CONTEMPORARY BICYCLE INFRASTRUCTURE PLANNING: SOURCES OF OPPOSITION AND PLANNING STRATEGIES

A Senior Project submitted to the Faculty of the Urban Studies Program, University of Minnesota, in partial fulfillment of the requirements for the Bachelor of Science

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12 May 2021

**INTRODUCTION**

In the past two decades, bicycling has found a resurgence in popularity in the urban United States. While still an unpopular mode of transportation in general (Pucher et al, 2011), the mode has been the centerpiece of headline-grabbing projects such as the renovation of Times Square in New York City. The Times Square project is just one of thousands that have happened in cities all across the country (Pucher et al, 2011). For bike advocates and planners, there is a good reason for that. 14% of youth and 24% of adults in the U.S. are obese (Parker, et al, 2011); cycling regularly can lead to a 20-40% reduction in mortality risk (Noyes, et al, 2014). Not only can it save lives, it is also cheap. A new shared-use path only costs one-tenth that of a new two-lane road (Florida DOT).

One aspect of bike planning has been building infrastructure in low-income and minority communities. On one hand, this seems sensible given low-income people of color are the largest cohort of cyclists in the U.S. (Hoffmann, 2016). And, given high-quality infrastructure like a separated bikeway, nearly half of Black and Hispanic people in one study indicated they would be more willing to try cycling (Lusk et al, 2017).

However, many bike infrastructure projects have met opposition from local residents. In one Chicago neighborhood, local residents and their alderman stopped a planned bike lane project from being built (Lubitow et al, 2015). In Minneapolis, residents near a proposed bikeway project have opposed parts of its plan (Eischens, 2018). Residents in other areas did not stop local projects and now rue their construction (Hoffmann, 2016).

Assuming cycling is generally accepted as a beneficial mode of transportation and that the type of people in these communities are open to cycling, why is there opposition? And, how can bicycle planners and advocates work best to address this sentiment?

**METHODS**

For this paper, I collected previous literature on the subject. This literature fell into categories. Two empirical studies were read and analyzed for their original data analysis. There were also three case studies that covered New York City, New York, Chicago, Illinois, and Portland, Oregon. Literature specific to Minnepaolis was also reviewed including three newspaper articles and two municipal planning documents. Finally, two “other” pieces of literature were analyzed covering environmental justice and bicycle planning. Using these categories is important because of the relative lack of research on this issue. The broader topics covered in those articles provide information that, combined with specific details from other articles, combine to inform this research.

By combining the findings from these categories, I was able to put together a more cohesive picture of the situation. Mainly, information from case studies in other American cities was combined with general trends observed in the literature to inform my analysis of bicycle planning in Minneapolis.

The sources of opposition are listed in decreasing order of influence. Each source’s respective level of influence was determined in two main ways. First, while reviewing relevant literature, it was quite clear that some topics came up more often than others. In that case, those issues were given a higher level of influence. The second way comes from knowing the general atmosphere in the urban planning profession at the moment. While it would be hard to cite individual studies for this as there are too many examples to name, it is clear that two main topics being discussed are gentrification and diversity.

**DISCUSSION & LITERATURE REVIEW**

Given that most analysis for this paper comes from reviewing the relevant literature, these two sections are combined to reduce redundancy.

**Overview**

The overview of this paper covers finding sources of opposition in low-income and minority communities then determining the best planning practices for overcoming those obstacles and better engaging the community.

*Sources of Opposition*

Sources of opposition to new bicycle infrastructure appear to fall into four categories (in descending influence): fear of gentrification, a lack of trust in the planning process, emotions tied to previous destructive projects, and a lack of excitement for cycling in general.

The main source appears to be a fear of gentrification and the resulting displacement of local residents. This connection is undeniable given the way in which new capital is associated with bike infrastructure (Krings and Schusler, 2020). Associations with wealthy neighborhoods in general are also hard to avoid given a history of investment there and research showing more bike infrastructure in wealthier and more educated neighborhoods (Braun et al, 2019).

