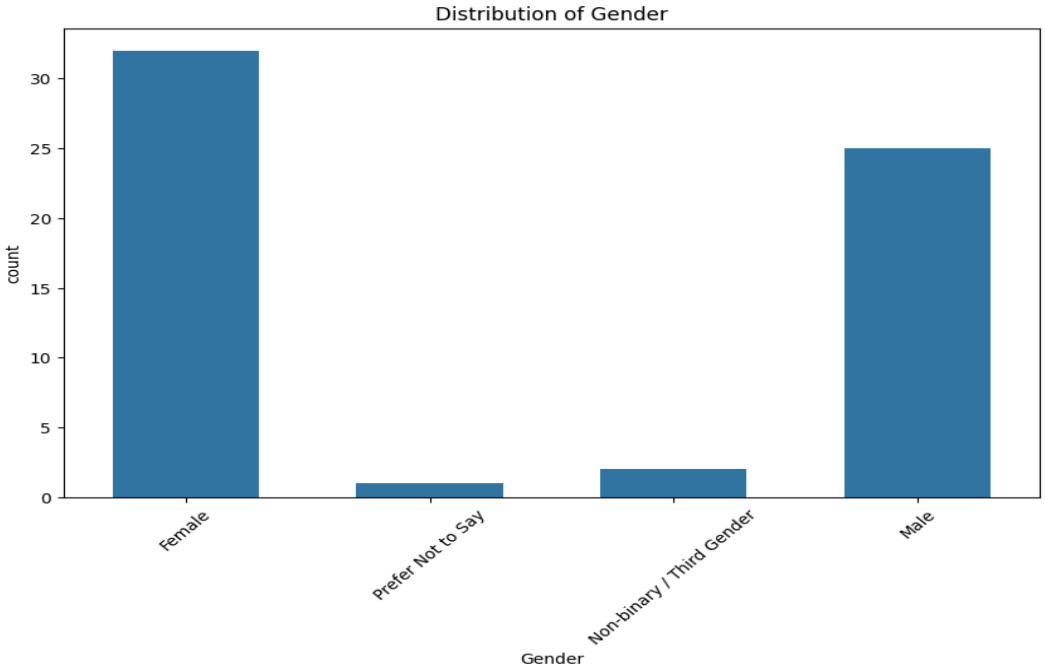

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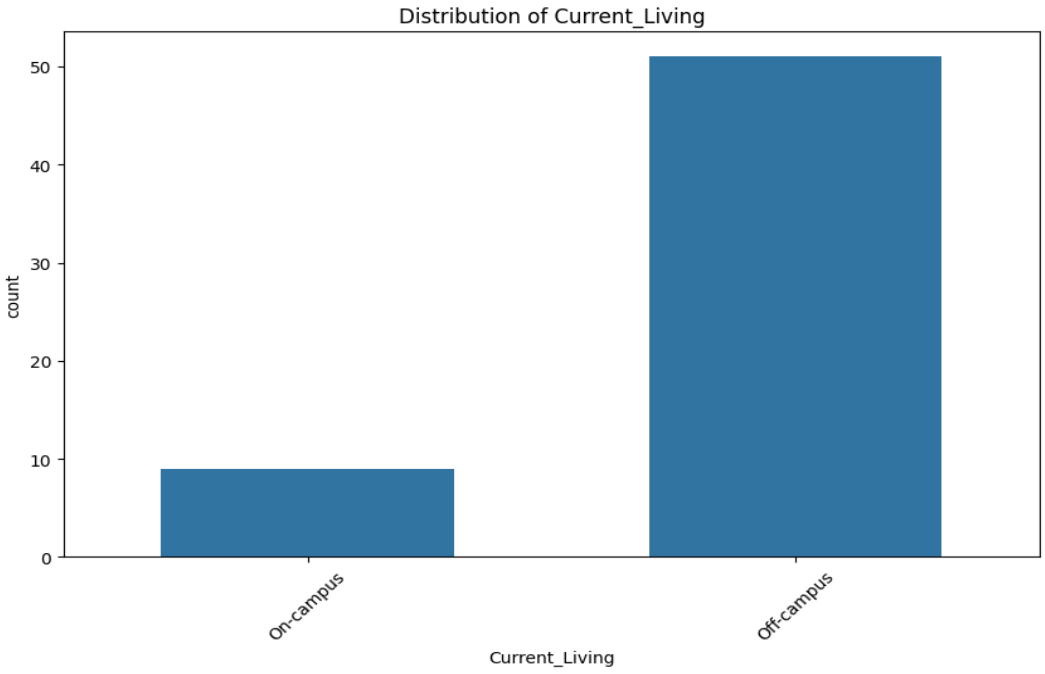

