OFF THE RAILS

ALTERNATIVES TO POLICING ON TRANSIT



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A comprehensive project submitted in partial satisfaction of the requirements for the degree Master of Urban and Regional Planning.

Disclaimer

This report was prepared in partial fulfillment of the requirements for the Master in Urban and Regional Planning degree in the Department of Urban Planning at the University of California, Los Angeles. It was prepared at the direction of the Department and of the Alliance for Community Transit - Los Angeles as a planning client. The views expressed herein are those of the authors and not necessarily those of the Department, the UCLA Luskin School of Public Affairs, UCLA as a whole, or the client.

Acknowledgements

This project was supported in part by a grant funded through UCLA Institute of Transportation Studies and Pacific Southwest Region UTC. Appreciation and gratitude to all the interviewees for their time, Laura Raymond, Scarlett de Leon, Mariana Huerta Jones, the Transit Justice Coalition at the Alliance for Community Transit - Los Angeles, Río Oxas at People for Mobility Justice, Dr. Destiny Thomas at Thrivance Project, my patient faculty advisor Dr. Brian Taylor, UC-ITS Librarian Kendra Levine, and Jorge Cáñez. Thanks to my family, friends, and loved ones for their help, ice cream, and encouragement throughtout the process.

This capstone is dedicated to the life and memory of César Rodríguez.



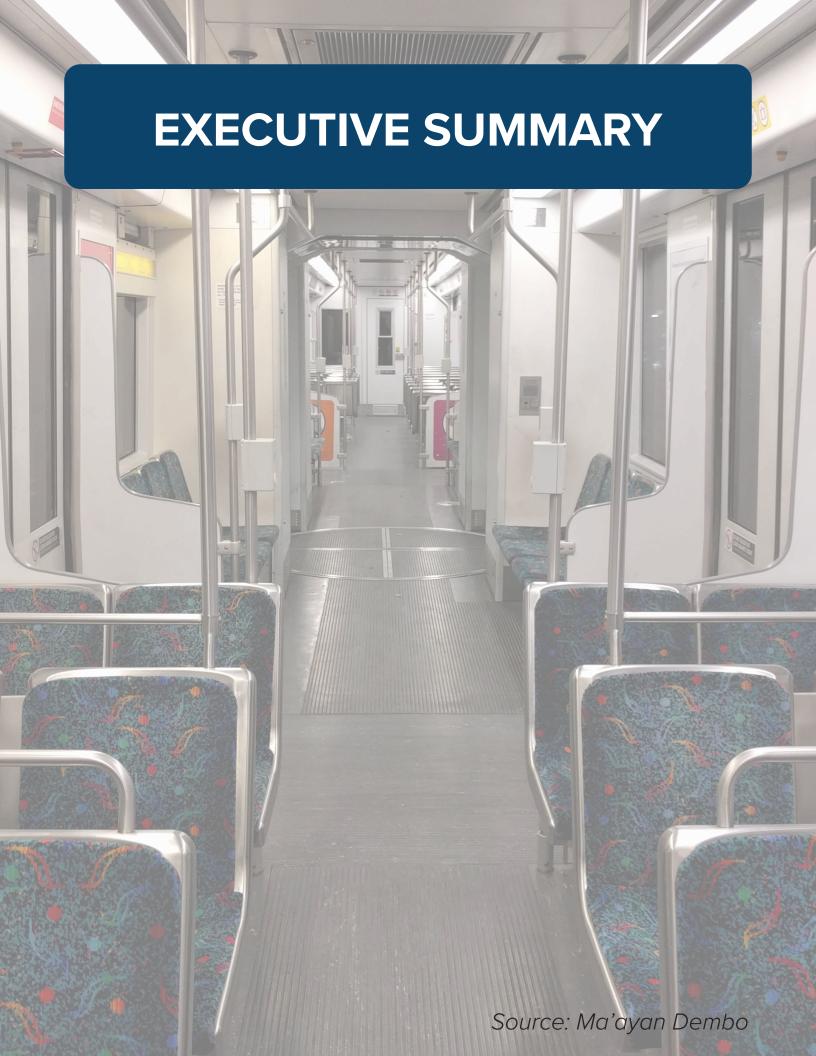






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The recent #BlackLivesMatter movement has focused media and political attention on the long-standing issue of state-sanctioned violence and racism in Black and Brown communities in the U.S. These issues of police brutality, discrimination, and escalation extend to policing on public transit systems as well. The same officers involved in use of force cases at a home, business, or during a traffic stop could be patrolling on transit the next day. A 2016 investigation by the Labor/Community Strategy Center found the Los Angeles County Sheriff's Department (LASD) racially profiled Black and Brown transit passengers in citations and arrests for fare evasion (Linton, 2017). Responding to concerns about staffing and officer visibility, Metro revised its policing contract and now splits security responsibilities amongst four agencies in its current five-year policing contract for \$797 million approved in 2017 (Nelson, 2017).

Given the high price of policing for Black and Brown transit riders, and LA Metro, my research on behalf of the Alliance for Community Transit – Los Angeles's (ACT-LA) Transit Justice Coalition investigates whether armed law enforcement personnel are the only viable way to provide safety and security services for transit. Drawing on case studies informed by previous research, and my own interviews, I evaluate the promise of alternatives to armed law enforcement for ensuring passenger safety on Metro's system.

For background, I reviewed literature on many different topics related to policing, its alternatives, and public transit. Some of the highlights include:

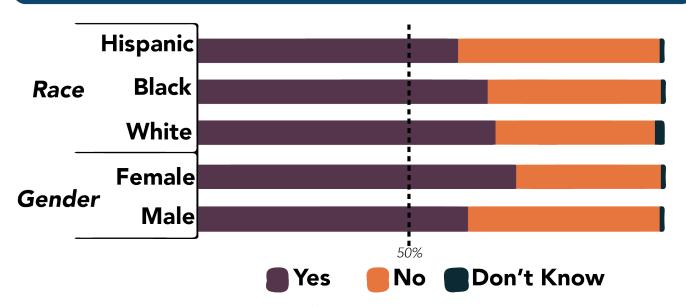
- Individuals' perceptions of safety on public transit are akin to their perceptions of safety in public spaces. This is influenced substantially by race, gender, class, ability, prior experiences, and environmental conditions.
- Prior research is inconclusive on the effect of improved safety/perceptions of safety by employing police on transit. Many people are alarmed more than calmed by police presence, especially people of color.
- Crime prevention through environmental design (CPTED) broadens the definition
 of how to ensure safety in transit environments beyond armed law enforcement,
 through design interventions like better lighting, sight-lines, and natural surveillance.
- There are encouraging results from non-policing approaches to reduce crime and increase social order from realms relevant to public transit.

Summarized Results

Transit Ambassadors are designated unarmed, identified transit agency staff with the role of providing extra eyes, ears, and authority at a transit facility or on a transit vehicle. In this study, I analyzed two such programs: San Francisco Muni's Community Transit Assistants Program, and the informal, volunteer Guardian Angels in New York City. According to an interview with a high-level security executive at San Francisco Muni, the San Francisco program reduces operator assaults and prevents youth from entering the criminal justice system. The Guardian Angels program has shown to reduce some passengers' fears of crime, albeit ephemerally, and most riders approve of their methods (Kenney 1987, 77-79).



On-Board Survey, New York City, 1987

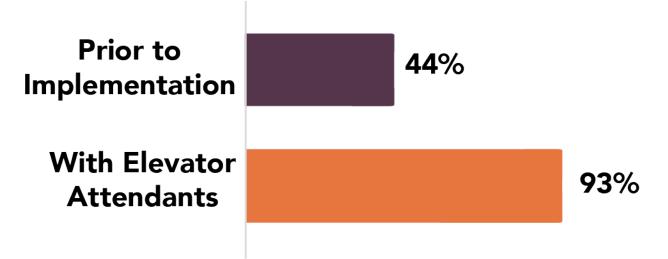


Source: "Crime, Fear, and the New York City Subways", Dennis Jay Kennedy, 1987, Page 79.



Like Transit Ambassadors, elevator attendants are designated unarmed transit agency staff in station elevators. Two different transit agencies have utilized elevator attendants: Bay Area Rapid Transit (BART), and the New York City Metropolitan Transportation Authority (NYCMTA). BART's program costs \$1.3 million annually to cover four stations, and according to an interview with Lateefah Simon, BART Board of Directors member, reports of urine, defecation, graffiti and needles were down in station elevators by 98 percent with the introduction of the program. Additionally, customers are significantly more satisfied with BART's elevators because of the program.

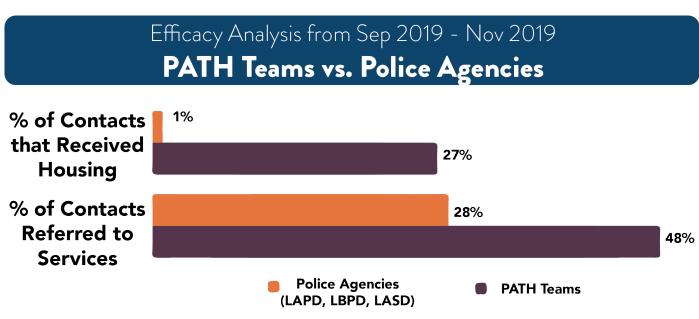
Percent satisfied with BART's elevators BART On-Board Surveys, 2018-19



Source: BART Social Resources Website.



Transit agencies predict ridership decreases if homelessness is not addressed (Metro, 2017). Two agencies, Los Angeles Metro (LA Metro) and Southeastern Pennsylvania Transportation Authority (SEPTA), have taken steps to assist people experiencing homelessness in their facilities. LA Metro contracted with People Assisting the Homeless (PATH), a long-established homeless services non-profit, as well as three major police departments to provide homeless service outreach. Evaluations of these efforts found that the PATH teams are more cost effective at providing meaningful services for people experiencing homelessness than employing police officers to offer such services (LAPD, 2017; Metro News, 2019; Quarterly Update on Metro's Homeless Outreach Efforts, 2019).

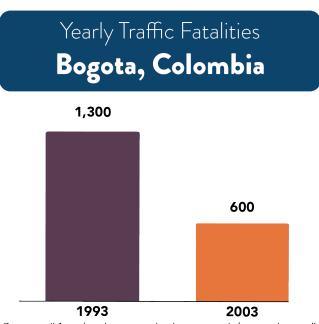


Source: Metro's Quarterly Update on Metro's Homeless Outreach Efforts, Sep 19 - Nov 19

In Philadelphia, the largest transit agency, SEPTA, partnered with a local non-profit social services organization, Project Home, to create a permanent drop-in service center inside a station concourse. In the first quarter of 2019, the service center placed 765 individuals in some form of housing (Knueppel, 2019).

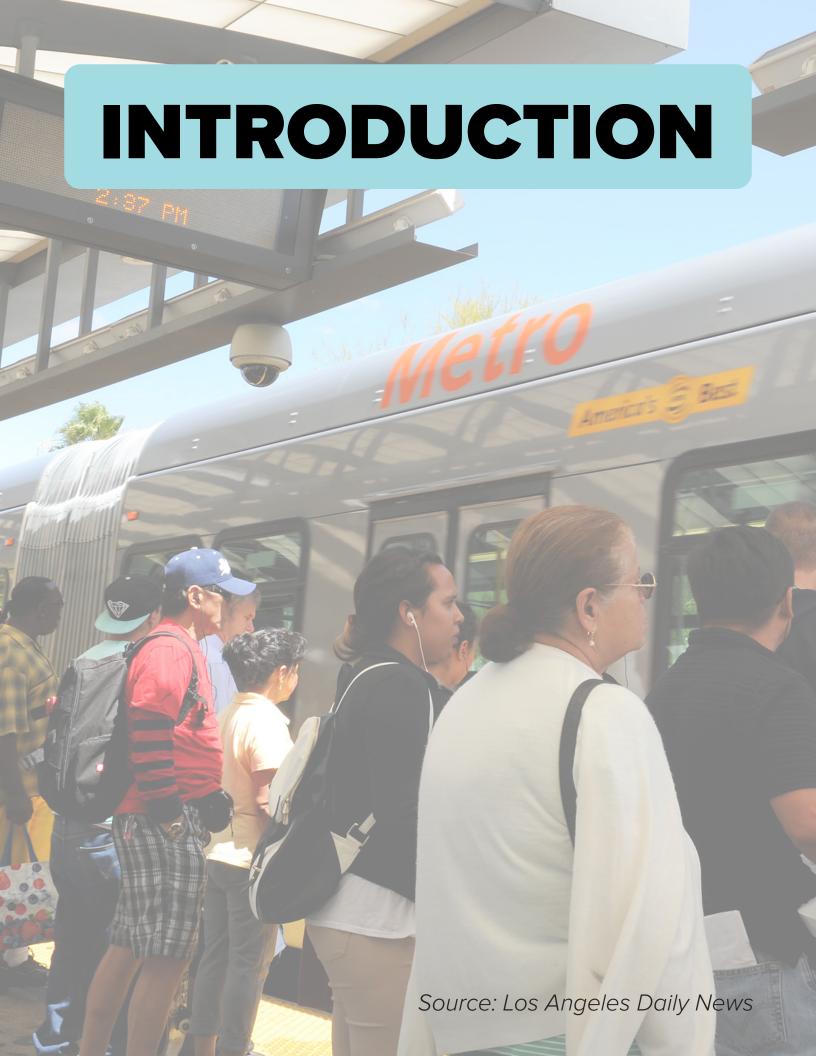


Another creative intervention to addressing incivilities on public transit is performance art. The two examples I review here – Ponte la del Metro in Mexico City, and traffic mimes in Bogotá, Colombia – show how de-escalation tactics through performance art can lead to effective results. Ponte la del Metro was a cultural intervention project on Mexico City's subway that used clowning techniques to inform subway patrons about proper behaviors when commuting (Ponte la del Metro, 2020). A similar intervention in Bogotá replaced traffic cops with mimes, and significantly reduced annual traffic fatalities (Caballero, 2004).



