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APRIL 16, 2021

ACTIVE TRANSPORTATION POLICY DECISIONS IN RESPONSE TO COVID-19

CASE STUDIES FROM FOUR NORTH AMERICAN CITIES

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Master's Project




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Introduction

This Master's Project explores the planning processes, implementation, and public reactions to active transportation programs executed in response to the COVID-19 pandemic in four North American cities (Washington, DC, Chapel Hill, NC, Oakland, CA, Halifax, Nova Scotia). These active transportation changes include Slow Streets programs, temporary infrastructure changes and street reallocations to accommodate walking, biking and rolling, reallocation of sidewalks and other public spaces to provide space for businesses to operate outside, and more. The implementation of active transportation programs moved abnormally quickly to respond to an increased demand for walking and biking in local areas due to COVID-19 lockdowns, restriction of travel and closure of many businesses. I conducted interviews with transportation planners working for each of the four cities to gain insight into each city's experience, lessons learned, and predictions for the future of active transportation infrastructure.

The interviews, and therefore the analysis and discussion, particularly focus on two topics: the community engagement process with residents while physical distancing measures were in place, as well as the role of equity (both considerations and perceptions) of new active transportation programs and infrastructure. Due to the desire to act quickly and provide more public space for active transportation, all four cities bypassed typical community engagement processes and either made solely internal decisions, relied on proxies for community engagement, such as elected officials, or utilized past community engagement results to determine current programs. This ability to quickly implement programs, particularly temporary programs, provides a unique learning opportunity for transportation planners and municipalities to rethink what is possible after the COVID-19 pandemic is over. All four cities also encountered equity challenges in these street space adaptations, largely concerning racial equity and accessibility for disabled individuals. Most cities struggled to initially recognize who was benefitting from these programs and the unintended consequences of their decision-making, which they were able to reflect on in the interviews and express what they learned and would have done differently if given the chance. It is crucial to understand how decisions around community engagement and equity were made, as well as the implications of these decisions, to guide future active transportation planning, implementation, and evaluation that will benefit communities equitably.

Research Questions

1. What was the process for each city to determine what active transportation programs and/or policies would be implemented in response to the COVID-19 pandemic and how have the changes been received by the public?
2. What was the community engagement process for the active transportation policies and/or programs and what role did equity play in this process?

Literature Review

Active Transportation in North America Background

Consensus on the benefits to integrating walking and biking facilities into communities has grown in the past few decades (Handy, 2020). These benefits include improved mental and physical health, access to jobs and services, and low cost at the individual level (Prapavessis & Sui, 2020). Benefits of active transportation infrastructure at the societal level include reducing traffic and pollution (Prapavessis & Sui, 2020). Support and infrastructure for active transportation modes, namely walking and biking, has steadily increased in North America for the last few decades (Handy, 2020). However, there is much left to be desired in terms of safe, quality pedestrian and bicycle infrastructure in most of the United States and Canada. Even in many of the most bike friendly cities in the United States, including Portland, OR, between five to ten percent of residents bike to work (Prapavessis & Sui, 2020). In Canada, similar proportions of cyclists are seen in its large cities, ranging between six and nine percent in Toronto, Montreal and Vancouver (Prapavessis & Sui, 2020).

While some cities and towns may be interested in investing in bike infrastructure, a lack of federal and state leadership on these issues can seriously hinder their efforts (Schmitt, 2019). For example, in the United States, counties and states can own roads within cities and towns, making a connected bike network difficult to implement. Additionally, the entrenched car culture and strong auto lobby has made a deep impact on the American public's concept of transportation (Handy, 2020). The basic structure of American cities are less dense and most lack a pedestrian core that many European cities have, which proves a major, but not insurmountable, challenge to making its cities pedestrian and bike friendly (Handy, 2020). Canada struggles with many of similar issues to the United States in terms of pedestrian and bicycling infrastructure, however, its metropolitan regions are denser and more mixed-use than the United States and has more transportation policies that incentivize active transportation, such as higher costs for car ownership and more restrictive parking (Pucher & Buehler, 2006).

Active Transportation & Equity

An integral piece of equitable transportation planning is to ensure that traditionally underserved populations are provided affordable, safe, and reliable active transportation infrastructure to meet their needs. Traditionally underserved populations are defined by the Federal Highway Administration (FHWA) as persons or communities fitting one of more of the following descriptions: low-income, minority, older adults, Limited English Proficiency, or person with disabilities (Sandt, Combs, & Cohn, 2016). These populations are more reliant on walking, wheeling, or biking for transportation, increasing their need for safe and convenient active transportation infrastructure (Lee et al., 2016). This higher reliance on alternative transportation modes is the case for a variety of reasons, including being physically, mentally,

or financially unable to drive or purchase a car (Sandt, Combs, & Cohn, 2016). However, the presence of quality active transportation infrastructure, such as sidewalks and bike lanes, has historically been afforded most to more affluent, white communities (Lee et al., 2016). This inequitable distribution of facilities produces significant effects on traditionally underserved populations, including limiting access to social and economic opportunities, exacerbating health inequities, and higher rates of pedestrian injuries and deaths (Sandt, Combs, & Cohn, 2016).

Active Transportation During COVID-19

Physical distancing and restriction of travel are some of the most effective and widespread strategies enacted worldwide to control transmission of COVID-19 (Honey-Roses et al., 2020). While many people were restricted to only leaving home to access essential jobs, essential services, and recreation, many roads emptied of the typical automobile traffic and have been utilized in various ways to support the needs of communities, including pedestrian and bike traffic, outdoor dining for restaurants and queuing for essential services such as grocery stores and markets (Caballero & Rapin, 2020; National Association of City Transportation Officials, 2020). Miles driven and traffic delays were reduced by 50 percent during the height of the stay-at-home orders in Spring 2020 (Inrix, 2021). This led to a drop of 17 percent of global carbon dioxide emissions in April 2020 (Gramling, 2020).

One study using anonymized cellphone data found that cycling trips increased by 26 percent at its peak in the United States during COVID-19 (Wilson, 2020). Streetlight Data found that small metro areas had higher spikes in cycling during COVID-19 than larger cities did, likely due to the amount of white collar commuters that switched to working from home (Wilson, 2020). Even still, they found that 88 of the 100 largest U.S. metro areas had more bicycle trips during the pandemic compared to the previous year, peaking in June (Wilson, 2020). The increase in cycling during COVID-19 was also reflected in bicycle sales skyrocketing in North America, producing supply shortages (Prapavessis & Sui, 2020). As lockdowns and stay-at-home orders loosened, cars returned to the road, but traffic still did not return to pre-pandemic patterns (Wilson, 2020). In September 2020, bicycle trips were still up 11 percent compared to the previous year and car traffic was still down 6.5 percent (Wilson, 2020).

One study that looked at three American cities found that changes in walking patterns varied between contexts but recreational walking clearly increased (Doubleday et al., 2021). Rails to Trails Conservancy estimated that there was a 200 percent survey in trail use early in the pandemic (Wilson & Cobbs, 2020). However, there is a lack of robust data to support many claims about patterns in pedestrian activity during COVID-19 (Wilson & Cobbs, 2020). It is important to understand these changing traffic patterns and continue to track them as more of North America re-opens and recovers from the COVID-19 pandemic. Transportation planners can take advantage of this changing transportation landscape, including more remote work, meaning potentially less commuters, and a new cohort of interested cyclists that started cycling during the COVID-19 pandemic.

In response to this dramatic shift in street use, many cities and municipalities have implemented both temporary and permanent changes to street infrastructure to support physical distancing for pedestrians and cyclists (Atherton, 2020). “Slow streets” and “open streets” policies have become popular during the pandemic, which includes closing roads and lowering speed limits to allow more people to utilize the street space (Caballero & Rapin, 2020).

Several groups created platforms to track the active transportation infrastructure changes made by cities (Combs & Pardo, 2021). One of the most comprehensive platforms is the University of North Carolina’s Pedestrian and Bicycle Information Center’s (PBIC) crowdsourced Shifting Streets database, which houses over 1,000 actions taken in 524 cities in the first five months of the pandemic (Combs & Pardo, 2021). After analyzing these actions, Combs & Pardo (2021) found that 43 percent of the recorded actions’ function was explicitly to expand the street space for pedestrian and cyclists and 11 percent expanded street space for outdoor dining or retail. In terms of primary purpose of these interventions, 47 percent of actions were for moving people, which was followed by public health at 29 percent, and economic recovery at 16 percent (Combs & Pardo, 2021). Ninety five percent of the changes were new actions, while two percent of actions were expansions of pre-COVID actions and another two percent were fast-tracked pre-COVID plans (Combs & Pardo, 2021). Combs & Pardo (2021) also tracked the timeline of these responses and found patterns in their implementation. The first wave of changes were primarily loading zones for picking up take-out food or store goods, which was followed by the expansion of street space for walking and cycling in late March (Combs & Pardo, 2021). However, while new space was created for pedestrians and cyclists, there were also restrictions put on these groups to restrict gatherings in public spaces and to discourage movement during lockdowns to prevent the spread of COVID-19 (Combs & Pardo, 2021). There was a leveling off of these types of changes in April, while creating space for pedestrians and cyclists and more space for outdoor dining or retail dramatically increased beginning in May (Combs & Pardo, 2021). May also saw more city, state, and national governments formally support pedestrian and cycling interventions, including creating new funding streams and adopting emergency transport plans and new guidelines for these interventions (Combs & Pardo, 2021). By July, most actions were already in place and any further actions were generally iterations or expansions of earlier implemented interventions (Combs & Pardo, 2021).

Concerns have been raised about the equity implications of fast-acting government programs to support walking, biking, and rolling during COVID-19 (Thomas, 2020; Bliss, 2021). Due to the desire to act quickly and implement these programs, many cities did not engage the community in their decision-making process (Thomas, 2020). This lack of engagement was publicly criticized by some, including Black planner and community organizer Destiny Thomas (2020). Thomas argued that these changes are more likely to hurt already vulnerable groups, particularly historically disadvantaged racial groups, who already suffer from inequities and justified mistrust of the government (Thomas, 2020). These programs were also implemented while Black Lives Matter protests took place across the world, particularly in the United States. Some linked the killings of Ahmaud Arbery, George Floyd, Dijon Kizzee, and other Black men by police or white vigilantes while on foot, biking, or in the public right of way, to the reallocation

of street space in the name of “safety” (Bliss, 2021). Thomas (2020) expressed that without addressing police brutality or anti-Black violence, streets are not safe for Black individuals. Resources have already been released to help planners think through the equity impacts of reallocating street space, such as Toole Design’s (2021) *Ensuring an Equitable Approach to Rebalancing Streets: 14 Strategies to Manage Change with Ethics, Equity, and Empathy* resource guide.

There has been a boom in research concerning pedestrian and cycling infrastructure changes during COVID-19 and compilations of case studies of different cities’ responses. Much of the current literature on the topic focus on documenting case studies. However, there is a lack of available literature focused on the decision-making process for these interventions. Since it has been approximately a year since the beginning of the COVID-19 pandemic, we don’t know how this experience will change active transportation infrastructure, demand, or the transportation field in the future. We also don’t have many available quantitative evaluations of these programs since, in most cases, there isn’t a baseline for the programs to be compared to due to the shift in movement due to COVID-19 and the quick implementation of these programs. This paper provides a new perspective to add to the existing literature. It not only concentrates on a unique set of cities, including some smaller cities that are not commonly discussed in the existing literature (Chapel Hill, NC and Halifax, NS), but also explores the processes of how interventions were determined with a particular focus on community engagement and equity considerations and perceptions. This paper is largely based off of interviews with city planners, which allowed me to gain a deeper insight into each city’s processes and allowed for qualitative analysis of these processes. This paper provides a nuanced, qualitative-centered understanding of how these decisions were made and planner’s reflections on the process, outcomes, and lessons learned. COVID-19 may change active transportation infrastructure and planning irrevocably and it is important to understand how these programs were put into place and what pieces planners should continue and where planners can learn from the parts that didn’t work.

Methods

I chose the four case study cities due to multiple factors. The four cities (Oakland, CA, Washington, DC, Chapel Hill, NC, and Halifax, NS) represent a variety of sizes and locations around North America. Each of the cities had something unique about their response but also presented some overlap with the other cities. For example, three of the cities implemented Slow Streets programs, which allows for comparison. Having lived in both Chapel Hill and Washington, DC, I was initially more familiar with those two cities’ programs and saw them in person. I also had connections with their city staff. Chapel Hill is a college town that installed a temporary lane reallocation, which they already planned to permanently implement in the future. However, this was implemented temporarily in order to primarily support businesses instead of improve mobility. DC had the unique situation of being limited in their distribution of Slow Streets by a council member representing a low-income, majority Black resident Ward in DC, who restricted any implementation in his Ward. I chose Oakland due to its pioneering of

Slow Streets and the city's adjustment in the moment based on public feedback. I selected Halifax to incorporate a Canadian city with robust programs, including deploying an existing tactical urbanism program to quickly implement planned active transportation infrastructure.

