EXPLORING REPARATIONS THROUGH URBAN FREEWAY REMOVALS

NATIONAL SYSTEM OF INTERSTATE AND DEFENSE HIGHWAYS

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ACKNOWLEDGMENTS

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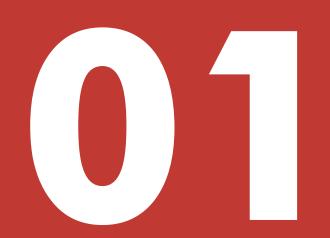
Detroit's East Side, Looking Over Black Bottom, 1933. Photo Credit: Detroit News rchive, Retrieved at Detroitnews.com, https://www.detroitnews.com/pictureallery/news/local/detroit-city/2021/03/24/detroit-black-bottom-photoallery/4764312001/ This thesis is dedicated to those who have been displaced or negatively impacted in the name of freeway construction and urban renewal across the United States as a means of racial segregation through racist policymaking and urban planning.

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O1 ABSTRACT

For over half a century, urban freeways have drastically transformed the urban landscape of cities across the world, especially in North America. With increased automobile dependence and the dawn of the 1956 Federal-Aid Highway Act, freeways began appearing in cities across the United States allowing for fast and efficient auto routes for commuters. While the widespread implementation of freeways in cities has allowed ease of transportation for drivers, it often came at the cost of dividing and demolishing communities. In recent years, urban freeways, many of which are aging and need to be replaced have been facing increasing criticism for the damage they have caused to diverse, integrated communities, especially African American communities. This thesis investigation intends to propose the removal of I-375 through a communityinformed, participatory lens that is centered around providing reparations to African American Detroiters.

Through the analysis of MDOT's I-375 Reconnecting Communities project, an improved design intervention at the urban scale can be informed. This may be achieved through a mixed qualitative/quantitative methodology that includes attending community engagement events, interviews, and various site analysis strategies. While the general community response towards MDOT's project has been overwhelmingly negative, with a significant number of residents calling for a redesign, the limitations and shortcomings of the project additionally will inform the design proposal of



the thesis investigation. In conclusion, an improved proposal for the removal of I-375 can be implemented based on community needs and reparations, identified through the shortcomings and community response to the MDOT I-375 Reconnecting Communities Project.



Figure 1.1 Construction of 1-35E, 1961. Photo Credit: Tom Dillard /The Dallas Morning News, Retrieved at Wordpress.com, 2024, panethos.wordpress.com/wp-content/ uploads/2018/04/construction_1961.jpg. Accessed 24 Apr. 2024.



1.1 THESIS STATEMENT

new, uncommon approach seen in cities to deal with old infrastructure, reparations, and restorative justice. In general, best practices involving improvements to the urban freeway should strive to create a safe walkable environment, give back to African Americans who were displaced or negatively impacted by freeway construction, and lay the groundwork that provides a more prosperous future to those who were displaced or negatively impacted. More specifically, this can include the creation of new greenspaces, bike lanes, and large, walkable sidewalks, planting the seeds for new businesses to flourish in the area. The city of Rochester is facing a similar case as Detroit. Rochester has been removing its Inner Loop freeway for many of the same reasons Detroit plans to remove I-375. "Rochester has already reconstructed the eastern section of the Inner Loop close to the Strong Museum of Play, where apartment complexes, bike lanes, and some businesses have sprouted in its place. Similar plans are being discussed for the Inner Loop's north end" (Pressley, 2023). Since this project is relatively new and its next phase is ongoing, it is difficult to know how these initiatives have impacted African Americans directly. The walkability, urban scale of the boulevard, and the emergence of new businesses in the area serve as a hopeful reminder that Detroit can get things right with its I-375 removal.

Introduction This thesis investigates reparations / restorative justice through improvements to urban freeways on an urban scale, specifically investigating the I-375 Reconnecting Communities Project that the Michigan Department of Transportation (MDOT) is proposing. Reparations/ restorative justice are an important way forward that involves initiatives/ interventions that mitigate or partially restore harms caused by urban renewal and freeway construction. Background Historically speaking, urban freeways have a controversial past. While convenient for commuters and motorists, urban freeways have been known to threaten the urbanity of cities and often were constructed as a part of a larger system of urban renewal. During the 1950s and 1960s, cities across the United States saw freeways and urban renewal initiatives planned and constructed disproportionately through low-income, minority, and predominantly African American communities. This was not a coincidence, as racist policymakers, urban planners, and government officials not only allowed this to happen but often directly facilitated these interventions. Ithough freeway improvements have been occurring for a number of decades now, they are still a relatively

