

Vision Zero's Enforcement Problem

Using community engagement to craft
equitable traffic safety strategies

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Executive Summary

Traffic fatalities are increasing in America, and cities are increasingly turning to a traffic safety framework called **Vision Zero** to combat this problem. In America, Vision Zero plans are generally based on a set of strategies known as the “three Es”: education (of road users), engineering (of streets), and enforcement (of traffic laws). Given the history of systemic racism in American policing, including enforcement in Vision Zero raises serious social justice concerns. This report analyzes the relationship between Vision Zero and racial justice, focusing on how cities conduct targeted stakeholder engagement and how this engagement affects the ways in which concerns about racial profiling are incorporated into Vision Zero plans.

This report investigates the use of community engagement in Vision Zero planning through qualitative case studies of four cities: **Portland, Oregon; Los Angeles, California; San Francisco, California; and Chicago, Illinois**. Through the interviews, we found that:

- 1 resource constraints limit the degree to which both planners and activists can focus on Vision Zero,
- 2 having multiple stakeholders in a city focused on racial justice is necessary for a nuanced and multifaceted conversation,
- 3 the failure of agencies within a city to coordinate can hamper plan implementation,
- 4 city staff often do not incorporate stakeholders fully enough into the planning process, and
- 5 the use of traffic cameras has the potential to reduce racial bias, but remains controversial.



These findings suggest **four steps** cities can take to improve the Vision Zero planning process:

Step 1

Prioritize proactive outreach to a wide array of community stakeholders

Step 2

Center Vision Zero planning and implementation within the mayor's office

Step 3

Provide stable funding to allow for long-range planning and stakeholder compensation

Step 4

If automated enforcement is used, pair it with fine structures that are adjusted for income so as not to disproportionately impact low-income communities

While additional research is into racial justice and the Vision Zero planning process is needed, these recommendations are important next steps towards creating equitable Vision Zero programs.

Introduction



Americans are dying in car crashes in record numbers. More than 40,000 people were killed on the country's roads in 2016, and that number is rising.¹ Faced with pressure to act, city governments around the country are turning to Vision Zero. Vision Zero is a traffic safety framework centered on the belief that it is possible to eliminate traffic deaths and serious injuries.² American cities use enforcement of traffic laws as one strategy to increase street safety, prompting criticism from people and organizations concerned with racial profiling and police violence.³

Vision Zero originated in Sweden in 1997.⁴ The country was approaching a road fatality rate of 7 deaths per 100,000 people and wanted to make a change. The idea was to take a systemic, design-based approach to traffic safety. Planners who developed the idea of Vision Zero in Sweden recognized that humans make mistakes and worked to design safer roads that could prevent those mistakes from killing people.

Sweden's Vision Zero program succeeded in making roads safer. By the mid-2000s the country's traffic fatality rate was less than half of what it had been when the program was introduced in the late 1990s, even though many more cars were on the road.⁵ This success made it a model for traffic safety outside of Sweden. The United States began to adopt the Vision Zero framework in 2014, when cities such as San Francisco, New York, and Los Angeles introduced or previewed plans. By 2018, more than 30 cities across the country had committed to Vision Zero and released or begun developing implementation plans.⁶

American cities have not adopted Vision Zero exactly as it was developed in Sweden. Instead, the concept of Vision Zero has been combined with more traditional American ideas about traffic safety. For the past century, traffic safety plans have been constructed around what are known as the "three Es": education (of road users), enforcement (of traffic laws), and engineering (of streets).⁷ The first Vision Zero plans in America were structured around the three Es, while more recent efforts have expanded the list to include additional Es such as equity, evaluation, and encouragement.⁸ These plans share the same stated commitment to eliminating road deaths that characterized Vision Zero in Sweden, but have placed a greater emphasis on non-engineering solutions that include enforcement.

1 NSC Motor Vehicle Fatality Estimates. (2017). *National Safety Council*. Retrieved from <http://www.nsc.org/NewsDocuments/2017/12-month-estimates.pdf>

2 *Vision Zero Network*. (n.d.) *What is Vision Zero?* Retrieved from <https://visionzeronetwork.org/about/what-is-vision-zero/>

3 Fox, J. & Shahum, L. (2017, May). *Vision Zero Equity Strategies for Practitioners*. Vision Zero Network. Retrieved from http://visionzeronetwork.org/wp-content/uploads/2017/05/VisionZero_Equity.pdf

4 Center for Active Design. (n.d.) *Vision Zero: Learning from Sweden's Successes*. Retrieved from <https://centerforactivedesign.org/visionzero>

5 Ibid.

6 *Vision Zero Cities Map*. *Vision Zero Network*. Retrieved from <https://visionzeronetwork.org/resources/vision-zero-cities/>

7 Porter, B. E. (2011). *Handbook of Traffic Psychology*. Academic Press.

8 Aboelata, M., Yanez, E., & Kharrazi, R. (2017, January). *Vision Zero: A Health Equity Road Map for Getting to Zero in Every Community*. *Prevention Institute*. Retrieved from <https://www.preventioninstitute.org/publications/vision-zero-health-equity-road-map-getting-zero-every-community>



PORTLAND, OR



LOS ANGELES, CA

Including enforcement as a major strategy has opened up Vision Zero plans in the United States to criticism regarding the impact of policing on communities of color.⁹ High-profile incidents like the 2016 killing of Philando Castile, who was shot to death by a police officer after being pulled over for driving with a broken brake light, have brought the risks posed by traffic stops into the national consciousness.^{10,11} Researchers find that people of color are more likely than white people to be stopped by the police for traffic violations and are more likely to be searched after being stopped.¹²

Along with posing the problems identified above, Vision Zero plans are complicated; they involve a variety of public and private stakeholders and use a variety of tactics. This report focuses specifically on the ways in which cities conduct targeted stakeholder engagement when crafting Vision Zero plans and seeks to investigate the relationship between the planning process and the ways in which racial equity concerns were incorporated into the plans. All case study cities convened task forces to guide the planning process, and some of these task forces included community members. In other cities, independent Vision Zero coalitions served as liaisons between the local government and the activist community.

9 Fox, J. & Shahum, L. (2017, May). Vision Zero Equity Strategies for Practitioners. *Vision Zero Network*. Retrieved from http://visionzeronetwork.org/wp-content/uploads/2017/05/VisionZero_Equity.pdf

10 Warnke, M. B. (2017, June 19). Sandra Bland, Philando Castile and now Charleena Lyles. Scream their names for all to hear. *Los Angeles Times*. Retrieved from <http://www.latimes.com/opinion/opinion-la/la-ol-castille-charleena-lyles-police-shooting-20170619-story.html>

11 Pfeifer, P. & Peck, C. (2016, July 7). Aftermath of fatal Falcon Heights officer-involved shooting captured on video. *Star Tribune*. Retrieved from <http://www.startribune.com/aftermath-of-officer-involved-shooting-captured-on-phone-video/385789251/#1>.

12 Novak, K. J. (2004). Disparity and Racial Profiling in Traffic Enforcement. *Police Quarterly*, 7(1), 65-96. Retrieved from <http://journals.sagepub.com/doi/pdf/10.1177/1098611102250359>; Moon, B., & Corley, C. J. (2007). Driving across campus: Assessing the impact of drivers race and gender on police traffic enforcement actions. *Journal of Criminal Justice*, 35(1), 29-37. Retrieved from <http://www.sciencedirect.com/science/article/pii/S0047235206001413>

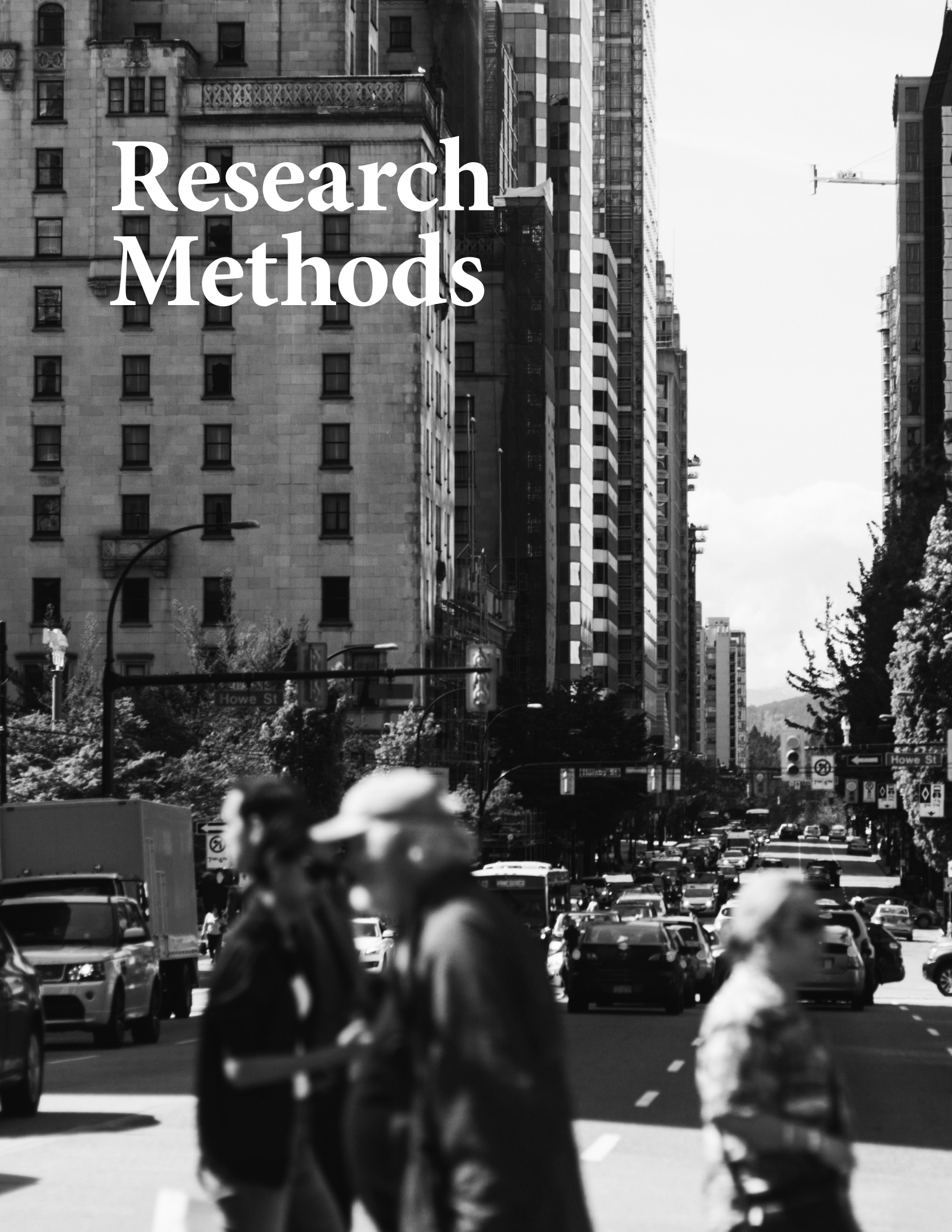


To tackle the issue of community engagement and racialized traffic policing this report. It begins with case studies of the Vision Zero planning process in four cities: **Portland, Oregon; Los Angeles, California; San Francisco, California;** and **Chicago, Illinois**. Each of these cities used task force-style stakeholder engagement and was home to planners and activists who spoke publicly about racial equity. These case studies describe when the cities adopted Vision Zero, how they used stakeholder engagement to create an action plan, and how each plan addresses issues related to racial equity.