Source: "Academic turns city into a social experiment", Mara Cristina Caballero, 2004.

Despite their positive outcomes, programs like these, unfortunately, are the exception and not the rule. I conclude from these reviews that there is a true need to expand the definition of public safety and the approaches to and providers of these services to the public. While mimes and clowns usually do not come up in discussions of ways to improve transit safety, the evidence reviewed here suggest that they, along with social workers, transit ambassadors, and elevator attendants, can be effective tools. While more evaluations are warranted, the data gathered here support the merit of alternatives to policing on transit. I conclude that the challenge to making public transit safe and civil while reducing the harms of armed policing of transit more a matter of budgeting and leadership, rather than creativity and inspiration Δ



Introduction

Police have a long, fraught relationship with low-income communities of color in Los Angeles. Historically, many of the nation's largest uprisings and riots over police brutality and racial disparities have occurred in Los Angeles. In 1965, the Watts Uprising took place in South Central Los Angeles, bringing to light the persistent inequities of opportunity and over-policing throughout the city. In 1991, police officers who brutally beat Rodney King at a routine traffic stop were acquitted, causing widespread unrest. Even today, these issues persist, with recent findings of racially-biased falsified gang enhancements and disproportionate traffic stops and searches by the Los Angeles Police Department (Chang & Poston, 2019; Puente & Winton, 2020).

In 2016, the Los Angeles Police Department (LAPD) led the nation with the highest rate of fatal encounters involving police officers per 100,000 residents (0.48, compared to 0.40 in Chicago and 0.14 in New York City) (Mcgahan, 2016).

In 2016, the department also recorded 40 use of force incidents, where an officer intentionally discharged a firearm (2016 Use of Force Year-End Review, 2016). Behind each of these statistics is a tenuous confrontation between a police officer and an individual that escalated. These high instances of use of force lead to community trauma and general mistrust.

These issues of police brutality, discrimination, and escalation extend to policing L.A.'s public transit systems as well. In 2016, an investigation by the Labor/Community Strategy Center found the Los Angeles County Sheriff's Department (LASD) racially profiled Black and Brown transit passengers in citations and arrests for fare evasion (Linton, 2017). The investigation found Black people comprised only 19 percent of rail riders, but made up nearly 50 percent of Los Angeles County Metropolitan Transportation Authority (Metro) citations, and nearly 60 percent of LASD arrests each year (Linton, 2017).

Additionally, the Labor/ Community Strategy Center found that from 2012 to 2015, Black riders received over 50 percent of fare evasion citations, while white riders received 9 to 10 percent of fare evasion citations.

Introduction

Often, officers from beats outside of transit systems pick up overtime shifts to patrol Los Angeles's transit system; these same officers who pull over Black and Brown drivers at disproportionate rates treat Black and Brown transit riders similarly (LAPD, 2017; Chang & Poston, 2019).

Prior to the investigation, the LASD was the only police agency contracted to provide safety and security services on Metro. In response to complaints around officer visibility, Metro changed its policing contract and now splits security responsibilities amongst four agencies: the Los Angeles Sheriff's Department (LASD), the Los Angeles Police Department (LAPD), the Long Beach Police Department (LBPD), and Metro-employed Transit Security Officers (TSO) (Nelson, 2017). In 2017, Metro approved this five-year, four-agency policing contract for \$797 million (Nelson, 2017). As a follow up, the Labor/ Community Strategy Center tried to analyze whether the new contract improved racial disparities in citations and arrests, but were unsuccessful in acquiring the necessary data (Tinoco, 2018).

Overall, the evidence suggests that many transit riders perceive, experience, and suffer from the racial biases among transit police. Recent focus groups for Metro's Understanding How Women Travel report illuminate low-income people of color are often uncomfortable with armed law enforcement on public transit. Metro is the largest transit agency in Los Angeles County, carrying over 100 million passengers each year. Most of these riders are low-income (more than half of riders make less than \$25k annually), and people of color (about 85%) (Metro On-Board Survey, 2019).

Given the looming 2022 Metro policing contract renewal, advocacy organizations like the Alliance for Community Transit – Los Angeles (ACT-LA) are asking if armed law enforcement personnel best provide safety and security on Metro's transit system.

My research investigates that question on behalf of the ACT-LA's Transit Justice Coalition. Drawing on case studies informed by the research literature and interviews with public transit officials, I evaluate the promise of alternatives to armed law enforcement for ensuring passenger safety on Metro's system. These alternatives to policing include unarmed transit ambassadors, social workers on transit, elevator attendants, and public art interventions.





To examine safety on public transit I review the literature on (1) perceptions of safety, (2) crime prevention through environmental design, (3) policing on transit, (4) community relations with police, and (5) alternatives to policing. My goals with this review are a well-rounded perspective on public transit safety, and to identify both emerging themes and gaps in what we know.

Perceptions of Safety

There is much literature on perceptions of safety on transit. Through a large-scale survey of bus riders in Los Angeles, Wachs and Levine find seniors, women, Latinx, and low-income people were more likely to be victimized than other subpopulations surveyed (Wachs & Levine, 1986). Further studies on the topic identify that people in ill health, people with disabilities, women, older people, and ethnic minorities were more likely to be concerned about their personal safety (Loukaitou-Sideris, 2014; Delbosc & Currie, 2012; Pantazis, 2000; Ross & Jang, 2000; Lynch & Atkins, 1988). Additionally, research shows that most of the factors contributing to fear in public spaces also influences people's perceptions of safety on transit (Koskela, 1997; Crime Concern, 2002; Day et al., 2003).

Another topic relating to perceptions of safety is fear of strangers. A study of elderly residents in Chicago finds that social bonding, trust, and relationships with neighbors all reduce fear of crime (Kim & Ulfarsson, 2004). Similarly, a study of adolescents finds fear of crime reduces feelings of trust in others (Salmi et al., 2007). Building off these studies, Delbosc and Currie find some of the strongest influences on feelings of safety on transit are trust in people and feeling safe in one's home and street (Delbosc & Currie, 2012). A later study by Delbosc and Currie focusing specifically on young people's perceptions of personal safety concludes with similar results:

"Feelings of anxiety and discomfort associated with traveling with people you do not know is the most influential factor driving negative feelings of personal safety on public transport" (Delbosc & Currie, 2013).

They suggest measures promoting positive social interaction and understanding among transit passengers can improve perceptions of safety (Delbosc & Currie, 2013). Additionally, people who were victimized on the bus, or who know people who had

been victimized, are more likely to perceive bus use as less safe (Wachs & Levine, 1986). Other research confirms this; first-hand or second-hand experiences with crime greatly influences people's perceptions of safety (Currie & Delbosc, 2012). Indeed, these perceptions of safety affect an individual's ridership (Taylor & Iseki, 2010). Other studies in the UK suggest 10 percent of the population would reconsider using public transport if their fears were addressed (Crime Concern, 2004). Moreover, it is likely that less familiarity with public transport contributes to greater fears for safety (Cozens et al., 2003). This creates what some analysts call a "cycle of fear"; fear reduces the number of people traveling on public transport, reducing the perceived effects of safety in numbers, and ultimately increasing levels of fear (Cozens et al., 2003).

Other studies identify the pain points along people's transit journeys. In most surveys, people report feeling more unsafe while travelling to/from or waiting at a transit station, and not when riding on the bus or train (Currie & Delbosc, 2012; Mahmoud and Currie, 2010; Crime Concern, 2004; Booz Allen Hamilton, 2007; Cozens et al., 2003; Reed et al., 2000). Most people are more fearful at night, or in spaces of darkness, poor lighting, and isolation (Schulz and Gilbert, 1996; Loukaitou-Sideris, 1999; Crime Concern, 2002; Taylor & Iseki, 2010).

Research by Yavuz and Welch finds perception of crime is strongly associated with environmental conditions and disorderly behavior—such as being loud, drinking in public, lack of cleanliness, or panhandling—rather than actual concerns about crime (Yavuz & Welch, 2010).

This finding confirms previous research that the presence of such social incivilities in transit environments significantly affect perceptions of safety (LaGrange et al., 1992).

Overall, the literature on perceptions of transit safety is consistent over time and across geographies. Individuals' perceptions of safety on public transit are akin to their perceptions of safety in public spaces generally. This is influenced largely by race, gender, class, ability, and prior experiences. People consistently feel most unsafe on public transit when waiting for buses and trains, rather than on-board the vehicle. Finally, environmental factors play a large role in peoples' perceptions of safety.

Crime Prevention Through Environmental Design

The idea of crime prevention through environmental design (CPTED) is that neighborhoods can be made safer through thoughtful design and intentional planning. CPTED adherents argue that the local physical environment can encourage or deter criminal behavior. Developed in the 1970s, CPTED's core principles rely on surveillance, territoriality, access control/target hardening, maintenance, and activity support. Many transit systems today incorporate concepts from CPTED into stop and station design. However, there is still much to glean from the CPTED literature about what makes people feel safe, and what strategies effectively deter crime.

One of the primary concepts from CPTED is natural surveillance – the ability for people to see their environments clearly, and provide "eyes on the street" for others (Jacobs, 1961). From a CPTED standpoint, this could mean improving lighting, improving sight lines within a station, or locating transit stops in areas of high pedestrian foot traffic or along commercial corridors. Indeed, one study analyzes bus stops with high concentrations of crime in Los Angeles, and finds those with better natural surveillance opportunities have lower crime rates (Loukaitou-Sideris, 1999). Another follow-up study finds the most important environmental factors to predicting lower personal and property crime rates are pedestrian presence and visibility (Liggett et.al, 2001). The authors conclude: "...good visibility from the surrounding buildings and pedestrian presence are important variables in reducing crime. Every effort should be made to site bus stops... in front of establishments that offer opportunities for natural surveillance... Sometimes, this may simply mean moving a bus stop a few yards up or down a street or at the opposite corner." (Liggett et.al, 2001).

Other studies find transit riders most desire increased visibility through better lighting to improve their safety at stations (Cozens et.al, 2003; Carnegie & Deka, 2010). Like improved lighting, visibility of and by others also makes people feel safer (Cozens et.al, 2003; Carnegie & Deka, 2010). People often feel more comfortable and safe in the presence of crowds, especially when familiar fellow passengers are present day to day (Carnegie & Deka, 2010; Fink, 2012).

Another concept from CPTED involves improving the physical design of a space to deter crime. Some studies find bus shelter placement and design play large roles in mitigating crime through clear designs and good placement (Liggett et al., 2001; Levine and Wachs, 1985; Falanga 1989, Felson et al. 1990, Felson et al. 1996). More

generally, other methods such as reducing the number of station entrances and exits, widening staircases, closing off areas behind staircases and passageways, locating surveillance booths to overlook both fare entry points and the platform level, locating waiting rooms closer to retailers, installing corner mirrors, and eliminating nooks all discourage crime on transit (Falanga 1989, Felson et al. 1990, Felson et al. 1996).

The literature on CPTED illuminates methods to improve perceptions of safety and the incidence of crime through design interventions. Interventions like better lighting, sight lines, and natural surveillance are highly supported by transit riders, and improve both perceptions of safety and crime rates. These ideas provide the foundation to many of the alternative safety programs discussed in this research.

CPTED broadens the definition of how to ensure safety in transit environments, through design interventions instead of armed law enforcement.

Community Relations with Police

When considering public safety in transit environments, one must understand the broader socio-political contexts of both policing and transit. Police on transit do not operate independently of their peers policing jurisdictions outside of transit systems.

The same officers involved in use of force cases at a home, business, or during a traffic stop could be patrolling on transit the next day (LAPD, 2017).

A discussion of policing on transit would be incomplete without a discussion of police violence. Police violence is the leading cause of death for young Black men between 20 to 35 years old in the United States (Edwards, et.al, 2019). The recent #BlackLives-Matter movement has focused media and political attention on the long-standing issue of state-sanctioned violence and racism in Black and Brown communities in the U.S.

In 2016, the LAPD led the nation in the most officer-involved killings for the second year in a row (Mcgahan, 2016). Los Angeles County also had the highest number of

officer-involved shooting deaths per 100,000 residents. in the entire country (Mcgahan, 2016). In Los Angeles, Black residents are disproportionately victimized by police. Black people represent 24 percent of the deaths by police but only 9 percent of the county's population (Pishko, 2019). Occurrences of deadly police use of force in Los Angeles County far too often lead to no real consequences for the offending officers (Black Lives Matter LA, 2019). Since 2000, only one member of law enforcement has been charged for killing a civilian in Los Angeles County, out of more than 1,500 instances of use of force (Pishko, 2019; Levin, 2018). In addition to this almost complete absence of prosecution of police killings, some victims' families and loved ones report the indignity of continued police harassment at memorials and funerals for victims killed by law enforcement (Tchekmedyian, 2019).

Recent investigations by The Los Angeles Times and the Labor/Community Strategy Center shine further light on police's systemic police bias – LAPD officers pull over Black and Latinx drivers at disproportionate rates compared to whites, LASD disproportionately arrests Black transit riders, and Black transit riders are issued fare evasion citations at far higher rates than white riders (Poston & Chang, 2019; Linton, 2017).

These data, studies, and lived experiences paint a clear picture of systemic bias and racism.

Police on Transit

I also analyzed the existing literature to assess the efficacy of increased policing on transit, as measured by their effects on crime rates and perceptions of safety. In this review, I distinguish studies relating to armed law enforcement and uniformed transit staff. Some studies find higher levels of staffing lead to lower crime rates at stations (Rahaman et.al, 2016; Sullivan 1996), while others find that design interventions reduce crime and other incivilities more than intensified policing (Felson et.al, 1996). However, there is no clear consensus on the relationship between intensified policing and a reduction in actual crime rates.

