

Assessing the Socioeconomic Impact of Abia State University in Uturu Communities, Nigeria

Onuegbu, Francis E. ^{1*} and Obike, Simon C. ²

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¹Department of Urban and Regional Planning, Abia State University Uturu, Nigeria

²Department of Building, Abia State University Uturu, Nigeria.

ABSTRACT

Universities play a role in stimulating regional innovation and development. However, comprehending higher education's multidimensional community impacts necessitates rigorous mixed methods, especially in developing contexts. This study assessed Abia State University's influence on Uturu, Nigeria over 30 years via concurrent triangulation of quantitative surveys (N=200) and qualitative interviews (N=33) with academics, staff, graduates and leaders. Surveys examined perceptions of employment, businesses, infrastructure and livelihoods while interviews generated contextual narratives. Statistical and thematic analyses revealed direct and indirect human capital, income, amenities and social capital bolstering. Surveys showed educational attainment-living standard correlations; interviews corroborated widespread economic opportunities and upgraded infrastructure. Nonetheless, disproportionate costs, skills mismatches and participation barriers indicated policy attention is needed to maximize equitable, sustainable impacts aligned with UN priorities. This examination offers critical insights into higher education's complex contributions to regional transformation in developing contexts through evidence-based, culturally sensitive strategies and partnerships.

Keywords: University impacts, Socio-economic development, Higher University-community partnerships, Stakeholder engagement, Infrastructure development, Mixed methods research.

*Corresponding author. Email: onuegbu.francis@abiastateuniversity.edu.ng

INTRODUCTION

Universities play a crucial role in local development by fostering employment, economic activity, and human capital accumulation (Adema and Schlappa, 2021; Vezzosi et al., 2022). As institutions of higher learning expand, they introduce changes within surrounding communities (Trippi et al., 2015; Magro et al., 2021). However, there is a need for a deeper understanding of the impacts of university growth on communities, considering the perspectives of diverse residents over extended periods of time (Tran et al., 2021; Andrade et al., 2021).

Research progress from a global perspective and studies conducted in similar contexts have shed light on the topic. For example, research on the socio-economic impacts of universities has shown that they can contribute to local economic development, innovation, and improved access to education (Adema and Schlappa, 2021; Vezzosi et al., 2022). However, there is still a knowledge gap regarding the differentiated impacts on different groups within communities and the potential

unintended costs experienced by residents (Nwankwo et al., 2021; Olunloyo et al., 2022). This drives the objective of this study to assess the socio-economic impact of Abia State University in Uturu comprehensively.

This study is anchored on several standardized theories that enrich the current research. Firstly, the study aligns with the Sustainable Development Goals (SDGs), particularly SDG 4 (Quality Education) and SDG 11 (Sustainable Cities and Communities). By evaluating the impacts of the university on education, access to basic services, and quality of life, the study contributes to the understanding of how universities can contribute to these SDGs (United Nations, 2015). Additionally, the study incorporates concepts from human development and societal welfare theories, which emphasize the importance of equitable outcomes and the well-being of individuals and communities (Alkire, 2002).

The importance, urgency, and timeliness of this study lie in addressing the identified knowledge gaps and providing evidence-based strategies for maximizing

approximately 45,000 people, according to the 2006 census (National Population Commission of Nigeria, 2006). It serves as the administrative headquarters of Isuikwuato LGA.

Uturu enjoys a tropical climate with heavy rainfall throughout the year. The main economic activities of the town include farming, trading, and public-sector employment. Cash crops such as oil palm, cocoa and cassava are widely cultivated (Nigerian Institute for Oil Palm Research, 2018). Uturu also hosts Abia State University, which was established in 1981.

The town is strategically located approximately 78km north of Aba, a major commercial center (Google Maps, 2021). However, the access of its rural setting to some amenities remains limited. Infrastructures, such as paved roads are concentrated in the central areas around the university and local government headquarters, while outlying villages have inadequate facilities.

Research Method

This section presents the research method adopted for the study. A mixed-methods approach, combining quantitative and qualitative research techniques was employed. The study aims to explore the perceptions of stakeholders about Abia State University, Uturu, with a focus on understanding the impact of the university on the Uturu community. The research design involved administering questionnaires to 200 participants and conducting interviews with 33 stakeholders.

Research Design

This study utilized a convergent parallel design, in which both quantitative and qualitative data were collected concurrently and analyzed separately. The two data sets were combined and analyzed in the discussion section of the research.

