



BREAKING DOWN BARRIERS

SUPPORTING EQUITABLE ACCESS TO MOAKLEY PARK

GOMEZ | GRUBER | KELLY | RAMESH | SIEGEL



MOAKLEY PARK



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ACKNOWLEDGEMENTS

Indigenous Land Acknowledgement

Our Field Project Team would like to acknowledge that Tufts University's Medford campus is located on the ancestral lands of the Wôpanâak, Massa-adchu-es-et (Massachusetts), and Nipmuc people. The study area of this project is located on the traditional territory of the Massa-adchu-es-et (Massachusetts) and Pawtucket people. We recognize that native persons were the original stewards of the lands upon which we are studying and acknowledge their displacement from them.

We would also like to acknowledge and thank the following individuals for their contributions to our project:

Project Partner

First, we would like to thank our project partner, Boston Harbor Now, for their ongoing assistance and support in our completion of this project. Specifically, we would like to acknowledge the efforts of our primary point of contact, Kelly Sherman. We would also like to thank Jaye Meakem for their guidance throughout our community engagement efforts, as well as Alice Brown, who provided oversight throughout.

Community Partners

Special thanks must be given to Mercy Robinson, the Executive Director of South Boston en Accion, without whom our focus group would not have been possible. We are extremely grateful for her willingness to assist our project team and appreciate all her contributions to the community.

Participants

We would like to thank each of the individuals who participated in our focus group session, as well as the many respondents of our intercept survey. We could not have completed this project without their contributions and are immensely grateful for their time and efforts.

Tufts University

Lastly, we are extremely thankful for our project advisor, Melissa Peters, as well as our group's teaching assistant, Shadia Garrison, both of whom provided ongoing feedback and support throughout the semester. We would also like to thank Rebecca Shakespeare, who helped us develop our focus group mapping exercise, as well as Kathryn Davies, whose guidance on our focus group script was invaluable. Additionally, we acknowledge the support and encouragement of every member of the Field Project Teaching Team and UEP Professors throughout this process; we would not have done this without them.



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Executive Summary

Breaking Down Barriers: Supporting Equitable Access to Moakley Park was a collaboration between a Tufts University Field Project Team, in the Urban Planning and Environmental Policy Department (UEP), and Boston Harbor Now (BHN). Throughout the Spring of 2023, we investigated the physical infrastructure and sociocultural barriers to accessing Moakley Park, an urban waterfront park located between the South Boston and Dorchester neighborhoods of Boston. The team led with community engagement, equity, and transportation access in mind in order to help BHN cultivate a park that is welcoming for all.

Our study area encompassed Moakley Park, as well as 0.5-miles of the park's surroundings ending at the neighboring MBTA stops, Andrew and JFK/UMass. The study area included several Environmental Justice (EJ) communities, which have high minority, low English speaking, and low income status populations. As such, it is important to consider park access through an equity lens. Given that Moakley Park is undergoing a redevelopment, it is crucial that all ongoing planning efforts incorporate local resident's input, both now and in the future.

To gain more insight into the existing barriers to Moakley Park, our project sought to answer the following research question:

What are the sociocultural and infrastructure barriers to accessing Moakley Park?

Our research focused on identifying the barriers within these overarching themes, including roadway and pedestrian infrastructure and feelings of welcomeness and belonging. We recognize that infrastructural and sociocultural barriers are often interrelated and have emphasized their connections where relevant. We employed various methods to answer our research question, including an extensive literature review, site visits, transportation and

spatial data analyses, and community engagement efforts such as an intercept survey and a focus group. Our community engagement efforts prioritized hearing from minority communities around the park about their experiences. The barriers of access to Moakley Park that were identified include concerns regarding safety of poor roadway and pedestrian infrastructure, as well as feelings of social exclusion due to differences in ethnicity, race, and gender.

The findings from our methods directly informed our recommendations, which aimed to assist BHN in cultivating a park that is physically accessible and socioculturally inclusive. The recommendations are as follows:

- 1) Reduce Speed Limit
- 2) Install Pedestrian Crosswalk Signals
- 3) Add and Maintain Sharps Containers
- 4) Add Bathrooms & Trash Can
- 5) Extend Night Lighting
- 6) Foster Inclusive Community Spaces
- 7) Conduct Local Community Outreach

These recommendations are intended to address some of the community's physical infrastructure and sociocultural concerns, which must be collectively addressed in order to effectively break down the barriers to accessing Moakley Park.

Team Introduction



Magdalena (Magda) Gomez (She/Her)

Magdalena holds a B.A. in Sociology from Universidad Alberto Hurtado, Chile. She is pursuing a M.A. in Urban and Environmental Policy and Planning at Tufts University, while working as a case manager in the Somerville Homeless Coalition and as a Spanish interpreter for community events in New England. Her previous work experience has focused on tenant organizing, advocacy for affordable housing and displacement prevention in the Somerville area, as well as government and academia work back in Chile.



Hannah Gruber (She/Her)

Hannah grew up in Michigan before attending Indiana University where she completed a B.A. in Environmental and Sustainability Studies. She is currently a first year student in the M.A. Urban and Environmental Policy and Planning. Hannah has spent the past two years working with the Michigan Geological Survey to address water quality issues. Her interests include urban green space, climate resiliency, and community engagement.



Brianna Kelly (She/Her)

Brianna Kelly is pursuing a M.A. in Urban and Environmental Policy and Planning at Tufts University. Prior to starting at Tufts, Brianna graduated from the University of New Hampshire with her B.S. in Community and Environmental Planning. She has previous experience in affordable housing and environmental advocacy, and is interested in community climate resiliency and community engagement.



Rahul Ramesh (They/Them)

Rahul Ramesh is a M.A. Urban and Environmental Policy and Planning student at Tufts University. Before enrollment at Tufts, they completed a B.A. from Boston University in Mathematics and Computer Science. They are passionate about equitable community development and food justice. They came to Tufts after working as a FoodCorps Service Member helping Chelsea, Massachusetts students learn about gardening and food education. Rahul hopes to learn from their experience at Tufts to empower local communities in a sustainable and just way.



Amber Siegel (She/Her)

Amber is a first-year M.A. student in Tufts' Urban and Environmental Policy and Planning program. As an undergrad, she earned a B.A. in Fine Arts with a Concentration in Environmental Studies from Kenyon College. Following graduation, Amber returned to her hometown of New York City and worked as a Sustainability Analyst for a Commercial Real Estate firm. Amber's time spent in NYC cultivated a deep appreciation for urban green spaces and an awareness that access to them is inequitable. This inspired her to redirect her career towards community-focused environmental policy and planning initiatives.

Partner Introduction: Boston Harbor Now

In 2016, the Boston Harbor Island Alliance and the Boston Harbor Association merged to form Boston Harbor Now (BHN). BHN is a non-profit that is working to re-establish Boston as one of the world's truly great coastal cities by collaborating with private and public partners to provide free and low-cost recreational, cultural, and social events to coastal neighborhoods in Boston. The organization works alongside entities such as the City of Boston and Massachusetts Department of Transportation to enhance Boston's water transportation, prepare for the impacts of climate change, and promote the usage of waterfront open spaces. BHN has spent ample time advocating for the neighbors of Moakley Park both in regards to their current and future access and enjoyment of the space.



Source: Boston Harbor Now.

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INTRODUCTION

Introduction

For decades, Boston's waterfront was both unusable and inaccessible due to declining industrial and commercial infrastructure, expansive garbage dumps, and highly polluted water. Over the past 50 years, significant efforts have been made to revitalize the City's deteriorating coastal expanses. Boston's efforts resulted in the creation of vibrant mixed-use neighborhoods with publicly accessible green spaces, the largest of which is Moakley Park (Figure 1).

Moakley Park is a 60-acre park located between the neighborhoods of Dorchester and South Boston in Boston, MA. Moakley Park of-

fers neighbors a chance to take refuge in an urban green space with beautiful views, large open areas, sports fields, and access to a public beach. The park is slated to undergo extensive renovations through the Moakley Park Resilience Plan, which is part of Boston's efforts to combat sea level rise due to climate change. As the park redesign begins, it is important to consider who has access to Moakley Park and how to ensure that all Bostonians have access to the park now and in the future. The Tufts Field Project Team, in partnership with BHN, was tasked with understanding existing barriers to accessing Moakley Park with a focus on trans-



Figure 1: Location of Moakley Park. The Park relative to surrounding neighborhoods (Dorchester and South Boston), local housing developments (Mary Ellen McCormack, Old Colony and Harbor Point) and significant Transportation features (JFK/UMass and Andrew T-Stops, Kosciuszko Circle and Pacuska Circle). Map by Rahul Ramesh.

portation and infrastructure challenges and sociocultural deterrents.

It is important to note that several of the bordering neighborhoods are classified as Environmental Justice (EJ) communities by the State of Massachusetts. EJ communities refer to communities with populations consisting largely of minority, low-income, or non-native English speakers (Mass.gov 2020). EJ communities are more prone to lacking access to welcoming and adequate green spaces (Agyeman et al. 2016).

To ensure that everyone in the community has access to and feels welcome within the park, both during and following the completion of the redevelopment project, the City invited

BHN to join the project team as a community advocate. In recent years BHN has worked to cultivate strong trusting relationships with the park's neighboring residents by hosting free public events at the park and providing ongoing support at public meetings for the redevelopment project. BHN requested the support of a Tufts University Field Projects Team to help identify the community's most pressing physical and sociocultural concerns to accessing Moakley Park in order to help establish equitable usage of Moakley Park in the present as well as the future.

To narrow down the project focus, our team developed a primary and secondary set of research questions:

Research Questions

What are the sociocultural and infrastructure barriers to accessing Moakley Park?

- 1 Who is and who is not using Moakley Park? And why?
- 2 What are the transit and/or infrastructure conditions encouraging and/or discouraging use of Moakley Park?
- 3 What are the sociocultural experiences encouraging and/or discouraging use of Moakley Park?
- 4 What does equitable access to Moakley Park look like for the neighboring community?
- 5 What are ways to remove or mitigate the physical and social barriers to accessing Moakley Park?

Project Goals

To answer the research questions, the Tufts team identified three main goals:

- 1 Identify the transportation and infrastructure barriers to accessing Moakley Park.
- 2 Identify the sociocultural deterrents to community use of Moakley Park.
- 3 Identify actionable recommendations to dismantle physical and sociocultural barriers to accessing Moakley Park.

Project Background

MOAKLEY PARK: HISTORY & PLANNING CONTEXT

While today Moakley Park is seen as a natural reprieve for its neighboring residents, it was not too long ago that the area was an active waste disposal site (Green 2021). It was developed as a park in 1916 (Figure 2) following an extensive infill process of the natural mudflats (TCLF n.d.; Green 2021). Today, the park is largely dedicated to athletics, with fifty-five percent of the area being devoted to sports while another forty-three percent is unprogrammed (Stoss Landscape Urbanism n.d.). Its public amenities include a walking track, basketball courts, tennis courts, soccer fields, baseball fields, a roller rink, two playgrounds, and a splash pad (Figure 3). While the park remains a widely used space, its future is tenuous as the threat of sea level rise looms, threatening not just the park but all of Boston's coastline and its nearby residents.

In 2016, The City of Boston's Parks and Recreation Department created the Climate Ready Boston plan to identify and address potential physical and social climate vulnerabilities. The report identified Moakley Park as one of eight at-risk areas in the City. The park was subsequently included in the Climate Ready South



Figure 2. Image of Dorchester Bay in 1920 (Moakley Park is visible along the bay). Source: Open Archives - UMASS Boston.

Boston Plan which detailed concrete actions for protecting Moakley Park and the surrounding areas against pending climate challenges (BDPA 2020; Green 2021). Since then, the resilient redevelopment of Moakley Park has progressed (Figure 4) with special attention being paid to coastal flood prevention along the harbor front, with a potential 21-40 inches of sea level rise anticipated over the next 50-60 years (Stoss Landscape Urbanism n.d.). The report vocalized particular concern for



Figure 3. Moakley Park in 2020. Source: The Cultural Landscape Foundation.



Figure 4. Rendering of Moakley Park following redevelopment. Completion is anticipated after 2025. Source: Stoss Landscape Urbanism.

the residents of the nearby public housing developments, Mary Ellen McCormack and Old Colony Houses, which are at high risk of flooding if sea level rise exceeds 40 inches (Stoss Landscape Urbanism n.d.).

The City of Boston and their consultant team, in partnership with BHN, have conducted robust community outreach to ensure resident

inclusion throughout Moakley Park's redesign process. Community engagement initiatives have included on-site seasonal events, such as BHN's recurring Winter Warmer, two dedicated public meetings hosted in 2022, and surveying conducted both online and in person. While substantial input has been collected and considered relative to the park's future design, concerns remain regarding universal access and enjoyment of the space prior to and after the implementation of those changes.

DEMOGRAPHICS & ENVIRONMENTAL JUSTICE (EJ)

The neighborhoods surrounding Moakley Park are diverse in terms of social, cultural, and economic demographics (Figure 5 and Appendix 4.6). The two neighborhoods bordering the park - Dorchester and South Boston - are extremely disparate both in race (Table 1) and median income rates (Table 2). The study area reflects the two neighborhoods, with 39% of the population identifying as Black, Hispanic, Asian, or two or more races. Of particular note is the study area's poverty rate of 30.31%, which is significantly higher than the neighboring areas and the City of Boston.

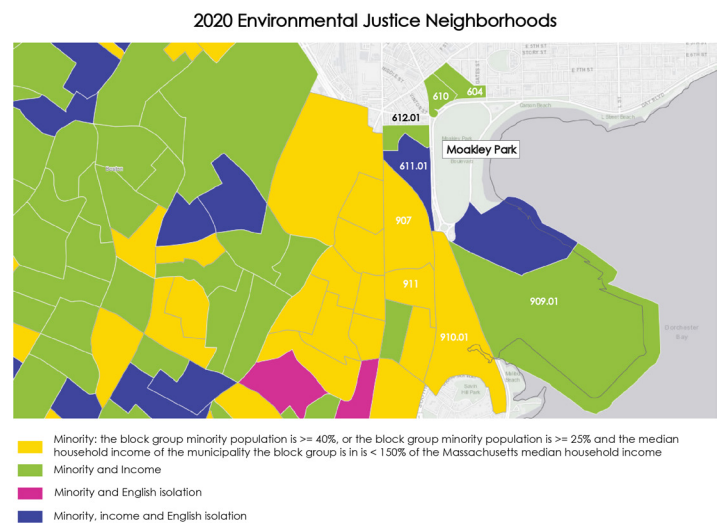


Figure 5. EJ communities surrounding Moakley Park as identified by the State of Massachusetts. Source: Mass. gov.

Table 1. Racial Demographics in the City of Boston Compared to Dorchester and South Boston (as of 2019)

Race	Dorchester	South Boston	City of Boston	Study Area
White Alone, Not Hispanic or Latino	22.3%	76.2%	44%	59.1%
Black or African American Alone	44%	5.6%	22.7%	9.6%
Hispanic or Latino	19.9%	11.1%	19.8%	14.4%
Asian Alone	9.9%	5.6%	9.6%	12.9%
Two or More Races	4.0%	1.5%	3.4%	2.3%

Table 1. Source: Analyze Boston. Study area demographics were compiled from census tract data, including tracts 604, 610 611.01, 612.01, 907, 909.01, 910.01, 911. Source: Census Reporter.

Table 2. Median Income and Poverty Rates in the City of Boston Compared to Dorchester and South Boston (as of 2019)

Location	Dorchester	South Boston	City of Boston	Study Area
Median Income	\$55,009	\$111,541	\$71,259	\$80,283
Poverty Rate	22.2%	14.1%	18.9%	30.31%

Source: Analyze Boston. Study area median income and poverty rates were compiled from census tract data, including tracts 604, 610 611.01, 612.01, 907, 909.01, 910.01, 911. Source: Census Reporter.



METHODOLOGY

Methodology

Our project team employed a variety of quantitative and qualitative methodologies to answer our research questions. The methodologies included a literature review, walk-audits, online and in-person intercept surveys, a community-directed focus group, and a compilation and analysis of publicly available transportation and infrastructure data. Particular consideration was given to our community engagement efforts, specifically the survey and focus group session, to champion neighborhood involvement and inclusion. Our team, in line with BHN's driving goals, felt it was a project priority to elevate residents' voices via our research methodologies and findings, leading with respect and understanding.

LITERATURE REVIEW

The literature review was used to provide context regarding infrastructure, transportation, and sociocultural barriers to accessing urban parks and green spaces. The findings provided our team with guidance as we developed our survey and focus group questions, as well as our identification of barriers and potential solutions to ensuring equitable access to Moakley Park.

SITE VISIT

Questions addressed:

- *What are the transit and/or infrastructure conditions encouraging and/or discouraging use of Moakley Park?*
- *What are the sociocultural experiences encouraging and/or discouraging use of Moakley Park?*

We performed a walk audit in and around the park, covering a distance of 0.5 mile, with JFK/UMass Station and Andrew Station Busway marking the outer boundaries (Appendix 4.1). In this walk audit, we considered the ways in which various infrastructure elements such as sidewalks, walking paths, crosswalks, and bike paths impacted neighborhood access to the

park. During this visit, we also attended BHN's Winter Warmer event, in which we were introduced to a number of local community members and organizations (Figure 6). We met the Executive Director of South Boston en Accion, Mercy Robinson, who later helped us coordinate and facilitate our community-directed focus group. Several conversations were held between the Tufts Team and community members, with initial commentary and feedback regarding the park noted. Collectively,



Figure 6. Community members attending BHN's Winter Warmed event in February 2023. Source: City of Boston

these physical and sociocultural observations were used to inform our intercept survey questions and focus group scripts, as well as our final recommendations. Our initial observations and notes can be found in Appendix 5.