When looking at perceptions of safety, many studies find that increased staffing improves passengers' perceptions of safety (Carnegie & Deka, 2010; Yavuz & Welch, 2010; Cozens et.al, 2003; Uzzel et al. 2003; Smith & Clarke, 2000; Sullivan, 1996;

Warsén, 2002; Loukaitou- Sideris, 1999; Reed et.al, 2000), while some find staffing programs with uniformed agents did not improve user's perceptions of safety (Webb & Laycock, 1992; Kenney, 1987). In one study, when given a range of various safety improvements, men and women differed the most when it came to increasing police on transit; women preferred it significantly less than men (Reed et.al, 2000). In sum, survey research on perceptions of safety draws no clear consensus on the impact of increased staffing on perceptions of safety.

In some studies, focus groups paint a more nuanced picture. There, many individuals have a forum to voice their unease with police. Some participants share their anxiety with the ongoing militarization of police, police intimidation, and police officers' mistreatment of youth of color (Carnegie & Deka, 2010). Similar dynamics play out in the recent "Understanding How Women Travel" report by Metro here in Los Angeles. When asked about policing on Metro's system, 54 percent of female survey respondents reported there were not enough on-board police, while only 8 percent reported too many police (Metro, 2019). It is important to note the survey demographics were reflective of LA County, not of Metro ridership, meaning it skewed towards white respondents (Metro Appendix B, 2019).

The focus groups and pop-up workshops targeted core transit rider demographics, who also identified safety as a pressing issue, but a different perspective on policing emerged (Metro Appendix E, 2019). In pop-up engagements at stations like Rosa Parks/ Willowbrook and El Monte, many individuals shared that "armed transit security or sheriffs actually make them feel less safe" (Metro Appendix E, 2019). Often, sheriffs' discriminatory or aggressive nature was cited (Metro Appendix E, 2019). During one pop-up engagement, the report authors witnessed six LASD officers boarding a train with guns drawn and fingers on the trigger in response to a cell phone robbery (Metro Appendix E, 2019). Stating:

"No one on the Pueblo team knows exactly what happened on the train, but our team was quite shocked by the show of force. Seeing the officer with the assault rifle was particularly disturbing and seemed like an unnecessary and dangerous threat, regardless of the situation, because the train and platform were filled with passengers" (Metro Appendix E).

Additionally, in two focus groups with immigrant/undocumented women and women experiencing homelessness, some participants of color shared that they or family members were unjustly targeted by law enforcement, and that they do not always feel more secure with armed law enforcement on buses, trains, or platforms (Metro Appendix E, 2019).

These results, while recent, are not novel. In 2017, LA Metro conducted a Customer Satisfaction Survey, complete with five focus groups in English, Spanish, Korean, and Chinese, with targeted recruitment among people over the age of 50 and African-Americans (Metro Appendix C, 2017). Participants in the focus groups also ranked safety on Metro trains and buses as their top concern (Metro Appendix C, 2017). African-American and Latino focus group participants "expressed significant concerns about their safety based upon their experiences with racial profiling and discrimination by law enforcement and Metro fare-checking personnel when taking public transportation" (Metro Appendix C, 2017). Similarly, in focus groups conducted in 2019, "African American participants, and some Latinos, stated that greater police presence is likely to negatively impact their personal safety" (Metro Appendix C, 2017).

Seeing as only 12 percent of Metro's ridership identifies racially/ ethnically as White, these consistent sentiments from transit riders of color regarding discriminatory behavior and policing raise troubling questions about whose voices are considered when planning for safety and security on transit (Metro On-Board Survey, 2019).

In sum, the overall literature is inconclusive on the effect of improved safety/ perceptions of safety by employing police on transit. People of different races/ethnicities, and genders, appear to have different perceptions and levels of comfort with police presence. However, none of the research I reviewed explicitly considered the role of racial relations with police, which is a key consideration given the ongoing issues of over-policing and police brutality in Black and Brown communities. The differing attitudes towards policing become more apparent when analyzing focus groups with transit riders.

Alternatives to Policing

A few scholars have theorized about alternatives to conventional policing for public spaces and public transit environments. The foundation largely comes from Jane Jacobs's seminal 1961 work The Life and Death of Great American Cities. Jacobs highlights the importance of "eyes on the street," whereby local community members help to maintain social order simply by their presence. These folks are not armed law enforcement, but instead shop keepers, grandmothers, and locals who populate public spaces and contribute non-violently to maintaining community and social order. Their authority is vested in them through social hierarchies and community building. Their natural surveillance from storefronts and porches help to enforce social norms onto a community, without state-sanctioned authority.

Building on the work of Jacobs and the idea of "eyes on the street", legal scholar Eric Miller separates police work into two different categories: preventative and investigative policing roles. Miller sees preventative policing as low-level public-order offenses, which can largely be mitigated through providing eyes on the street to reduce urban disorder. Investigative policing, on the other hand, aims to apprehend criminals (Miller, 2006). Low-level crimes, Miller argues, should not trigger the police's regulatory response that entails automatic escalations (Miller, 2006). Preventative policing, Miller posits, could be done by expanding existing municipal agents' roles like meter readers, crossing guards, or even bus drivers (Miller, 2006).

Miller's argument relates to the types of crime on transit, where most issues rarely require the immediate detention of the criminal suspect (Miller, 2006). Instead, they often require "eyes and ears on the street" to identify locations, and "some form of creative effort to match responses from the different municipal and private actors with the ability to diffuse the situation" (Miller, pg. 68, 2006).

This relates to theorists work around "guardianship"; agents who can perform the same duties that armed law enforcement performs on public transportation. Texas State University Professor of Criminal Justice, Marcus Felson and colleagues posit a guardian is anybody passing by, or anybody assigned to look after people or property (Beavon et al., 1994). Guardians deter the likely offender from committing a criminal act by watching and detecting untoward behaviors (Beavon et al., 1994). Others ex-

pand this notion by adding that a guardian is any person on the scene of a potential crime that may notice and intervene (whether they intend to or not) (Sampson et al., 2010).

One study examines whether guardians can directly reduce crime rates in public transit. Researchers in the UK instructed uniformed civilian staff with no weapons, detaining, or arrest powers to be highly visible at rail stations, and then tracked their locations and time with GPS monitors (Ariel, et.al, 2017). Testing the effect of targeted periodic presence of unarmed security guards, researchers find that guardians, "...were capable of materializing some of the manifestations of state policing. As measured by the official records collated by the police—both victim-generated and police-generated—security guards prevent a wide range of criminal activities from taking place; they lead to the detection of notifiable offenses; and they can manage initial crime scenes" (Ariel, et.al, 2017).

Additionally, a pan-European study on surveillance and privacy preferences finds respondents ranked armed police, and armed security personnel as their least preferred security measure (Patil et.al, 2016). Unarmed police were their most preferred option, followed by unarmed security personnel employed by a private company (Patil et.al, 2016).

People prefer unarmed guardians over armed guardians in public transit environments.

This study noted racial discrepancies; non-white, non-conservative individuals prefer settings where uniformed military are not present (Patil et.al, 2016). The study also notes that 29 percent of respondents are concerned increased security measures would be misused for sexual or racial harassment (Patil et.al, 2016).

Some community organizers and activists call for divestment from police amid increasing police brutality (Black Lives Matter, 2016; Critical Resistance, 2011; Center for Popular Democracy, 2016). These groups typically support reducing both police and jail budgets, and instead investing in mental health, education, transportation, and job training programs in low-income communities of color (Black Lives Matter, 2016; Critical Resistance, 2011; Center for Popular Democracy, 2016). Activists see these measures as positive and preventative social welfare policies. By providing more op-

portunities and expanding the social safety net, overall crime can be reduced (Dent et.al, 2018).

Research support this approach. A meta-analysis on crime reductions and policing finds community and problem-solving interventions designed to change social and physical disorder conditions led to the highest crime reductions among a variety of approaches evaluated (Braga, 2015). Conversely, aggressive order maintenance strategies that target individual disorderly behaviors, like certain stop-and-frisk strategies, did not generate significant crime reductions (Braga, 2015). Another longitudinal study found that for every ten additional community-based organizations focusing on crime and community life in medium and large cities, there was a 9 percent reduction in the murder rate, a 6 percent reduction in the violent crime rate, and a 4 percent reduction in the property crime rate (Sharkey et.al, 2017).

These studies show the efficacy of community-oriented, proactive solutions in responding to crime.

Moreover, there is a growing movement questioning whether police are even the right type of first responders in certain instances (Vitale, 2019). In many cases, police are taking on roles for which they are not trained: mental health practitioner, social worker, or school counselor (Vitale, 2019).

Too often, police are employed to solve societal problems that other er professionals are more adept to take on.

For example, the largest inpatient psychiatric facilities in the United States are the LA County Jail, New York Riker's Island Jail, and Chicago's Cook County jail (Vitale, 2019). In the case of people with mental illnesses, police are a first point of contact instead of mental health professionals and trained social workers. This often leads to escalated situations and violent outcomes (Vitale, 2019).

Conclusion

Overall, there is a large amount of literature around the topics adjacent to policing on transit. The literature on perceptions of safety is rich, considering differences in race/ethnicity, gender, ability, and age. The factors that influence an individual's perceptions of safety vary widely based on personal experiences and environmental conditions. The literature also show many people are more alarmed than calmed by police presence, especially people of color. The research on policing preferences and CPTED is less diverse, grouping all participants equal without much regard for how factors like race and class influence preferences. However, CPTED shows promise in design interventions successfully reducing crime, without a need to rely on armed law enforcement. Moreover, there are encouraging results from research on non-policing approaches to reducing crime and increasing social order and cohesion from realms relevant to public transit. However, major gaps in the literature exist, particularly around implementing these non-policing approaches specifically on transit environments, which I hope to fill.



Methodology

This study evaluates alternatives to armed law enforcement to ensure safety on public transit. To do this I analyze existing programs throughout North and South America to understand and evaluate their efficacy and methods. My sample is from agencies the ACT-LA Transit Justice Coalition identified, snowball sampling, and knowledge from professors and colleagues.

To evaluate these alternative programs, I conducted both interviews and document analysis. My interviews were semi-structured, to allow for additional probing and conversational exploration of topics. The interviews ranged between thirty minutes to one hour, were conducted via telephone, and recorded. Transcripts were then coded to pull consistent themes from across interviews. If interviewees did not respond to requests, document analysis was used instead. Documents analyzed ranged from research articles, books, budget reports, meeting agendas and presentations, on-board customer satisfaction surveys, and newspaper articles discussing the programs. Additional supporting data were contracts with police, crime statistics for transit agencies, ridership statistics for transit agencies, and transit rider's perceptions of safety. For a complete list of data used, refer to Appendix F and References.

All told, I identified eleven agencies as possibilities for investigation. Among these eleven, I contacted thirteen people at the eleven agencies to set up an interview. Six of those contacted agreed to interview, while seven did not (zero declined, seven failed to respond after 2 or 3 contact attempts). Of the five agencies for which I was not able to set up an interview, I conducted a detailed document analysis for three of them.

Agency	Interviewee Name	Status
SFMTA	Anonymous	Interviewed
BART	Lateefah Simon	Interviewed
BART	Janice Li	Interviewed
Hub of Hope	Eliza Mongeau	Interviewed
Ponte la del Metro	Jorge Durán Solórzano	Interviewed
InterCity Transit	Ann Freeman Manzanares	Interviewed
BART	Bevan Dufty	Failed to Respond
Guardian Angels	Curtis Sliwa	Failed to Respond
Metro Homeless Outreach Program	Joyce Burrell Garcia	Failed to Respond
SEPTA	Carol Thomas	Failed to Respond
Traffic Mimes, Bogota, Colombia	Antanas Mockus	Failed to Respond
Kansas City, Missouri	Councilmember Eric Bunch	Failed to Respond

Table 1: List of interviewees identified.

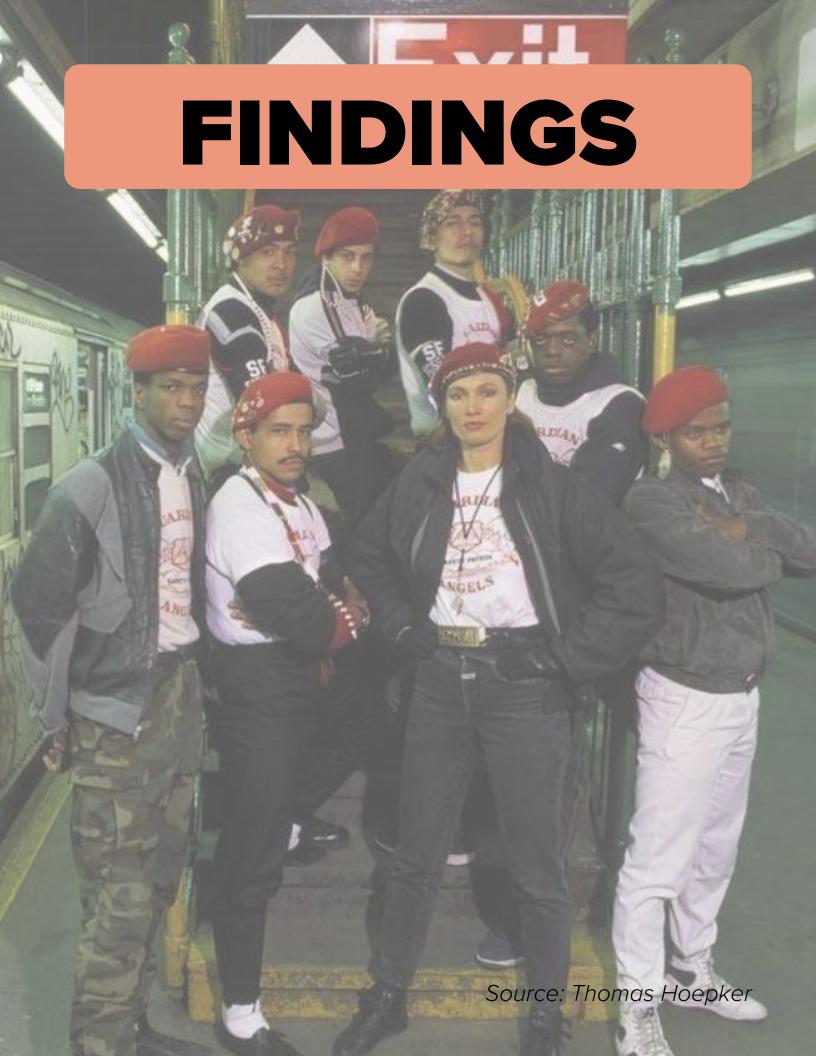
Methodology

In sum, six interviews were conducted with five transit operators: a senior security executive who preferred to remain anonymous at the San Francisco Municipal Transportation Authority in San Francisco; Janice Li and Lateefah Simon, Bay Area Rapid Transit Board of Directors; Eliza Mongeau, Assistant Programs Manager of the Hub of Hope in Philadelphia, Pennsylvania; Jorge Durán Solórzano co-founder of Ponte la del Metro in Mexico City, and Ann Freeman Manzanares, General Manager of InterCity Transit in Olympia, Washington. Most professionals interviewed had first-hand participated in program development and implementation.