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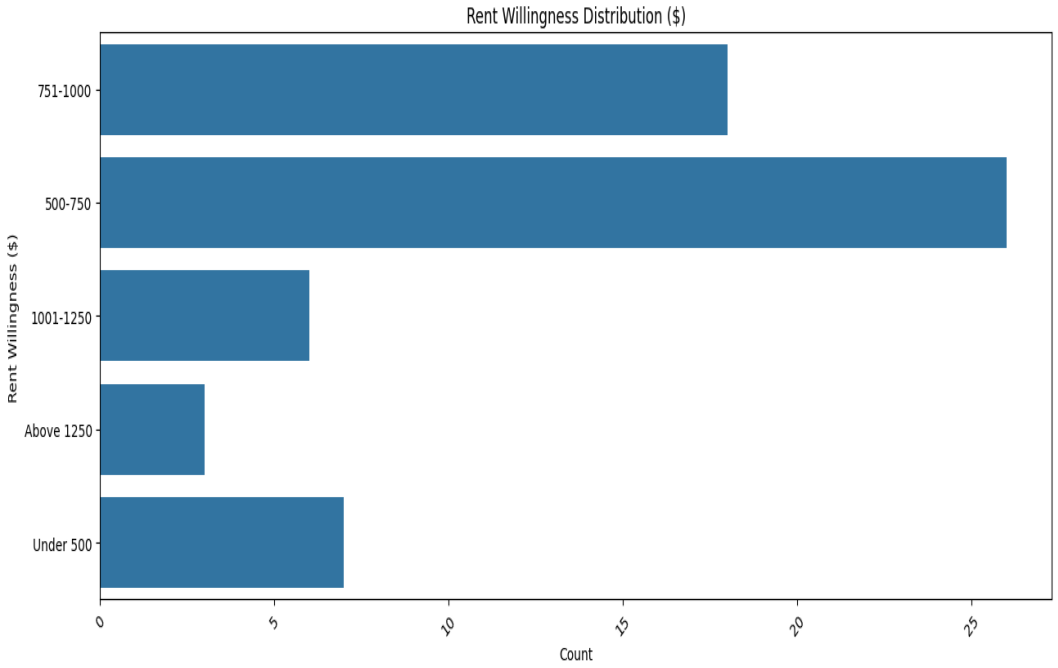
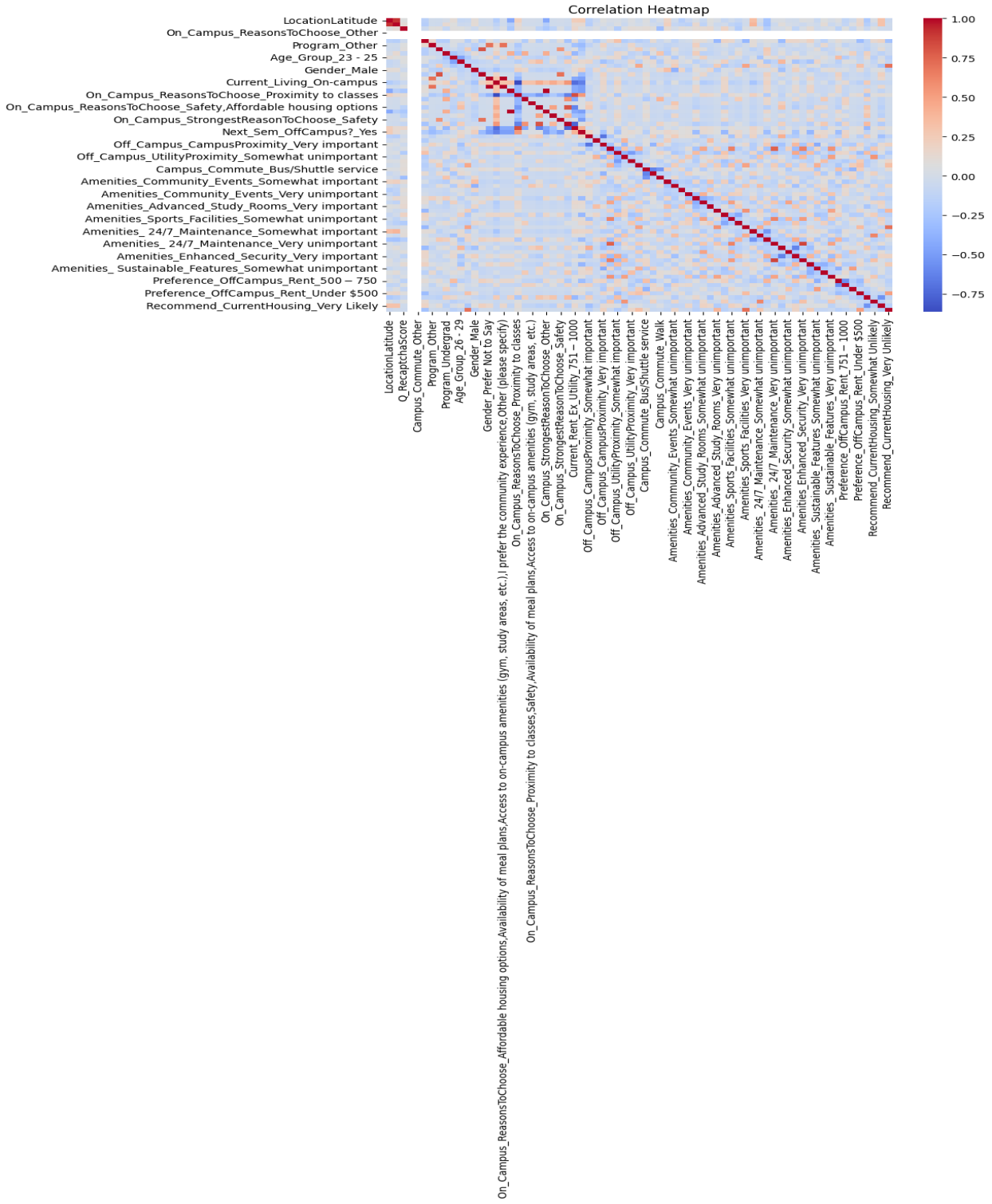