Analyzing the case studies suggests five issues with the Vision Zero planning process: 1) resource constraints limit both planners and community members, 2) having multiple stakeholders focused on racial justice is necessary to guide the conversation, 3) lack of inter-agency coordination can hamper plan implementation, 4) stakeholders often lack defined roles in the planning process, and 5) automated enforcement has potential benefits but remains controversial. After addressing these findings, the report makes recommendations to address the issues in an effort to create a guide that can help planners create more racially just Vision Zero plans.

Research Methods



To investigate the political relationships that set the course of the Vision Zero planning process, this report is based on exploratory, qualitative research centered upon interviews with people involved in creating Vision Zero plans.

This research focuses on four cities: Portland, Oregon; Los Angeles, California; San Francisco, California; and Chicago, Illinois. These cities all have published Vision Zero plans and are home to advocates and/or planners who have spoken out about the importance of racial equity in Vision Zero. These cities developed their plans at different times and with different methods, allowing for the exploration of a range of scenarios.

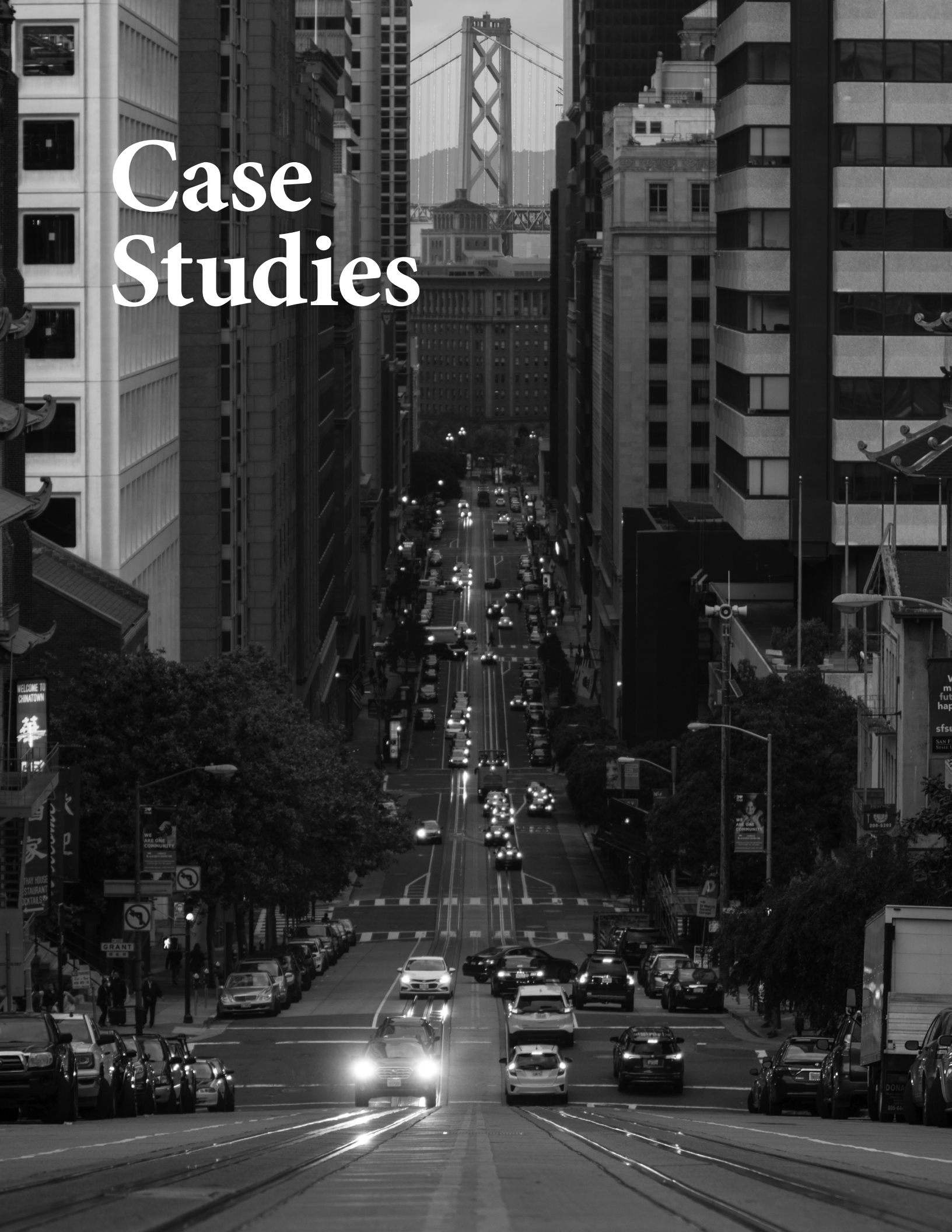
To create a balanced picture of how the planning process evolved, this project is based on 11 interviews with government officials and activists - at least one of each in all four cities. Appendix A lists the interviewees. Interview topics included the general history of Vision Zero in each city, the relationship between government and civilian stakeholders, how racial equity was discussed during the planning process, and what aspects of engagement did and did not work.

The goal of this project was to identify common challenges and successes across the experiences in various cities. Interviewees identified many issues related to the development of racially sensitive Vision Zero plans. To frame the research, the findings are preceded by case studies of each city. Each case study describes when the city adopted Vision Zero, how it structured stakeholder engagement, and when each city's Vision Zero plan was published. The case studies also include analysis of each Vision Zero plan, focusing on how the plan addressed equity, what law enforcement strategies it recommended, and whether or not it referenced the potential for traffic enforcement to result in racial profiling and contribute to disproportionate negative outcomes for communities of color.

This research has clear limitations. Vision Zero is a new concept in urban planning, particularly in the United States; the first U.S. plans were only adopted in 2014. It is hard to study emerging planning issues because the profession's understanding of these issues is still evolving. The topic is also politically sensitive, so subjects may not have always been completely open during interviews. However, critical analysis of Vision Zero planning is important enough that it has been worth pushing through these barriers.

These four case study cities do not tell the entire story of Vision Zero, traffic enforcement, and racial equity. This research is meant to be a starting point that draws preliminary conclusions about Vision Zero planning. Future researchers should build on this work by examining additional cities, including cities where racial justice was not part of the conversation. This could both add to the knowledge about how racial justice advocates shape the Vision Zero discussion and document what happens when no planners or activists champion racial equity.

Case Studies



Portland

Portland began its path toward Vision Zero in 2014, when the Portland Bureau of Transportation (PBOT) hired the consulting firm Nelson\Nygaard to develop a two-year work plan for the agency.¹³ Titled “Portland Progress,” this plan was released in February 2015 and included Vision Zero as one of five themes on which PBOT should focus.¹⁴ In response to the report, in June 2015 the Portland City Council voted 4-0 to formally endorse Vision Zero and accept state grants that PBOT could use to draft an action plan.¹⁵

To help guide the development of the action plan, PBOT convened a 26-member Vision Zero Task Force.¹⁶ Various government agencies served on the Task Force, such as the Portland Police Bureau, Portland Fire and Rescue, the Multnomah County Circuit Court, and TriMet.¹⁷ PBOT also invited civilian groups to join in the effort. PBOT first reached out to traditional road safety organizations like Oregon Walks and Oregon and SW Washington Families for Safe Streets. The agency recognized that Vision Zero affects residents not already organized around street safety and reached out to a broader group of stakeholders as well, including community organizations, like the Asian Pacific American Network of Oregon, that represent Portland neighborhoods with dangerous streets. Notably, the original Task Force did not include any African-American members. PBOT began to realize that this was an issue, particularly as the controversy surrounding race and law enforcement in Vision Zero emerged, so they recruited the Black

Parent Initiative and a professor from Portland State University so as to include Black voices. As of 2018, the Task Force includes two other Black members.¹⁸

The task force met every two months in its first year. PBOT had originally intended to hold five meetings. Agency staff came to the fourth meeting with a plan that they thought was almost complete. However, members of the task force still had concerns about the role of law enforcement in Vision Zero. Seeing that there were more issues to discuss, PBOT added a sixth meeting to the schedule. The additional conversation gave members of the Task Force time to emphasize the importance of not increasing police activity.¹⁹ After a year of engagement and project development, the Portland City Council adopted the Vision Zero Action Plan in November 2016.²⁰

Portland’s Vision Zero Action Plan reflects the Task Force’s focus on racial equity. “Equitable” is one of the guiding principles of the report, with a subheading stating that “[the Vision Zero plan] will not result in racial profiling.”²¹ PBOT was concerned about the financial impact of traffic fines on low-income communities of color,²² and the plan goes on to explain that “the enforcement actions in this plan are limited in order to reduce the possibility of racial profiling and disparate economic impacts.”²³

13 Schmidt, B. (2014, November 14). Portland Bureau of Transportation paying nearly \$150,000 for 'vision' of its 'transportation future'. *The Oregonian*. Retrieved from http://www.oregonlive.com/portland/index.ssf/2014/11/portland_bureau_of_transportat_14.html

14 Schmidt, B. (2015, February 10). A Portland with no traffic deaths and good streets? Plan sets slow path forward. *The Oregonian*. Retrieved from http://www.oregonlive.com/portland/index.ssf/2015/02/a_portland_with_no_traffic_dea.html

15 Schmidt, B. (2015, June 17). Portland adopts 'Vision Zero' goal of no traffic deaths. *The Oregonian*. Retrieved from http://www.oregonlive.com/portland/index.ssf/2015/06/portland_adopts_goal_of_no_tra.html

16 Clay Veka, personal interview. (2018, February 1).

17 Vision Zero Task Force members. *Portland Bureau of Transportation*. Retrieved from <https://www.portlandoregon.gov/transportation/article/628402>

18 Clay Veka, personal interview. (2018, February 1).

19 Ibid.

20 Redden, J. (2018, February 28). PBOT: Traffic deaths up, despite Vision Zero efforts. *The Portland Tribune*. Retrieved from <https://portlandtribune.com/pt/9-news/388157-278676-pbot-traffic-deaths-up-despite-vision-zero-efforts>

21 Vision Zero Action Plan: Saving Lives With Safe Streets. (2016, December). *The City of Portland*. P. 1. Retrieved from <https://www.portlandoregon.gov/transportation/71730>.