I conducted a review of the available online evidence for each of the case studies, including academic literature, grey literature and reports from organizations and city governments, news articles and/or blog posts, and relevant social media. Due to how recently these programs were implemented, there is a lack of academic literature on these cases.

In addition to available literature, I conducted interviews with leadership and staff in each case study city's local government, largely from the Departments of Transportation (DOT). Before the interviews were conducted, this project was reviewed by the Office of Human Research Ethics at UNC Chapel Hill and was given the determination of not human subjects research and did not need IRB approval. I identified the interviewees by emailing DOT leadership from their websites and asking to interview them or a staff member (Halifax), emailing staff that were listed on any media or reports on these COVID-19 response programs (Oakland), and through personal connections with staff (Chapel Hill, Washington, DC).

Table 1. Interviewee names, titles and city of employment.

	Interviewees		
Chapel Hill, NC	Bergen Watterson, Transportation Planning Manager	Sara Poulton, Downtown Special Projects Manager	Josh Mayo, Transportation Planning Assistant
Washington, DC	Emma Blondin, Transportation Planner	Charlie Willson, Vision Zero Analyst	
Halifax, NS	Tanya Davis, Strategic Transportation Planning Program Manager		
Oakland, CA	Noel Pond-Danchik, Transportation Planner	Warren Logan, Policy Director of Mobility & Interagency Relations (Mayor's Office)	

The interview guide template can be seen in Appendix A. The intent of these interviews was to gain a comprehensive understanding of the active transportation programs that were implemented during the COVID-19 pandemic, beyond what has been publicly reported by either the local government or the media. The interviews focused on the decision-making process, including community engagement, speed of implementation, public reaction to implementation, and equity considerations. The interviews offered rich qualitative data to provide a narrative and a deeper understanding of the process than outside sources would. Interviews took place over Zoom and audio was recorded and later transcribed using the Zoom transcription function and edited manually. Seven interviews were conducted, ranging from 17

minutes to 56 minutes. Two interviews took place for Oakland, DC, and Chapel Hill, while one interview took place for Halifax.

Analysis of the qualitative data was determined through consultation with an expert in qualitative data analysis at the Odum Institute at UNC Chapel Hill. I also utilized the qualitative data analysis process of creating topical and interpretive codes I learned in the course “Qualitative Research Methods” at UNC Gillings School of Global Public Health. I analyzed the interview transcripts using Dedoose, a software for analyzing mixed-method and qualitative data. I created a list of both topical and interpretive codes (Appendix B). Topical codes were questions that I directly asked in my interviews, such as “community engagement” or “location selection.” Interpretive codes were themes that emerged from interviews, such as “compare peer cities.” I created a code list and then tested it on one transcript and made the necessary adjustments, which included adding codes, deleting codes, and making some codes sub-codes under a code. I then coded each transcript and assigned the variable of “city” to each transcript. This allowed them to be grouped together by city to aid in writing each case study. I used the “code co-occurrence” and “code application” tools to analyze the crossover between certain codes and transcripts and codes and other codes.

In the next section of this paper, I provide background information on each of the four cities and briefly describe their COVID-related transportation changes as reported by staff in interviews, official reports, and the media. In the next section, I go more in depth to document the processes and reactions to each city’s different actions. Then, in the Analysis section of the paper, I will present findings from the content analysis of interview transcripts.

Background on Cities’ COVID-Related Transportation Changes

Chapel Hill, NC

Chapel Hill is a town in North Carolina, a state in the southeastern United States, with a population of 60,988 (Data Commons, 2018). Chapel Hill is home to The University of North Carolina (UNC) Chapel Hill, a public university with 30,101 undergraduate, graduate, and professional students (UNC Chapel Hill, 2020). Chapel Hill, along with the nearby larger cities of Durham and Raleigh, make up what is known as the Research Triangle, anchored by three prestigious research universities: UNC Chapel Hill, Duke University, and North Carolina State University. Chapel Hill’s proximity to these universities has led to an influx of highly educated residents and a relatively high median household income level of \$62,208 compared to North Carolina’s median household income level of \$46,868 (UNC Center for Civil Rights, 2017). However, there are stark disparities within Chapel Hill, particularly along racial lines (UNC Center for Civil Rights, 2017). For example, the Chapel Hill-Carrboro City Schools (CHCCS) has the second largest white-Black achievement gap in the United States and more than one in

three African-Americans living in Chapel Hill live in poverty (Reardon, Kalogrides, & Shores, 2017; UNC Center for Civil Rights, 2017).

Chapel Hill has undertaken two different infrastructure changes (reallocation of road space to support local businesses on a state-owned road in the downtown core and temporary in-street multi-use paths in residential areas) and is planning a third (tactical urbanism projects to meet the needs of lower-income, racially diverse neighborhoods).

Interviewees

I conducted two interviews with three Town of Chapel Hill employees for this case study. The first interview was with Bergen Watterson, Transportation Planning Manager, and Sara Poulton, Downtown Special Projects Manager, both of whom spearheaded the Franklin Street temporary lane reallocation. Watterson also leads the temporary in-road multi-use paths and project. The second interview was with Josh Mayo, Transportation Planning Assistant, who supports all of the projects and is helping lead Chapel Hill's tactical urbanism project in diverse neighborhoods.

Washington, DC

Washington, D.C. is a large city and the capital of the United States. D.C. is split into four quadrants, sits on the Potomac River and is surrounded by Maryland and Virginia. Between the years 2000 and 2012, D.C. was ranked the most intensely gentrified city in the U.S. by the National Community Reinvestment Coalition (CCRC) (Austermuhle, 2020). This gentrification was accompanied by displacement of largely of Black residents, reflected in a drop in African-American residents from 60 percent in 2000 to 47 percent less than 20 years later (Austermuhle, 2020). While D.C.'s population was about 705,749 in 2019, commuters increased the population by 79 percent, more than a million people, each workday (US Census Bureau, 2019a; NBC, 2021). The COVID-19 pandemic dramatically changed the streets of DC due to the shift of many jobs to remote work. According to INRIX, traffic congestion dropped in D.C. by 77 percent, one of the largest drops seen globally (NBC, 2021).

Washington, D.C. implemented three active transportation-related infrastructure programs as a response to COVID-19: a Slow Streets program, a Streateries program, and temporary extended sidewalks. Additionally, pilot Car Free Lanes for buses and cyclists were implemented in response to the pandemic.

Interviewees

I conducted two interviews with District Department of Transportation (DDOT) employees. Emma Blondin, Transportation Planner, discussed the streateries program and Charlie Willson, Vision Zero Analyst, discussed other COVID-19 related active transportation projects, primarily the Slow Streets program and car free lanes. Kim Vacca, Transportation Planner, also provided some clarifications about the streateries program over email.

Halifax, NS

Halifax is the mid-sized capital city of Nova Scotia, Canada. The city is located on a peninsula, with only five routes of entry and exit, two of which are bridges. Halifax has been growing in population and contending with accompanying challenges, including an aging population and a lack of affordable housing (Rankin, 2019). Halifax's population grew two percent to 430,512 from 2018 to 2019, a large portion due to immigration and young people (Rankin, 2019). Halifax is a largely homogenous city. In 2016, about four percent of the population identified as Aboriginal, four percent as Black, and 89 percent as white (Statistics Canada, 2016).

In response to COVID-19, Halifax implemented three new programs (Slow Streets, temporary extended sidewalks, and space for businesses) and temporarily implemented seven planned active transportation infrastructure projects through their existing tactical urbanism program (Street Improvement Pilot Project) to provide more space for people to walk, bike, and roll while staying physically distant.

Interviewees

I conducted one interview a Halifax Regional Municipality staff member. The interviewee was Tanya Davis, who is the Strategic Transportation Planning Program Manager for Halifax Regional Municipality and the lead on COVID-response transportation changes.

Oakland, CA

Oakland is a mid-sized city with a population of about 433,031 people (US Census Bureau, 2019b). Located on the east side of the San Francisco Bay, Oakland has a racially diverse population of 29 percent White (Non-Hispanic), 23 percent Black or African-American (Non-Hispanic) and 15 percent Asian (Data USA, 2018). In terms of ethnicity, 27 percent of the population is Hispanic (Data USA, 2018). Oakland is known for its thriving arts and culture and has attracted many more people in the recent decade. Between 2013 and 2017, the NCRC named San Francisco-Oakland as the most gentrified metro area in the United States, where one in three low-income neighborhoods gentrified (Hansen, 2020). In 2018, the median household income was \$76,469, a large increase from \$54,394 in 2013 (Data USA, 2018).

In response to COVID-19, Oakland implemented a Slow Streets program to provide space to safely walk, bike, and roll, which later included the Essential Places program to meet the needs of priority equity communities to safely access essential services. To provide space for businesses to safely operate outside during COVID-19, Oakland also created the Flex Streets initiative.

Interviewees

I conducted two interviews with Oakland staff members to discuss Oakland's active transportation-related response to COVID-19. The first was with Noel Pond-Danchik, Transportation Planner for Oakland's Department of Transportation (OakDOT). The second interview was with Warren Logan, Policy Director of Mobility & Interagency Relations for the Oakland Mayor's Office. Both interviewees were key players in Oakland's Slow Streets and Essential Places programs. Warren Logan also was a leader in the Flex Streets initiative, however that was not discussed in-depth in the interview.

Processes & Reactions to Cities' COVID-related Transportation Changes

Table 2. Table of programs in each city.

	Program	Timeline
Chapel Hill, NC	Temporary lane reallocation	<u>Initiated</u> : May 2020 by community petition <u>Implemented</u> : July 2020 <u>Removed</u> : likely stay until summer 2021 when street is permanently re-striped
	Temporary in-road multi-use paths	<u>Initiated</u> : Two surveys were sent out Summer & Fall 2020 by staff to determine path locations <u>Implemented</u> : First path completed on February 4, 2021 <u>Removed</u> : No plans to remove yet, still implementing
	Tactical urbanism in diverse neighborhoods	<u>Initiated</u> : Summer & Fall 2020 when staff realized the temporary in-road multi-use path criteria would not serve more diverse Chapel Hill neighborhoods <u>Implemented</u> : Currently planning, not yet implemented <u>Removed</u> : No plans to remove yet, still planning
Washington, DC	Slow Streets	<u>Initiated</u> : Staff discussed how to encourage safe active transportation in Spring 2020

		<p><u>Implemented:</u> City Council passed bill for Slow Streets in early June 2020, DDOT implemented 26 miles of Slow Streets corridors by the end of 2020</p> <p><u>Removed:</u> All Slow Streets materials will be removed in May 2021 and the program will be re-evaluated</p>
	Streeteries	<p><u>Initiated:</u> In Spring 2020, the Mayor put together committees to discuss safe re-opening strategies</p> <p><u>Implemented:</u> Summer 2020. Streeteries began being implemented after the stay-at-home order was lifted on May 29, 2020</p> <p><u>Removed:</u> Not determined, but program will likely be incorporated into future DDOT regulations with some adjustments</p>
	Car-free lanes	<p><u>Initiated:</u> Bus lanes had been planned before COVID-19, but three pilot Car Free Lanes in response to COVID-19 were announced in spring 2020</p> <p><u>Implemented:</u> Two corridors were installed in early January 2021, and one location is in the planning phase</p> <p><u>Removed:</u> Each corridor will be evaluated as a pilot and adjustments made</p>
	Temporary extended sidewalks	<p><u>Initiated:</u> Spring 2020, one of the earliest interventions of the pandemic to allow for social distancing outside essential services</p> <p><u>Implemented:</u> Spring 2020</p> <p><u>Removed:</u> The future of each location is being evaluated and determined by local resident and business feedback</p>
Halifax, NS	Slow Streets	<p><u>Initiated:</u> April 2020 Mobility Response Plan was created</p>

		<u>Implemented:</u> Spring and Summer 2020, 16 km installed in two phases <u>Removed:</u> September 2020
	Street Improvement Pilot Project (SIPP)	<u>Initiated:</u> Tactical urbanism program created in 2019 and projects were from 2017 Integrated Mobility Plan <u>Implemented:</u> Spring/Summer 2020 <u>Removed:</u> Keeping installed until replaced with permanent infrastructure in near future
	Temporary extended sidewalks	<u>Initiated:</u> Spring 2020 from Mobility Response Plan <u>Implemented:</u> May 29, 2020 in two locations <u>Removed:</u> One location on June 19, 2020 and the other was removed with Slow Streets infrastructure on September 2, 2020
	Space for businesses	<u>Initiated:</u> Spring 2020 from Mobility Response Plan <u>Implemented:</u> Summer 2020 <u>Removed:</u> Several areas were removed in September, four areas were allowed to stay in place until November 1, 2020 and program was made permanent
Oakland, CA	Slow Streets & Slow Streets: Essential Places	<u>Initiated:</u> Spring 2020 <u>Implemented:</u> April - July 2020 21.4 miles of Slow Streets installed; May - July 2020, 15 Essential Places installed <u>Removed:</u> Still in place, Slow Streets shifted to a by-request basis and Essential Places being incorporated into traffic calming programs
	Flex Streets	<u>Initiated:</u> Spring 2020 <u>Implemented:</u> Spring 2020. As of February 2021, 103 permits have been approved through the program

		Removed: Program ends June 30, 2021 but staff hopes some form of the program will be made permanent
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Chapel Hill, NC

Program: Franklin St. temporary lane reallocation

Chapel Hill's main commercial street, Franklin Street, was transformed using barriers and bollards to increase sidewalk capacity for outdoor business operations and allow pedestrians to comply with social distancing (Town of Chapel Hill, 2020). Parking and loading zones were moved one lane towards the center, reducing the travel lanes to one lane in each direction (McConnell, 2020). The project was implemented in July 2020 and will likely stay in place until a previously planned roadway re-striping project is executed in summer 2021.