The next most influential source of opposition is a distrust in planning from local residents. Modern planning processes are mainly top-down and technocratic run by educated, white, wealthier people (Lubitow et al, 2015; Owens, 2015); bike projects are also often included in fast-tracked processes because of their low cost. This can inspire suspicion amongst residents (Lubitow et al, 2015). Additionally, citizens aren’t always included in the planning process. Whether it’s inadequate public engagement plans or an unrepresentative bike advocacy community, the wrong voices may be listened to when planning a bike facility (Clark, 2014 and Braun et al, 2019).

A third source of opposition comes from historical government relations with these communities. A history of large-scale projects segregating and displacing residents (King, 2016) combined with a lack of investment in areas like street maintenance and snow plowing (Lindele, 2016) leads some residents to question the motives of the city now that it appears to pay attention to these neighborhoods (Hoffmann, 2016).

Finally, and least influential to bike infrastructure opposition, is non-interest in bicycling. Three reasons for this are fears of being racially profiled or sexually harassed while biking (Lubitow et al, 2019), the bike lane designs being proposed aren’t a good fit for the communities they serve (Lusk et al, 2017), and a social stigma that paints bicycling as a means of transportation reserved for people too poor to afford to drive (Hoffmann, 2016). Thus, if there is less interest in bicycling, there might be less support for projects aimed at enabling more of it.

*Planning Strategies*

Bicycle planning is context-sensitive and thus it is difficult to find a one-size-fits-all approach that will succeed in every situation. However, based on the analysis in this paper, some possible strategies were identified. First, is the possibility of avoiding gentrification by following the ethos of “just green enough”. Allowing residents to guide projects, doing smaller, more spread out projects, and using projects for other things like urban agriculture has been proposed as a way to “green” a community without leading to gentrification (Wolch et al, 2014). However, other research has found that this strategy has not succeeded in staving off gentrification (Rigolon and Nemeth, 2019).

Second, is using municipal funds to avoid displacement after the construction of a new project. This has been used in the vicinity of Chicago’s “606” bike project to help pre-existing residents (Saunders, 2018). However, this requires sums of public money to be viable.

As for the planning process, finding ways to connect residents to planned engagement meetings and public comment periods is key (Hoffmann, 2016). Often, local residents know better than planners what is needed to improve their community (Cobbs, 2020). In order to get more project support, it can be helpful to frame projects in a way that fosters a personal connection between the infrastructure and local residents (Lubitow et al, 2015). It is also important to not just frame projects a certain way but ensure that they are actually beneficial. Planners can follow the City of Philadelphia in adding a “social impact score” to all projects that takes that into account (Saunders, 2018). Finally, support can be built via fostering a rich bicycling culture in an area outside the traditional project planning process (Lubitow et al, 2015).

**Further Discussion**

In this section I will go through the relevant literature, discuss the research methods of each piece, and discuss how it relates to the sources of opposition or engagement strategies for bicycle infrastructure planning. They are split up into categories that summarize their background: empirical studies, case studies, Minneapolis-specific literature, and other (literature that was difficult to define).

*Empirical Studies*

In 2019, Braun et al. analyzed associations between bike lanes and the demographics in 22 American cities. It uses regression analysis to compare various data points such as miles of bike lane, education level, and socioeconomic status. This paper determines that there is a positive relationship between more bike infrastructure and higher education levels and socioeconomic status. It also finds a negative relationship between bike infrastructure and Hispanic neighborhoods, despite Hispanics’ higher rate of cycling. Additionally, Braun, et al, discusses qualitative findings about the history of bike investment being focused in wealthier neighborhoods, including in Minneapolis. In sum, these findings are relevant because of the support they provide for fears of gentrification due to investment in bike infrastructure.

Second, Braun, et al, also briefly discuss contemporary planning practices. They note that people that bicycle are a diverse population, however, the planners in charge of coordinating bicycle infrastructure are mainly white. This discussion lends credence to the hypothesis that people oppose bike lanes because of an unrepresentative planning practice.