TRANSPORTATION DATA COLLECTION

Question addressed:

- *What are the transit and/or infrastructure conditions encouraging and/or discouraging use of Moakley Park?*

We collected and analyzed publicly available transportation data, specifically the City of Boston's vehicle crash data, traffic light and street light locations, and crime reports to

visually illustrate positive and negative physical elements of the study area. The Vision Zero Crash data and the crime report data were downloaded from the City of Boston's website and geocoded in ArcGIS Pro. Similarly, the traffic light and streetlight data were downloaded from the City of Boston's website as shapefiles, which were placed directly into ArcGIS Pro. The resulting maps provided further insight into the various spatial elements that create physical infrastructure barriers to accessing Moakley Park. Additionally, following the completion of our focus group session, we used ArcGIS Pro to create a digital version of the map produced during the group exercise. The resulting map illustrated the infrastructural and sociocultural barriers shared by participants.

See the final maps and the analysis of them in our *Findings and Analysis* section, as well as in Appendix 4.

INTERCEPT SURVEY

Questions addressed:

- *Who is and who is not using Moakley Park and why?*
- *What are the transit and/or infrastructure conditions encouraging and/or discouraging use of Moakley Park?*
- *What are the sociocultural experiences encouraging and/or discouraging use of Moakley Park?*

The Tufts Team developed an intercept survey to gather feedback from both park users and neighborhood residents. The survey questions focused on understanding the various infrastructural and sociocultural barriers to the park. Background information and feedback from our initial site visit was incorporated into the survey questions. The survey itself asked respondents about the frequency with which they use the park and how they traveled there. It also included questions gauging the opinions of respondents regarding the park's accessibility in terms of transportation and infrastructure features, as well as sociocultural

Survey

- **Target Participants:** Park visitors and pedestrians in the immediate neighborhoods, and neighborhood residents, particularly in the surrounding Public Housing Developments.
- **Site(s):** Within Moakley Park and within a 0.5 mile radius surrounding Moakley Park; Outside of the Andrew Station Busway and JFK/UMass Station.
- **Number of surveys collected:** 60 responses were collected in total. We targeted a total of 60+ persons, with hopes of equal distribution between park users and non-users.

sentiments.

The survey was reviewed and finalized in collaboration with BHN and circulated over the course of five weeks, between March 8th to April 14th, 2023. The team conducted the in-person intercept surveys in and around Moakley Park via Qualtrics on iPads and smartphones. Flyers were posted in and around the park featuring a QR code to access the survey. Lastly, the survey link was shared with a local community partner, South Boston en Accion, who distributed the survey to their respective members. As an incentive, respondents were given the option to share their email and/or phone number to be entered into a raffle to win one of three \$30 Stop and Shop gift cards.

See Appendix 1 for copies of the English and Spanish version of the survey, as well as Appendix 2 for the English and Spanish versions of the flyers.

FOCUS GROUP

Question addressed:

- *What does equitable access to Moakley Park look like for the neighboring community?*

The team conducted one in-person focus group, hosted in collaboration with BHN and South Boston en Accion. The session was held on Thursday, March 30th at 5 pm, and was attended by eight Spanish-speaking individuals who live in the Public Housing Developments of Mary Ellen McCormack and Old Colony. The individuals were recruited to participate by South Boston en Accion's Executive Director. As a means of compensation, participants were provided food and drinks during the session, and were given the opportunity to enter a raffle drawing for a \$30 Stop & Shop gift card. The focus group gift card raffle was held separately from the survey raffle. The participants agreed to have the session recorded, which was later transcribed and analyzed.

The focus group session ran for 90 minutes and included a conversation about the participants' experience in and hopes for Moakley Park's future, as well as an interactive

mapping activity. We began the session with a brainstorming exercise, having the participants consider their favorite parks and then Moakley Park. We hoped to establish a sense of excitement around park spaces by encouraging them to share with us their most used and enjoyed park features first. The focus group discussion was punctuated by a mapping exercise in which participants were asked to place different colored stickers on areas in the park that they either spent time in or avoided. The participants were encouraged to explain their sticker placement and elaborate on the infrastructural, transportation, and sociocultural barriers they felt were or were not present in the locations. The session concluded with a final discussion of sociocultural sentiments, including instances in which participants had felt both welcome and unwelcome in the park, as well as a conversation around cultural events (e.g. food trucks, Spanish music festival) that would make people feel more comfortable in using the space.

See Appendix 1.1 (English) and 1.2 (Spanish) versions of the focus group script.

Focus Group

- **Target Participants:** Neighborhood residents, particularly those who reside in the neighboring housing development (Mary Ellen McCormack and Old Colony).
- **Community Partner:** South Boston en Accion
- **Number of participants:** 8
- **Session:** Thursday, March 30th at 5pm



Figure 7. Focus group participants talking with Tufts Team member, Magda. Source: Amber Siegel



LITERATURE REVIEW

Literature Review

URBAN PARK BENEFITS

Urban parks and green spaces serve as an opportunity for individuals to get outside, relax, exercise, spend time with family and friends, and interact with the larger community. Parks designed with social gatherings in mind can provide people with more opportunities to bond and spend time together, ultimately building a greater sense of community (Jennings and Bamkole 2019). These spaces have the ability to increase opportunities for social interaction and cohesion through amenities such as community gardens, athletic activities, and other outdoor facilities that are welcoming and inclusive.

Parks also serve as neighborhood destinations, encouraging people to get outside and walk around their neighborhoods. As a result, they increase walking and exercising rates locally. Neighborhood destinations can enhance the quality of life in urban landscapes and can act as a catalyst to physically bring the community together (Sugiyama et al. 2012). However, this is dependent on park accessibility, and there are several sociocultural, infrastructural, and transportation barriers both within and surrounding park spaces that can prevent people from easily accessing the parks even if they are close by.

IMPACTS OF PARK DESIGN AND INTERNAL INFRASTRUCTURE ON ACCESS

While parks are typically open to the public, it is important to recognize that not everyone feels able to utilize the space in the same ways. When parks lack spaces that are functional, inclusive, and/or welcoming, it can establish infrastructural and sociocultural barriers that prevent individuals and/or groups from utilizing the park space. This can prevent park usage by both the general population within the neighborhood surrounding the park and may limit who accesses the park outside of its neighborhood.

Physical infrastructure and sociocultural barriers are often interrelated. Sociocultural barriers can be caused by poor or absent physical

infrastructure that prevents social cohesion and interaction. Infrastructure that prevents social cohesion includes outdoor seating without shade and a lack of gathering spaces, particularly those without amenities such as grills and picnic benches (Robinson et al. 2022). Another infrastructural element that prevents a space from feeling welcoming and inclusive is the lack of general signage and wayfinding, especially if it is only written in English in a community where other languages are present (Robinson et al. 2022). This lack of inclusive infrastructure creates sociocultural barriers to accessing park spaces and may add to feelings of exclusion within a community.

These feelings of social exclusion can often be found along racial lines in city parks. In the UK, a study was conducted on the access and barriers to green spaces amongst different racial groups. The study found that Black and Asian people visited natural environments 60% less than white people (Robinson et al. 2022). Additional research found that individuals residing in socioeconomically deprived communities have less access overall to good quality green space compared to those residing in higher socioeconomic communities (Robinson et al. 2022). Researchers determined that this was due to a lack of access to transportation, as well as funding cuts and concerns about safety within local parks (Robinson et al. 2022). These systemic barriers were seen to be a result of structural racial inequities due to past urban planning decisions (Robinson et al. 2022). By mitigating these barriers, parks and green spaces can become more accessible and inclusive to racialized individuals and families.

TRANSPORTATION ACCESS BARRIERS

Traditionally, park access has only looked at the proximity to and distribution of green spaces in cities, not access to them via transportation (Kaczynsk et al. 2014). Transportation barriers in the surrounding areas play a significant role in determining community access. Accessing parks means looking at the many different safety, infrastructure, and con-

nectivity issues in the surrounding area that can prevent easy access to parks regardless of proximity (Kaczynsk et al. 2014).

Parks encourage walking and being outside in one's neighborhood. As such, walkability is an important factor to consider in terms of transportation access. Walking rates are reduced by varying degrees when infrastructure elements like sidewalks are lacking or are poorly maintained (Sugiyama et al. 2012). This adds safety concerns, makes the park look unappealing, and may discourage walking to the park. The perceived appeal and beauty of the route will also impact walking rates, with poorly maintained paths discouraging park usage (Sugiyama et al. 2012). Walking rates are also reduced if individuals perceive the path to the park to be too out of the way (Bedimo-Rung et al. 2005).

Street connectivity, or how many intersections there are in a neighborhood, and traffic speeds pose significant barriers to neighborhood walkability and park usage. The higher the street connectivity, the more walkable a neighborhood is (Kaczynsk et al. 2014). Neighborhoods with higher street connectivity near parks had higher rates of walking, as compared to neighborhoods with lower street connectivity (Kaczynsk et al. 2014). Traffic speeds are also an important consideration when it comes to access and walkability near parks. Crossing a high-speed (>35 mph) street to get to a park is associated with lower rates of walking as compared to those that do not have to cross a high-speed street (Kaczynsk et al. 2014). The presence of high-speed roads deters people from getting to parks, even if individuals live within a 5-10 minute walk. While this study does not show a causal relationship between traffic speeds and park visitors, it does shed light on the importance of reducing traffic speed and increasing connectivity in order to facilitate access to green spaces. Additionally, the study shows that reducing traffic speeds encourages walking. There is, however, conclusive evidence that high-speed roads are more dangerous to drivers as well as pedestrians (Aarts et al. 2005). While

many studies do not explicitly look at the relationship between transportation access and green spaces beyond typical proximity measures, we do have ample evidence on the impacts of general road safety and traffic speeds. Reducing speeds by utilizing speed bumps, traffic adjustments, speed limit reductions, and road narrowing can increase road safety by reducing crashes and increasing the perceptions of safety for both pedestrians and drivers (Aarts et al. 2005).

It is important to consider different types of transportation options when ensuring ease of access for the community. Biking is an easy way for residents to get around their neighborhood and exercise. While there is not much literature about urban bike rates and access to parks, there is literature that focuses on bike safety measures. The presence of bike lane infrastructure and protected bike lanes increases safety and perceptions of safety, which in turn encourages biking. This holds true when applied to walking, with protected sidewalks and crosswalks all increasing safety and the perceptions of safety (Aziz et al. 2018). While these studies were not completed in relation to green spaces, they do illuminate how safety and infrastructure measures may encourage walking and biking in urban areas.

It is also important to note that subsidized housing complexes, particularly those with high populations of low income or people of color, often disproportionately experience barriers to park access. As a result, they are potentially deprived of the positive benefits of parks, including having a space to exercise and relax (Bennett et al. 2007; Boulton et al. 2018). One study found that Hispanic communities living in subsidized housing had higher rates of exposure to faster traffic patterns than similar non-Hispanic communities living in subsidized housing. This finding, coupled with earlier observations of the association between higher traffic rates and decreased park access, suggests that vulnerable minority communities facing higher traffic exposure may also face reduced access to green spaces (Houston et al. 2012).

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FINDINGS & ANALYSIS

Findings & Analysis

To answer our research questions, we used a variety of methods to address the social and infrastructural aspects of our questions.

SITE VISIT

During our initial visit, we conducted a team walk audit which yielded a handful of observations regarding existing infrastructure and sociocultural access barriers within and around Moakley Park. The audit began with team members traveling to the park via public transportation, specifically the MBTA Red Line, and disembarking at different T stations: JFK/UMASS and Andrew. The team met at the park and completed a lap around the perimeter, paying special attention to the sidewalks and crosswalks. Subsequently, we traversed the park to better observe the sporting amenities, internal walking paths, and landscape. We also explored Carson Beach, which lies between Moakley Park and the waterfront. See

Figure 8 for the team's route to and around the park.

Following our visit, we compiled our written observations and visual documentation of the access barriers identified (Appendices 4.1 and 5). The team noted several infrastructure barriers, including little to no protected pedestrian crosswalks, a lack of seating areas and gathering spaces, and severely deteriorating sidewalks and walking paths in and around the park (Figures 9-14). This lack of pedestrian and community infrastructure echoed barriers identified in the literature review which indicated that an absence of amenities and walkable areas deter potential park goers from utilizing the space (Robinson et al. 2022; Sugiyama et al. 2012).

Sociocultural deterrents were also observed, centering around the police car that was stationed on the baseball field for the length of the Winter Warmer event (Figure 14). The presence of the police car was noticeable,

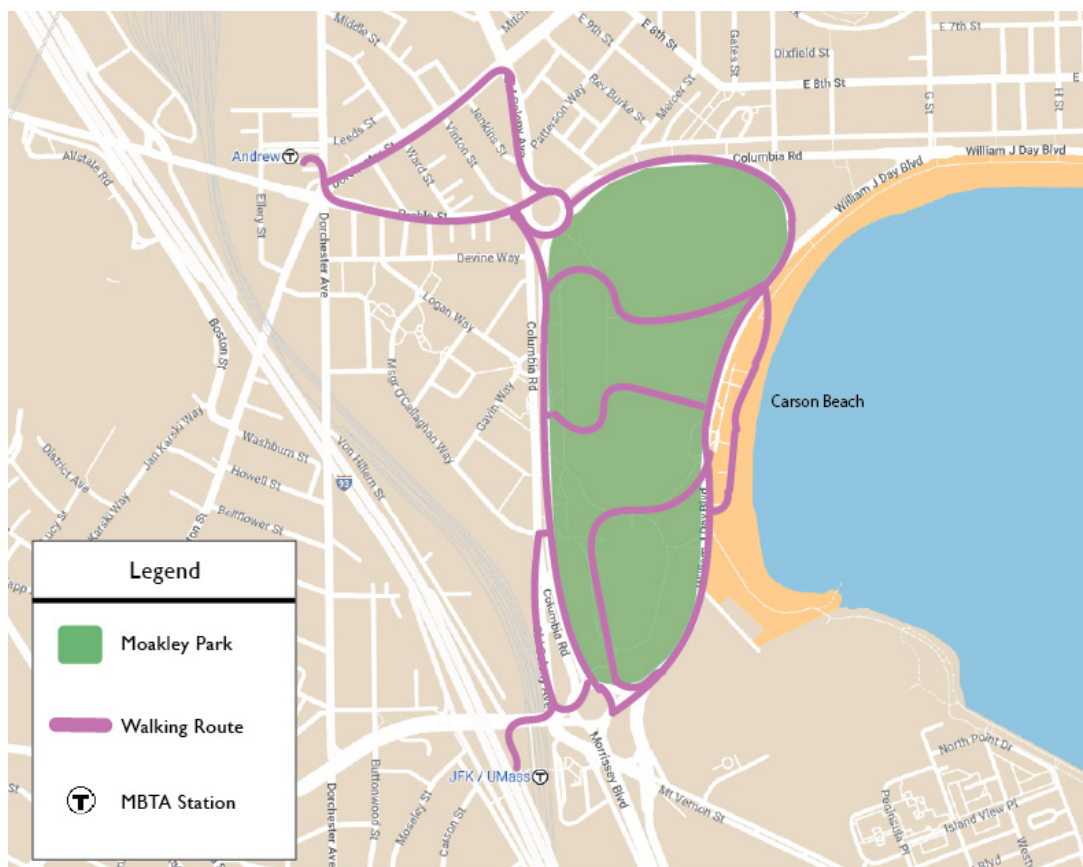


Figure 8. Map of the field project team's route to and around the park. Map by Rahul Ramesh.

however, we never saw nor interacted with a police officer. Another potential sociocultural barrier that the team noticed was the park's lack of diverse cultural markers, this was apparent in the lack of language-inclusive signage, absence of country flags, and the general underrepresentation of the Hispanic

community who resides in the area. As studies featured in the literature review have found, the lack of language-inclusive signage can prevent a space from feeling welcome to a range of individuals, acting as both a socio-cultural and physical barrier to access (Robinson et al. 2022).



Figures 9-10. Crosswalks leading to/from Moakley Park to Kosciuszko Circle. No walk signage, but heavy traffic, observed. Photo by Brianna Kelly.

Figures 11-12. Sidewalk running alongside Columbia Road on the West side of MP. Surface deterioration observed. Photo by Brianna Kelly.

TRANSPORTATION DATA

One pressing transportation barrier to access Moakley Park is the heavy automobile traffic, particularly along Columbia Road and through the two traffic circles (Kosciuszko Circle and Pacuska Circles), paired with poor pedestrian infrastructure (e.g. lack of cross signals and protected crosswalks). From 01/01/2020 to 03/31/2023 there have been numerous crashes along these roadways, including 47 pedestrian-vehicle, 27 bike-vehicle, and 156 vehicle-vehicle incidents, which may be due to the lack of traffic lights, poor directional signage, and absence of pedestrian infrastructure in the area. Figures 15 and 16 depict the location of traffic lights, as well as pedestrian, bicycle, and vehicle crashes. While conducting our walk audit, our team also noted the surprising lack of traffic lights along Columbia Road, William J. Day Boulevard, and at the traffic circles, which was supported by the locational data we collected from the City of Boston website (see Figures 15 and 16).