22 Clay Veka, personal interview. (2018, February 1).

23 Ibid. P. 5.

The Action Plan minimizes, but does not eliminate, the role of law enforcement. It focuses on “speed, impairment, and dangerous behaviors” rather than “less serious infractions,” but does not go into specifics about what these statements mean.²⁴ The plan highlights the use of cameras to enforce speed limits, which reduces the risk of racial profiling.²⁵ One section of the plan addresses accountability and states that PBOT and the Portland Police Bureau Traffic Division will review equity data on a monthly basis.²⁶

The Portland Bureau of Transportation originally intended for the Vision Zero Task Force to only meet during the period leading up to the publication of the Vision Zero Action Plan. However, the members of the task force wanted to be involved in the implementation of the plan as well. In response, PBOT extended the organization’s term for two more years and moved to a quarterly meeting schedule.²⁷ It remains to be seen what affect the continued existence of the Task Force has on the way Vision Zero is implemented in Portland.

24 Vision Zero Action Plan: Saving Lives With Safe Streets. (2016, December). *The City of Portland*. P. 25 Retrieved from <https://www.portlandoregon.gov/transportation/71730>.

25 Ibid. P. 24; Vision Zero Equity Strategies for Practitioners. (2017, May). *Vision Zero Network*. Retrieved from http://visionzeronetwork.org/wp-content/uploads/2017/05/VisionZero_Equity.pdf

26 Ibid. P. 26

27 Clay Veka, personal interview. (2018, March 20).

28 Executive Directive No. 10. (2015, August 24). *City of Los Angeles*. Retrieved from https://www.lamayor.org/sites/g/files/wph446/f/page/file/Mayor_Garcetti_File_Executive_Directive_10_Vision_Zero.pdf?1440454405

29 Anonymous Los Angeles Department of Transportation employee, personal interview. (2018, January 27).

30 Ibid.

Los Angeles

Los Angeles Mayor Eric Garcetti signed Executive Directive No. 10 in August 2015, officially launching the city's Vision Zero initiative. The directive set goals of a 20% reduction in traffic fatalities by 2017 and the elimination of traffic fatalities by 2025. The directive also outlined the immediate and long-term actions the city would take in order to achieve Vision Zero.²⁸

Executive Directive No. 10 ordered the formation of the Vision Zero Steering Committee and the Vision Zero Task Force to guide the initiative. The agencies most closely involved with Vision Zero, such as the Los Angeles Department of Transportation (LADOT), Los Angeles Police Department (LAPD), and the Bureau of Engineering (BOE), sit on the Steering Committee. The Task Force included government stakeholders who were less directly involved in Vision Zero but still affected by the plan, such as the Department of Aging and the Department of Neighborhood Empowerment.²⁹

Unlike in Portland, where the city's Vision Zero Task Force is composed of a mix of government agencies and community stakeholders, the Los Angeles Task Force is almost entirely made up of government agencies. Community organizations are represented on the Task Force by the Vision Zero Alliance, a coalition of advocacy groups interested in Vision Zero.³⁰ Formed in the summer of 2015, the Alliance advises the city on Vision Zero issues but is independently run by its member organizations.

Los Angeles published its Vision Zero Action Plan in January 2017. While the plan includes enforcement as a strategy, the executive summary is explicit in its concern about equitable enforcement:

“Our work aims to ensure appropriate focus on equity and engagement. As a starting point, we commit to unbiased policing in all contacts with any person(s) during traffic safety enforcement activities, regardless of race, color, ethnicity, national origin, gender, gender identity, gender expression, sexual orientation, or disability.”³¹

³¹ Vision Zero Los Angeles | 2015–2025 Action Plan. (2017, January). City of Los Angeles. P. 10. Retrieved from <https://view.joomag.com/vision-zero-action-plan-2017/0893807001485436685?short>.

³² Ibid. P. 29.

³³ Ibid. P. 35.

The Action Plan includes a section devoted to equity, which discusses both the uneven distribution of traffic fatalities and the potential for racially biased policing. This section does not offer specifics beyond a promise to “adhere to the LAPD’s commitment to unbiased policing in the implementation of Vision Zero-enforcement efforts.”³² Later, when discussing implementation, the plan states that “the City recognizes that an enforcement effort grounded in data will encourage equitable outcomes”³³ and refers to data transparency as “a great way to hold Vision Zero accountable to its commitment to equity.”³⁴ The plan devotes relatively little space to discussing enforcement strategies, but does state that enforcement will focus on “major moving violations” on streets that LADOT identified to be the most dangerous in the city.³⁵

Since the publication of the Action Plan, the Vision Zero Alliance has continued to push the city on racial equity. The coalition released a policy platform in August 2017 calling for “a no racial profiling pledge that clarifies how the Los Angeles Police Department will implement education and enforcement to avoid harassment and violent interactions between officers and community residents.”³⁶ In November 2017 the Alliance elaborated on its equity concerns in a letter to the Los Angeles City Council Transportation Committee. This letter reiterated the Alliance’s desire for no racial profiling pledge and outlined other steps the city could take to make its Vision Zero initiative more equitable.³⁷

³⁴ Ibid. P. 10.

³⁵ Ibid. P. 38.

³⁶ *Vision Zero Alliance*. (2017, August). Policy Platform. P. 2. Retrieved from https://d3n8a8pro7vnm.cloudfront.net/la0/pages/18/attachments/original/1503553156/LA0_policy_platform_FINAL.pdf?1503553156

³⁷ RE: CF # 15-0546-S3 - Vision Zero Action Plan / Citation Issued Data / No Profiling Pledge. (2017, November 6). *Vision Zero Alliance*. Retrieved from https://d3n8a8pro7vnm.cloudfront.net/la0/pages/18/attachments/original/1512950672/LA0Letter_CF-15-0546-S3.pdf?1512950672

San Francisco

San Francisco adopted Vision Zero in February 2014 with the aim of eliminating traffic fatalities by 2024.³⁸ To spearhead the effort the city created its own Vision Zero Task Force. Led by the San Francisco Municipal Transportation Agency (SFMTA) and the San Francisco Department of Public Health (SFPDH), the Task Force is composed of government agencies such as the San Francisco Police Department, Planning Department, and Department of the Environment and held quarterly meetings open to the public.³⁹ SFPDH emerged as a champion for equity concerns, recognizing the issue of racially biased enforcement as falling within the department's mission of protecting vulnerable populations.⁴⁰ The department studied the issue and reported back to the Task Force in September 2017 with a presentation titled "Advancing Equity through Vision Zero SF."⁴¹

Like Los Angeles's Vision Zero Alliance, San Francisco's Vision Zero Coalition is a partnership comprising more than 30 community-based organizations that have a stake in street safety efforts. The group is led by the transportation advocacy groups Walk San Francisco and the San Francisco Bike Coalition. These organizations are better funded than some of the other members, and therefore have the resources necessary to organize the effort. The Vision Zero Coalition is largely concerned with making sure the city adopts robust, attainable safety goals, but the Coalition also has advocated for the city to publish data on the race of drivers stopped by police. The Coalition does not have a formal seat on the Vision Zero Task Force, but its members attend the Task Force's meetings.⁴²

San Francisco published its first Vision Zero Two-Year Action Strategy in February 2015. Enforcement was a large part of the strategy; one of the core principles was that "safe human behaviors, education about and enforcement of safety rules, and vehicle technologies are essential contributors to a safe system."⁴³ One of the 11 action items in the enforcement section of the strategy calls for quarterly reports to the San Francisco Police Commission regarding the status of Vision Zero. The strategy suggests the inclusion of several statistics in these reports, but statistics related to racial equity, such as the race or ethnicity of drivers who are stopped, are not listed.⁴⁴ In fact, the only times the word "equity" appears in the Action Strategy are in a "social equity" section addressing the issue of high-injury streets disproportionately running through low-income communities and communities of color.⁴⁵

In May 2017, San Francisco followed up with a second Two-Year Action Strategy. Enforcement still is included in this plan, but its role is noticeably diminished. The 2015-2016 Action Plan uses the term "enforcement" 23 times, while the 2017-2018 plan uses the term only 9 times. Three of these uses refer to automated enforcement (as opposed to two in the earlier strategy), while one reference calls for SFMTA to "identify diversion programs that allow for non-financial consequences of enforcement efforts such as speeding." The plan still only uses the word "equity" to refer to the uneven distribution of crashes.⁴⁶ However, it indirectly refers to racial equity by calling on the Police Department, SFMTA, and Controller's Office to "establish baseline percentage [sic] of citations/warnings issued for traffic violations by race/ethnicity for ongoing monitoring."⁴⁷ Additionally, the 2017-2018 Action Strategy highlights the need for proactive engagement in underserved communities.⁴⁸

38 Pedestrian safety group demands action after 2 more pedestrians die. (2017, September 22). KTVU. Retrieved from <http://www.ktvu.com/news/pedestrian-safety-group-demands-action-after-2-more-pedestrians-die>

39 Vision Zero San Francisco Two-Year Action Strategy. (2015, February). *Vision Zero SF*, P. 21. Retrieved from <https://view.joomag.com/vision-zero-san-francisco/0685197001423594455?short>

40 Ana Validzic, personal interview. (2018, March 8).

41 Advancing Equity Through Vision Zero SF. (2017, September). *San Francisco Vision Zero Task Force*. Retrieved from <http://www.sfcta.org/sites/default/files/content/Executive/Meetings/visionzero/2017/10-Oct/Equity%20and%20Vision%20Zero%20SF%202017%2009%2028.pdf>

42 Cathy DeLuca, personal interview. (2018, April 3).

43 Vision Zero SF. (2015, February). *Vision Zero San Francisco Two-Year Action Strategy*. P. 5. Retrieved from <https://view.joomag.com/vision-zero-san-francisco/0685197001423594455?short>

44 Ibid. P. 14.

45 Ibid. P. 9.

46 Vision Zero SF. (2015, February). *Vision Zero San Francisco Two-Year Action Strategy 2017-2018*. P. 8. Retrieved from <http://visionzerosf.org/about/two-year-action-strategy/>

47 Ibid. P. 12.

48 Ibid. P. 8.

Chicago

By the standards of American cities, Chicago was ahead of the curve in adopting the goals of Vision Zero. The Chicago Department of Transportation (CDOT) released an action plan called Chicago Forward in 2012. This plan did not mention Vision Zero by name but did set as one of its missions the elimination of traffic fatalities in 10 years, a goal to which no American city had previously committed.⁴⁹

Chicago Forward included traffic safety as a priority, but the plan addressed all aspects of CDOT's operations. When Vision Zero rose to prominence in the U.S., the agency saw the opportunity to refocus its traffic safety efforts.⁵⁰ Chicago launched a dedicated Vision Zero program in September 2016. Like other cities, Chicago set a 10-year timeframe for eliminating traffic fatalities.⁵¹

