URBAN ACTION

A journal of public affairs & civic engagement

2018 // Issue 39



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A Journal of Public Affairs & Civic Engagement

Urban Action is published annually by students in the Department of Public Affairs and Civic Engagement at San Francisco State University. Views expressed are those of the authors and do not reflect those of San Francisco State University or the Department of Urban Planning.

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Advisor's

Welcome to the 2018 issue of Urban Action. I am extremely proud and honored to introduce this 39th annual edition of the student-produced journal of the Urban Studies and Planning program. Housed within SFSU's School of Public Affairs and Civic Engagement, the Urban Studies and Planning program offers students a broadly interdisciplinary approach to the study of cities and urban processes aimed at preparing them to develop community engaged solutions to complex urban issues. This issue truly embodies this mission.

The articles in the 2018 issue represent the breadth and complexity of

contemporary urban issues. Attending to issues ranging from Opioid Addiction to pedestrian accessibility, to environmental justice, the research highlighted in this issue represents the cutting edge of engaged urban scholarship that both embodies the core mission of the School of Public Affairs and Civic Engagement and offers a unique glimpse at the policy and planning issues facing American cities in the near future.

This year's editorial team deserves particular recognition. Each issue of Urban Action is the result of remarkable student diligence and dedication. Students write, edit and design every



Letter

aspect of this journal while juggling school, work and family obligations. While each issue represents an incredible achievement, this year's editorial team demonstrated an exceptional level of professionalism and "can-do" attitude. For most of the year, the journal operated with a skeleton crew of three members. These dedicated team members were responsible not only for procuring, producing, and editing content and designing the journal, but also recruiting peers to serve as last minute line editors. Despite these constraints, this team was able to produce a issue that illustrates the best of what Urban Action has to offer. Every member of the team should feel

proud of this accomplishment.

I hope you enjoy reading this issue. If you do, I hope you will consider supporting continued production of Urban Action either by purchasing a print copy of this journal or by direct donation. Next year will be the 40th anniversary edition of this journal and we are planning something special to commemorate the occasion. Please help us support this endeavor and maintain this tradition of participatory, engaged undergraduate scholarship that Urban Action represents

Tony Sparks PhD Faculty Advisor to Urban Action

I wanted to begin by thanking you, the reader, for taking the time to flip through, if not read the 39th Issue of Urban Action. This year's issue was painstakingly crafted by some of the most amazing people I have ever had a chance to work with. Each member of our team had the vision and work ethic to think beyond the daunting task ahead and focus on creating something that we could be proud of. Not one of us knew exactly how this year would play out so we focused in on the one guiding principle of our journal, the reader. The 39th Issue features a lot of diverse articles written by a very small and passionate group of students that breathe the urban air that is exhaled from our books, professors, city streets and from lived experiences as students at San Francisco State University. This issue focuses on questioning the decisions made by our local governments and the issues that may not be immediately apparent, some of which come in the form of research papers, reports and policy analysis that try to make sense of the issues that we face

As Editor-in-Chief, I was floored by the varying perspectives and topics that each one of these authors brought. It was incredible to see what each person achieved and the knowledge they obtained from our small program. I am proud to say that I learned so much from my peers. Through them, I learned about community benefit districts, air quality and even street art which would not have been possible without reading it in their own voices. I like to believe that this is the legacy of Urban Action. In the almost forty years since the journal was established in 1979, the ideas of what this journal would be have changed but the thing that never did was the power given to students to tell their truths and learn from one another as observers and participants of our urban life. They are the ones who have made this journal possible.

However, the 39th issue would not have been possible without Armando Garcia, and Greg Schrader. Thank you for your guidance, friendship, dedication and eye for detail. This journal has been a result of your

Letter from

efforts. Thank you also to our advisor, Dr. Tony Sparks for the encouragement, guidance and the foundation for which many of the articles are built from. Dr. Sparks was always there to turn to during times of uncertainty and helped to steer us in the right direction. For all of the time and effort put into Urban Action, I am eternally grateful.

In all, I want to thank our editors and especially our staff editors and photographer who stepped up when we needed them most to dedicate their remaining hours of the day after class, work, and assignments to making the 39th issue of Urban Action a success. I look forward to my role as Editor-in-Chief emeritus in my final semester at San Francisco State, helping guide my successor in the 40th Anniversary Issue. I hope you will join us then. For now, please enjoy the 39th Issue of Urban Action as its pages are lined with the soul of the Urban Studies and Planning Program and with it, the legacy of the 2017-2018 academic year.

Thank you so much for your support.

Marina Chavez, Editor-in-Chief, 39th Issue of Urban Action.

Editor

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Community Business

By Cole Brennan

Abstract

San Francisco's Community Benefit Districts are an increasingly popular form of public-private partnership in urban governing. These districts have firm physical boundaries and clearly articulated benefits in their management plans. Amid these precise definitions what constitutes the "community" in the community benefit district is left unspoken. By attending CBD meetings, interviewing people who work with and for CBDs, and observing CBD neighborhoods, I found several trends and a few important outliers in how community is conceived, supported, and engaged via CBDs. I used Talja Blokland's theory of community as practice and Nicholas Blomley's ideas about urban property to develop a relational understanding of how community benefit districts practice community through property. San Francisco's CBDs operate with a range of engagement, outreach, transparency, and functionality. Noting these variations. I theorize that CBDs have potential for both regressive and progressive community creation, enforcing the privatization of the city or generating new avenues for civic engagement in local government. Overall, the trend appears to bend toward consumptive and transactional civic engagement, but the examples of CBDs actively building capacity in their communities deserve attention.

Introduction

Community Benefit Districts are public-private partnership that allows property owners of an area to create a non-profit and fund it with a special property assessment tax, which they can then use to extend and create local services such as street cleaning or special events. Community Benefit Districts (CBDs) combine features of non-profits, businesses, and public organizations to form a sort of hyper-local government. They receive grants and logistical help from the city government and often fundraise to increase their budgets beyond their initial assessment. They are run by boards of directors which hire an executive director, in the same manner as other non-profits. Board positions are also hired (rather than elected) positions. They are similar to merchant associations. but with much more direct, sanctioned access to city agencies, programs, and support. CBDs rely on

dedicated civic engagement, but only from property owners and merchants. These owners not only organize and vote for their CBD to bring it into existence, they also provide the funding and can become members of the CBD's board of directors. Unlike property owners and non-property owning merchants, there is no dedicated board seat for people living in the district who do not own property in the district. The functional community thus seems limited to only property-owning or business-operating people from the self-defined local area. Do San Francisco's CBDs stick to this relatively narrow view of their community, or do they invite others to participate in their hyper-local government? By studying their meetings and documents and interviewing people involved with San Francisco's CBDs, the purpose of this paper is to elucidate what constitutes "community" in San Francisco's community benefit districts.

Explanation and brief history of BIDs

Business Improvement districts emerged in North America in the late 1960s as new form of civic government in response to federal funding cuts for city centers. These groups were focused on improving the marketability of city-center commercial districts. They differ from merchant associations in that they must be voted on by property owners and approved by the Board of Supervisors, and they enlist the city's help to levy and collect taxes to provide direct services to their local area. California began allowing BIDs and CBDs in 1989, and in 2004 San Francisco used its charter city ability to amend the statewide 1989 statute in order to make CBDs longer-lasting, their taxes more proportional, and the threshold for creation easier and more fair. These changes, known as Article 15, precipitated a boom in benefit districts in San Francisco, from 1 in 2004 to 13 currently operating today.

Community Benefit Districts are a form of Business Improvement District (BID). The difference between a CBD and a BID is that a CBD can include mixed-use and residential property, whereas a BID can only include parcels zoned for business. As Chris Corgas, Senior Program Manager for CBDs and BIDs at San Francisco's Office of Economic and Workforce Development, noted, a community benefit district sounds nicer and more acceptable than a business improvement district that might gentrify the neighborhood and price people out. Or, as Talja Blokland puts it, "Community is thus a widely used term. It has the convenience of being imprecise and loaded with positive connotations, a social 'something' that we cannot be against" (2017, p6). There are many regulations for boundaries, services, and transparency for San Francisco's CBDs, but no requirements for what counts as community.

In 2012 San Francisco's Office of Economic and Workforce Development conducted a study of the 10 extant CBDs to evaluate their impacts on street cleanliness, crime, and property values. They assessed the benefits of the community benefit districts, leaving the community part unspoken. How do CBDs conceptualize, engage, and create community?

Literature Review

To begin understanding community benefit districts, it is helpful to understand business improvement districts (BIDs), an umbrella term that includes CBDs and other locally variant names for special assessment districts organized by property owners, such as "special improvement districts" or "business improvement areas". There is little national or international standardization in the naming of these districts, making thorough research and comparison more difficult (Hoyt, 2005). Some researchers have determined that the general features of a BID in the U.S. are that they have their geographical boundary within a municipality, the area receives supplemental services, and property owners within the geographic boundary pay for the supplemental services via a special tax assessment (Morcol & Gautsch, 2013). In California law community benefit districts are a

type of BID, and they share these features. Beyond these general characteristics, there is much variation between states and even within states (Morcol & Gautsch, 2013).

The two general themes of the criticisms of BIDs relate to their place in a democratic order, specifically whether they are representative and accountable, and their effects on the publicness of public spaces. These criticisms often overlap. Comfort and cleanliness for some may come at the cost of access and representation for others. BIDs are effective at their goals of making streets cleaner and safer, and these benefits may improve commercial districts even for nearby residents and others in the city by improving the image of that neighborhood and the comfort they feel in being there. The need for increased services in these areas is real, but the use of BIDs to meet those needs might cause changes in the way services are distributed around the city and may be disproportionate to the actual need (Hoyt, 2005), thus diminishing the democratic provision of services. Overall, the literature points to a fragile, delicately counterbalanced view of BIDs as a useful and efficient response to government withdrawal from urban projects and a worrying component of the privatization of every aspect of public life. There is limited research on how communities perceive their CBD/BID (Contesting Public Space and Citizenship, by Schaller and Modan, is an

excellent but rare example), and no obvious scholarship on how these entities conceptualize the cities they inhabit. Through my research I discovered some of the ways that San Francisco's civic life is represented, ignored, championed, placated, and harassed through its CBDs.

Methods

In order to assess the community interaction with CBDs, I conducted field research across San Francisco's benefit districts. I was a participant observer in CBD meetings and events throughout San Francisco for both existing and proposed benefit districts. I also observed CBD districts to see how a resident might become aware of their CBD, looking for visible indications of the CBD; I coded these observations (by cataloguing the frequency and prominence of CBD insignia or information within the district, such as lightpole flags with the CBD logo) in order to assess the neighborhood visibility of the CBD. I reviewed the management plan for each CBD and coded the types of property and people listed in the mission statements, statements of purpose, and/or goals of each district. I attended meetings for two proposed benefit districts. Finally, I conducted semi-structured interviews with people involved in CBDs in San Francisco to understand how they see the community. CBD, and the city fitting together. Interviews were conducted in person, over the phone, and over email. Although I visited every CBD area and studied each CBD's current management plan, I did not attend events or meetings for every CBD. In most cases this was because the CBD did not host many events or meetings, and my study length was constrained.

One limitation to this field research is that it is necessarily limited in scope. The research and findings may or may not yield insights for other cities or the national implications of CBDs. Another drawback is that by going to CBD events and meetings I most often encountered people who support CBDs. I did speak with people who were skeptical of CBDs or the particular CBD they were in, but it is possible (and even likely) that a plurality of residents are unaware of what and where CBDs are in San Francisco. Their perspectives are not represented in this paper.

Despite these limitations, I believe this research will contribute to the understanding of CBDs in San Francisco and offer insights for CBDs that strive for more clearly defined and inclusive community connections. Although the empirical findings from this study are limited, it may be the case that the theoretical model is useful for other sites (Small, 2009).

Findings & Discussion

The way that the state and city distinguish CBDs from BIDs is

solely through what kinds of property can be incorporated into those districts. CBDs, as stated earlier, can include residential property as well as commercial/industrial property. (BIDs can only form and operate within a district that is exclusively commercial/industrial.) San Francisco makes no operational distinction between a CBD and a BID. how they are formed or conducted, or what services they provide, except to allow residents to serve on their board of directors. San Francisco's CBDs make the most of this leeway. How CBDs conceptualize, integrate, respond to, and serve their communities varies substantially from one CBD to another, and with varying degrees of awareness. Six of the twelve CBDs in San Francisco do not even mention the word "community" in their mission statement, statement of purpose, or goals. For comparison, Eight of the twelve mention the streetscape in some way, and only one CBD (Fisherman's Wharf) does not mention "business" in these statements. None of the CBDs states what counts as community for them. This is a direct reflection of the business-minded origins of CBDs.

Chris Corgas, the Senior Program Manager for CBDs & BIDs in the San Francisco Office of Economic and Workforce Development, stated plainly that the name "community benefit district" is preferred because "it lacks connotations of commercialization and gentrification. It does not foster the kind of backlash that 'business' does". He expressed frustration with CBDs that try to expand beyond "clean and safe" service provision. In an interview with Adrian Lopez, part of an organization that is in the early stages of trying to create a CBD in the Mission district, he saw the use of the term "community benefit district" as a boon to their efforts because it sounds nice and innocuous, has no association with gentrification, and "can fly under the radar". Although Lopez genuinely hopes that a Mission CBD could serve the community through events, advocacy, and promotion of the community of current residents, Corgas argues that too much focus on these types of actions is outside the scope of CBDs.

At a Yerba Buena CBD meeting I asked the communications director, Richard Ciccarone, if the CBD has a community liaison or outreach member I could interview for this project. He responded "Well, we are the community.", by which he meant no, they do not have a community outreach member. The YBCBD was cited as the best example of a CBD in the city by several people at that meeting and others I spoke to in this process. There were no non-owning residents of the district in the room. The YBCBD may be efficient, arts-minded, and savvy at marketing, but it has little introspection regarding its service to the community. Some CBDs have a similar lack of inclusion, but more modest budgets and impacts, such

as the CBDs of Noe Valley, Ocean Avenue, and Top of Broadway.

On the other end of the spectrum, the Lower Polk and Tenderloin CBDs stand out as exceptionally community-minded. Both include a framework or set of goals for people within the district. They operate programs and make decisions aimed at achieving these goals. (See Tenderloin CBD Core Framework in the Appendix.) This adds transparency and accountability to their governing processes in addition to motivating the CBDs to seek out community involvement. Although both of these CBDs feature street cleaning (street cleaning is one of the big enticements for forming a CBD, and even the most loosely organized CBDs in San Francisco perform this task) they show a much stronger focus on neighborhood services than their peers. Lower Polk provides bathrooms and cleaning stations for people living on the streets, and the Tenderloin operates a Safe Passage program, run by paid workers from the neighborhood, who help promote a sense of safety for children and seniors traversing the neighborhood. Another commonality between these two CBDs is that they both operate out of offices on the ground floor in their districts. In an interview with Fernando Pujals, Communications Director of the TLCBD, he expressed great pride in their ground floor office, saying that "our work is really to be on the sidewalk" and hoping that people

would consider the office the "living room of the neighborhood." Indeed, over the course of the hour I visited, a few people did come in and chat among the plants and couches lining the front window.

"Clean and Safe": The Apolitical Paradigm of CBDs

The low profile of most of San Francisco's CBDs is maintained through relentless but vague positivity and a focus on ostensibly neutral streetscape projects. Keeping the streets "clean and safe" is at the heart of operations for every CBD. "Clean and Safe" is an incontrovertible good, like "community". The impact of the motives, means, and ends making the streets clean and safe are left unaddressed. In practice, the easiest thing to find out about a CBD is how to request a cleaning. The hotline for such services is at the top of every CBD website, unlike their meeting schedules, documents, office location, or events calendar, which are scattered and often out of date.

CBDs rely on metrics to prove that they are conforming to their budget and management plan, and street cleaning is an essential component of every CBD's management plan. As a result, many CBDs use countable "clean and safe" indicators as proxies for ephemeral goals like improving quality of life. They track 311 reports and direct calls for services, and they track them obsessively. This "See Click Fix" engagement is relatively shallow compared to the visions of civic engagement that many San Franciscans often claim to aspire to, where residents feel powerful and connected to the decisions that shape their city.

CBDs instead encourage residents to identify immediate harms or unpleasantness, such as feces on the sidewalk, and report it for cleaning or removal. There is no 311 form or CBD link for requesting more housing in your neighborhood, or for saying you disagree with encampment clearance. There is no dialogue or even any interaction with this form of civic engagement, and there is no community, no collective responsibility or shared endeavour. Response requests are as immediate as they are individualistic. This serves to keep CBDs doable, they can track the requests they get and close the cases when the vagrant has been spoken to or the trash bin emptied. They need not deal with the politics of the street at all.

"Improving", "enhancing", "supporting", and "encouraging" are words that show up repeatedly in the goals and missions of the CBDs. These words indicate a reinforcement of the status quo that is at the heart of how CBDs operate. They eschew the possibility of change, which would indicate a preference and thus a liability. In their projects they aim for an upbeat and studiously uncontroversial tone. The CBDs promote streetscape projects that appear neutral but act mainly to service business interests, sometimes at the expense of other considerations. For example, the Castro CBD advocated for the rainbow crosswalk pattern in their intersections, in order to promote neighborhood identity, but also worked to have benches removed and replaced with "leaning benches", which, notably, can't actually be sat on. The "leaning benches" nor the rainbow stripes bear the name of the CBD, so their effect on the street is not obvious to passers-by. Unlike a service, the physical landscape has the subtlety of looking permanent and unorchestrated; the streets just happen.

Currently, CBDs are very limited in the kinds of activities they can perform or endorse. All the CBDs operate some form of street cleaning, and one of the most impactful parts of the street cleaning efforts involves removing used syringes from the street. While it is helpful to have the CBD services to remove the syringes, this approach does little to stop the needles from ending up on the street to begin with, let alone to push back against the larger harms the needles represent. For example, I asked Pujals about the possibility of the TLCBD supporting a safe injection site in the neighborhood. Pujals answered by way of analogy. He described how a business owner called him in a panic one morning because there was a new city trashcan in front of his business, and Pujals had to explain that he himself had asked the

city to put the trashcan there. Pujals then worked with the business owner to find a different site for it. The effort to meet a public need for the relatively basic amenity of a trash receptacle was, in this instance, objectionable to the business owner, and Pujals had to accommodate him. Since the existence of the CBD depends upon the support of property owners, it would be perilous for the CBD to advocate for safe injection sites. Trash can locations are controversial, safe injection site locations are a bridge too far. TL-CBD and several other CBDs have worked to site sharps containers in their districts, but doing much more than that is too politically incendiary for them to handle. They need city leadership to make the politics work.

Spatialization and Freedom

Many of San Francisco's CBDs are concentrated along the northern end of Market Street. (See Map Of San Francisco's CBDs in the Appendix.) Chris Corgas suggested that parcel size is likely to play a role in why CBDs proliferate in this area. Corgas noted that the formation process for CBDs involves wrangling the votes of all the district property owners, so areas with large lots owned by a single entity are easier to work with than areas that feature many owners of smaller parcels. This sort of operational convenience certainly plays a role in why CBDs have formed in some areas but not others.

Notably, one of the Article 15 provisions that led to the increase in CBDs in San Francisco changed the threshold for weighted votes for formation. In general in California, the owner of a property that makes up 40% or more of the district will not count toward the vote to create a CBD, so that this property owner can't strong-arm a CBD into existence without support from other property owners. In San Francisco, Article 15 stipulates that the threshold for exclusion from the vote is if the property comprises 25% or more of the proposed district. This is a move in favor of smaller holders and more democracy among the property owners, however it also complicates CBD creation in small districts or those with many property owners, such as the Mission District or SoMa. Article 15 also stipulates that the owners of at least 50% of the weighted property must participate in the vote in order for it to be valid, and that at least twothirds of that weighted property must vote in favor in order for the CBD to be formed.