Agency Name	Location	Annual Ridership (2018)	Relationship with armed law enforcement
San Francisco Municipal Railway	San Francisco, California	225 mil- lion	Unarmed contract security services, and San Francisco Police Department contracted.
Bay Area Rapid Transit	San Francisco Bay Area, California	129 million	Armed BART Police Department utilized.
Hub of Hope (South Eastern Pennsylvania Transit Author- ity)	Philadelphia, Pennsylvania	319 million	Works closely with SEPTA police and Philadelphia police.
Ponte la del Metro (Sistema de Transporte Colectivo)	Mexico City, Mexico	1.655 bil- lion	Unknown.
InterCity Transit	Olympia, Washington	4.47 mil- lion	No formal security contracts with police.

Table 2: Overview of transit agencies included in analysis.

Since the programs' evaluations are based on interviews by people involved in either the design or implementation, the findings may be skewed. The individuals might have professional and emotional stakes in their programs, and be reluctant to criticize them. Additionally, interviewees may be hesitant to discuss shortcomings with their program out of loyalty to their agency or out of reluctance to criticize colleagues. For these reasons, interviewees were given the option to be anonymous, to allow for open and frank discussion. Most declined, however.



Transit Ambassadors are designated unarmed, identified transit agency staff with the role of providing extra eyes, ears, and authority at a transit facility or vehicle. Transit Ambassadors usually have no powers of citation or arrest, but are often trained in de-escalation, conflict resolution, and self-defense.

I analyzed two groups: San Francisco Muni's Community Transit Assistants Program, and the informal, volunteer Guardian Angels in New York City. These programs provide authoritative figures on transit vehicles, at stops, and in stations to reduce incivilities and directly respond to situations. San Francisco Muni's program specifically targets youth riders, while the Guardian Angels respond to all situations. Despite the long-running San Francisco Muni program, no evaluations have been conducted and no data are available on program outcomes. I interviewed a high-level San Francisco Muni security expert about the program, who reports it is well-liked by operators, community members, and politicians. The expert noted the program reduces operator assaults and prevents youth from entering the criminal justice system.

Similarly, the Guardian Angels program has shown to reduce some passengers' fears of crime, albeit ephemerally, and most riders approve of their methods (Kenney 1987, 77-79). For more analysis and information on Transit Ambassadors on transit, refer to Appendix A.

Like Transit Ambassadors, elevator attendants are designated unarmed transit agency staff with the role of providing extra eyes, ears, and authority in station elevators. Two different transit agencies have utilized elevator attendants: Bay Area Rapid Transit (BART), and New York City Metropolitan Transportation Authority (NYCMTA). BART's joint program with San Francisco Muni costs \$1.3 million annually to cover four stations, and according to an interview with Lateefah Simon, BART Board of Directors member, reports of urine, defecation, graffiti and needles were down in targeted station elevators by 98 percent. In our interview, Simon mentioned,

"You don't always need someone who has the power to kill to make a space safe. You need someone who deeply knows the interactions of people who are struggling the most, and how to respect them."

In New York City, the elevator attendants have been saved numerous times from budget cuts through both union and community support. Residents of Washington Heights, a neighborhood with elevator operators, organized to maintain their presence, saying attendants were "essential for their safety" (Ramsay, 2019). According to community advocate Elizabeth Lorris Ritter,

"[P]eople who take the elevators all the time don't see it as a luxury... They view it as public safety. You will see people wait for the manned car" (Grynbaum, 2011).

While I could find no formal evaluations of the elevator attendant program, the community members' struggle to retain them, as reported by Grynbaum and Ramsey, speaks to their influence on safety in elevators. For more analysis and information on elevator attendants, refer to Appendix B.

Some of the underlying issues in elevator cleanliness relate to the epidemic of homelessness many large cities face. Transit agencies in the U.S. understand they can play a deeper role in addressing this problem (Bell 2019). Station cleanliness directly affects a rider's experience, and transit agencies predict ridership decreases if homelessness is not addressed (Metro, 2017).

Oftentimes, police are first-responders to situations with people experiencing homeless or suffering from mental illness (Vitale, 2019). In these cases, police may escalate the situation or face distrust from the person in need (Vitale, 2019; Miller, 2020).

Two agencies, Los Angeles Metro (LA Metro) and Southeastern Pennsylvania Transportation Authority (SEPTA), employ strategies of social workers and social services.

LA Metro contracted People Assisting the Homeless (PATH), a long-standing homeless services non-profit, to provide outreach to people experiencing homelessness (Metro, 2020). Eight three-person PATH teams provide services along the Metro Red Line and Union Station, and cost Metro about \$4.9 million each year (Metro News, 2019). Conversely, LA Metro also hired LAPD's Homeless Outreach and Preventive

Engagement (HOPE) teams to provide similar services. Metro pays \$1.17 million annually to deploy four HOPE staff (LAPD, 2017). The Long Beach Police Department and Los Angeles County Sheriff's Department also provide similar "Quality of Life" teams that engage in outreach to people experiencing homelessness.

Between September 2019 and November 2019, PATH teams on Metro referred a greater share of their contacts (clients) to services, and secured housing for a greater share of their contacts (clients) than the three police outreach teams (Metro Homeless Snapshot, 2020). In terms of absolute cost, the contract for the PATH teams is higher than the annual cost of LAPD's HOPE officers (\$4.9 million, and \$1.17 million, respectively), but PATH pays twenty-four individuals, while the HOPE unit is only four officers.

Assessing both service provision and cost, the PATH teams are more effective at providing meaningful outreach for people experiencing homelessness than employing police officers.

In Philadelphia, managers at SEPTA invested even more in social service provision than LA Metro. According to an interview conducted with Eliza Mongeau, Assistant Program Manager at the Hub of Hope, in 2012 SEPTA partnered with a local non-profit social services organization, Project Home, to take over an unused space in a central city station concourse. The service center, called Hub of Hope, operates on a first-come, first-served, same day, drop-in service model. The Hub offers free shower and laundry services, drop-in primary care center, on-site acute case management, hot breakfast every day, and dinner six nights a week.

According to Eliza Mongeau, the Hub of Hope aims to "meet people where they're at and get them what they need."

In the first quarter of 2019, the Hub of Hope placed 635 individuals in shelter, placed more than 60 people in safe haven/long term respite, and referred more than 70 people to locations for permanent housing (Knueppel, 2019). Additionally, the Hub delivered medical services to 168 people, and referred 36 others to medical or treatment programs (Knueppel, 2019). In 2019, they had over 100,000 visits, and over 10,000 laundry and shower services delivered. For more analysis and information on social workers on transit, refer to Appendix C.

Another creative intervention to addressing incivilities is performance art. The two examples studied, Ponte la del Metro in Mexico City, and traffic mimes in Bogotá, Colombia, illustrate how de-escalation tactics through performance art can lead to effective results. Ponte la del Metro was a cultural intervention project on Mexico City's subway that used clowning techniques to inform subway patrons about proper behaviors when commuting (Ponte la del Metro, 2020). When the clowns would approach people, and point out their bad behavior (like crowding the train before others can get out), confronted individuals "would laugh, and say 'sorry I did something wrong', and continue with their trip," Ponte la del Metro co-founder Jorge Durán Solórzano shared in an interview with me.

He went on to say, "the confrontational situation became a funny thing. We de-escalated the confrontation through humor, and this form of engagement helped manage how things turned out."

In my interview, Solórzano told me, "as long as we were doing the intervention people would engage and change certain behaviors. But as soon as we would leave the subway, everybody would continue as normal."

In contrast, a similar intervention using mimes in Bogotá had a lasting impact. Under direction from Mayor Antanas Mockus, traffic mimes replaced traffic cops in the early 1990's. They mocked lawbreakers, applauded courteous drivers, and dramatized the frustrations and challenges of citizens moving through traffic (Goat, 2014). They tracked every move of a pedestrian running across the road, or poked fun at reckless drivers (Goat, 2014).

Between 1993 to 2003, traffic fatalities dropped from 1,300 per year to about 600 per year (Caballero, 2004).

Mockus notes how these doubly unarmed agents—no words, and no weapons—showed the importance of cultural regulations and led to meaningful change (Caballero, 2004). These humorous approaches reduce the hostility of confrontations, and make interventions effective and memorable.





Discussion

This review of four non-police approaches to improving safety and civility on public transit suggests that alternative safety programs can deliver positive results in improving both perceptions of and actual public safety. While many of these programs have not been formally evaluated (perhaps owing their unconventionality), anecdotal and qualitative evidence highlight their success—San Francisco Muni operators frequently request transit ambassadors on their vehicles, people laughed and changed behavior when confronted by clowns on the subway in Mexico City, and people who otherwise would eschew services, or not be provided any at all, came in to take showers at the Hub of Hope in Philadelphia.

These programs, however, are the exception and not the rule. Currently planners, politicians, and the public largely rely on armed law enforcement to provide safety services on public transit, with alternative programs often viewed as outside the purview of ensuring safety. For example, LA Metro's recent Understanding How Women Travel study had no survey questions about alternative safety and civility programs (Metro HWT Appendix C, 2019). Instead, when posed with the question "what makes you feel safe when riding public transit", individuals could choose lighting, other people, open businesses nearby, emergency intercom, security cameras, transit employees or representatives, transit police, and other (Metro HWT Appendix C, 2019). There were no alternative programs — like on-board social workers, public art programs, unarmed transit ambassadors, etc. — even mentioned. The survey asked additional questions about police responsiveness, and the police presence on transit.

The lack of consideration of alternative approaches to safety points to a larger issue facing many transit agencies: a too-narrow concept of safety and civility interventions.

While mimes and clowns, for example, usually do not come up in discussions of ways to improve transit safety, the evidence reviewed here suggest that they can be effective, and fun, tools. Too often, punitive measures are how safety is provided, by patrolling and reacting aggressively to negative behaviors. When crime increases, the hand of the state grows firmer. However, as this study shows, there are proactive, interactive, and de-escalating ways to address negative behavior on transit.

There is a true need to expand the definition of public safety and which bodies can provide those services to the public.

Discussion

Moreover, at the conclusion of this study, the COVID-19 novel coronavirus pandemic took hold of the United States, radically changing the way people live and move both in Los Angeles and throughout the world. The pandemic requires agency staff to consider what their essential services are, and how they ensure their systems are safe for the public. In response, most step up their janitorial and cleaning services. In the face of a global pandemic, janitorial staff are essential workers, ensuring public safety.

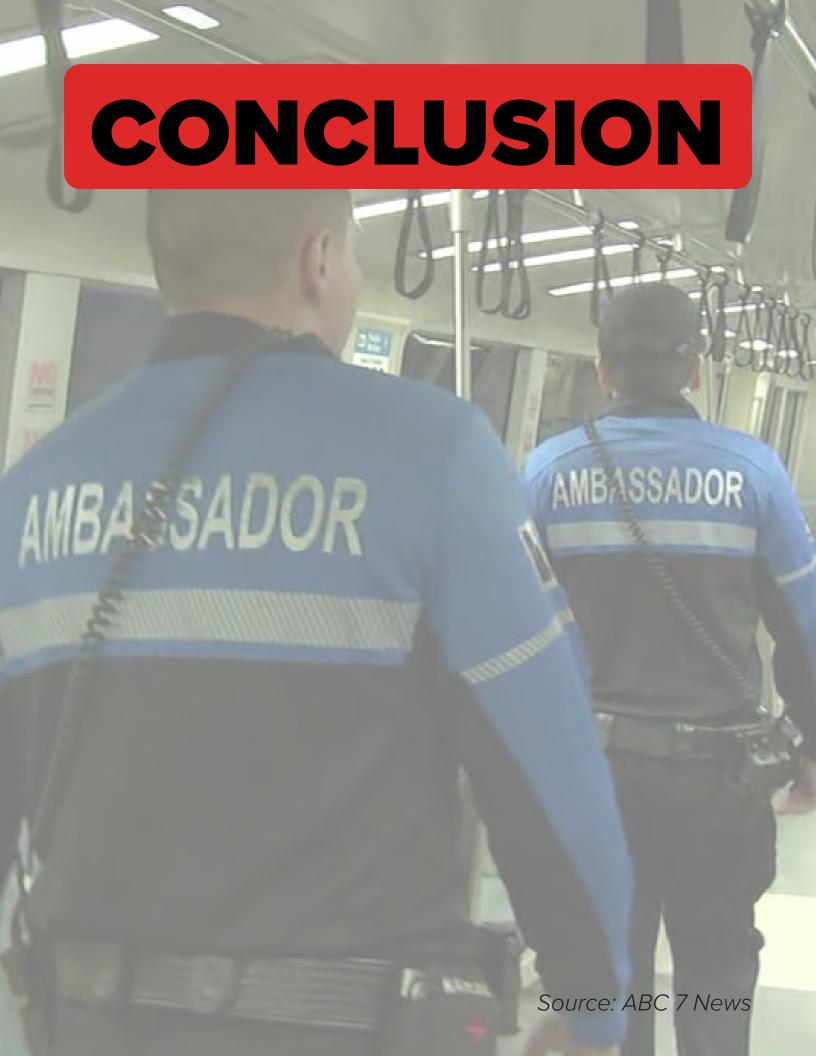
The long-term effect of the pandemic is yet to be seen both for transit agencies and our larger economy alike. Due to decreased sales tax revenues, many agencies will face budget shortfalls and required cuts. In one interview conducted after shelter-in-place orders were mandated in the Bay Area, Lateefah Simon of the BART Board discussed with me the pandemic's effect on safety and security, saying

"Non-enforcement positions and programs are critical to the public safety success of our agency. They are as important, if not more important, to creating a safe and secure community within our stations... These are not accessory programs; we must not categorize them anymore as pilots."