Another empirical study was conducted by Lusk et al. in 2017 in Boston. It took two approaches to collecting data on cyclists in a low-income neighborhood in Boston with a planned future bike project. It mailed out surveys to households in the area asking about respondents’ preferences in bike lane design, separation type for a bike lane, and general cycling habits. The authors also conducted an intercept survey at a local bike facility where respondents were asked similar questions. Overall, results showed a preference for a separated cycleway. Respondents also indicated a preference for paths wide enough to allow them to bike alongside friends and family. Lastly, Black respondents consistently had lower rates of feeling safe on all types of bike facilities. This data shows two things. First, is that low-income and minority communities are open to bicycling on high-quality bike facilities. Second, is that there is a fear of bicycling from minority groups, possible due to policing like helmet laws.

These results are important because it would be rash to assume that successful bike facility designs are equally applicable to all neighborhoods. These findings can be used to inform bike lane design in similar communities moving forward. However, the data quality in this study is not impressive. Only 17% of recipients of the mail survey responded and 60% of that subset said they already owned a bike. Additionally, all respondents in the intercept survey were already bikers. This means that, overall, there was likely a sample bias leaning towards existing cyclists. If opposition to bike infrastructure comes from non-bikers, the data here will likely not help inform methods to persuade them.

An important piece of literature reviewed was the analysis of the “just green enough” strategy by Rigolon and Nemeth (2019). In their empirical analysis of new park developments, they determined that the “just green enough” strategy of spreading out sustainability projects did not lead to neighborhoods avoiding gentrification as hoped.

This is influential because the “just green enough” approach was a preeminent idea put forward to create a compromise between communities’ desires for healthier communities and fear of displacement (Wolch et al, 2014).

*Case Studies*

Stein’s short article from 2011 provided research on opposition to bike lanes in New York City. Stein analyzes the dual opposition to bikes from both low-income residents and middle- or high-income residents. Relevant to my research, the paper discusses the source of opposition stemming from fears of gentrification. This article’s age is of note, being written in 2011, ten years ago. However, since it covers New York City, I find it quite helpful. This is because New York City is the largest city for bikes in America, a city with one of the richest histories of cycling, and one that started its progress on cycling before many others. This means that its “evolution” on bicycling issues is farther along than other cities and can provide a look into the future for cities that have yet to catch up.

Its primary relevance to this paper is its discussion of gentrification fears and bike lanes. First, it discusses two causes of gentrification (consumption and gap theory). It also discusses the use of bike lanes in advertising, whether it's from the city government or real estate developers. Finally, it poses the question of whether bike lanes are a cause of gentrification or merely correlate with neighborhoods that have other attractive traits.

Lubitow et al’s 2016 paper covers the history of bike lanes in Chicago, Illinois on “Paseo Boricua'' in the heart of the city’s Puerto Rican neighborhood. This paper takes a very detailed look at the process that happened in the early-2000s while this bike lane was proposed, opposed, blocked, proposed again, and finally built.

This paper is a great case study due to its in-depth analysis and long-term description of this particular project. It touches on the fear of gentrification. In Chicago, the mayor associated biking with new development, which could be why residents associate biking with gentrification. However, the main source of opposition covered in this case study is inadequate planning processes. The trend of “fast-tracking” bike projects can inspire suspicion in local residents. Beyond that, bike projects are often framed as politically-neutral or even as objectively-good and this assumption can steamroll legitimate opposition. Finally, similar to Braun, et al, Lubitow, et al, notes the whiteness of the planning profession and bicycling community.

Finally, this paper finds planning strategies that can help overcome opposition. The most important is creating a sense of ownership for residents. Another strategy is framing a bike lane as a way to connect residents efficiently and cheaply to jobs. Finally, this paper recommends using non-infrastructure projects (like education) to get residents engaged with cycling in general.

The third case study I read covered Portland and was written by Lubitow et al. in 2019. This paper was based on a series of 45+ minute interviews with women and people of color found along the streets in North Portland. Based on a glut of previous research on infrastructural barriers to cycling, these interviews focused on societal barriers to it. Some factors mentioned by respondents included an association with displacement and white gentrifiers, women being catcalled while cycling, and people of color being yielded to less and perceiving microaggressions towards them by other road users.