James Spinello, a leader of the effort to create the SoMa West CBD, offered a different possible explanation for the northeastern concentration of CBDs than the one offered by Chris Corgas. In a community informational meeting about the proposed SoMa West CBD, Spinello suggested that part of the rise in "quality of life" issues in SoMa

is that nearby CBDs are effective in encouraging homeless or troublesome people to move along, and so they move along to the next closest place: SoMa. Separately, Corgas suggested that individuals living on the street don't like to be hassled. so if an area is getting cleaned regularly or they are being asked to move on often, but the space across the street is not getting cleaned, they'll just move across the street. However, he declined to comment when I asked him if Spinello was right to suggest that CBDs push unwanted people and behaviors into adjacent neighborhoods. If SoMa West becomes a CBD, it will put another large tract of downtown San Francisco under the revanchist gaze of property owners, pushing homeless people further from the core of the city. This territorial expansion of property owners creates enclaves of ownership, wherein the city is not itself but is divided into the parcels of ownership with their own rules and amenities. "The enclave is an important technology of rule, a form of rule that operates through the double helix of liberty and sovereignty, of freedom and protection." (Alsayyad & Roy, 2006, p8) The power of ownership is enforced and reified through the CBD model, with no attendant increase in social responsibility.





Cautious Compassion

"Poor people are thus represented as interlopers who are present only to utilize services that are not required by authentic locals." (Blomley, 2004, p100)

At CBD meetings and events almost all people who spoke about people experiencing homelessness or addiction with at least some professed compassion. One property-owning resident of the Yerba Buena CBD, giving public comment at her first CBD meeting, described her morning routine:

"I leave the house with my five year old daughter, and there's this man who stands in front of the bakery on my block and demands food, he won't leave until they give him some food. He's there everyday and it's awful for me and my daughter. I'm not saying all the homeless people should be kicked out. I know they have real needs. But this situation is untenable."

This general one of acknowledgement and exhaustion, of "compassion fatigue", colored many CBD conversations. People expressed dismay at the unfortunate lives of people not present in the meetings, combined with a desire for those people, principally unhoused

people, to never be in view. They did not wish them harm, they just hoped there was some quick way to make the homeless disappear. "This 'public' policing has its roots, some argue, in anxieties over private property" (Blomley, 2004) This tone gets written into the proposals and funded in the physical landscape that CBDs produce. For example, the Yerba Buena CBD identified Annie Street Plaza as a "hot spot" for their cleaning team. What makes it so "hot" is that people sit there, sometimes consuming drugs or leaving trash, sometimes looking disheveled or falling asleep. YBCBD has created a new proposal for the plaza that simply eliminates every feature of the current plaza: the plants, the planters, the spaces for sitting, the corners. What's left in the renderings is a blank hardscape that might later feature some outdoor seating for the adjacent cafe. That seating will be rented through cups of coffee from the cafe's patrons, and the plaza itself will become a de facto public-private partnership. This represents a shift toward "surveillance of public space and restriction of citizenship to consumership" (Schaller and Modan, 2005, p 405). The right not to be excluded from the space will no longer exist (Blomley, unpublished, 2017). The proposal for Annie Street counters the disorder of the public with the order of property. Although work to remove the plaza is expected to start in early 2018, there are at the time of writing no notices or indications of the coming

changes at the plaza.

Another example from a meeting for the proposed Inner Sunset Green Benefit District is illustrative. When funding proposals for services were discussed, the initial proposal included funds for a resource guide who would be responsible for directing people living on the streets to services. Some in attendance were weary. One person told a story about bringing someone off of the street for a night to stay in his home, and noted that the city doesn't have many services available so the nascent district shouldn't spend their money on someone to guide people to services that don't exist or are already over capacity.

Conclusion

The generally low standard of community interaction from CBDs is at least in part a failure of city government to stipulate that community involvement is a component of being a community benefit district. It is also abetted by the tendency not to ask what we mean when we say "community". We all think we know, and happily apply our own (often vague) definitions onto the term when others use it, no matter how different the context or speaker. It is not easy to come up with an all-purpose definition of community, and there is risk in stating any definition explicitly: you lose precisely the cover the word "community" usually grants, and you are then open to critique and scrutiny by those included or excluded in the

definition. Stating which community is intended to benefit from a CBD should be a practice that acknowledges the reality of CBDs, instead of sublimating it.

When Ciccarone said "Well, we are the community", he was right. YBCBD does not currently serve or represent communities not already present in that room. Their community is wealthy, artsy, and predominantly white property owners, and that is who they act to benefit. The only problem is that they don't have to be accountable to that fact- they can hide behind the positive, inexact connotations of "community". San Francisco should encourage CBDs to have community in mind in their decisions, and require them to stipulate, at least to some extent, which communities they plan to serve. As Blomley noted, "the interests of a community have no formal status; they are not, for example, property rights" (2004, p 11). Property rights are extended by CBDs, while the practice of community is often fragmented by them. It will be difficult to hold CBDs accountable for this as they are currently formed, but even a relatively simple acknowledgement of who they represent or serve would make them more transparent and more open to fair critique. The Tenderloin and Lower Polk CBDs both achieve great results while specifying their community simply as all the people living in the district. Insofar as CBDs are funded by taxation on property owners in order to

fund neighborhood projects, there is a very real way in which they can operate as a wealth redistribution mechanism. It is my hope that other CBDs in San Francisco will take advantage of this potentially revolutionary aspect of the CBD.

In some ways, CBDs bank on the worn-out idea that there is a one-to-one relationship between physical space and community. This idea stems from the historical genesis of the term "community" to refer to working class enclaves, often segregated by race, religion, and ethnicity, in industrial US and UK cities (Blokland 2017). Blokland contends that this is an outmoded conceptualization of community, if it was ever accurate to begin with. CBDs provide a neighborhood-scale outlet for civic participation, harnessing many hours of volunteer labor for their boards and committees. There is no reason to assume that this kind of enthusiasm for civic engagement manifests only in the land-owning class. At the moment, the restriction to property owners is caused by the exigencies of the California tax code, specifically Proposition 13. If CBDs are to continue gaining ground in San Francisco, some combination of tax reform and/or CBD incorporation reform will be needed to ensure a democratic sense of community in our cities.



R a C е, Poverty, & Proximity to Freeways LA 111

LA Freeway Impacts By Cecilia Ng

Introduction

There has been a wealth of research regarding the racial demographics and socio-economic status of those who live in close proximity to major freeways and roadways (Gunier, et al., 2003), along with the impacts on quality of life near these areas (Houston, et. al, 2004). Many scholars, public health experts, and environmental studies experts have named this as an environmental justice issue (Tian, Xue, Barzyk, 2013). Along with being an issue of equity, there is a high economic toll of people living in close proximity to areas of high pollution. Air pollution exposure was responsible for roughly 2.8 million lost workdays yearly and over \$3.5 billion in healthcare costs (Houston, et. al, 2004).

My research question is as follows: What is the relationship between proximity to major freeways and the racial and economic make-up of census tracts in the Los Angeles Metropolitan Area?

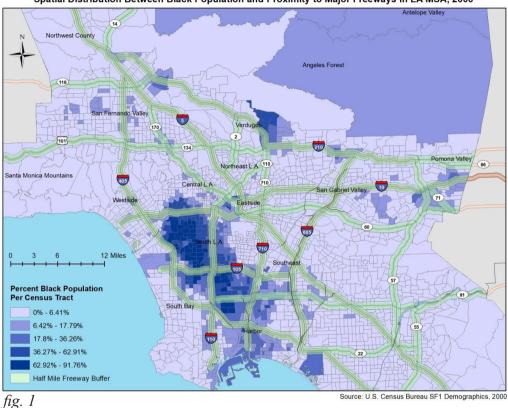
My research hypothesis, H1, is that census tracts in close proximity (within half mile) to major freeways in the LA MSA are more likely to be populated by people of color (i.e., % Asian, % Black, % Hispanic) and low-income family households when compared to tracts not within a half mile of major freeways. My null hypothesis, H0, is that there is no statistically significant difference, in terms of racial make-up and income levels, between census tracts within a half mile of major freeways in the LA MSA and census tracts outside of a half mile of major freeways.

In accordance to previously conducted research discussed above, I expected that I would find that the census tracts within half a mile of major freeways in the LA MSA would have significantly higher populations of Black, Asian, and Hispanic or Latino people, along with higher percentages of households with low incomes and living below the poverty level.

Results, Interpretation, and Analysis: *Spatial Analysis*

I made a series of four thematic maps using multi-level analysis to examine the spatial relationships between racial and ethnic demographics, income levels, and proximity to major freeways in the Los Angeles Metropolitan Area. Two of the maps look at racial and ethnic population and the other two look at income and poverty levels. I obtained the data for my maps from the following places: the Demographics SF1 and Income SF3 2000 and surrounding county census tract shapefiles were from the U.S. Census Bureau, the group layer file of the USA freeway system was tracts "1" and the tracts not selected "0" in order to do statistical analysis in SPSS.

The unit of analysis is by census tract. I chose to have five classifications for my thematic maps, all classified by natural breaks (Jenks).



Spatial Distribution Between Black Population and Proximity to Major Freeways in LA MSA, 2000

from ESRI's online catalogue of data and maps, and the shapefile for all LA county regions that I used for the labels was from the LA Times' online database.

Using the group layer file of USA freeway systems, I created a half-mile buffer area for all my maps, which I then used to select all census tracts that had their centroid in the buffer zone. I then created a dummy variable and assigned the selected My first map (*fig. 1*) looks at the spatial distribution between percent Black population and proximity to major freeways in the LA MSA. The variable I created for this map was Perc_Black, which was calculated by taking the total number of Black people living in each census tract (P007003) and dividing by the total population in each census tract (P001001) and multiplying by 100. Looking at the map, the vast majority of census tracts in Los Angeles and Orange Counties had very low populations of Black people living in them (between 0% and 6.41%). The areas with 36.27% or higher Black population were concentrated in South Central LA, between the 405 and 110 freeways. Areas in the Harbor region and going south and slightly east of South Central all the way to the coast had between 6.42% and 36.26% Black population.

Latino people (P008010) and dividing by total population for which Hispanic or Latino or neither have been specified (P008001) for each census tract in the LA MSA then multiplying by 100. The Northwest County, Santa Monica Mountains, Westside, and South Bay regions had very low percentages of Hispanic or Latino populations living in these census tracts (0% to 19.01%). The regions with the highest concentrations of



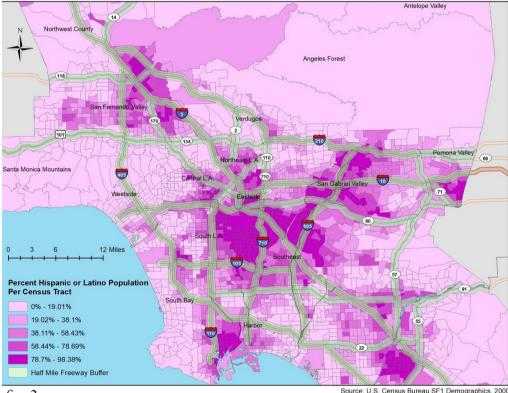


fig. 2

Source: U.S. Census Bureau SF1 Demographics, 2000

My second map (fig. 2) shows the spatial distribution between percent Hispanic or Latino population and proximity to major freeways. I created the variable Perc HisLa by taking the number of Hispanic or Hispanic or Latino populations were the Northeast, Eastside, Southeast, San Fernando Valley to the northwest, San Gabriel Valley to the east, Harbor to the south, the southern part of Pomona Valley and an area of Orange County to the south east (between the 405 and 55 freeways). The largest area with high populations of Hispanic or Latino people residing in them was the region at and below where all the 5, 710, 170, and 10 freeways meet.

Mountains and Westside to the west. There were a few census tracts with the highest income classification in the Verdugos, South Bay, and Harbor regions. The eastern part of Orange County had a concentration of tracts with the second highest income

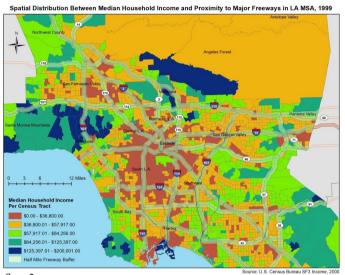


fig. 3

This third map (fig. 3) shows the spatial distribution between yearly median household incomes and proximity to major freeways in the

LA MSA. The variable used for this map was median household income for each census tract in 1999 (P053001). The areas with the most census tracts with the highest median household incomes (\$84,256.01 to \$125,397.00 and \$125,397.01 to \$200,001.00) were the Santa Monica

level (\$84,256.01 to \$125,397.00). The areas with concentrations of tracts with the lowest income level (\$0.00 to \$36,800.00) were San Fernando Valley, Northeast LA, Central LA, South LA, Eastside LA. San Gabriel Valley, the southern part of Pomona Valley, and parts of Harbor. An area of interest is the southernmost part of the Harbor region, right next to the coast, where

there are tracts with the highest income level immediately adjacent to tracts with the lowest income level.

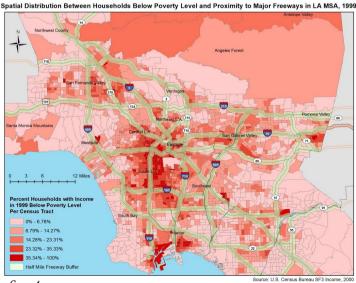


fig. 4

Another observation is that the areas with the lowest income levels corresponds with the areas with the highest populations of Black and Hispanic or Latino populations (as discussed in the first two maps). Furthermore, it appears that the area in the Eastside, where all the major freeways cross one another, is the area with the most low income census tracts.

This last map (fig. 4) shows the spatial distribution between the percent of households living below the 1999 poverty level and proximity to the freeways in the LA MSA. The variable Perc Pov used for this map was created by taking the number of households with income in 1999 below poverty level (P092002) and dividing by the total households for whom poverty status in 1999 has been identified (P092001) per census tract and then multiplying by 100. The following five classifications were created: 0% to 6.78%, 6.79% to 14.27%, 14.28% to 23.31%, 23.32% to 35.33%, and 35.34% to 100%. I found it odd that a census tract would have 100%, so every single household, to be living below poverty level, so I looked into which tract it was, and it was census tract 2074 with a total of 7 households living inside it. Tract 2074 is located in Central LA. This was clearly an outlier tract. The tract with the second highest percent of households living below poverty level was census tract 2227, located in South Central LA, with 137 out of 148 households living below poverty (or 92.57% of households). Areas with the highest concentration of the

most impoverished tracts (tracts with 35.34%, or more than 1 in 3 house-holds living below poverty level) were Central LA, South LA, East-side, and parts of Harbor.

Statistical Analysis

My statistical analysis consisted of creating descriptive statistics tables and histograms to show the distribution of the data for all variables I have included the histograms in the appendix of this report. Furthermore, as I was dealing with independent variable that had a nominal level of measurement (within or beyond the half mile buffer zone) and dependent variables with interval-ratio levels of measurement (percents), I ran independent samples t-tests for all my racial, ethnic, and income level variables to test for statistically significant relationships between tracts within and beyond the half mile buffer zone. As mentioned in the above section. I was able to do this by creating the dummy variable in ArcGIS and then exporting that file into SPSS.

Descriptive Statistics for Racial/Ethnic Demographic Variables

Along with the variables for percent Black and Hispanic or Latino populations, I created the variables Perc_White and Perc_Asian. The following table shows the total number of census tracts (2,631 tracts) and the mean, median, standard deviation, variance, minimum, maximum, range and percentiles for the four variables. These measurements show the distribution of the data. For example, the mean and median percent population for all LA MSA census tracts were 7.86% and 2.54%, respectively. The minimums for all racial/ethnic demographic variables were zero. The maximum for Perc Black was 0.9175, meaning that the census tract with the highest Black population was 91.95% Black. The maximum for Perc HisLa was 98.34% and the maximum for Perc Asian was 82.03%. The maximum for Perc White was 1.00%, meaning that there were census tracts with all White populations.

s	tati	sti	cs

		Perc_Black	Perc_HisLa	Perc_Asian	Perc_White
N	Valid	2631	2631	2631	2631
	Missing	0	0	0	C
Mean		.07856786	.39908846	.12091624	.53402784
Median		.02539220	.32868400	.07358950	.51143900
Std. Deviati	on	.142645976	.292597173	.134835014	.229515777
Variance		.020	.086	.018	.053
Range		.917636	.983768	.820319	1.000000
Minimum		.000000	.000000	.000000	.000000
Maximum		.917636	.983768	.820319	1.000000
Percentiles	25	.01166430	.12630700	.03396660	.35773800
	50	.02539220	.32868400	.07358950	.51143900
	75	.06410260	.63881900	.15371300	.74400200

Regarding the distribution of the data for each variable (refer to the histograms at the end of this report), all the variables had asymmetrical distributions. The distributions for the percent of Black, Hispanic or Latino, and Asian populations were all skewed to the right. The distribution for percent White population was bimodal.

Descriptive Statistics for

Income Variables

Along with Perc Pov and Median Household Income (P053001), I created the variable Perc FamPo, which was calculated by taking the number of families with children under 18 that lived below the 1999 poverty level (P090002) divided by the total families for whom poverty status in 1999 by family type and by presence of children under 18 have been specified (P090001). What follows is a table showing the total number of tracts. the mean, median, standard deviation, variation, range, minimum, maximum, and percentiles for the three variables. The average percent of families with

> children living under the 1999 poverty level was 13.37%. The average percent of all households living under the 1999 poverty level was 13.95%. The average of median household incomes was \$50265.32. Perc_FamPo and Perc_Pov shared the same minimums and maximums (meaning that there were census tracts with no households living

in poverty at the same time that there were census tracts with everyone living under poverty). What I found interesting is that for median household income, the maximum was \$200,001. I expected this to be higher, given that Los Angeles is home to a lot of wealthy people.

Regarding the distribution for the data for these three variables, the histograms indicated that they were all asymmetrical and skewed to the right.

		Statistics		
		Perc FamPo	Perc Pov	p053001
N	Valid	2631	2631	2631
	Missing	0	0	0
Mean		.1336696	.1394860	50265.32
Median		.0939306	.1052630	45345.00
Std. Devia	ition	.12030902	.11848543	25795.403
Variance		.014	.014	665402811.500
Range		1.00000	1.00000	200001
Minimum		.00000	.00000	0
Maximum		1.00000	1.00000	200001

Results for Independent Samples T Test for Racial/ Ethnic Demographic Variables

There were a total of 766 census tracts that fell within the half mile buffer zone and 1865 census tracts that were beyond the buffer zone. The difference between the means for each variable were the following: for Perc_Black, there was a 1.84% difference between the averages of the two groups. For Perc_His-La, there was a 11.7% difference of means. For Perc_White, there was a 8.4% difference and for Perc_Asian, a 0.32% difference.

Group Statistics								
		N	Mean	Std. Deviation	Std. Error Mean			
Perc_Black	0	1865	.0780349170000	.15076332500000	.00349105176000			
	1	766	.0798654461000	.12070139700000	.00436111875000			
Perc_HisLa	0	1865	.3650166350000	.28900118000000	.00669206572000			
	1	766	.4820440180000	.28478100700000	.01028955600000			
Perc_White	0	1865	.5584870080000	.23506726300000	.00544318045000			
	1	766	.4744764540000	.20359903000000	.00735633196000			
Perc Asian	0	1865	.1199814110000	.13318129000000	.00308392494000			
	1	766	.1231923040000	.13884124600000	.00501653811000			

The independent samples t test yielded the following results.

					Indep	endent Samples	Test					
		Equa	s Test for ality of ances		t-test for Equality of Means							
								Std. Error	95% Confidence Inte	erval of the Difference		
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Difference	Lower	Upper		
Perc_Black	Equal variances assumed	2.388	.122	299	2629	.765	00183052907000	.00612267692000	01383628260000	.01017522450000		
	Equal variances not assumed			328	1762.513	.743	00183052907000	.00558630461000	01278700890000	.00912595079000		
Perc_HisLa	Equal variances assumed	.017	.896	-9.476	2629	.000	11702738300000	.01234998870000	14124406500000	09281070110000		
	Equal variances not assumed			-9.534	1443.078	.000	11702738300000	.01227431090000	14110478500000	09294998160000		
Perc_White	Equal variances assumed	46.824	.000	8.648	2629	.000	.08401055490000	.00971427778000	.06496215070000	.10305895900000		
	Equal variances not assumed			9.180	1631.300	.000	.08401055490000	.00915116568000	.06606128230000	.10195982800000		
Perc_Asian	Equal variances assumed	1.273	.259	555	2629	.579	00321089342000	.00578717298000	01455876840000	.00813698159000		
	Equal variances not assumed			545	1372.053	.586	00321089342000	.00588865415000	01476263380000	.00834084691000		

For Perc_Black, there was a 0.122 significance value for Leven's test, which is over 0.05, so equal variances were assumed. Knowing that, I referred

to the significance (2-tailed) for that row, which was 0.765. This is over 0.05, meaning that I could not reject the null hypothesis. This also means that there was a 76.5% chance of the difference between the means being due to chance.