Rent Willingness Distribution ($)
751-1000
500-750
1001-1250
Above 1250
Under 500
Rent Willingness ($)
0
5
10
15
20
25
Count

Exhibit 6


Correlation Heatmap
LocationLatitude
On_Campus_ReasonsToChoose_Other
Program_Other
Age_Group_23 - 25
Gender_Male
Current_Living_On-campus
On_Campus_ReasonsToChoose_Proximity to classes
On_Campus_ReasonsToChoose_Safety,Affordable housing options
On_Campus_StrongestReasonToChoose_Safety
Next_Sem_OffCampus?_Yes
Off_Campus_CampusProximity_Very important
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Campus_Commute_Bus/Shuttle service
Amenities_Community_Events_Somewhat important
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Amenities_Advanced_Study_Rooms_Very important
Amenities_Sports_Facilities_Somewhat unimportant
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Amenities_ Sustainable_Features_Somewhat unimportant
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Recommend_CurrentHousing_Very Likely
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Campus_Commute_Other
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Program_Undergrad
Age_Group_26 - 29
Gender_Male
Gender_Prefer Not to Say
On_Campus_ReasonsToChoose_Affordable housing options,Availability of meal plans,Access to on-campus amenities (gym, study areas, etc.),I prefer the community experience,Other (please specify)
On_Campus_ReasonsToChoose_Proximity to classes
On_Campus_ReasonsToChoose_Proximity to classes,Safety,Availability of meal plans,Access to on-campus amenities (gym, study areas, etc.)
On_Campus_StrongestReasonToChoose_Other
On_Campus_StrongestReasonToChoose_Safety
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Off_Campus_CampusProximity_Very important
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Off_Campus_UtilityProximity_Very important
Campus_Commute_Bus/Shuttle service
Campus_Commute_Walk
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Amenities_Advanced_Study_Rooms_Somewhat unimportant
Amenities_Advanced_Study_Rooms_Very unimportant
Amenities_Sports_Facilities_Somewhat unimportant
Amenities_Sports_Facilities_Very unimportant
Amenities_ 24/7_Maintenance_Somewhat unimportant
Amenities_ 24/7_Maintenance_Very unimportant
Amenities_Enhanced_Security_Somewhat unimportant
Amenities_Enhanced_Security_Very unimportant
Amenities_ Sustainable_Features_Somewhat unimportant
Amenities_ Sustainable_Features_Very unimportant
Preference_OffCampus_Rent_751 – 1000
Preference_OffCampus_Rent_Under $500
Recommend_CurrentHousing_Somewhat Unlikely
Recommend_CurrentHousing_Very Unlikely
1.00
0.75
0.50
0.25
0.00
−0.25
−0.50
−0.75

