## Undergraduate Thesis Prospectus

# **Developing Sustainable**

# Systems and Infrastructure with Underserved Communities

(Technical research project in Civil Engineering)

# The Struggle over Gentrification in Urban America

(Sociotechnical research project)

by

Glenn Broderick

October 27, 2022

technical project collaborators:

Sarah Beseky Katherine Foley Gabriella Ford Cooper Hamby Timothy Maxwell Terence Moriarty Wyatt Yoder

On my honor as a University student, I have neither given nor received unauthorized aid on this assignment as defined by the Honor Guidelines for Thesis-Related Assignments.

Glenn Broderick

Technical advisor: Jose Gomez. Advisor, Department of Civil Engineering

STS advisor: Peter Norton, Department of Engineering and Society

## Buildings' effect on the community

How does Infrastructure impact communities?

Infrastructure projects that serve community needs well can also make communities more attractive sites for new businesses and residents, an effect which can drive local property values up and thereby make communities too expensive for long-established businesses and residents. Successful community development is therefore best measured not only in terms of provision of sound infrastructure and services, but also in terms of affordability across a broad income range.

### **Developing Sustainable Systems and Infrastructure with Underserved Communities**

How can engineers provide pedestrian footbridges to underserved communities in remote areas? This technical project takes place in the Civil Engineering Department under advisor Jose Gomez in collaboration with Sarah Beseky, Katherine Foley, Gabriella Ford, Cooper Hamby, Timothy Maxwell, Terence Moriarty and Wyatt Yoder. Engineers in Action (EIA) finds communities in need of pedestrian footbridges and connects them with engineering students and professional engineers to design and build the bridges. These bridges provide access to schools, healthcare and agriculture for the communities, and the goal of the project is to improve the opportunities and quality of life for the people who live there. Students work to create preliminary designs, source and raise funds for materials, and form construction schedules for the suspension bridges. Bridge designs are based off of standards of designs that EIA has developed for other bridges, and modified by the students from site to site.

#### The Struggle over Gentrification in Urban America

In the United States, how are social groups competing to resist gentrification or to defend the

practices that cause it?

Gentrification describes "the displacement of the working-class residents of ... neighborhoods by middle-class newcomers" (Richardson 2022). The economic vitality of communities that attract investment, businesses, and new residents typically also makes them too expensive for long-established residents, who may find themselves priced out of their own homes. In the United States, where income inequality correlates strongly with race, the populations displaced by gentrification are often black or brown; the beneficiaries are largely white. Particularly in cities, social groups that resist gentrification compete with others who defend the practices that contribute to gentrification.

Researchers have studied the effects of gentrification. Atkinson (2002) concludes that gentrification causes more harm than good. Other researchers have studied how communities influence local planning decisions and resist gentrification. Slater (2014) faults the assumption that gentrification is the inevitable side effect of community improvement as "false choice urbanism." According to Rucks-Ahidiana (2022), "exposure to gentrification varies depending on a neighborhood's racial composition." Bremmet (2019) considers gentrification's effects on residents, businesses and markets.

Many social groups defend the practices that can contribute to gentrification. In Chicago, Alderman Danny Solis represents the 25th Ward, including the neighborhood of Pilsen. Solis argues that the opponents of gentrification oppose the changes that can bring new opportunities. "When you say that we want to keep a neighborhood the way it was, what do you mean? You want to keep it all working class and take the understanding that our community is not going to evolve, not going to grow? Not reach the American Dream?" (qtd. in Pupovac, 2019). Rising property values mean more tax revenue for the city, driving some politicians to support practices

contributing to gentrification. Some proponents say that new buildings attract people and business, as in the case of James T. Butts jr., the mayor of Inglewood, California. Butts credits the construction of Sofi stadium for revitalizing the once struggling community. The new stadium has been blamed for rising local housing costs despite rent control, but Butts defends it. "The only thing that has changed in Inglewood is everything," he says, "and it's the new Inglewood but with the same people" (Streeter 2022).