For Perc_HisLa, the significance value for Levene's test was 0.896 (over 0.05) so equal variances were assumed. The significance (2-tailed) value for that row was 0.000 (less than 0.05), meaning I could reject the null hypothesis. The 0.000 value tells me that there is a very low chance (0% basically) that the difference between means for the groups within and beyond the buffer zone was due to random chance.

For Perc_White, the significance value for Levene's test was 0.000, meaning equal variances could not be assumed. The significance (2-tailed) value for that row was 0.000, meaning I could reject the null hypothesis.

And lastly, for Perc_Asian, the significance value for Levene's test was 0.259. This meant that I look at the significance value (2-tailed) for equal variances assumed, which was 0.579. This value is over 0.05, meaning I could not reject the null.

Results for Independent Samples T Test for Income Variables

For P053002 (Median Household Income), there was a difference between the means of the two groups of \$11,322.67. For Perc_Pov, there was a difference of 4.59% between means and for Perc_FamPo, a difference of 4.35% between means.

Group Statistics									
	dummy	N	Mean	Std. Deviation	Std. Error Mean				
p053001	0	1865	53561.85	27379.215	633.989				
	1	766	42239.18	19237.185	695.068				
Perc_Pov	0	1865	.1261193	.11144162	.00258052				
	1	766	.1720304	.12848064	.00464219				
Perc_FamPo	0	1865	.1209982	.11439278	.00264886				
	1	766	.1645210	.12857694	.00464567				

Running the independent samples t test gave the following results.

Independent Samples Test

					muepenu	ent Sample	5 1051			
		Levene's	Test for							
		Equality of V	of Variances t-test for Equality of Means							
									95% Confidence Ir	nterval of the
						Sig. (2-	Mean		Differen	ce
		F	Sig.	t	df	tailed)	Difference	Std. Error Difference	Lower	Upper
p053001	Equal variances assumed	76.914	.000	10.436	2629	.000	11322.674	1084.969	9195.194	13450.153
	Equal variances not assumed			12.035	1999.442	.000	11322.674	940.777	9477.668	13167.679
Perc_Pov	Equal variances assumed	15.970	.000	-9.171	2629	.000	04591113	.00500629	05572781	03609445
	Equal variances not assumed			-8.644	1261.397	.000	04591113	.00531122	05633093	03549133
Perc_FamPo	Equal variances assumed	13.024	.000	-8.544	2629	.000	04352280	.00509377	05351101	03353459
	Equal variances not assumed			-8.138	1287.418	.000	04352280	.00534778	05401412	03303148

For all three of my variables, the significance value for Levene's test came out to be 0.000, meaning I could assume unequal variances. The significance value (2-tailed) for all three were also 0.000, meaning I could reject the null hypothesis. There was a very low (0.000%) chance of the difference of the above-discussed means being due to random chance.

Conclusion and Policy Implications

I can conclude that my research hypothesis was partially correct. I can say that census tracts within a half mile of major freeways in the LA MSA in the year 2000 have higher percentages of Hispanic or Latino populations, lower White populations, more households and families living in poverty, and lower household median incomes when compared to census tracts beyond a half mile buffer zone. I was able to reject the null hypothesis for only two of my variables dealing with race/ethnicity (Perc HisLa and White). I was able to find statistically significant relationships between White populations and proximity to freeways and Hispanic or Latino populations and proximity to freeways. I was unable to find statistically significant relationships between Black populations and Asian populations and proximity to freeways. For my variables dealing with income level. I am able to conclude that there are statistically significant relationships between percent of households below poverty, percent of families below poverty, median household income, and

proximity to freeways.

Some policy implications of my research results could be that these results justify the creation or further funding of programs and services (such as healthcare) to populations living in close proximity to freeways, in the interest of environmental justice (Tian, Xue, Barzyk, 2013). Furthermore, a case can be made that future developments for housing, hospitals, or schools should not be located in close proximity to freeways (Houston, et al., 2004).

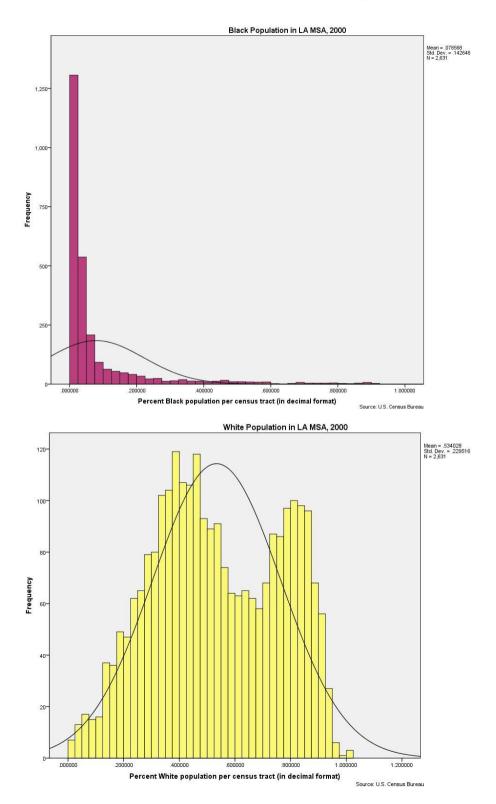
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Histograms for Racial/Ethnic Demographic Variables



Accessibility Issues in Protected Bike Lane Design By Natasha Opfell

Introduction

Cities across the United States have been implementing protected bike lanes throughout their streets that strive to make biking a more viable, safe, and accessible option for their populations. Protected bikeway networks are an important safety improvement for cyclists, yet they are being built in such a way that creates dangerous situations for people with disabilities. The conflicts that these protected bikeway designs create for people with disabilities stem from a long history of institutional disinvestment from their needs. The loading requirements of wheelchair users, or people using paratransit, vary drastically from the user experience of a blind transit rider. These diverse needs seem to deter cities from making informed design choices.

This report examines the effects of protected cycling infrastructure on accessibility for persons with disabilities. As cities strive to become safer and more sustainable by shifting mode share toward walking and cycling, they must take into account the needs of people with disabilities. Cities have a responsibility to consider the needs of people with disabilities in the design of public streets, and not create projects that improve the safety of one mode while creating dangers for the other.

Advancements in cycling infrastructure research and design have determined that the best way to protect cyclists is the "protected bike lane", a type of bike lane that is physically separated from moving traffic by a barrier (planters, bollards, or parked cars). Protected bike lanes are becoming more and more popular in the United States as cities aim to become more bike-friendly. As cities adopt Vision Zero, a strategy to eliminate all traffic fatalities and severe injuries, we see that protected bike lane projects are being expedited and rushed through the planning phase in order to be implemented as soon as possible. This fast tracking of the protected bike lane design process can cause accessibility needs of people with disabilities to be overlooked

Persons with disabilities are disproportionately affected by changes to urban infrastructure. Urban bike networks incorporating protected bikeways often lack considerations for persons with disabilities in their design. Cities must legally adhere to the Americans with Disabilities Act (ADA), yet the quality of accessibility is hardly ever considered. The resulting designs limit the accessibility of persons with disabilities whose independence, health, and self-confidence count on being able to reach vital services that these protected bike lanes can impede.

This research is not condemning protected bike lanes, but identifying design aspects that create accessibility issues. These issues are often hard to identify and frequently overlooked by able-bodied planners due to limited experience with the reality of disabled users. Urban planners need to expand their design outlook by involving persons with disabilities, and experts in accessibility design, into the planning process at earlier stages. Through a series of interviews and focus groups, I have identified some recommendations persons with disabilities might have in response to newly implemented protected bike lanes in San Francisco. This research also reveals how they might like the city to involve persons with disabilities in the design process. San Francisco is one of the few American cities to implement protected bike lanes at a large scale in complicated, multiuse corridors that encounter transit. high volume pedestrian activity, and more. San Francisco is also one of the few cities to experiment with protected bike lanes in the less conventional one-way and contra-flow configurations. The protected bike lane designs that San Francisco implements will set the standard in cycling safety for the rest of the United States. San Francisco should serve as the model and standard of accessibility in these bikeways.

Research and Methods

This research utilizes interviews, participant observation, and focus groups. The research question analyzes the experiences of individuals interacting with protected bike lane design and these research methods yield qualitative analysis that can provide important information from individuals who are affected by these designs and also get information from individuals involved in design, implementation and the politics around the accessibility of bike lanes to better understand not only the implications of bike lanes on the disability community but also the processes and politics that are involved in the development of these safety features.

Interviews:

In the selection of interviewees for this research I found it important to seek input from not just persons with disabilities, but also persons involved in the development of these bike lanes. This included individuals from city agencies, individuals involved with the disability community, as well as activists in the cycling, pedestrian, disability and liveability realms. The goal was to develop a complete, holistic view of all the variables involved in the design, implementation, and assessment of protected bike lane infrastructure. In order to get the best quality of information possible, I guaranteed that interviewees' identities would be kept anonymous due to the repercussions that some of the public-facing individuals may receive when providing candid answers.

I reached out to seventeen individuals with requests for interviews. All but one agreed to be interviewed. Out of those sixteen who agreed to be interviewed, I was able to coordinate dates with fourteen individuals, and was able to gather viable transcripts from twelve. Unfortunately, for two of the interviews the recording software was not able to pick up any audible recording, so they were not added to the data set.

Focus Group:

Part of this research involved observing how people with disabilities were actively interacting with protected bike lanes. Through my work at Walk San Francisco, a pedestrian advocacy organization and my involvement with this research, I became involved with a focus group that included members of a Senior and Disability workgroup. The members of the group were involved in assessing various examples of protected bike lane infrastructure along with advocates from the disability, bike and pedestrian communities, and city staff. Having the ability to assess various protected bike lane types with various users from the disability community provided essential feedback for the research.

Participant Observations:

To better understand how the city integrates accessibility concerns from the public, participant observations were utilized.

The first meeting was located at the Independent Living Resource Center, an organization that focuses on supporting and empowering other individuals with disabilities to actively participate in their communities. The workshop was held for their clients to assess and become educated around the Folsom-Howard Streetscape project. City staff were invited to this meeting to be able to conduct a listening session around the comments and concerns the clients had around the protected bike lane designs. This meeting allowed me to observe a conversation involving twenty one individuals with a wide range of disabilities and hear in-depth discussion around how they experience protected bike lanes, navigate city infrastructure, and interact with the project managers of upcoming projects.

The second meeting observed was hosted by the SFMTA. This meeting was an informational meeting for city staff involved in protected bike lane design to hear the disability community's concerns around recently-implemented protected bike lane infrastructure. The observation of this meeting provided a deeper understanding of how the city communicates with members from the disability community and advocates involved in streetscape design. Limitations of Research:

The timeline for this project created various limitations to the research. With only three months to effectively plan, execute, and deliver research on this topic the extent to which qualitative research could be done was limited. The length of time it takes to organize, schedule, plan and conduct thorough interviews, focus group and observation data limited the sample size of data that was able to be gathered.

<u>Results</u> Interviews:

Each interview was transcribed and read through using a qualitative

coding process that isolated and labeled pervasive topics, themes and ideas. The final themes in this report were selected by analysing the various topics and grouping them into larger overarching categories. The final categories that were chosen to sort the data were: policy, public engagement, values, culture, structural issues, and infrastructure.

Values-

The majority of the individuals interviewed expressed that a majority of the problems around accessibility of protected bike lanes stem from a system built on compromised values. Many of the interviewees expressed a

great concern over where the intentions of designers, engineers, politicians and advocates lay. Many of the respondents believe that the inaccessibility of bike lanes issues stem from decision makers not considering the needs of people with disabilities during the planning process. Interviewee A stated, "I think as a pedestrian advocate, I think the conversation of accessibility comes to a bigger question of, what sort of city do we want to live in...and who is it for?". This sentiment of "who are we designing for?", was brought up over and over again when critiquing the value system that organizations such as the city agencies, politicians, advocates and individuals use when doing their work. Many interviewees stated that the prioritization of the private automobile has created a tumultuous, dangerous and inaccessible landscape. Interviewees feel that when there is not a consensus, and an obvious lack around who streets should be for and how they

We turned the city into a set of traffic sewers that move cars and we shunted pedestrians, bicycles, and transit off to the sides. **99**

> should be utilized, it created a complex system of competing needs.

> Competing needs was a topic that was brought up again and again. When asked about how protected bike lanes were designed and implemented, many interviewees believed that they were developed around a value framework where automobiles were given priority:

> "We had this massive intervention on behalf of the automobile. We turned the city into a set of traffic sewers that move cars and we shunted pedestrians, bicycles, and transit off to the sides...if anywhere...and then all of the moves that counter that mindset feel very tenuous. And

so that is the challenge here, the status quo is really terrible for pedestrians and cyclists." (Interviewee B).

Many of the interviews contained opinions that people with disabilities are not valued and that this was made clear in the lack of consideration for accessibility in the current design of protected bike lanes. Interviewee C when commenting on how protected bike lanes removed curb access expressed that, "seniors and people with disabilities are once again being being put on the back burner".

When bike lanes are being advocated for by the cycling community and being engineered quickly with the goal of cyclist safety, other values, such as accessibility for people with disabilities, become ignored and often seen as an obstruction to implementation. One concept that was able to make its way into more than one overarching theme was the idea of siloing. Many interviewees felt as though there was a strong focus on individual city agency priorities and that this created different project outcomes in regards to accessibility of protected bike lanes.

Culture-

Many of the individuals interviewed expressed a great concern with the current culture we have in San Francisco around many issues that affect accessibility for people with disabilities. The view that people with disabilities are a minority that do not require accommodation often permeates conversations around accessibility:

"I think that maybe there is the perception of..."Well, it doesn't affect that many people..." This is an argument that I have heard my entire career you know? It is one of the things I talk about most. It doesn't matter if it is one person or it's five hundred people. It is just what we have to just do...It's literally a mindset shift." (Interviewee D).

Other interviewees expressed that in their particular group, when fighting for their needs, their group was not always empathetic to the needs of those outside of their specific community, "When a particular group of people get so concerned about their own rights being violated or fighting for their own rights (i.e cyclists), they have a hard time perceiving other people's needs, wants and rights." (Interviewee E). Interviewees also noted that this culture of siloing and individualism is moving away from its current, ableist framework toward a more inclusive paradigm. This paradigm is beginning to include discussions around accessibility and people with disabilities, with many stating that they have seen huge moves toward integrating intersectionality and equity into their organizations' strategic plans and personal goals.

Policy-

Many policies were brought up by interviewees to explain the various policy driven reasons as to how accessibility for people with disabilities is considered and measured. The policies discussed included federal, state, and municipal laws, as well as city plans, efforts, and campaigns.

The Americans with Disabilities Act (ADA) was mentioned by all who were interviewed as pivotal legislation towards the rights and inclusion of people with disabilities. Many stated that the ADA was of utmost importance due to power as a legal mandate on municipali-

ties. The ADA creates legal requirements for city agencies, such as the San Francisco Municipal Transportation (SFMTA). Agency It requires these city agencies to provide accessibility, yet many of the interviewers saw the ADA as limiting factor, that did not supply specific compliance requirements for designs such as protected bike lanes:

"But the development of these guidelines and updates is very long arduous process, so once it gets published it doesn't get updates for another five, ten years. So in that interim you have a lot of innovative projects that don't have really clear guidelines. " (Interviewee F).

Universal design is a broad spectrum of

design ideas that was brought up by many of those interviewed as a preferred supplement to ADA compliance principles that would create dynamic and creative accessible environments that work for all users no matter their ability. Some who were interviewed viewed universal design principles as being important to the development of a deeper understanding of accessibility that



is not dependent on the "checklist" compliance of ADA and is more concerned with quality of user experience. There was a concern that not many people involved with the development of protected bike lane infrastructure are knowledgeable of universal design and therefore are limited in designing truly accessible environments.



Organizational Issues-

Many different city agencies govern the public realm. There are a handful of city agencies that have jurisdiction over the design and implementation of protected bike lanes. Many of the individuals interviewed expressed concern about the way that city agencies work, or do not work, together to achieve truly accessible projects. Other individ-

> uals mentioned that each agency handles their accessibility coordination department differently and they do not always communicate with each other.

> Within the SFM-TA, limited staffing was brought up as an issue that can sometimes affect whether protected bike lane projects receive appropriate attention. Due to a multitude of other constraints and requirements, accessibility was often only measured by strict adherence to ADA compliance mandates and not on the quality of accessibility provided:

> "I assume the staff has done their job as far as strict compliance. I think that when it comes to the boards decision and once it passes that flat compliance issue. The big questions are, "How does this actually work for people?" And you know there are

plenty of things that I interact with in my day to day life that are technically compliant and totally do not work for me." (Interviewee G).

Some interviewees mentioned that when accessibility issues with protected bike lane designs are brought to the SFMTA's attention, the best solution towards creating a more accessible bike lane may be under another city agency's jurisdiction, therefore complicating and impeding the accessibility improvement process.

Public Engagement-

A majority of the individuals interviewed expressed concern that city agencies are not doing all they can to involve people from the disability community in their work. The city does have advisory councils that deal with accessibility in various capacities. Some interviewees reported that, while these councils do provide insight, they were far from a comprehensive voice. Many individuals complained that when people with disabilities are involved in the conversation it is often too late in the design process to incite change or provide actionable feedback for a project. Phrases such as "bringing more voices to the table", "giving more people a place at the table", and "engaging the proper stakeholders" were prevalent in almost all the interviews.

Many of the interviews also mentioned that the efforts of the SFMTA's outreach during the public engagement stage was of poor quality and severely lacked accommodations for people with disabilities:

"I think that the SFMTA leaves a lot to desire with their outreach. I don't demonize the SFMTA the way many people do...but I do think that when it comes to outreach they tend to focus on businesses and stuff like that...but I think they unfortunately rely a lot on advocates to do outreach." (Interviewee H).

"Seniors and people with disabilities are not the majority, And the city doesn't really go out of their way to reach these populations... they have meetings that sometimes are not accessible to people." (Interviewee E).

Some of the people interviewed explained that even when the SFM-TA made a good faith effort to involve their organization in a project, they still did not have their needs met nor did they receive follow-up information regarding how their input was received. There was an individual interviewed that depended greatly on an established relationship with key accessibility coordinators and felt as though that greatly helped her concerns to be heard within the SFMTA projects that affected her clients.

Infrastructure-

Throughout all the interviews many differing infrastructure treatments were brought up as possible solutions to the issues of limited accessibility in relation to protected bike lane implementation. Engineering components designed to slow down the speeds of traffic and bicycles such as raised crossings, raised intersections, speed bumps, and signaling changes were all referenced by interviewees as beneficial remedies to make protected bike lanes and the corridors where they are located safer for all pedestrians, and especially those with disabilities.

There was an understanding throughout the interviews that access to the curb was one of the most important needs for people with disabilities, especially wheelchair users. When protected bike lanes restrict curb access, this diminishes people with disabilities' access to locations along the length of the bike lanes. People who depend on paratransit, vans with lifts, taxis, or transportation network companies for mobility are impacted. The reduction of places for pick-up and drop-off can create situations that decrease safety for all road users. Interviewee J expressed great concern at a proposed bike lane:

"Many of them that are using van services or are using either a wheelchair or walker. For some of them it's staff assisting them by arm off the van and for them to be going into a bike lane, it could be very tricky. The people that are on vans tend to need more support for varying reasons." (Interviewee J).

Limited access to the curb was also expressed by some interviewed as a impediment on the independence of people with disabilities. For persons with disabilities who drive and require curb access to get in and out of their vehicle, a safe way to access the curb is necessary for completing day to day activities.

Focus Group:

The focus group participated in a tour of three different types of protected bike lane examples in or around the South of Market area of San Francisco. They identified many accessibility issues in the protected bike lanes they were assessing. The issues that were most concerning to the group were the lack of well marked accessible loading zones, the lack of blue zone handicap parking, the inadequate width of the demarcated path of travel, the amount of obstructions in the designated path of travel, and the lack of speed control devices in the bike lane in areas where there would be pedestrian conflicts.