Following the announcement of its Vision Zero program, in June 2017 Chicago released its Vision Zero Action Plan 2017-2019. This plan differed somewhat from plans in other cities. Rather than enumerate a full set of strategies for implementing Vision Zero, CDOT created a plan that broadly described the agency's efforts and laid the groundwork for the creation of specific plans for high-crash parts of the city.⁵² The Mayor's Office wanted to release a Vision Zero plan a year after announcing the program. A year was not enough time for CDOT to perform extensive community engagement, so the agency instead made plans for future engagement.⁵³

The Vision Zero Action Plan's executive summary references enforcement by establishing a citywide policy to "police traffic laws fairly, focusing on education and the dangerous driving behaviors that cause most severe crashes."⁵⁴ While the Action Plan proposes enforcement actions, it specifies that increased citations are not an indicator of success.⁵⁵ The plan also commits to prioritizing education over fines and to working with Cook County Courts to minimize excessive burdens that fines put on low-income individuals.⁵⁶ The plan identifies speed as a major factor in fatal crashes, but proposes working with communities to determine the most appropriate ways to prevent speeding.⁵⁷ In an apparent sign that the plan de-prioritizes enforcement, a section at the end of the report outlining roles for each agency states that the role of the Chicago Police Department is to "educate Chicagoans on safe driving and traffic laws to prevent dangerous behaviors that lead to death and serious injury from traffic crashes" [emphasis added].⁵⁸

Releasing the Action Plan before conducting extensive community engagement left CDOT vulnerable to criticism. Slow Roll Chicago, an organization focused on the intersection of bicycling and social justice, lobbied the city to remove police enforcement from the Vision Zero program. Slow Roll members met with the city to discuss their concerns. The city agreed to provide Slow Roll with citation data to analyze for evidence of racial bias, but stood firm on the role of enforcement in Vision Zero.⁵⁹

49 Schmitt, A. (2012, May 14). Chicago Aims for Zero Traffic Deaths by 2022. *Streetsblog USA*. Retrieved from <https://usa.streetsblog.org/2012/05/14/chicago-aims-for-zero-traffic-deaths-by-2022/>

50 Sean Wiedel, personal interview. (2018, May 3).

51 Claffey, M. & Hofer, S. (2016, September 6). Mayor Emanuel Launches Vision Zero Chicago Initiative To Eliminate Traffic Fatalities And Serious Injuries Across The City. *City of Chicago*. Retrieved from https://www.cityofchicago.org/city/en/depts/cdot/provdrs/traffic_signals_andstreetlights/news/2016/september/mayor-emanuel-launches-vision-zero-chicago-initiative-to-eliminate.html

52 Sean Wiedel, personal interview. (2018, May 3).

53 Rosanne Ferruggia Lubeck, personal interview. (2018, January 25).

54 Vision Zero Chicago Action Plan 2017-2019. (2017, June). *City of Chicago*. P. 7.

55 Ibid, P. 21.

56 Ibid, P. 44.

57 Ibid, P. 48.

58 Ibid, P. 77

59 Reed, O. O. (2017, September 23). Update from our Vision Zero Chicago Advocacy Team. *Slow Roll Chicago*. Retrieved from <http://slowrollchicago.org/blog/update-from-our-vision-zero-chicago-advocacy-team/2017/9/23>

According to CDOT Assistant Commissioner Sean Wiedel, the Action Plan is only the beginning of the Vision Zero planning effort in Chicago. The department is working on specific plans for five neighborhoods in the city, with outreach methods tailored to each. On the West Side, CDOT conducted large-scale community engagement, talking to 5,000 residents. Downtown, where there are more organizations already working on traffic safety, CDOT is organizing a Downtown Task Force to guide the process. To form the Task Force, CDOT has relied on its contacts in the area and the knowledge of the city's elected aldermen. The Task Force will meet four to six times in the summer of 2018 and CDOT aims to release a Downtown specific plan by the end of the year.⁶⁰

60 Sean Wiedel, personal interview. (2018, May 3).

Findings



The Vision Zero planning process differs in every city, but interviews suggest a few recurring, fundamental issues. In the end, five findings stand out as being especially important across the case study cities. These are of course not the only points to keep in mind when developing a Vision Zero plan, but their prevalence in the case study interviews makes me believe that they are the most important.

FINDING #1

Resource constraints limit both planners and community members

In investigating the Vision Zero planning process, lack of capacity emerged as a theme among both community members and government officials. Interviewees either used the exact phrase or described similar concepts in talking about their experiences. Officials and activists explained that they were restricted in the resources—money, time, and staff—that they could devote to Vision Zero.

Planners must recognize the burden that participating in the Vision Zero planning process puts on activists. Attending task force meetings and spending other time working on Vision Zero is a large commitment, and the case study cities do not compensate activists for their participation. Several organizers mentioned that they could not devote as much time to Vision Zero as they would have liked. In Los Angeles, the organization T.R.U.S.T. South LA joined the city's Vision Zero Alliance early in the process to push the group to focus on racial justice. T.R.U.S.T. South LA is a community land trust with a wide variety of programs. Transportation safety and racialized policing are important to T.R.U.S.T. South LA, but are just two of the issues on which the organization works. Faced with too little capacity and too many projects, the organization decided to temporarily end its participation in Alliance meetings.⁶¹

Other organizations pushing for racial justice also have competing priorities. In Portland, the Asian Pacific American Network of Oregon (APANO) is involved with the city's Vision Zero Task Force. Associate Director Duncan Hwang explained that traffic safety was traditionally a major issue in the communities APANO serves, but after the 2016 elections concerns over immigrant rights became a stronger focus. As a result, APANO began to dedicate less time to Vision Zero than it had previously.⁶²

The timing of task force meetings places an additional burden on activists. Portland, Los Angeles, and San Francisco all hold task force meetings during weekday business hours. Scheduling meetings during traditional work hours limits participation to professional, full-time activists and citizens with flexible work schedules (or no work at all). For example, members of San Francisco's Vision Zero Coalition routinely attend Task Force meetings, but the people who can attend are disproportionately white and retired compared to the membership of the Coalition as a whole.⁶³

Capacity issues also exist within government too. Like community organizations, city planners are limited in the resources they can devote to any one issue. In Los Angeles, planners had to keep up with many other transportation projects while developing the city's Vision Zero plan. One Los Angeles Department of Transportation (LADOT) employee, who prefers to remain unnamed, expressed a desire to have more frequent meetings with members of the Vision Zero Alliance.⁶⁴ However, competing professional responsibilities made this impossible. San Francisco Department of Public Health project coordinator Ana Validzic expressed similar concerns.

61 Malcolm Harris, personal interview. (2018, January 19).

62 Duncan Hwang, personal interview. (2018, March 7).

63 Cathy DeLuca, personal interview. (2018, April 3).

64 Anonymous Los Angeles Department of Transportation employee, personal interview. (2018, January 27).

“We have a very diverse city. We could easily have a whole team from each culture and in each language going out to bring the word out on Vision Zero,” she said. “I have a staff of three.”

In addition to staffing constraints, some cities developing Vision Zero plans had to deal with hurried timelines. For example, in Chicago the Mayor’s Office was intent on creating a Vision Zero plan within the span of a year, a timeframe used in other case study cities as well. Former Chicago Department of Transportation (CDOT) planner Rosanne Ferruggia Lubeck⁶⁵ was frank about the impact of this tight timeline on the process:

“A year is not enough time to create this plan and do significant community outreach. What we did is we tried to establish and set up what an outreach process would look like in these communities so that we could tailor the responses we’re looking at for those communities but still get the overarching document about the plan out in a year.”⁶⁶

Vision Zero is a complicated effort, and conducting robust community engagement makes it even more time-consuming. Even when planners and community members have ideas about how to improve community engagement, limited resources can constrain the process.

FINDING #2

Having multiple stakeholders focused on racial justice is necessary to guide the conversation

Stakeholders made it clear that one of the most important parts of the engagement process is making sure that planners bring enough voices to the table. Planners and activists in all four cities raised issues related to what can happen when the responsibility of championing racial equity falls on just a handful of people or groups. This is especially true given that community stakeholders come to the table with different perspectives on the strategies they would like to see included in a Vision Zero plan. Three of the case study cities had clear conflict between “traditional” transportation activists and activists focused on social justice. In Portland, some members of the city’s Vision Zero Task Force entered the discussion with a belief that traffic enforcement was a necessary part of Vision Zero. In Chicago, the Vision Zero plan prompted a column published in the *Chicago Reader* questioning whether a plan without an enforcement component would be forceful enough.⁶⁷

This mainstream perspective made it difficult for other community-based stakeholders to steer conversations towards racial equity. In Portland, there was a risk that voices of color would be drowned out by more traditional activists. It was not until after the first meeting of the Vision Zero Task Force that the city realized that it needed to broaden the group’s membership. The Task Force ended up with about ten members whose work had either a direct or indirect social justice focus. Portland Bureau of Transportation project manager Clay Veka identified the inclusion of multiple organizations with a focus on racial equity as a major reason why the city’s Vision Zero plan did not call for increased enforcement:

65 Rosanne Ferruggia Lubeck worked at CDOT when the interview was conducted but left the agency before this report was published.

66 Rosanne Ferruggia Lubeck, personal interview. (2018, January 25).

67 Greenfield, J. (2017, July 19). Does Chicago’s Vision Zero Action Plan have zero vision? *Chicago Reader*. Retrieved from <https://www.chicagoreader.com/chicago/vision-zero-action-plan-enforcement-department-of-transportation/Content?oid=28086538>

“I think a big reason why equity and its interplay with Vision Zero was the most consistently focused on topic of our Task Force meetings was because there were so many voices at the table that were asking for and pushing that. I think that if we had had two or three people who really cared about equity out of a Task Force of 26 that we probably wouldn’t have ended up having as robust of conversations as we did.”⁶⁸

Having multiple members championing racial equity is especially important considering previously discussed capacity issues. In Chicago, the push against enforcement strategies relied largely on the bicycle equity organization Slow Roll Chicago and its founder Olatunji Oboi Reed. A medical issue forced Reed to step away from advocacy during much of the time when the Chicago Department of Transportation was assembling its plan, and his colleagues at Slow Roll did not have the time to pick up the fight. No other stakeholders working with the city had the same racial justice focus, so enforcement issues were a less prominent part of the conversation compared to Portland.⁶⁹ This contrasts with the situation in Los Angeles; after T.R.U.S.T. South LA stepped away from the Vision Zero Alliance, several of the remaining organizations continued to push for a focus on racial justice.