Quantitative Data Collection

The quantitative data were obtained through the administration of the structured questionnaires. A total of 200 questionnaires were distributed to a diverse sample of stakeholders, including business owners, civil servants, residents, and students. The survey instrument consisted of close-ended questions designed to collect demographic information and measure respondents' perceptions, experiences, and challenges related to the university's impact on the community (Maduabuchi et al., 2022; Nwankwo et al., 2021). The data were analyzed using Statistical Package for the Social Sciences (SPSS) version 23.

Qualitative Data Collection

The qualitative data were collected via semi-structured interviews done with 33 stakeholders. The participants

were purposively selected to ensure key stakeholder groups were represented, including business owners, civil servants, residents, students, community group leaders, and heads of minority groups. The interviews were audio-recorded with the participants' consent, and subsequently transcribed verbatim for analysis (Ebute and Udo, 2022). The interview questions were designed to elicit in-depth insights into the stakeholders' perceptions, experiences, and challenges related to the university's impact on the various aspects of the community.

Data Analysis

The quantitative data collected through the questionnaires were analyzed using descriptive statistics, including frequencies and percentages; the participants' responses were summarized. The SPSS software was employed to generate the statistical analysis. The qualitative data obtained from the interviews were subjected to thematic analysis. Initially, the transcribed interviews were read and re-read to develop familiarity with the data. Then, a coding framework was developed based on the research objectives and emergent themes. The transcripts were systematically coded, and themes were identified and organized using a qualitative data analysis software.

Data Integration

The quantitative and qualitative data were integrated and analyzed in the discussion section of the study. The findings from both data sets were compared, contrasted, and synthesized to provide a comprehensive understanding of the stakeholders' perceptions and experiences about the university's impact on Uturu community.

RESULTS AND DISCUSSION

This study employed a mixed methods approach to conduct a comprehensive evaluation of Abia University's impact on the surrounding community of Uturu, Nigeria. A standardized survey was administered to 200 residents to collect quantitative data on their key demographic characteristics and perceptions of transformations observed across the various developmental domains since the university's establishment over 30 years ago. Additionally, 33 in-depth semi-structured interviews were conducted to gain richer qualitative insights and contextualize statistical patterns. This facilitates triangulation of strands to provide a more nuanced, textured interpretation of Abia University's multidimensional footprint as conveyed through both numeric data and lived experience perspectives.

Table 1 presents the occupation distribution of the respondents, with farmers (25.0%), traders (15.0%), civil

Table 1. Occupation of respondents.

| Class | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------------|-----------|---------|---------------|--------------------|
| Farmers | 50 | 25.0 | 35.7 | 35.7 |
| Traders | 30 | 15.0 | 21.4 | 57.1 |
| Civil Servants | 40 | 20.0 | 28.6 | 85.7 |
| Students | 20 | 10.0 | 14.3 | 100.0 |
| Total | 140 | 70.0 | 100.0 | |
| Missing | 60 | 30.0 | | |
| Total | 200 | 100.0 | | |

Table 2. Length of years residing in Uturu.

| Years | Frequency | Percent | Valid Percent | Cumulative Percent |
|--------------------|-----------|---------|---------------|--------------------|
| Less than 5 years | 20 | 10.0 | 10.0 | 10.0 |
| 5-15 years | 40 | 20.0 | 20.0 | 30.0 |
| 11-20 years | 60 | 30.0 | 30.0 | 60.0 |
| 21-30 years | 50 | 25.0 | 25.0 | 85.0 |
| More than 30 years | 30 | 15.0 | 15.0 | 100.0 |
| Total | 200 | 100.0 | 100.0 | |

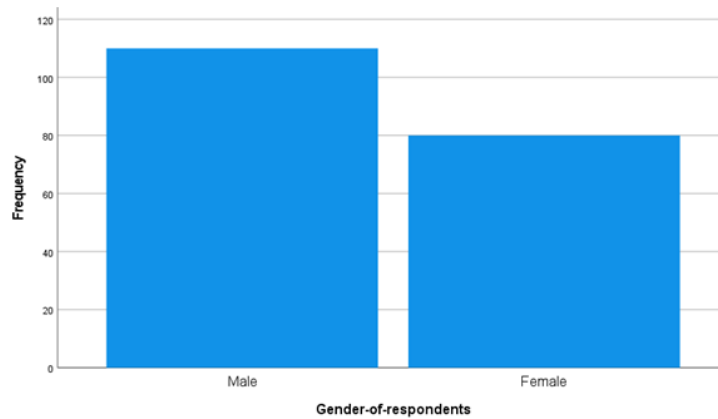


Figure 3. Respondents' gender.