Additionally, we observed the absence of crosswalk signals and protected crosswalks and personally experienced difficulty in safely crossing the streets. The lack of protective pedestrian infrastructure paired with the lack of traffic signals resulted in confusion for both vehicles and pedestrians. As our literature review showed, walking rates decline when physical infrastructure and safety elements, such as well-maintained and functional pedestrian sidewalks, are poorly kept (Sugiyama et al. 2012). Adding to the safety concerns are the high speeds of the vehicles traveling along roads that border Moakley Park, which have speed limits of 35 mph (Columbia Road) and 30mph (William J. Day Boulevard) respectively ("Speed Map" 2023). As research has shown, high traffic speeds discourage individuals from walking to parks, and as a result may act as a deterrent to park use overall. Of note, the area's speed limits are equal to, or only slightly lower than, the maximum speed (35 mph) identified in the literature review as a



Figure 13. Center of park looking towards the Western border of MP. Mary Ellen McCormack Housing Development visible across the street. Large open space lacking clearly defined gathering spaces and seating areas. Photo by Amber Siegel.



Figure 14. Police car parked on one of the baseball fields during Winter Warmer. Car remained on, with lights flashing, for the entirety of the event. Photo by Brianna Kelly.

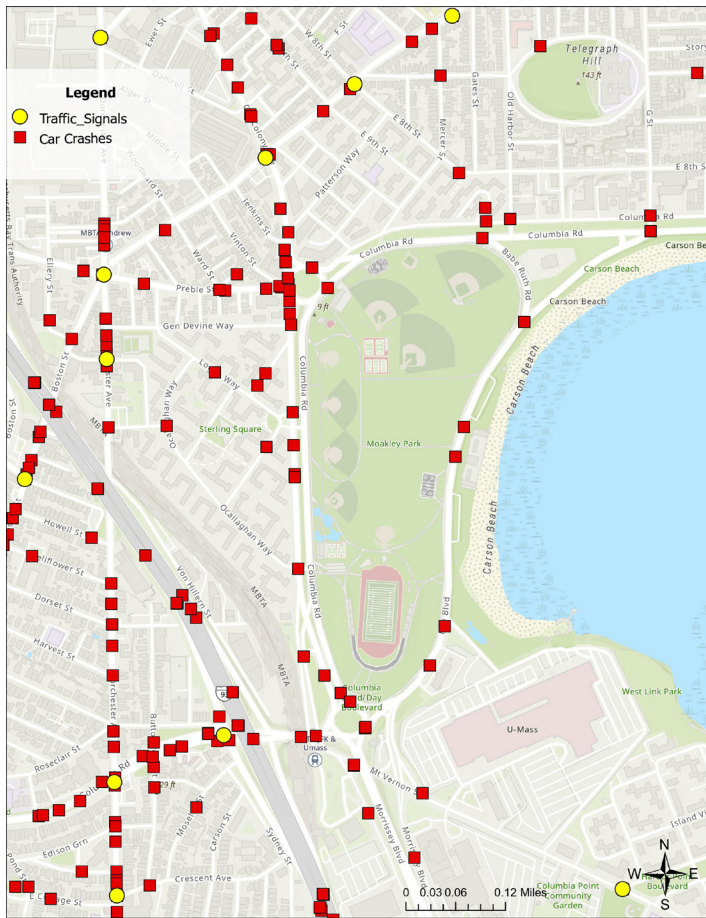


Figure 15. Location of pedestrian and bike crashes, relative to traffic lights, 2020-2023. Source: Vision Zero Safety Concerns, City of Boston, 2023. Map by Magda Gomez and Amber Siegel.

walkability deterrent (Kaczynsk et al. 2014). It is then reasonable to think that the high speeds of these roadways, paired with the poor pedestrian and vehicle infrastructure, are preventing residents from accessing the park in a manner that they otherwise would.

INTERCEPT SURVEY

To better identify and understand the barriers to park usage, the Tufts Team administered an intercept survey from March 8th to April 14th, 2023. We collected data from sixty-two respondents, removing two incomplete surveys, for a total of sixty responses. We conducted the intercept surveys on two weekends, and two weekdays, alternating between morning and afternoon times to ensure diverse spread. We targeted respondents who were in and around Moakley Park, as well as the two nearby MBTA T-stops, JFK/UMass and Andrew.

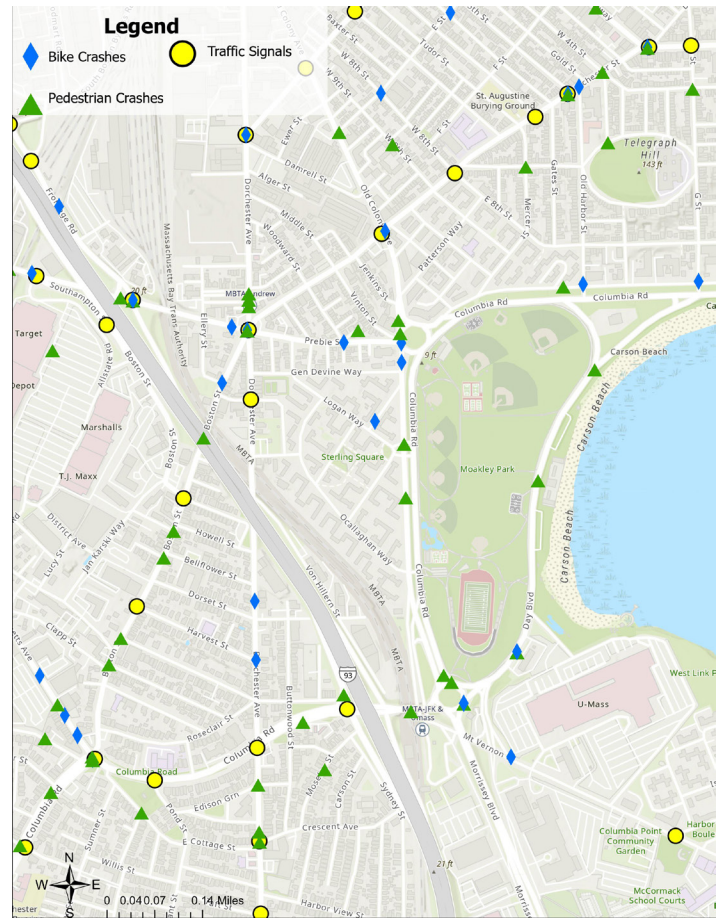


Figure 16. Location of vehicle crashes, relative to traffic lights, 2020-2023. Source: Vision Zero Safety Concerns, City of Boston, 2023. Map by Magda Gomez and Amber Siegel.

Our survey aimed to understand the community’s overall park usage, the demographics represented in and around the park, and any physical, infrastructural, transportation, and sociocultural barriers park users face. It is important to note that our survey’s findings were not statistically analyzed. The results were not tested for statistical significance and cannot be generalized to the whole population it represents. Instead, our findings were generalized based on trends observed by the team. Additionally, we do not consider our findings to be representative of the entirety of the South Boston-Dorchester community, but rather an insight into a portion of it.

Our first research question aimed to identify the racial demographics of Moakley Park users as compared to those of the surrounding neighborhoods.

Who is and who is not using Moakley Park, and why?

What are the transit and/or infrastructure conditions encouraging and/or discouraging use of Moakley Park?

The racial demographics of the survey respondents are similar to the racial demographics of the residents of the study area (Figure 17 and 18). This suggests that Moakley Park users reflect the demographics of the study area (Table 1). An interesting finding was the number of respondents who did not know that they were currently in Moakley Park, despite regularly walking through it or living nearby. According to our results, 20% of respondents did not know about Moakley Park and 5% were unsure if they had heard about Moakley Park.

Our next set of questions aimed at understanding the infrastructure barriers that survey respondents experienced in getting to the park. The first theme explored was transportation barriers and safety issues related to pedestrian and vehicle infrastructure. We wanted to understand how people traveled to the park, and depending on their mode of travel, whether or not they experienced any safety or transportation-related issues. Based on our results, most of the respondents walked to the park (67%), with driving (18%) and other public transportation methods such as trains and buses (6.51%) being the least popular. In the follow-up, we asked respondents to consider their perceived safety when traveling to the park via their chosen method, see Figure 19.

Most of the survey respondents felt 'Very Safe', 'Safe', or 'Neutral' when traveling to the park, with none of the respondents feeling 'Very Unsafe'. A different relationship emerges, however, when comparing the safety rankings of drivers to pedestrians (Figure 20). Respondents that reported walking to the park had noticeably fewer 'Very Safe' ratings (26%) and recorded far more 'Neutral' (24%) and 'Unsafe' (12%) replies versus those that drove. Notably, none of the drivers felt 'Unsafe' or 'Very Unsafe'.

These findings suggest that individuals who walk to the park have a more "unsafe" experience compared to those who drive. This discrepancy is likely a result of multiple factors, including high traffic speeds and poor sidewalk and crosswalk conditions. As relevant literature shows, walking rates decline when pedestrian infrastructure elements are in disrepair, including sidewalks and poorly maintained pathways (Sugiyama et al. 2012.; Kaczynsk et al. 2014). Additionally, research has attributed higher speed limits with reduced walkability, due to perceived safety

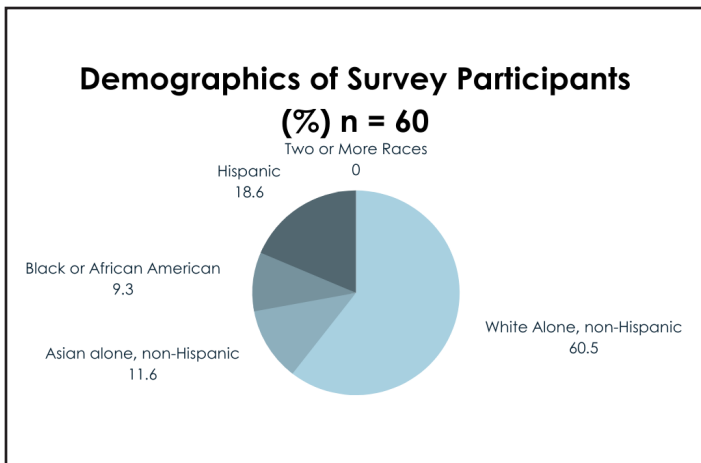


Figure 17. Survey participant demographics.

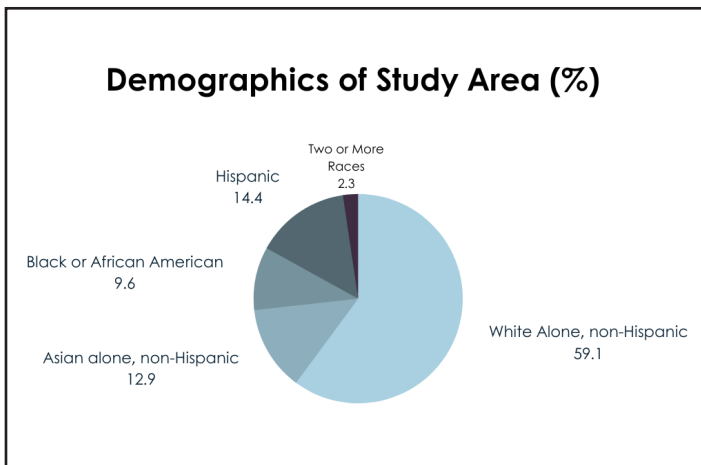


Figure 18. Demographics of study area.

Safety Perception When Traveling To Park



Figure 19. Safety perceptions of survey respondents when traveling to Moakley Park.

Safety Perception Rating vs Mode of Transit

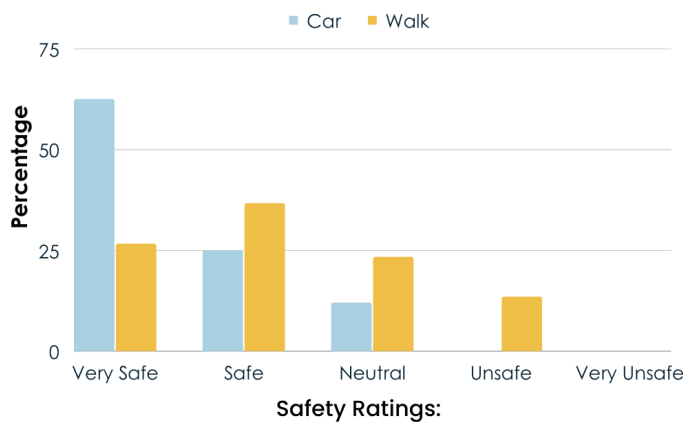


Figure 20. Survey respondents perceptions of safety versus their mode of transportation.

Infrastructure Conditions Ranking and Mode of Transit

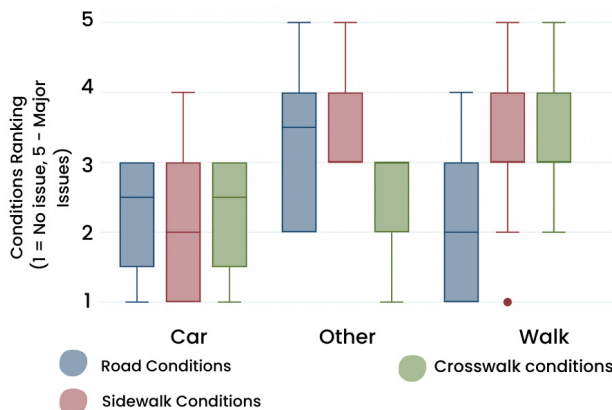


Figure 21. Survey respondents infrastructure ranking comparing those who drivers versus walk.

concerns and increased difficulty in crossing roadways (Kaczynsk et al. 2014).

In an effort to gain additional insights into individuals' perceptions of infrastructure conditions around the park, we asked respondents to rank any issues they have when using crosswalks, sidewalks, roads, bike lanes, bus stops, parking, and signage in their language. The features were ranked by respondents on a 1 - 5 scale with 1 being 'No issue' noticed, 3 being 'Minor issues' noticed, and 5 being 'Major issues' noticed. Table 3 provides a summary of the infrastructure rankings. The mean rankings for each infrastructure condition hovers around 3, or 'Minor issues', with some variation.

Figure 21 illustrates the relationship between participants' chosen travel methods and their perception of roadway and pedestrian infrastructure in the area. In doing so, we were able to understand the differences in experiences between the respondents that regularly drive to the park versus those that walk. Note, we only included road conditions, sidewalk conditions, and crosswalk conditions in the figure in order to better understand the walkability for pedestrians.

As depicted in Figure 21, there are differences in how those that 'Walk' and take 'Other' means of transportation (e.g. public buses, trains) ranked the infrastructure elements compared to those that drove. Noticeably, those that walked ranked the crosswalks and sidewalks worse than those that drove, however, there is very little difference in road conditions between the two groups. Poor sidewalk and crosswalk conditions may be a deterrent for those attempting to access the park and therefore must be addressed if barriers to access are to be removed. Relevant literature spoke to the importance of improving pedestrian pathways, as well as the installation of speed mitigation features (e.g. speed bumps, speed limit reduction), in order to improve walkability (Sugiyama et al. 2012.; Kaczynsk et al. 2014).

Table 3. Survey Respondents Ranking of Infrastructure Elements on a 1-5 Scale.

Infrastructure Feature	Mean Ranking
Crosswalks	3
Sidewalks	3
Bike lanes	3.04
Bus stops	2.39
Road conditions	2.54
Parking conditions	2.77
Signage in your language	2.82

What are the sociocultural experiences encouraging and/or discouraging use of Moakley Park?

Another factor we wanted to understand was how welcoming Moakley Park feels to those using it. This question of welcomeness aims to address the sociocultural barriers, specifically the lack of inclusion, that may be present. We asked respondents to answer the following question: Please rank your level of agreement with this statement: "I feel welcome in the park." The rankings ranged from 'Strongly Agree' to 'Strongly Disagree', see Figure 22.

Most of the survey respondents replied 'Strongly Agree' or 'Somewhat Agree', indicating that they generally feel welcome in the park. We analyzed further to see if individuals with different demographic characteristics, namely race, and gender, felt otherwise.

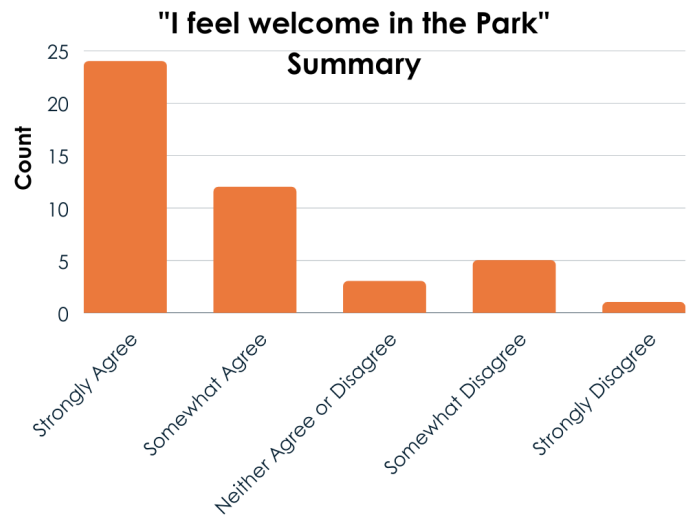


Figure 22. Survey responses regarding feelings of welcome in Moakley Park.