FINDING #3

Lack of inter-agency coordination can hamper plan implementation

Vision Zero efforts require the involvement of individuals from multiple fields and, therefore, coordination among various government agencies. In the case study cities the local departments of transportation led the development of the plans and relied on the local police departments for enforcement. The relationship between these two departments helped determine the role of law enforcement in Vision Zero plans. Neither of these agencies has control over the other. “LADOT is not going to change an LAPD written policy,” one official explained. “That’s the police commission.”⁷⁰

Because neither agency is in charge, the personalities of those in power can take on an outsized role in the process. In Portland, Veka praised the Police Bureau’s traffic captain for caring about social justice and being a strong partner in crafting an equitable Vision Zero program. The specific departments within each agency involved in the process matter too. In Los Angeles, Vision Zero is the responsibility of the police department’s Traffic Coordination Section (TCS). TCS is not responsible for day-to-day enforcement actions, which adds a layer of complexity to coordination.⁷¹

In case study cities, agencies involved with Vision Zero were willing to publicly commit to racial equity. In Los Angeles, the Los Angeles Police Department (LAPD) resisted calls for a “no racial profiling pledge” not because the agency is unconcerned about profiling, but because its code already prohibits biased policing. The issue is in turning these statements into tangible actions. Validzic explains that in San Francisco, there is a disparity between stated equity goals and the culture of various agencies:

68 Clay Veka, personal interview. (2018, February 1).

69 Olatunji Oboi Reed, personal interview. (2018, January 25).

70 Anonymous Los Angeles Department of Transportation employee, personal interview. (2018, January 27).

71 Ibid.

“I think from a high-level perspective no one’s going to say ‘we’re not supportive of equity’... But how that’s operationalized could be very different. All of us have different mandates that we have to function under.”⁷²

FINDING #4

Stakeholders often lack defined roles in the planning process

Conflict between government officials and stakeholders can be amplified if there is no clear framework for engagement. In Chicago, transportation activist Olatunji Oboi Reed requested a meeting with the mayor after coming to the conclusion that CDOT was not the driving force behind policies on racial equity.⁷³ Unlike a department of transportation, a city’s mayor and city council have the ability to change police policy.

Even in cities with a formalized Vision Zero Task Force, activists can feel like they are not clearly involved with the planning process. In Los Angeles, T.R.U.S.T. South LA Director of Programs & Organizing Malcolm Harris had difficulty communicating with the LAPD. The LAPD participated in meetings with LADOT staff and Vision Zero Alliance members, but there seemed to be little movement toward the Alliance’s goals of data-sharing and the securing of a no racial profiling pledge. Consequently, the Alliance broadened its efforts. It has not shifted focus away from LADOT in the way that Reed has with CDOT, but members have started to build relationships with the city council, as well as to work with the LAPD directly. Harris explained that this multi-pronged approach is necessary in a project with multiple agencies working simultaneously.

“The problem with the city conversation is that it is complicated. I mean everybody wants to get the Black and Brown faces and get those numbers in. I think that is hard to answer because we are dealing with the bureaucracy. We are dealing with a city that has a lot of different ways of operating.”⁷⁴

These four cities use different models for engagement. In Portland there are about as many members of the public as government stakeholders on its Task Force, and Chicago is assembling an all-civilian Downtown Task Force. In contrast, community members are represented on the Los Angeles Task Force through the Vision Zero Alliance; San Francisco includes no civilians but its meetings are open to the public. In Portland, activists have the ability to drive the conversation in Task Force meetings. The structure of the San Francisco meetings does not encourage robust community engagement:

“The city tends to just present what they’re doing on Vision Zero and the community has a chance to ask questions,” explained Walk San Francisco Policy & Program Director Cathy DeLuca. “The coalition is really pushing the city to change the format of that meeting so that it is more collaborative so that the community has a say in what the city is doing and (is) not just getting some report about it.”⁷⁵

⁷² Ana Validzic, personal interview. (2018, March 8).

⁷³ Olatunji Oboi Reed, personal interview. (2018, January 25).

⁷⁴ Malcolm Harris, personal interview. (2018, January 19).

⁷⁵ Cathy DeLuca, personal interview. (2018, April 3).

Vision Zero cannot be successful if government officials struggle to coordinate with each other and if activists do not know who in the government to talk to in order to have their voices heard. Without clear leadership, these issues will continue to plague the process.

FINDING #5

Automated enforcement has potential benefits, remains controversial

This report has discussed racial equity concerns related to traditional traffic enforcement, in which police officers pull over drivers and issue tickets. Using humans to enforce traffic laws involves officer discretion, opening the door to intentional or subconscious racial profiling.⁷⁶ Camera-based automated traffic enforcement has the potential to reduce racial bias in ticketing.

Several interviewees identified automated enforcement as a strategy that could make traffic enforcement more equitable. In San Francisco, both the Department of Public Health and SF Walks are interested in this type of enforcement.

“[A traffic camera] doesn’t even see who you are, it takes a picture of your license plate, so it couldn’t even profile if it tried except that it just might be in a Black neighborhood,” explained DeLuca. “So that’s an interesting aspect that we’re trying to push. We were still talking about enforcement for

Vision Zero but only automated enforcement.”⁷⁷

Other activists interviewees expressed concern about the issue DeLuca raised regarding the types of neighborhoods that are policed by cameras. Communities of color are disproportionately affected by traffic crashes, so installing cameras in the most dangerous locations will mean installing them in communities of color more frequently than in white neighborhoods:⁷⁸

“[Traffic cameras] still disproportionately impact communities of color,” explained Maria Sipin, a board member for the Los Angeles organization Multicultural Communities for Mobility.⁷⁹ “So I just feel like we can’t win here.”⁸⁰

Racial justice remains a concern even after a citation is issued. Traffic tickets are regressive; a flat-rate fine hurts lower-income people more than higher-income people. A fine that a richer person can easily pay may be impossibly high for a poorer person, and unpaid traffic tickets can amass late fees and lead to license suspension or imprisonment.⁸¹ People of color are disproportionately low-income compared to whites,⁸² so income-regressive fines can also have an outsized effect on communities of color. The regressive nature of fines is not confined to automated enforcement, but it raises questions about whether or not automated enforcement truly is race-neutral.

76 Rojek, J., Rosenfeld, R., & Decker, S. (2012). Policing Race: The Racial Stratification Of Searches In Police Traffic Stops. *Criminology*, 50(4), 993-1024. Retrieved from <https://onlinelibrary.wiley.com/doi/pdf/10.1111/j.1745-9125.2012.00285.x>.

77 Cathy DeLuca, personal interview. (2018, April 3).

78 Maciag, M. (2014, August). Pedestrians Dying at Disproportionate Rates in America's Poorer Neighborhoods. *Governing*. Retrieved from <http://www.governing.com/topics/public-justice-safety/gov-pedestrian-deaths-analysis.html>

79 Disclosure: As of publication Maria Sipin works as an intern for Alta Planning + Design, the client organization for this report.

80 Maria Sipin, personal interview. (2018, March 7).

81 Greenfield, J. (2016, September 28). Sliding-scale fines could make Chicago traffic enforcement more equitable. *Chicago Reader*. Retrieved from <https://www.chicagoreader.com/chicago/traffic-fines-regressive-fees-solution/Content?oid=23730503>

82 Chetty, R., Hendren, N., Jones, M., & Porter, S. (2018). Race and Economic Opportunity in the United States: An Intergenerational Perspective. National Bureau of Economic Research. Retrieved from http://www.equality-of-opportunity.org/assets/documents/race_paper.pdf

Recommendations



In addition to identifying problems, interviewees suggested potential solutions to those problems. These suggestions informed a set of recommendations related to outreach, capacity, coordination, and automated enforcement.

RECOMMENDATION #1

Prioritize proactive outreach

The first step in stakeholder engagement is convening community members. Planners have limited networks from which to draw, which can make it hard to amass a diverse group of participants. Planners need to look beyond their standard contacts in finding community stakeholders. Setting concrete goals for including representatives from different neighborhoods and races could help avoid situations like the one in Portland, in which the Portland Bureau of Transportation did not realize until after the first Task Force meeting that it had not included any Black stakeholders.⁸³

One way to increase the diversity of stakeholder representation is to ask existing contacts to lead in recruitment. In Los Angeles, the Vision Zero Alliance grew because members reached out to other stakeholders, some of whom would not traditionally be involved in transportation issues. Planners forming government task forces should be cautious of this approach, however; asking community members to recruit additional task force participants increases the burden put on these members and raises the capacity issues identified in this report. Additionally, if the initial community partners do not reflect the community as a whole then their own networks may be similarly non-representative.

The best strategy for increasing a city's ability to involve a large, diverse group of stakeholders starts well before outreach has begun. Cities need to recruit *staff* from the communities they serve, and should proactively form ongoing, trust-based partnerships with diverse groups and leaders. Planners said that, when tasked with outreach, they first contact people they know. If planners are going to rely on their own networks, then someone who comes to the job with deep community relationships is a valuable resource for a city.

“Who they hire is a big deal,” explained Sipin. “Who do you bring into your team to be in charge of developing these community partnerships? How connected are they?”⁸⁴

Changing the structure of task force meetings could also help increase community participation. At a minimum, meetings should be held in the evenings or on weekends to accommodate community members who work during the day. In addition, holding meetings away from government offices might make stakeholders feel more comfortable voicing controversial opinions. CDOT planners acknowledged the importance of meeting community members where they are as opposed to asking them to come to government buildings.⁸⁵ Compensating members for participation would also make it more feasible for a diverse group of stakeholders to attend meetings.

83 Clay Veka, personal interview. (2018, February 1).

84 Maria Sipin, personal interview. (2018, March 7).

85 Sean Wiedel, personal interview. (2018, May 3).

RECOMMENDATION #2

Center Vision Zero within the mayor's office

Lack of agency coordination was a major theme in this research. Vision Zero is usually organized by a city's department of transportation, which has limited power over city policy beyond transportation. A department of transportation does not control the city budget and, perhaps most crucially, has no authority over police activity. The decisions of planners regarding enforcement strategies will have very little influence if the police department refuses to cooperate.

Addressing coordination issues requires centralized leadership. The mayor and city council must take an active role in directing the Vision Zero planning process. While Vision Zero is a transportation initiative, its multifaceted nature means that the planning process should be led by the Mayor. As one official in LA explained:

“The way I've seen it work best in other cities is driven by the mayor's office, regular meetings where everyone is held accountable on what they said they would do, and the people who are in those meetings are the decision makers that can take responsibility if things aren't going well, and then direct their staff and resources appropriately.”⁸⁶

Vision Zero is not just complicated; it is also political. It is unreasonable to expect a department of transportation, police department, or other apolitical city agency to lead what can be a controversial, cross-agency effort. These changes must come from the city's political leadership.

RECOMMENDATION #3

Provide stable funding to allow for long-range planning

If cities are serious about creating equitable Vision Zero plans, they need to back up their efforts with funding. Resource limitations put severe constraints on both planners and activists. Increased funding for Vision Zero would help alleviate the capacity issues that interviewees frequently raised.

Three of the case study cities studied published their Vision Zero plans just a year after committing to the initiative, and planners expressed concern about both the speed of the process and staffing constraints. One planner regretted that they could not spend more one-on-one time with community stakeholders.⁸⁷ Ana Validzic of the San Francisco Department of Public Health similarly explained that a larger staff would let her agency engage more deeply with more of the city.⁸⁸ Money cannot change a project's timeline, but hiring additional staff would let cities do more in the time that they have.