Figure 1. Expanded Sidewalk on Franklin Street in Chapel Hill, NC. (Town of Chapel Hill/Sarah Poulton)

Process

The Town of Chapel Hill staff was aware of other cities and towns opening their streets to pedestrians and cyclists in response to COVID-19. Chapel Hill residents also shared news articles about this with staff members. In April, Town transportation planning and downtown

events staff internally discussed the idea of closing lanes of Franklin Street to accommodate public health measures, but were told there it wasn't financially feasible. A Chapel Hill community group created an online petition in May 2020 called "Feet on Franklin," which gathered more than 1000 signatures in support of the outermost lanes on Franklin Street to be used for social distancing while walking and outdoor dining. The advocates behind "Feet on Franklin" were well connected to the Town Council and got the attention and interest of Town Council members. Additionally, the Town's Economic Development Office became interested in the outermost lane closures to support Franklin Street businesses that were in dire need of more space to conduct business outside due to public health restrictions.

As well as these reactions to COVID-19, the Town transportation staff had already been planning a re-striping of West Franklin Street by North Carolina Department of Transportation (NCDOT) in summer 2020, which would convert the outermost lane into a protected bike lane. There were concerns about the cost of a temporary lane re-allocation just before a re-striping project, but when NCDOT pushed the re-striping project back to summer 2021, this helped make the case for the temporary lane reallocation. The Town Council passed an ordinance on June 2nd to allow for the temporary lane reallocation on Franklin Street.

Once Council passed the ordinance to allow for the temporary walkway and street changes, NCDOT had to approve of the design and materials since Franklin Street is an NCDOT-owned road. NCDOT's regulatory hoops proved challenging, time consuming, and expensive – the project cost around \$200,000.

Community engagement

While a group of community members were vital to the initiation of the temporary walkway and lane reallocation on Franklin Street, there was not a typical community engagement process for this project. Community engagement was conducted for the similarly designed NCDOT re-striping plan before the COVID-19 pandemic. The Town published press releases and descriptions on the Town's website to publicize the project. The Town was also involved in a survey that went out to Franklin Street businesses to assess what support they needed in light of public health restrictions. One interviewee felt that the Council Members passing the ordinance allowing for this project was a form of community engagement. The Downtown Special Projects Manager also continuously checks with business owners and responds to their concerns.

Public reaction

Much of the public reaction to the lane reallocation on Franklin Street was in the form of phone calls and conversations with town staff. At the beginning, there were some negative reactions to the changes, mostly in the form of calls from town residents to staff, but after the first weekend, which was also move-in weekend for UNC Chapel Hill students, town staff stopped getting complaints. Since then, most of the feedback they've received has been positive and people have expressed that they want the current configuration to stay until the permanent re-striping occurs. The interviewees noted that there has been an overwhelmingly positive reaction from the Franklin Street business community, many of whom believe their businesses would have closed without the extra outdoor space.

The most public negative reaction was a story that ran in the Daily Tar Heel (local independent newspaper run by UNC students) criticizing the Franklin Street lane reallocation as not being ADA compliant (Kenfield, 2020).

Equity considerations & perceptions

When asked about the equity considerations for this project, one interviewee acknowledged that most of the business owners on Franklin Street that benefit from this project the most are white males. They felt as though they implemented the temporary lane equally to all businesses where it was physically possible. The walkways also provided additional space for Black Lives Matter protests and Ruth Bader Ginsburg memorial walks.

However, an article in the Daily Tarheel criticized the prioritization of businesses over the accessibility of the sidewalk. Ramps were installed down to the temporary walkway where outdoor dining didn't allow pedestrians to pass on the sidewalk, but the article said these ramps weren't appropriate for many wheelchairs (Kenfield, 2020). The Town staff interviewed said they did consider ADA accessibility and felt they did the best they could with the physical limitations of the street. Town staff did reach out to the individuals quoted in the story to follow up and try to work with them but did not receive sustained responses. The interviewee said at the end of the day it was a decision to either provide a perfect ADA experience or allow restaurants to survive and they balanced it the best they could.

Program: Temporary in-road multi-use paths

Using temporary materials, such as tape, cones, and signage, the town is implementing temporary, multi-use in-road paths to accommodate for the increased walking, biking, running and rolling due to the COVID-19 pandemic. The first six-foot path was implemented on February 4, 2021 on Honeysuckle Road and Booker Creek Road (see Figure 2), both of which lack sidewalks or bike facilities (Go Chapel Hill, 2021).



Figure 2. Temporary in-road path in Chapel Hill, NC. (Emma Stockton)

Process

Town staff saw other communities providing extra space on their roads with temporary materials and heard about the crowded greenways due to increased interest in outdoor recreation during the pandemic. While the Franklin Street project took much of the staff's time and a large budget, the staff knew they wanted to do this in town-owned roads, which would be easier and cheaper than the Franklin Street project. The total for this project is approximately \$5,000 in materials, which is funded by the CARES Act. The staff chose criteria for the roads that this would be implemented in, including town-owned road, low traffic volume, and lacking walking or biking facilities. The staff narrowed the options down to what would be a "quick win" that wouldn't involve much political will or complicated design. At the time of the interview, two streets were actively being implemented. They plan to do a minimum of three and a maximum of five of these paths.

Community engagement

The Town sent out a survey in summer 2020 soliciting suggestions for streets that the public felt was crowded and would like to see one of these multi-use paths on. They received 80 responses from this survey and then narrowed the options down to five streets based on

their criteria. In fall 2020, they sent another survey out to determine what order the options should be implemented in and received 200 responses, more than they anticipated.

Public reaction

The town has an online survey available that is also advertised on the path to get public input on it. If these paths are successful, the Town will explore making them permanent.

Equity considerations & perceptions

Town staff did note that there were very few survey responses from people of color or underserved communities, which they said they were not surprised by. The few streets that were suggested in neighborhoods with more racially diverse residents weren't pursued for this project due to not matching criteria to produce a "quick win." The five streets chosen are in more affluent, white areas since they are more likely to have wider, town-owned streets.

Planned program: Tactical urbanism in diverse neighborhoods

The Town wants to use extra materials from the temporary multi-use in-road paths to provide support to more diverse neighborhoods that did not meet the criteria for that particular program.

Process

Town staff were aware of that the chosen temporary multi-use in-road paths were concentrated in whiter, more affluent neighborhoods and not serving neighborhoods with higher proportion of Black, Indigenous or people of color (BIPOC). Their plan is to talk to community members in these neighborhoods and tell them the materials they have, offer some ideas for projects and hear about what would be useful to them. Once these projects are determined, they will decide how many multi-use in-road paths they will implement.

Community engagement

Town staff know the importance of collaborating with these neighborhoods that have historically been underserved. This is why they want to talk to community leaders to gauge interest. One interviewee explained that they have two primary areas in mind and three to four organizations that they want to reach out to in case they aren't able to engage with the identified community leaders. Another interviewee said they often rely on the Housing and Community Development Department for outreach to communities of color since they have an ongoing communication and strong, established relationship. Staff also mentioned that they need to set expectations on what they can do with these limited materials and the fact that some of these may be NCDOT roads that they can't make temporary changes to.

Equity considerations & perceptions

The goal of this program is to provide active transportation infrastructure to already underserved communities that largely do not benefit from the other two programs the Town has implemented. This program is driven by equity.

Washington, DC

Program: Slow Streets

Slow Streets is a program that was implemented to support physically distanced active transportation activities on neighborhood streets by designating street segments to be open to local traffic only, with speed limits reduced to 15 MPH. Twenty-six miles of Slow Streets have been implemented in Washington, D.C.

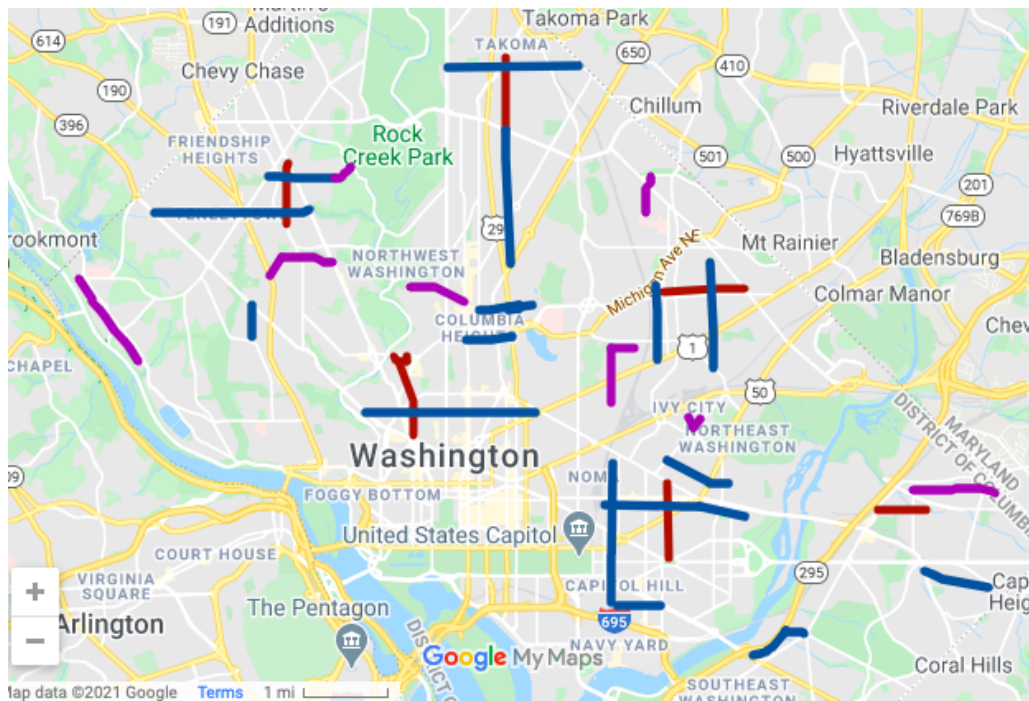


Figure 3. Map of Washington D.C.'s Slow Streets. (DDOT)

Process

The interviewees expressed that DDOT staff had been aware of other cities who were implementing Slow Streets, particularly Oakland, and wanted to address the temporary needs of the public space during the public health emergency. DDOT was also responding to requests from the public and active transportation advocates through emails and social media to provide more space for people walking and biking. The Slow Streets program was run by the Vision Zero Division, who convened departments within DDOT, such as Planning & Sustainability, Active Transportation, Safe Routes to School, Traffic Engineering and Signals, and Traffic Operations and Safety. This group created criteria for what could be a Slow Street: local street, no bus route and connection to existing facilities. Other factors that were desirable were proximity to Capital bikeshare stations, locations with many vulnerable users such as close to a school or senior center, or if it paralleled a major street and had a history of drivers using it as an alternative to the major street. They then looked at the neighborhood greenways, which the

Active Transportation Department had identified, and narrowed the options down. This program built off existing regulations that allowed DDOT to make streets local traffic only. City Council passed a bill in early June, the Connected Transportation Network Emergency Amendment Act of 2020, requiring DDOT to implement a program that prioritizes active transportation. However, an amendment was added by Ward 8 Council Member, Trayon White, restricting this program from Ward 8 (DC City Council, 2020). All Slow Streets will be removed at the end of May 2021 so that DDOT can assess lessons learned from the Pilot and then determine future steps that build on it. At a D.C. Council Transportation Committee roundtable, many testified that the program did not go far enough to provide a safe public space for those not in vehicles (Pascale, 2021).