In the face of looming funding shortfalls, pilot programs like the ones described here are often the first to go. It's likely that, even if ridership decreases, funding for policing will stay constant. But if these transit ambassadors, social workers, and performance art programs cost-effectively enhance transit safety and civility, cutting them could be an expensive way to save money.

Cutting these programs may prove a disservice to their efficacy, especially when compared to costly policing contracts which fail to meet the same results of improved safety, service delivery, and customer satisfaction.

When facing budget cuts, it is important agencies think about safety, pilot programs, and essential services through a nuanced perspective.



Conclusion

Given this research on alternative approaches to transit safety and civility, I conclude that there is great promise in alternative programs to providing public safety and improving perceptions of safety. While more evaluations are warranted, the evidence gathered here supports the merit of programs like unarmed transit ambassadors, elevator attendants, social workers on transit, mimes, and clowns. Indeed, my interviews suggest that social workers and mimes proved even more effective than armed law enforcement at meeting their respective goals. But despite their apparent success, they are often scarcely funded in comparison to policing budgets. To improve safety for all riders, and reduce oppressive interactions with Black and Brown transit riders, the concept of public safety must be expanded.

Armed law enforcement can no longer be the default.

The notion of what bodies or groups can provide public safety also needs to be broadened. Successful examples exist, offering precedents from which agencies in Los Angeles can learn and adapt. I would argue that the challenge is more a matter of budgeting and leadership, rather than creativity and inspiration.

APPENDIXA



Source: Bay Area Telegraph

TRANSIT AMBASSADORS

Introduction

Transit Ambassadors are designated unarmed, identified transit agency staff with the role of providing extra eyes, ears, and authority at a transit facility or vehicle. Depending on the program, some have a specific purpose, or patrol a specific type of facility. Often, they are union jobs, but sometimes they may be contracted out. In this case study, I explore three specific models—the San Francisco Municipal Transportation Authority's (SFMTA) Community Transit Assistance Program (here referred to as the Muni Transit Ambassador program), Bay Area Rapid Transit's Transit Ambassador Program, and New York City's volunteer-program Guardian Angels.

SFMTA Transit Ambassadors

Background

Following persistent security problems on bus and rail lines, in 1995 a handful of young volunteers began riding the San Francisco city buses with the goal of making their neighborhood buses safer (New York Times, 1998). The group, comprised of former gang members or those who had prior run-ins with the law, called themselves Together United Recommitted Forever, or the Turf Group (New York Times, 1998). In 1996, under Mayor Willie Brown, the SFMTA formalized the program, with Muni, the San Francisco school district, and San Francisco Police Department allocating funding (New York Times News Service, 1998).

The program then, and today, targets youth riders on Muni's lines by schools where fights are known to occur. The program currently engages 17 different middle and high schools out of the 33 in the entire district; these 17 "require a little more attention," as a high-level security executive familiar with the program put in one of my interviews. Transit Ambassadors have no powers of citation or arrest, but they are trained in rail safety, de-escalation, customer service, and receive a training module by the San Francisco Police Department. The Transit Ambassadors work closely with school administrators, parents, non-profits, and counselors to hold students accountable through administrative actions instead of entering the criminal justice system.

Law enforcement is almost never involved, as the high-level security executive recalled, most situations are de-escalated or resolved by the Transit Ambassadors.

Transit Ambassadors are often hired from the community. Muni specifically works with certain nonprofits to hire people with street cred among students and parents; typically former gang members who were recently released from incarceration, and who have little to no prior work experience. The roughly thirty Transit Ambassadors are full-time non-union SFMTA employees, who stay in their position for three years and then cycle into a different role in

the organization. In this way, the program is both an alternative to policing, and an alternative job training program.

Every day, Transit Ambassadors report to their school and check in with administrators and school resources officers. There, they receive notice about incidents that may cause a disruption around dismissal. During dismissal, they ride the lines from the school to connecting hubs. According to the security executive I interviewed, while riding the lines the Transit Ambassadors, "intervene in any undesired behavior, hold the students accountable for abiding to the rules of travel on our system, and assist other customers with information about our system." By riding the lines and intervening like this, the Transit Ambassadors seek to ensure that students get around safely without being bullied or assaulted.

Results

Even though the Transit Ambassador program has been around since 1996, there has never been a systematic evaluation of the program. Data on the program are not regularly collected. The security executive I interviewed said a data collection and evaluation protocol was something San Francisco Muni is putting in place now to better understand how often Transit Ambassadors are utilized, and their impact on criminal justice and gang diversions.

According to the security executive I interviewed about this program, bus operators "have a good rapport with [the Transit Ambassador] staff. They request on a regular basis our [Transit Ambassador] staff's assistance." S/he/they also reported that the Transit Ambassadors' presence on-board reduces both assaults on operators and the need for operators to get involved in passenger conflicts, letting them focus on driving. S/he/they also asserted that the larger transit-riding community thinks highly of the Transit Ambassador program, saying that the community

"Think[s] the job that [the Transit Ambassadors] do is extraordinary... The public doesn't have the pleasure of knowing the intervention work that [the Transit Ambassadors] do on a daily basis. But what the public does observe is their ability to address the kids, and the kids' willingness to adhere to the commands that [the Transit Ambassadors] are giving them."

Beyond success with operators and the public, my interviewee also characterized the Transit Ambassador as a political success. The security executive I interviewed noted how many of the San Francisco Board of Supervisors, whose districts encompass concentrations of schools where Transit Ambassadors work, are fully on-board with the program. Supervisors have even requested information on the Transit Am-

bassadors, to create similar Community Ambassador programs in their districts.

Indeed, the security executive hopes to expand the Transit Ambassador program in the coming year. While the details of what that would entail are not clear yet, the security executive I interviewed expressed hope to "expand not only our coverage area, but also give more attention to the schools that we already serve—it would allow us to cover more of our schools at one time... a part of the expansion would be to address evening activities involving our schools," like sporting events and other programming. Program expansion would also allow the agency to duplicate the efforts to outside of the youth-centric program. Currently, the agency is working to approve more funding and hire additional employees.

The 2021 and 2022 Fiscal Year budgets allocate \$0.9 million and \$1.2 million towards hiring an additional 20 Transit Ambassadors (SFMTA Board Workshop, 2020).

Compared to current policing budgets, SFMTA allocated \$3.39 million towards contract services with the San Francisco Police Department, however, I could find no information on the number of police officers this included (Sustainable Streets Budget, 2018).

BART, also in the San Francisco Bay Area, recently implemented a Transit Ambassador program, largely modeled on San Francisco's. Instead of focusing on youth, BART staff are aiming to provide a stronger security presence during off-peak and weekend times (Quality of Life FY20, 2020). In an interview with Janice Li, BART Board of Directors member, she discussed how recent surveys and listening tours indicated a strong desire for staff presence during those times when stations and trains are less crowded. Indeed, BART's steepest ridership declines in recent years have been during the off-peak and weekend hours (Wasserman, 2019). According to Li, the Transit Ambassador program aims to boost ridership and address safety and security concerns.

BART's ten-person Transit Ambassador six-month pilot program began in February 2020. Li discussed how the union-represented Community Service Officers are housed under the BART Police Department (BPD), but are unarmed uniformed staff identified by a high-visibility blue shirt (Quality of Life FY20, 2020). BART's Transit Ambassadors are visible to the public, answer customer questions or complaints, and report inappropriate behavior, bio-hazards, or safety and security issues to BPD (Quality of Life FY20, 2020). The total cost of the six-month pilot (from February 2020 to August 2020) is \$690,000, and results will be presented to the BART Board to assess the viability of extending the program (Quality of Life FY20, 2020).

New York City Guardian Angels

Introduction

Unlike the SFMTA and BART programs, New York City's Guardian Angel program is separate from the Metropolitan Transit Authority (MTA), and entirely volunteer-run. The Guardian Angels began in 1979 as a response to rampant muggings and assaults on New York City's subways and streets (Guardian Angels, n.d.). The Angels are groups of unarmed vigilantes, with distinct uniforms who patrol subways and streets. They de-escalate immediate physical violence they witness, return lost children to their parents, and protect women who are being harassed by men (Guardian Angels, n.d.). The Guardian Angels are still around today, donning their distinct uniforms and addressing safety and security. They mainly patrol the New York City subways, but often also do street patrols in neighborhoods with known gang affiliations (Guardian Angels, n.d.).

Trayvon Martin, a 17-year old African-American man was murdered while walking in that community in 2012 by George Zimmerman, a neighborhood watch coordinator for his Florida gated community (Robertson & Schwartz, 2012). The tragedy garnered national attention for months, starkly highlighting the risks many African-American men face doing quotidian activities that most others take for granted. It also cast both citizen-patrols and legislation like Florida's Stand-Your-Ground law that empower them in a profoundly unfavorable light.

The Guardian Angels take specific steps to differentiate themselves from the usual citizen-patrol groups seen across the United States, such as patrolling in groups, training martial arts, videotaping patrols, and a vetting process (Stahl, 2013). Their work aims to secure a public space, not protect private propertied interests like homes or neighborhoods. Moreover, Angels are unarmed—before starting their shift, they search each other to ensure no weapons are carried (Krule, 2016). Volunteers are trained in self- defense, basic martial arts, CPR, law, communication and conflict resolution (Guardian Angels, n.d.).

Unlike most neighborhood watch programs like the one that called George Zimmerman a member, the Guardian Angels recruit a diverse set of volunteers from all boroughs, ages, genders, and backgrounds across New York City (Guardian Angels, n.d.).

While many volunteers join on their own volition, the Guardian Angels run a Junior Angels program aimed at Black and Latinx youth (Stahl, 2013). The Junior Angels program offers free martial arts courses, tutoring services, and provides food for about 500 children a week during after-school hours, hoping to steer them away from gang recruitment (Stahl, 2013). At their peak in the 1980s in New York City, almost 1,000 individuals volunteered as Guardian Angels; today, there are only about 100 (Stahl, 2013).

Results

In 1987, Dennis Jay Kenney and Elizabeth Gibson-Kenney studied passengers' attitudes of the Guardian Angels on the New York City subway. Kenney and Gibson-Kenney surveyed passengers during different times of day, and in different boroughs experiencing varied levels of Guardian Angel patrols. They sought to evaluate how the patrols of the Guardian Angels influenced rider's perceptions of safety, and impacted actual crime rates within the subways.

From their interviews conducted with transit riders, Kenney and Gibson-Kenney found that 61 percent of people believed the Guardian Angels improve other people's perceptions of safety (Kenney 1987, 77). Breaking down by racial and ethnic lines, 62 percent of Black people surveyed and 56 percent of Hispanic people surveyed thought the Guardian Angels reduced fear of crime in "people like themselves", compared to 64 percent of white respondents (Kenney 1987, 78). Additionally, the authors found that:

"Female passengers, respondents riding earlier in the evening, and those riding least often each week had the greatest confidence that the Angels reduced a passenger's fear. Oddly, residents of Manhattan and the Bronx, Hispanic riders, and teenage passengers were least likely to believe that the patrols reduced fear in riders like themselves" (Kenney and Gibson-Kenney 1987, 79).

From the surveys, riders who used the transit system the least were more likely to report that the Guardian Angels reduced passenger fears. Kenney and Gibson-Kenney also point out that users who worried the most about crime overall were more likely "to increase their estimate of the Angels' impact upon fear" (Kenney 1987, 86). Adult Black males, living in the Bronx and riding during middle evening hours (9pm-12am), were the most positively influenced by the presence of Guardian Angels (Kenney 1987, 86). The majority of riders, however, expressed that the Guardian Angel patrols reduced overall fear on the subways (Kenney, page 79).

Seventy-four percent of the riders surveyed also supported the work and methods of the Guardian Angels. The strongest support came from female and Black riders, with 80 percent and 77 percent of respective respondents approving when asked, "do you approve or disapprove of the Guardian Angels and their methods?" (Kenney, page 80). However, despite the support for the Guardian Angels and their operations in the 1980s, in the long-term their presence had little effect on passengers' overall levels of fear on subways (Kenney 1987, 84). Thus, despite their distinctive uniforms and consistent presence, the Guardian Angel's operations have a more ephemeral effect on riders (Kenney, page 85).