Intent and Research Questions

The intent of this thesis investigation is to gain an indepth understanding of the MDOT I-375 Reconnecting Communities Project, the design drivers behind this project, and the community engagement/community response to the project. From there, the proposal of a more holistic, restorative design intervention that addresses the shortcomings and areas of concern with the MDOT proposal can be made. Through a nuanced understanding of MDOT's process including its strengths and weaknesses, a more intentional approach that is in line with the wants/needs of the community, and directly tackles the challenge of providing restorative iustice to the descendants of Black Bottom can be proposed that addresses where MDOT's process has its own limitations. Some important research questions that have directed the thesis are:

- Given the historical implications of urban freeways, how can this widespread destruction be remedied?

- How can reparations/justice be explored or addressed through placemaking, urban planning, and design?

- What are some of the constraints that limit the success of improvements to urban freeways?

These questions play a crucial role in the development and design of proposals and keep them connected to the main intent of the thesis investigation.

Central Argument

This thesis argues for improvements to urban freeways that follow a bottom-up approach that heavily involves community engagement and fully is centered around

reparations and restorative justice rather than the current top-down approach that MDOT is using through its I-375 Reconnecting Communities project. An approach that includes prioritization of walkability, restoration of urban fabric, and restoration of businesses would be significantly more beneficial to the community than the bottom-up approach MDOT defends which is largely car-centric. Through a radical intervention that aims to get rid of the I-375 freeway altogether, restorative justice/reparations can be administered. Envisioning an I-375 corridor that is dominated by new greenspaces that embrace Detroit's historical landscape, new business incubation opportunities for African American Detroiters, and educational programs that honor the history of Black Bottom will create a truly restorative, healing environment for African American Detroiters.

Evidence

This thesis has used a mixed methodology that combines both qualitative and quantitative methods, specifically methods that include interviews, mapping, attending community engagement events, photo documentation, and diagramming. Through background research of the I-375 Reconnecting Communities project, it has been identified that there are barriers that are directly imposed through government interference such as the federal grant that is funding over \$100M of the project. This grant is time-sensitive and directly informs the sizing of the boulevard as a freeway replacement that can support similar traffic volumes as the freeway through community engagement events, the community perspective and attitude towards has been overwhelmingly negative. Many residents of Lafayette Park, business owners in Eastern Market, and concerned Detroiters have voiced their concerns with the project from the perspective of its design, construction logistics, and government interference through the federal grant. In addition to

cities across the US, freeway removal/improvement this, the community has voiced that its values projects have been increasing in both numbers and largely centered around properly honoring are the history of Black Bottom, creating a safe, popularity. Because of this, new projects must go pedestrian-friendly environment, and improving beyond replacing freeways with large boulevards connectivity to both downtown and the riverfront. and "stroads". Because of the generational impact of these projects, it is crucial that community impact, accessibility, walkability, and past harms of urban **Critique Summary** renewal and freeway construction is properly addressed. Overall, the proposal created through this thesis New understandings that have been uncovered through this thesis investigation will be important considerations investigation has merit, but due to its scale, cost, ecological complexity, and the degree of cooperation in future freeway removal and improvement projects.

required between state, federal, and municipal governments and the community as a whole, the project count potentially run into difficulties that threaten its feasibility. In addition to this, the project may potentially be gentrifying and risk not serving all Detroiters.

Concession and Limitations of The Study

The critique position that addresses issues such as the cost and ecological complexity of the project is an area of concern that may require further analysis and research in order to prove feasibility. Due to the massive costs associated with removing the freeway, and replacing it with an engineered waterway designed to help mitigate flooding in the area, it may be challenging to secure funding. In addition to this, the ecological complexity of executing the project such as decontaminating soil, and further excavating the I-375 corridor to make way for a below-grade greenway may threaten the feasibility of the project.

Conclusion

To conclude, this thesis investigation has great value in proposing a holistic, community-oriented freeway removal, that is truly honoring the history of Black Bottom. As freeway infrastructure is deteriorating in

1.2 FRAMING

This thesis will be framed around key concepts such as justice, policy, place, community, circulation, and human experience. It will embody a mixed methodology that is both qualitative and quantitative in nature, utilizing a wide array of methods such as interviews, field notes, photography, observations, diagrams, collaging, statistics, measurements, and others. The primary framework of this thesis is a participatory framework, with the secondary framework being intersubjective contextual. A third framework that informs part of the design intervention resulting from the research is the visionary framework.