Participant Observations: Folsom Howard Workshop at the Independent Living Resource Center-

Individuals who were at this meeting were presented with designs of the various protected bike lanes being considered for the nearterm Folsom Howard Streetscape project. The SFMTA had a project manager present to and listen to the concerns of the individuals with disabilities who utilize the Independent Living Resource Center (located on Howard Street). Many of the individuals at the workshop had cognitive disabilities that limited their ability to comprehend complex data quickly and the SFMTA project manager was not prepared for an audience that required less jargon dependent information and additional time to gain an understanding of complex topics. In response to the project manager not getting the specific feedback he desired, the project manager reframed the conversation to cover overall safety concerns of the clients when using either Folsom or Howard street. Many of the individuals cited concerns over inadequate crossing times, narrowness of sidewalks, uneven pavement and the need to jaywalk due to the long length of the city blocks along these corridors. They did not speak strictly to concerns regarding protected bike lane design.

Pedestrian Accessibility and Safety of Bike Lane Design Meeting at the SFMTA-

This meeting was held by members of the disability community to communicate their concerns with engineers, project managers, and accessibility coordinators at the SFMTA. These individuals raised concerns regarding the width of the demarcated path of travel, lack of blue zone parking once the protected bike lanes were installed, and lack of curb access once the protected bike lanes were installed. They described the conflicts they had encountered when trying to cross the bike lane to access loading zones or transit stops. The disability community requested that the SFMTA revisit their planning document developed in 2014, "The

Guidelines for Accessible Building Blocks for Bicycle Facilities", because they felt that the document lacked the necessary guidelines for these newer styles of protected bike lanes. The SFMTA was mostly in a listening role and were not able to provide answers to many of the disability communities questions but agreed to look into them and report back.

Discussion

Reestablish values and culture to promote accessibility for people with disabilities-

To truly affect change in the way protected bike lanes can better accommodate the needs of people with disabilities there needs to be a significant shift in the values and culture our city and its residents have. When redesigning streetscapes we need to have firmly established values of accessibility, safety, and usability for all to ensure that any projects that arise consider accessibility from their first renderings. When assessing the needs and values of our transportation system, there needs to be a shift from the ideals of motordom that the last half century brought to San Francisco to establish a value system that supports the roads' most vulnerable users in a way that does not pit one mode over another.

There needs to be a shift in the culture around the perception of people with disabilities. We as a city must accept that the design of our built environment produces limits to accessibility. When persons with disabilities are seen as the minority and their disabilities are blamed as what disallows them access from the environment(Baker & Kaufman-Scarborough, 2001), an ableist paradigm dominates, which will consistently create designs that limit accessibility. cy or code to reference. This is why San Francisco's policies on accessibility need to promote a series of guidelines that promote universal design best practices.

When universal design best practices are considered, the long term value is preserved by not having to redesign for new compliance standards in the future.When done



Develop policies that better support the quality of access for people with disabilities—

Our bureaucracy is structured around the upholding of policy. When our city agencies only consider limited or dated policies such as the ADA they produce ineffective designs. If the city aims to produce projects that are cutting edge, or innovative such as protected bike lanes, there might be a lack of policorrectly, universal design plans for all the needs of a population in a way that does not create segregated spaces, and instead creates open safe accessible places that can sustain an aging population. To evaluate accessibility based on user experience and feedback promotes a deeper understanding of the needs of people with disabilities no matter how innovative the design might be. When considering that many of the current protected bike lanes were built without specific ADA compliance mandates, engineers could be encouraged to embrace universal design as an answer to the lack of policy.

Policies that San Francisco adopts need to be constantly updated so that there is always a discussion about how we can better address accessibility due to the ever changing streetscape environment. As protected bike lanes that potentially create new accessibility challenges are being installed throughout the city, policies need to be assessed often so that they best promote the understandings of universal design. This will ensure that all protected bike lane designs are adequately accessible.

Restructure organizations to support better communication–

San Francisco city agencies need to restructure in such a way that promotes information sharing and collaboration around streetscape projects that affect accessibility. The current siloed structure of city agencies creates an endless blame game as to who is responsible for accessibility improvements. The built environment being accessible is one of the best ways to ensure independence for people with disabilities and city agencies need to be able to communicate and collaborate openly around design best practices. San Francisco agencies in charge of the implementation of projects, such as the SFMTA and the Department of Public Works, need to have a relationship with visioning bodies such as the Planning Department to ensure proper communication around projects. This type of open communication could put and end to the delays seen in the implementation accessibility solutions whether infrastructure related or policy driven.

Set a new precedent around public engagement—

A common theme throughout this research was that the current involvement of persons with disabilities in processesses around streetscape design leaves much to be desired. The research yielded many examples of how city agencies can better involve persons with disabilities, disability advocates or other city agencies involved in the support of people with disabilities, earlier on in the design process so that accessibility issues can be mitigated before the project being considered begins construction. What we are seeing in San Francisco at the moment is that persons with disabilities are having to respond to current accessibility issues with protected bike lane design after they have already been constructed, this renders accessibility improvements costly and often considered impossible due to budget restrictions. When the voices of the disability community are brought to the table in design discussions early on, accessibility issues can be ensured to be heard by people responsible for project implementation, creating an open conversation on the various design solutions that may be

implemented early on in the design process.

Understandably, not all individuals with disabilities and other interested parties can be involved within these proposed early conversations. The SFMTA currently has a public engagement process that is extremely limited in their ability to reach people with disabilities when a project has entered its public outreach stage. When people with disabilities are not accommodated during these project open houses, community meetings, and design presentations, their concerns cannot be heard. The SFMTA should make it a priority to hold inclusive meetings that meet the needs for persons with disabilities such as providing large format materials, audible assistance for those with visual impairments, providing multiple meetings that are held at various times that meet the needs of people with night blindness or other time based needs, and mandating that activities that require participation to be accessible to those in a wheelchair or with limited mobility.

Creating better guidelines to promote better infrastructure development

Throughout this research many different infrastructure improvements that would aide in the accessibility of protected bike lanes were mentioned. These design improvements are well known throughout the transportation world as measures that make our streets safe for its most vulnerable users, pedestrians and cyclists. The problem that arises when trying to implement many of these infrastructure improvements, such as raised crossings, raised intersections, and curb access for loading and unloading, the argument of limited space causes road users to be pitted against each other and the interests of private automobile to win. This has created the need for protected bike lanes to be designed in a segregated, physically separated way, due to proximity to fast moving automobile traffic. If we deprioritized the use of privately owned motor vehicles, and slow them down, and re-distributed street space to safety improvements that have been requested from the disability community, the streetscape would be a safer place for all users.

Conclusion

The world is aging, the population over the age of 60 is growing faster than all younger age groups (United Nations, 2017). In the United States according to a U.S census report that covered the period between 2008 to 2012, nearly 40 percent of people aged 65 or older had at least one disability, with a majority of those individuals saying that mobility was their main concern (US Census, 2014). This is why ensuring the accessibility of our urban environment is of utmost importance. When we invest in accessibility we are investing in the future of our city, a city where it's residents can age in place, safely and comfortably.

Protected bike lanes are an improvement infrastructure that should not only make the streets safer for people cycling, it should improve safety for all road users. A city cannot call a protected bike lane that creates dangerous conflicts for people with disabilities a safety improvement. A city should value a safe transportation system that protects its most vulnerable users above all else. A city that has these values would engage persons with disabilities early on in the design process so that their concerns were addressed before the implementation of a project and in such a way that guarantees them access in whatever streetscape project may come to be.

San Francisco is making strides to become a city that engages people with disabilities. Throughout this research, the SFMTA has been engaged in conversations with advocates in the disability community, the cycling community, and pedestrian advocates to reassess their guidelines for accessible bike lane construction. Active transportation advocates that, for so long, have been held to their individual causes, such rights of cyclists or the safety of pedestrians, have begun to branch out and realize that their causes effect communities other than just their own. The minutiae of accessibility details can be difficult for organizations to grasp, that is why organizations such as the San Francisco Bicycle Coalition and Walk San Francisco are engaging in partnerships with disability advocates to better understand their needs. The fact that all the individuals that were interviewed during this research had common goals, concerns and progressive ideas around accessibility for people with disabilities, provides a notion that a culture shift is happening within the city of San Francisco.

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THE OPI

OID EPIDEMIC A Policy Analysis Hermandeep Kaur, Perry Rhodes III, Brandon Ruthven

Introduction

Opiates are a class of pain-relieving drugs with high addiction potential. Prescription opiates include fentanyl, hydrocodone, hydromorphone, oxycodone, and morphine. The most familiar and recognizable of illegal drugs in the opiate family is heroin, and all opiates essentially work to bind with opioid receptors in the brain to either reduce pain, increase pleasure, or both (ASAM 2016).

Opiates are routinely used to ameliorate chronic and acute pain in a medical context. One study found 32% of patients with fibromyalgia, a chronic pain condition, were treated with opiates—and two-thirds of those were being treated using strong opiates (Fitzcharles 2011). The study also found strong associations between opiate prescriptions and incidence of previous drug use, mental health issues, and suicide attempts, suggesting many of those prescribed opiates were drug-seekers (Fitzcharles 2011).

Emerging data is raising consciousness that modern America is in the midst of a serious public health crisis: the opioid addiction epidemic. Out of all potential consequences, ranging from interactions with the criminal justice system to economic and social problems, the potential of death looms most ominously. In fact, drug overdose is the leading cause of accidental death nationwide, and the largest constituent of these deaths is opiate related. In 2015 there were 52,404 drug overdose deaths and 33,091 of them involved either prescription opiates or heroin (ASAM 2016). A single family of drugs are responsible for 63% of the leading cause of accidental death, which warrants analysis to prevent and mitigate the consequences of opiate drug use.

Opioid addiction can be deadly, but luckily it is preventable through policy intervention. Like car accidents, the drug overdose epidemic has become central to our public discourse. It is an epidemic that crosses class and racial divides, does not discriminate against gender, and has the unique characteristic of being a problem that is both so pervasive and severe, that resolving it is in the best interests of society at large. In 2015, for the first time, drug overdose surpassed auto collisions as the number one cause of accidental death in the United States, a category that excludes chronic illness and violence (asam.org). If we care about preventing car accidents, we must care about preventing drug overdose death.

Research on the opioid epidemic reveals that a pipeline exists between the prescription of opiates and addiction, which ultimately leads to overdose deaths. Drug overdoses are increasing in frequency, and the vast majority of overdoses are caused by opiates. The problem of opioid overdose is established by citing widely known statistics concerning the magnitude of the crisis. Research reveals that this problem begins with prescriptions by outlining the correlations between prescription opiate sales, heroin production, and overdose death rates over the last 15 years. There are notable differences between this epidemic and previous heroin epidemics, which makes it imperative to analyze the affected populations. Throughout our search for the optimal policy intervention to prevent the high number of opioid overdose deaths, we came to the conclusion that a comprehensive approach is necessary to facilitate the desired results.

We began our analysis of policies with a list of fifteen policies. After formulating evaluation criteria, we were able to narrow these fifteen policies to six, and then to three policy options. Projected outcomes of these policy choices are discussed in the conclusion of this paper.

After comparative analysis with other selected policies, we conclude that the Comprehensive Addiction & Recovery Act is the most effective policy choice given its multifaceted nature—intervening at the level of the prescription, as well as providing more treatment for those already addicted. An act of legislation that addresses each stage of the prescription to death pipeline is the most appropriate for the scope of the problem.

This crisis is one with multiple intervention points and multiple causes. It was important for the policies to be politically and economically feasible, and for the policies to facilitate the elimination of overdose deaths equitably. Medical marijuana alternatives, market-based solutions, safe injection sites, criminal-justice approaches, and the Comprehensive Addiction & Recovery Act were evaluated to find the optimal solution according to this criteria.

While each policy with a singular focus has its strengths, none on their own were sufficient in their ability to tackle the entire opiate addiction and overdose epidemic. Nonetheless, each possesses potential insights into the problem and could contribute meaningfully to a comprehensive strategy.

Problem Identification

The increase in opiate prescriptions closely correlates with the simultaneous rise of overdose death and heroin addiction rates (CDC 2011). A CDC study found no correlation between demography and increases in drug overdose death across regions. This study did, however, find a strong correlation between increases in the rate of opiate prescription and drug overdose deaths in those places (CDC 2011). The CDC reports that the rate of drug overdose death had quadrupled from 1999 to 2008, and sales of opioid pain relievers increased the same amount over the same period (CDC 2011).

An especially deadly opiate, heroin, is prohibited for medical use and is highly addictive. A study of injection drug users in New York and Los Angeles found that 86% had transitioned to heroin use from prescription opiates (Lankenau, et al., 2012). An argument could be made that these users would have been initiated into drug addiction in some other waythat those who become heroin addicts become so because they're integrated into communities of drug use or are simply interested in the recreational use of drugs. The majority of cases described in the study, however, found that their use of prescription opiates predated other drug use, and that they had initially acquired opiates through a prescription, or a prescription to a friend or family member rather than purchasing the drugs off the street (Lankenau, et al., 2012). This challenges the notion that these populations held a latent potential for drug addiction that would have been activated even without prescription.

Between 1991 and 2011 production of opiate medications tripled. Opiate overdose deaths tripled over the same period. Between 2005 and 2009, heroin production by America's largest supplier, Mexico, increased nearly 6 fold (NIDA, 2015). Ninety-four percent of surveyed heroin addicts cite the availability and affordability of heroin, relative to the high cost of prescription pills, as their motivation for switching between the two (NIDA, 2015).

The increases in overdoses are not due to heroin alone. Many overdose deaths are produced by prescription opiates. In 2010, 8% of drug overdose deaths were related to heroin. Five years later that figure was 25%. Death by synthetic opioids (excluding methadone) increased from 8% to 18% in that same period, whereas death by natural opioids (morphine) and methadone overdose declined (Hedegaard et al., 2017). This demonstrates that while synthetic opioid overdose death is increasing, it is not increasing at the same rate that death from heroin overdose is (Hedegaard et al., 2017). The rise in heroin addiction and overdose can be attributed to the increasing prevalence of prescription opiates, therefore the availability of prescriptions plays a role in heroin-related deaths.

While the rates of prescription opiate overdose death are rising the fastest—heroin is still the largest producer of overdose deaths. In 2015, 9,580 people overdosed and died after consuming prescription opiates, compared to 12,989 deaths for heroin use. Controlled for race, the death rates from overdose of heroin rose across different demographics. Among prescription opiate overdoses, black users saw a 90.9% increase in overdose death from 2014 to 2015. whereas that rate was 75% for white people and only 50% for Hispanics (Hedegaard et al., 2017).

There are well-documented differences between the preferences of urban and rural drug users. Suburban and rural drug addicts are more likely to be addicted to prescription opiates while their urban counterparts are more likely to use heroin. In 2009, 21.8% of rehabilitation admissions in cities were heroin-related. That figure was only 3.1% for rural communities. For prescription opiates, this trend was reversed. Non-heroin opiates contributed to only 4% of urban admissions while contributing 10.6% to rural ones (SAMSHA,



2012). This suggests that heroin use, being at least in part driven by opiate prescription, is more of a problem for cities than for rural places. This conclusion is not definitive, however. The data suggests that since 2010, the nature of the opioid epidemic has intensified, such that pre-2010 data may not be sufficient to draw conclusions about today's situation. Further confounding these statistics are cultural and economic variables that influence who has access to rehabilitation in these communities. Rehabilitation rates may be a poor predictor of drug overdose death statistics, but are undergirded by the same trends, so they are not totally useless.

A study of drug users in San Francisco from 2010 to 2012 found that only 9.1% of its opioid overdose deaths involved heroin-decreasing from 183 deaths in 1999 to 31 over the 2010-2012 period. Approximately 94.7% of the deaths were prescription opiate related-representing a massive shift in which drugs were killing people (Visconti, et al., 2015). While most of these deaths occurred in less-affluent neighborhoods previously associated with heroin overdose, the study found that overdose death was being distributed more evenly into more affluent neighborhoods, suggesting prescription opiate death is crossing class lines as it grows (Visconti, et al., 2015).

The study further suggests a reason for the switch from the predominance of heroin-deaths to that of prescription opiates may be access to harm reduction facilities—heroin addicts in San Francisco have needle exchange programs available to them and more access to medications to reverse overdose (Visconti, et al., 2015). While prescription opiates may be fueling heroin use, heroin users are now less likely to die than they would have been in the 1990's. Prescription opiate addicts, however, do not have the same access to these harm reduction strategies, and this may be artificially deflating the impact of heroin in urban environments.

Ultimately, it is clear that beginning in the 2000's a public health crisis of opiate overdose death has culminated in overdose being the leading cause of accidental death in the United States. Nationwide, this appears to most heavily affect rural, white men. Nonetheless, this epidemic has affected urban minorities as well. In fact, in these urban environments it seems that people of color are disproportionately affected (Visconti, et al., 2015). While the poor are still the most heavily afflicted, death rates in more affluent neighborhoods are increasing. To ameliorate the consequences of the opiate epidemic, urban centers may have to focus the same resources they've constructed to combat heroin and repurpose them for prescription drugs.

Policy Research & Evaluations

Policies promoting safe injection sites were the first to be considered and compared to alternatives.

Safe injection sites are physical locations provided by cities where intravenous drug users are able to engage in medically supervised drug use. These services have been implemented in some European and Canadian communities with measured successes in preventing heroin overdose, but do not adequately attract prescription opiate users for safe consumption services. Further, these sites often produce controversy, as some residents fear the sites attract unwanted. drug addicted individuals and drug paraphernalia to their neighborhoods. Although safe injection sites have garnered recent support from San Francisco officials once opposing the concept, state legislation earlier this year failed to progress. The political pitfalls and practical limitations of safe injection sites to reach prescription opiate users, who drive the opioid epidemic, led to seeking other policy solutions.

A few of the investigated policies are geared towards addressing the concern that the opioid epidemic within the U.S. is largely driven by prescription drugs for pain management. It is important to note that the epidemic is complicated by illegal drugs when prescriptions are no longer available (Wu et al, 2017). The House Bill 188 (Penm et al, 2017) and Executive Order 16.09 (doh. wa.gov) focus on the interaction between pharmacists and patients as a primary means of intervention. Although, their main focus is on education and recognizing potentially high-risk treatments rather than safe injection sites, it offers a starting point to understanding the causes of the epidemic and an example of commonly proposed solutions. These policies acknowledge the responsibility that pharmacists have to their patients, especially considering the abundance of pharmacies available in communities. They also describe the main reason that patients are prescribed opioids: to alleviate pain which is responsible for a large proportion of hospital visits (Wu et al, 2017).

Another commonly considered policy has been to make naloxone more readily available. Naloxone is an opioid-blocking medication that can be used to prevent death in cases of overdose. One of the functions of House Bill 93 is to increase the distribution of naloxone to first responders and the general public, consequently reducing stigma of its use (Matthews et al, 2016). Following a similar intent. Executive Order 16.09 identifies one of its main goals as intervention in opioid-related overdoses in an effort to prevent death. Although naloxone is highly efficient in reversing the effects that taking large amounts of opioids can have on the body, opponents are concerned that making it easily accessible will enable the prevalence of opioid addiction and overdose (Green et al, 2017). It is important to understand that access to naloxone will be increased along with education and training for medical practitioners, as well as opioid users and their friends and family. After considering different arguments for and against increased access to nal-



oxone, it can be concluded that this policy has a limited point of intervention. Despite being able to successfully reverse potentially fatal symptoms of opioid overdose, this option is only available once an individual is already addicted and does little to prevent addiction in the first place.

Communities and policy makers have acknowledged that opioid addiction may be linked to other social issues which require collaborations with a multitude of support services. One example of this is lack of access to affordable housing. The stress associated with finding adequate housing can cause opioid addiction to become a continuous cycle. Both Executive Bill 16.09 and Housing First (Schwartz, 2015) provide affordable housing assistance with wraparound supportive services to ensure a healthy and quality life for individuals who struggle to maintain a stable living situation. The latter program assists homeless individuals, including minors, with substance use or mental health disorders. A critical aspect of Housing First is that it posits housing as an initial intervention, not something earned by abstinence from drug use. Furthermore, an individual's right to housing assistance is not threatened by their drug habits. With such a liberal approach, however, some might view drug users as undeserving of assistance.