When looking at the results in terms of race, we observed an interesting trend. Those that identified as Black, Indigenous, and People of Color (BIPOC) had a wider spread in response when compared to those that identified as White Alone, Non-Hispanic (Figure 23). Most White respondents (62%) strongly agreed that they felt welcome in the park, and no White folks disagreed with the statement. In comparison, BIPOC individuals selected both 'Somewhat Disagree' (23%) and 'Strongly Disagree' (4.7%), with fewer selecting 'Strongly Agree' (42%). This suggests that people of color have a different experience in the park as compared to their White counterparts. This may be due to increased experiences of discrimination, harassment, greater exposure to safety issues, higher rates of policing, lack of welcoming signage or visual markers such as flags specifically including people of color and those from other nationalities, amongst other factors. The literature references this trend, highlighting the heightened impacts of sociocultural barriers along racial lines. Further, the research indicated that this inequitable access is due to structural and racial inequalities reflected in the lack of inclusion of minority communities in green spaces (Robinson et al. 2022).

We see a similarly disparate pattern when

"I feel welcome in the Park" Rankings by Race

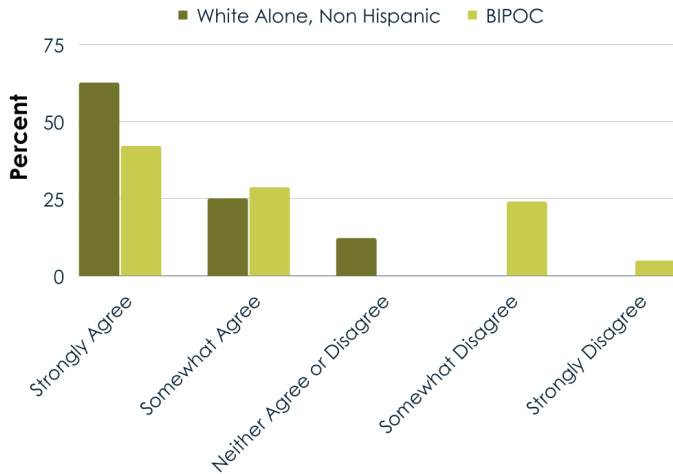


Figure 23. Survey responses regarding feelings of being welcome as shown by race.

"I feel welcome in the Park" Rankings by Gender

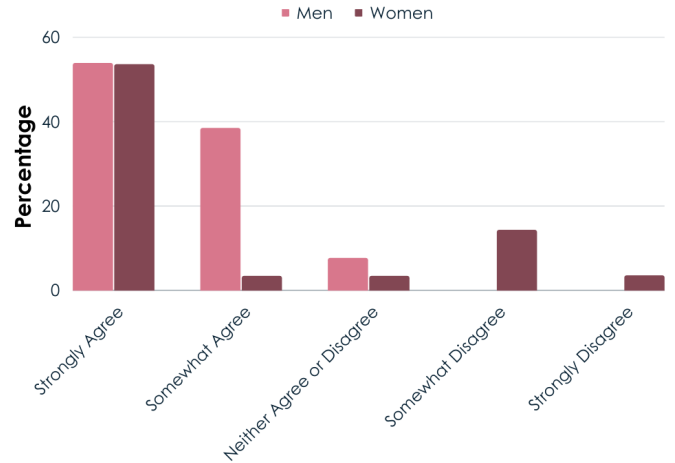


Figure 24. Survey responses regarding feelings of welcome as shown by gender.

considering the responses relative to gender (Figure 24). While both men and women had similar rates of 'Strongly Agreeing' (53.8% for men vs. 53.3% for women), women's responses skewed farther to the disagree side. In contrast, 0% of men selected 'Somewhat Disagree' or 'Strongly Disagree', while 14.3% of women responded 'Somewhat Disagree'. This is likely due to men and women's varied experiences in the park, whether it be women's increased rates of harassment, discrimination levels of safety exposure, or something else. The varied responses to this question suggests that different groups of people experience the park differently, indicating that there may be sociocultural barriers to accessing Moakley Park in terms of both race and gender.

FOCUS GROUP

The focus group revealed that local community members have a complicated relationship with Moakley Park, with participants sharing both positive and negative sentiments about the space. In analyzing the transcripts, we bucketed the positive and negative feedback into general themes, many of which overlapped. As such we have chosen to present the findings based on general themes (e.g. safety, access), followed by subsections (e.g. sidewalk, lighting, drug use) and positive and negative associations respectively.

Access

All of the participants shared a general appreciation for the park due to its convenient location, decent facilities, and offerings for their children, friends, and families. In particular, they shared fond memories of time spent there with family, characterizing the park as a social space. In recent years, the park has provided a space where neighbors can spend time in an outdoor place during the COVID-19 lockdowns. The park became a place for taking care of one's mental health, as well as physical movement. One participant shared, "It was my therapy during the pandemic. It has a lot of problems. But I like it. It is my favorite place". Several participants spoke about their enjoyment of the natural elements of the park, specifically the large trees and waterfront location.

While the neighbors regularly use the park due to its proximity to their homes, they described a handful of infrastructure barriers they face when walking or driving there. Those that drove spoke to the consistent lack of parking in the park's onsite lot. Lack of parking availability is not only a consideration but seemingly a deterrent for residents interested in visiting via car. Several participants shared the belief that residents should have priority parking in the park's lot.

For neighbors who visit the park on foot, heavy traffic and poor pedestrian infrastructure are a concern. Participants spoke about the confusion they feel when attempting to cross via the traffic circles (Pacuska Circle and Kosciuszko Circle) that border the north and south ends of the park, as seen in Figure 1. One participant said, “This area is very dangerous....If you’re driving your car, you don’t know where to go and an accident can happen”. The participants, who are all members of South Boston en Accion, have first-hand experience with car crashes involving pedestrians since one of their members was hit by a vehicle in one of the traffic circles. The pedestrian infrastructure is not sufficient to protect individuals crossing through the traffic circles. Heavy car traffic, which is typically traveling at high speeds, and the lack of traffic and walk signals make accessing the park particularly dangerous. A participant shared, “The walk sign light doesn’t even work. Sometimes you push the button and the light doesn’t want to change”. As a result, participants shared a desire to use the overpass that straddles Columbia Road in order to avoid roadways and traffic circles. However, they often feel uncomfortable using it due to the unhoused population living there.

Participants shared that the overpass is theoretically the safest way to walk to the park in order to avoid cars and crosswalks. Participants shared that they avoid the overpass when it is occupied, as they are unsure how the unhoused individuals will react to them and are also concerned about walking through the syringes that often litter the ground. One individual shared “In winter there are even quilts, and mattresses (in the overpass to go to the park)!”

“This area is very dangerous....If you’re driving your car, you don’t know where to go and an accident can happen”

Safety

Overall, safety was the most mentioned topic during the focus group, with participants referencing safety-related concerns 37 times (Figure 25). Within the theme of safety, traffic was the most discussed, coming up a total of 13 times (Figure 26). Additionally, participants shared specific concerns about ongoing drug use, leftover drug paraphernalia, and the lack of lighting at night.

Frequency of Coded Data from Focus Group

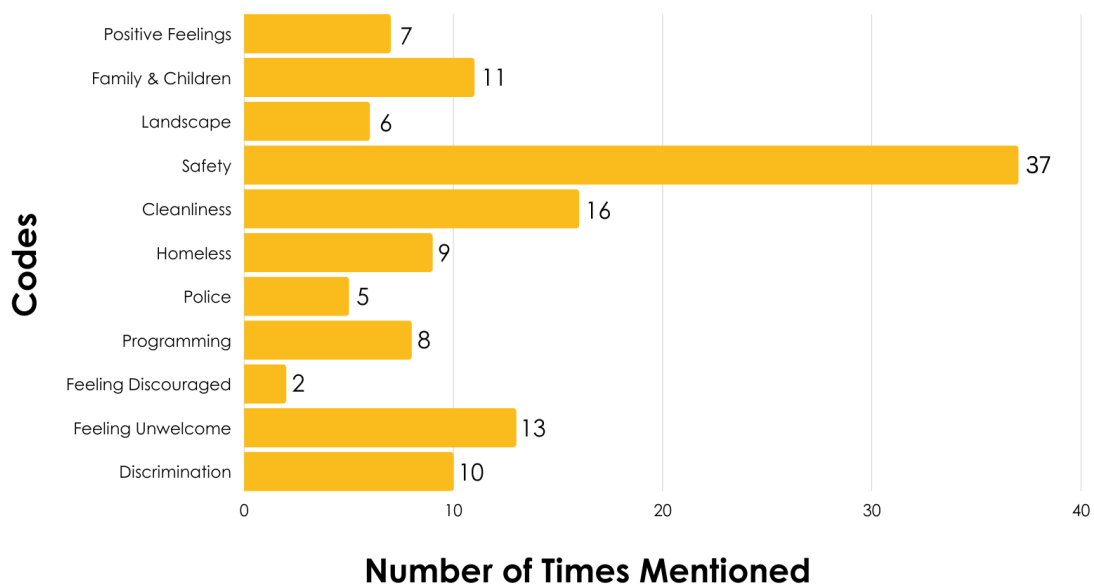


Figure 25. Frequency of themes during the discussion.

Frequency of Coded Data: Safety

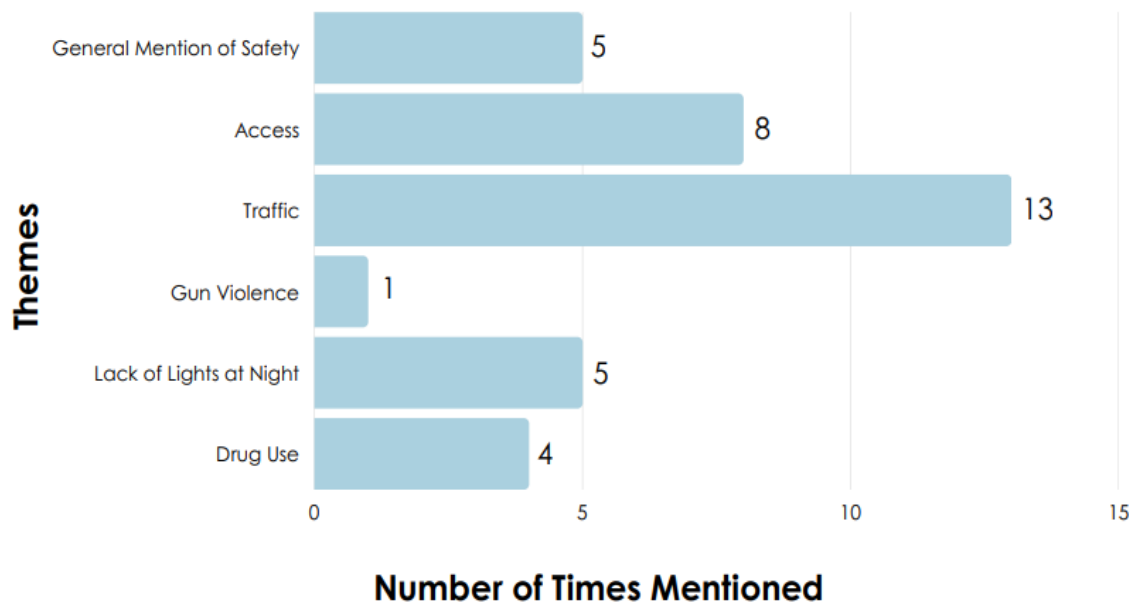


Figure 26. Frequency of topics discussed relative to safety.

Individuals stated that drug use is particularly prevalent amongst the unhoused people that reside in the park, which created a feeling of unease and discomfort for park goers. One focus group participant shared, “If it is someone who looks like an alcoholic or a drug addict, I feel afraid. I was with my son, and in those situations, it scares me, because I didn’t know how that person might react. If he is on drugs, and I walk past him... I really don’t know what can happen”. Individuals felt more unsafe at night, largely due to the lack of lighting, which welcomed unlawful behaviors such as excessive drug and alcohol consumption, public sex acts, and even gun violence to occur. Another participant shared, “At a certain time, the homeless and the drug addicts are there and you’re not going to feel comfortable there. They come out at night and I feel uncomfortable”. Several participants echoed this concern emphasizing how darkness attracts people whose actions put other’s safety and health at risk. One participant shared, “It is very dangerous. And why? Because, for example, at night people don’t go there for a walk. But there are cars parked in the parking lot. People stay inside the cars, and what

they do.... they do anything that you can imagine. Anything you can imagine is done in that parking lot”. While there are lights near the track and the parking lot, our observations found they do not remain on past dark, something that many participants commented on and hoped would change.

“If it is someone who looks like an alcoholic or a drug addict, I feel afraid. I was with my son, and in those situations, it scares me, because I didn’t know how that person might react. If he is on drugs, and I walk past him... I really don’t know what can happen”

A majority of the participants commented on the lack of police presence, pointing to their absence as a cause for the growing lack of safety. While a patrol car is frequently present during large park events, as our team observed during BHN’s Winter Warmer Event (Figure 14), it is not stationed there on an average day. Participants went on to explain that even when a police car shows up, the officers remain inside of their cars “eating donuts and watching TikTok”. The interest in increased

police presence is partially due to a shooting that occurred in the park in 2021, which left local residents with a growing sense of worry. Another participant shared, "There is a lot of insecurity in that park... Shootings have happened. With all of those things happening there, the need for security is real. Many citizens don't feel safe enough". The increase in violence along with the absence of police persons, the lack of night lighting, and the presence of people experiencing homelessness has resulted in a space where respondents feel unsafe.

Cleanliness

Lack of park cleanliness was mentioned 16 times during the session (Figure 25) with participants specifically addressing drug paraphernalia 4 times and bathroom issues 12 times. One of the participants shared, "That's another bad thing about the park. In the last few years, you walk around and you find syringes, condoms, everything you can imagine. If you have an accident with a syringe like that...it's dangerous".

Participants also shared concerns regarding the restrooms specifically, given that the park building with bathroom facilities is closed for much of the year. The participants explained that while there are porta potties near the track, they remain closed a majority of the time, and are only opened for events. This has caused significant sanitation issues and health concerns among regular park goers. The lack of toilets discourages people from visiting not only because they do not have access to a restroom facility, but also because people use other areas to relieve themselves.

Additionally, participants noted that the park's open field space tends to be filled with goose and sometimes dog poop. The presence of feces makes for a less pleasant park experience and prevents visitors from walking and sitting in this otherwise unused open space.

"That's another bad thing about the park. In the last few years, you walk around and you find syringes, condoms, everything you can imagine. If you have an accident with a syringe like that...it's dangerous".

Sociocultural

Although participants were concerned about various safety and cleanliness aspects of the park, they also commented on the valuable communal spaces it provides. The most used and enjoyed spaces included the playgrounds and splash pads, for their children and younger family members, as well as the sports fields. Several participants spoke specifically of their enjoyment of baseball, but lamented the fact they were never able to use the spaces themselves, finding the process of reserving the fields to be an obstacle. This has led to questions regarding who the park spaces are accessible to, given that the local residents seldom get to use the sports facilities themselves. One participant said, "For example: if you want a space in the summer to go and play, how do you do it? Where do you go? Where do you ask for permission?... Typically, if you ask someone how to do anything, they will say 'Get on the internet and do it through the city website'. But I don't know, maybe they should also add a plaque where one can call a number and do the request". The inability to access the sporting facilities has led to feelings of being "unwelcome" in the park and has further cultivated the sentiment that the park space was not made for its immediate neighbors.

Additionally, the group noted while there are activities and events at the park, they often are not informed about them. Some of them attributed this to the use of social media and online platforms to publicize them, something participants either do not use or do not see. Participants felt that flyers or the use of a bulletin board would be more effective, emphasizing that they are interested in participating in activities. One participant men-

tioned, “I know there are activities in the park, but I never know about them. And I live next to the park!!”. The group also noted that the park does not offer events or spaces for the elderly. A participant shared, “I would like our neighborhood park to have more attractions for older people so that they can go there... because many elderly people live in the surrounding public housing developments, and they always stay indoors, they never go out.”. Throughout the discussion, it became clear that both the park's specific events and existing activities were a source of interest for the participants, as well as their other community members, but they did not feel welcome to attend.

“I know there are activities in the park, but I never know about them. And I live next to the park!!”

Lastly, the group spoke of the discrimination they experienced in and around the park. The topic of feeling unwelcome due to discrimination was mentioned a total of 13 times in reference to lack of access to sports (2), general discrimination against Hispanic people by white and other brown persons (6), feeling judged (5), and discrimination against women (2). It is important to note that the discrimination against Hispanic individuals was a general experience in the neighborhood and was not limited to the park. Within the park, however, participants described experiences of discrimination while traveling to and visiting with their children. One participant shared, “Over there, in that traffic circle [Pacuska Circle], there was so much discrimination you could feel it”.

Another finding was the gender discrimination experienced by women traveling to the park. One of the participants shared that it is often more difficult to cross the road as a female than a male. They felt that vehicles are more likely to stop for men while they do not do the same for women, even if they are with young children. This contributed to a more negative

experience for female park goers, something that was echoed in the survey findings where no male respondents felt unwelcome in the park, while 14.3% of female respondents did (Figure 24).