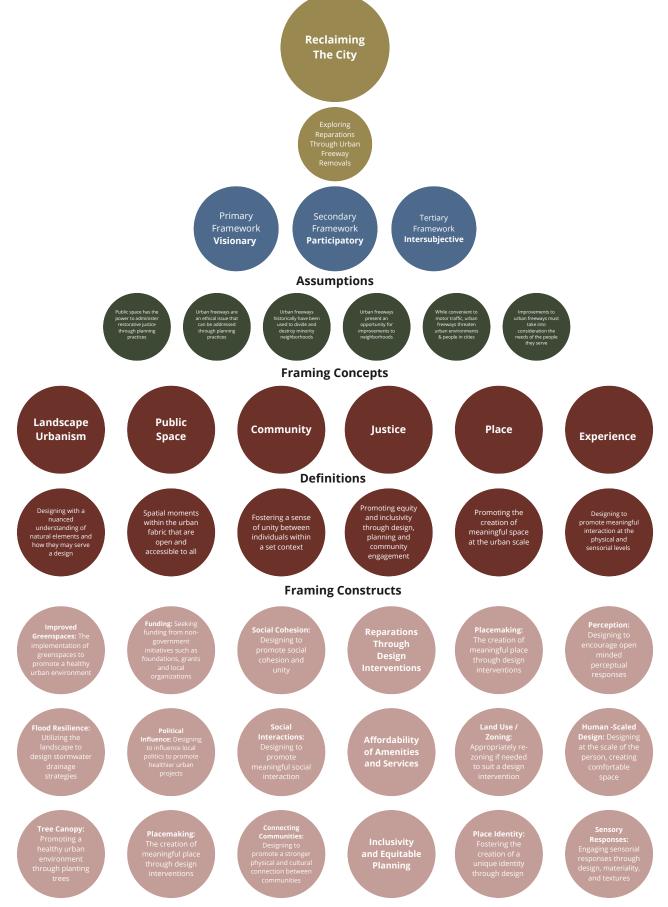


Figure 1.3 Conceptual Diagram

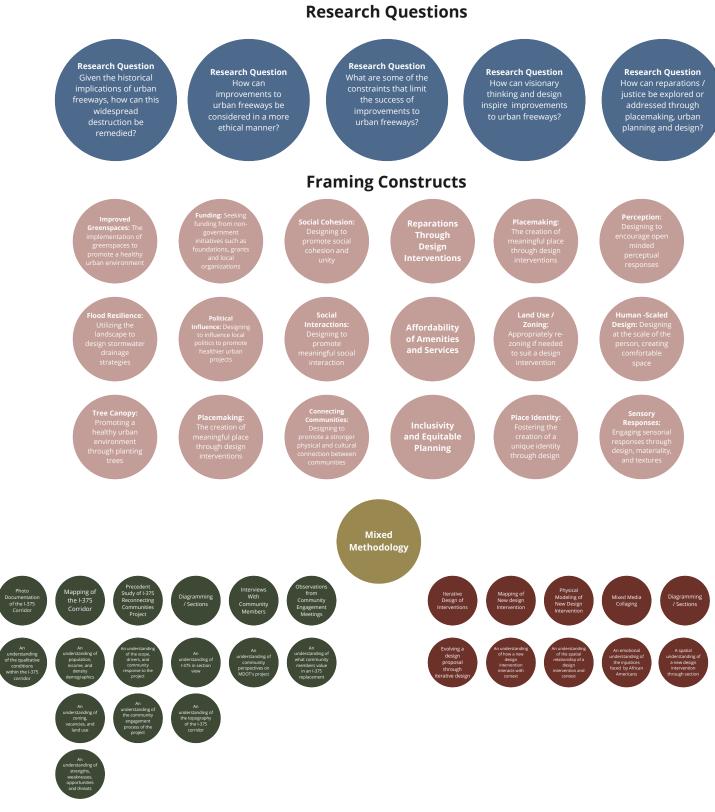




Figure 1.5 *Detroit's Cobo Center Through The Years, 1962.* Photo Credit: The Detroit News Archives, Retrieved at *Detroitnews. com,* 2024, detroitnews.com/picture-gallery/news/local/ michigan-history/2016/04/11/detroits-cobo-center-through-theyears/82921160/. Accessed 24 Apr. 2024.