Community engagement

DDOT did not seek suggestions for Slow Streets on the front end and instead used different proxies to get community feedback. They relied on the Community Engagement Division of DDOT, who have continuous dialogue with communities in all Wards about transportation needs, to get initial thoughts on the proposed Slow Streets network. The Vision Zero team then took plans to Advisory Neighborhood Commissions (ANC) representatives and, where applicable, Business Improvement Districts (BIDs) or Main Street organizations for feedback and decided on the approximately 26 miles currently installed.



Figure 4. D.C. Slow Street barrier and signage. (Twitter/DDOT)

Public reaction

To evaluate the program, there is an [online survey](#), which staff feel happy about the positive response on. According to an interviewee, preliminary survey results indicate that most

respondents have a positive opinion of Slow Streets and most use Slow Streets frequently, and about one quarter of respondents reported that they didn't live near a Slow Street but would like one near them. The results of the survey will be posted publicly once they are final. Fully assessing the effect of the conversion has been difficult since the number of cars in the city overall has dramatically decreased since the beginning of the public health emergency.

Some critics pointed out that drivers were ignoring the Slow Street signage and driving too fast, resulting in pedestrians and bicyclists being struck and injured on Slow Streets (Solomon, 2020). Additionally, photos circulated of the barricades moved and destroyed and the lack of enforcement of Slow Streets (Solomon, 2020). DDOT responded to these complaints by putting in more branded signage to educate drivers and others of the purpose of Slow Streets. DDOT also installed more barricades at more intersections along Slow Streets to indicate local traffic only should be on that street. As for enforcement, DDOT purposefully designed this to be "self-enforcing" and purposefully did not increase enforcement.

The Vision Zero staff did say that while Slow Streets is a narrowly focused intervention in response to COVID-19, it has led to much bigger conversations with residents about traffic safety.

Equity considerations & perceptions

This program has several equity considerations. An interviewee explained that not including external enforcement was a purposeful decision that was based on police resources as well as other considerations.

This program was also originally meant to be equally distributed across the city geographically until the amendment prohibiting Slow Streets in Ward 8. Ward 8's residents are predominantly Black, similar to several other wards, and are lower income compared to the rest of DC (Kramer, 2020). Council Member Trayon White's rationale for his amendment states "Many residents in Ward 8 have not supported bike lanes and other measures that appear to force aspects of gentrification and displacement" (DC City Council, 2020). The DDOT Community Engagement team has other ongoing traffic safety improvements in Ward 8, including a car free lane and Capital projects currently underway. Those projects enjoyed wide community and council support. Overall, DDOT felt they built equity into the program by proposing locations in all Wards and then installing them across the District after getting approvals of ANC's or receiving feedback and making changes based on that feedback.

Program: Streateries

Streateries are a program allowing restaurants to use expanded sidewalk space, alleys, parking lanes, and travel lanes for table seating (DDOT, 2020d).



Figure 5. D.C. Streateries in the Dupont Circle neighborhood. (Joe in DC)

Process

Streateries were initiated due to a recommendation made after the Mayor's office put together committees to discuss how to reopen once the stay-at-home order was lifted. Since D.C. has wide right of ways and traffic was dramatically decreased, it was determined that this space could be reallocated for restaurants to be able to conduct more business due to public health restrictions. There was an existing parklet program, that required the space be used for the public, so these guidelines were adapted for restaurant use and to keep with public health standards. These guidelines were revised for the winter in collaboration with the Department of Public Health. The Mayor's Office of Nightlife and Culture offered a \$6,000 winterization grant for restaurants to create or improve their streateries. DDOT provided jersey barriers and allowed restaurants to paint them and also bought heaters to provide to restaurants. DDOT streamlined the application process for any restaurant to apply for a Streatory.

Streateries and Slow Streets were purposefully not open until after the stay-at-home order had ended, which occurred on May 29, 2020 (Moore & Hartner, 2021). Mayor Bowser also did not want to completely close streets, since in D.C., this has a connotation with block parties and crowds of people. One neighborhood with very strong advocates, Adams Morgan, did circumvent the typical approval process and got approval from the Director to pedestrianize a portion of a commercial corridor for one weekend. The crowds that gathered were criticized for not following public health guidelines and open streets have not been authorized since.

Community engagement

DDOT has assisted any business that is eligible and wanted a Streatory through the application process. However, most of their advertising is through BIDs and Main Streets and those organizations apply on behalf of their restaurants. The interviewees mentioned that this has been the most common way for restaurants to get streateries.

DDOT also worked with many community partners to create and update streaterly guidelines and regulations throughout the COVID-19 pandemic, including the Restaurant Association of Metropolitan Washington, the DC Department of Health, and the Alcohol Beverage Regulation Administration (ABRA).

Public reaction

In the moveDC long term plan, DDOT solicited public comments on this program and flexible use of public space to both evaluate the program and likely plan to make it permanent. Almost all public feedback so far has been positive, based on information from DDOT. The only negative feedback has been in regards to lack of enforcement of Streaterly guidelines, such as keeping bike lanes clear and pedestrians and patrons safely distanced.

DDOT sent out a [survey](#) to businesses in November 2021 through social media, community partners including BIDs and Main Street organizations, and a listserv of interested applicants to both promote the program and get feedback. This survey will remain open through the end of the COVID-19 public health emergency. Based on the results so far, while some businesses weren't aware of the program, most businesses said they would have closed without it, particularly because D.C. has gone through extended periods of not allowing any indoor dining.

Equity considerations & perceptions

Restaurants that are a part of a BID or Main Street, particularly in wealthier areas such as Georgetown, were at a clear advantage for this program. Despite DDOT's outreach to businesses that aren't part of these organizations, and the streamlined permitting system, it appears that less lucrative businesses aren't benefitting from the program as much. There is also a need for these restaurants' surrounding physical environment to fit certain constraints, such as wider sidewalks. For example, Anacostia, a historically Black neighborhood, has streets that were not redeveloped like the rest of the cities' streets due to a long history of disinvestment by the D.C. government (Kratz, 2019). Despite this, there are now two streateries east of the Anacostia River, including Busboys and Poets on Martin Luther King Jr. Ave SE in Ward 8 (Brice-Saddler, 2021). DDOT has also worked with the Anacostia BID to find other ways to support businesses where they found spaces for restaurants to have outside events in a separate space and doing a physically distanced art walk.

The manager of this program expressed that moving forward, equity will play a large role and they want to ensure they are accommodating all businesses, not just those with the resources to be in a BID or a loud community group supporting them.

Program: Car Free Lanes

DDOT installed bus and bike improvements in multiple corridors in 2020 and 2021, including Car Free Lanes on two high priority corridors as a part of DDOT's COVID-19 response and recovery. Each lane was painted red and says, "BUS ONLY" with white bicycle sharrow lane markings (DDOT, 2020b). This program was not discussed in-depth in the interviews.



Figure 6. Car Free Lane in Washington D.C. (Twitter/DDOT)

Process

One of the interviewees explained that DDOT had existing bus lanes initiated before COVID-19, and during the public health emergency, the agency also executed pilot projects in more locations. This is part of DDOT's plan to make transit and biking more viable along these priority corridors as the city reopens. Corridors for the pilot were chosen from DDOT's network of bus priority corridors based on the criteria of high ridership, congestion, and requiring minimal design changes to facilitate a quick delivery. Three corridors were announced in spring 2020. Two of the projects were implemented in late 2020 and one location is in the design phase (DDOT, 2020b). These are meant to be pilot projects and will be adjusted over time. The fine for driving or blocking these lanes is \$200 (DDOT, 2020b).

Community engagement

DDOT issued a Notice of Intent for the projects to formally solicit feedback, posted signs at the bus stops along the corridors, coordinated engagement with the business improvement districts, passed out flyers to businesses, left postcards on windshields of parked vehicles, and held virtual meetings with residents and stakeholders.

Equity considerations & perceptions

One of these Car Free Lanes was implemented in Ward 8, connecting the historically Black Anacostia and Congress Heights neighborhoods. Additionally, supporting transit will promote equitable outcomes. For example, of 14th Street NW bus riders, where DDOT installed bus and bike improvements in 2020 that were similar to Car Free Lanes but were not part of the

Covid response, 43 percent are low-income and 78 percent are part of a minority group (DDOT, 2020a).

Program: Temporary Extended Sidewalks

In one of the first COVID-19 responses to support social distancing, DDOT installed barriers to extend sidewalks outside essential businesses. This program was not discussed in-depth in the interviews.



Figure 7. Temporary extended sidewalk in Washington D.C. (DDOT)

Process

At least ten expanded sidewalks were installed around the city at the start of the COVID-19 pandemic. This program was not expanded since then (DDOT, 2020d). According to DDOT, the future of the extended sidewalks is being determined on a case-by-case basis. Some will be removed, others will stay with the same materials, and some may be made permanent.

Community engagement

Residents were asked to submit requests to ANC or BIDs if they wanted an extended sidewalk, who then sent suggestions to DDOT (DDOT, 2020d). The future of each extended sidewalk location is based on resident and business feedback.

Halifax, NS

Program: Slow Streets

Slow Streets is a program that was implemented to reduce traffic and speed on local streets to create space for walking, rolling, and cycling during COVID-19 by designating streets as “local traffic only” (Halifax Regional Municipality, 2021). Halifax installed 16 km of Slow Streets in their Regional Center (HRM, 2021a).



Figure 8. Halifax modified Slow Street set-up. (Halifax Regional Municipality)

Process

Staff was in discussions about how to respond to COVID-19 when the Regional Council put forward a motion asking staff to think about how to implement active transportation infrastructure quickly. A task force was created in April 2020 to determine how to respond to COVID-19 in terms of mobility and public spaces (HRM, 2021a). The task force included Planning & Development, Transportation & Public Works, Halifax Transit, Corporate Communications, and Nova Scotia Public Health (HRM, 2021a). Four key areas were identified to focus on in Halifax’s Mobility Response Plan:

- Space to Move
- Space to Load
- Space to Queue
- Space to Support Business

The Slow Streets program was one part of Halifax’s “Space to Move” response, which sought to provide space for active transportation, particularly due to reduced transit operations (HRM, 2021a). Staff was aware of other jurisdictions’ Slow Streets programs, particularly San Francisco’s, and learned more about the programs through the National Association of City Transportation Officials (NACTO). Residents were also posting on social media and emailing staff, pressuring them to act and pointing to what other cities were implementing.

Halifax determined the location of Slow Streets by following their All Ages and Abilities (AAA) Regional Cycling Network, which was a part of their 2017 Integrated Mobility Plan (IMP) and Active Transportation Priorities Plan (HRM, 2021a). Preferred criteria included streets that were designated Local Street Bikeway routes or a local street parallel to a proposed bikeway on a major street, connections to existing active transportation infrastructure, and streets without transit service and stops (HRM, 2021a). The 16 km of Slow Streets implemented were indicated at 64 intersections by cones with a “local traffic only” sign and a “Slow Street” sign, explaining the program (HRM, 2021a). The program was not regulatory, so the signage was just a suggestion and the program was not enforced. The Slow Streets program ended in September, 2020 when the barrels were removed due to hurricane and to evaluate the program.



Figure 9. Map of Halifax's Slow Street network. (Halifax Regional Municipality)

Community engagement

There was no community engagement for the initial roll out of Slow Streets. The IMP, which included the AAA bike network, was created with community engagement. So, the interviewee said that since the locations were based on previously approved routes for bike facilities, the fact that the materials were temporary, and the limited time available, they did not pursue the typical community engagement that they would when implementing the AAA bike network permanently. After the initial roll out, community engagement was conducted

with several advocacy groups to get feedback on the first phase and plan for the second phase (HRM, 2021a). The interviewee knew engagement needed to happen in any historically marginalized communities where Slow Streets would be implemented. So, staff spoke with community leaders in an African Nova Scotian neighborhood where the AAA network had proposed bikeways. This was successful and a Slow Street was implemented there during the second phase. Staff also tried to reach out to leaders in another African Nova Scotian neighborhood where the Active Transportation Priorities Plan, which the engagement has not begun for yet, had a proposed bikeway. Due to the difficulty in forming trust through virtual engagement, they did not pursue implementing a Slow Street there.

Public reaction

Staff received feedback from the public after the first rollout of Slow Streets, which prompted them to roll out additional Slow Streets, increase signage, include additional barrels, and move both barrels to the side of the street instead of the middle of the street (HRM, 2021a). Initially, the Slow Streets program had positive feedback. Staff heard there was more use of the spaces for active transportation when they were first implemented (HRM, 2021a). However, the lightweight materials were moved and damaged often and staff had a difficult time monitoring and managing the signs at 64 intersections (HRM, 2021a). This led to drivers adhering less to the “local traffic only” suggestion and less people feeling comfortable and safe walking, rolling, and biking on Slow Streets (HRM, 2021a). Due to this feedback, Halifax proposed to Council that if Slow Streets are implemented again, more permanent materials, such as planters, bollards, or jersey barriers should be used instead of barrels.