Even many new residents of gentrified neighborhoods criticize them for their expense and for sacrificing practicality to style. In San Francisco, the rise of the software industry has attracted many young professionals. Luxury housing has displaced affordable apartments in the Mission District. Though the growing tech sector drives the trend, even many of its employees have been priced out. A Google employee, for example, says "I can't afford to live in the Mission." (Pogash 2015). One common sign of gentrification is the rise in "trendy" businesses such as cafés and restaurants that follow the influx of young new residents. In one such shop, "Ink" in Denver, the owners' opinions on gentrification were clear on a sign stating "Happily Gentrifying the neighborhood since 2014" (Selk 2021). This stunt was followed with immediate community backlash, but it made evident that some newcomers do not see the same issues as longtime residents.

Many residents of gentrifying neighborhoods have organized to resist gentrification.

Vicky Romero was a leader in the anti-gentrification group Pilsen Alliance. She led an effort that forced Alderman Solis to hold public meetings about changes in the neighborhood. Thanks to local efforts of this kind, Pilsen developers must now commit 21 percent of their projects to affordable housing. Rather than work with local authorities, other groups use litigation. To stop an infrastructure project called Memphis 3.0, Dr. Carnita Atwater sued the city of Memphis for

\$10 billion as reparations for decades of gentrification. Carnitas hopes to make the city's failure to serve its community members visible, "to show the violence the city of Memphis is perpetrating against us" (qtd. in Sandifer, 2020).

#### References

- Atkinson, R. (2002). Does gentrification help or harm urban neighborhoods? An assessment of the evidence-base in the context of the new urban agenda. *Neighborhood Change Research Partnership*, 5, 2-26.
- Brummet, Q., & Reed, D. (2019). The Effects of Gentrification on the Well-Being and Opportunity of Original Resident Adults and Children Working Paper (*Federal Reserve Bank of Philadelphia*). https://doi.org/10.21799/frbp.wp.2019.30
- Gillham, O. (2002) In the Limitless City: A Primer on the Urban Sprawl Debate. Washington DC: Island Press.
- Flemming, J (2022, February 9). "A Crisis for Renters": Football Sent Inglewood Home Prices and Rents Skyrocketing. *Los Angeles Times*.
- Poe, R. (2019, July 21). The 901: Bring on the Memphis Gentrification It Might Not Be So Bad After All, Study Shows. *The Commercial Appeal*. https://www.commercialappeal.com/story/news/local/the-901/2019/07/17/maybe gentrification-isnt-so-bad-memphis-after-all-new-study-shows-901/1753531001/
- Pogash, C. (2015, May 22). Gentrification spreads an upheaval in San Francisco's Mission District. *The New York Times*.
- Pupovac, J. (2019, March 22). Pilsen develops new tools to fight gentrification. *WTTW Chicago*. <a href="https://interactive.wttw.com/my-neighborhood/pilsen/gentrification">https://interactive.wttw.com/my-neighborhood/pilsen/gentrification</a>
- Richardson, J. (2022, March 8). Shifting neighborhoods: Gentrification and cultural displacement in American cities " NCRC. https://ncrc.org/gentrification/
- Rucks-Ahidiana, Z. (2022). Theorizing Gentrification as a Process of Racial Capitalism. *City & Community*, 21, 173–192. <a href="https://doi.org/10.1177/15356841211054790">https://doi.org/10.1177/15356841211054790</a>
- Sandifer, J. D. (2020, October 5). Protest targets gentrification, Memphis' 3.0 development plan. MLK50. https://mlk50.com/2019/03/31/protest-targets-gentrification-memphis-3-0-development-plan/
- Selk, A. (2021, October 26). A coffee shop celebrated gentrification and is now profusely penitent. *The Washington Post*
- Slater, T. (2014). Unravelling false choice urbanism. *City*, 18, 517–524. https://doi.org/10.1080/13604813.2014.939472
- Streeter, K., & Gonzalez, C. (2022, February 10). In Inglewood, optimism and anxiety neighbor Super Bowl Stadium. *The New York Times*.