Exhibit 7

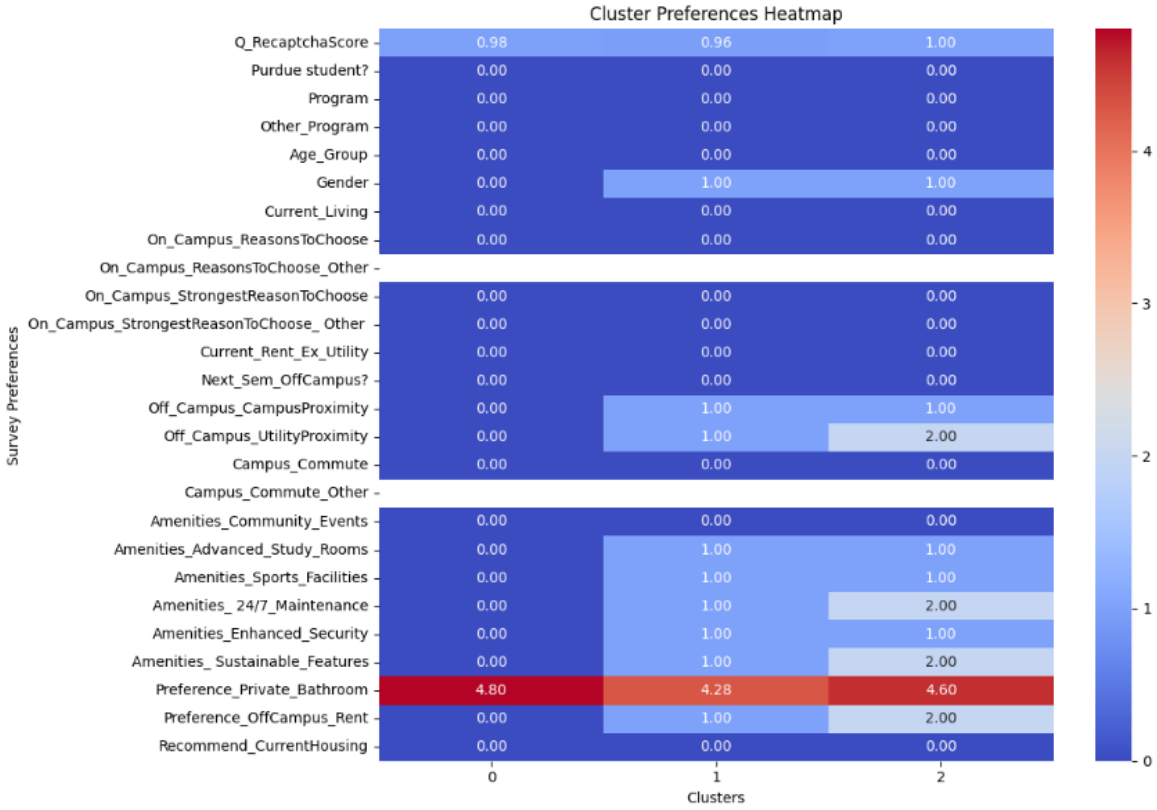
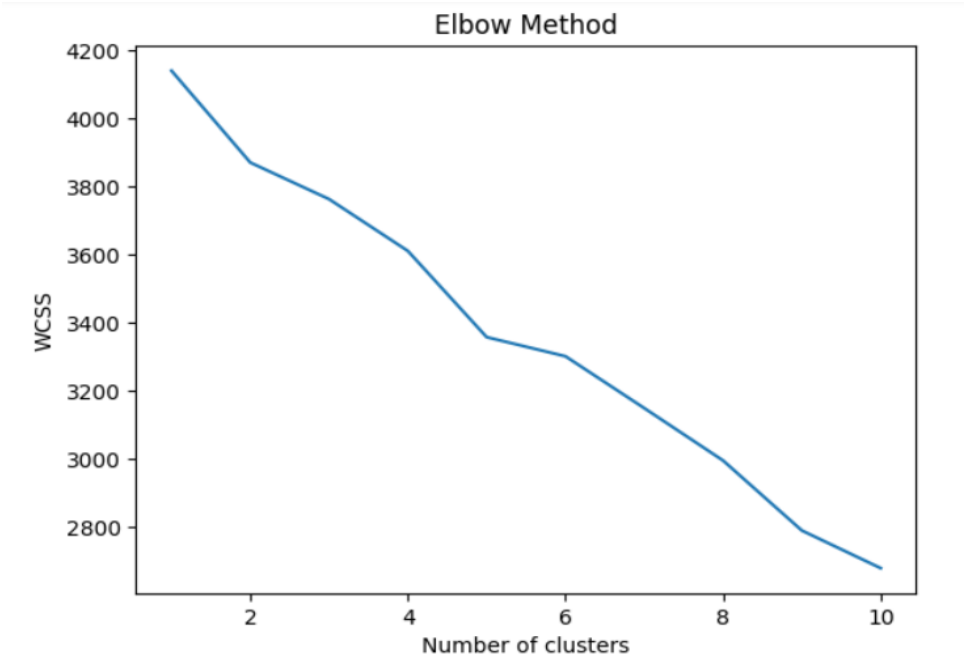


Exhibit 8



Files Attached (In Brightspace Submission):

- Google Colab .py file
- Google Colab Code and Output .pdf file
- Source Data .csv file
- Survey Link