Public feedback was collected in several ways, including a Shape Your City map where people could map requests for interventions, an email and phone line, and social media (HRM, 2021a). Between May 25th and August 10th, 2020, 303 requests were related to the “Space to Move” portion of the Halifax Mobility Response Plan (HRM, 2021a). Fifty-nine percent of these requests were categorized as “Designate as Slow Street” and two percent were for “Extension of Slow Street” and one percent were for “More Slow Street Signage” (HRM, 2021a). In the city’s interim report to the Regional Council, all requests are broken down by neighborhood and street (HRM, 2021a).

A final wrap-up survey was released in September 2020, when the Slow Streets program ended, to capture feedback on the Mobility Response Plan (HRM, 2021a). The survey was promoted through social media and those who filled out Shape Your City via email (HRM, 2021a). The survey received 207 responses (HRM, 2021a). Over 65 percent of respondents were at least somewhat supportive of the goal of the Slow Streets program (HRM, 2021a). About 61 percent of respondents thought that the materials used (traffic barrels and signage) were not effective, which was echoed as the main complaint in the comments (HRM, 2021a). 64 percent of respondents were in favor of using more robust materials for a future Slow Streets program, while 90 percent of those who were not in favor did not support the goals of the program (HRM, 2021a).

Equity considerations & perceptions

As outlined in the Community Engagement section, Slow Streets was implemented in one African Nova Scotian neighborhood where engagement had already begun before COVID-19 pandemic, but not in another African Nova Scotian neighborhood where there wasn't a previous relationship of trust formed before the pandemic. The interviewee believes that the Slow Street locations being based on the AAA bike network was not equitable and didn't benefit the communities that needed the infrastructure the most and who relied on walking or taking transit. Staff received criticism that the placement of Slow Streets were in areas that supported affluent residents that already had many mobility options (HRM, 2021a). The interviewee expressed regret over the lack of equity and the program and one of the main lessons learned in the interim report to the Regional Council is "Equitable distribution of projects throughout and outside of the Regional Center" (HRM, 2021a). In the proposal for the next year, staff outlined the future Slow Streets program having a smaller scope and focusing on priority corridors based on equity criteria and outcomes in and outside the Regional Center, particularly communities that are more reliant on non-vehicular modes of travel (HRM, 2021a).

Program: Street Improvement Pilot Project (SIPP)

Street Improvement Pilot Project (SIPP) is Halifax's tactical urbanism program, which was established in 2019 (HRM, 2021a). Seven previously planned active transportation infrastructure projects were implemented through SIPP as a part of the city's COVID-19 response.

Process

SIPP was already established before COVID-19, however the only projects that were implemented through the program before the COVID-19 pandemic were bump outs at intersections. Staff wanted to respond to the public's requests for more room to safely walk, bike and roll. As part of the "Space to Move" portion of the Mobility Response Plan, staff decided to accelerate planned projects from the 2017 Integrated Mobility Plan (IMP) as a part of the SIPP to act quickly and save on costs (HRM, 2021a). The seven projects they chose to implement temporarily included protected bike corridors and safer intersections for pedestrians using temporary materials, such as paint, bollards, concrete materials (HRM, 2021A). One temporary protected bike lane was on a major corridor that runs north-south into and out of downtown Halifax. The temporary infrastructure will be replaced with permanent infrastructure in the near future.

Community engagement

The seven projects implemented through SIPP were a part of the IMP, which had its own community engagement process before being adopted in 2017. Typically, staff would have conducted engagement in the locations as these improvements were made. However, due to the desire to implement the interventions quickly and their temporary nature, no community engagement was conducted.

Public reaction

The final survey Halifax distributed did not focus on evaluating the SIPP projects particularly (HRM, 2021a). However, the interviewee said the feedback they received on these projects were positive. Since these projects were planned to happen anyway, there was not any reported controversy around them. Some respondents to the survey expressed that the projects weren't bold enough and needed to be permanent (HRM, 2021a).

Equity considerations & perceptions

These projects were all located in the Regional Center due to limited staff capacity, following the AAA bike network and future capital projects, and access to hospitals and other essentials services downtown (HRM, 2021a). However, HRM's (2021a) report acknowledges this was not equitable and did not benefit areas that rely on non-vehicular modes of travel. The recommendation in HRM's (2021a) report is for the 2021 Mobility Response Plan to focus on equitable access to mobility options, including SIPP.

Program: Temporary Extended Sidewalks

Halifax installed two temporary extended sidewalks using barricades, planters, and signage as one of its first responses to COVID-19 to support physical distancing (HRM, 2021a). This program was not discussed in-depth in the interviews.



Figure 10. Halifax Extended Sidewalk. (Halifax Regional Municipality)

Process

After seeing other municipalities extend sidewalks at the beginning of the COVID-19 pandemic, staff determined criteria to implement this in Halifax: pedestrian volume pre-COVID-19 and connection to essential services (HRM, 2021a). Two locations were chosen and

implemented using temporary barricades, planters, and signage on May 29, 2020 (HRM, 2021a). One location allowed staff to pilot design elements for a planned streetscape project (HRM, 2021a). Materials were removed from one location on June 19, 2020 and the other was removed with the Slow Streets infrastructure on September 2, 2020 (HRM, 2021a). Similar to Slow Streets, staff had a difficult time managing the lightweight materials and suggest more robust barriers for future temporary installations (HRM, 2021a).

Community engagement

The public was encouraged to add to the Shape Your City online map to show where they'd like to see active transportation interventions and 25 respondents requested temporary expanded sidewalks (HRM, 2021a).

Public reaction

One extended sidewalk was removed after feedback from the public and the local BID who felt that the existing sidewalk was wide enough for that location (HRM, 2021a).

Public perception of this initiative was overall positive, with a few common complaints (HRM, 2021a). The Spring Garden Area Business Association posted a survey on Twitter and Instagram to gauge public opinion of the initiative (HRM, 2021a). Sixty-seven and sixty percent were supportive, respectively (HRM, 2021a). Some respondents reported that the ability to physically distance while walking and rolling made them feel safer (HRM, 2021a). Those that weren't supportive of the program were critical of cost, impact on loading and movement, or felt that the initiative wasn't bold enough (HRM, 2021a).

Equity considerations & perceptions

One of the main challenges reported for the temporary extended sidewalks was a lack of accessibility for those with limited mobility and using mobility devices (HRM, 2021a). Signage was placed along the sidewalks requesting able-bodied individuals use the expanded sidewalk portion to allow others to use the sidewalk (HRM, 2021a). However, this was not always followed and staff recommended a focus on accessibility for future temporary installations (HRM, 2021a). Additionally, both locations were located in the Regional Center, which the HRM (2021a) report considered inequitable and missing communities that these projects could have a bigger impact on. Two bus stops at one location and one at the other location were closed to accommodate the sidewalks, potentially impacting transit-dependent populations (HRM, 2021a). One of the extended sidewalks was removed when Black Lives Matter protests took place on that street and replaced afterward (HRM, 2021a).

Program: Space for Businesses

The fourth area of the Mobility Response Plan, "Space to Support Business," centered around providing businesses, primarily restaurants, outdoor space for dining and queuing (HRM, 2021a). This program was not discussed in-depth in the interviews.



Figure 11. Block closed for outdoor dining in Halifax. (Halifax Regional Municipality)

Process

Due to restrictions on indoor dining, restaurants and bars were in need of outdoor space. Staff worked with BIDs in downtown Halifax to determine where space could be provided to businesses for outdoor dining and queuing (HRM, 2021a). Parking lots, parking spaces, car lanes, and full street blocks were closed to cars to allow for pedestrians and outdoor business operations (HRM, 2021a). While several areas were removed in September, four areas were allowed to stay in place until November 1, 2020 (HRM, 2021a). The Regional Council approved a continuation of this program permanently (HRM, 2021a). Businesses can apply annually for a seasonal café license, which is valid between April 15th and November 15th (Halifax Regional Municipality, 2021b). Staff will need to determine the feasibility of providing this extra space as traffic levels increase (HRM, 2021a).

Community engagement

Community engagement for these projects was focused on local BIDs and the impacted businesses (HRM, 2021a). However, the public did provide feedback on where they'd like more space to support businesses via the Shape Your City online map (HRM, 2021a).

Public reaction

Public reaction was overwhelmingly positive to these interventions (HRM, 2021a). In the final Mobility Response Plan survey, 73 percent of respondents said the additional outdoor dining space greatly contributed to their sense of safety and well-being when dining out (HRM,

2021a). Additionally, 87 percent of respondents said they felt the spaces either greatly or somewhat contributed to street life (HRM, 2021a). However, some critics were disappointed in the use of public space for private businesses instead of purely for mobility purposes (HRM, 2021a). The interviewee noted that some downtown businesses were not able to have outdoor space due to physical constraints and other businesses were challenged by more limitations on loading and unloading goods right in front of their business when the streets were closed.

Equity considerations & perceptions

Some survey respondents noted the need for extended patios to be more accessible to patrons with disabilities (HRM, 2021a). These initiatives only took place in downtown and for businesses that are represented by a BID (HRM, 2021a). This leaves out many businesses outside the Regional Center that may have fewer wealthy owners and less political influence (HRM, 2021a).

Oakland, CA

Program: Slow Streets & Slow Streets Essential Places

Oakland rolled out 21.4 miles of Slow Streets, which provided more space for physically distant walking, biking, and other physical activity on local streets by using temporary barricades and signs, including “Road Closed to Thru Traffic” (OakDOT, 2020). After adapting to community feedback, OakDOT added the “Essential Places” element to the Slow Streets program, which used temporary materials to allow for safer crossings to essential services (OakDOT, 2020). There have been no fatal or severe pedestrian or bicyclist involved crashes related to any Slow Streets (OakDOT, 2021).

Process

Both interviewees described the process of the conception and initiation of Slow Streets. Only months before the COVID-19 pandemic, there were a series of high-profile crashes, including a pedestrian fatality who was a mother picking up her child from school. This led to a call for more traffic safety measures, particularly in East Oakland where many of these fatal crashes were occurring. A few months later, Oakland’s Mayor and her office wanted a quick response to COVID-19 and the stay-at-home order. Residents were complaining of overcrowding in parks and public spaces for exercise and frustrations of parents and children working and doing school from home. The residents reaching out to the City wanted more space for physically distant activities. Oakland had temporarily closed streets in the past for events and were aware of other countries’ programs of permanent street closure to provide public space for residents. Advocacy groups, such as Walk Oakland Bike Oakland (WOBO), were also calling for the City to take action to provide space for pedestrians and cyclists and had pushed for similar programs for many years. Staff in the Mayor’s Office and OakDOT then pushed Slow Streets forward to respond to these demands they were receiving.

Slow Streets locations were distributed across the city, as seen in Figure 12, and determined by the recently finalized Bike Plan. Between April and July 2020, 21.4 miles of Slow

Streets were added on 21 corridors (OakDOT, 2021). This corridors included 538 barricades, 638 cones, and 1,496 Slow Streets posters (OakDOT, 2021).

A new part of the Slow Streets program, Essential Places, was added in May 2020 after there was pushback, particularly from Black residents in East Oakland, about the lack of community engagement for Slow Streets (OakDOT, 2021). Essential Places also used temporary materials to provide safer crossings and access to essential services, such as grocery stores, public food distribution sites, and COVID-19 test sites (OakDOT, 2021). To determine locations, access to essential services was overlaid with the City's High Injury Network and highest-priority neighborhoods based on race and income (OakDOT, 2021). Fifteen Essential Places were added between May and July (OakDOT, 2021). This included 238 cones, 48 barricades, and 20 signs (OakDOT, 2021). Four hundred eighty COVID-19 resource posters were installed in both Slow Streets and Essential Places (OakDOT, 2021). As of mid-September 2020, Oakland spent \$160,000 on Slow Streets and Essential Places material costs, such as cones, barricades, signs, and printing (Fermoso, 2020).

One interviewee mentioned that Slow Streets implementation has shifted to a by-request basis for residents and community organizations. Oakland also wants to create pop-up Slow Streets in priority neighborhoods with a focus on programming for children (OakDOT, 2020). OakDOT's interim report from September 2020 also mentions that OakDOT will "institutionalize prioritizing Essential Places to address traffic safety and community needs" (OakDOT, 2020).

