

Pressure Points: California Transportation Administrators' Views of Cycling Safety

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1. INTRODUCTION

Transportation is an essential aspect of contemporary life; access to mobility is necessary to participate in social, civic, cultural, educational, and economic opportunities. Despite the many personal and societal benefits of cycling, however, very few Americans regularly bicycle for transportation [1, 2] even as cities all over the world are promoting cycling as a means to improve public health and to create environmental, social, and economic sustainability [3]. As Pucher and Dijkstra argue, a lack of bicycling infrastructure investments in the United States coupled with widely held negative perceptions about bicycling result in dangerous and unpleasant conditions for people who bicycle [4]. Specifically, in comparison to several Scandinavian countries, the United States experiences considerably higher cyclist fatality rates per mile cycled [4]. Although researchers have paid great attention to documenting the collision rates and disparities among communities, there is a dearth of research on what public administrators - uniquely positioned to understand and affect transportation decision-making - are doing to improve cycling safety.

2. METHODOLOGY

While a growing body of research shows the benefits of urban cycling [5] and what projects will encourage cycling [6, 7], very little has been done to examine how such projects come about in the United States. Even less research has been done to ascertain and categorize transportation administrators' views on and opinions of cities' responsibilities to and obligations for cyclist safety. This research project uses qualitative research methods - specifically, semi-structured interviews - to answer the primary research questions 1). What do administrators say they do to promote cyclist safety; 2). What do transportation administrators say they do to encourage cycling; and 3). What do administrators believe prevents them from more fully pursuing cycling-friendly and safe transportation policies?

To answer these questions, 27 interviews were done with transportation administrators from across California. Targeted cities were selected through a convenience sample of California cities actively engaged in providing cycling infrastructure and promoting cyclist safety; interviewees within the governmental apparatus of each city were selected on the basis of possessing requisite knowledge of both their cities' transportation policymaking and implementation processes. Cities represented in this study represent a broad swath of the various types of California communities: 17 interviewee cities are in coastal counties; 11 cities are home to universities; 13 cities are from the northern half of the state and 14

are from the southern half; 13 have populations less than 100,000 while 14 have populations in excess of 100,000; and, finally, 9 cities are built out (in other words, all developable land is occupied by existing structures or infrastructure).

Interviews were recorded, transcribed, and, using MaxQDA qualitative data analysis software, hermeneutically analyzed to identify key themes and trends. Analysis followed a strategy set out by Maxwell that involved an iterative process of contextualizing and categorizing strategies [8]. This process included reading transcripts and other documents completely through to get a sense of the whole, re-reading and coding segments, re-coding and grouping codes into broad clusters of similar topics or nodes, primarily around the research questions while allowing for emergent topics. These clusters were then iteratively re-coded into more specific and simplified nodes, creating “trees” [9].

3. SUMMARY OF FINDINGS

The findings indicate that public administrators face many - sometimes conflicting - pressures to improve the safety of cyclists and suggest that public administrators are affected by both internal and external pressures that shape their approach to bicycle planning and policy. These pressures play an important role in deciding what gets built and for what purpose.

In analyzing the interviews, four primary themes emerged. First, pressure and input from members of the public revolving around real and perceived cycling safety concerns plays a significant role in affecting transportation administrators’ decision-making and policymaking practices. Second, infrastructure modifications to enhance cyclists’ safety frequently occur on a reactive - rather than proactive - basis, in response to high collision rates; administrator beliefs about the importance of prioritizing automobile travel emerge in this theme. Third, less frequently, infrastructure modifications are made to manage and create public perceptions about bike safety. Finally, funding constraints are frequently cited by transportation administrators as hindering them from more fully pursuing a safety-focused agenda for cyclists.

In illustrating the first primary theme, an interviewee relayed an anecdote in which old infrastructure was posing a unique lighting hazard to cyclists: “It was pretty clear to us that when our [street] lights started failing, I got a lot of phone calls [from members of the public]. It was abundantly clear that the next grant I would be writing, would be one that would retrofit out these old decrepit solar lights so that people could ride...especially women [who] ride at night...the least we can do is make sure that the infrastructure is sound.” Conversely, some public feedback regarding cycling infrastructure does not come from cycling advocates and has implications for the safety of cyclists. For example, a transportation administrator in a different city reversed plans to add on-street protected bicycle lanes after significant “pushback” from outspoken members of the public who disapproved of the proposed plan’s removal of on-street parking. This change, resulting in a lack of dedicated bicycle infrastructure, presumably subjected cyclists to unsafe travel conditions.

Second, interviewees suggest that their decision whether to include on-street bicycle facilities depends on available space and resources *after* motor vehicle travel lanes have already been designed. One interviewee explained, “If we’re not building the complete system of a street on some roads, we’re hesitant about putting a bike lane; however, we will put a shoulder on [the road]. Because, if we start occupying the shoulder for a bike lane, it kind of gets awkward, if there’s no place for a car to pull off in an emergency situation.” Such remarks reveal the interviewee’s ontological situatedness in which mobility for car users is prioritized at the expense of mobility and safety for people riding bicycles.

Illustrating the third primary theme, the findings indicate that California transportation administrators are aware of safety perceptions that some members of the public hold which prevents them from commuting

by bicycle, and therefore will make infrastructural changes to ameliorate such concerns. An interviewee acknowledged that “the way [their] city has been designed does put a lot of emphasis on vast auto travel, and so there are a lot of people who are interested in bicycling but concerned about...safety on the streets.” Interviewees explained that “interested but concerned groups” serve as an incentive for them to explore infrastructure changes and modifications to help satisfy the safety perceptions of cyclists, thereby encouraging them to ride.

Finally, several transportation administrators indicated that to improve cyclist safety, they are working to address high collision rates between bicyclists and motorists. The interview responses reveal that administrators are utilizing a dual approach of infrastructure design and educational components to reduce collision rates. One transportation administrator discussed their city’s use of protected green lanes in response to a large number of bicyclist-involved collisions on a particular street; no collisions have occurred on that street since the green lane was installed. Additionally, many interviewees described using educational approaches to improve the safety of cyclists, including widespread educational bicycling campaigns, educational programs in elementary schools, bicycling educational programs at universities, education to alter motorist behavior, and education on bicycling policy. Although interviewees communicated that they feel educational aspects are an important aspect to improving the safety of bicyclists, many cities simultaneously communicated that a lack of funding prevents them from enacting certain bicycling education measures, implying that cyclist safety programs are funded with money that is leftover after other transportation priorities have been met.

This research represents a significant opportunity to understand the pressures transportation administrators face, which can assist public grassroots organizations seeking to affect the policymaking process, provide information and insight to bicycling safety advocates, and clarify the logic and beliefs behind certain administrator decisions. Since the choices transportation policymakers and administrators make have widespread and long-lived implications for the health and wellbeing of the public, understanding and documenting administrator beliefs, actions, constraints, and pressures is a critical component of active transportation research.

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