From the broader policies addressing opioid addiction and overdose, we narrowed down to the six that may have greater success in preventing the rising number of opioid overdose deaths. One of these programs is the Drug Enforcement Administration's National Drug Take Back Day. The campaign website brings awareness to the fact several million Americans abuse prescription drugs and that many of those are acquired through someone they know (takebackday.dea.gov). To this end, they place emphasis on the need to properly dispose of unused prescription drugs. Reducing the availability of unused prescription drugs results in fewer cases of addiction and overdose death. However, this requires individuals who are willing to turn in their prescriptions. The prescriptions collected may largely come from those who want to prevent them from getting into the hands of friends and family. It may not be as often the case that drug addicts acknowledge that they themselves are engaging in destructive behavior and turn in their own prescriptions. This program cannot be optimally successful without additional resources, such as drug addiction treatment programs available to those who turn in their prescription drugs.

Next, the Comprehensive Addiction and Recovery Act of 2016 offers a well-rounded approach to address opioid-related deaths. This is accomplished through developing best practices for prescribing opioids and authorizing grants for drug education, prevention, and treatment programs. It offers preventative measures that are effective in solving the problem of addiction and overdose because it takes precautionary steps as soon as a need to prescribe opioids has been identified. It is inevitable that people who suffer from pain are going to reach out to their doctors to gain relief, and educating professionals along with patients can effectively prevent negative outcomes of addiction associated with opiates prescribed for pain.

Drug addiction has been treated as a criminal offense for decades but there is no evidence that this approach is effective in preventing addiction. According to the National Association of Drug Court Professionals, approximately 95% of individuals return to drug abuse after release from prison (nadcp.org). As a result, attitudes have shifted and drug addiction is increasingly viewed as a health concern which requires services that promote positive mental health. The Police Assisted Addiction and Recovery Initiative demonstrates the interest of legislators and policymakers to have a police-centered approach that focuses on treatment rather than arrest (paariusa.gov). It gives police officers an opportunity to engage with members of their community and gain a better understanding of their needs. In contrast to the previous policy explored, this initiative relies heavily on those who are already addicted and does little to prevent those who are at high risk of addiction from becoming addicted.

Medical and recreational marijuana legalization has the potential to reduce opiate overdose deaths (Bachhuber, Saloner, Cunningham, & Barry 2014). The National Academy of Sciences, Engineering, and Medicine found evidence supportive of the conclusion that marijuana is effective in the treatment of chronic pain (NASEM, 2017). Considering that opioids are constantly provided to relieve pain, marijuana might provide a viable alternative because it is not extremely addictive. However, many might disagree with those findings and claim that it might actually become a pathway that leads to the usage of more illicit drugs. The National Institute on Drug Abuse are notable proponents of this gateway effect. There are no scientific studies that confirm those claims, but they do contribute to the policy being less politically feasible. On the other hand, as the legalization of marijuana for recreational use across some states has shown, attitudes have been shifting and it might become an accepted alternative for pain reduction. Something that also needs to be taken into consideration is whether or not marijuana can effectively treat acute pain. Substantive research in this arena has vet to be conducted. Now that some state allow the legal use of marijuana, research initiatives can be explored to better understand this substance and its ability to address pain.

The six policies previously mentioned were further examined using evaluation criteria that considered its level of effectiveness, equitability, political feasibly, and potential cost (Table 1a). A policy will be considered highly effective if it foresees the likelihood of reducing the number of opiate overdose deaths. To meet

the criteria of highly effective, the policy must anticipate a measurable percentage of reduction in overdose deaths. The least effective policy option would result in the lowest decrease in overdose deaths among all policies if it is implemented. Equity examines the fairness in distribution of the policy's costs and benefits across the population that will be affected by its implementation. A highly equitable policy will be measured by the lowest amount of disproportionately negative impacts on any one social group. The optimal policy would require benefits and burdens that are reasonably balanced. Political feasibility is critical to review in regards to the likelihood of a particular policy being implemented. A policy will be considered highly feasible if similar policies have been supported historically, and if majority voters find it attractive. This criteria is especially useful with policies that are controversial. Cost will be measured by factors such as how expensive the policy is to implement for each individual that benefits. This cost will be taken in relation to how much money is saved on emergency room visits as a result of putting this policy in place. An expensive policy will project the most in costs, in terms of a dollar amount.

Gauging the effectiveness of a policy is our highest ranking criteria. It will be used to measure how close we have come to reaching our overall goal of reducing opiate overdose deaths. This is followed by equity because we realize that everyone involved, including political officials, those who identify as addicts, and residents of the state, will have varving benefits and burdens. We intend to select a policy that is the most equitable. Along the same lines, we must choose a policy that is politically feasible and supported by the majority of stakeholders in order to ensure greater chances of it being put into action. The least ranking of our criteria is cost. In comparison to our other criteria, the number of lives saved is valued more than the amount of money it takes to achieve that outcome.

Evaluations

The Federal Comprehensive Addiction and Recovery Act (CARA) is anticipated to be highly effective. It is a well-rounded approach that is geared to help individuals addicted to opiates through multiple points of intervention. It addresses a variety of areas from the initial need to prescribe opiates, to the life-threatening moment when naloxone is needed to revive someone from the brink of overdose. This policy is also highly equitable in interacting with many people across the prescription to overdose pipeline, which leads to a rating of being highly politically feasible as it is projected to achieve the outcome of reducing opioid-related deaths. Finally, although there are costs associated with funding for education and treatment programs, it is less costly than Executive Order 16.09.

Executive Order 16.09 scored nearly as well as the Federal Comprehensive Addiction and Recovery Act. In terms of effectiveness, it was rated as highly effective according the evaluative criteria. Through a comprehensive approach that requires the collaboration of multiple agencies, this policy is projected to achieve the goal of reducing opiate overdose deaths. Methods to reduce overdose deaths involve efforts from several organizations including hospitals, pharmacies, and treatment facilities. According to the criteria of equity, this policy receives the highest rating

of six points. It is intended to protect people who might potentially become addicted to opioids as well as those who already are. This policy has the potential to reach people at different points of the prescription to overdose pipeline. On political feasibility, this policy received a rating of somewhat feasible. Because implementing this policy would be a highly collaborative effort, it might be less politically feasible than what is ideal. Solving the opioid epidemic through this approach would require it to be given priority above other problems, and it is possible that not all politicians will agree with the severity of this problem and the solution required to address it. The different agencies that are required to collaborate to make this policy work might not agree on all the decisions that need to be made. This is closely related to the cost, where the policy ranked low at the minimum two points. The time and effort required to implement this policy can become very costly, especially if goals are not quickly identified by the different parties involved, slowing progress towards them.



The Police Assisted Addiction and Recovery Initiative (PAARI) received a score of six towards effectiveness. It only addressed people who interact with the criminal justice system, so it is unable to greatly reduce the number of opiate-related deaths in the entire scope of the problem. This also leads to a problem in equity, where the policy receives a rating of four points. Since it only focused on a specific population, those who have come in contact with police officers, it fails to reach the broader population that is battling opioid addiction by relying on those who are already addicted. Nonetheless, this policy has the potential to be considered highly feasible as politicians are starting to move away from criminalizing opioid addiction and treating it as a medical concern instead. Lastly, in terms of cost, it would only be somewhat expensive to implement as drug treatment programs that people are referred to would need to be adequately funded to make a noticeable difference and prevent opiate overdoses.

The Drug Enforcement Administration's National Drug Take Back Day was considered to be a some-



what effective policy because it is a solely voluntary program where people can turn in prescriptions drugs if they want to. This is not helpful for those who are highly addicted and need treatment programs to assist in saving their lives. Thus, it is only somewhat equitable. It only helps a specific population of people who are in possession of prescription drugs and might not necessarily be addicted. Although it prevents these drugs from getting into the hands of a vulnerable population like teenagers,

it does not do enough to help those who are having a hard time fighting an addiction. This program can be considered highly politically feasible because it takes initiative to remove prescription drugs from people's home, making them less likely to get into the wrong hands. It is also a low cost option, and gets pharmaceutical companies involved in the effort. The companies are also encouraged, or even forced, to cover the cost of prescription drug disposal.

Medical and recreational marijuana legalization can be seen as a somewhat effective means to address the opioid epidemic. It is a fairly new approach, thus there are no substantial studies that confirm it to be an effective strategy. It can be seen as somewhat equitable because it will only help those who are being prescribed opioids, as a possible alternative, but not those who are already addicted. This policy approach has been highly controversial, which makes it one of the least politically feasible. However. as far as costs are concerned, it is not costly to implement as switching to the alternative of marijuana for pain relief is less expensive than prescription painkillers.

The last of our six policies is dependence on market-based solutions. This approach is considered to be the least effective with a rating of five points, because it has not been a tested solution. Along the same lines, it is considered somewhat equitable. It would allow healthcare professionals to buy and sell permits to prescribe opioids like cap and trade systems for

carbon emissions. This still allows for a certain number of prescriptions to circulate through communities. Market-based solutions addressing the opioid epidemic might only be somewhat politically feasible. This is not an approach that has been applied to this problem, and it might not seem an appropriate use of time and effort. This policy suggestion would not be costly. It receives a score of four points for this evaluation criteria. as limiting the number of prescriptions allowed to healthcare professionals would not be expensive to implement

After weighing the costs and benefits of our six policies and using our selected criteria to evaluate their potential success, we found two policies proximal to reaching the goal of reducing the number of opioid-related deaths. These are the Federal Comprehensive Addiction and Recovery Act (CARA) and Executive Order 16.09. These will be further analyzed, compared, and contrasted to the aforementioned policy solution: safe injection sites.

CARA is considered a highly effective policy because it is likely to reduce the number of overdose deaths. This policy becomes involved in the initial interaction between health care professional and patient when the need to prescribe opioids has been identified. It requires the professional to recognize any potential risk factors for abuse and communicate that with their patients (Matthews et al, 2016). CARA is considered highly equitable. The preventative measures that are taken reduce the risk of addiction for individuals interacting with the healthcare system and prescribed opiates for pain. It is also beneficial for health care professionals and policymakers alike to be able to proactively prevent addiction and overdoses. Lastly, friends and family are less likely to suffer the pain of having a loved one become addicted to opiates and potentially die. Communities will also be healthier overall if there are fewer cases of addiction. Because this policy has positive projected outcomes, it is highly politically feasible. However, its implementation will be somewhat costly. Luckily, there are federally authorized grants for education, prevention, and treatment programs that alleviate some of that financial burden on states and counties. All things considered, the moderate costs associated with implementing this policy are justifiable by the number of people that are anticipated to live healthier lives as a result.

The policy alternative is Executive Order 16.09. This comprehensive approach would be highly effective in moving towards the identified goal. It offers an emergency response for those who experience overdose and intervenes with the life-saving drug naloxone. It is a collaborative effort to track, monitor, and report potential risks of addiction and overdose. Support services are also offered for the friends and family of those affected by opiates, making it highly equitable for those involved. Because this is a coordinated collaboration between different programs to provide treatment and education, it can come at a high cost. The selected collaborative firm coordinating the programs requires payment which raises the overhead cost of implementing this policy. Moreover, because the stakeholders involved are able to give their input, the policy is complex and can contribute to delays in implementation making it even more costly than initially planned. For these reasons, although this policy is projected to have positive outcomes, it may only be somewhat politically feasible. Opponents might not be willing to support the policy because of the time and effort that is required to ensure its success. In conclusion, some of the obstacles this policy are likely to face make the Comprehensive Addiction and Recovery Act a much more optimal policy recommendation.

Both Executive Order 16.09 and CARA offer extensive programs and tools to address opioid addiction and overdose. They pick up where safe injection sites (SISs) are limited in their invention. In reducing deaths, SISs can be somewhat effective since drug use is supervised by medical professionals and fatal outcomes can be prevented. SISs fall short of doing anything to prevent opioid addiction in the first place, which is the primary focus of Executive Order 16.09 and CARA. Consequently, these sites might not be equitable across all lines. The stigma associated with SISs could prevent drug users from seeking them out, and policymakers might view them as sites that enable

and encourage drug use, thus making it the least feasible alternative of the three. As illustrated through the evidence provided in this paper, the projected outcomes of the Comprehensive Addiction and Recovery Act make it the optimal policy solution to the opioid epidemic. Its implementation will reduce risk of addiction which achieves the overall goal of preventing opioid-related deaths.

Conclusion

The large number of opioid-related deaths across the United States is a problem that must be addressed with policy. The growing awareness of this problem has caught the attention of policy makers and political officials, who are now aiming to create legislation to address and end the opioid epidemic. The fact that lives are lost to an addiction that is most often initiated through prescriptions written by healthcare professionals presents an opportunity for intervention and accountability on their part. The main goal of the optimal policy solution is to eliminate the epidemic of opioid overdoses. It is important for the policy solution to offer a comprehensive approach to achieve this goal through addressing multiple points of intervention.

The Comprehensive Addiction and Recovery Act is projected to obtain the stated goal and decrease the number of deaths over time to eventually eradicate the problem. It attends to a great span of the population, from those who may be prescribed opiates and harbor a potential risk of becoming addicted, to those who have already become addicted and are in need of treatment and services to prevent them from losing their life. This allows multiple parties to become educated and assist the effort, including doctors and drug companies. The cost of implementing this policy solution will be balanced with the number of lives that are saved, which are also economically costly. Given the favorable outcome of implementing CARA, the government should not hesitate to invest the necessary funds to put this policy recommendation into action in San Francisco city and county. Preventing opioid-related deaths is in the best interest for all parties involved from professionals to families and friends. Fewer cases means healthier overall communities who can benefit from the services provided by CARA and lead successful lives.

The Comprehensive Addiction and Recovery Act is a dependable proposal to address the opioid epidemic. We examined policies that addressed multiple aspects of the identified problem including policies that focused on the role of healthcare professionals, limitations of the amount of prescriptions written, opiate disposal programs, safe injection sites, and legalizing marijuana use. This broad collection of policies were reduced to six policies, which we considered our "best practices." These were CARA, Executive Order 16.09, National Prescription Drug Take-Back Bay, the Police Assisted Addiction and Recovery Initiative, the legalization of marijuana, and market-based solutions. With carefully selected evaluation criteria, we rated each policy which allowed for indepth analysis of the pros and cons. Through this process we were able to compare and contrast the selected policies. Although we had two close competitors, the Comprehensive Addiction and Recovery Act scored the highest.

In conclusion, these different factors needed to be examined to determine the best fit for the State of California. Policies that are effective in other parts of the United States might not be the best fit for the city, and also might fail to address every concern facing the population in terms of opioid addiction. The Comprehensive Addiction and Recovery Act is expected to have far-reaching results which makes it the policy that elected officials and citizens should support. Keeping in mind the tragic history and ongoing occurrence of opioid-related deaths, enacting a policy to address the problem is an urgent issue. This report carefully synthesizes important information to decide on the optimal policy to implement in California.

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Table 1. Criteria Ranking Table

Effectiveness (+4)	Highly Effective	Somewhat Effective	Least Effective
	(+3)	(+2)	(+1)
Equity (+3)	Highly Equitable	Somewhat Equitable	Least Equitable
	(+3)	(+2)	(+1)
Political Feasibility	Highly Feasible	Somewhat Feasible	Least Feasible
(+2)	(+3)	(+2)	(+1)
Cost (+1)	Highly Costly (+1)	Somewhat Costly (+2)	Least Costly (+3)

MacArthur Transit Village and Shifting Paradigms

Marina E. Chavez

In 2008, a plan began to transform MacArthur BART Station, a centrally located, commuter transit station into a Transit Village. The transformation of the MacArthur BART Station involves developing a 618 space surface parking lot into 875 residential units, 44,000 square feet of commercial space and 5,000 square feet of community engagement space. While the project has already added 90 units of affordable housing and a 478 stall parking garage, the project is still far from completion (City of Oakland, 2008). Over eight years since the start of the project, the battles to disrupt or stop the development have been contentious. It is the goal of this research paper to examine MacArthur Transit Village's role in California's shift to New Urbanist planning and its effects on the adjacent communities through zoned height extensions, affordable housing and parking.

Introduction

The macrocosm of transportation systems, housing development and job creation that exists in the San Francisco Bay Area today is growing at a faster rate than ever before. With the projected addition of 2,147,000 residents and 600,000 residential units, the most pressing issue facing the Bay Area today is how to proceed with new development when land is becoming increasingly scarce and as a result—valuable (Final Plan Bay Area 2040). In the past, California has addressed growing population by creating subdivisions, exclusionary zoning ordinances, and by developing raw land. This is no longer a viable option for the Bay Area and other cities in California due to impending urban encroachment on other crucial resources such as farmland (Guide to California Planning, 2012). In 2008, California's legislature passed SB 375, which sought to use landuse planning as means of reducing greenhouse gas emissions (Plan Bay Area 2040). SB 375 not only addresses issues of climate change but also helps California abandon the older paradigm of planning and create plans based upon the theory of "new urbanism". While the older paradigm of planning is based upon car infrastructure, and urban sprawl, New Urbanism is the theory that neighborhoods should provide a range of services in a walkable space with equitable modes of transportation such as walking, biking and public transit (Guide to California Planning, 2012).

It has proven very hard for California to shift into this new form of development as each municipality holds control over land-use mechanisms. In fact, SB 375 merely set guidelines that each municipality is expected to conform to but does not provide methods in which to reduce greenhouse gas emissions. In the Bay Area, SB 375 spurred the creation of Plan Bay Area, an agreement created by the Association of Bay Area Governments (ABAG) and the Metropolitan Transportation Commission (MTC) to address the guidelines set by SB 375. (2013) One of the goals

of Plan Bay Area is to create transit oriented development (TOD). TOD sites such as Transit Villages are dense, urban infill projects within half a mile of major transit hubs that are designed to reduce single occupancy commuters. MacArthur BART is one of these projects that highlights the shifting paradigms within the last decade (Plan Bay Area 2040).

Community Concerns on Height Extensions

Plan Bay Area's Infill projects, such as MacArthur BART tend to include increases in height limits especially for transit oriented projects, as it maximizes the amount of development on a small parcel of land and increases housing density. According to the National Research Council, doubling housing density would decrease pressure on inter-regional public transit and decrease vehicle miles traveled (VMT) by 5-12% (2009). While this would reduce greenhouse gas emissions, proposed height increases in predominantly low-lying residential communities have created controversy. In the MacArthur BART plan, the developer, Boston Properties was issued an amendment to the Planned Unit Development permit by the Oakland City Council to build a 260 ft. tower in an area where the zoned heights ranged from 40-85 feet (City of Oakland File # 16-0708, 2017) The amendment to an existing plan allowed for the tower to be approved without going through the process of receiving a variance permit and thus without additional input from the community. The City Council approved the tower much to the dismay of many local residents less than 6 months after its introduction (City of Oakland File # 16-0708, 2017).

Parcel B and Environmental Impacts

The 260 ft. pending development on Parcel B is situated between the BART parking garage, the 24 freeway and would house 402 units. Many residents were upset that the tower was not originally included in the proposed plan in 2008. The 2008 environmental impact report showed that each parcel (A, B, C, D) in the initial plan would house buildings between 4-8 stories, well within the zoned residential heights unlike the 24- story Boston Properties tower (Environmental Impact Report, City of Oakland 2008). According to the record of public comment, the largest concerns by the communities of Temescal, Mosswood, and Longfellow that are adjacent to the proposed tower were the shadow of the building, the impact the tower would have on traffic and effects on the neighborhood's character (Public Comment, Payne 2017). These were not concerns, however, that constituted a revised environmental impact report (EIR). Instead, the city put together California Environmental Quality Act (CEQA) findings to show that a revised report was not necessary. In the findings, the city used simulations

of shadows during each season and during the morning, noon and evening to show there was no significant effect on the community. In fact, the shadows in the simulations would fall onto the freeway or onto other properties within the Transit Village (2016 CEQA Findings). The simulation showed that residents' fear did not have basis yet many in the community continued to display anxiety towards the tower's shadow.

As for the impacts that the tower would have on traffic, it is important to understand SB 743. SB 743 was a bill passed by the California legislature in 2013 that required that cities move from measuring the level of service (LOS) which sought to mitigate traffic often by widening roads, to studying VMT to mitigate the effects on greenhouse gas emission. SB 743 also modified CEQA to prevent TOD sites from analyzing car traffic and instead focusing on reducing car usage (Governor's Office of Planning and Research, 2018). The original 2008 EIR showed that the impacts on traffic were substantial enough, prior to the introduction of the tower, to require mitigation due to level of service (LOS) delays that would move many of the existing traffic signals from LOS level E to level F. Level F indicates the highest level of traffic gridlock in the Level A to F system of traffic analysis which typically requires mitigation. The steps proposed to mitigate the traffic delays were to coordinate the traffic signal groupings to allow each cohort of vehicles to pass through several intersections

at once. Since no impact analysis was required for traffic in 2016, it is unclear how the addition of the tower will affect the intersections on MacArthur (Environmental Impact Report 2008).