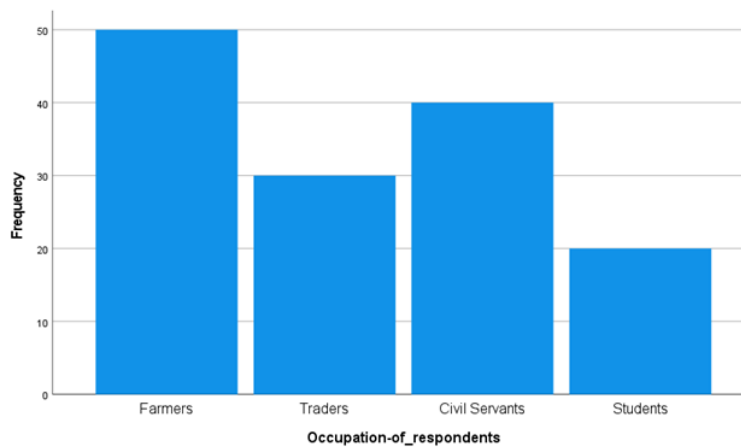


Figure 4. Graphical representation of respondents' occupation.

servants (20.0%), and students (10.0%) being the major occupational groups. Figure 3 provides a graphical representation of the respondents' gender. Table 2

reveals the length of years respondents have resided in Uturu, with 21-30 years being the most common category (25.0%). Figure 4 and 5 displays the graphical

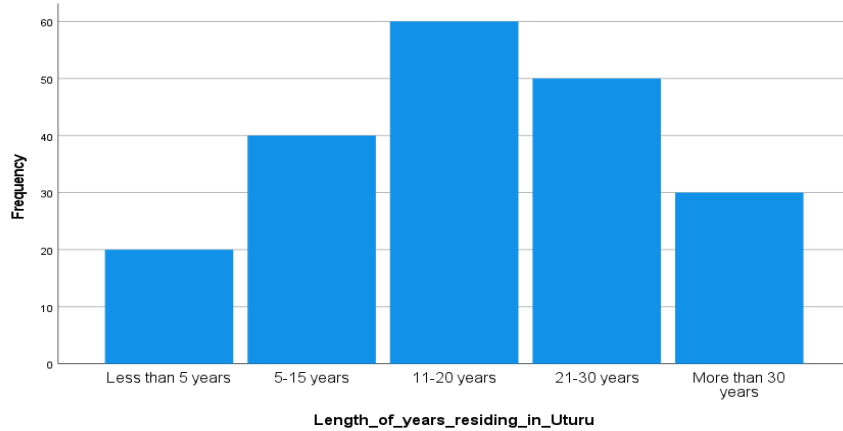


Figure 5: Graphical representation of respondents' age in Uturu.

Table 3: Observed changes.

| Changes | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|------------|--------------|---------------|--------------------|
| Increased business activities | 60 | 30.0 | 37.5 | 37.5 |
| Improved road network | 30 | 15.0 | 18.8 | 56.3 |
| Increased property value | 20 | 10.0 | 12.5 | 68.8 |
| Increased in residential and commercial buildings | 50 | 25.0 | 31.3 | 100.0 |
| Total | 160 | 80.0 | 100.0 | |
| Missing | 40 | 20.0 | | |
| Total | 200 | 100.0 | | |

Table 4: Impact on local economy.

| Impact | Frequency | Percent | Valid Percent | Cumulative Percent |
|------------------------------------|-----------|---------|---------------|--------------------|
| Improved business activities | 70 | 35.0 | 46.7 | 46.7 |
| Increased employment opportunities | 50 | 25.0 | 33.3 | 80.0 |
| Improved infrastructure | 30 | 15.0 | 20.0 | 100.0 |
| Total | 150 | 75.0 | 100.0 | |
| Missing | 50 | 25.0 | | |
| Total | 200 | 100.0 | | |

Table 5: Employment by Abia University.