Increasing the budget for Vision Zero would also allow cities to compensate stakeholders for their time. Many of the activists interviewees identified capacity issues as a limiting factor in the Vision Zero process. Asking community members to contribute to the planning process for free restricts the variety of stakeholders who can participate. While the research did not identify a set value for stakeholder participation, some amount of compensation—perhaps framed as a stipend for the participant organization—could both make it easier for community members to participate and would send a signal that cities are serious about stakeholder engagement. Portland and Chicago both hired local community organizers to do large-scale community outreach, an approach that other cities should emulate. However, none of the case study cities paid members of their Vision Zero task forces.

⁸⁶ Anonymous Los Angeles Department of Transportation employee, personal interview. (2018, January 27).

⁸⁷ Ibid.

⁸⁸ Ana Validzic, personal interview. (2018, March 8).

Several of the case study cities relied on grant funding to support community engagement. Grants cannot be counted on for long-term efforts. Validzic works on grant-funded projects and projects with steady city funding, and explains that:

“having the luxury of stable funding allows [the department] to really focus on the program instead of focusing on how to continue the program.”⁸⁹

Asking for more money directly from a city budget is no easy task, but it is the only way to get the stable funding necessary to conduct continued community outreach. The funding issue reinforces the need for strong city leadership, as city hall has the ultimate control over budgeting. Vision Zero funds should be allocated on a multi-year cycle. The Los Angeles Department of Transportation has to go to City Council each year to justify its budget, which makes it difficult to plan what is supposed to be a ten-year program.⁹⁰ Planners need stable funding in order to focus on developing effective Vision Zero plans; instead, they spend their valuable time attracting chasing resources.

RECOMMENDATION #4

Pair automated enforcement with new fine structures

Automated enforcement has the opportunity to remove racial bias from the ticketing process, but cities must address the issue of traffic fines disproportionately affecting low-income communities of color. If placing cameras in the most dangerous areas means issuing more tickets to people of color, then cities should revise their fine structures to be less regressive. Portland is currently exploring the feasibility of introducing a sliding scale for traffic fines based on the income of the driver, or even giving first offenders the opportunity to take a safety class rather than pay a fine.⁹¹ California Senate Bill 185, signed into law in 2017, allows courts to reduce traffic fines based on income and establish personalized payment plans to ease the financial burden of citations.⁹²

Automated enforcement is prohibited or severely restricted in many states.⁹³ The California state government does not allow cities to use speed cameras, and both city staff and activists are working to change the law. Assembly Bill 342 would begin a speed camera pilot program in San Francisco and San Jose and explicitly allows for reduced fines or community service.⁹⁴ Other states should include similar protections in laws authorizing automated enforcement.

⁸⁹ Ibid.

⁹⁰ Anonymous Los Angeles Department of Transportation employee, personal interview. (2018, January 27).

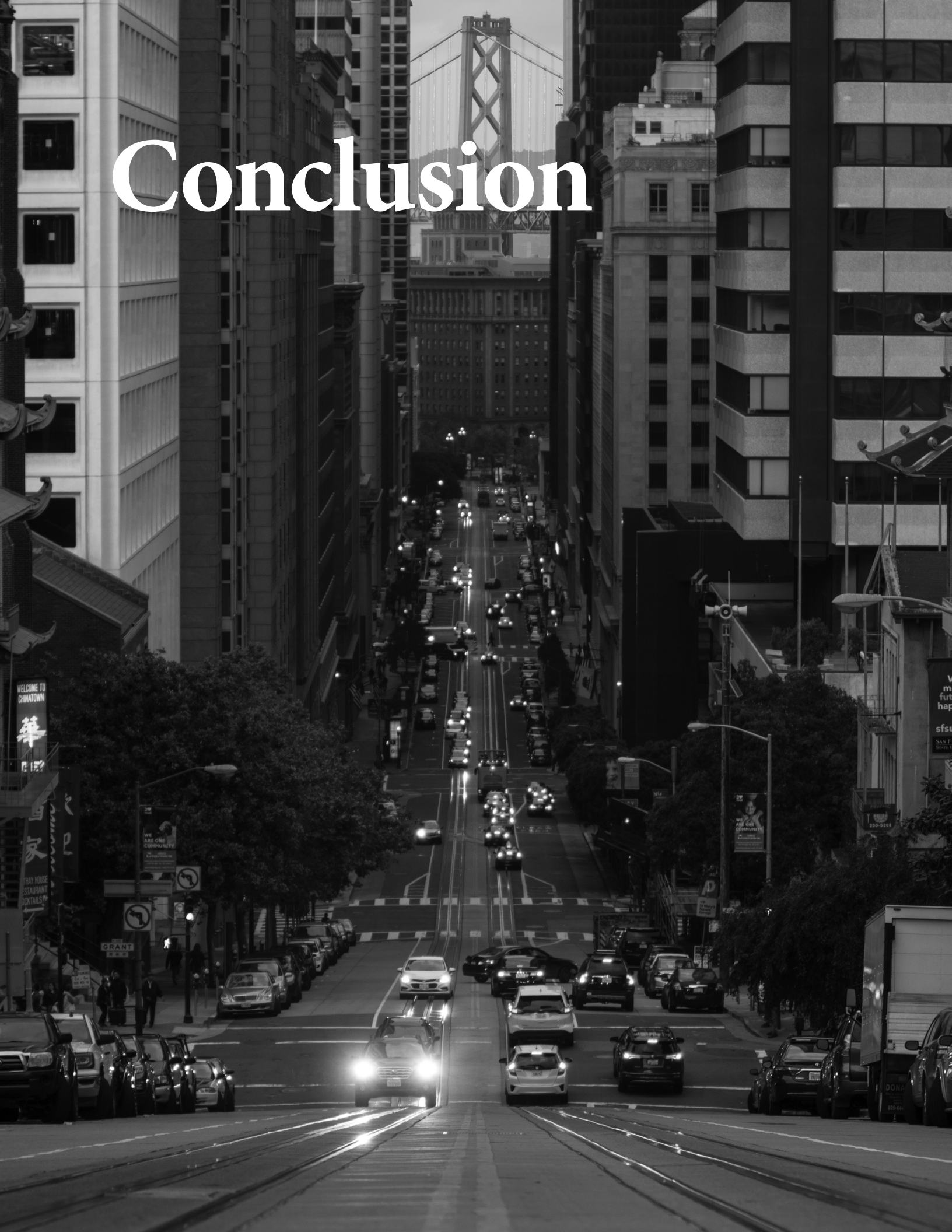
⁹¹ Clay Veka, personal interview. (2018, February 1).

⁹² SB 185 Passes, Reduces Burden of Unfair Fines and Fees. (2017, August 15). *Street Sheet*. Retrieved from <http://www.streetsheet.org/?p=3794>.

⁹³ Speed and Red Light Cameras. *Governors Highway Safety Association*. Retrieved from <https://www.ghsa.org/state-laws/issues/speed-and-red-light-cameras>

⁹⁴ California Considers Automated Speed Cameras: How Will That Affect Me? (2017, July 12). *CBS Sacramento*. Retrieved from <http://sacramento.cbslocal.com/2017/07/12/california-considers-automated-speed-cameras-how-will-that-affect-me/>

Conclusion



This report focuses on targeted stakeholder engagement in the Vision Zero planning process and the ways that engagement affects how racial justice considerations factor into Vision Zero efforts. Interviewing government staff and activists in four cities led me to five findings about the planning process:

- 1 Resource constraints limit both planners and community members
- 2 Having multiple stakeholders focused on racial justice is necessary to guide the conversation
- 3 Lack of inter-agency coordination can hamper plan implementation
- 4 Stakeholders often lack defined roles in the planning process
- 5 Automated enforcement has potential benefits, but remains controversial

These issues informed a set of recommendations to improve the planning process:

- 1 Prioritize proactive outreach
- 2 Center Vision Zero within the mayor's office
- 3 Provide stable funding to allow for long-range planning
- 4 Pair automated enforcement with new fine structures

Future research can expand on this report in a variety of ways. Performing qualitative analyses of other Vision Zero cities would help bolster the findings of this report. As cities begin to collect additional data about the racial composition of drivers pulled over in traffic stops, researchers performing statistical analyses will be able to draw firmer conclusions about racial disparities in enforcement. With more information about how exactly enforcement affects communities of color, cities will be able to refocus their Vision Zero plans to be more equitable.

With more than 40,000 people dying in car crashes on America's streets each year, cities cannot ignore traffic safety.⁹⁵ Vision Zero is an important framework for saving lives. However, including police enforcement of traffic laws in Vision Zero plans means that these plans have the potential to disproportionately affect people of color, who studies show are more likely than white drivers to be stopped and searched while driving.⁹⁶ Reforming the community engagement process will not necessarily solve all the problems identified in this research, but it is a start. Both traffic violence and racially biased policing are too important to ignore.

95 NSC Motor Vehicle Fatality Estimates. (2017). *National Safety Council*. Retrieved from <http://www.nsc.org/NewsDocuments/2017/12-month-estimates.pdf>

96 Novak, K. J. (2004). Disparity and Racial Profiling in Traffic Enforcement. *Police Quarterly*, 7(1), 65-96. Retrieved from <http://journals.sagepub.com/doi/pdf/10.1177/1098611102250359>; Moon, B., & Corley, C. J. (2007). Driving across campus: Assessing the impact of drivers race and gender on police traffic enforcement actions. *Journal of Criminal Justice*, 35(1), 29-37. Retrieved from <http://www.sciencedirect.com/science/article/pii/S0047235206001413>

Bibliography

Aboelata, M., Yanez, E., & Kharrazi, R. (2017, January). Vision Zero: A Health Equity Road Map for Getting to Zero in Every Community. *Prevention Institute*. Retrieved from <https://www.preventioninstitute.org/publications/vision-zero-health-equity-road-map-getting-zero-every-community>

Advancing Equity Through Vision Zero SF. (2017, September). *San Francisco Vision Zero Task Force*. Retrieved from <http://www.sfcta.org/sites/default/files/content/Executive/Meetings/visionzero/2017/10-Oct/Equity%20and%20Vision%20Zero%20SF%202017%2009%2028.pdf>

Automated Speed Enforcement Implementation: Survey Findings and Lessons Learned From Around the Country. (2015, November 12). *City and County of San Francisco Office of the Controller*. Retrieved from <http://sfcontroller.org/sites/default/files/FileCenter/Documents/6928-Automated%20Speed%20Enforcement%20Implementation%20-%20Survey%20Findings%20and%20Lessons%20Learned%20From%20Around%20the%20Country.pdf>

Baumgartner, F. R., Epp, D. A., Shoub, K., & B. L. (2015). Driving While Black: It's Getting Worse. Unpublished manuscript submitted for review, University of North Carolina Chapel Hill. Retrieved from <https://www.unc.edu/~fbaum/TrafficStops/DrivingWhileBlack-July2015.pdf>

