Are high-tech companies having a positive impact on the historically low to middle-income neighborhoods?

- An observational study in East Austin, Texas

Manasa Hegde¹

Department of Architecture Texas A&M University, College Station, TX, 77840 email: manasa.hegde9@tamu.edu

James Michael Tate¹

Department of Architecture Texas A&M University, College Station, TX, 77840 email: tate@tamu.edu

Abstract

This paper discusses stresses placed on housing and community resources as hightech industry professionals and businesses transform the eastside of Austin, Texas U.S.A. In the late 1920s, segregationist policies relocated minority and low-income residents to designated districts east of downtown which has long been anchored by black and latinx communities who built and nurtured these neighborhoods.

Influx of higher-earning households began in the 1970s with the incubation of techgiants in the northeast of Austin-Round Rock Metropolitan area. While parts of Austin received improvements services, the eastside was underserved and thereby underperforming by comparison. Cost of living and property values increased by the early 2000s, rendering long-term residents of East Austin vulnerable to displacement. East Austin is growing to be an affordable destination for emerging tech professionals to live and work in an urban setting due to its ease of access to downtown, the international airport, and a balance of urban authenticity and historic charm.

This paper surveys east of I-35 highway, framed by US 290 on the North, TX-130 on the East, TX-71 on the South and I-35 on the West that is being transformed. Projected development of the area suggests a building out of this territory, a nexus of tech startups, many of which whose products seamlessly merge virtual and lived experiences of the city. A major

question in East Austin is how this disruption will be done equitably to benefit both new residents and those with long established roots.

Introduction

Technology is increasingly integrated into our daily routine. Access and the ability to digital devices and services is a convenience many Austin residents unconsciously rely on. Texas counties claimed the top four spots in numeric growth in the US - with Austin-Round Rock metroplex at a population of 2.16 million (US Census Bureau, 2018). While Austin has grown into a successful Technopolis, very few studies have tapped into understanding the impact of high-tech companies on non-tech individuals and the urban transformation of East Austin. This paper discusses the rapid urbanization of East Austin, Texas U.S.A. while considering the implications of high-tech development on the underserved low-income residents. Land market values of houses and income per occupation were analyzed to determine the ability to own a house in the East Austin area. An assessment of 50 randomly selected single-family detached units over the past 30 years (2000-2019) showed that non-tech individuals had to spend 30.69% of their income to own a house in East Austin which is more than the recommended 28% of one's income.

Background

Why Austin?

Austin is now recognized as the next "Silicon Valley" leading in creativity, innovation, business start-ups and net creation of wealth and jobs (Gibson & Oden, 2019; Smilor et. al., 1989) than live music capital. It is one of the most preferred cities to live in because of 2% lower than national average living costs, tax benefits, inexpensive land, low labor costs and access to

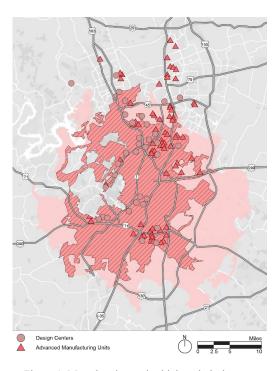


Figure 1. Map showing major high-tech design centers and advanced manufacturing units.

outdoor activities (Mercado, 2019; Leanman, 2019; Gibson & Oden, 2019; Kerr, 2019). Austin is consistently ranked among the top 20 fast growing metro cities in the U.S.

High-tech companies that have transitioned to Austin span myriad domains - enterprise software, semiconductors, gaming and several startups (Zimmerman, 2013; Williams 2016). University of Texas, Austin's initial efforts in the 1950s attracted the first few tech companies namely Tracor, Inc., Xerox, Texas Instruments, IBM, Motorola, and so on (Gibson and Oden 2019; Glasmeier, 1988; Hedman et. al., 2017; Smilor et al., 1989). Some of the larger tech companies with offices here are Apple, Facebook, Google, Amazon, and Oracle (Zehr, 2018; Bort 2018; Lorek, 2018). Today, the physical and cultural perceptions of this city is attractive to emerging generation of digital natives.