“Over there, in that traffic circle [Pacuska Circle], there was so much discrimination you could feel it.”

Map Exercise

In an effort to better visualize participant experiences in the park, we conducted a mapping exercise with participants. We asked the participants two questions: 1) In what part of this map do you spend time, and why? and 2) In what part of this map do you avoid, and why? Each participant was given ten stickers, five green, to indicate areas they spend time and five red, to indicate areas they avoid.

The resulting map echoed many of the sentiments shared in the discussion portion, including participants' enjoyment of the sports fields and natural areas, and their aversion to the traffic circles, pedestrian overpass, and rundown facilities (Figure 27 and 28). The well liked areas were clustered around the beach, the tree-lined pathways, the playground, the track, the baseball fields, and the tennis courts. The most disliked areas centered around the traffic circles and Columbia Road, visually emphasized by the lack of green dots near these areas. This exercise helped the participants, as well as our team, connect the verbal feedback to the physical park spaces, clearly identifying the spaces that need to be addressed in order to encourage residents' park usage.

SUMMARY OF FINDINGS

In terms of park usability, our survey, site walk, and focus group revealed that the park is generally well-used and well-liked by the surrounding communities. However, there are several barriers to increased accessibility that have been uncovered by our analyses. In analyzing our collective findings, we identified

Questions asked:

- 1) In what part of this map do you spend time, and why?
- 2) In what part of this map do you avoid, and why?



Figure 27. Completed map from focus group 1.

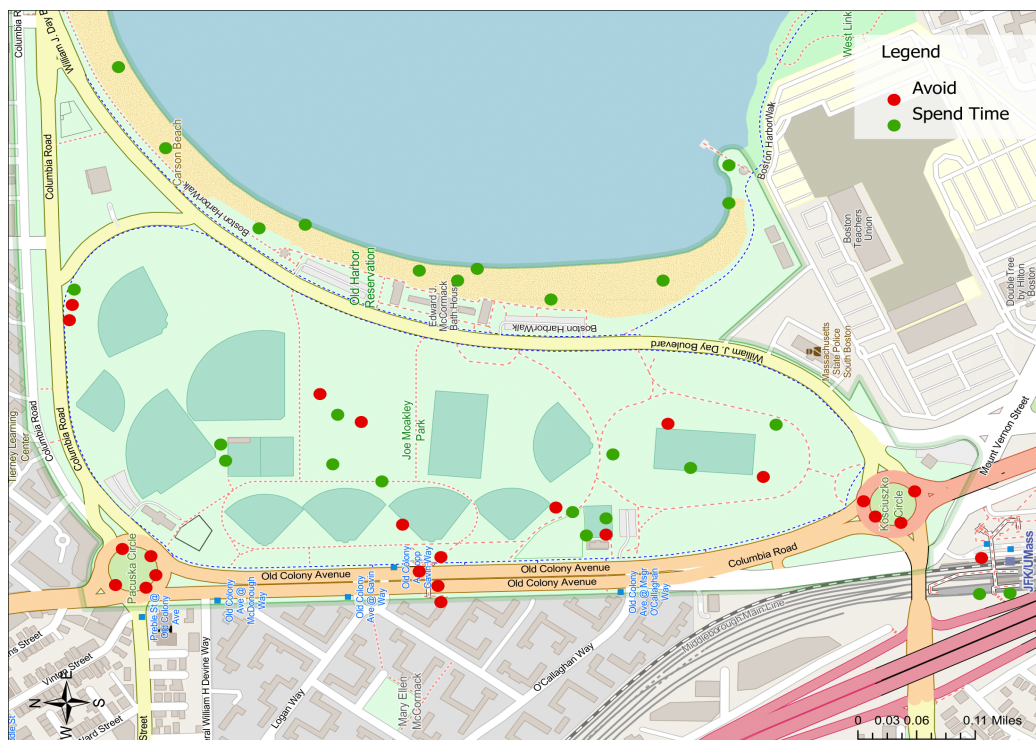


Figure 28. ArcGIS version of the participant map from focus group 1.

a series of overlapping and recurring themes that are most responsible for hindering the accessibility of Moakley Park. The physical infrastructural and sociocultural barriers repeatedly referenced included traffic concerns, poor pedestrian infrastructure, safety issues related to drug use, street harassment, and a lack of inclusive events and activities.

The most glaring physical barrier was the highly trafficked roads surrounding the park, particularly Columbia Road, and the two traffic circles on either end, Kosciuszko Circle and Pacuska Circles. Participants in our focus group shared a mistrust of automobiles when using the crosswalks and traversing the traffic circles. This safety concern around cars is also reflected in our survey, where those who walked to the park experienced higher levels of safety concerns than those who drove. Concerns around walking were shared by several individuals in our focus group. They reflected on their experiences of feeling unsafe crossing the roads due to speeding traffic and an absence of walk signals and well-marked crosswalks. Our team experienced difficulties crossing during our site visits, on both Columbia Road and William J. Day Boulevard, which we attributed to the lack of pedestrian walk signals. Figure 15 and 16 illustrate the density of pedestrian, bike, and vehicle crashes around the traffic circles. Infrastructure conditions around the park serve as a barrier to access. Our site visit and survey results point to the aging and poor sidewalk and crosswalk conditions that add to the danger pedestrians feel when walking to the park. In addition to infrastructure concerns, survey respondents and focus group participants shared misgivings regarding the high-speed limits in the area. This echoes our literature review, which spoke to the negative impacts high-speed limits have (35 mph+) on an area's walkability. Taken together, the poor pedestrian infrastructure and speeding vehicles combine to create an environment in which residents feel increasingly uncomfortable and unsafe walking through to get to the park.

The focus group participants and survey respondents also shared safety concerns regarding park use at night, given the lack of sufficient lighting. The lack of lighting was signaled by neighbors as a contributor to an increase in drug usage and drinking, which has carried over into the daylight hours in the form of general trash and drug paraphernalia. As a result, residents have become increasingly hesitant to use the park given the growing concerns around safety and cleanliness. Our team observed drug paraphernalia in the park and noted the items were concentrated around the Columbia Day overpass and parking area, with fewer items near the north end of the park.

While it was clear park goers were not comfortable in the space after dark, they still enjoyed spending time there during the day and were keen to see communal facilities improved and more inclusive programming added. Participants in both the survey and focus group noted the lack of seating in the park, commenting that an area to sit, rest, or read would be an extremely welcome addition. The lack of seating was something our team quickly noticed during our site visit, as the park is dominated by open space but offers very few gathering areas with seating. As the literature review showed, amenities geared towards group activities, including picnic and grilling areas, facilitate social connection and inclusion. The focus group participants were particularly interested in utilizing the sports fields they felt were inaccessible to them, largely due to the confusion around the booking process. The use of digital platforms for field reservations, as well as publicity tools for events, was a clear deterrent to residents' park usage as they often do not engage with online sources.

In analyzing our findings, we were conscious to consider racial and gender equity as a part of park accessibility. Our findings show BIPOC and women have different experiences from White folks and men in how welcome, safe,

and included they feel in the park. The literature review showed social exclusion and lesser access to green spaces are more prevalent in minority communities. This aligns with findings from the focus group and the survey, which indicated BIPOC residents felt “unwelcome” in and around the park, while the White residents did not. This finding is also reflected to a lesser extent when looking at gender differences, with women reporting feeling more “unwelcome” than men. Further, during the focus group, the Hispanic women participants shared experiences of discrimination not just in the park but around the neighborhood as well, which discourages them from traveling to the park and visiting more often. These findings indicated a distinct difference between individual experiences in and around the park that is tightly linked to race and gender, with the gap between White and Latinx individuals being of particular note. Lastly, the literature showed the quality of green spaces and traffic conditions typically decline when located in underserved neighborhoods. This was echoed by survey respondents and focus group participants, as well as our own observations. Park facilities are in need of better upkeep and in some places replacement. Additionally, traffic conditions need to be improved, including reducing the speed and amount of traffic on the roads, and well maintained pedestrian infrastructure increased.



RECOMMENDATIONS

Recommendations

Our team developed a series of recommendations to support equitable use of Moakley Park and its facilities. We divided our recommendations into three main categories: pedestrian infrastructure and roadway safety, park facility improvements, and inclusive community programming.

PEDESTRIAN INFRASTRUCTURE & ROAD SAFETY IMPROVEMENTS

To ensure safe pedestrian access to Moakley Park, several roadway, sidewalk, and crosswalk improvements should be considered.

Recommendation 1: Reduce Speed Limit

To increase walkability to Moakley Park, traffic speeds on neighboring roadways should be reduced to 25 mph or less. Efforts should be made to enforce the City of Boston's "25 in Boston", which aims to decrease speed limits of City roads to 25 mph to prevent traffic-related injuries and fatalities (Figure 29). The rate of pedestrian fatalities along high-speed roadways typically drops from 20% at 30 mph to 12% at 25 mph ("25 in Boston" 2016). If implemented, new signage should be installed on both Columbia Road (35 mph) and William J. Day Boulevard (30 mph), as well as by the traffic circles (Kosciuszko Circle and Pacuska Circle) announcing the reduced speed limits.

Additionally, the City should install more traffic lights along Columbia Road and William J. Day Boulevard. The lack of traffic signals, such as stop lights, enables cars to travel at increasingly high speeds and makes it difficult for pedestrians to cross safely. Traffic signals have successfully been used in increasing pedestrian, bike, and vehicle safety in Irvine, California. According to the City of Irvine, traffic signals force cars to come to a full stop at pedestrian crossings, ensuring their safe passage ("Traffic Signals" 2015).



Figure 29. "25 in Boston" poster. Source: City of Boston.

Recommendation 2: Install Pedestrian Crosswalk Signals

Pedestrian infrastructure updates are crucial to ensuring walkability. There are many ways to promote walkers' safety, including the installation of speed bumps, additional walk signals, and protected crosswalks and sidewalks. The City of New York has encouraged the use of pedestrian signals, enhanced crosswalks, and curb extensions, as they are low-cost investments that offer substantial improvements to both vehicle and pedestrian safety ("Pedestrian Safety and Projects" n.d.). Additionally, the Federal Highway Administration (FHWA) has created a program called Safe Transportation for Every Pedestrian (STEP), which encourages infrastructure improvements to facilitate pedestrian safety. STEP recommendations include installing walk signage, Rectangular Rapid Flashing Beacons (RRFB) (Figure 30) and Leading Pedestrian Intervals (LPIs) ("Safe Transportation for Every Pedestrian (STEP) | FHWA" n.d.). RPFB's are user-activated LED lights that flash when pedestrians enter the crosswalk and indicate to drivers that they should slow down. The RP-

FBs have been found to drastically increase the rate at which drivers yield to pedestrians, ensuring they can cross safely. Similarly, LPI signals provide pedestrians with three to four more seconds when crossing the road (“Safe Transportation for Every Pedestrian (STEP) | FHWA” n.d.). This additional time has been shown to increase pedestrian safety and reduce collisions. The City of San Francisco Municipal Transportation Authority (SFMTA) has worked to install LPIs throughout the City in an effort to reduce pedestrian-vehicle collisions. The SFMTA noted that potential crashes can be reduced by as much as 60% through the installation of LPIs (“Pedestrian Signal Improvements” 2021). The City of Boston should consider emulating the STEP program in the Moakley Park area in an effort to decrease pedestrian, bike, and vehicle crashes and increase walkability.



Figure 30. RPFb user activated pedestrian cross signal. Source: Federal Highway Association.

FACILITY IMPROVEMENTS IN AND AROUND MOAKLEY PARK

Improving facilities in and around Moakley Park can help increase feelings of safety and cleanliness.

Recommendation 3: Add and Maintain Sharps Containers

In order to address public drug usage, including the safe disposal of needles, we recommend BHN and the City work together to place additional sharps disposal containers for needles and syringes in and around the park. While Moakley Park currently has one sharps container located in the center of the park (Figure 31), we recommend additional ones be placed near Carson Beach and the Columbia Road overpass. The City of Boston already maintains several “Safe Needle and Syringe Disposal” containers, and we recommend that this program be extended into the Moakley Park area (“Safe Needle and Syringe Disposal” 2017). Once implemented, these containers should be regularly emptied and maintained. The installation of additional sharps containers should be paired with robust outreach and engagement efforts with local populations experiencing homelessness and Persons Who Inject Drugs (PWID) to facilitate safe, inclusive, and effective drug awareness and prevention.

In 2018, the NYC Parks Department implemented several successful changes to promote safe disposal of sharps by PWID. Notably, they hired six additional workers to form a syringe waste disposal crew and installed 46 indoor and outdoor syringe collection kiosks within 16 parks with high rates of public injection and syringe litter (“Parks and Recreation: A Comprehensive Response to the Substance Use Crisis” 2020). As of 2020, more than 35,000 syringes have been deposited into these collection kiosks, indicating that the program was successful in keeping syringes out of trash cans and off the ground.

In addition to placing more sharps containers in the park, the National Recreation and Park Association (NRPA) recommends posting clear guidance on reporting sharps litter and drug paraphernalia within community parks, either through a digital form or by calling a phone number (“Parks and Recreation: A

Comprehensive Response to the Substance Use Crisis” 2020). The community reports would be sent directly to the designated clean-up teams, which are typically the Parks Department, a local public health organization, or a third party. We recommend that guidance be posted within and around Moakley Park to

crease park usage and community comfort.

Recently, the City of Portland installed public and accessible restrooms called The Portland Loo, which has been adopted by other cities such as Cambridge, MA (Figure 32) (“Portland Loo” 2023). Unlike Porta Potties, the Portland Loos are connected to public water and sewer lines, which ensure a fresh and clean space



Figure 31. Sharps disposal container in the park.
Source: Brianna Kelly.



Figure 32. Portland Loo installed in Cambridge, MA.
Source: Wikimedia Commons.

ensure that the community is able to take advantage of the City of Boston’s existing sharps reporting program.

Recommendation 4: Add Bathrooms & Trash Cans

According to the literature, the perception of how beautiful, clean, and free of debris parks are can impact park access. Issues of cleanliness have recurred throughout our findings, including in both the focus group and survey. In particular, respondents shared concerns regarding Moakley Park’s public restrooms, noting that the bathrooms have trash scattered across the floors and are often closed or dirty. It is clear that this lack of access to clean public restrooms has deterred park usage. Therefore, we recommend that the park maintain open and clean restrooms in an effort to in-

for relieving oneself. The bathrooms are regularly inspected by employees, ensuring a high level of cleanliness is maintained. We recommend Moakley Park install similar public facilities, with focus placed on maintenance and access. We recognize the financial burden of installing permanent public bathrooms and recommend additional Porta Potties as an alternative. If Porta Potties were to be installed, however, they must be regularly opened to ensure access.

We also recommend the installation of additional trash cans, especially near the Columbia Road overpass and parking lot. Trash in these areas has been a major concern re-



Figure 33. BHN Moakley Park cleanup event. Source: BHN.

peatedly voiced by residents throughout this process. While BHN hosts regular clean-up events (Figure 33), we recommend partnering with additional Massachusetts environmental organizations to host even more community trash collection events. Partnering with an organization like Great Massachusetts Cleanup to clear trash and debris from Moakley Park would encourage residents, park goers, and the general public to care for and maintain the facilities (“Great Massachusetts Clean Up” 2023).

Recommendation 5: Extend Night Lighting

We identified the existing lighting in and around the Moakley Park area (Figure 34). The street lights are primarily located along the main roadways and near the parking lot, basketball court, and track. We recommend that additional lighting be installed throughout the core of the park and that BHN work to encourage the City to extend the streetlight’s nightly hours.

As the Trust for Public Land (TPL) found, in a study called Safer Parks After Dark, the addition of nighttime lighting does not necessarily reduce crime but it does increase individuals’ perception of safety. Further, TPL shared that if comfort levels increase, park spaces do become safer due to the increased park usage overall (Harnik, Donahue, and Thaler 2012).

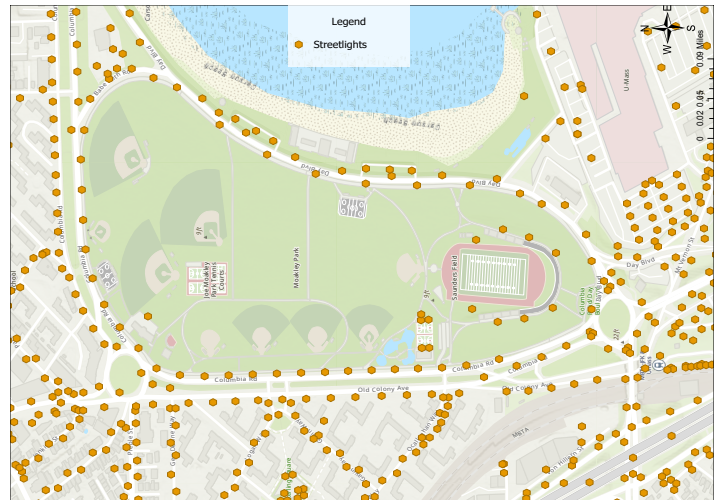


Figure 34. Location of the street lights in and around the park. Source: City of Boston, 2023. Map by Magda Gomez and Amber Siegel.