This paper is noted for its useful interviews that explicitly identify issues stopping people from cycling. Knowing these is helpful for when bike projects are opposed to a lack of perceived users. On the other hand, there are issues with the paper’s methods. Similar to Lusk et al. it likely has a sample bias stemming from the type of people willing to participate in a lengthy interview. The researchers also noted most respondents had college degrees which is likely unrepresentative of most low-income and minority neighborhoods.

*Minneapolis-specific Literature*

I found three articles from local newspapers regarding bike planning and opposition to bike projects in Minneapolis. In these, reporters conveyed individuals’ reasons for opposing bike projects in North Minneapolis (a low-income minority community). These articles also mentioned some engagement methods that were successful.

One source of opposition, which relates to planning processes, is a lack of appropriate outreach by planning officials. One article mentions that many residents near a proposed project did not know about it (Clark, 2014). On the same project, where parking was going to be reduced, Hmong residents believed city officials were not aware of their living patterns which use more parking than other households (Clark, 2014).

Relating to the opposition because of past destructive projects, one resident interviewed said they were doubtful about a new bike lane because of a history of neglect by the city for things like road maintenance and snow plowing (Lindeke, 2016).

Finally, one proposed engagement strategy is conducting non-traditional public meetings like a pop-up exhibition to show off a project design before constructing it fully (Lindeke, 2016).

Similar to the other articles based on interviews, the helpfulness of these articles may be limited by sample bias. It is possible that the people interviewed for these articles are outliers in their communities and not representative of North Minneapolis’s collective concerns.

*Other*

Krings and Schusler’s 2020 paper goes into detail about the general subject of environmental justice and gentrification. The crux of this paper surrounds how city governments approach marketing sustainability projects. Similar to the case study in Chicago, Krings and Schusler talk about how cities use sustainability as a means of advertising their city to capital, tourism, and skilled labor. These outside forces can then cause gentrification. At that point, Krings and Schusler say, sustainability can be used as an excuse (and portrayed as a “win-win”) to avoid discussions of displacement.

This paper is a result of looking at ten projects, however most of those are in New York City. Since urban planning is a context-sensitive topic, basing a paper on projects from only one city makes it not as applicable as it could have been. While this paper does not cover bicycles specifically, it is useful for its perspective on pitfalls in the current urban planning process. It also proposes ways for communities to obstruct gentrification and residents to have their voices heard in the planning process. For example, it discusses the realm of the third wave environmental justice movement and its focus on self-determination and opposing displacement. Understanding this movement is important to understanding some opponents to some bicycle projects.

Wolch et al (2014) wrote about the strategy of being “just green enough”. This approach can be applied not only to bicycle infrastructure but to all projects aimed at improving a community’s environment. Its assumption is that building large projects creates a place for capital to focus. By spreading out smaller projects, communities can attempt to “hide” their new assets while keeping their benefits. Ideally, these projects don’t just “re-wild” the landscape but restore it in a way that allows for other uses like urban agriculture. Also, this method weighs the input of local residents heavily and supposes that locals may know what their community needs better than professional planners.

**CONCLUSION**

In this paper I have collected and analyzed various reasons why low-income and minority communities may be opposed to bike infrastructure projects. Two major sources of opposition come from a fear of gentrification and a distrust in the planning process. Two other factors that may impact a community’s sentiment are a history of disinvestment and destruction by local government and a lack of interest in bicycling as a means of transportation.

In order to counter this opposition, urban planners need to utilize new strategies for planning and community engagement. These strategies include getting more and giving more value to resident input, creating a sense of local ownership, and adopting nontraditional meeting formats. In general, a friendly atmosphere for cycling is also helpful for avoiding opposition to bike infrastructure. Thus, using non-infrastructure methods to foster bicycle culture in an area can also help the planning process.

With bicycling expanding as a mode of transportation as chosen by users and planners it is crucial that these issues are addressed quickly. Bicycling has numerous benefits that can help one’s health and pocketbook and a city’s infrastructure budget and streetscape. However, if we continue to ignore opposition and local concerns to new bike projects, it is possible the future parallels the construction of highways through cities in the late-1900s. With proper changes in the planning process, the future of cities can be sustainable, affordable, livable, and equitable.

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