Racially segregated housing has been a major challenge since Austin was made capital of Texas in 1839 (Hedman et. al., 2017; Walsh et. al. 2007; Busch, 2013) affecting low to middle-income families (Hedman et. al., 2017). While the city claims to have high quality health and wellness oriented residential life, it remains racially and economically segregated with unequal distribution of resources (Walsh et. al.,

2007; Busch, 2015) which has prevailed since the 1928 master plan for the city. In 1939, Lyndon Johnson played a major role in creating public housing for the low-income families. This resulted in majority of the Latinx, African American and low-income White population being pushed towards East Austin into public housing developments namely Santa-Rita, Rosewood and Chalmers Courts respectively (Busch, 2015; Perry et. al., 1939; Philips, 2016). Between 1970-1990, living conditions were subpar – displacement of long-term residents, declining real estate values, underperforming educational opportunities, and low-wage jobs were common in East Austin (City of Austin, 1978; Busch, 2015; Walsh et. al., 2007).

In the 1990s, suburban development was aimed at attracting high-tech white-collar investments and reclaiming urban spaces (Busch, 2015). Growth of high-tech sectors zoned in the eastside of Austin created more jobs for the skilled labor (Walsh et. al., 2007; Busch, 2015). While the 2010 master plan created green infrastructure to encourage an active lifestyle, it was mostly accessible to the wealthier lakeside properties. (King, 2019; City of Austin and Nelessen, 2010; Busch, 2015). I-35 freeway, a major physical barrier segregated the working-class low-income residents on the south and east. While increased influx of high-tech

companies and startups have improved quality of life in East Austin, it has also driven up home prices and land taxes making long-term residents on fixed income vulnerable to displacement (Hedman et. al., 2017; Austin Chamber, 2017; Stephens et. al., 2019; Tretter, 2015). Until recently, this area had just one major grocery store and no major pharmacies serving more than 100,000 residents. Whole Foods and Target+CVS is scheduled to open in Spring 2020 with growing demand for high quality goods.

Austin's current housing models are multifamily/apartments, condominiums, townhomes, duplex/triplex/fourplex units, livework units, and single-family detached units (BBC Research & Consulting, 2014; NHCD, 2017). While single-family detached units are highly desired, only a handful can afford one. Median prices of single-family detached units as of 2019 was \$368,000 which is a 22.7% increase since 2012 (BBC Research & Consulting, 2014; Merrill, 2019). Only 20% of the 100,000 new jobs in the past decade earn more than \$75,000 per year and can afford homeownership (BBC Research & Consulting, 2014) creating a gap in income distribution and housing affordability.

Current and projected land use trends in Austin

While the population is expected to double (~2 million) in the next 3 years, (Austin City Council, 2018) more residential and commercial developments are being implemented, some of which are the "Colony Park" and the "Austin Green Planned Unit Development (PUD)" both located in far east Austin. Both projects are master planned residential communities of sizes 208-acres and 2,122.7 acres respectively with a percentage of houses provided at affordable prices to those at 60% and 80% median family income (BBC Research & Consulting, 2014; NHCD, 2017; Austin City Council, 2018). While these projects are meant to provide affordable housing, job opportunities within walking distance and help relieve some of the pressures of increasing housing prices and traffic, they are located 9 and 16 miles away from downtown Austin.

Another major development in far East Austin is the Austin-Bergstrom International Airport (ABIA). By 2040, ABIA will support larger aircrafts, higher passenger traffic, latest technologies, and an urban plaza with relaxing spaces and off-leash play areas for dogs servicing 31+ million annual passengers (ABIA, 2019). This renovation is projected to have an overall economic impact of \$7.6 billion providing 74,148 jobs (ABIA, 2019).

Impact of new developments on lowincome underserved residents

The city's Imagine Austin 2019 master plan proposes a transformed East Austin with walkable/bikeable green landscapes, and attractive public spaces from downtown to ABIA airport (City of Austin & A. Nelessen Associates Inc., 2019; Austin City Council, 2018) resulting in developers renovating/replacing older apartments offered at higher rent (Ulloa, 2013; Tretter, 2014).

Studies suggest that new developments and increase in land taxes in the East Austin area has affected low-income, long term especially minority families resulting in displacement of low-income families (Tretter, 2014; Tretter, 2013; Ulloa, 2013). A recent study shows that, East Austin residents in 'Govalle and Johntson Terrace', 'Chestnut', and 'Holly' neighborhoods owed more than \$95,000 in land and property taxes and has a homeownership turnover rate of 24%, 42.5%, and 32.2% respectively (Tretter, 2014).

According to the 2014 Austin Housing Market Study, high income renters – those earning more than \$75,000 per year has increased by 15,000 since 2007 (City of Austin - NHCD, 2014). However, 80,000 out of 100,000 new jobs are moderate to low paying jobs (City of Austin - NHCD, 2014) which creates a gap between income distribution and housing price and affordability. Median price of single-family homes has increased from \$300,000 in 2012 to \$368,000 in 2019 (City of Austin - NHCD, 2014; Merrill, 2019).