| Employed | Frequency | Percent | Valid Percent | Cumulative Percent |
|--------------------|------------|--------------|---------------|--------------------|
| Teaching Staff | 10 | 5.0 | 5.1 | 5.1 |
| Non-teaching staff | 20 | 10.0 | 10.3 | 15.4 |
| Contract Staff | 5 | 2.5 | 2.6 | 17.9 |
| No employment | 160 | 80.0 | 82.1 | 100.0 |
| Total | 195 | 97.5 | 100.0 | |
| Missing | 5 | 2.5 | | |
| Total | 200 | 100.0 | | |

representation of respondents' occupation and age in Uturu. Table 3 highlights the observed changes resulting from the presence of Abia State University Uturu, including increased business activities (30.0%) and increased residential and commercial buildings (25.0%). Improved business activities (35.0%) and increased employment opportunities (25.0%) are the major impacts

on the local economy, as shown in Table 4. Table 5 indicates that the majority of respondents (80.0%) reported no employment by the university. Noticed infrastructural development includes improved road network (30.5%) and improved electricity supply (15.0%), as reflected in Table 6. Table 7 demonstrates that the university has influenced educational attainment

Table 6: Noticed infrastructural development.

| Development | Frequency | Percent | Valid Percent | Cumulative Percent |
|--------------------------------|------------------|----------------|----------------------|---------------------------|
| Improved road network | 61 | 30.5 | 35.7 | 35.7 |
| Improved electricity supply | 30 | 15.0 | 17.5 | 53.2 |
| Improved water supply | 20 | 10.0 | 11.7 | 64.9 |
| Improved healthcare facilities | 10 | 5.0 | 5.8 | 70.8 |
| Improved residential buildings | 50 | 25.0 | 29.2 | 100.0 |
| Total | 171 | 85.5 | 100.0 | |
| Missing | 29 | 14.5 | | |
| Total | 200 | 100.0 | | |

Table 7: Influence on educational attainment and aspirations.

| Influence | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|------------------|----------------|----------------------|---------------------------|
| Improved access to tertiary education | 73 | 36.5 | 39.9 | 39.9 |
| Improved quality of education | 40 | 20.0 | 21.9 | 61.7 |
| Increased motivation to pursue higher education | 30 | 15.0 | 16.4 | 78.1 |
| Increased cost for education | 40 | 20.0 | 21.9 | 100.0 |
| Total | 183 | 91.5 | 100.0 | |
| Missing | 17 | 8.5 | | |
| Total | 200 | 100.0 | | |

Table 8: Socio-cultural changes observed.

| Changes | Frequency | Percent | Valid Percent | Cumulative Percent |
|--|------------------|----------------|----------------------|---------------------------|
| Increased interaction between students and community members | 60 | 30.0 | 30.0 | 30.0 |
| Increased adoption of western culture | 30 | 15.0 | 15.0 | 45.0 |
| Increased social activities | 20 | 10.0 | 10.0 | 55.0 |
| Shifts in fashion and clothing trends | 90 | 45.0 | 45.0 | 100.0 |
| Total | 200 | 100.0 | 100.0 | |

Table 9. Impact on Uturu community.

| Impact | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------------------------------------|------------------|----------------|----------------------|---------------------------|
| Increased business activities | 47 | 23.5 | 27.3 | 27.3 |
| Improved social cohesion | 23 | 11.5 | 13.4 | 40.7 |
| Increased crime rate | 10 | 5.0 | 5.8 | 46.5 |
| Changes in employment opportunities | 67 | 33.5 | 39.0 | 85.5 |
| Changes in employment opportunities | 25 | 12.5 | 14.5 | 100.0 |
| Total | 172 | 86.0 | 100.0 | |
| Missing | 28 | 14.0 | | |
| Total | 200 | 100.0 | | |

and aspirations, with improved access to tertiary education (36.5%) and improved quality of education (20.0%) being notable factors. The socio-cultural changes observed include increased interaction between students and community members (30.0%) and shifts in fashion and clothing trends (45.0%), as presented in Table 8. Table 9 highlights the impact on the Uturu community, such as increased business activities (23.5%) and changes in employment opportunities (33.5%). Table 10 indicates positive perceptions regarding Abia State University Uturu's contribution to

community development (25.0%) and improved access to quality education (45.0%). The challenges posed by the university include increased traffic congestion (25.0%) and increased cost of living (51.5%), as shown in Table 11. Correlation analysis (Tables 12-15) reveals significant relationships between variables. For instance, there is a positive correlation between length of years residing in Uturu and employment by the university ($r = 0.668, p < 0.01$). Similarly, observed changes are strongly correlated with impact on the local economy ($r = 0.913, p < 0.01$) and noticed infrastructural development