Britt, J. W., Bergman, A. B., & Moffat, J. (1995). Law Enforcement, Pedestrian Safety, and Driver Compliance with Crosswalk Laws: Evaluation of a Four-Year Campaign in Seattle. *Transportation Research Record* 1485, 160-167. Retrieved from <http://onlinepubs.trb.org/Onlinepubs/trr/1995/1485/1485-021.pdf>

California Considers Automated Speed Cameras: How Will That Affect Me? (2017, July 12). *CBS Sacramento*. Retrieved from <http://sacramento.cbslocal.com/2017/07/12/california-considers-automated-speed-cameras-how-will-that-affect-me/>

Carr, A. F., Schnelle, J. F., & Kirchner Jr., R. E. (1980). Police crackdowns and slowdowns: A naturalistic evaluation of changes in police traffic enforcement. *Behavioral Assessment*, 2, 33-41. Retrieved from <http://www.crab.rutgers.edu/~goertzel/Speed.pdf>

Center for Active Design. (n.d.) *Vision Zero: Learning from Sweden's Successes*. Retrieved from <https://centerforactivedesign.org/visionzero>

Chetty, R., Hendren, N., Jones, M., & Porter, S. (2018). Race and Economic Opportunity in the United States: An Intergenerational Perspective. National Bureau of Economic Research. Retrieved from http://www.equality-of-opportunity.org/assets/documents/race_paper.pdf

Conner, M. (2016, March 9). Racial Inequity in Traffic Enforcement. *Streetsblog NYC*. Retrieved from <https://nyc.streetsblog.org/2016/03/09/racial-inequity-in-traffic-enforcement/>

Conner, M. (2017). Traffic Justice: Achieving Effective and Equitable Traffic Enforcement in the Age of Vision Zero. *Fordham Urban Law Journal*, 44(4), 969-1004. Retrieved from <https://ir.lawnet.fordham.edu/cgi/viewcontent.cgi?article=2702&context=ulj>

DeAngelo, G., & Hansen, B. (2014). Life and death in the fast lane: Police enforcement and traffic fatalities. *American Economic Journal: Economic Policy*, 6, 231-257. Retrieved from <https://www.aeaweb.org/articles?id=10.1257/pol.6.2.231>

Engel, R. S. & Calnon, J. M. (2006) Examining the influence of drivers' characteristics during traffic stops with police: Results from a national survey. *Justice Quarterly*, 21(1), 49-90. Retrieved from <https://www.tandfonline.com/doi/abs/10.1080/07418820400095741>

Engel, R. S., Calnon, J. M., & Bernard, T.J. (2002). Theory and racial profiling: Shortcomings and future directions in research. *Justice Quarterly*, 19(2), 249-273. Retrieved from <http://www.tandfonline.com/doi/abs/10.1080/07418820200095231>

Executive Directive No. 10. (2015, August 24). *City of Los Angeles*. Retrieved from https://www.lamayor.org/sites/g/files/wph446/f/page/file/Mayor_Garcetti_File_Executive_Directive_10_Vision_Zero.pdf?1440454405

Fox, J. & Shahum, L. (2017, May). Vision Zero Equity Strategies for Practitioners. Vision Zero Network. Retrieved from http://visionzeronetwork.org/wp-content/uploads/2017/05/VisionZero_Equity.pdf

Goodyear, S. (2014, November 20). The Swedish Approach to Road Safety: 'The Accident Is Not the Major Problem'. *CityLab*. Retrieved from <https://www.citylab.com/transportation/2014/11/the-swedish-approach-to-road-safety-the-accident-is-not-the-major-problem/382995/>

Greenfield, J. (2016, September 28). Sliding-scale fines could make Chicago traffic enforcement more equitable. *Chicago Reader*. Retrieved from <https://www.chicagoreader.com/chicago/traffic-fines-regressive-fees-solution/Content?oid=23730503>

Greenfield, J. (2017, July 19). Does Chicago's Vision Zero Action Plan have zero vision? *Chicago Reader*. Retrieved from <https://www.chicagoreader.com/chicago/vision-zero-action-plan-enforcement-department-of-transportation/Content?oid=28086538>

Greenfield, J. (2017, June 12). At Long Last, the City Releases the Chicago Vision Zero Action Plan. *Streetsblog Chicago*. Retrieved from <https://chi.streetsblog.org/2017/06/12/at-long-last-the-city-releases-the-chicago-vision-zero-action-plan/>

Luca, D. L. (2015). Do Traffic Tickets Reduce Motor Vehicle Accidents? Evidence from a Natural Experiment. *Journal of Policy Analysis and Management*, 34(1), 85-106. Retrieved from <http://onlinelibrary.wiley.com/doi/10.1002/pam.21798/full>

Maciag, M. (2014, August). Pedestrians Dying at Disproportionate Rates in America's Poorer Neighborhoods. *Governing*. Retrieved from <http://www.governing.com/topics/public-justice-safety/gov-pedestrian-deaths-analysis.html>

Moon, B., & Corley, C. J. (2007). Driving across campus: Assessing the impact of drivers race and gender on police traffic enforcement actions. *Journal of Criminal Justice*, 35(1), 29-37. Retrieved from <http://www.sciencedirect.com/science/article/pii/S0047235206001413>

Novak, K. J. (2004). Disparity and Racial Profiling in Traffic Enforcement. *Police Quarterly*, 7(1), 65-96. Retrieved from <http://journals.sagepub.com/doi/pdf/10.1177/1098611102250359>

NSC Motor Vehicle Fatality Estimates. (2017). *National Safety Council*. Retrieved from <http://www.nsc.org/NewsDocuments/2017/12-month-estimates.pdf>

Pedestrian safety group demands action after 2 more pedestrians die. (2017, September 22). *KTVU*. Retrieved from <http://www.ktvu.com/news/pedestrian-safety-group-demands-action-after-2-more-pedestrians-die>

Pheifer, P. & Peck, C. (2016, July 7). Aftermath of fatal Falcon Heights officer-involved shooting captured on video. *Star Tribune*. Retrieved from <http://www.startribune.com/aftermath-of-officer-involved-shooting-captured-on-phone-video/385789251/#1>

Porter, B. E. (2011). *Handbook of Traffic Psychology*. Academic Press.

RE: CF # 15-0546-S3 - Vision Zero Action Plan / Citation Issued Data / No Profiling Pledge. (2017, November 6). *Vision Zero Alliance*. Retrieved from https://d3n8a8pro7vnm.cloudfront.net/la0/pages/18/attachments/original/1512950672/LA0Letter_CF-15-0546-S3.pdf?1512950672

- Redden, J. (2018, February 28). PBOT: Traffic deaths up, despite Vision Zero efforts. *The Portland Tribune*. Retrieved from <https://portlandtribune.com/pt/9-news/388157-278676-pbot-traffic-deaths-up-despite-vision-zero-efforts>
- Reed, O. O. (2017, September 23). Update from our Vision Zero Chicago Advocacy Team. *Slow Roll Chicago*. Retrieved from <http://slowrollchicago.org/blog/update-from-our-vision-zero-chicago-advocacy-team/2017/9/23>
- Rojek, J., Rosenfeld, R., & Decker, S. (2012). Policing Race: The Racial Stratification Of Searches In Police Traffic Stops. *Criminology*, 50(4), 993-1024. Retrieved from <https://onlinelibrary.wiley.com/doi/pdf/10.1111/j.1745-9125.2012.00285.x>
- SB 185 Passes, Reduces Burden of Unfair Fines and Fees. (2017, August 15). *Street Sheet*. Retrieved from <http://www.streetsheet.org/?p=3794>
- Schmidt, B. (2014, November 14). Portland Bureau of Transportation paying nearly \$150,000 for 'vision' of its 'transportation future'. *The Oregonian*. Retrieved from http://www.oregonlive.com/portland/index.ssf/2014/11/portland_bureau_of_transportat_14.html
- Schmidt, B. (2015, February 10). A Portland with no traffic deaths and good streets? Plan sets slow path forward. *The Oregonian*. Retrieved from http://www.oregonlive.com/portland/index.ssf/2015/02/a_portland_with_no_traffic_dea.html
- Schmidt, B. (2015, June 17). Portland adopts 'Vision Zero' goal of no traffic deaths. *The Oregonian*. Retrieved from http://www.oregonlive.com/portland/index.ssf/2015/06/portland_adopts_goal_of_no_tra.html
- Schmitt, A. (2012, May 14). Chicago Aims for Zero Traffic Deaths by 2022. *Streetsblog USA*. Retrieved from <https://usa.streetsblog.org/2012/05/14/chicago-aims-for-zero-traffic-deaths-by-2022/>
- Smith, M. R., & Petrocelli, M. (2001). Racial Profiling? A Multivariate Analysis of Police Traffic Stop Data. *Police Quarterly*, 4(1), 4-27. Retrieved from <http://journals.sagepub.com/doi/abs/10.1177/1098611101004001001>
- Speed and Red Light Cameras. *Governors Highway Safety Association*. Retrieved from <https://www.ghsa.org/state-laws/issues/speed-and-red-light-cameras>
- Vision Zero Action Plan 2014. (2014) *City of New York*. Retrieved from <http://www.nyc.gov/html/visionzero/pdf/nyc-vision-zero-action-plan.pdf>
- Vision Zero Action Plan: Saving Lives With Safe Streets. (2016, December). *The City of Portland*. Retrieved from <https://www.portlandoregon.gov/transportation/71730>
- Vision Zero Alliance*. (2017, August). Policy Platform. Retrieved from https://d3n8a8pro7vhmx.cloudfront.net/la0/pages/18/attachments/original/1503553156/LA0_policy_platform_FINAL.pdf?1503553156
- Vision Zero Chicago Action Plan 2017-2019. (2017, June). *City of Chicago*. Retrieved from http://visionzerochicago.org/wp-content/uploads/2016/05/17_0612-VZ-Action-Plan_FOR-WEB.pdf
- Vision Zero Cities Map. *Vision Zero Network*. Retrieved from <https://visionzeronetwork.org/resources/vision-zero-cities/>
- Vision Zero Los Angeles | 2015-2025 Action Plan. (2017, January). *City of Los Angeles*. Retrieved from <https://view.joomag.com/vision-zero-action-plan-2017/0893807001485436685?short>
- Vision Zero Network. (n.d.) *What is Vision Zero?* Retrieved from <https://visionzeronetwork.org/about/what-is-vision-zero/>
- Vision Zero San Francisco Two-Year Action Strategy. (2015, February). *Vision Zero SF*. Retrieved from <https://view.joomag.com/vision-zero-san-francisco/0685197001423594455?short>
- Vision Zero Task Force members. *Portland Bureau of Transportation*. Retrieved from <https://www.portlandoregon.gov/transportation/article/628402>

Warnke, M. B. (2017, June 19). Sandra Bland, Philando Castile and now Charleena Lyles. Scream their names for all to hear. *Los Angeles Times*. Retrieved from <http://www.latimes.com/opinion/opinion-la/la-ol-castille-charleena-lyles-police-shooting-20170619-story.html>