Impact of new developments on the surrounding environment

Colorado River is the jewel of Austin, Texas which not only supports a highly diverse aquatic life but also is a source of outdoor recreation for Austin residents. In 2012, Travis county created a "Colorado River Corridor Plan", whose main goal is to "preserve and enhance environmental, economic, recreational, and cultural resources along a 32-mile stretch bound by US 183 highway on the west, Travis county line on the east, FM 969 on the North, and SH 71 on the

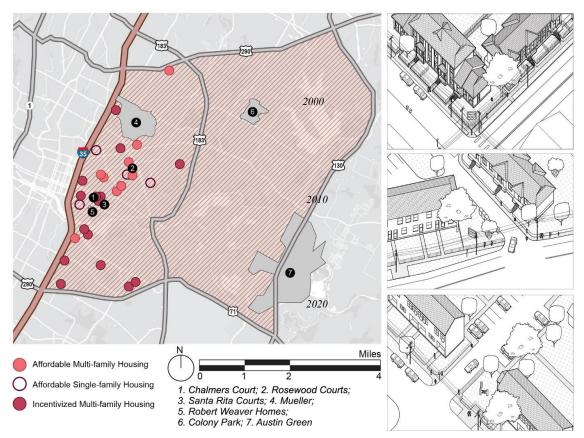


Figure 3. Study area in East Austin, Texas showing change in land-use patterns from 2000 to 2020

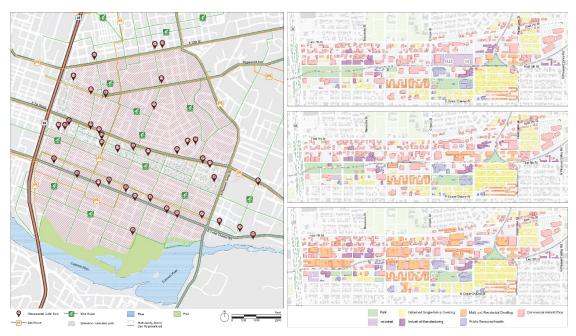
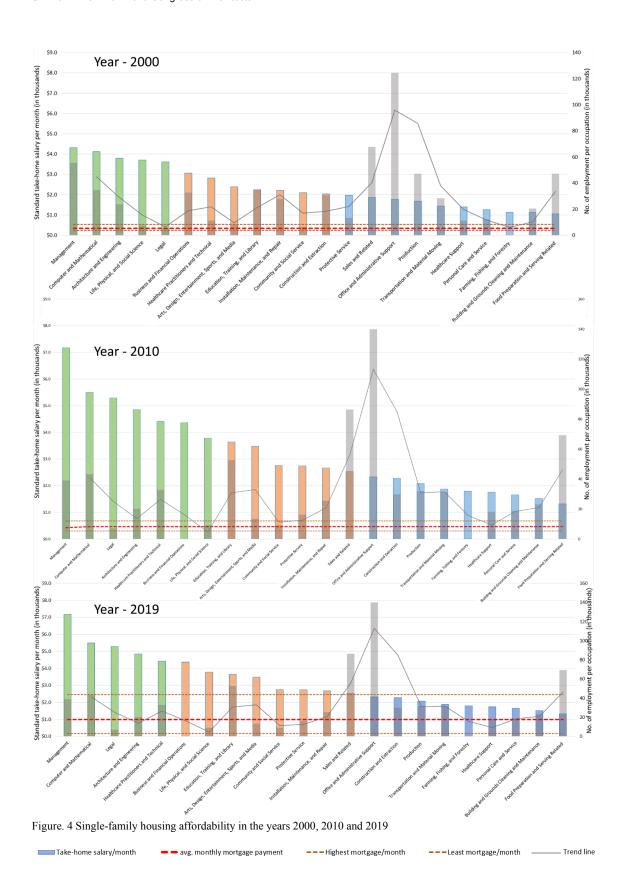


Figure 2. Affordable housing in East Austin (left), Rosewood Courts, Santa-Rita Courts, and Chalmers Courts (right).