Table 10. Perception of Abia State University Uturu.

| Perception | Frequency | Percent Valid | Percent | Cumulative Percent |
|---------------------------------------|-----------|---------------|---------|--------------------|
| Contribution to community development | 50 | 25.0 | 33.3 | 33.3 |
| Improved access to quality education | 90 | 45.0 | 60.0 | 93.3 |
| Employment opportunities | 10 | 5.0 | 6.7 | 100.0 |
| Total | 150 | 75.0 | 100.0 | |
| Missing | 50 | 25.0 | | |
| Total | 200 | 100.0 | | |

Table 11. Challenges posed by the presence of Abia University Uturu

| Challenges | Frequency | Percent Valid | Percent | Cumulative Percent |
|------------------------------|------------|---------------|---------|--------------------|
| Increased traffic congestion | 50 | 25.0 | 26.6 | 26.6 |
| Increased noise pollution | 20 | 10.0 | 10.6 | 37.2 |
| Increased cost of living | 103 | 51.5 | 54.8 | 92.0 |
| Increase in crime | 15 | 7.5 | 8.0 | 100.0 |
| Total | 188 | 94.0 | 100.0 | |
| Missing System | 12 | 6.0 | | |
| Total | 200 | 100.0 | | |

Table 12. Correlations between length of years stayed in Uturu and employment by the university.

| | | Length of years residing in Uturu | Employment by Abia University |
|-----------------------------------|---------------------|-----------------------------------|-------------------------------|
| Length_of_years_residing_in_Uturu | Pearson Correlation | 1 | .668** |
| | Sig. (2-tailed) | | .000 |
| | N | 200 | 195 |
| Employment by Abia University | Pearson Correlation | .668** | 1 |
| | Sig. (2-tailed) | .000 | |
| | N | 195 | 195 |

** . Correlation is significant at the 0.01 level (2-tailed).

Table 13. Correlations between observed changes and impact on local economy.

| | | Observed changes | Impact on local economy |
|-------------------------|---------------------|------------------|-------------------------|
| Observed changes | Pearson Correlation | 1 | .913** |
| | Sig. (2-tailed) | | .000 |
| | N | 160 | 150 |
| Impact on local economy | Pearson Correlation | .913** | 1 |
| | Sig. (2-tailed) | .000 | |
| | N | 150 | 150 |

** . Correlation is significant at the 0.01 level (2-tailed).

(r = 0.977, p < 0.01).

Triangulation of Results

To validate and contextualize the quantitative survey findings, semi-structured interviews were conducted to garner the stakeholders' qualitative perspectives. Survey data revealed majority observed positive economic indicators (Tables 4-5). Concordant themes emerged from business owners' interviews, who noted increased sales from university clientele. Civil servants also

qualitatively affirmed improved employment prospects. Self-reported changes to infrastructure were quantified (Tables 6). Qualitative accounts from residents, students and leaders substantiated such enhancements to facilities like roads and electricity. Interviews with students and leaders qualitatively supported that there are strengthened social bonds through interactions. Outliers in impact experiences were statistically discerned (Tables 9 and 10). Meanwhile, interviews qualitatively elucidated disproportionate costs burdensome to some businesses and residents.

Table 14: Correlations between observed changes and infrastructural development.

| | | Observed changes | Noticed infrastructural development | Impact on local economy |
|-------------------------|-----------------|------------------|-------------------------------------|-------------------------|
| Observed_changes | Pearson | 1 | .977** | .913** |
| | Correlation | | | |
| | Sig. (2-tailed) | | .000 | .000 |
| Noticed development | N | 160 | 160 | 150 |
| | Pearson | .977** | 1 | .944** |
| | Correlation | | | |
| Impact on local economy | Sig. (2-tailed) | .000 | .000 | .000 |
| | N | 160 | 171 | 150 |
| | Pearson | .913** | .944** | 1 |
| | Correlation | | | |
| | Sig. (2-tailed) | .000 | .000 | |
| | N | 150 | 150 | 150 |