Warren, P., Tomaskovic-Devey, D., Smith, W., Zingraff, M., & Mason, M. (2006). Driving While Black: Bias Processes And Racial Disparity In Police Stops. *Criminology*, 44(3), 709-738. Retrieved from <https://onlinelibrary.wiley.com/doi/full/10.1111/j.1745-9125.2006.00061.x>

Appendix

Appendix A: Interviews

INTERVIEWEE	ORGANIZATION	CITY	INTERVIEW DATE
Rosanne Lubbeck	Chicago Department of Transportation	Chicago	January 25, 2018
Oboi Reed	Slow Roll/Equiticity	Chicago	January 25, 2018
Sean Wiedel Katie Witherspoon	Chicago Department of Transportation	Chicago	May 3, 2018
Malcolm Harris	T.R.U.S.T. South LA	Los Angeles	January 19, 2018
Anonymous	Los Angeles Department of Transportation	Los Angeles	January 27, 2018
Maria Sipin	Multicultural Communities for Mobility	Los Angeles	March 7, 2018
Clay Veka	Portland Bureau of Transportation	Portland	February 1, 2018 March 20, 2018
Duncan Hwang	Asian Pacific American Network of Oregon	Portland	March 7, 2018
Kari Schlosshauer	Safe Routes to School National Partnership	Portland	May 15, 2018
Ana Validzic	San Francisco Department of Public Health	San Francisco	March 8, 2018
Cathy DeLuca	Walk San Francisco	San Francisco	April 3, 2018

Appendix B: Literature Review

Introduction

Before discussing any potential problems with traffic enforcement, it is worth establishing what is currently known about the issue. Analyses of the relationship between traffic enforcement, safety, and racial profiling provide context for the report. It is not entirely clear that enforcing traffic laws has a large impact on safety, but there is substantial evidence that traffic enforcement is often racially biased.

Traffic Safety

The enforcement component of Vision Zero is based on the assumption that enforcing traffic laws increases safety. Because of the number of variables involved, however, the relationship between enforcement and safety is difficult to confirm. Moreover, the literature on this relationship is relatively underdeveloped and merits additional study. Some scholars use natural experiments to find a link between enforcement and safety and find mixed results. For example, the Oregon State Police experienced large budget cuts in 2003, resulting in layoffs and a reduction in ticketing. This reduction was associated with a significant increase in traffic injuries and fatalities.⁹⁷ Massachusetts began participating in the national Click-it-or-Ticket program in the early 2000s. While the focus was on seatbelts, police officers pulled over drivers for moving violations. One analysis found that the program was associated with a reduction in crashes and injuries.⁹⁸

In contrast, other studies come to different conclusions. Similar to the Oregon budget cuts, a 1978 Nashville traffic police strike served as a natural experiment to test the relationship between enforcement of traffic laws and road safety. In this instance, however, researchers found no effect on the number or severity of crashes.⁹⁹ One study of pedestrian right-of-way enforcement in Seattle found mixed results, with minimal safety gains on the sorts of arterial roads typically the focus of Vision Zero plans.¹⁰⁰

These diverse results do not imply that enforcement should be excluded from Vision Zero programs. However, considering other criticisms of traffic enforcement discussed below, the lack of certainty about the efficacy of enforcement raises questions about the role enforcement should play in Vision Zero.

Street safety activists concerned with racial profiling sometimes point to automated enforcement—using cameras to issue tickets for traffic violations like speeding and running red lights—as a race-neutral alternative to traditional traffic enforcement.¹⁰¹ By removing human police officers from the enforcement process, automated enforcement could remove racial bias from ticketing. A city can operate an automated enforcement program independent of the police department, which could appeal to communities of color that distrust law enforcement.¹⁰²

97 DeAngelo, G., & Hansen, B. (2014). Life and death in the fast lane: Police enforcement and traffic fatalities. *American Economic Journal: Economic Policy*, 6, 231-257. Retrieved from <https://www.aeaweb.org/articles?id=10.1257/pol.6.2.231>

98 Luca, D. L. (2015). Do Traffic Tickets Reduce Motor Vehicle Accidents? Evidence from a Natural Experiment. *Journal of Policy Analysis and Management*, 34(1), 85-106. Retrieved from <http://onlinelibrary.wiley.com/doi/10.1002/pam.21798/full>

99 Carr, A. F., Schnelle, J. F., & Kirchner Jr., R. E. (1980). Police crackdowns and slowdowns: A naturalistic evaluation of changes in police traffic enforcement. *Behavioral Assessment*, 2, 33-41. Retrieved from <http://www.crab.rutgers.edu/~goertzel/Speed.pdf>

100 Britt, J. W., Bergman, A. B., & Moffat, J. (1995). Law Enforcement, Pedestrian Safety, and Driver Compliance with Crosswalk Laws: Evaluation of a Four-Year Campaign in Seattle. *Transportation Research Record* 1485, 160-167. Retrieved from <http://onlinepubs.trb.org/Onlinepubs/trr/1995/1485/1485-021.pdf>

101 Conner, M. (2016, March 9). Racial Inequity in Traffic Enforcement. *Streetsblog NYC*. Retrieved from <https://nyc.streetsblog.org/2016/03/09/racial-inequity-in-traffic-enforcement/>

102 Conner, M. (2017). Traffic Justice: Achieving Effective and Equitable Traffic Enforcement in the Age of Vision Zero. *Fordham Urban Law Journal*, 44(4), 969-004. Retrieved from <https://ir.lawnet.fordham.edu/cgi/viewcontent.cgi?article=2702&context=ulj>

Research suggests that automated enforcement has a significant positive impact on traffic safety. Programs in Seattle, Portland, Washington D.C., Chicago, Denver, and New York City all led to reductions in traffic fatalities by as much as 70%.¹⁰³ Automated enforcement has the potential to be more effective in changing behavior than traditional enforcement because cameras can issue many more citations than officers can; in 2016, New York City speed cameras issued 10 times as many citations as police officers.¹⁰⁴

Racial Profiling

Conducting empirical research on racial profiling is difficult. Police departments often do not collect or release data on the racial composition of drivers who are stopped for traffic infractions, and analyzing racial disparities in stops without incorporating other explanatory factors does not necessarily prove racial bias. However, racially disparate impacts are problematic regardless of officer intent.

A literature review by Engel, Calnon, and Bernard takes issue with the methodology of studies examining traffic stops and racial profiling.¹⁰⁵ However, 10 of the 13 studies they review find evidence of racial bias. Subsequent research also finds evidence that people of color, and particularly Black men, are disproportionately likely to be stopped for traffic violations.^{106, 107, 108}

Research on racial disparities after traffic stops is even more compelling than the research on stops themselves. Several studies show that while Black men are more likely than other drivers to be searched after a traffic stop, they are less likely than drivers of other races to be cited after a search.^{109, 110, 111} This finding provides evidence for the idea that police officers use traffic violations as an excuse to stop people of color because the officers wrongfully believe that non-white drivers are more likely to be guilty of other crimes.

A recent study of traffic stops in North Carolina supports the existing research on racially biased traffic policing. Analyzing 18 million stops, the authors find that young Black males are searched and arrested in traffic stops more frequently than other drivers. In addition, this research provides evidence that the problem is growing over time.¹¹² Overall, the research provides enough evidence of racial disparities in traffic policing to warrant a discussion of the role of enforcement in Vision Zero plans.

Conclusion

The role of enforcement in Vision Zero is a difficult issue. Activists have extensively criticized Vision Zero for failing to account for the concerns of communities of color, and studies of racial profiling in traffic enforcement lend credibility to these critiques. The question then becomes how to translate these activist critiques into Vision Zero plans that more thoroughly consider the importance of equity in traffic enforcement.

- 103 Automated Speed Enforcement Implementation: Survey Findings and Lessons Learned From Around the Country. (2015, November 12). *City and County of San Francisco Office of the Controller*. Retrieved from <http://sfcontroller.org/sites/default/files/FileCenter/Documents/6928-Automated%20Speed%20Enforcement%20Implementation%20-%20Survey%20Findings%20and%20Lessons%20Learned%20From%20Around%20the%20Country.pdf>
- 104 Conner, M. (2017). Traffic Justice: Achieving Effective and Equitable Traffic Enforcement in the Age of Vision Zero. *Fordham Urban Law Journal*, 44(4), 969-1004. Retrieved from <https://ir.lawnet.fordham.edu/cgi/viewcontent.cgi?article=2702&context=ulj>
- 105 Engel, R. S., Calnon, J. M., & Bernard, T.J. (2002). Theory and racial profiling: Shortcomings and future directions in research. *Justice Quarterly*, 19(2), 249-273. Retrieved from <http://www.tandfonline.com/doi/abs/10.1080/07418820200095231>
- 106 Novak, K. J. (2004). Disparity and Racial Profiling in Traffic Enforcement. *Police Quarterly*, 7(1), 65-96. Retrieved from <http://journals.sagepub.com/doi/pdf/10.1177/1098611102250359>
- 107 Engel, R. S. & Calnon, J. M. (2006) Examining the influence of drivers' characteristics during traffic stops with police: Results from a national survey. *Justice Quarterly*, 21(1), 49-90. Retrieved from <https://www.tandfonline.com/doi/abs/10.1080/07418820400095741>

- 108 Warren, P., Tomaskovic-Devey, D., Smith, W., Zingraff, M., & Mason, M. (2006). Driving While Black: Bias Processes And Racial Disparity In Police Stops. *Criminology*, 44(3), 709-738. Retrieved from <https://onlinelibrary.wiley.com/doi/full/10.1111/j.1745-9125.2006.00061.x>
- 109 Moon, B., & Corley, C. J. (2007). Driving across campus: Assessing the impact of drivers race and gender on police traffic enforcement actions. *Journal of Criminal Justice*, 35(1), 29-37. Retrieved from <http://www.sciencedirect.com/science/article/pii/S0047235206001413>
- 110 Baumgartner, F. R., Epp, D. A., Shoub, K., & B. L. (2015). Driving While Black: It's Getting Worse. Unpublished manuscript submitted for review, University of North Carolina Chapel Hill. Retrieved from <https://www.unc.edu/~fbaum/TrafficStops/DrivingWhileBlack-July2015.pdf>
- 111 Smith, M. R., & Petrocelli, M. (2001). Racial Profiling? A Multivariate Analysis of Police Traffic Stop Data. *Police Quarterly*, 4(1), 4-27. Retrieved from <http://journals.sagepub.com/doi/abs/10.1177/1098611101004001001>
- 112 Baumgartner, F. R., Epp, D. A., Shoub, K., & B. L. (2015). Driving While Black: It's Getting Worse. Unpublished manuscript submitted for review, University of North Carolina Chapel Hill. Retrieved from <https://www.unc.edu/~fbaum/TrafficStops/DrivingWhileBlack-July2015.pdf>

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