Conclusion

Transit Ambassador programs aim to create eyes on the street, whether through formalized staff as part of the agency like on San Francisco's Muni or the Bay Area's BART, or as informal, volunteer-groups like the Guardian Angels in New York City. These programs provide authoritative figures on transit vehicles, at stops, and in stations to reduce incivilities and directly respond to situations that typically do not involve law enforcement or the criminal justice system. SF Muni's program specifically targets youth riders, while BART and the Guardian Angels respond to all situations, at varied times of day. Despite the long-running SF Muni Transit Ambassador program, no evaluations have been conducted and no data are available on their performance or outcomes. However, the expert interviewed about the San Francisco program reports that it is well-liked by operators, community members, and politicians. Similarly, the Guardian Angels program has shown to reduce some passengers' fears of crime, albeit ephemerally, and the majority of riders approve of their methods.

Given these findings, I conclude that Transit Ambassador programs help reduce fear of crime among riders, improve perceptions of safety, and provide authoritative figures who can immediately respond to disruptive situations.

Transit Ambassadors are unarmed, but equipped with de-escalation training, neighborhood knowledge, and authority.

They can respond to altercations between youth, sexual harassment, and other incivilities. However, their long-term effects on crime and perceptions of safety are unclear. In the moment, they seem to help situations, but it is unclear whether the Transit Ambassadors also have an ephemeral effect, like the Guardian Angels.

APPENDIX B



Source: TWU Local 100

ELEVATOR ATTENDANTS

Introduction

Like Transit Ambassadors, Elevator Attendants are designated unarmed transit agency staff with the role of providing extra eyes, ears, and authority in station elevators. Elevators are confined spaces with minimal supervision and limited engagement from other passengers. These enclosed areas are ripe for vandalism, assaults, or otherwise illegal behavior (LaRue, 1974). Oftentimes, the most vulnerable of transit passengers (people using wheelchairs, elderly folks, or individuals with strollers), are reliant on them. Given their special status, some transit agencies have created programs to make elevators safer and more secure. In this case study, I explore similar responses from two different transit agencies: Bay Area Rapid Transit (BART), and New York City Metropolitan Transportation Authority (NYCMTA).

Background

In 2017, BART was sued by a coalition of disability advocates, because their elevators and escalators were not compliant with Americans with Disabilities Act (San Francisco Bay Area News, 2019). Advocates argued that elevators were often out of service, soiled with human waste, and otherwise unusable, preventing passengers with disabilities from accessing transit. BART responded by unveiling their \$16.3 million escalator and elevator improvement agenda, as well as \$190 million towards access improvements in stations in Downtown San Francisco (BART News, 2017). Part of that plan included elevator attendants, which are individuals stationed in certain elevators to prevent individuals from defecating, defacing, urinating, or otherwise using the elevators improperly. According to Lateefah Simon, BART Board of Directors member, the elevator attendant program aimed to be a moderate cost program focused on safety and cleanliness in elevators.

In my interview with her, Simon mentioned that BART focused on improving elevator conditions without "over-polic[ing] folks who weren't being provided a service by the city and county."

The program, according to Simon, was loosely based off the NYCMTA Elevator Operator program. In New York City, elevator attendants initially operated the hand-cranked elevators to access certain platforms (Grynbaum, 2011). With automation in the 1970s, the MTA tried to eliminate the operators, but local politicians and the Transport Workers Union of America (TWU) fought to keep the positions in place (Grynbaum, 2011). Through many budget cuts, some elevator operators who left or retired were not replaced, and today only a handful of full-time operators remain.

Operators today work in five different deep-bore subway stations in northern Manhattan,

where elevators are still the primary or only means of access to subway platforms (Grynbaum, 2011). These stations can be as deep as 12-stories underground (Piazza, 2003). These operators are unarmed; they carry no weapons, mace, and do not intervene in altercations (Ramsay, 2019). They have union jobs—technically they are station cleaners, but are re-assigned as elevator operators due to medical reasons like arthritis (Ramsay, 2019). Although initially not envisioned as a community safety position, according to Grynbaum (2011), the elevator attendants now create a sense of safety and order in these confined spaces.

Results

BART partnered with the San Francisco Municipal Transportation Agency (SFMTA) to pilot an elevator attendant program in 2018 at two stations shared by the agencies, Civic Center and Powell Street. After a successful pilot program, in 2019 elevator attendants were expanded to cover all BART and SFMTA stations in downtown San Francisco (Brinklow, 2019). Elevator attendants are hired through the non-profit Hunters Point Family (HPF), which works with recently incarcerated, low-income, African-Americans living in the historically Black neighborhood of Bay-View Hunter's Point. Attendants sit on stools in elevators, equipped with a clipboard and collect data about usage, demographics, and elevator conditions during their 8-hour shifts. According to Lateefah Simon, a BART Board of Directors member, elevator attendants are part community managers, and part researchers, compiling field notes while ensuring proper elevator etiquette.

Despite much pushback from BART's employee union representatives, staff and the Board ushered the program in its current contract format. With regards to the program's employment format, Simon shared, "it would be great if we had the revenue to make these positions union, and we will hopefully get there... it's just a question of resources." In its pilot operations, 35 people staffed the two stations' elevators 21 hours a day, beginning at 4 a.m. (Keeling, 2018). Currently, the program costs BART about \$1.3 million annually to cover four stations, but I was unable to find the exact number of employees in the program (Swan, 2019).

The presence of the attendants is overwhelmingly positive. Prior to the program 44 percent of BART customer service survey respondents reported being "very satisfied" or "somewhat satisfied" with the condition of the elevators.

After the attendant program was underway, 93 percent of respondents reported being "very satisfied" or "somewhat satisfied" (BART Social Resources, n.d.).

Additionally, according to Simon, reports of urine, defecation, graffiti and needles were down in targeted station elevators by 98 percent. Simon also told me that the elevator attendants create:

"A safer and friendlier environment, and [the attendants] increase everyone's ability to move throughout our stations. Not just folks in wheelchairs... when you have attendants on [the elevator] greeting with you a smile, who are not in a badge with a gun, you're not worried about your document status, you're not worried about someone hurting you or asking you questions, you're just getting on and going about your business."

The BART elevator attendant program's positive results show how effective community members can be at enforcing order in space, without the use of armed law enforcement Authority isn't necessarily vested solely through a badge and gun. In our interview, Simon discussed how, "you don't always need someone who has the power to kill to make a space safe. You need someone who deeply knows the interactions of people who are struggling the most, and how to respect them."

In New York City, the elevator attendants have been saved numerous times from budget cuts through both union and community support. Residents of Washington Heights, a neighborhood with elevator operators, organized to maintain their presence, saying attendants were "essential for their safety" (Ramsay, 2019). According to community advocate Elizabeth Lorris Ritter, "[p]eople who take the elevators all the time don't see it as a luxury... They view it as public safety. You will see people wait for the manned car" (Grynbaum, 2011). Another Washington Heights resident, Margaret Meagher, shared to reporters "I am afraid to go into those elevators at night if there isn't an operator there. This is a safety issue for me and all the people who live here" (Piazza, 2003). While I could find no formal evaluations of the elevator attendant program, the community members' struggle to retain them, as reported by Grynbaum and Ramsey, speaks to their influence on safety in elevators.

Conclusion

Elevator attendant programs aim to create a staff presence within the uniquely vulnerable spaces of elevators in transit facilities. Whether through contracted individuals on BART, or unionized positions in New York City, these authoritative figures reduce incivilities and improve elevator safety and cleanliness. BART's newer program was motivated by concerns over accessibility, while NYCMTA's program is largely a relic of the past. Despite the long-running NYCMTA program, I could find no data on its results, but my review of media accounts of the program suggests that it is well-liked by transit system users. Conversely,

the BART program has dramatically reduced elevator incivilities, and riders overwhelmingly approve of their presence. Given these findings, I conclude that elevator attendant programs can be viable alternatives to armed law enforcement in transit facilities with elevators. They both improve customer satisfaction and the cleanliness of elevators. Moreover, their effect on elevators, a key step in the transit journey, has the potential to improve overall perceptions of safety on transit. Elevator attendants are unarmed, but equipped with neighborhood knowledge, a smile, and authority. My review of materials and interviews suggest that their reliable presence cultivates community, keeps riders safe, and provides for a dignified journey while in an enclosed space.

APPENDIX C



Source: Philadelphia International Airport Flickr

SOCIAL WORKERS

Introduction

Many large cities in the U.S. face epidemics of homelessness. Oftentimes, people experiencing homelessness take shelter in transit facilities, like stops, stations, and rights-of-way, and on trains and buses as well. These spaces are typically safer than the streets, and sheltered from inclement weather. However, they are not meant for habitation, and can endanger the individual taking shelter. Additionally, factors like vehicle and facility cleanliness and social order play a large part in people's perceptions of safety (Yavuz & Welch, 2010; LaGrange et al., 1992). In a survey of transit agencies conducted by the American Public Transportation Association, 78 percent of respondents reported that people taking shelter in their system negatively effects ridership (Bell, 2019). While I could find no studies establishing a causal link between the presence of the unhoused and ridership, most of the agencies surveyed reported taking steps to alleviate issues of homelessness;

68 percent also reported that they believe that their agency has a role to play in reducing homelessness (Bell, 2019).

Transit agencies have taken different approaches to reduce the number of people taking shelter on transit. I will focus here on two agencies' approaches, the Los Angeles County Metropolitan Transportation Authority (LA Metro) and the Southeastern Pennsylvania Transportation Authority (SEPTA). I focus on these two because they were recently highlighted by the American Public Transportation Association as agencies employing best practices in addressing homelessness on transit. LA Metro contracts homeless services to two types of organizations, a social services agency, and various local police departments. SEPTA utilizes homeless outreach teams, police departments, and the Hub of Hope, an in-concourse service center run by a local non-profit. I discuss each in turn below.

Background

In February 2017, LA Metro created a Transit Homeless Action Plan, aiming to improve the rider experience, maintain a safe and secure system, and provide outreach to individuals experiencing homelessness (Metro, 2017). The plan called for working with police departments to provide homeless outreach services, and hiring two C3 (County, City, Community) teams through the Los Angeles County Department of Health Services (Metro, 2017). The C3 teams provide outreach to the homeless with the goal of housing them (Metro, 2017). They are multi-disciplinary teams consisting of a Mental Health Specialist, a Substance Abuse Specialist, and a Generalist, often with lived experience of homelessness (Metro, 2020).

LA Metro contracted People Assisting the Homeless (PATH), a long-standing homeless ser-

vices non-profit, to conduct homeless services outreach (Metro, 2020). Eight PATH teams work on the Red Line, the subway line with the highest daily ridership, and at Union Station, the largest station in size and passenger volume in Los Angeles County (Metro, 2020). PATH teams typically offer services, and provide on-going support to obtain housing and health for people they have already connected with (Metro, 2020; Nelson, 2018). As the program has continued, the teams have become very familiar to folks experiencing homelessness on the system, and much of the team's time is spent with follow-up activities (Metro, 2020). PATH's services cost Metro about \$4.9 million each year, for eight three-person teams (Metro News, 2019).

Alongside these efforts, the three main police agencies contracted by LA Metro have special teams that interface directly with people experiencing homelessness. The LAPD has a Homeless Outreach and Preventive Engagement team (HOPE), consisting of officers from LAPD, City of Los Angeles Sanitation Department workers, and outreach specialists from the Los Angeles Homeless Services Authority (Metro, 2020). In LAPD's 2017 contract proposal with Metro, only police officers are listed as staff for the HOPE teams, with a \$1.17 million annual cost to deploy four HOPE staff on Metro (LAPD, 2017).

These HOPE teams are partially staffed by police officers who volunteer for overtime shifts; the officers may not be specifically trained to interface and assist individuals experiencing homelessness (LAPD, 2017).

In the discussion of HOPE teams, there are no line items in the contract for City of Los Angeles Sanitation workers, or Los Angeles Homeless Services Authority (LAPD, 2017). However, these could also be contracted separately.

Despite repeated attempts and in-depth document analysis of police contracts and quarterly Homeless Update Reports, I was unable to clarify whether all members from LAPD's HOPE teams patrol Metro's system, or just police officers. The LASD and LBPD take similar approaches with their Transit Mental Evaluation Department (TMET) and Quality of Life Teams (QoL) (Metro, 2020). These units consist of one officer and a Los Angeles County Mental Health Department clinician responding to issues together (Metro, 2020). As with the HOPE teams though, repeated attempts and document analysis did not reveal whether these officers are patrolling Metro with their Mental Health clinician co-part, or on their own. Police teams have a larger scope than PATH, and patrol the entire Metro system.

In Philadelphia, managers at SEPTA took a slightly different approach. According to Eliza Mongeau, Assistant Program Manager at the Hub of Hope, SEPTA officials were hearing concerns raised by business owners and could see that homelessness was a problem in their concourses. They concluded that the best path forward was to provide needed re-

sources to the homeless population. SEPTA staff recognized that while many of the service providers were located on the outskirts of the city, most of the homeless population resided in the center city. In 2012, the agency partnered with a local non-profit social services organization, Project Home, to take over an unused space in a central city station concourse. According to Mongeau, the 9,000-square foot Project Home space in the train concourse operated as a winter-only service center, offering support and services.

According to Mongeau, because people experiencing homelessness are present year-round, not just in the winter, the City of Philadelphia, SEPTA, and Project Home partnered to create a larger, 11,000 square-foot year-round space in a Center City rail concourse that had been abandoned for 25 years. The new space, called Hub of Hope, opened in January 2018.