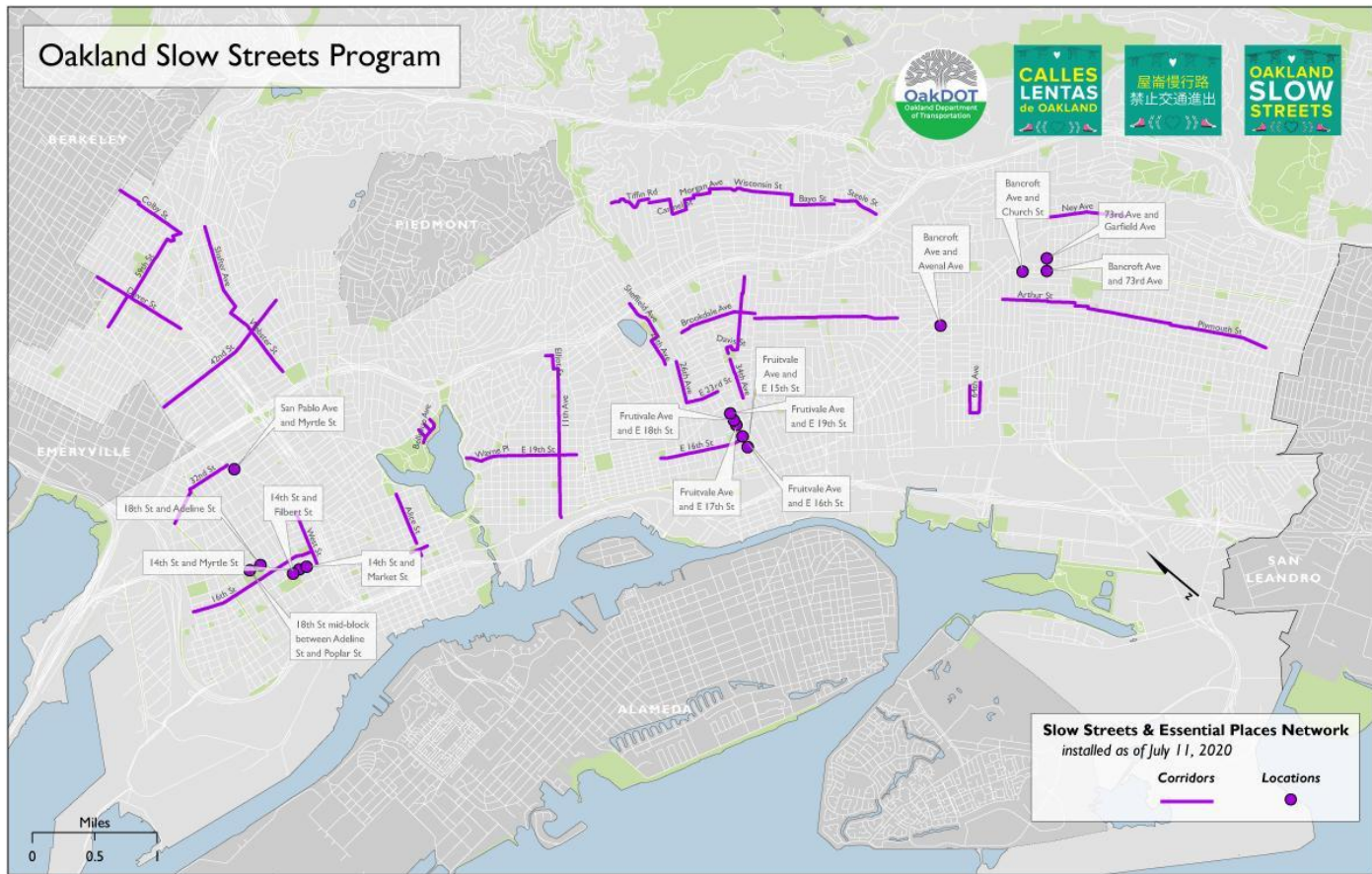


Figure 12. Map of Oakland's Slow Streets and Essential Places Network. (OakDOT)

Community engagement

One interviewee expressed that there was a mandate from the Oakland Mayor's office to move quickly on the Slow Streets program. The other interviewee explained that Oakland had just finalized their Bike Plan with an intensive community engagement process. So, they decided to use the neighborhood bikeways that were created in collaboration with community organizations and residents as the locations for Slow Streets.

After the initial roll out of Slow Streets, community engagement was conducted to both expand Slow Streets with community partners and to dialogue with primarily East Oakland community organizations and residents about concerns over Slow Streets (OakDOT, 2021). From these conversations, several more Slow Streets were implemented, including collaborations with a senior walking club and advocacy organization and the Chinatown Lincoln Recreation Center (OakDOT, 2021). Essential Places was also generated from the conversations with East Oaklanders to meet their particular traffic safety needs (OakDOT, 2021).

Public reaction

The initial Slow Streets program instigated strong reactions, both positive and negative, largely based on geographic, racial, and income demographics. The interviewees explained that the initial negative reaction from East Oaklanders, the majority of whom are Black, was largely

due to a lack of inclusion in the process. Other negative reactions came from the perception that there were more pressing COVID-19-related concerns, such as testing. One interviewee felt overwhelmed by both the negative and positive feedback the City received on Slow Streets.

The City addressed the criticisms about the program's lack of engagement and other criticisms in several ways (OakDOT, 2021). For example, in response to some of the public's concern that the City should instead prioritize spending on more direct COVID-19 projects or confusion about the allowance to use Slow Streets during a stay-at-home order that an interviewee mentioned, OakDOT put public health communication signs on the Slow Streets barriers (OakDOT, 2021). The interviewees spoke about the many challenging conversations that took place with the community organizations and leaders that were critical of the program in an effort to address the feelings of betrayal and hurt the East Oakland and Black residents particularly felt. These organizations and individuals continued to provide feedback and helped both adapt the Slow Streets program and create the Essential Places program. An interviewee explained that after hearing the feedback that some East Oaklander's dislike for Slow Streets was based on the temporary materials looking like construction materials when the neighborhood had a long-standing construction project, the city applied and received a grant for an East Oakland community artist to paint the barriers and create new road signs, one of which changed the standard pedestrian figures to be two Black girls playing.

To evaluate the programs, OakDOT had multiple data sources. OakDOT put out the General Community Feedback Survey on April 14, 2020 and shared the [results](#) online. Other sources included maintenance reports, materials costs, and interviews with maintenance staff, crash data and traffic counts, intercept surveys, other supplemental surveys about Slow Streets placement, an Online Feedback Map, Twitter, and Oakland 311/See Click Fix (Oakland's portal for residents to report maintenance or infrastructure issues) (OakDOT, 2021). Overall, these responses from these sources were positive regarding Slow Streets (OakDOT, 2021). Seventy-seven percent of respondents said they supported the Oakland Slow Streets program in the General Community Feedback Survey (OakDOT, 2021). However, staff's interim report and an interviewee noted that respondent support for the program was higher for residents that were white, higher income, without disabilities, and living in North Oakland (OakDOT, 2021).

Oakland's Slow Streets program also received a large amount of media attention (OakDOT, 2021). However, as an interviewee pointed out, the more equity-focused Essential Places part of the program was not discussed or replicated as much as the original Slow Streets program.

Equity considerations & perceptions

As mentioned in the sections above, a large part of the Slow Streets program was intimately tied to equity, in particular racial equity, and a reflection of the historical context of the city. After hearing the swift, negative reaction from residents, particularly from Black, East Oakland residents, the city engaged with community leaders and organizations to discuss their views. One interviewee reflected on how the residents were emotional and clearly felt hurt and betrayed over lack of inclusion in the process, even though staff felt as though the engagement they did on the Bike Plan was sufficient. The interviewee felt as though the start of these talks were venting but eventually moved into a problem-solving space. They determined that the East Oakland community was made up of many essential workers and the idea of Slow Streets

for exercise and recreation did not resonate, but when the language of community gatherings, such as a barbeque, were used, this resonated more. However, some residents were then confused about how Slow Streets aligned with public health measures. The community was also more interested in traffic calming than recreation. These conversations led to the idea for Essential Places, where residents could reach important locations safely, particularly when crossing the street. Continued conversations with community leaders, particularly high-level City staff, helped ease the tension and make the programs work to meet different community needs. One interviewee felt that Essential Streets likely would not have been created if the community did not have something to react to and that it was the fact that people could react to something concrete in the street, instead of an abstract concept, that the programs ended up being a success. The interviewee felt that a turning point for Slow Streets in East Oakland was the addition of the community artist to the project, which made the community members feel seen. The interviewee pointed out that after a community feeling so disenfranchised and forgotten over the years, even seemingly small changes can make a huge impact.

Accessibility for individuals with disabilities was another challenge of the project, with support for the program 27 percent lower for those with disabilities than those without disabilities (OakDOT, 2021). Survey respondents with disabilities expressed concerns about safety, restricted access to businesses, lack of communication about the program, and confusion of right of way between modes (OakDOT, 2021). However, other respondents with disabilities said they felt safe with additional space to move (OakDOT, 2021).

Program: Flex Streets

Oakland created the Flex Streets initiative, which allows retail businesses and restaurants to use City sidewalks, parking lanes, and roadways for business (Rodas, 2021). This initiative was not discussed in the interviews.

Process

The City rewrote four or five permit programs quickly to support local businesses (Rodas, 2021). One hundred and three permits have been approved through the program as of February 2021 (Rodas, 2021). The City is using CARES Act funds to support local organizations to provide technical assistance to businesses that need assistance in setting up outdoor spaces (Rodas, 2021). There are no official plans for an extension past the emergency public health order, but staff hope that some form of the program will continue (Rodas, 2021).

Public reaction

The business community's reaction was overwhelmingly positive to this new permitting process (Rodas, 2021).

Equity considerations & perceptions

Most of the initial Flex Streets were in North Oakland and downtown, which are not priority equity areas of Oakland. However, overtime, Flex Streets permits were distributed to more geographic areas of Oakland (Rodas, 2021). However, barriers still exist for businesses

that do not have the help of a BID or owners that speak a language other than English (Rodas, 2021).

Analysis

Several themes emerged from analyzing the interviews using qualitative data analysis software. These themes include what information sources the cities used to determine their own active transportation-related response to COVID-19, which included peer cities and professional organizations. Cities bypassing community engagement to implement programs faster, pivoting from inequitable impacts, and mixed public reactions were common threads throughout many of the programs. Cities also had both similar and unique barriers to success and challenges they faced in their responses. These five themes are explored in the following analysis section. The themes are illustrated by quotes from the interviewees, which have been lightly edited for clarity.

Information Sources

Peer Cities

Discussion of peer cities' active transportation programs in response to COVID-19 appeared in every interview at least once. Washington, DC, Halifax, and Chapel Hill mentioned they were aware of Oakland's and San Francisco's Slow Streets programs and other programs to promote walking and biking during COVID-19, including in Portland and Paris. There was also discussion of pressure to implement similar programs either internally or from the public, and also some comparisons that arose. For example, DDOT staff in Washington, D.C. said they partially felt pressure to implement programs in order to live up to what their peer cities were doing. They mentioned that people often brought up Oakland's Slow Streets program to them before they implemented their own Slow Streets program.

Furthermore, Oakland criticized other cities' handling of Slow Streets programs' equity concerns:

There were a number of cities that took a lot of time to talk it through and I don't think their programs were very equitable because they essentially didn't launch in low-income neighborhoods. There was so much pushback initially they just said, "oh we're just not going to do it." And I think that's kind of messed up. Some cities said they were going to do it and never did anything – that's a problem. (O_WL)

Professional Organizations

Both Washington, DC and Halifax mentioned the importance of the National Association

of City Transportation Officials (NACTO) and other professional organizations in sharing programs other cities were implementing in response to COVID-19 and facilitating conversations. The interviewee in Halifax mentioned multiple organizations that aided in their process:

Yes, we participated in a few different webinars through organizations like Institute of Transportation Engineers, TAC (Transportation Association of Canada), and NACTO. We're a member city of NACTO and found it very valuable to make connections and review their list of who's doing what and when and what type of tools were being used. That was certainly helpful. (H_TD)

Bypassed Community Engagement

None of the four cities did a standard community engagement process for their programs in response to COVID-19. Very few programs did any initial community engagement and in those that did, it was for a program implemented after other initial programs. For example, Chapel Hill launched two surveys for the public to help determine locations of temporary in-road multi-use paths street both after the Franklin Street intervention had been implemented and after they determined that in-road multi-use paths was the intervention they would pursue. Oakland also did extensive, continuous engagement with community organizations to create Slow Streets: Essential Places after pushback on the lack of initial community engagement for Slow Streets.