PROGRAMMING

In order to address sociocultural deterrents, we have developed a series of recommendations to foster a more inclusive park environment.

Recommendation 6: Foster Inclusive Community Spaces

A proactive way to increase social inclusion in park spaces is to offer additional opportunities for involvement in culturally and age-inclusive park-based clubs and organizations. Of particular importance is establishing youth and adult recreational opportunities, as well as options geared toward older individuals. Organizations could include book clubs featuring diverse authors, gardening clubs with sessions hosted in various languages, and even neighborhood walking groups, which would encourage community members to get outside and participate (Figure 35). A study featuring neighborhood parks in New Orleans found that community members who participated in park-based clubs and organizations had a stronger perception of social cohesion (Jennings and Bamkole 2019). The study also found parks with more appealing community amenities, such as gathering spaces and playgrounds, had greater rates of participation (Jennings and Bamkole 2019).

To improve social integration and discourage discrimination based on race and ethnicity, we also recommend offering programs that are appealing to and inclusive of different cultural groups that live around the park. We recommend BHN work with the City of Boston to offer additional free public events in the park, including fitness classes, food truck pop-ups, live music, and movie events. Currently, the City of Boston offers free public fitness classes



Figure 35. Fenway Community Garden in Boston, MA. Source: Wikimedia Commons.

through its Park Fitness Series, which is hosted weekly in Boston's public parks ("Parks Fitness Series" 2018). The City also runs a series of free outdoor movie nights in public parks throughout August and September (Figure 36) ("Parks Movie Nights" 2021). Additionally, we recommend that the fitness classes, movie nights, and any other social events hosted, feature music and media in Spanish to facilitate feelings of welcome for the neighboring Hispanic community.

A physical improvement to facilitate community inclusion is the installation of multilingual signage in the park. As literature has shown, culturally representative signage fosters inclusive feelings for park goers who speak the language. The City of Boston maintains data about the languages spoken in each commu-



Figure 36. Coolidge Corner Theatre at the Rose Kennedy Greenway. Source: Boston.com.

nity. According to the City, the top languages spoken in Dorchester and South Boston are Spanish, followed by Vietnamese, Chinese, and Haitian Creole ("Language and Communications Access" 2016). The park currently has English signage only, excluding a large portion of the neighboring populations. We strongly recommend that signage be added that includes text in Spanish, Vietnamese, Chinese, and Haitian Creole, in addition to English.

Recommendation 7: Conduct Local Community Outreach

A majority of the focus group participants shared that they often do not know about events being hosted in the park. To address this knowledge gap, BHN should implement a community outreach plan incorporating specific strategies to engage with local residents. The National Recreation and Park Association (NRPA) provides guidelines for fostering community trust and engagement, as well as the evaluation of the efficacy of their application (NRPA 2016). The NRPA's guidelines prioritize a bottom-up outreach approach, where the community has an active role in guiding park plans (NRPA 2016). To ensure community inclusion, BHN should work with the community to select a neighborhood representative who will serve as a liaison between the community and the City. The selected individu-

al would assume tasks such as reserving the sports fields for events and working with the City's Parks and Recreation Department to ensure music and movie nights feature community-inclusive media. While there is an online public reservation system for sports facilities, focus group participants noted many local residents do not use the internet in this capacity, and thus are not able to reserve and use these spaces. Additionally, a bulletin board should be installed in a publicly accessible area of the park where weekly schedules could be posted with upcoming events. The use of less technology-heavy mediums would also ensure the inclusion of elderly residents, who are frequently unaware of events and miss out on the amenities offered at the park.

The community outreach must include events specifically geared towards unhoused individuals currently residing in the park. Outreach events should offer resources to connect unhoused persons with housing options and resources, medical treatments, and job training. The City of Atlanta recently implemented a mobile game cart in one of its urban parks, Woodruff Park, staffed by outreach case managers (Figure 37). The cart provides both recreational activities and social services to the community, as they connect unhoused individuals with housing services, as well as PWID with a needle and sharps disposal box and drug addiction services (Madison 2020). The recreational activities facilitate positive connections among park goers, including PWID and those experiencing homelessness. There are several outreach organizations currently operating in Boston to assist individuals experiencing homelessness, including Pine Street Inn and St. Francis House, that BHN could partner with to implement similar programming in the park. Both of these non-profits work to connect unhoused people with job training and personal care resources, while also helping them stabilize their housing situation. Given that these organizations already have experience in and around Boston, BHN should consider partnering with them to bring their

services to the local unhoused populations in Moakley Park.



Figure 37. City of Atlanta's mobile game cart in Woodruff Park. Source: Madison, 2022.

Limitations

One of the limitations of this project is that while English and Spanish are spoken by the members of our team, other represented languages including Haitian Creole, Chinese, and Vietnamese were not. This skewed our results to focus more on the Spanish and English-speaking communities in the study area. Future research should be done in an effort to include additional languages to ensure that there is equitable representation in surveys, focus groups, and other research efforts.

Additionally, we aimed to host separate focus groups for Spanish and English speakers to ensure smooth and open communication between focus group facilitators and members. Due to time and logistical constraints, however, we could not host an English-speaking focus group. This skews our focus group results to be more representative of the Hispanic Spanish-speaking community. While we have data on the diverse Hispanic populations surrounding the park, we are lacking this level of specificity for English-speaking community members, as well as other historically underserved and underrepresented populations in our study area, such as Asian and Black individuals.

Generally, our research engaged more women respondents than any other gender. We received the most responses from women in our survey and our focus group was composed entirely of women. We did not receive as many responses from men and received no responses from transgender or non-binary individuals in our surveys or focus group. Given our lens of equity, we do not think the overrepresentation of women or the specific focus placed on Hispanic residents is a limiting factor, but rather a strength in that it uplifts typically underrepresented individuals in both our findings and recommendations. Lastly, the park and the surrounding neighborhoods are going through many substantial

changes, including two housing redevelopment projects at the Old Colony and Mary Ellen McCormack public housing developments, as well as the proposed Dorchester Bay City development. These development plans may contribute to the gentrification pressures that the neighborhood is already facing. The ongoing gentrification will potentially price out and displace many long-time residents of the area, especially low-income and BIPOC individuals. Even if the housing remains affordable through deed restrictions, other local services and amenities may not stay affordable. Concerns around gentrification were voiced by park goers and residents throughout the research process, and while we were limited in time and scope to discuss gentrification within our project, we recognize the community member's anxiety around the topic. Additionally, we feel strongly that access and equity should be a crucial part of development processes from day one. In order to have the most impact, research projects such as ours should occur when projects are initially proposed. Lastly, we acknowledge that it will take multiple city departments and coordination across housing developments to ensure that displacement does not occur.

Conclusion

Through this project, we developed a deep understanding of both the physical and sociocultural barriers the community faces in accessing Moakley Park. As the research showed, unsafe roadways, poor sidewalks, and lack of inclusive programming have deterred locals from using the park as frequently as they otherwise would. In completing this research project, our team hopes to provide BHN with insights into the specific infrastructural and sociocultural deterrents present, as well as actionable recommendations through which they can address them.

Moakley Park is surrounded by vibrant and diverse neighborhoods and communities, and

we hope that BHN, the City of Boston, and the various governmental agencies with a stake in the area continue to focus on equity, access, and inclusion in their design and decision-making process. We are hopeful that this

report will encourage changes in and near the park in a manner that benefits all park goers, but especially those most in need of a welcoming and inclusive Moakley Park.



From left to right: Shadia Garrison, Kelly Sherman, Alice Brown, Jaye Meakem, Rahul Ramesh, Brianna Kelly, Hannah Gruber, Amber Siegel, Magdalena Gomez, Melissa Peters.

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APPENDICES

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1. Survey Questions: 1.1 English Version

Moakley Park Barriers to Access Neighborhood Survey

Introduction:

Help us make Moakley Park more accessible for everyone!

Share your thoughts by filling out this survey and for a chance to win one of three \$30 Stop & Shop gift cards!

We are graduate students at Tufts University working with Boston Harbor Now in an effort to help make Moakley Park more accessible for all. As community members, we want to recognize your voices, values, and experiences in cultivating a comfortable, accessible, and safe space for a diversity of people and uses.

Please note that this survey is voluntary. This means that you are not obligated to answer any of the questions. If there are any questions that you feel uncomfortable answering, you can skip them. There are no right or wrong answers. Your answers should reflect your personal opinion and experiences on this specific topic. We value your personal experience on this matter. We care about your privacy. Your information will be stored in Qualtrics, a safe platform for collecting data.

1. What is your preferred language?

- a. English
- b. Spanish
- c. Other: _____

2. Have you heard of Moakley Park?

- a. Yes
- b. No

If 'no' JUMP TO QUESTION # 14

3. Have you ever been to Moakley Park?

- a. Yes
- b. No
- c. If no, why not? : _____

If 'no' JUMP TO QUESTION #5 and then #14

4. If yes, how often do you visit Moakley Park?

- a. Daily
- b. A few times a week
- c. Monthly
- d. A few times a year
- e. Once a year
- f. Less than once a year

5. How would you describe the park in a few words?

6. How do you travel to the park? (check all that apply)

- a. Walk
- b. Bike
- c. Bus
- d. Train
- e. Taxi/Uber/Lyft
- f. Car
- g. Other: _____

7. How safe do you feel getting to the park?

- 1 = Very Safe
- 3 = Neutral
- 5 = Very Unsafe

1 2 3 4 5

Please explain your answer in a few words: _____

8. What challenges, if any, do you experience when traveling to the park?

9. Rank the conditions of the following infrastructure around the park.

- 1 = No issues
- 3 = Minor issues
- 5 = Major issues

Crosswalks

1 2 3 4 5

Sidewalks

1 2 3 4 5

Bike Lanes

1 2 3 4 5

Bus Stops

1 2 3 4 5

Parking

1 2 3 4 5

Roads

1 2 3 4 5

Signage in your language

1 2 3 4 5

10. Select the TOP FIVE qualities that you currently like in the park:

- a. Cleanliness
- b. Access (to the park)

- c. Mobility (e.g. wheelchair access, ramps, etc.)
- d. Safety
- e. Nature
- f. Community Events
- g. Sports Opportunities
- h. Kid-friendly Spaces (playgrounds)
- i. Walking Paths
- j. Other:_____

11. Select the TOP FIVE qualities you currently dislike in the park:

- a. Cleanliness
- b. Access (to the park)
- c. Mobility (e.g. wheelchair access, ramps, etc.)
- d. Safety
- e. Nature
- f. Community Events
- g. Sports Opportunities
- h. Kid-friendly spaces (playgrounds)
- i. Walking Paths
- j. Other:_____

13. Please rank your level of agreement with this statement: "I feel welcome in the park."

- 1 = Strongly Disagree
- 3 = Neutral
- 5 = Strongly Agree

1 2 3 4 5

14. Please explain your answer in a few words: _____

If 'no' on question 3 or 4 JUMP HERE:

15. What zip code do you live in? _____

16. What is your age?

- a. 18-19
- b. 20-29
- c. 30-39
- d. 40-49
- e. 50-59
- f. 60+
- g. Do not wish to answer

17. What is your gender?

- a. Woman
- b. Man
- c. Nonbinary
- d. Prefer not to say
- e. Other:_____

18. Which of the following best describes you?

- a. Hispanic
- b. White alone, non-Hispanic
- c. Black or African American alone, non-Hispanic
- d. American Indian and Alaska Native alone, non-Hispanic
- e. Asian alone, non-Hispanic
- f. Native Hawaiian and Other Pacific Islander alone, non-Hispanic
- g. Some Other Race alone, non-Hispanic
- h. Multiracial, non-Hispanic

19. If you are interested in knowing the final results of this study and/or entering the raffle for a chance to win 1 of 3 \$30 Stop & Shop gift cards, please enter your email or phone number below: _____

1.2 Spanish Version

Introducción

¡Ayúdenos a hacer que el Parque Moakley sea más accesible para todos! Comparte tu opinión rellenoando esta encuesta y tendrás la oportunidad de ganar una de las tres tarjetas regalo de 30 \$ de Stop & Shop.

Somos estudiantes de posgrado de la Universidad de Tufts trabajando con Boston Harbor Now en un esfuerzo para ayudar a hacer Moakley Park más accesible para todos. Como miembros de la comunidad, queremos reconocer sus voces, valores y experiencias en el cultivo de un espacio cómodo, accesible y seguro para una diversidad de personas y usos.

Tenga en cuenta que esta encuesta es voluntaria. Esto significa que no está obligado a responder a ninguna de las preguntas. Si hay alguna pregunta que le incomoda responder, puede saltársela. No hay respuestas correctas o incorrectas. Sus respuestas deben reflejar su opinión personal y sus experiencias sobre este tema concreto. Valoramos su experiencia personal en este asunto. Nos preocupa su privacidad. Tu información se almacenará en Qualtrics, una plataforma segura de recogida de datos.

1. ¿Cuál es su lengua preferida?

- a. Inglés
- b. Español
- c. Otros:

2. ¿Has oído hablar de Parque Moakley?

- a. Sí
- b. No
- c. No estoy seguro

Si 'no' PASE A LA PREGUNTA #14

3. ¿Has estado alguna vez en Parque Moakley?

- a. Sí
- b. No

Si no, ¿por qué no? _____

Si 'no' PASE A LA PREGUNTA #5 y luego a la #14

4.. En caso de que sí, ¿con qué frecuencia visita el Parque Moakley?

- a. A diario
- b. Algunas veces a la semana
- c. Cada mes
- d. Algunas veces al año
- f. Uno vez al año
- g. Menos de una vez al año

5. ¿Cómo describiría el parque en pocas palabras?

6. ¿Cómo llegas al parque? (marca todas las casillas que correspondan)

- a. A pie
- b. Bicicleta
- c. Bus
- d. Tren
- e. Taxi/Uber/Lyft
- f. Carro/Auto
- g. Otros: _____

7. ¿Te sientes seguro al llegar al parque?

- 1 = Muy seguro
- 3 = Neutro
- 5 = Muy inseguro

1 2 3 4 5

Explique en pocas palabras su respuesta a la pregunta anterior: _____

8. ¿Qué dificultades, si las hay, experimenta cuando viaja al parque?

9. A continuación, te pedimos que califiques las condiciones de las siguientes infraestructuras del parque. En esta escala, 1 = Sin problemas; 3 = Problemas menores; y 5 = Problemas importantes

Rango (1-5)

Pasos de peatones

1 2 3 4 5

Aceras/veredas

1 2 3 4 5

Vías para bicicletas

1 2 3 4 5

Paradas de buses

1 2 3 4 5

Estacionamiento para vehículos

1 2 3 4 5

Carretera

1 2 3 4 5

Señalización en su idioma

1 2 3 4 5

10. Seleccione las CINCO cualidades que más le gustan actualmente del parque

- a. Limpieza
- b. Acceso (al parque)

- c. Movilidad (acceso en silla de ruedas, rampas, etc.)
- d. Seguridad
- e. Naturaleza
- f. Eventos comunitarios
- g. Oportunidades deportivas
- h. Espacios para niños (parques infantiles)
- i. Rutas de senderismo
- j. Otros: _____

11. Seleccione las CINCO cualidades que menos le gustan del parque:

- a. Limpieza
- b. Acceso (al parque)
- c. Movilidad (acceso en silla de ruedas, rampas, etc.)
- d. Seguridad
- e. Naturaleza
- f. Eventos comunitarios
- g. Oportunidades deportivas
- h. Espacios para niños (parques infantiles)
- i. Rutas de senderismo
- j. Otros: _____

13. Por favor, clasifique su nivel de acuerdo con esta afirmación: "Me siento bienvenido en el parque".

- 1 = Totalmente en desacuerdo
- 3 = Ni de acuerdo ni en desacuerdo
- 5 = Totalmente de acuerdo

1 2 3 4 5

14. Explique en pocas palabras su respuesta a la pregunta anterior: _____

Si 'no' en la pregunta 3 y 4 SALTA AQUÍ:

15. ¿En qué código postal vive? _____

16. ¿Cuál es su edad?

- a. 18-19
- b. 20-29
- c. 30-39
- d. 40-49
- e. 50-59
- f. 60+
- g. No desea contestar

17. ¿Cuál es su género?

- a. Masculino
- b. Mujer
- c. No Binario
- d. Otros: _____

18. ¿Cuál de las siguientes opciones le describe mejor?

- a. Hispano
- b. Blanco solo, no Hispano
- c. Negro o Afroamericano solo, no Hispano
- d. Indios Americanos y Nativos de Alaska solos, no Hispanos
- e. Asiáticos solos, no Hispanos
- f. Nativo de Hawai y otras Islas del Pacífico solo, no Hispano
- g. Alguna Otra Raza Solo, no Hispano
- h. Multirracial, no Hispano

19. Si está interesado en conocer los resultados finales de este estudio y/o participar en el sorteo de 1 de las 3 tarjetas regalo de 30 \$ de Stop & Shop, introduzca su correo electrónico o número de teléfono a continuación: _____

Moakley Park Area



<http://bit.ly/3YCUG7d>

Tell us what YOU
think!
Take our Survey!

Tufts University students, in partnership with Boston Harbor Now, are conducting a survey to better understand resident's opinions about getting to and spending time in the park.



Be entered for a chance to
win 1 of 3 \$30 Stop and Shop
GIFT CARDS!