The Hub of Hope operates on a first-come, first-served, same day, drop-in service model. Anyone can come to the hub and connect with several on-site services. The Hub offers free shower and laundry services for people to wash and clean themselves and their clothing. At the hub, there is also a drop-in primary care center including medical, dental, and behavioral health care. There is, in addition, on-site acute case management, where case managers can help people get a bed for the night, get into long-term placement or a housing program, make a phone call, apply for a job, or just have a little vent session. Additionally, the Hub serves a hot breakfast every day, and dinner six nights a week. According to Eliza Mongeau, the Hub of Hope aims to "meet people where they're at and get them what they need."

Results

In Los Angeles the Metro Safety and Security team compiles Homeless Outreach Program Updates each quarter to inform Metro's Operations, Safety, and Customer Experience Committee. Between September 2019 and November 2019, PATH teams had a tenth as many overall contacts than police homeless outreach teams (495 contacts compared to 4,965), but PATH teams had a higher percentage of referrals (48% of contacts referred to services by PATH teams compared to only 28% for police homeless teams) (Metro Homeless Snapshot, 2020). Additionally, the PATH teams house (shelter, find interim housing, or place people in permanent housing) more people than police outreach teams (Metro Homeless Snapshot, 2020).

From September to November of 2019, PATH teams housed 161 people, about a third of the people with whom they had contact. In contrast, when police homeless teams conducted the same outreach over three months, they found housing solutions for only 34 people, representing about one percent of the people with whom they had contact (Metro Homeless Snapshot, 2020).

In terms of absolute cost, the contract for the PATH teams is higher than the annual cost of LAPD's HOPE officers (\$4.9 million, and \$1.17 million, respectively). However, the PATH teams are composed of 24 individuals, while the HOPE teams are only four police officers. In addition, the PATH teams are more effective per dollar than the HOPE teams in terms of referring people to services and securing housing for people experiencing homelessness. Thus, the PATH teams are more cost effective than LAPD's HOPE team.

Both my literature review and interviewees stressed that many individuals experiencing homelessness have negative associations of police, and be reluctant to trust them (Vitale, 2019). Such concerns are all too often well-founded as people experiencing homelessness in Los Angeles are often subject to police brutality and criminalization due to their economic class (Vitale, 2019; Miller, 2020). Given this, police officers may not be well-equipped to engage in meaningful and dignified homeless outreach services.

In contrast to the police-centered approach at LA Metro, SEPTA's Hub of Hope approach primarily utilizes social workers. Instead of trying to distribute social workers through a complex transit system, they created a drop-in space in the transit network.

In the first quarter of 2019, the Hub of Hope placed 635 individuals in shelter, placed more than 60 people in safe haven/long term respite, and referred more than 70 people to locations for permanent housing (Knueppel, 2019).

Additionally, the Hub delivered medical services to 168 people, and referred 36 others to medical or treatment programs (Knueppel, 2019). According to Mongeau, the Hub sees between 300 to 450 people come through their doors every day. In 2019, they had over 10,000 visits, and over 10,000 laundry and shower services delivered.

Beyond services, the Hub also has expanded programming to include weekly legal consultation and clothing mending services. Mongeau, the Hub of Hope Assistant Programs Manager I interviewed, hopes to bring more specialized programming to the space, like a recovery group or a women's group. Overall, the Hub also operates as a community center, where people can relax and have a place to simply watch TV if they want.

When asked about the public's reaction, Mongeau said, "At the end of the day we're doing the work that people need and we just encourage people to recognize that, and to get involved as much as they can instead of just saying that we are the problem. Because we're not the problem, and we're not the ones bringing a problem to the station. Everyone was already here and we're just trying to help them." Looking through SEPTA's prior customer satisfaction surveys, in 2010 transit riders rated personal security and safety 7.4/10, like many other categories. In 2018, personal safety and security ratings fell to 7.2/10, a difference

which may not be meaningful (SEPTA, 2012; SEPTA, 2018). Data for 2019, or 2020, when the larger Hub of Hope opened, is unavailable. Moreover, one cannot causally link the opening of the center to the slight decrease in perceptions of safety.

The Hub of Hope does work closely with the local Philadelphia and SEPTA police departments. The police will inform Hub staff of any incidents over the weekend, or when the Hub is closed, for example. However, at the beginning of the initiative, Hub of Hope staff established policies that police could not come into the space and arrest anyone unless they were specifically called by the Hub. This was to prevent the police from coming into the Hub simply to look for people, thereby ensuring it was a comfortable space for people experiencing homelessness. However, interviewee Mongeau did say they still call the police about once a week to respond to incidents like fights at the Hub, which staff are unable to resolve.

Conclusion

The issue of people taking shelter on transit is reaching what officials are calling a crisis point (Nelson, 2018). Without adequate shelter or facilities, people seek warmth and dryness on trains, buses, and stations, leading to people sleeping, urinating, and leaving behind other waste in places not built to accommodate it (Metro, 2017). Station cleanliness directly affects a rider's experience, and transit agencies predict ridership decreases if homelessness is not addressed (Metro, 2017).

The review of these two cases strongly suggests that social workers are better equipped to provide homeless outreach services than the police.

The police teams are not professional outreach workers, and lack the in-depth training, expertise, and potentially lived experience of the social worker teams. Additionally, police departments do not have the institutional resources to follow up and coordinate service delivery like social workers.

Police departments have the power of citation and arrest; they are less adept at helping an individual apply for welfare benefits or housing. The outreach conducted by police officers may also be more reactive in nature, responding to reports of homelessness or people sleeping on transit cars and facilities.

APPENDIX D



Source: Associated Press

PERFORMANCE ART

Appendix D: Performance Art

Introduction

Oftentimes, the most creative interventions come from non-governmental actors; people thinking outside the box to address social problems. This case study looks at the use of performance art to create safer and more comfortable conditions for transit riders in subways, and pedestrians crossing the street. The two examples used, Ponte la del Metro in Mexico City, Mexico, and traffic mimes in Bogotá, Colombia, illustrate how de-escalation tactics through performance art can lead to effective results. These two examples use unconventional actors to engage the public through humor, altering dangerous behavior and reducing conflict points.

Background

Ponte la del Metro was a cultural intervention project on Mexico City's subway starting in 2010 (Ponte la del Metro, 2020). First begun by students, it then evolved into a more formal entity. Ponte la del Metro used humor, clowning, and miming techniques to inform subway patrons about proper behaviors when commuting. The main goals, according to an interview I conducted with Ponte la del Metro co-founder Jorge Durán Solórzano, were to improve commuting conditions for subway riders, by "trying to make it more efficient and less violent." The group targeted three main behaviors: letting people exit train cars before boarding passengers entered them, standing on the right side of escalators to let people pass on the left, and respecting the directional flow patterns on walkways and stairs to reduce disruptions. According to Solórzano, the school group identified the violence, aggression, and hostility on the subway as social problems, and wanted to use small interventions to alleviate them.

Meanwhile, similar conditions of violence were at hand in Bogotá, Colombia in the early 2000s. With no prior political experience, Professor Antanas Mockus successfully ran for mayor of Bogotá in 1993, and was in office until 1995 when he left for an unsuccessful run at the presidency (Marsh, 2013). In the early 1990s, there were about 1,300 traffic fatalities in Bogotá each year (Caballero, 2004). Mockus, fresh into office, wanted to improve the conditions for pedestrians (Mockus, 2015). He replaced 2,000 of the city's transit police with 20 mime artists, each who trained other mimes until the group grew to over 400 (Goat, 2014).

According to Mockus, the "idea was that instead of cops handing out tickets and pocketing fines, these performers would 'police' drivers' behavior by communicating with mime — for instance, pretending to be hurt or offended when a vehicle ignored the pedestrian right of way in a crosswalk" (Mockus, 2015).

Appendix D: Performance Art

Like Ponte la del Metro, Mockus's approach used, "short, pleasing experiences for people that generated stories of delightful surprise, moments of mutual admiration among citizens, and the welcome challenge of understanding something new" (Mockus, 2015).

Results

At first, Ponte la del Metro in Mexico City tried interventions dressed as soccer referees. The universality of soccer led them to believe referees would be widely understood and accessible. However, Solórzano shared the group quickly had to pivot to something else, "if you're already in an environment that is quite hostile and a group of random people approach you with whistles and tell you that you did something wrong, then you get angrier."

Instead, Ponte la del Metro pivoted to a simple red nose in their costume, the universal sign for a clown. Immediately, the group had more success:

"The confrontational situation became a funny thing. We deescalated the confrontation through humor, and this form of engagement helped manage how things turned out."

When the clowns would approach people and point out their bad behavior (like crowding the train before others can get out) through clown techniques and miming, confronted individuals "would laugh, and say 'sorry I did something wrong', and continue with their trip," Solórzano shared. Some people still were annoyed and reacted with hostility, but according to Solórzano, most people were receptive. Indeed, some people even thanked the clowns, and asked how they could join and get involved.

Over time, the group received positive media coverage and formalized into a non-profit, with funding from various governmental bodies and institutions. Ponte la del Metro upgraded costumes, recruited more volunteer clowns, and made postcards to distribute to subway riders during their interventions detailing better subway riding behavior. The group incorporated more performance in their interventions. In my interview with him, Solórzano shared that this less confrontational approach "started a dialogue with the clowns to see how people could do something different." Moreover, the subway authority also adopted the clown image in a campaign to have riders use the subway in a "responsible way, [helping people] be aware of who surrounds [them] to improve the commuting process in the subway in Mexico City." Solórzano thought the advertising campaign was very useful, tying together the themes of Ponte la del Metro and reaching a larger audience.

The project, with an interventionist on-the-subway approach, continued until 2016. At that point, only two of the original ten or so team members were still involved. I could find no

Appendix D: Performance Art

formal evaluations of the program, so its long-term effect on passenger courtesy and de-escalation of aggression is unclear. Solórzano told me that patrons of the Mexico City subway now tend to display more courtesy on escalators, and let others exit before entering trains, but he did not think these improvements were solely due to Ponte la del Metro. Since Ponte la del Metro's interventions, the Sistema de Transporte Colectivo (Mexico City Rapid Transit Authority) installed wayfinding, signage, and decals to help passengers navigate subway stations, platforms, and trains, more easily (Laboratorio para la Ciudad, 2017). In my interview, Solórzano told me, "as long as we were doing the intervention people would engage and change certain behaviors. But as soon as we would leave the subway, everybody would continue as normal." While the long-term effect of the intervention is difficult to measure, in the short-run Ponte la del Metro did achieve their goals.

In contrast, there is evidence that Mockus's mimes in Bogotá had a lasting impact on Bogotá. Using popular education techniques, the traffic mimes fanned out through the city, mocking lawbreakers, applauding courteous drivers, and dramatizing the frustrations and challenges of citizens moving through traffic. They tracked every move of a pedestrian running across the road, or poked fun at reckless drivers.

Conversely, the mimes followed and applauded citizens who performed acts of social goodness or kindness, and encouraged the general public to participate and congratulate them as well (Goat, 2014).

The mimes were incredibly effective at reducing traffic fatalities; between 1993 to 2003, traffic fatalities dropped from 1,300 per year to about 600 per year (Caballero, 2004). Mockus notes how these doubly unarmed agents—no words, and no weapons—showed the importance of cultural regulations and led to meaningful change (Caballero, 2004). Indeed, these mimes were ordinary citizens, they had no powers to detain or enforce the law (Goat, 2014).

Conclusion

To address safety concerns, unconventional, creative approaches can improve conditions. Clowns on the subway, and mimes in street traffic, were two innovative interventions used by a non-governmental entity, and a formal government body to improve transportation safety. As shown in this case study, performance art is a creative way to engage the public to correct dangerous behavior or reduce conflict points. A humorous approach reduces the hostility of confrontations, making interventions effective and memorable.

APPENDIX E



Source: Liz Moughon, Los Angeles Times

FARE-FREE TRANSIT

Introduction

Transit and criminal justice reform activists have long campaigned for zero fare transit, or fare free transit. Currently, most fare free transit is limited to specific periods (on Earth Day, or Voting Day), certain transit lines (free shuttles or circulators), or user groups (elderly, students, etc.) (Cats et.al, 2016). Very few programs have been introduced across an entire transit system (Cats et.al, 2016). As a result, an in-depth exploration of fare free transit can help policymakers and advocates understand the opportunities and challenges of such a shift.

The Youth Justice Coalition in Los Angeles, a youth-led movement, has been pushing for fare free transit for many years. They advocate for free transit specifically for youth, citing youth's disproportionate citations for fare evasion by the Los Angeles Sheriff's Department (Youth Justice Coalition, 2013). These citations create an extreme financial and emotional cost for many students and families due to fines, missed days of school and work, humiliation, possible arrest, detention, incarceration and criminal record (Youth Justice Coalition, 2013).

In 2012, under pressure from students and organizers, the Los Angeles County Sheriff's Department, the Los Angeles County Metropolitan Transportation Authority (Metro), the Los Angeles Unified School District, and the Los Angeles School Police announced implementation of a Transit Juvenile Diversion Program to keep juvenile students out of the criminal justice system in the event they are cited for minor infractions (Youth Justice Coalition, 2013). The Transit Juvenile Diversion Program ensured youth with minor infractions would not enter the larger criminal justice system, and would help reduce the financial burden of fees and fines. Building on these efforts, the Youth Justice Coalition worked with State Senator Robert Hertzberg to create Senate Bill 882 in 2016, which decriminalized fare evasion for youth under 18 throughout California.

Despite the progress on the issue, organizers point to ongoing racial profiling over fare enforcement and citations, for both youth and adults (Chandler, 2017).

By removing fares, and creating a fare free transit environment, nobody can be cited for fare violations. This removes a key point of friction between transit riders and law enforcement, and saves the agency money by not hiring armed law enforcement to provide checks.