When asked about community engagement, the cities prioritized providing the infrastructure and programs quickly over taking the time for a standard public engagement process. There was also a sense that since these programs were temporary, it was less necessary to do a full engagement process. If there was pushback, they could be changed or removed. This was the case in Halifax:

Based on the temporary nature of the materials, the direction from HRM Regional Council, and on approved policy documents like the Integrated Mobility Plan, we just implemented it. We felt we didn't have time to fully engage with residents. We also felt that the materials were all temporary, it was important to do something quickly and if there were any concerns, we could remove the materials quickly. (H_TD)

Both Oakland and Halifax used planned bike networks from recently completed plans with a standard community engagement process to determine locations of Slow Streets:

Frankly, to some degree, we had talked to the community. Depending on how you look at it, just a few months before we had put a bow on our bike plan that had cemented these streets that all of these people just said they wanted to see made safer for people to walk and bike safely. The neighborhood bikeways - we didn't make those up - they were from a plan that we just finished, [basically] yesterday. (O_WL)

Some cities relied on elected officials as a proxy for community engagement. In DC, from an equity point of view, DDOT staff felt that if the agency simply put out an open call for suggestions, it may not have gotten responses from all parts of the District, particularly on relatively short notice. So DDOT proposed potential Slow Streets in all Wards and shared it with the neighborhood-level elected officials (ANC Commissioners). DDOT decided which locations to prioritize for Slow Streets based on ANC commissioner feedback. Chapel Hill mentioned their City Council as one form of community engagement:

It was so tied up with the restriping plan that we didn't do a lot of like, "tell us what you think about maybe putting a temporary walkway on West Franklin." We were already in the process of getting input for the restriping in general. We did do an in-person [meeting] for that before the pandemic and then we did a virtual survey that people could respond to. But we didn't do any really before it was implemented. I mean Council voted on it, so in a way that's from the community asking for it because it bubbled up from the community organization to the Council level and got approved. So, if anything I'd say that's probably the biggest community input pre-implementation. (CH_SP)

A sub-code of "Community Engagement" was "Community Engagement: Equity Considerations," which was coded for all of the cities. One of the biggest criticisms and concerns with not doing a full community engagement process is how that affected historically underserved populations, particularly BIPOC communities. Oakland received the most criticism for rolling out their Slow Streets program without the engagement of the BIPOC community. Halifax engaged an African Nova Scotian community where they implemented a part of their Slow Streets program. However, they found it challenging to build trust over virtual platforms with other communities where there wasn't previously established trust and familiarity before COVID-19:

We knew that we couldn't do a lot of engagement as there wasn't a lot of time. When we go into communities that are maybe marginalized, or have different social, economic dependencies, we really need to have extensive conversations before implementing ideas. We knew that was going to take more time, so we did a two stage rollout on the Slow Streets. The first stage was based on the All Ages and Abilities bike network in the

Integrated Mobility Plan and things that we already kind of knew and had a feeling for from the communities. And then the second phase... we did a little bit of engagement for one of the streets where it was through a historically African Nova Scotian community, we did go in and talk to some of their community leaders before we implemented the Slow Streets on those streets... one of the recommendations that we may put forward in our February report is, how do we how do we make our program more equitable because we didn't have the opportunity to do that this time. (H_TD)

COVID certainly limited our ability to engage with communities as we were not able to meet people where they were. Virtual platforms make it more difficult to build trust. (H_TD)

Halifax was the only city that mentioned trying to do virtual community engagement with a community they didn't already have a relationship with, which they found difficult. Oakland did successfully have meetings with community leaders and organizations in East Oakland virtually. However, they generally had relationships with these individuals and groups prior to COVID-19. Most interviewees expressed the importance of community engagement, particularly with marginalized groups, but also felt that they did their best in the time constrained situation they were in.

Pivoting from Inequitable Impacts

Implemented during a period of time that brought conversations around racial equity to the forefront, these programs often became flashpoints for conversations around equity and active transportation. Conversations about equity in the interviews were largely surrounding Slow Streets programs, indicated by the highest code co-occurrence of "Equity Impacts" and "Slow Streets." Overall, low-income neighborhoods with higher proportions of BIPOC were less likely to get Slow Streets in these cities for various reasons. Washington, DC was not able to implement Slow Streets in the Ward with the highest percentage of BIPOC and lowest-income due to a Council member's legislation and also was not able to implement many streateries in the same Ward due to the physical constraints. While DDOT attempted to mitigate these restrictions for some of its already most marginalized residents, Oakland's mobility policy director criticized the DC Councilmember's blocking of Slow Streets in his Ward:

I know about the DC case. I just totally disagree with that. I think that whenever people align traffic safety improvements with the perception of gentrification and forms of displacement, to me that sounds lazy. 'Cause to me what you're saying is, "I'm going to totally disregard the housing policies that cause people have instability and assign a relatively insignificant improvement to be the harbinger of everyone is going to have to

move out.” That is mentally lazy and probably from a policy standpoint, irresponsible.
(O_WL)

Physical constraints in neighborhoods with more BIPOC and lower-incomes impacted the ability to meet these programs set out criteria. This was the case in the Anacostia neighborhood of Washington, DC not able to have many streateries partially due to narrower streets and sidewalks since the area was not redeveloped when the other parts of DC were. The restaurants that didn’t belong to BIDs in DC were also much less likely to apply to have a streaterie, likely disadvantaging business owners not wealthy enough to have restaurants in main corridors of the city where most BIDs were located. Additionally, the roads in Chapel Hill with higher Black populations are primarily state-owned, rather than town-owned, and are narrower, not meeting the criteria to implement temporary, multi-use paths. When the staff realized the “quick win” streets they chose were in affluent, majority white neighborhoods, they decided to do an additional program with majority Black neighborhoods with the surplus materials:

We got maybe a couple suggestions in communities that were minority majority and I think a lot of the suggestions we got kind of centered around the same two or three more affluent neighborhoods. Part of that is the criteria that made it easier to do this and to approach it as a quick win. A lot of people who live on wide streets where it's town-owned, and we could easily do it without impacting traffic - that's the type of street that wealthier homeowners live on typically. After coming up with the main five streets that we were looking at, we realized none of them really meet those community needs. And so, we wanted to expand some of the materials that we have to use them in different ways.
(CH_JM)

This pivot after realizing or hearing about a program’s inequitable impact took place in several cases, including in Oakland. Staff worked with East Oakland advocates to create the new program, Slow Streets: Essential Places and bring in a community artist to meet the population’s needs. These pivots were a response to quickly implemented programs and infrastructure that lacked community engagement.

Mixed Public Reactions

As previously mentioned, the lack of initial engagement sparked a strong reaction for many people, particularly concerning Slow Streets. While some saw the lack of initial community engagement a mistake, others felt pushback was unavoidable. Particularly the Mayor’s Mobility Policy Director in Oakland believes that people needed to see something in the street to react to and Slow Streets fit what the previous community engagement in the same community

expressed desire for. Instead of the true concern being about the Slow Streets program, he believes that it is both the archaic way the community engagement and planning process works in addition to the justifiable distrust historically marginalized communities have towards the government:

I think the betrayal that people felt was... I think that we make these long, thick plans. And I think we train people to believe that we're not going to do anything with it. It's true, a lot of plans remain on shelves. So, I think that people's feedback, it's inauthentic. I don't want to say that people are lying, I don't mean it that way but because we train people to not really believe that we're going to do anything with the network, with the plan, with the words that we're saying in this chapter, when we actually do that, there's this cognitive dissonance, like, "wait, you actually did it. Well shit I don't think I would have given you this feedback this way if I had known you were really going to do it." That's a little bit of what happened, well actually that's a lot of what happened with Slow Streets. Because everyone who was shouting at us was like, "yeah, I remember talking about these streets but I didn't think you would use them in this way." But if we flip the book open, right there it says "community said they wanted slow neighborhood streets that were implemented quickly to compliment, long standing multimillion dollar capital improvements." We're like, "we just did this and you said that you wanted us to do this." So, my point here is based on that feedback of people being confused that... [the] government finally did what it said it was going to do, that tells me that we need to do engagement and planning differently. (O_WL)

All four cities implemented a combination of programs to encourage and address the increase in walking, biking and rolling on streets during COVID-19. Multiple cities felt that some people put too much emphasis on these COVID-19 interventions as a major solutions, instead of a simple, short-term traffic safety tool that should work in combination with other programs. DDOT expressed that DC's Slow Streets was a pretty narrowly focused intervention for local, residential streets that didn't have a bus route. However, Slow Streets wasn't the answer for every safety issue. On bigger streets, like major arterials, planners have to really dig in on what the safety issues are, and often changes need to be part of a bigger conversation with the community. Bottom line: Slow Streets is a pilot program that was a response to COVID. It wasn't going to achieve the goal of safety in every location.

Chapel Hill plans to provide temporary materials to create tactical urbanism projects for the neighborhoods that weren't getting the in-road multi-use paths:

We want to use some of the materials that we have, even if it isn't necessarily the same as creating an in-road multi-use path. It's a bit of a tactical urbanism approach, instead of seeing the in-road multi-use paths as THE solution. (JM_CH)

Oakland felt similarly that all the public attention, including imitation from other cities, continued to be on Slow Streets instead of their multitude of other interventions, including the more equity-focused Slow Streets: Essential Places:

I really try and emphasize the Essential Places aspect of our program, especially in talking with other cities just because I think it was one of the coolest things to come out of it. I'm honestly a little disappointed that it's not being replicated at the same scale that the Slow Streets corridors are. I wish other cities were taking up other programs like that - it doesn't have to be Essential Places but just asking their priority communities what would actually be helpful during this time and kind of pivoting that way. (O_NPD)

Particularly in Oakland, interviewees discussed the very different reactions to Slow Streets and how that largely fell along racial lines, with white collar, affluent, whiter people being happier with Slow Streets:

Slow Streets in general has been a very polarizing program in terms of the feedback that we've gotten, more so than anything else I've worked on. It's very apparent to people - they see a street closed they wonder why, what's going on. We get a ton of people saying they love it and that it's letting kids learn to ride their bikes for the first time and that's so exciting. And then we have also gotten a lot of comments that this program doesn't speak to their needs, people don't jog in their neighborhood, there's a lot of essential workers, and it's causing traffic issues. A lot of both of these kinds of comments. (O_NPD)

This sentiment of never being able to make the public happy was shared in multiple interviews, including the speed of rolling out programs:

It's kind of funny, I know some of the other people who run the other programs and we're all kind of like - moved too fast people pissed. Didn't move at all, people pissed. We put it here, they're pissed - no one's ever happy. (O_WL)

Barriers to Success & Challenges

While each individual city and program had its own unique challenges, there were some challenges that cut across multiple cities and projects. The first was how uncertain everything was at the beginning of the pandemic, while most of these programs were first being implemented. This made creating timelines and budgets difficult. Launching these new active transportation programs was additional work for city staff in the middle of a shift to working from home and overall dealing with the realities of a pandemic:

We knew based on the Integrated Mobility Plan that we were building out these All Ages and Abilities networks, but COVID accelerated that work while also needing to continue with our regular work. We were all learning to work virtually from home and were just trying to figure out the best way forward. (H_TD)

Getting buy-in from the necessary stakeholders for approvals to do these active transportation programs on an accelerated timeline was another challenge multiple cities encountered. This included lawyers, decision-makers within the city staff, Council members, and other government agencies. For example, NCDOT required convoluted regulations and lengthy approvals for Chapel Hill to temporarily reallocate lanes on Franklin Street since it is a state-owned road. Halifax also experienced challenges with getting approvals from crucial stakeholders:

We have a Municipal Engineer and a Traffic Authority. The Municipal Engineer signs off on engineering design within the right of way and the Traffic Authority signs off on regulatory signs and pavement marking changes. So, this was something new to them too. Going through the process to get buy-in and being like, “it's going to be okay; this is safe to fail” was interesting. Change, and change quickly, can always provide challenges. (H_TD)

As mentioned in the community engagement and equity sections, getting input from marginalized group was a challenge and barrier to success for most cities. While initial engagement for most projects was not attempted, most cities tried to get feedback from the public once projects were implemented. However, multiple cities found the feedback they were receiving, largely from online surveys, were from whiter, more affluent respondents. This was the case for Oakland's survey:

Our first comprehensive survey was really skewed based on demographics and I think that's for variety of reasons. We tried to address that by getting these partners to send the surveys to their networks and sending the recent survey to every household in the form of a mailer. But I'm sure there's still a lot of a lot of folks that we're missing. (O_NPD)

Evaluating these programs in general was also a challenge for most cities, particularly due to the lack of baseline data to compare any new data to, such as number or speed of cars going through Slow Streets. The restrictions around in person evaluation also complicated these efforts.