While the residents concern about traffic remains, the loss of LOS traffic analysis is conducive to the goals of New urbanism and Plan Bay Area. The LOS analysis did not take into account the effects on cyclists or pedestrians who commute in these intersections. Instead, the introduction of SB 743 promotes bicycle infrastructure in the transit village, which includes an internal street that is bicycle and pedestrian friendly. In addition, according to the 2016 Modified CEQA findings, daily vehicle trips generated by residents of the tower would be reduced by approximately 1186 in comparison to the originally proposed building (2016). The reduction in trips generated is based upon the transit-oriented location and the increased number of units. Thus, the basis for two of the most significant comments given by the public were shown to be without merit or mitigated to reduce some of its effects.

The only comment that is unable to be mitigated or discredited is the feeling the public has about the project's effects on the culture and community. The creation of transit oriented developments and 24-story towers are likely to make community members nervous as it is unlike what was previously done in the region. The change in paradigm is not just policy based or institutional but is also a culture change that will take time to introduce to communities that may not see the merit in dense urban infill. In that same regard, while the transit village has been in the process of development for over 8 years, the 24-story tower has come into the public's view quickly in the last year and with little public comment or support. This rapid development in the region should be scrutinized because when market rate housing is so expensive, the expansion of housing



development may not benefit those in the community but instead investors. The process of height extensions and rapid development must be done carefully and with a lot of thought as to the effects 10 or 15 years from now, especially in relation to affordable housing.

Affordable Housing

Another of the battles faced by the MacArthur Transit Village is the fight for inclusive housing or mixed income housing developments. Inclusive housing is the incorporation of subsidized housing into market rate buildings. Many of the developments proposed and completed in the Bay Area have still not quenched the need for housing in the growing metropolis. As a result, housing prices continue to climb meaning there are often few housing options for the middle class that has not seen a large growth in wages. The demand for housing in the Bay Area is influenced by many factors but is increasingly difficult when a sect of the population, those working in the tech industry see significantly higher wages than those in the other fields. The disparity in wages paired with the demand for housing and the growing population leaves the Bay Area with a scarcity of affordable housing (Silicon Valley Institute for Regional Studies, 2015).

Many cities such as Oakland and San Francisco have implemented programs aimed at creating more mixed-income, subsidized housing that can keep teachers, public sector employees close to job centers and amenities. Oakland, for example, approved new development impact fees in 2016 to address the lack of affordable new developments. The development impact fees are used to fund affordable housing development by nonprofits but can be waived if the developer chooses to include affordable housing in the development or off-site (City of Oakland Report March 2016). While some activists have hailed this step towards affordability, developers see this as an unnecessary burden that both slows and stalls development in the infill areas designated by Plan Bay Area. Conversely, some affordable housing activists such as the East Bay Housing Organization have claimed that the development impact fees or required percentage of affordable housing does not extend far enough (Oakland to impose impact fees on new housing developments, 2016).

Currently, the MacArthur Village has 90 rental units of affordable housing provided by Bridge Housing, a nonprofit housing developer and lead contractor on the project. The 90 unit building, referred to as The Mural, is the first of 115 rental units that were required to be below market rate (BRIDGE Housing, 2016). In total, 17% of the units in the MacArthur Transit Village development project will be below market rate rentals, an amount of 146 units in the 875 unit plan. This percentage is shy of the 20% goal set by the Bay Area Rapid Transit (BART Affordable Housing Policy 2016). While

the difference between 17% and 20% below market rate housing can seem miniscule, of the thousands of units being built within Oakland only 6% are below market rate (Oakland At Home Update: 2017). Though the city raised fees and requirements for affordable housing, many developers prefer to pay the development impact fees rather than allow 10% of their rental units to be subsidized housing for 55 years, the current minimum (City of Oakland Report March 2016).

According to Bridge Housing, the completed 90 units at the Mural received over 100 housing applications per unit (Mural brings transit-oriented development to life near Oakland's MacArthur BART station 2016). The number of applicants per unit clearly demonstrates the need for affordable housing in the area. Developers that argue against affordable housing often state that as the demand for housing subsides, with increased development, housing prices would fall. However, activists and nonprofits argue that affordable housing is needed right now rather than down the road. MacArthur Transit Village and in particular the Parcel B tower represent the fight between these groups which often place the city in between.

Community Benefit Agreements and the Community

The Boston Properties project has tried to mitigate beyond the EIR with solutions geared towards winning over activists and community leaders. The developer has agreed to a one million dollar community benefits agreement (CBA). The CBA, while not addressing problems directly at affordable housing, provides some benefits that are helpful to low-income residents. The CBA requires that Boston Properties fund transit passes for the below market rate residents, create a new recreation center at Mosswood Park and donate \$50,000 dollars to Youth Alive, a nonprofit geared towards preventing youth violence. (Oakland OKs 25-story apartments at MacArthur BART). Aside from the development impact fee created by the city, Community Benefits Agreements are typically ad-hoc agreements made directly with the community often with help from city officials. Regardless of the mere 11% of affordable housing, the project was going to be approved by the City of Oakland. However, by agreeing to negotiate with citizen groups, the developer is held somewhat accountable for its place in the community (City of Oakland Staff Report 2016).

Robert Ogilvie, the Oakland Director of the San Francisco Bay Area Planning and Urban Research Association (SPUR), argues that the negotiation of CBAs are more problematic in addressing the lack of housing development in Oakland. If CBA costs are not known in advance, a development company may decide that a project is too costly and walk away from development. Ogilvie makes the argument that development impact fees are sufficient. However, with the state of housing and expansion in the Bay Area, the benefits to the developer to create housing far outweigh the costs of \$500,000 CBAs (SPUR 2017). Ogilvie's claim can hold true in a slow housing market or following a market crash but as the opportunity for investment in the Bay Area grows, CBAs do not seem to be stopping development and if fact, offer very little in way of consolation prize for residents opposed to the tower.

The concern that cannot be mitigated by CBAs or affordable housing is the MacArthur BART Station project's potential for displacement in the surrounding communities. The MacArthur BART plan changed many times from its inception and without much public participation. While the project proposal began in 2004 and the project itself will not be completed until 2020. More than a decade passed between 2006 and 2016 where almost no development took place on the MacArthur Transit Village site (MacArthur Station Master Plan). This was due in large part to the recession that hit the housing and construction markets. Many of the proposed plans had to be shelved until the market recovered. In this time, the expectations of TOD sites by BART, Plan Bay Area and the housing market changed dramatically. Between 2006 and 2014, 2.3% of all housing in the area of Longfellow, Hoover-Foster and Temescal/MacArthur went into foreclosure affecting the mostly black communities. In this same time, the rate of mortgage burdened residents increased in the MacArthur area from

20% in 2000 to over 55% in 2013. This dramatic increase in mortgage burdened residents in an area seeing an increase in high end commercial and housing development is likely to be at severe risk of displacement. Mortgage-burdened residents may be pressured into selling their houses to move to more affordable areas with amenities suited to their needs often outside of the Bay Area. Though not only are homeowners burdened in these communities, over 50% of renters are rent-burdened as well. All of this in an area where over 74% of all units are rented this includes single family homes and condos that are not protected by rent control (Zuk & Chapple, 2015). These types of units that are common in low density residential areas can see astronomical rent increases or direct displacement through California laws such as the Ellis Act in order to accomodate high paying tenants. While urban infill is important for decreasing greenhouse gas emissions and incorporating additional modes of transportation, the amenities of market-rate housing near transit make it advantageous for those who can afford to live in high rent developments to move into the inner city. This generally raises demand and costs for small businesses, housing and especially for parking.

Residents and Parking

Parking availability is at the heart of the MacArthur Transit Village project and has a great effect on both residents and BART commuters. Prior to the development of the 7.5-acre lot, 618 spaces of vehicle storage occupied the expansive plot of land. Aside from the sheer amount of space that is being transformed into a commuReducing the amount of parking at the BART Station, makes it inconvenient to drive as parking may be unavailable. The goal of removing car infrastructure is to create equity in transportation and

nity, the amount of parking lost in the project is also relatively low. The new 478-stall parking garage that replaced the parking surface lot at MacArthur BART is an excellent example of an area that is maximized through height. as only 140 spaces are lost. The loss of parking is made up in the interior street

and density of housing. Though the change in BART parking would typically trigger an environmental impact report, SB 375, SB 743 and Plan Bay Area's prioritized development areas within half a mile of transit are not subject to include parking in the environmental impact report. The removal of parking in the environmental impact report highlights that Plan Bay Area and members of the California Legislature do not seek to create alternatives to decreases in parking as that is the desired effect. (2016 Modified CEQA Findings). By removing car infrastructure, the TOD creates a space that does not prioritize vehicles over other travelers such as pedestrians and cyclists.



to conform to SB 375 guideline of reducing greenhouse gas emissions from passenger vehicles by 35% per capita (Plan Bay Area 2040).

However, parking is not just an issue with those using MacArthur BART but also of great concern to the individuals who will reside in the Transit Village. At the beginning of the MacArthur Village project in 2008, the area was zoned between a Residential High Density (R-70) and a commercial corridor (C-28). The parking required for residential zones such as R are a minimum of one parking space per unit. In order to improve upon the transit oriented location, the project was rezoned as transit-oriented, (S-15). With the introduction of S-15 zoning, the parking minimum was changed to .5 spaces per unit (Oakland City Council Ordinance 12883 C.M.S, 2008). The designation of less parking spaces than



units was a direct attempt to instill in the community a more environmental approach that is less car depenparticularly dent. because of the transit-oriented location. Soon after, the project developers requested a conditional use permit (CUP) that would allow the development project to extend the parking to a one to one ratio with an additional

extension of commercial parking that is not required in the zoned S-15. The Oakland Planning commission approved the conditional use permit and the project was expected to allocate 675 parking spaces for the residential units (Oakland Planning Commission Staff Report July 2008). The extension of required parking by the planning commission directly illustrates the fight in paradigms between sprawl and new urbanism. The reason the land was rezoned by the city to S-15 was to reduce the number of drivers and promote transit accessibility. The appointed members of the Oakland Planning Commission disrupted the intent of the project by allowing additional parking that would have increased with the introduction of Parcel B as the units went from 132 to 402.

However, instead of requiring the same one-to-one parking ratio, Boston Property developers did not increase the parking spaces and decided to cap the spaces at 273. The change in parking allocation was a shift towards transit-oriented development though the new parking space ratio, .77-to-1, still exceeds the .5-to-1 ratio designated by S-15 zones. By permitting additional parking above the .5 to 1 ratio, the project does not hold to the mission of the plan and thus is rendered less effective in reducing carbon emissions, and promoting pedestrian and bike infrastructure. However, residents in the adjacent neighborhoods were pleased with the change towards more parking as they were concerned residents would begin parking on neighborhood streets. The resident approval of additional parking illustrates that the old paradigm of planning is still part of not only our infrastructure but also our culture. The culture, in particular, is something that must change in order to protect our environment and create spaces conducive to safety and human scale development. Though this does not mean it is without its flaws. Currently, there is no realistic idea of how we will improve transit in order to accommodate those who will no longer be driving. Oakland, in particular, is not as dense as San Francisco, so the concern by residents over strain on parking is valid. Removing parking is only one step that will not necessarily improve quality of life without increases in transit spending and lower costs. As with much of the MacArthur Transit Village, there are benefits and drawbacks to its design and implementation processes.

Conclusion

MacArthur BART Transit Village is a complex project that will greatly change its surroundings. Ultimately, the project moves toward new urbanism with higher density, bike and transit infrastructure while also adhering to the old paradigm primarily in the way of parking. The movement towards new urbanism may be a step towards sustainability in the long term, but it may also accelerate the rate of displacement of families as the area becomes more desirable. Including affordable housing, community benefits agreement and reduced car infrastructure do provide some benefits but it is uncertain whether they will be enough especially in the wake of displacement. The goals of Plan Bay Area and new urbanism may be partly responsible for increasing the housing crisis for certain sectors of the population that cannot afford higher rents and luxury apartments in the name of the environment. It is in that reality that many of the fights against 260 ft. towers occur. As Transit oriented development sites continue to be developed in Walnut Creek, West Oakland and throughout BART stations in the Bay Area. it is up to the city and developers to decide how quickly to move and how much of the community to involve in these projects. The degree of community input, the balancing of socio-economic issues, and the environment, as seen in the MacArthur Transit Village, ultimately will decide the fate of the existing communities and the future of Bay Area culture.

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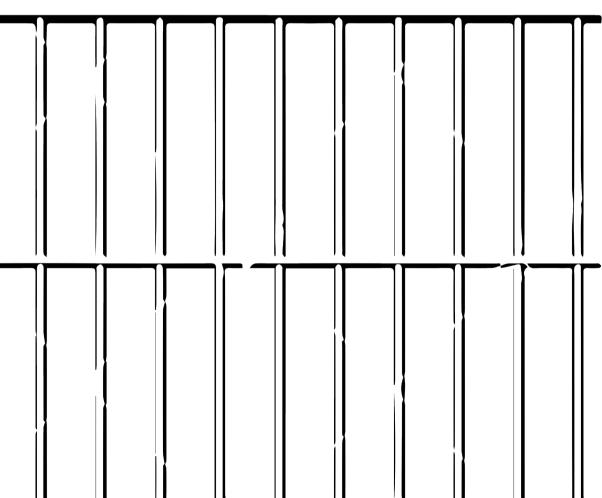
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Mass Incarceration of Youth of Color

Problem Analysis and Policy Recommendations

Co-Authored by Armando Garcia, Jordyn Markoe, & Erik Aguilar



Problem Analysis

The problem of mass incarceration of youth of color has become apparent over the last two decades. Even as rates of crime have decreased, the proportion of youth of color in juvenile detainment, detention or criminal incarceration has continued to increase.

The implications of this observation are serious. The American justice system is not meeting the ideals of liberty which Americans expect. The consequence is large portions of populations of color in the United States starting their adult lives with criminal records. Valuable years of their lives are wasted in incarceration while their white peers complete post-secondary degrees and begin careers. A large amount of economic potential is wasted as these children are prevented from self-actualizing and becoming independent, while American taxpayers spend between 8 and 20 billion dollars annually on the policies and institutions that maintain these young people's isolation and dependency. Meanwhile, these young people of color fall behind their generational peers, and their fate contributes to the massive and growing wealth gap between races in the United States.

Solving this problem contributes to the solving of several interconnected issues dealing with race and class in the United States. Fortunately, our research shows that there is hope. Firstly, the problem is caused by the policy treatment of youth of color, not by out-of-control delinquency rates among youth of color. The behavior of non-white youth is not significantly different than that of white youth. This means that Americans have the power to fix this problem quickly. In other good news, the best policy solutions are cheap. Not only do solutions have a much smaller price tag than the cumbersome policies in place that produce this problem, but much can be done to improve the situation without reinventing the justice system all together.

The following problem analysis has been organized in a way that describes causes as points along a "funnel to incarceration." It should be recognized that disparities in incarceration of youth of color reflect the effects of racism in other social institutions as well. We hope that our research into this problem can spur action to change the most immediate causes, and help turn the discourse towards the more complex and less obvious causes of racial disparity.

Causes of Mass Incarceration of Youth of Color

Urban Policing Strategies

In a survey of 500 young New Yorkers produced by the Vera Institute, 80 percent of the youth surveyed reported being stopped by police more than once in their lifetime, and 44 percent had experienced a minimum of nine stops by police in their lifetime (Fratello, Rengifo, and Trone, 2013). Eighty-five percent answering the survey said that they had no illegal items or weapons in their possession when stopped, even as nearly half reported being threatened by police. Almost one third of the youth were never told why they were stopped.

These statistics offer a view of how young people experience law enforcement. The policy known as "stop and frisk" in New York City produced an exceptionally high rate of police stops and gained media notoriety, but other urban areas have applied similar policies as well (James, 2015; Ross, 2016; ACLU of Illinois, n.d.). Often, the result is a disproportionately high number of stops and arrests for young people of color.

The higher rate of stops and arrests exposes youth of color to higher rates of conviction and incarceration, even while they do not exhibit delinquent behavior at a rate much different than that of white youth (Rovner, 2016; CDCP, 2013).

NYPD has since cut the number of police stops by 97%. Darius Charney of the Center for Constitutional Rights notes that the lack of a significant increase in crime as a result demonstrates the ineffectiveness of Stop and Frisk as a crime fighting policy (Ross, 2016). Urban policing strategies such as Stop and Frisk can be confirmed to disproportionately expose youth of color to arrests and convictions, but they cannot be confirmed to produce a significant reduction in crime.

The effects of policing strate-

gies on youth of color are compounded further by strict mandatory sentencing laws, and other laws known as "zero tolerance" policies, which codify certain consequences for repeat offenses. Even minor offenses like small drug possession charges can be included in this category. Several data sources show that black vouth are arrested at a rate of between two and nine times as frequently as are white youth, with other youth of color experiencing similar disparities (OJJDP, 2017; Rovner, 2016). These high rates of arrest subject youth of color to harsh zero tolerance laws more frequently than their white counterparts.

Other studies have also found that policing tactics and attitudes in general have helped to produce more negative attitudes towards police among youth of color, and that these negative attitudes may contribute to delinquent behavior (Myers, 2007). Myers cites researchers (Williams, 1999; Nihart et al., 2005; Hurst & Frank, 2000) reporting that juveniles felt they were harassed by police, and that police were to blame for "the fear of crime, victimization, and the worsening conditions in their neighborhoods". These findings suggest that urban policing strategies have a responsibility to bear for the disparity between white and non-white juvenile arrest and conviction rates.

Criminalization of Youth Behavior in Schools

The approaches often used in schools to address behavioral challenges are modeled after the urban

policing strategies described in the previous section. Research has established the parallels between policing strategies and disciplinary policies in schools (Johnson, 2015). These policies approach behavioral management issues as delinquency issues and funnel greater numbers of youth of color into contact with the the iustice system. Through these policies, the number of arrests in schools has increased significantly, and the populations of students affected are disproportionately students of color (Dunbar & Villarruel, 2002; Blad & Harwin, 2017). Black students in particular experience significant disparities. Figure 1, below, shows two examples of states with the highest disparities between the proportion of black students enrolled in public schools, and the proportion of black students who have been arrested (Blad & Harwin, 2017).

are found with weapons on school grounds, and requires schools to transfer offending students into the juvenile or adult justice systems. On the one hand, the GFSA mandates expulsion and intervention by criminal justice systems without leaving much discretion in the hands of school administrators. On the other, it is rather vague about what constitutes a "weapon", and students have been expelled according to the GFSA for having art scissors, nail clippers, and even nail files. (Heitzeg, 2009; Whitehead, 2011)

This pattern of requiring law enforcement interventions in response to poorly-defined standards is common among "zero tolerance" policies like the GFSA. The insistence that criminal justice approaches be the primary way to handle behavioral and disciplinary issues discourage administrators from erring away from

Figure 1.				
Black Students' Enrollment in Public Schools vs. Black Students' Share of School-Based Arrests				
State	Black Student Enrollment	Black Student Arrests		
Virginia	39% of total enrollment	75% of school-based arrests		
Louisiana	40% of total enrollment	69% of school-based arrests		

Education Week Research Center, 2017

An example of a zero-tolerance policy, which has had a negative impact on students of color, is the Gun Free Schools Act of 1994 (GFSA). This is a federal law that requires schools to expel students who criminalization and risking non-compliance. Meanwhile, the loose definition of standards in zero tolerance laws allow administrators' judgment to vary on the most relevant question that isn't controlled strictly by these policies: the scope of applications for zero tolerance. The circumstances produced are those in which a tool as benign as a nail clipper can exclude students from school and educational resources, and funnel students into the criminal justice system.

The introduction of School Resource Officers (SROs) is thought to exacerbate the rate at which students are funneled into the school to prison pipeline. In their article describing Education Week's research, Blad & Harwin (2017) write that black students are also "more likely than students in any other racial or ethnic group to attend schools with police," which shines some light on the role that School Resource Officers (SROs) might play in this arrest disparity. Confidentiality rules make it difficult to obtain many statistics, but there are reports of increased arrests in many school districts which introduce SROs. Examples are in a district in Ohio, where arrests increased by 490 between 2000 and 2002, and in the Miami-Dade school district in Florida, where the number of schoolbased arrests in 2001 was three times larger than that in 1999 (Theriot, 2009).