Tufts

Urban and
Environmental
Policy and Planning

Área del Parque Moakley



<http://bit.ly/3YCU67d>

**Díganos lo que
piensa
respondiendo
nuestra encuesta!**

Los estudiantes de la Universidad de Tufts, en colaboración con Boston Harbor Now, están realizando una encuesta para conocer mejor las opiniones de los residentes sobre cómo llegar al parque y pasar tiempo en él.



**¡Participa para tener la
oportunidad de ganar 1 de las 3
TARJETAS DE REGALO de \$30
de Stop and Shop!**

Tufts

Urban and
Environmental
Policy and Planning

3. Focus Group Script: 3.1 English Version

Timing: 90 minutes

Materials (Tufts Team to bring):

- 10 small handout maps
- Butcher paper (for group norms)
- Sharpies
- 10 plain white envelopes
- 1 large map
- Labels
- Tripod
- Cookies

Compensation: Food/Drink; Raffle Entry (chance to win a \$30 Stop and Shop gift card)

Name tags: Invite participants to pick up their name tag (with name and participant number already written on them) as they enter.

Food/Drink: Invite participants to grab food/drinks as they enter and note they are welcome to grab additional snacks at any point. Also, they are free to excuse themselves for the restroom/for any other reason at any time.

(5 minutes) Introduction/Consent

We are graduate students at Tufts University working with Boston Harbor Now (BHN) in an effort to help make Moakley Park, Carson Beach, and the surrounding area more accessible for all. As community members, we want to recognize your voices, values, and experiences in cultivating a comfortable, accessible, and safe space for a diversity of people and uses. Findings from this session, along with survey results and other transportation data, will assist BHN in advocating and designing for equitable access to the parks, their existing and future facilities and ongoing programming.

Please note that this focus group is voluntary and you are free to leave at any point during this session. This means that you are not obligated to answer any of the questions. If there are any questions that you feel uncomfortable answering, you can skip them. There are no right or wrong answers. Your answers should reflect your personal opinion and experiences on this specific topic. We value your personal experience on this matter. We care about your privacy and will only share our findings in aggregate.

Our agenda will go as follows:

1. Introductions (5 minutes)
2. Group Norms (5 minutes)
3. Establishing Sense of Place (20 minutes)
4. Mapping Activity (15 minutes)
5. Break (5 minutes)
6. Debrief: Mapping Activity (10 minutes)
7. Understanding Sense of Belonging (20 minutes)
8. Wrap up (5 minutes)

Facilitator/Participant Introductions

Let each person answer A-C and then move on to the next

- A. Name
- B. Pronouns (if they want to share)
- C. Where do you live?

(5 minutes) Group Norms

We would like to establish some group norms prior to beginning the session. We would like to ask anyone that is comfortable to share some best practices for this discussion. Some examples are:

- Treat other participants with respect
- Listen before responding
- Give everyone the chance to speak/respond
- Be open minded
- Everything shared in this room will be kept confidential (in other words: avoid identifying participants individually outside of this session)

(20 minutes) Establishing Sense of Place

Each question will be posed one at a time (e.g. 2 followed by 2a) and participants will be given the chance to answer before moving on to the next person

1. Think about your favorite park. Tell us about it and what you like to do there! *Let each participant think for a moment prior to asking them to share; Have each person share prior to moving on to the next*

2. Now think about Moakley Park! *Let participants think for a moment before asking a and b.*

a. Do you go to Moakley Park? *Ask participants to raise their hands if "yes"; ask i and ii in follow-up*

i. Why do you go to the park?

ii. What's your favorite thing to do there? Why?

b. If you do not go to the park, why not? - *Ask participants who did not raise their hands for question "a" to respond*

3. Who do you typically go to the park with (friends, family, alone)? - *Ask 3 and 3a at the same time and then let each participant answer*

a. What's your favorite thing to do in the park with whoever you most frequently go with?

4. How do you get there (walk, drive, bus, bike, etc) and what makes it challenging (crosswalks, sidewalks, traffic, signage) to travel to the park that way? - *Let each participant answer (share prompt/examples as needed)*

a. Prompts/Examples: Is parking an issue on weekends? Is walking difficult during rush hour?

(15 minutes) Map Exercise: Think, Write, Share

We are now going to complete a short interactive exercise. All of you will be invited to place stickers and sticky notes onto a shared map based on specific guidance we provide and 2 questions we ask.

We will be asking you 2 questions regarding the area depicted on the map. We will give you 5 stickers to place onto the map in response to the questions. The sticky notes can be used to explain your sticker placement. The smaller map can be used to think about your responses prior to placing your stickers onto the large map. Stickers should not be placed onto the smaller map.

The map includes all of Moakley Park and Carson Beach as well as Mary Ellen McCormack Housing Development, the JFK and Andrew's T Stations and the 2 roundabouts beside the park.

Questions:

1. Where on this map do you spend time? Why? Use a green sticker to indicate the places you spend time. Use the sticky notes to explain sticker placement in a few words.
2. Where on this map do you avoid? Why? Use a red sticker to indicate the places you avoid. Use the sticky notes to explain sticker placement in a few words.

Now take a few minutes to consider your smaller map and where you might place your stickers for questions 1 and 2. Again, stickers will go on the larger map only, nothing goes on the small map. Wait a few minutes...Now please take your stickers and sticky notes and place them onto the larger shared map.



(5 minutes) Session Break

Time for participants to take a dedicated bathroom/snack/phone break etc.

***We can use this time to review the map and formulate our debrief accordingly*

(10 minutes) Map Debrief

Thank you for participating in the interactive mapping exercise! We would now like to review the data points you shared with us. Take a moment to look at the map you all created and read over the sticky notes.

1. Why do you like to spend time in the locations you marked?
 - a. What feelings do you associate with these areas?
2. Why do you avoid the areas you marked?
 - a. What feelings do you associate with these areas?
 - b. What would make you want to spend time in these areas? And why?

(20 minutes) Understanding Sense of Belonging: Reflecting on our mapping exercise

We would like to better understand your levels of comfort and sense of belonging in Moakley Park. *Each question will be posed one at a time (e.g. 2a, followed by i/ii) and participants will be given the chance to answer before moving on to the next person*

1. Do you feel comfortable at Moakley Park? If not, why? - *Let each participant answer prior to asking follow-ups (let whoever feels comfortable/has a response to i/ii share).*
 - a. What would make you feel more welcome?
2. We heard from other community members that they do not always feel welcome at Moakley Park. Why do you think that is? *Let each participant answer prior to asking follow-ups (let whoever feels comfortable/has a response to a share).*
 - a. Does your experience differ or align with that? And why?
3. What program(s) would make you visit Moakley Park more often? e.g. Cookout, Food Trucks, Cultural Festival. *Let each participant answer prior to asking follow-ups (let whoever feels comfortable/has a response to i/ii share).*
 - a. Why do you want to see these things?
 - b. How would these changes make you feel? More welcome? More interested in using the space?

(5 minutes) Questions and Final Thoughts

Thank you everyone for taking the time to participate in our focus group. We greatly appreciate your time and contributions to this project. We enjoyed getting to talk with you all and are happy to share our final report with you if you wish. Don't forget to enter the \$30 Stop and Shop gift card raffle if you would like, you can leave either your email or phone number and we will contact you if you are selected! Feel free to take any of the remaining food/drinks, you are welcome to bring some home! Thank you again and let us know if you have any questions!

3.2 Spanish Version

Duración: 90 minutos

Compensación: Comida/bebida; participación en un sorteo (tarjeta regalo de \$30 de Stop and Shop)

Etiquetas con nombre: Invitar a los participantes a recoger su etiqueta identificativa (con el nombre y el número de participante ya escritos en ella) al entrar.

Comida/bebida: Invitar a los participantes a que tomen comida/bebida al entrar y dígalos que pueden tomar otros tentempiés en cualquier momento. Además, pueden excusarse para ir al baño o por cualquier otro motivo en cualquier momento.

(5 minutos) Introducción/Consentimiento

Somos estudiantes de Tufts University, y estamos trabajando con Boston Harbor Now (BHN) en un esfuerzo para ayudar a hacer Moakley Park, Carson Beach, y el área circundante más accesible para todos. Queremos reconocer sus voces, valores y experiencias en el cultivo de un espacio cómodo, accesible y seguro para una diversidad de personas y usos, especialmente porque ustedes son parte de la comunidad. Las conclusiones de esta sesión, junto con los resultados de la encuesta y otros datos sobre transporte, ayudarán al BHN a defender y diseñar un acceso equitativo a los parques, a sus instalaciones actuales y futuras y a la programación en curso.

Tenga en cuenta que este grupo de discusión es voluntario y que puede abandonarlo en cualquier momento de la sesión. Esto significa que no está obligado a responder a ninguna de las preguntas. Si se siente incómodo respondiendo a alguna pregunta, puede saltársela. No hay respuestas correctas o incorrectas. Sus respuestas deben reflejar su opinión personal y sus experiencias sobre este tema concreto. Valoramos su experiencia personal en este asunto. Nos preocupa su privacidad y sólo compartiremos nuestros resultados en conjunto.

Nuestro orden del día será el siguiente:

1. Presentaciones (5 minutos)
2. Normas del grupo (5 minutos)
3. Establecimiento del sentido de pertenencia (20 minutos)
4. Actividad cartográfica (15 minutos)
5. Pausa (5 minutos)
6. Informe: Actividad cartográfica (10 minutos)
7. Comprender el sentimiento de pertenencia (20 minutos)
8. Conclusión (5 minutos)

Presentaciones del facilitador/participante

Que cada persona responda de la A a la C y luego pase a la siguiente

- A. Nombre
- B. Pronombres (si quieren compartirlos)
- C. ¿Dónde vives?

(5 minutos) Normas del grupo

Nos gustaría establecer algunas normas de grupo antes de comenzar la sesión. Nos gustaría

para este debate. Algunos ejemplos son:

- Tratar a los demás participantes con respeto
- Escuchar antes de responder
- Dar a todos la oportunidad de hablar/responder
- Mantener una actitud abierta
- Todo lo que se comparta en esta sala será confidencial (en otras palabras: evite identificar a los participantes individualmente fuera de esta sesión).

(20 minutos) Establecer el sentido de pertenencia

Se planteará una pregunta a la vez (es decir, a la pregunta 2 le seguirá una pregunta 2a) y se dará a los participantes la oportunidad de responder de a uno, antes de pasar a la siguiente persona

1. Piense en su parque favorito. Háblenos de él y de lo que le gusta hacer ahí. *Deje que cada participante piense un momento antes de pedirle que comparta; Haga que cada persona comparta antes de pasar a la siguiente*
2. Piensa ahora en el Parque Moakley. *Deje que los participantes piensen un momento antes de preguntar a y b*
 - a. ¿Vas al Parque Moakley? *Pida a los participantes que levanten la mano si la respuesta es "sí"; pregunte i y ii a continuación*
 - i. ¿Por qué vas al parque?
 - ii. ¿Qué es lo que más te gusta hacer allí? ¿Por qué?
 - b. Si no va al parque, ¿por qué no? - *Pida a los participantes que no levantaron la mano en la pregunta "a" que respondan*
3. ¿Con quién suele ir al parque (amigos, familia, solo)? - *Pregunte 3 y 3a al mismo tiempo y luego deje que cada participante responda*
 - a. ¿Qué es lo que más te gusta hacer en el parque con esa persona/esas personas?
4. ¿Cómo te vas al parque (caminando, en carro, en bus, en bicicleta, etc.) y qué dificultades (pasos de peatones, aceras, tráfico, señalización) encuentras en el camino para ir al parque de esa manera? - *Deje que cada participante responda (comparta las indicaciones y los ejemplos que sean necesarios).*
 - a. Indicaciones/Ejemplos: ¿Es difícil parkear los fines de semana? ¿Es difícil caminar en hora punta?

(15 minutos) Ejercicio de mapa: Pensar, escribir, compartir

Ahora vamos a realizar un breve ejercicio interactivo. Se les invitará a todos a colocar stickers y notas adhesivas en un mapa compartido basándose en las orientaciones específicas que les demos y en 2 preguntas que les hagamos.

Les haremos 2 preguntas sobre la zona representada en el mapa. Les daremos 5 stickers para que las coloquen en el mapa en respuesta a las preguntas. Las notas adhesivas pueden utilizarse para explicar la colocación de las pegatinas y el mapa más pequeño para reflexionar sobre las respuestas antes de colocar los stickers en el mapa grande. Los stickers no deben colocarse en el mapa pequeño.

El mapa incluye todo Moakley Park y Carson Beach, así como Mary Ellen McCormack, las estaciones de metro JFK y Andrew's y las dos rotondas situadas junto al parque.

Preguntas:

1. ¿En qué parte de este mapa pasas más tiempo? ¿Por qué? Utiliza el sticker verde para indicar los lugares en los que pasas el tiempo. Utiliza las notas adhesivas para explicar en pocas palabras por que pusiste el sticker ahí.
2. ¿Qué lugares de este mapa evitas? ¿Por qué? Utiliza el sticker rojo para indicar los lugares que evitas. Utiliza las notas adhesivas para explicar en pocas palabras la colocación de las pegatinas.

Ahora tómate unos minutos para pensar en tu mapa más pequeño y en dónde podrías colocar tus stickers para las preguntas 1 y 2. De nuevo, los stickers irán en el mapa más pequeño. De nuevo, los stickers sólo irán en el mapa más grande, nada va en el mapa pequeño. Espera unos minutos... Agarre sus stickers y notas adhesivas y colócalas en el mapa compartido más grande.



(5 minutos) Pausa de la sesión - Tiempo para que los participantes se tomen un descanso para ir al baño, comer, hablar por teléfono, etc.

***Podemos utilizar este tiempo para revisar el mapa y formular nuestro informe en consecuencia.*

(10 minutos) Informe sobre el mapa

Gracias por participar en el ejercicio de cartografía interactiva. Ahora nos gustaría repasar los datos que han compartido con nosotros. Tómense un momento para mirar el mapa que han creado y leer las notas adhesivas.

1. ¿Por qué te gusta pasar tiempo en los lugares que has marcado?
 - a. ¿Qué sentimientos asocias a estas zonas?
2. ¿Por qué evitas las zonas que has marcado?
 - a. ¿Qué sentimientos asocias a estas zonas?
 - b. ¿Qué te haría querer pasar tiempo en estas zonas? ¿Por qué?

(20 minutos) Comprender el sentido de pertenencia: Reflexionando sobre nuestro ejercicio de mapeo

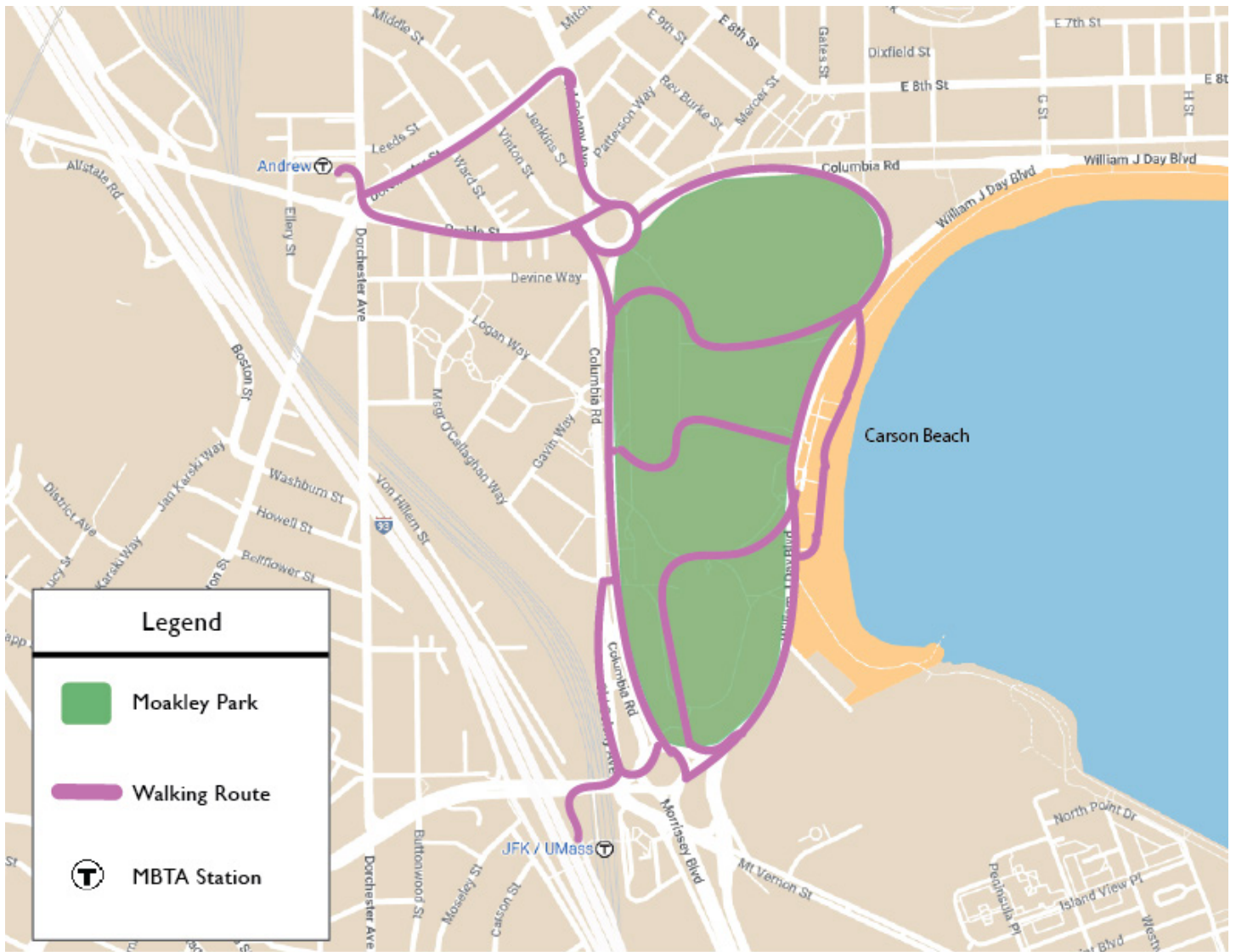
Nos gustaría entender mejor sus niveles de comodidad y sentido de pertenencia en Moakley Park. *Cada pregunta se planteará de a una (es decir, 2a, seguida de i/ii) y se dará a los participantes la oportunidad de responder antes de pasar a la siguiente persona.*

1. ¿Se siente cómodo en Moakley Park? En caso de que no, ¿por qué? - Deje que cada participante responda antes de hacer preguntas de seguimiento (deje que quien se sienta cómodo/tenga una respuesta a i/ii comparta)
 - a. ¿Qué le haría sentirse más bienvenido?
2. Otros miembros de la comunidad nos han dicho que no siempre se sienten bienvenidos en Moakley Park. ¿A qué cree que se debe? *Deje que cada participante responda antes de hacer preguntas de seguimiento (deje que quien se sienta cómodo/tenga una respuesta comparta)*
 - a. ¿Su experiencia difiere o coincide con la suya? ¿Por qué?
3. ¿Qué programa(s) le haría(n) visitar el Parque Moakley más a menudo? Por ejemplo, comida al aire libre, camiones de comida, festival cultural. *Deje que cada participante responda antes de hacer preguntas de seguimiento (deje que quien se sienta cómodo/tenga una respuesta a i/ii la comparta)*
 - a. ¿Por qué quieres ver estas cosas?
 - b. ¿Cómo te harían sentir estos cambios? ¿Más bienvenido? ¿Más interesados en utilizar el espacio?