Additionally, fare free transit helps address current transportation inequities. According to a 2019 report from the Institute for Transportation and Development, lower-income households in the United States generally pay a larger portion of their expenditures on transportation costs, relative to people in middle and higher income brackets (ITDP, 2019). They

conclude those with the lowest incomes tend to be burdened with the largest share of expenditures on transportation, showing such costs to be regressive (ITDP, 2019). This finding is also substantiated by prior research (Roberto, 2008). Fare free transit can alleviate the financial burden for lower-income households, as they typically rely on transit service more.

Moreover, there is a philosophical debate surrounding fare free transit. Some people argue transportation is a basic need, and not a luxury good, and therefore should be free (Barry, 2020). Activists and scholars in Toronto argue that "free public transport [is] a lever to change social and economic relations in the city... transport—like firefighting, police services, and water and sewage in most of Canada—should be fully paid for out of the public purse as a social right and a common good." (Dellheim & Prince, xvii, 2018). Others see zero fare transit as an extension of the Civil Rights Movement in the United States, noting how zero fare transit can reduce the impact of the police state and institutionalized racism (Dellheim & Prince, xvii, 2018; Barry, 2020).

Through these paradigms of racial and transit equity, this appendix explores implementation of fare free transit in the United States context.

What are the opportunities for implementing fare free transit, what have other jurisdictions learned, and what are the challenges for a large agency like LA Metro in implementation?

To answer these questions, I conduct a case study of Olympia, Washington, the first large city in the United States to implement fare free transit. Additional international cases from South Korea, Belgium, and Estonia are also presented to provide further evidence. Critiques of fare free transit are also discussed. Kansas City was also considered for this case study. However, at the time of research they had not yet implemented the program, but only approved a motion for zero-fare transit.

Background

Olympia, Washington is a small-city of almost 53,000 people, and the capital of Washington State. Olympia's transit system is run by InterCity Transit, serving about 200,000 people in their service area. Facing a budget shortfall in 2016, InterCity Transit conducted extensive public comment to pull together a transportation sales tax ballot initiative, which passed in November 2018. The ballot initiative touched on service related-enhancements, like expanding service reach, frequency, and timing, and exploring alternative fare collection methods.

Originally, the agency explored replacing the fare collection system because, according to

an interview conducted with InterCity Transit General Manager Ann Freeman Manzanares, it "was held together by duct tape and bailing wire." According to Freeman Manzanares, community members wanted a new system, citing they wanted to stop paying in cash, didn't have exact change, found fares too expensive, or payment presented a psychological barrier to getting on board. InterCity Transit weighed several different options, like joining the regional ORCA fare card system, bidding through eBay to replace old cash boxes from surplus and decommissioned buses from other cities, or creating an interim system. Freeman Manzanares shared none of the alternatives seemed like a good use of taxpayer money, and were ruled out by the Board.

During this exploration process, InterCity Transit also conducted a holistic audit of their current farebox costs, both hard and soft costs. The agency took into consideration staff time across all divisions associated with fares, from their mechanics to customer service to planning. They also considered other costs like hiring armored car services for transporting money, and printing passes. As Freeman Manzanares told me, in the audit process they found customer service staff would save about 25 percent of their time if they didn't have to deal with fare issues. Transit operators cited fare issues as the number one source of disruptions. From the audit, it became clear the agency spent a lot of time, money, and resources around fares.

Previously, InterCity Transit only recouped about 14 percent of their operations costs through fares (FTA, 2018). Freeman Manzanares pointed out that assuming consistent operating and capital costs, by eliminating fare collection, the agency could save money over a five-year period. Over a ten-year period, they would lose a nominal amount of money, which could be recouped in other ways.

But Freeman Manzanares saw a bigger picture from removing fares, saying, "sometimes it's not just a straight dollar conversation, it's about a quality of life or quality of community conversation."

Results

The zero-fare policy at InterCity Transit went into effect January 1st, 2020. Within the first month, Olympia saw a 20 percent increase in ridership compared to the previous year — an equivalent of over 60,000 more riders (Hess, 2020). Weekday boardings grew 15.1 percent in January 2020 from the same period a year ago, while weekend boardings spiked, up nearly 50 percent over the same period (Boone, 2020). The agency notes that weekend service frequencies also increased during this time. By increasing service, and eliminating fare collection, InterCity Transit served its customer base better, and allowed people to make

trips to meet their needs.

Besides ridership, Freeman Manzanares discussed other benefits. For one, she brought up their college partnership programs. Previously, some of the local colleges were spending \$200,000 to pay for transit for their students. Now, they reallocated that money toward their Student Success Campaign, which is dedicated to supporting homeless students in community colleges through direct assistance. In her words, "we're not talking about \$1.50 for a bus pass anymore, we're talking about changing somebody's life." Freeman Manzanares also shared another example of a woman in an addiction recovery-to-work program. Upon becoming employed, she found herself spending a large portion of her minimum wage income on transportation. The zero-fare policy helps her get to work without bearing the high cost of transportation.

Freeman Manzanares mentioned how zero fares can "change so many lives, because we're getting people where they need to go. Whether that's to an addiction recovery program, to school, to training, to employment opportunities, health, daycare. Transportation is what strings people's lives together."

The agency never contracted with outside law enforcement to patrol the transit environments and provide safety and security services. Fare checks were conducted by unarmed customer service staff. Typically, if people act aggressively or inappropriately on transit, InterCity Transit has the authority to exclude them from the system, a solution Freeman Manzanares explained they prefer not to do.

A critique of zero-fare transit is an increase in vandalism and incivilities when fares are waived (Perone, 2002). When discussing changes in safety and behavior of riders from the zero-fare policy, Freeman Manzanares said new people were drawn to the bus that previously hadn't ridden, who did not follow the code of conduct. Customer service staff located at transit centers had to approach those individuals, explain the rules of conduct to them and the consequence of exclusion, and then people were receptive. Manzanares mentioned how, "from an umbrella perspective, I'm not hearing that we're having problems that we weren't having before on our buses. We have a broad spectrum of people who ride our buses, that hasn't changed."

Additional Cases

While InterCity Transit is one of the largest transit agencies in the United States to shift to zero fares, international examples exist. In the 1980's, Seoul, South Korea, began a fare-free program for seniors (aged 65 and up). This policy resulted in 54,000-58,000 additional

senior trips per day, 21,000 of which were previously automobile trips (Myung et.al, 2018). Many of these were off-peak, weekday trips that avoided peak periods and busy stations (Myung et.al, 2018). This shift increased the mobility of elderly, fixed-income populations. However, since the policy was enacted, life expectancy rates have been rising in South Korea. Between 2013-2017, the share of trips on Seoul's transit from elders was 13 percent, a larger share than in the 1980's (Hyun-bin, 2018). To respond to a growing transit deficit, local officials are pushing for revisions to the policy. Some are weighing increasing the age to receive benefits from 65 to 70, or setting a daily discount period and time for the elderly to travel free of charge (Hyun-bin, 2018). South Korea's policy, while initially helping seniors, is now fiscally straining the agency.

Another case study one can look to is Tallinn, Estonia. In Estonia, all residents must register in their city with a government-issued smart identification card, which doubles as a public transit smartcard (Cats et.al, 2016). Since 2003, this registration provides residents of Tallinn with a 40 percent fare reduction. In 2013, Tallinn introduced fare free transit for its 420,000 residents. It is the first European capital and the largest city in the world to do so (Cats et.al, 2016). Prior to implementation, 40 percent of all trips in Tallinn were conducted on transit (Cats et.al, 2016). Ticketed trips covered about 33 percent of system operational costs (Cats et.al, 2016). That same year, the share of users receiving discounted passes (students, elderly, low-income) was around 60 percent of transit riders (Cats et.al, 2016).

As in Olympia, in Tallinn zero fares were coupled with an increase in fleet supply and transit service. After zero fare was introduced, passenger demand increased by 3 percent (Cats et.al, 2016). Additionally, in the first three months the average passenger trip length decreased by 10 percent, suggesting that zero fare substitutes walking trips with transit trips (Cats et.al, 2016). A year after zero fares, public transit usage had increased by 14 percent.

Moreover, low-income households increased their share of public transit trips by 20 percent, evidence suggesting the mobility of low-income households improved (Cats et.al, 2016).

Hasselt, Belgium, also introduced universal zero-fare transit on its transit network in 1996. The universality of the program meant anyone could take advantage of it, not just the elderly or permanent residents. The town of 70,000 inhabitants also coupled the fare changes with a fivefold increase its fleet supply (Cats et.al, 2016). In the short term, ridership increased tenfold and 37 percent of new trips came from new users (Van Goeverden et al., 2006). Cats et.al, in reviewing this case, note that existing bus riders carried out 567 percent more bus trips (Cats et.al, 2016). This shows the huge increase in mobility for existing bus riders. However, despite these large percentage changes, in 2013, Hasselt's transit mode share

remained at 5 percent (Verachtert 2013). As the operation costs rapidly increased, in 2014 fares were re-introduced, with discounts for certain groups (Cats et.al, 2016).

Conclusion

For many years advocates and activists have encouraged zero fare transit to address many issues on transit systems, racial profiling, cost overruns of policing contracts, and easing household transportation burdens. InterCity Transit's zero-fare policy is successful—both increasing ridership and allowing funds to be reallocated to direct assistance. International examples show fare free transit can improve mobility for low-income households and elderly residents, and increase overall agency ridership. However, balancing service provision and budgets in the long-run with fare free transit can be a challenge.

These case studies and international examples can provide some insights, but should be understood to have limitations. For one, the U.S. transportation financing system has historically heavily favored automobile infrastructure, making it difficult to fund large increases in transit operating expenditures (Transit Center, 2019). As such, car-dependency dominates most political conversations and negotiations, and oftentimes investments in transit are framed through reducing traffic. From the evidence, we see that zero fare transit does not necessarily achieve this goal of mode shift in the long-run.

Given this narrative around traffic, many critics argue fare free transit is not the right policy tool to increase transit ridership. The debate boils down to price elasticity, how changes in price affect a consumer's demand for a good. Critics argue that since the elasticity of transit is lower than the cross-elasticity to car usage price, zero fare transit is a second-best policy for promoting mode shift (Cats et.al, 2016). They argue other pricing levers such as congestion pricing, parking fees, and fuel taxes could result in a greater mode share away from cars to public transit (Cervero, 1990; Litman, 2004; Transit Center, 2019). However, these critics are concerned with only one goal of zero fare transit (increasing ridership), and are not considering other positive impacts from their analysis, like improved mobility and increased equity.

Other critics of fare free transit discuss the strain additional passengers cause on peak demand. By creating a fare free environment, transit agencies further stress their capacity by increasing additional riders during weekday, peak-hour commute times (Perone, 2002; Petras, 2020). This exacerbates overcrowded trains and buses, and requires increased operating costs to carry heavier loads on routes (Perone, 2002). Knowing this effect, transit agencies in Tallinn and Olympia coupled their fare free policies with increases in service and frequency, to accommodate these changes.

In her 2002 review of fare free transit, Perone also interviewed transit agency officials and surveyed bus operators. The review spans three cities that experimented with varying levels of fare free transit, but ended the programs due to revenue problems and safety concerns. In Trenton, New Jersey, for example, 92 percent of transit drivers reported that their jobs were less enjoyable after the free fare program was instituted (Perone, 2002). Austin, Texas reported an increased cost in security measures and repair of damaged vehicles. (Perone, 2002). Additionally, physical assaults on Austin's public transit grew from 44 instances in the three months before the institution of free fares to 120 instances in the three months afterwards (Blumgart, 2013). The third city surveyed, Miami, Florida, also experienced similar issues. When considering the case of Tallinn, Estonia, the smart card barrier to entry may have helped to cut down on these issues of vandalism and assault (Blumgart, 2013).

From the evidence, it seems increased conflict may be an unintended consequence of fare free transit. However, violence could also be mitigated by increasing safety programs, like those discussed earlier.

InterCity Transit, and many of the other cases presented, are small agencies and applying lessons to LA Metro's system may not be as cut and dried. Their farebox recovery rates were already low, and their service areas small. Some of the successful international examples had high transit mode shares prior to implementation. In a 2018 study of zero-free transit, Harmony found the mean service population of free transit systems was 56,000 people, mean operating expenses were \$4.1 million each year, and the mean bus operations size was 17 buses (Harmony, 2018). Even though farebox recovery is only 19.4 percent, fare revenues net \$362 million for Los Angeles Metro (FTA, 2018). Comparatively, InterCity Transit only had \$5 million at stake by eliminating fare collection. However, to put this in perspective, Metro also spends about \$159 million each year on policing contracts.

Implementing fare free transit for Los Angeles's Metro system would be complex, and additional funding sources need to be explored. Fare free transit should be coupled with increases in service, to make sure people need to get where they are going. Alternative safety programs would need to be increased, to protect operators and vehicles.

Additionally, it may be worthwhile for LA Metro to conduct a complete audit on its fare collection costs, as InterCity Transit did. This exercise may illuminate other cost savings the agency could incur if it did not collect fares.

APPENDIX F

Agency	Data Source
Metro	How Women Travel Report (2019)
	On-Board Customer Survey (2017, 2019)
	Metro Safety & Security Contract (2017)
	Metro Quarterly Homeless Update (January 2020)
	LAPD LACMTA Policing Contract (2017)
SFMTA	Sustainable Streets Division Adopted Operating Budget (FY2019-FY2020)
	Agency-Wide Proposed Operating Budget (FY 2017-FY2018)
	SFTMA 2020 Board Workshop on Budgets
BART	Transit Ambassador Pilot Board Presentation (2020)
	Adopted Budget (FY 2019)
SEPTA	On-Board Customer Survey (2012)
	On-Board Customer Survey (2015)
	On-Board Customer Survey (2018)

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