In the context of zero-tolerance policies, it has been suggested that the increased number of arrests represents a large number of minor disciplinary infractions that might previously have been resolved on school grounds and without arrests. According to Theriot (2009), juvenile court officials in the Ohio county describe most cases to be minor infractions, with only a small percentage representing safety risks at schools. In 2015, International Association of Chiefs of Police President Richard Beary noted that officers themselves don't usually have much discretion for arrests in certain cases, referring to laws and policies that mandate arrests (CSG Justice Center, 2015). It seems that the supportive potential of SROs is hampered by the policy context they work with.

Because zero-tolerance policies give school administrators little choice in how discipline is handled. some administrators seem to rollback their disciplinary efforts altogether in hopes of limiting students' exposure to arrests. Interviews we conducted with two faculty in the Hayward Unified School District indicate that this has been the case at one middle school in the district. The resulting school environment is similar to what Metau-Gelabert and Lune (2007) describe in their research. They interviewed several high school students at a disorderly school and theorized that the presence of disorderly environments in schools pressure otherwise well-meaning students into "acting tough" for self-defense from delinquent students. Taken together with the interviews of teachers in Hayward, CA, Metau-Gelabert and Lune's conclusions suggest that providing faculty with the support they need, managing behavior with a consistent, clear policy, and keeping students in school reduce delinquency more effectively than zero-tolerance policies do.

Zero-tolerance school policies, along with the approaches of SROs, funnel more children into criminal processing, which leaves them vulnerable to harsh sentencing policies and at risk of incarceration. Evidence suggests that the youth affected by these policies in schools are disproportionately youth of color. Metau-Gelabert and Lune's research (2007) explored the effects of disorder in a New York City high school primarily attended by students of color, and their theory points towards causes that other researchers have identified as associated with the implementation of zero tolerance policies. Gagnon, Jaffee, and Kennedy (2016) found that students of color are disproportionately exposed to what they call "exclusionary discipline", which is administered according to zero-tolerance policies. The scholar Henry Giroux (2003) has published his own theory on the relationships between the rise of neoliberal policy, the implementation of zero-tolerance policies in schools, and the devaluation of youth as citizens. Giroux traces the connections between broad phenomena that lead to the racist discrimination of young people, and the criminalization of youth of color.

Dunbar and Villarruel (2002) note an interesting example of the disparate application of zero-tolerance policies in schools. Students in a rural, mostly-white community which values hunting often carry rifles to school without consequences, but students in an urban, mostly-black school in Michigan are subject to much stricter scrutiny. In the Michigan school, a small utility pocket knife was cause for expulsion of a student. It is a federal law (GFSA) that mandates this strict treatment of weapons offenses, and this law should apply to all schools in the United States. Dunbar and Villarruel (2002) argue that the GFSA is enforced discriminately by school administrators, and a synthesis of other researchers' conclusions (Metau-Gelabert and Lune, 2007; Gagnon, Jaffee, and Kennedy, 2016; Theriot, 2009; Blad and Harwin, 2017; Heitzeg, 2009; Whitehead, 2011; Johnson, 2015) provides a clear view that this discriminate enforcement affects youth of color and funnels them away from educational opportunities and into the justice system

Processing Juveniles as Adults

In the same "tough on crime" era that zero-tolerance policy was popular, many states also implemented laws that would increase the number of juveniles processed through criminal justice systems as adults. The trend of increasingly processing juveniles as adults began even earlier, in the 1970s, while juvenile crime rates increased. Some of the largest racial disparities in the processing of delinquent youth exist at points of entry into the criminal system. Black juveniles, for example, are more than twice as likely to be transferred into the criminal justice system than white iuveniles, and are more than twice as

likely to be incarcerated in adult prisons (OJJDP, 2016). Figure 2 compares the rates at which black youth are represented with rates at which white youth are represented at certain processing points in the justice system. The data was collected from The Sentencing Project, and from the U.S. Office of Juvenile Justice and Delinquency Prevention.

Juvenile contact with the crim-

minimizing recidivism and integrating delinquent juveniles into society. As those juveniles who are processed and incarcerated as adults are disproportionately youth of color, the impact that this practice has on communities of color in the United States is extremely significant.

Juvenile contact with the criminal system can be produced by different origins. Many states have ages

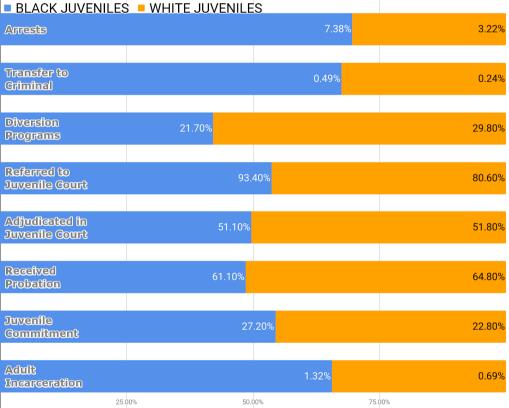


Figure 2. Rates of Processing Juveniles, Comparison by Race

inal system has been associated with higher rates of recidivism, and those being held in jails or prisons are subject to significantly higher rates of physical and sexual abuse (Wood, n.d.). The consequences of processing juveniles as adults are significant, and counterproductive to the goal of of jurisdiction that exclude juveniles above a certain age. Some other states include statutes that grant prosecutors discretion on whether juveniles are processed by juvenile or criminal courts. Figure 3 is a map of U.S. states that visualizes these laws for each state.

As the map in Figure 3 illustrates, the problems caused by juvenile contact with the criminal system occur nationwide. Even while ages of jurisdiction are set as low as 16 in some states, more recent neurological research shows that the brain development of people in their 20s continues similarly to that of adolescents (Lebel & Beaulieu, 2011). The implication is that juveniles as well as vounger adults are not being treatrecurring question we encountered in choosing criteria was "will this support finding policy that can be applied nationwide?" We concluded this process by choosing five criteria that represented our major concerns for the policy: that it focus on the disparity and not fail to address it, that it treat significant points of disparity in the funnel to incarceration, that it be flexible enough to adapt to local circumstances, that it be familiar and

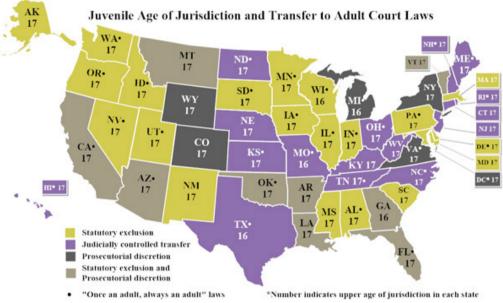


Figure 3. (NCSL.org)

ed effectively by the criminal justice system, and that the criminal justice system is not designed to factor in the biological and emotional conditions of being a young person.

Research Methods and Evaluation Criteria

We produced our evaluative criteria for policy with an approach that prioritized "bang for buck". The

politically expedient, and that it provide cost savings easily.

1. Targets disparity between white and non-white youth. The nation-wide incarceration rate for youth has been rapidly decreasing over the past decade. The racial disparity between white youth and youth of color has rapidly increased. We felt that it was important to remain focused on

policies that address this racial disparity as an issue, and not be distracted in our analysis by policies which make no considerations of this disparity.

2. Reduces contact between youth and law enforcement. Recent studies have found evidence of increasingly large arrest disparities between white and non-white youth (Rovner, 2016), despite the Center for Disease Control and Prevention finding a similar likelihood of crimes being committed by white and nonwhite youth (CDCP, 2013). The largest disparity exists in arrest rates, so it is our contention that minimizing contact between youth of color and law enforcement should reduce the incarceration rate of non-white youth.

3. Strategy is able to be reproduced in any metropolitan area that experiences elevated rates of youth crime and incarceration. The disparity in incarceration rates between white youth and non-white youth is a phenomenon observed across many states and metropolitan areas. Common causes and practices throughout these areas underlie this disparity. As such, policy that addresses common causes should see some success in most areas where the problem exists. A significant impact on such a widespread problem can more efficiently be made by flexible policy that can be adapted to multiple areas, so we decided that this criterion was of third highest importance.

4. Evidence of success is available, not theoretical. A variety of strategies have been implement-

ed across the country in attempts to manage disproportionate incarceration of youth of color. In a time when criminal justice experts as well as both political parties are lending support to these efforts, there are several examples of policy with real results that can be considered. We agreed that policies which have endured trials with positive results were more expedient than those which have not.

Implementation 5. should reduce spending at best, or not exceed spending at least (Cost). The municipal and county governments that would be playing the largest part in administering these policies often experience a great deal of pressure to be cost-effective. Incarceration itself is a very expensive practice, but alternatives that promise to be more effective at decreasing recidivism have the potential to be much cheaper than incarceration. This fortunately seemed like a low bar, so we decided it was our lowest priority.

Final Policy Recommendations

In our initial phase of evaluation, we considered fifteen policies. Of those fifteen, seven were kept for further analysis. Of the seven policies we had chosen for a final evaluation, we chose five. Two were discarded, and aspects of them were recognized to duplicate efforts that can be produced by well-structured diversion programs. Other aspects of the two discarded were recognized to work towards goals other than disparities in incarceration.

Discarded Policies

We considered a policy that supports mental health services as an alternative to incarceration. This policy calls upon law enforcement to bring detainees to the mental health system instead of the court system, where they can face possible criminal prosecution (Thompson, Reuland, and Souweine, 2003). The Criminal Justice / Mental Health Consensus Project (also referred to as the Consensus Project) formulated numerous policy recommendations in which they advocate for improvement on "response[s] to people with mental illnesses." who either come into contact, or are at risk of getting into contact with the criminal justice system (Thompson, Reuland, and Souweine, 2003). Estimates have revealed that around fifty to seventy-five percent of youth who encounter the juvenile system meet criteria for a mental health disorder (Underwood, 2016). As such, we judged this to be a policy worthy of further analysis.

Ultimately, we decided not to include this policy as an alternative to incarceration. The incarceration of mentally-ill persons is a major problem in the United States that produces startling statistics, and we support efforts to recognize that mentally-ill people often end up incarcerated because our society lacks alternatives. However, it was difficult to justify this policy as one that addresses and targets the disparity between white and non-white youth in the justice system. This idea also risked pathologizing youth of color with policy, and our research was demonstrating that the causes of our problem were often more interlinked with the pathologizing of youth of color than solutions. In general, we support positive interventions, such as drug addiction treatment, in favor of incarceration. But criminal policy that targets people of color in such a way did not seem productive to us. Moreover, the issue that this policy intends to address can be in part resolved by a combination of other policies considered.

Another of the policies considered facilitates the development of delinquency prevention programs. This strategy focuses on investing necessary funds, ongoing attention and supervision into various community-based programs in efforts to meet needs gaps that are thought to lead to delinquency. Programs of this nature would include community mentoring, volunteer opportunities, local athletic programs, art/music programs, inclusive teen centers, and extra-curricular activities that are not classroom oriented nor court mandated, but provide more platforms of support for children of all ages.

This proposal was too broad, and duplicated many of the approaches of other policies that included more specificity. This proposal made assumptions based on the Chicago School's social disorganization theory (see Shaw and McKay, 1942) to call for changes in environment that may reduce delinquency. Early childhood programs would be more expensive than other options, and also require additional administration and funding allocations. There would be difficulty in proving the success of such programs in reducing mass incarceration of youth of color, given the number of years that it would take to see results. It would also be difficult to trace changes in incarceration back to the effects of these policies, given that the target of this policy is so far upstream from the incarceration itself.

One challenge that delinquency prevention programs could not overcome was the fact that delinquency rates between white and non-white youth are not significantly different from each other. If there is a disparity in incarceration rates between white youth and youth of color, it generally is not because youth of color are in environments that make them commit more crimes. The case made by social disorganization theory that investment in environment would lead to positive results for people in those environments is reasonable, but investments of this type don't address the causes that our research revealed as major sources of disparity. Furthermore, basing criminal policy on social disorganization theory is the logic that created "tough on crime" policies and "broken windows" policing that have been identified as causes and exacerbators of this problem. The underlying assumption that youth of color commit more crimes than white youth remains, and policies using this logic single out youth of color as a group that needs to be somehow "fixed". This assumption disagrees with the conclusions reached in our problem analysis, and it was not something that our group of analysts could comfortably agree on making into a final proposal.

Recommended Policies

Our final policy proposal is a policy package that includes five of the seven policies in our final phase of evaluation, and some modifications that address objectives of the two discarded policies. A policy package is appropriate because of the large scope of the problem of youth incarceration, and because disparities occur at several specific points in the justice system. A single policy action cannot address all these points at once, and broader policy action is needed.

Fortunately, all of the proposed solutions are possible at a fraction of what is currently spent on the incarceration of youth, and all of the proposed solutions are backed by a great deal of evidence. All of these solutions are considered to be politically feasible, as there are examples across the United States of jurisdictions which have put one or more of these solutions into practice, with reasonable results. These jurisdictions are a mix of politically left and right leaning communities. Now is the best time to act, while bipartisan support continues to exist and contention around this issue is relatively low.

The proposed policy package is

Racial and Ethnic Disparities	in Direct File Rates (2003-2014)
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2003		2014		
White 1	Ŵ	ń	White 1	
Latino 2.4	m m 1	m m m 1	Latino 3.3	
Black 4.5	1 1 1		Black 11.3	

Figure 4. The Burns Institute, 2017

defined broadly, without recommendations on the details of implementation. We do have some ideas on what best practices might be, based on Walby's study of diversion programs in Florida and other works cited that analyze the efficacy of programs, but such an analysis would fall outside the scope of our objective, which is to find flexible policy options that can be promoted in a national campaign. The details of implementation would vary by locality, based on local politics, budgetary constraints, and resources. However, we are confident that all aspects of our policy package can be implemented in virtually all jurisdictions with relative ease. Our policy package will be described in the following sections, organized by policy category.

Component One: Limit Direct File

In 2016, California passed Ballot Proposition 57, which would repeal the practice of "direct file". Direct file refers to the prosecutor's authority to determine whether to try a juvenile in the juvenile court system, or as an adult in the criminal court. Several states include statutes that allow prosecutors to unilaterally make these decisions (see figure 3).

The bar in figure 2 labeled "Transfer to Criminal" represents the black/white racial disparity in youth who are being held until their hearing in criminal court. Figure 4 displays data collected by the Burns Institute on disparities in direct file rates.

Disparities increase from 2003 to 2014 statewide. Disparities varied across California counties, even in cases where rates of youth arrest were identical (Ridolfi, Washburn, and Guzman, 2016). Ridolfi, Washburn, and Guzman reported that the cause was often increased rates of direct file. An example of this is the difference between Yuba and San Diego counties, which "report identical rates of vouth arrest for serious offenses, but youth living in Yuba County are 34 times more likely to be directly filed than youth in San Diego County" (The Burns Institute, 2017).

The practice of direct file has produced large racial disparities in processing juveniles. We recommend revoking prosecutors' authority for this in all states. Doing so would completely eliminate this practice as a point of bias against youth of color in the justice system. It would decrease delays in processing delinquent youth who are made to wait for criminal hearings, and decrease the number of youth of color who are in detention waiting for this process to complete. It would increase parity across local jurisdictions in each state by preventing the preferences of single individuals in power (prosecutors) to unilaterally determine what an appropriate venue for juvenile justice should be.

Our ideal implementation of this would be to pass federal legislation prohibiting states from having statutes that allow direct file. In light of the infeasibility of Federal intervention on this matter, we propose that each state government revoke direct file statutes.

The simplicity of this policy solution is extremely attractive. It does not create significant and cumbersome reform in the justice system, but merely repeals a past policy that has proven itself to be problematic. Arguments made by Californians in 2016 against Ballot Proposition 57, which repealed direct file, revolved around other sections of the proposition. We could not find specific objections to repealing the practice of direct file. The fiscal impact of Proposition 21 in 2000, which implemented direct file in California, was estimated to be upwards of 300 million dollars per year. The fiscal impact of Proposition 57, which repealed direct file, was estimated to save tens of millions of dollars annually in the state budget and several million in county budgets. There is very little reason to oppose the repealing of direct file statutes

Component Two: Raise the Age

Several states have made a push recently to raise the age at which delinquent youth are tried as juveniles. Connecticut, Mississippi, Massachusetts, Illinois, New York, New Hampshire, and a rapidly growing list of states have passed legislation that make changes to who is tried as a juvenile and who as an adult.

Advances in our understanding of the brain, physiologically, have revealed that brain development continues until at least one's late twenties. According to one study, connectivity in brain tissue continues to increase between the ages of 20 and 30 at a similar rate to that of adolescents (Lebel & Beaulieu, 2011). The New Republic's summary of this data describes that connectivity increases by 6% between the ages of ten and twenty, and 4% between the ages of twenty and thirty (Goldstein, 2016). This study and other recent neurological discoveries have suggested that there is some arbitrariness to our chosen ages of consent and adulthood.

Young adults between 18 and 24 are vulnerable to social and economic factors that can create social isolation, and lead to delinquency. The National Institute of Justice reports that those between 16 and 24 are arrested most frequently (NIJ, 2017). Economic conditions have left many high school graduates experiencing difficulty in the job marketespecially minority youth (Campaign for Youth Injustice, 2017). While earlier generations were more accustomed to jumping straight into family and career life as soon as education is completed, the lack of work opportunities has left many young people isolated from resources. Young men are especially affected (Campaign for Youth Injustice, 2017).

Ideally, we recommend that an age be set by Federal law, and that it be no less than 21. Because Federal intervention may be infeasible, a change in each state's statutes to raise the age is the strongest option. Studies should be run in each state in order to develop projections of whether increasing the age of jurisdiction to 21 is feasible in one step, or whether budgetary risks call for a more conservative approach to implementation that would incrementally increase the age over time to meet the final target of 21.

Two arguments against proposals to raise the age have been that it may increase the caseload for juvenile courts by more than courts can handle, and that it would require a large increase in spending on juvenile courts. Several jurisdictions have already raised the age and their results are available. In Connecticut, costs were projected to rise by \$100 million annually, but in practice actually decreased by \$2 million. Studies done in Texas and North Carolina project that raising the age would save each state \$88.9 and \$52.3 million, annually.

The argument that caseloads would dramatically increase has turned out to be mostly false, as well. In Illinois, the total number of juveniles in the juvenile system dropped in spite of raising the age. In Massachusetts, only half of the cases predicted were actually filed. This trend can be observed in several other states. Even while it seems that projections on increased caseloads are overblown, sensible policy often finds challenges in overcoming popular fear. That being the case, the third component of our recommended policy package plays a role in addressing this concern.

Component Three: Diversion Programs

Our research uncovered that the largest race disparities among youth in the justice system occured at the point of arrest, at points of transfer into the criminal court system, and in criminal (adult) incarceration. In each of these, the majority of youth affected were youth of color. Another point of disparity was the point of transfer to diversion programs. Our data shows that 30 percent of white youth who had been arrested are transferred to diversion programs, while only 22 percent of black youth are given this opportunity.

Some of the reasons for this involve decision bias, in that black youth are regarded as being higher risk and in need of more rigorous intervention. Much of it is also due to challenges faced by families in heavily-policed urban neighborhoods. It is often determined that youth in urban communities of color might not be able to meet the requirements of diversion programs and are not eligible for transfer. We uncovered some examples of diversion programs that have worked quite well for youth of color, however.

Our research uncovered positive results achieved by diversion programs across the country, and included in-depth analyses of programs in the states of South Carolina and Florida. Our careful study suggests that the effectiveness of diversion programs is likely to increase if they are implemented alongside raising the age, and revoking direct file. In turn, diversion programs are likely to boost the feasibility or effectiveness of the other two policies.

Diversion programs can address some of the concerns about increasing caseloads and budgets associated with raising the age. As the age of jurisdiction is extended, putting thousands of new cases in the jurisdiction of the juvenile system, the implementation of effective diversion programs can serve to divert a significant number of cases away from the system. Well-chosen implementation of diversion programs are shown to prevent recidivism at a significantly improved rate than that of traditional methods.

A key to appropriate implementation that expands access to youth of color is that diversion programs must be provided at no cost to juvenile offenders. That many programs come at financial cost to the offenders' families may be one reason for the race disparity in the utilization of diversion programs.