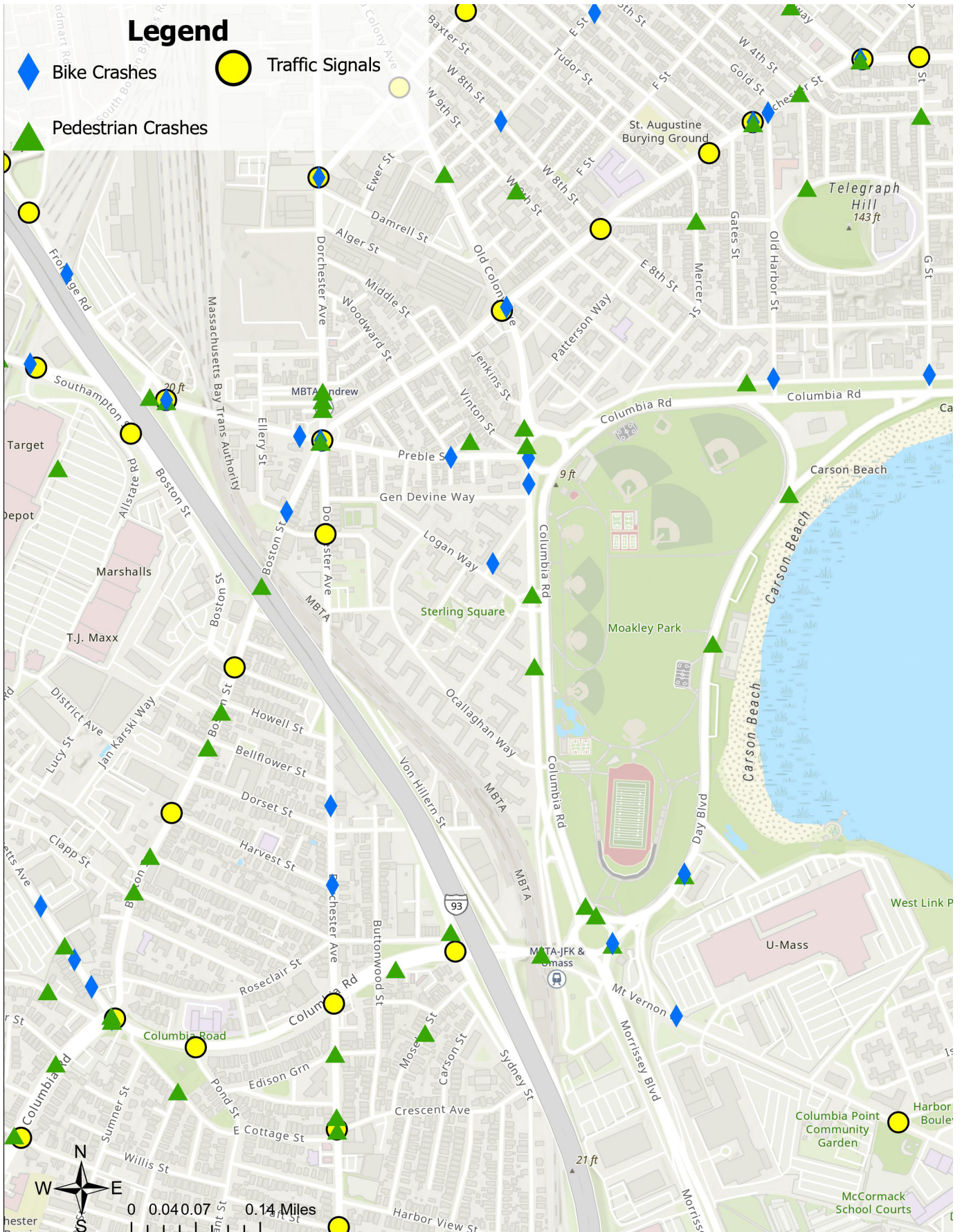
(5 minutos) Preguntas y Reflexiones Finales:

Gracias a todos por dedicar su tiempo a participar en nuestro grupo de discusión. Apreciamos enormemente su tiempo y su contribución a este proyecto. Hemos disfrutado hablando con todos ustedes y estaremos encantados de compartir nuestro informe final con ustedes si lo desean. No olviden participar en el sorteo de una tarjeta regalo de 30 dólares de Stop and Shop si lo desean. Pueden dejar su dirección de correo electrónico o su número de teléfono y nos pondremos en contacto con ustedes si resultan seleccionados. ¡Siéntase libre de tomar cualquiera de los alimentos / bebidas restantes, que son bienvenidos a llevar algo a casa! Gracias de nuevo y haznos saber si tienes alguna pregunta.

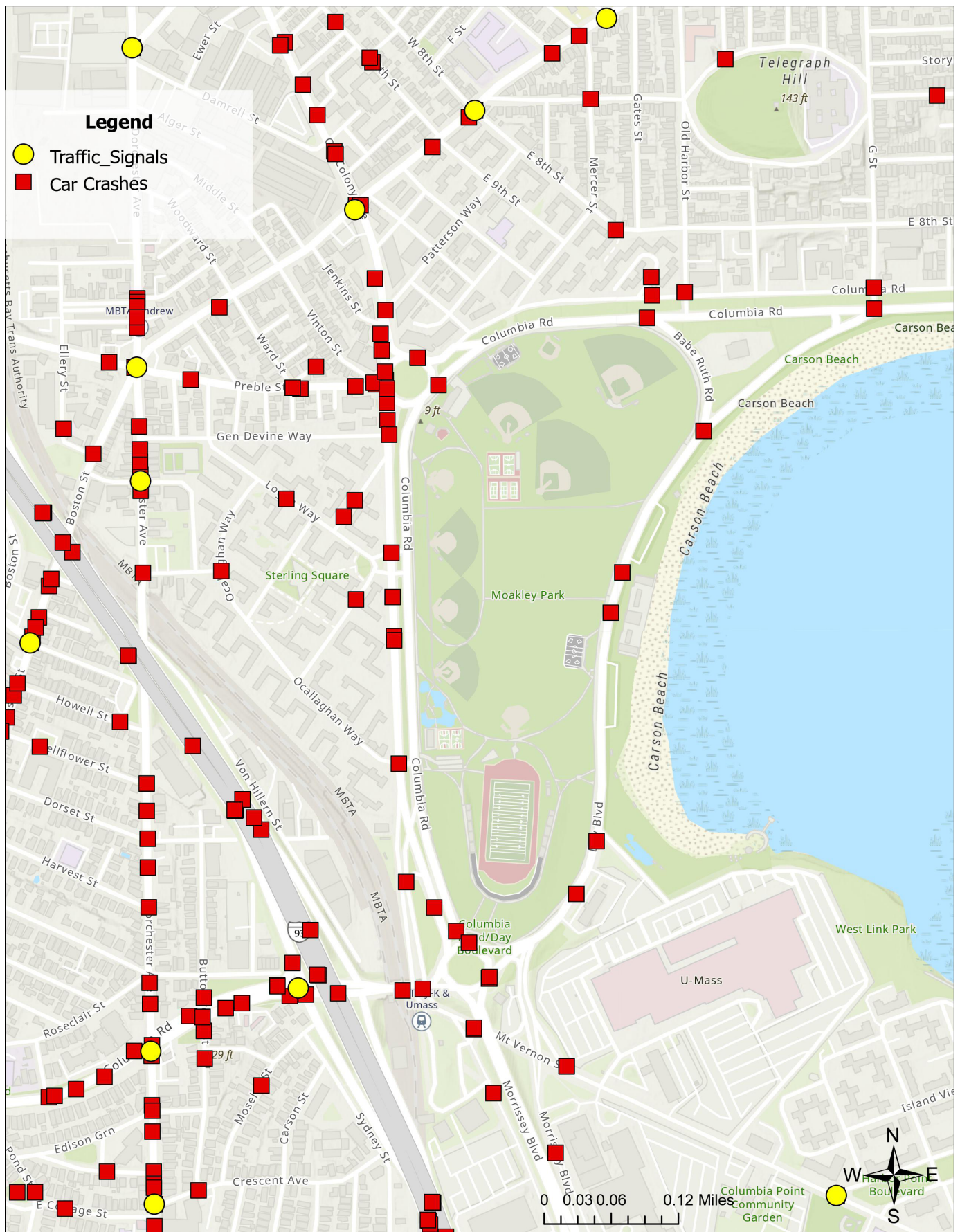
4. Maps: 4.1 Initial Site Visit Route



4.2 Pedestrian, Bike Crashes, & Traffic Lights



4.3 Vehicle Crashes & Traffic Lights

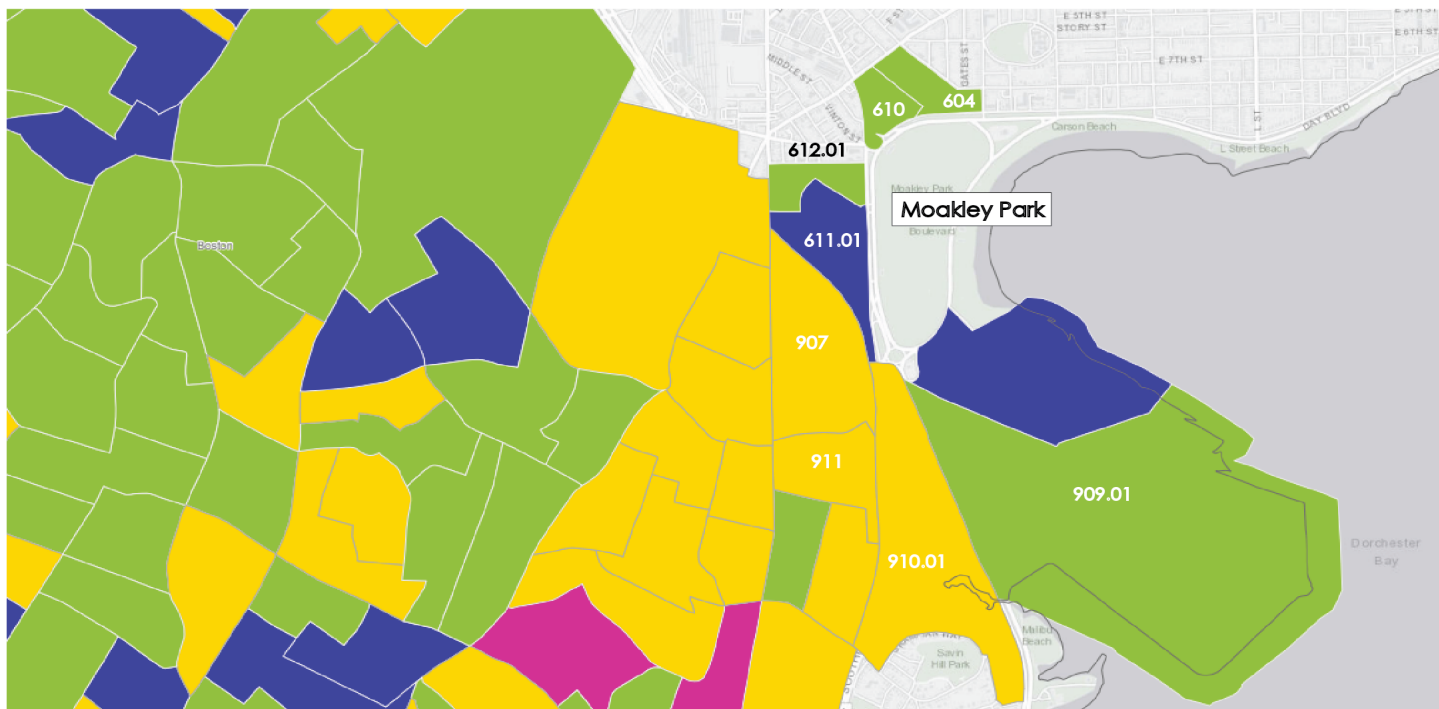


4.4 Streetlights



4.6 Environmental Justice Map

2020 Environmental Justice Neighborhoods



- Minority: the block group minority population is $\geq 40\%$, or the block group minority population is $\geq 25\%$ and the median household income of the municipality the block group is in is $< 150\%$ of the Massachusetts median household income
- Minority and Income
- Minority and English isolation
- Minority, income and English isolation

5. Initial Site Visit Notes: 5.1 Observations

Notes on our observations after our first site visit to Moakley Park.

Type	Observation	Notes
Physical/Infrastructural	No bikers	Individuals may not be comfortable biking in the area
Physical/Infrastructural	No wayfinding at T stops for the park	No signage to help direct people to the park
Physical/Infrastructural	Bluebikes near JFK/UMASS and Andrew	
Physical/Infrastructural	No bike racks that hold more than 5 bikes	
Physical/Infrastructural	No protected bike lanes	
Physical/Infrastructural	Run-down sidewalks	Not wheelchair or elderly friendly
Physical/Infrastructural	Unprotected pedestrian crosswalks	
Physical/Infrastructural	Crosswalks with no signage	Less likely that cars will slow down for people trying to cross
Physical/Infrastructural	Few trash cans	Trash cans located within the park but not near peripheral
Physical/Infrastructural	Lack of benches	
Physical/Infrastructural	Lack of shade	
Physical/Infrastructural	Few water stations	Not in use due to season
Physical/Infrastructural	No designated area for pets	
Physical/Infrastructural	Lack of lights within the park	Only noticed lights surrounding the stadium
Physical/Infrastructural	Speeding cars	Makes it difficult to cross street
Physical/Infrastructural	Lack of walk signals	
Sociocultural	Police	Witnessed three cars get pulled over in Pacuska Circle

5.2 Conversations

Notes on the conversations we had during our initial site visit to Moakley Park.

Type	Observation	Notes
Sociocultural	Lowered enrollment numbers in local soccer program	Covid-19 and gentrification have impacted enrollment. Young couples and single people are moving to the area, displacing families and children.
Sociocultural	White park users "Too whitey" - Quote by park goer	There white park users that don't reflect the demographics of the surrounding area of the park, meaning they might come from other neighborhoods.
Physical/Infrastructural	People get to the park via car	If they are driving, it's likely they do not live in the housing developments near the park.
Sociocultural	Feeling unwelcome	A feeling of judgment for speaking in Spanish or playing music around white park users.
Sociocultural	Going to park is often a group activity	People from the public housing communities feel more comfortable visiting the park in groups rather than alone.
Sociocultural	Interest in more community events and programming	People are more likely to visit the park if there are activities to do there.
Physical/Infrastructural	The park is visually unappealing	The park does not feel inviting due to the way it looks.
Sociocultural	Some long-time residents of the nearby housing developments have never been to the park or beach.	An example of how uninviting the park is for these people.
Sociocultural	"The park is not for us"	
Sociocultural/Physical	Seasons don't affect park use	People still don't use the park when the weather is nice.

Physical/Infrastructural	Lack of shade; would be interested in a pool	It seems people would like an attraction at the park that would entice them enough to visit.
Sociocultural	History of racism in South Boston	The neighborhood used to be majority Italian-Irish until immigrants started moving to the area. There are videos of BIPOC people in South Boston being harassed by white people on the Internet.