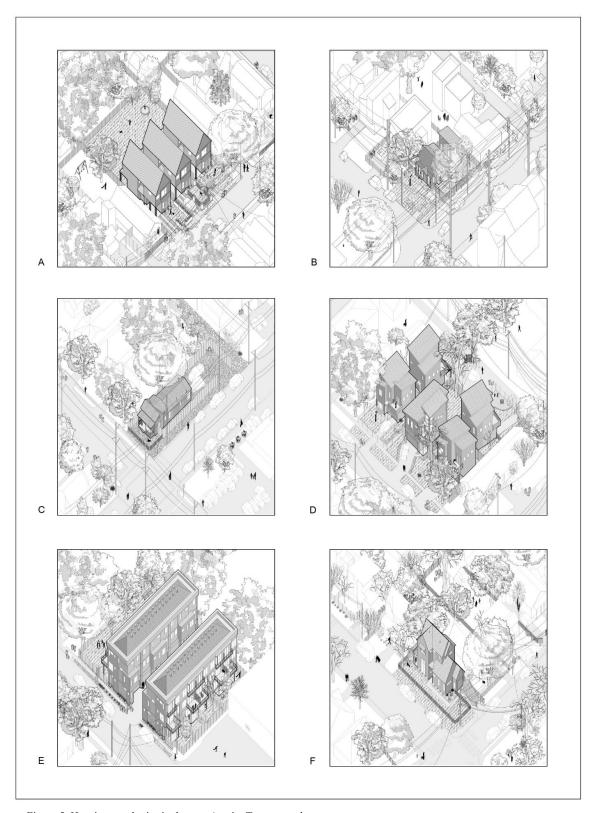


Figure 5. Housing typologies in the east Austin, Texas – study area

south over the next 25 years" (Travis County Transportation & Natural Resources, 2012). However, 21.4% (6,549 acres) of this corridor was identified as mining land use in 2010 some still functioning and others abandoned (Travis County Transportation & Natural Resources, 2012). Most of the inactive mines are reclaimed and converted into urban areas such as schools, residential areas and related commercial land use, trying to accommodate the significant population growth in Austin, Texas (U.S. Census Bureau, 2018; Travis County Transportation & Natural Resources, 2012). Studies have shown that urban development often lead to habitat fragmentation and risk the existence of sensitive flora and fauna (Crooks. 2002; Fischer & Lindenmayer, 2007).

Methodology

For this study, we will analyze 5 variables: (1) land market value of houses (2) average mortgage value (3) income per occupation (4) land use pattern (5) demography.

Land market value for 50 randomly selected single-family detached units for the years 2019-2015, 2010, and 2000 are analyzed to understand the change in property values in the recent past and the past 20 years. Income per month per occupation is observed with respect to average mortgage value to determine the ability to afford a house within our study area Income per occupation per month after taxes is determined to study the ability to afford a house within our study area with respect to the average mortgage value.

Total number of employment and salary per sector is compared to determine the gap in number of employment vs salary earned and housing prices. Sectors with higher income is further analyzed to study the distribution of salary across job roles. Income is compared against mortgage value with and without the high income sectors to better understand the gap in earning ability vs affordability of houses.

In addition, land use in East Austin is documented for 2000, 2010 and 2019 to understand how housing types and its surrounding land use have evolved in the past 20 years.

Results

Land market value of houses

We compared the take-home salary after taxes by occupation to single-family housing prices to determine what percentage of one's salaryis spent towards mortgage every month to afford a single-family house in east Austin from over the past 30 years -2000, 2010, and 2020 (fig. 4). In the past 30 years on an average, high-tech sector employees spent 9.83% of their salary towards mortgage payments whereas service sector employees spent 30.69% of their monthly income towards mortgage which is more than the 28% limit recommended by financial institutions in general. In 2019, high-tech sector employees spent 14.25% whereas service sector employees spent 42.44% of their income towards mortgage to own a house in east Austin.

Additionally, the trendline in figure 4 shows that the percentage of employment in the services sector is approximately 3.4% higher than the high-tech sector.

Land use pattern

The land-use pattern for East Austin over the past 20 years shows a significant change (fig.2). What was once single-family dwelling units are now high-end apartments with walking/biking lanes, hip restaurants, coffee shops, boutique stores, food truck areas and so on. Most of the changes can be seen between East 7th and 4th street – a 30% increase in multifamily apartments and commercial areas from 2000-20.

Discussion and Conclusion

With a contextual understanding of the reality of Austin, designer can and should work with these communities to promote new models of housing that are not complicit with the neoliberal master plan enclaves which socially isolate, promote exclusionary tactics, and do little to promote settlement patterns that will preserve resources for future generations. This paper represents some of our initial work which is based on observation of the shifting context and current trends. It aims to spark a public conversation about pressing issues related to housing in East Austin, Texas. A follow up

study will thoroughly analyze how significant is the impact of high-tech development on housing affordability and what's attracting new professionals and businesses to East Austin. We will be studying the effect of property taxes on housing prices, a detailed breakdown of occupation and respective income. Additionally, affordability of rental properties will be part of our future study.

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