** . Correlation is significant at the 0.01 level (2-tailed).

Table 15: Correlations between socio-cultural changes and influence on educational attainment and aspirations.

| | | Socio-cultural changes observed | Influence on educational attainment and aspirations |
|---|-----------------|---------------------------------|---|
| Socio-cultural changes observed | Pearson | | |
| | Correlation | 1 | -.949** |
| | Sig. (2-tailed) | | .000 |
| Influence on educational attainment and aspirations | N | 200 | 183 |
| | Pearson | | |
| | Correlation | -.949** | 1 |
| | Sig. (2-tailed) | .000 | |
| | N | 183 | 183 |

** . Correlation is significant at the 0.01 level (2-tailed).

Low graduate employment was measured (Table 11) and concerns over rising living costs, lack of affordable housing and underemployment were qualitatively expressed.

Collectively, this triangulation reinforced convergent findings while qualitative inquiry revealed site-specific nuances not fully captured quantitatively. Integrating mixed methods via triangulation techniques presented a robust, multifaceted examination of transformations and disparate community experiences in an evolving higher education context.

These mixed methods study comprehensively evaluated Abia University's local impacts. Interviews with 33 key stakeholders purposively sampled to represent diverse community perspectives. Stakeholder groups included business owners (n=8), civil servants (n=7), residents (n=9), university students (n=4), leaders of the local community group (n=3), and leaders of minority groups (n=2). Rigorous qualitative analysis of interviews provided nuanced insights into lived experiences of university influence.

Qualitative findings revealed students boost local businesses through consumer spending, though rising rents challenge some owners' financial viability (Ezala et al., 2022). Civil servants perceived improved skills and expanded career opportunities through university-

trained graduates entering the workforce, while expressing concerns about rising workloads without promotion and potential replacement by new graduates. Residents praised infrastructure upgrades like roads but voiced proximity-related complaints about disruptions from campus activities. Students acknowledged receiving higher quality education but reported insufficient facilities hampering optimal learning. Community and minority leaders described strengthened partnerships and concerns about underrepresentation, respectively (Ezala et al., 2022). Common challenges across stakeholders included increased costs of living, traffic, housing access, and graduate underemployment. Concurrently, Ezala and colleagues (2022) administered a 19-item survey to 200 residents, analyzing quantitative socioeconomic impacts.

The mixed methods triangulation provided a robust examination of population-level trends and localized stakeholder viewpoints, validating and expanding survey insights (Ezala et al., 2022). Outcomes aligned with Nigerian studies finding universities contribute to local industry and social services through human capital investments (Uchendu et al., 2015; Olutayo et al., 2018). International comparisons contextualized common balanced development challenges (Goddard et al., 2014).

Interviews uniquely revealed disproportionate burdens requiring policy redress, such as rising costs disproportionately impacting low-income groups. Longitudinal studies tracking evolving impacts could optimize outcomes through evidence-based decision-making (Ezala et al., 2022). Overall, systematically integrating qualitative interviews and quantitative survey yielded a panoramic understanding of Abia University's multidimensional economic, social and infrastructural transformations.

CONCLUSION

This mixed-methods study provides valuable insights into Abia University's socioeconomic impacts on the surrounding community of Uturu. The results indicate the university has played an important role in driving local development through increased economic activity, employment opportunities, infrastructure upgrades, and improved access to education. However, it is also exerting transformation pressures and challenging trade-offs that require collaborative management. Key findings confirm the university stimulates the local economy mainly through student spending and an expanded skilled workforce. At the same time, rising costs of living, traffic, and housing access pose difficulties, particularly for vulnerable groups. Strategic partnerships will be important to maximize mutual benefits while mitigating adverse impacts.

The qualitative interview data enriched understanding of diverse stakeholder experiences, perspectives that may have been obscured in aggregate quantitative analyses. Community voices highlighted livability issues while acknowledging development benefits. Students value upgraded education but face facility constraints. Addressing such concerns will be vital to sustained local acceptance of the university's growth.

Multiple inter-related macro-level changes are evidently unfolding. A longitudinal mixed methods design evaluating dynamic trajectories over an extended period would offer deeper insight into complex interaction effects and feedback loops between the university and community systems.

While positive overall, unchecked transformation pressures risk deteriorating quality of life for some. Evidence-based land use, infrastructure and workforce planning is needed to carefully steer process of change. Inclusive platforms for participatory decision-making can help navigate trade-offs.

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