Another challenge that was explicitly discussed in the Oakland case but likely impacted other cities' efforts is a staff that is majority white and not low-income that are trying to make programs that work for low-income, BIPOC residents. This dynamic played out in Oakland:

Admittedly, I think, a part of the challenge that our team felt was that the group of people that are criticizing my staff were all Black and the people who represent our safety team are all white women. And so, that dynamic was playing out at the top, middle, and below the surface as well. So, you have a group of people who ostensibly work for a department of transportation that champions lifting up Black and brown voices. And when those voices are turned against you, it kind of feels like, "oh did we like totally mis-aim our goal here?" And so, they actually came back to me a few days in and were like, "we're just going to cancel the program, they're all pissed, what do we do" and I said, "you're actually doing the community and yourself a disservice if you just pack it up." (O_WL)

However, since Warren Logan, the Mayor's Mobility Policy Director, is a Black man, he was in a different position to have these difficult conversations with the mainly Black East Oaklanders and he was able to uniquely understand the impact the community artist had on the perception of Slow Streets:

It's funny because I remember when he sent us the template I kind of teared up because I saw something that I could tell some of my colleagues didn't see. I texted some of my other Black planner friends and was like, "do you see this?" And they were like "OMG." And I was like, "*that's* my point." You know the pedestrian walk caution sign that's a generic walk person? So, what Jonathan did was he threw that out and put these two adolescent girls running holding hands. Small black girls wear their hair in pom poms, it's this awesome style. And these girls have pom poms and when I saw that I thought, people who need to see themselves in our infrastructure, they see it. It's right there and it's so subtle, but lots of other people are like, "cool they're running, got it, they're playing." But for the people that need to see it, it's those little tiny things that are part of this process that clearly, we're missing. (O_WL)

While this shows the power of bringing a local community artist into a project, it also shows the power of having diverse staff that will be able to understand these nuances and bring in invaluable experiences and positionality. Conversations around race and privilege arose during the Black Lives Matter protests and the often, pointed criticism around the inequity of some of these programs:

I think it's been a personal reckoning – especially trying to get other staff to reckon with the pitfalls of our program and where we've fallen short and to be able to reckon with our own privilege and say, “oh we didn't realize that it wouldn't work for these reasons” and see how we can move forward with the program from that space. (O_NPD)

Discussion

The two research questions for this project focused on understanding the process of these active transportation programs that were implemented in response to COVID-19 and how community engagement was conducted and how equity played a role in that. This section will discuss the findings from these case studies and their subsequent analysis.

Most of these programs were initiated through a combination of staff interest, pressure from the public, and political support. Typical regulatory processes and hurdles were largely reduced in order to implement the programs quickly. An exception to this was the Franklin Street lane reallocation in Chapel Hill, which went through a thorough review process. Since Franklin Street is owned by the state, NCDOT had strict regulations that town staff had to accommodate, including only using specific materials that were much more expensive than what staff would have chosen without the regulations. All four cities were implementing a system of active transportation infrastructure or programs largely to benefit outdoor recreation or exercise and local businesses, with only Oakland and Halifax explicitly mentioning the programs' purpose as providing access for essential trips. Three projects were accelerations of, or based on, previously planned infrastructure changes before COVID-19: the Franklin Street lane reallocation in Chapel Hill, the Car Free Lanes in DC, and the active transportation infrastructure projects in downtown Halifax. City-specific cultural context also played a role in determining what programs would be implemented in each city. For example, DC's mayor intentionally did not want to pedestrianize city blocks because the city does that for major festivals so that has a connotation of crowds and parties. One street did this for a weekend and it was very crowded and considered a public health risk. However, closing city blocks in downtown Halifax to allow restaurants to use the space for outdoor dining was successful.

Community engagement was a major topic that was discussed in the interviews and is publicly discussed about these COVID-19 response active transportation programs. As the analysis section mentioned, initial community engagement was bypassed for most of these projects in order to implement them quickly. Some proxies for community engagement, such as bike plans and elected official feedback, were used. This unique situation allows us to reflect on whether this was justified and what we learned from it. Warren Logan, the Oakland Mayor's Mobility Policy Director believes it was justified and that they learned some crucial lessons

about how to engage the community for active transportation projects in the future. Logan believes that the feedback received after quickly implementing Slow Streets in Oakland was more meaningful and helpful in creating a program that met East Oaklanders' needs, Essential Places, than if they had done initial community engagement. Reacting to something physically on their streets allowed them to provide meaningful feedback, something that Logan argues is missing from transportation planning.

Another layer of this is mistrust and lack of communication between BIPOC communities and local government due to historical disinvestment by the government. That context weighs heavily on these programs and their implementation. It is not surprising that BIPOC communities reacted negatively to programs in their neighborhood without being consulted or communicated with. However, when BIPOC communities were consulted with, it didn't always have an equitable outcome. For example, in Halifax, staff met with leaders of one African Nova Scotian neighborhood that they had previously worked with to implement Slow Streets in their area and this was approved and successful. However, when wanting to implement Slow Streets in another African Nova Scotian neighborhood, they were unsuccessful in building a relationship virtually and did not roll out a program in that neighborhood. This speaks to the importance of continued relationships between DOTs and communities, particularly BIPOC communities.

Additionally, the neighborhoods of Chapel Hill that fit the physical criteria to put in temporary multi-use in-road paths were affluent, white neighborhoods. Their plan is to take the extra materials from this project and work with neighborhoods with higher proportions of BIPOC residents to meet their needs. This could be seen as prioritizing affluent neighborhoods who arguably aren't in need of these programs as much, however this was also influenced by CARES Act funds. These examples still highlight how inequity can be compounded due to historical legacy when it is not fully taken into account and acted on. While most interviewees emphasized that equity is integrated into everything that their agency does, this was not always clear in their decision making and outcomes. In every city, except eventually Oakland after they had ample negative feedback and engaged in difficult conversations, the programs benefitted and were accepted by more affluent, white neighborhoods. This was also shown by how many cities replicated Slow Streets – a program embraced by whiter, affluent neighborhoods – and not Essential Places, a program that was created through meaningful engagement with BIPOC community and is arguably much more equitable.

One way to combat the perpetuation of inequities in access to active transportation infrastructure is to constantly remind staff and yourself why the inequities exist and creatively find ways to combat it. Part of this is from the lessons that Warren Logan shared, which is both

rethinking how community engagement is conducted and how transportation plans are implemented. One way is to pilot these programs in the streets and get authentic feedback after people are able to visualize an intervention and try it out. Part of the mistrust of government is also reinforced when planners engage the community, create a plan, and then it is never fully implemented. While plans are the backbone of transportation planning, maybe all of the effort should not be focused on necessarily making plans, but in getting authentic feedback from the community and being respectful of that feedback and implementing it. Part of this played out when the largely Black critics of Oakland's Slow Streets program explained that while they agreed to a program like this in the Bike Plan, they didn't actually think it would happen. This sentiment reflects a glaring failure by governments that is not widely discussed by transportation planners. Taking up historically marginalized groups' effort and time and all the while them not believing you will even implement the outcome of those conversations is a perpetuation of the inequities in our society. Transportation planners need to internalize this and think creatively how to combat this.

In addition to how initial community engagement is conducted, active transportation projects must incorporate unique perspectives throughout the process. This begins with diversity of leadership and staff, whether it is a particular race, gender, or income background. These differing perspectives are vital to creating truly equitable transportation programs. In Oakland, this played out in Warren Logan, as a Black man, being able to respond and have different conversations with East Oakland residents than the white women on the safety team. It also includes aspects of a program that may seem small to transportation planners, but can make a world of difference to community members. An example of this was Oakland hiring a local community artist that changed the standard pedestrian road signs to reflect young Black girls playing.

The often uncomfortable conversations around equity that were hashed out in Oakland, unlike in the other case cities, gave more valuable lessons. One was that while East Oaklanders wanted more permanent active transportation infrastructure in their neighborhoods and for it not to feel like a "construction zone," while the more affluent, white neighborhoods had overwhelming support for their Slow Streets and are applying for more Slow Streets and people even implementing them themselves. Logan pointed out that these insights should change how their Bike Plan is implemented. If wealthier areas don't require expensive infrastructure changes and are content with less expensive road treatments, then more money can be spent on high quality infrastructure in what Oakland considers "High Priority" neighborhoods to provide safety and encouragement for active transportation modes. This is a way to produce more equitable outcomes. However, proposals to add bike lanes or other active transportation infrastructure in lower-income neighborhoods is often met with the argument that this will fuel

gentrification and displacement. This was a part of the argument by the Washington, D.C. Council member that did not allow Slow Streets in his Ward. As expressed by Warren Logan in Oakland, avoiding making streets safer for pedestrians and bicyclists is harmful, especially when not taking housing policies into account that are a much more direct reason for gentrification and displacement.

How planners receive feedback and communicate the goals of transportation projects was another lesson learned from these case studies. Community engagement is also a way to inform and prepare the community for projects, which was missed in most of these cases. This led to confusion about the goals of programs. For example, East Oakland residents found the stay-at-home order in conflict with the message of Slow Streets. Most cities mentioned that to get the word out for these programs they posted on their websites, the mayors announced the programs, and they published press releases. This is not enough to reach the general public. Interrogating and questioning who is providing feedback and how to measure success of the projects is also important. Solely relying on voluntary online surveys and community meetings is not reaching the people necessary to make decisions. Oakland found creative ways, such as short text surveys advertising where infrastructure is located and social media content, to evaluate programs. To understand who is giving feedback and how representative the feedback is, it's also important to track demographic data such as race, income level, neighborhood, and whether or not the individual has a disability.

Future Implications

The future of these programs is varied. In Chapel Hill, the temporary extended sidewalk will be in place until the permanent re-stripping is completed in summer 2021 and the multi-use in-road paths and tactical urbanism projects in diverse neighborhoods are currently underway. In Washington, DC, the expanded sidewalks seem to be temporary and specific to the pandemic, while streateries and car free lanes will continue to expand and become permanent in the future. With more mixed reviews, DC's Slow Streets pilot project is ending in May 2021 and will be evaluated to determine its future (Pascale, 2021). Halifax's Slow Streets program and SIPP are poised to continue beyond COVID-19 with more of a focus on equity, while their expanded patios and outdoor dining program has already been approved as a permanent program for businesses to apply to annually (HRM, 2021a). Oakland's Slow Streets program will continue on a by-request basis and Essential Places will be incorporated into OakDOT's traffic safety work. The future of Oakland's Flex Streets initiative is currently unclear, but City staff expressed desire for a continuation of the program after the COVID-19 pandemic (Rodas, 2021).

The lessons learned from the pandemic will undoubtedly change how active transportation planning is conducted in a post-COVID-19 pandemic world. Overwhelmingly, interviewees expressed that what they think will continue past the pandemic is their ability and willingness to pilot test programs and infrastructure after this experience. This would shift how community engagement is conducted in the future and encourage more tactical urbanism. However, multiple cities found that temporary materials still need to be robust. Lightweight materials that are easily moved or damaged by the public often cause more negative reactions from the public. They also believe that this experience showed the speed that programs can be implemented with some reductions in regulatory barriers. This will provide a precedent for that change. This included more risk-averse stakeholders, such as traffic engineers and the city's lawyers. This faster implementation after more authentic community engagement since people were able to react to something on the street instead of an idea could revolutionize the relationship between communities and local government and push active transportation forward.

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Appendix

Appendix A. Interview Guide

The interview guide was adapted for different interviews.

1. Can you describe how [city] has responded to COVID-19 in terms of active transportation infrastructure?

Probe: How did that idea arise? Who were the major drivers behind it?

Probe: How was the idea adopted and operationalized?

Probe: How was the distribution of this infrastructure determined?

2. How did the city manage community engagement?

Probe: What were the drawbacks or challenges with this?

Probe: What were the advantages of this?

Probe: Compared to if this project was in non-COVID-19 times, was the community engagement timeline similar?

3. How are you measuring success for this project?

Probe: How has the public react to the initiative?

4. How did racial equity considerations equity affect the project? Did this change due to the BLM movement/conversations?

Probe: Was this considered in terms of placement of this project?

Probe: Was this considered in terms of community engagement?

3. How was the implementation of this project different than if it were a non-COVID-19 project?

Probe: How did **budgeting** work? Differently due to COVID?

5. What is the future of this project?

Probe: How has this project affected the city's future goals for active transportation infrastructure?

6. What were the biggest challenges of this project?

7. Anything surprising about this project?

6. What have been the main lessons learned from this project?

Appendix B. Code List

- Barriers/challenges
- COVID-related
- Community engagement
 - CE: Equity considerations
- Compare peer cities
- Equity impacts
- Good Quote/Narrative
- Implications for future
 - New opportunities
- Measure of success
- Process
 - Adoption/operationalization
 - Initiation
 - Location selection
- Public reaction
 - Mismatch of expectations
- Supporting factors to success
- Type of program
 - Car free lanes
 - Essential Places
 - Other
 - Slow Streets
 - Streateries
 - System of programs
 - Temporary AT infrastructure
- What would've done differently