Another key to success is the implementation of several programs. Some options are better suited for some offenses than others, and some may be utilized by some groups in a community more than others. Walby's research on programs in Florida reveal several counties that implemented teen courts, citation programs, and arbitration programs, as well as assessment centers that relieve law enforcement officers of making determinations about where to take juveniles. health-driven, Making community policy the agent of these determinations instead of police officers can help to minimize the effects

of police officers' biases on youth placements.

The implementation of these programs may seem to provoke cost and feasibility concerns, but the in depth analyses by Hazen and Walby provide insights to best practices. State budgets can use cost savings from the implementation of raise the age and revoking direct file towards implementation of diversion the programs, which themselves will produce cost savings in the juvenile court system. A look at Hazen's report on the arbitration program in Aiken County, South Carolina, can provide a view of what cost savings might be possible. Relative costs are shown in Figure 5:

Carefully structured diversion programs can produce better results at a fraction of the cost, as is the case in South Carolina, where 93% of participants in these programs succeed at completing sanctions. These programs can be administered by local governments, law enforcement en-

that only a part of savings produced by raising the age or revoking direct file will be needed to cover effective programs for all counties in most states. Assessment centers as part of these programs can play some of the roles suggested by policies calling for community centers and mental health treatment. Psychological assessments done at these centers can reveal whether the community is better-served by providing an offender with mental health services, a case worker, or youth activities that can reduce deviance and alleviate isolation.

We are not aware of any arguments against such programs, but we are aware of the bipartisan support they receive in several jurisdictions. In addition to reductions in recidivism and cost savings, these programs have potential to produce positive community effects by producing roles for community volunteers, increasing the participation of community members in the justice system, and producing

Figure 5.

	Arbitration	Probation	Intensive Probation	Incarceration
Cost per juvenile: daily	\$1.95	\$3.29	\$7.10	\$300
Cost per juvenile: 90 days	\$175.50	\$296.10	\$639.00	\$27,000

tities, or by community non-profits. The most successful tend to be those which are community-based. Programs in Florida operate with budgets of between \$50,000 to \$500,000 per year, depending on the county. At these costs, it is extremely likely locally-based job opportunities for the administration and maintenance of these programs.

Component 4: Improving Educational

Policies and Limiting Enforcement of Zero Tolerance in Schools

The fourth and final component of our policy package is the broadest and most complex. We recommend that schools find alternative disciplinary policies, stop enforcing zero-tolerance policies, and either remove School Resource Officers (SROs) from schools or redefine their roles. The implementation of this is larger in scope than our research can address, but the school to prison pipeline plays such an important role in the funnelling of non-white youth to incarceration, that a complete solution must address the number of arrests and disciplinary issues at schools.

The most illuminating source for our research to this end was the work by Metau-Gelabert and Lune. Their study is a demonstration of how changes in the classroom environment, faculty attitudes, and disciplinary policies can greatly affect the level of delinquency at a school, and therefore affect the number of arrests occurring at a school. The lack of enforcement without an alternative disciplinary policy is not enough to make any change, as well-intentioned students will be forced to relate to other students within the culture of disorder ("street culture") that grows dominant in a school without discipline. Zero-tolerance policies and SROs do little to combat the delinquency itself, but have the effect of sending several children through the justice system and away from schools instead, exacerbating the likelihood that they will continue to exhibit delinquency.

The main goals of changing school policy is to reduce the number of arrests on school grounds, and to provide an environment that can keep youth feeling valued and engaged. The role that SROs can play in working towards these goals is questionable, as they have not been shown to reduce violent crimes on school grounds, and have only been shown to increase arrests. Our recommendation is that SROs posts in schools be eliminated. There are cost savings in doing so that can be used towards the implementation of more effective disciplinary policy.

The elimination of SROs may be infeasible, however. In this case, a serious effort at retraining SROs should be undertaken. One problem with this cited by Theriot (2009) is that law enforcement officers don't often trust others who aren't in law enforcement. This highlights the challenges in retraining officers. If possible, it may be preferable to acquire new hires for the role of SROs, and for those hires to have limited if any law enforcement background before they receive unique training.

Further study outside the scope of our analysis would be required in order to appropriately assess how schools can move forward. The school to prison pipeline is its own large and complex issue. We urge policymakers to decrease the number of arrests in schools as a part of reducing the racial disparities in youth incarceration.

Conclusion

Policy solutions for racial disparities in youth incarceration are accessible, cheap, feasible, and widely applicable. Activists and policymakers working on this problem have no incentive not to push their hardest right now while these solutions still maintain bipartisan support. The amount of research and literature on both this problem and on policy related to it has been overwhelming. There has been so much study on this problem, that it is impossible to account for all of it within the scope of this report. Agreement among experts is virtually unanimous. This is a problem that requires no further study; there is enough information to act now.

Americans are faced with the possibility of making justice reflect American values instead of politicians' fears. The Justice Policy Institute reports that Americans pay between \$8 and \$21 billion annually to incarcerate juveniles, nationwide. For that kind of money, thousands of jobs could be created in affected communities: case workers, mentors, educators, counselors, arbitrators, and more. Neighbors, friends, families, and communities could be activated and involved in deciding the fate of their children and contributing to their successes. All of this can be done at a fraction of the costs paid by taxpayers now for incarceration and the policies that cause it. Instead of wasteful policy, communities of people can be allowed to help themselves get justice.

The policies recommended in this report can be promoted as ideas to be embraced by policymakers at every level of government. Activist organizations and experts on these disparities have already been advocating for the policies we've chosen, and have been successful in changing policy throughout several states. But there is still much work to do, and we encourage use of the frame within which we have explained the problem in order to simplify arguments and unify efforts. Likewise, the series of policies we have recommended should be recognized as several aspects of the same effort, rather than discrete subjects. The recommended policies work best together, and efforts to implement each work best if they are put together, as well.

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STREET AR GENTRIFIC

EMANUEL ULLOA



T AND ATION

Introduction

Ever since I was around ten years old, street art has always sparked my interest. Whether it be graffiti, murals, street performers, or even sculptures, I've always seen street art as an artist expressing themselves, and also as a way of sending a message, important or not, to the community. These messages can cover a wide variety of topic including social changes, politics, global issues, even homages to important community figures that have passed away.

Street art is very common and can be found in any city in the world. On a more local level, in San Francisco's Mission district, a neighborhood famously known for its art murals, street artist Shepard Fairey painted a mural which captured "Fannie Lee Chaney, a Black civil rights activist, on the day she found out that her son and two of his friends were murdered by the Ku Klux Klan for registering Black voters (Mission Local)." Fairey hoped this mural would shift people's attention to workers' rights, gun rights, voter suppression, and the issue of extreme income inequality in the United States. Fairey wanted this mural to inspire many people, especially young people, to get out and be involved in fixing these issues within the country (Mission Local)."

Since Street art is shaped by its neighborhood culture, it is important to study it in relation to gentrification because street art and gentrification is something that is seen in major urban areas across the country and around the world. Gentrification is the process of renewal and rebuilding that accompanies the influx of middle-class or affluent individuals into disinvested areas often displacing poorer residents of that neighborhood. The term goes back to Ruth Glass in 1963, who first coined the term to describe socioeconomic and cultural changes in a working class London neighborhood. Glass claimed that gentrification occurs when "working class quarters are invaded by the middle class ... until all or most of the working class occupiers are displaced and the whole social character of the district is changed." (Governing). Thus, gentrification is still a relatively new phenomena, however, it is evident that gentrification has spread to become an ongoing worldwide issue and affects the nature of street art in urban areas.

The changes in a neighborhood can be seen in street art because much of street art is a representation of neighborhoods themselves. It can show the history of a neighborhood and its culture such as, in a predominantly African American community, there might be a number of murals that illustrate the history of its residents. The purpose of this research is to assess the ways in which gentrification affects street art in neighborhoods experiencing different levels of gentrification: one that hasn't experienced gentrification, one undergoing gentrification, and one that has been fully gentrified. Going into this study, I expected the neighborhood untouched by gentrification to contain more meaningless taggings and a lot of street art indicating a gang presence in that neighborhood. In a fully gentrified neighborhood, I expected there to be more institutionalized street ain the form of statues and possibly street performers, in addition to clean walls with minimal taggings.

Background

For this study I chose three different neighborhoods, each neighborhood at a different stage of gentrification. The three neighborhoods chosen for this study were Deep East Oakland in Oakland, CA which has experienced no gentrification, West Oakland in Oakland, CA which is currently undergoing gentrification, and the Lower Haight in San Francisco, CA which has fully undergone gentrification.

For Deep East Oakland, the boundaries for research were: 73rd Avenue & International Boulevard (Northeast boundary), 73rd Avenue & Bancroft Avenue (Northwest boundary), 98th Avenue & International Boulevard (Southeast boundary), and 98th & Bancroft Avenue (Southwest boundary).

For West Oakland, the boundaries for research were: Peralta Street & 7th Street (Southwest boundary), Peralta Street & W. Grand Ave (Northwest boundary), W. Grand Ave & Mandela Parkway (Northeast boundary), and Mandela Parkway & 7th Street (Southeast boundary).

For The Lower Haight, the boundaries for research were: Oak Street & Divisadero Street (Northwest boundary), Oak Street & Waller Street (Southwest boundary), Waller Street & Buchanan Street (Southeast boundary), and Oak Street & Buchanan Street (Northeast boundary). Buchanan Street (not shown in the map) is the street in between Webster Street and Laguna Street also running vertically.

Terminology

Before I explain my research methods for all three neighborhoods, it is necessary to define a selection of artistic terminology to aid in understanding this research. I will define the following six terms:

Stencil Art - Stencil Art is created with templates to draw or paint identical letters, numbers, symbols, shapes, patterns, or figures when used. This style is typically used by artists who need to paint detailed images and are pressed for time.

Permission Murals - Artists develop an idea, find a wall, secure permission from the owner or sponsoring organization, and paint a mural. These murals can be commissioned or done as a gift to the community.

Sculptures - Three dimensional works of art placed in an urban setting, often with official approval from the city or an organization.

Taggings - Tags are done by street artists who sign their name in any random style. One may typically find tags on walls, but they are also commonly found on dumpsters, fire hydrants, and the ground. When done on the ground they are known as ground tags. Ground tags are also specifically crafted with latex paint unlike other forms of tagging, which are typically done with spray paint, markers, or pens.

Throw-Ups - These taggings make use of bubble style lettering, and typically consist of a maximum of two colors which are used to spell out the artist's appellation.

Stickers/Posters - A common form of street art used to advertise and promote people, places, ideas, or events.

Research Methods and Findings

Deep East Oakland

I walked afoot within the above mentioned boundaries only using the main streets of 82nd Avenue and 90th Avenue in between the northern and southern boundary. The majority of Deep East Oakland is residential save for the main streets along and between boundaries, so there was no need to explore any of the smaller residential streets. The majority of my art findings were along International Blvd in between 73rd Avenue and 98th Avenue. I used my iPhone to take pictures of all my data.

The walking portion of this research took approximately 3.5 hours. I took pictures of every single instance of both tagging and any





other kind of art I could find. With the exception of five murals running along International Blvd, Four of the murals had homeless people hanging out in front of them and after explaining to all of them at each mural if I could take a picture of the mural for a school project, none of them at each location wanted to move. At the fifth mural. I was told to leave the area by two individuals after explaining to them that I was looking to take a picture of the mural for my school art project. The two individuals also advised I stop taking pictures of graffiti because I was "attracting too much attention on myself." One noteworthy experience I had in Deep East Oakland occurred while explaining to two kids who both looked no older than 13 years old if they could move so I could take a picture of the permission mural on 82nd and International Blvd depicting a black goddess in tune with mother nature. The two little kids started questioning me, asking me where I was from and who I associated with in the neighborhood. My initial thought was that these two little kids were most likely getting involved in gangs at a very young age since they seemed very defensive about their territory. Nonetheless, after mentioning it was for school and telling them about what I wanted to do in life, they softened up and let me take a picture of the permission mural.

For the non-gentrified Deep East Oakland neighborhood, I ended up taking 197 pictures and captured 242 different pieces of street art all falling within any of the six categories I previously mentioned. Within these 242 findings, I found 0 pieces of stencil art, 48 permission murals, 0 sculptures, 141 taggings, 52 throwups, and 1 sticker.

West Oakland



I walked by foot within these boundaries, but unlike Deep East Oakland, this neighborhood was a mix of old warehouses, residential streets, and new mixed use development projects stretching south towards 7th Street. I walked along every street within the triangular shaped



boundary of the neighborhood. My findings were all over the place and not just limited to the main streets in the neighborhood.

It took approximately three hours to walk and explore every street within this chosen area. Again, I took pictures of everything art-related I could legally access. It was striking in this neighborhood how much clearly covered up street art there was. At the same time. West Oakland was also where I found the most street art of the three neighborhoods I investigated. I even came across a painter in the process of painting over street art on a fence. The amount of effort that the city has made in order to try and clean up the street art in this area was really evident at that point.

In regards to the ongoing gentrification in West Oakland, I ended up taking 160 pictures in total, but found 504 different pieces of street art. All of which fell within the six categories I previously mentioned. Of the geographic areas researched, this was the most demographically diverse neighborhood in relation to ethnicity and diverse in relation to the more evenly distributed numbers of street art falling within any of the six categories. Within these 504 findings, I found 4 pieces of stencil art, 29 permission murals, 5 sculptures, 274 taggings, 129 throw-ups, and mix of 63 stickers and posters.

The Lower Haight

This was a relatively small neighborhood, so I walked alongside my chosen boundaries, and along ev-





ery horizontally and vertically running street within the boundaries. The entire process took about two hours. My findings were also varied here, and not limited to the busy main streets.

This neighborhood was strikingly clean compared to West Oakland and Deep East Oakland, and also featured a vast number of permission murals. These murals were incorporated into businesses, parks, and even into some people's houses. There were many permission murals that signified the black history of what once was a predominantly Black neighborhood in the 1950s. The one thing I expected to find in this neighborhood that I unfortunately did not were more permitted sculptures. The only sculpture, and I'm using this term loosely, I found was a cactus planted within a metal garbage can cut in half and attached to the sidewalk. This stood out to me as an example of upcycling, where people repurpose old things into something new and useful while at the same time keeping aesthetics in mind. It really showed how environmentally conscious people in this neighborhood might be.

For the fully gentrified neighborhood of the Lower Haight, I ended up taking a total of 134 pictures, and ended up with 189 different pieces of street art all falling within the six categories I've previously mentioned. Within these 189 findings, I found 1 stencil art piece, 107 permission murals, 1 sculpture, 70 taggings, 7 throw-ups, and a mix of 3 stickers and posters.

Analysis & Discussion

Several conclusions can be assumed when looking at each neighborhood. Each of the three neighborhoods I studied, regardless of the level of gentrification, had a significant art presence in them. Deep East Oakland possessed a heavy tagging presence. Many of the times, the taggings didn't even spell anything out; one might assume the tagging was vandalism for the sake of vandalism. It is at that point where street art stops being art and is instead considered simply vandalism; when there is no meaning behind the piece or painting.

Deep East Oakland's tags often possessed a heavy emphasis on taggings to honor the memory of somebody that passed away -- something that Deep East Oakland and West Oakland had in common. It is possible that spraying somebody's name on the sidewalk or a building is a way of honoring and respecting an individual in the street art culture. None of these taggings honoring somebody that passed away had been covered by another tagging, which implies respect for the act.

Many businesses in Deep East Oakland seemed to incorporate street art onto their own business. It's common to see businesses with permission murals on their sides with bubble lettering style graffiti. These businesses might be trying to fit into the culture of the community and in doing so, they end up participating in the street art. A lot of the art that these businesses incorporate may be to pay





respect to the demographic culture in that community.

Deep East Oakland has a rich black history and it is obvious when one pays attention to the different types of murals in the area. Alliance Academy on 98th Street had murals demonstrating black excellence all around the school, but unfortunately I was not allowed access inside the school by a yard duty supervisor as they were still in session.

Despite all of this, my findings matched my predictions, it seems like a common practice to paint the name of person who passed away. If I could change one thing about how I went about my research in Deep East Oakland, it would be to better organize the way I'm going to collect my data, and try to get permission from schools like Alliance to check out their murals showing Black excellence.

West Oakland was noticeable different from Deep East Oakland in that it contained the most diversity of the six different types of street art I chose to look into. Not only was it diverse artistically and demographically, but it was also evident that there were majors efforts by the city to clean up unnecessary street art and revitalize the area. There were many new mixed-use redevelopment condominiums being built along with brand new victorian style houses, as the area is known for its vintage style victorian house. Even though the area is currently experiencing gentrification, there are also signs that the city looks to keep West Oakland's

culture. I came across a couple of interesting sculptures. One in particular at Oakland Memorial Park which paid remembrance to the Loma Prieta earthquake that struck in 1989. The sculpture features two twisted ladders that are supposed to express the ladders used by people after the earthquake to help those stuck on top of the freeway that passed alongside the park during that time.

It is nice to see that the City of Oakland is making an effort to preserve the history of the community in a rapidly gentrifying neighborhood. Not just through art, but also through building new victorian houses in order to fit the architectural style of the neighborhood. I did not expect this neighborhood to contain a wide array of street art. I originally expected to find mostly taggings and covered up throw-up paintings, but there was a large variety of different forms of street art. Just like Deep East Oakland, West Oakland holds a lot of Black history, and there are many murals to remind the current residents and future generations of the people who have historically lived in that community.

As for the Lower Haight, the fully gentrified neighborhood was completely different from West Oakland and Deep East Oakland. The streets and walls were clean, and the majority of taggings in the area were subtle ground taggings. Some of the ground taggings even had positive messages. This illustrates the stark differences that increased gentrification imparts on street art. The majority of the street art was in the form of permission murals, and many of them seemed to also highlight the rich black cultural history of this neighborhood prior to the recent cultural and demographic change.

During the process of gentrifying, there was an immense effort to clean up the streets and the walls in order for this area to look as nice as it does today.During the process of gentrification in any city, certain art will get taken down in order to make the neighborhood more appealing to the new population that is moving into the area. It is also important to note, however, that the Lower Haight has also made an effort to preserve the history of that neighborhood in the form of murals as there are many murals in the neighborhood that show the history.. An example of this can be found in a mural showing a black woman amongst young kids on the side of a cafe on Pierce and Haight Streets.

Conclusion

Overall, this study showed a variety of things that may happen to street art in neighborhoods going through different levels of gentrification. In a neighborhood untouched by gentrification such as Deep East Oakland, the street art done by artists and taggers remains. There is not much effort by the city to clean the area or remove taggings. Many businesses themselves in this ungentrified neighborhood decide to join in on the art culture as they adapt this street art into many of their storefronts or choose to be a sponsor for permission murals on the sides of their stores. Street art comes in many forms in this type of neighborhood but the most common were taggings without a message. These tags are done by taggers who are just looking to deface property for the sole reason of vandalism instead of adding to the art scene in the community.

For communities currently undergoing gentrification like West Oakland, one cannot ignore the fact that much of the street art will be taken down as a way to revitalize the community. At the same time, at least the city of Oakland acknowledges the importance of art that shows the history in the community. However, there is backlash from longtime residents and some choose to take their anger out by painting new throw-ups or permission murals that demonstrate the social issues going on within the community. In West Oakland, for example, there is a mural that shows a black man dressed in Warriors gear saying "Stop Gentrification." This art demonstrates how angry the longtime residents of that community are with the changes in their communities. Street art is just one way of releasing that frustration.

Fully gentrified communities like The Lower Haight in San Francisco have already cleaned up the less aesthetically pleasing aspects of street art, and for the most part have decided to highlight murals in the community. Many of these murals talk about history, social issues, and political problems. However, it is important to note that the effort has been made to leave a piece of history in a neighborhood that is completely changed from what it was sixty years ago.

The ultimate result of the relationship between street art and gentrification is that as neighborhoods gentrify and undergo a revitalization process, much of the less visually pleasing street art goes away along with the original residents of that neighborhood, some who may have been street artists themselves. As a neighborhood goes from rags to riches, the art present in that neighborhoods becomes more pleasing to the eye and looks to appear more often in the form of permission murals. These permission murals typically carry a positive message or outline a social problem, or even serve as a reminder of the history in that neighborhood. Ultimately, no matter how gentrified a neighborhood becomes, it is evident that a part of the old neighborhood will forever remain present in the new revitalized area, most commonly in the form of street art.

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