02 HISTORICAL BACKGROUND: DETROIT, MI

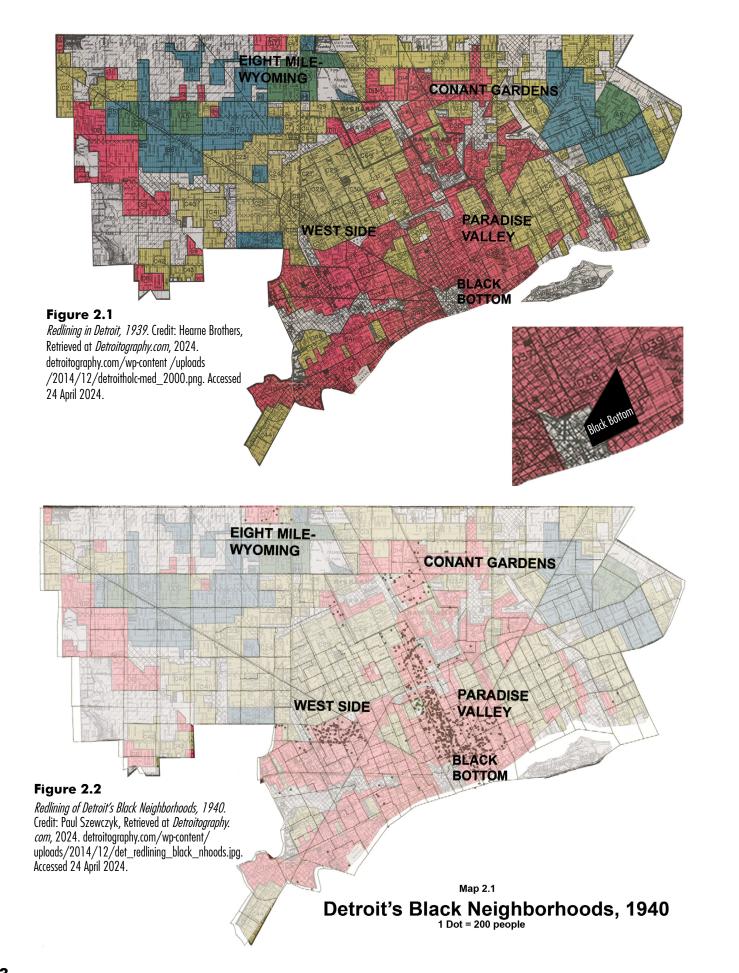
While the impacts of freeway construction and urban renewal have impacted cities across the United States, for the purposes of this thesis, Detroit is the primary city of study.

In the early 20th century, African Americans started migrating to the North, Midwest, and Western United States as a part of the Great Migration to seek better economic opportunities and a better quality of life. African Americans were particularly drawn to the city of Detroit due to the job opportunities in the emerging auto industry. By 1910, about 6000 African Americans lived in Detroit. By 1930, this figure exploded to over 120,000. Many municipalities across the country, policymakers, and a substantial portion of white people saw large influxes of African Americans in their cities as a threat due to long-standing stereotyping, social attitudes, and racial power structures that dated back to the slavery era in the United States (1776-1885). Because of the fear of African Americans and the rate at which they were moving into cities like Detroit, governments and policymakers took matters into their own hands with a sense of urgency.

This sense of urgency came at the dawn of suburbia, a time when cities became fearful of suburban flight. Building permits for single-family housing were skyrocketing at this time, and despite annexation efforts to grow Detroit's landmass, it was becoming a very densely populated city. This combined with the drastically changing racial landscape of Detroit left the



- municipal government fearful of suburban flight. This was
 a common trend that could be observed in many cities
 across the United States. As African Americans began
 moving into neighborhoods that previously housed only
 whites, fear and racial tensions began to mount. This
 was only made worse by government-aided housing
 projects that aimed to segregate African Americans from
 white people, which further fueled anger, but the federal
 government had a plan in the works.
 - The Federal Housing Administration (FHA), founded in 1934, was launched during the Great Depression to make housing more affordable by offering insured mortgage loans, which African Americans almost exclusively were ineligible for. In fact, both the FHA and the Home Owners' Loan Corporation (HOLC) created residential security maps of virtually every major metropolitan area in the United States, grading neighborhoods within metro areas based on the risk of insuring loans within these areas. This process is known as redlining, which began with the FHA's creation, a few years before the creation of most redlining maps. Within redlining maps, neighborhoods were graded from A-D with A being first grade, B being second grade, C being third grade and D being fourth grade.



Each grade on redlining maps was represented by announced, the city of Detroit began condemning and a distinct color. A (first grade) was green, B (second demolishing properties in the neighborhood in the grade) was blue, C (third grade) was yellow, and late 1940s. The majority of the neighborhood was D (fourth grade) was red, which is where the name demolished by 1954, and demolition was further sped redlining originated from. African American communities up by the proposal of the Chrysler Freeway (now I-375 were almost exclusively redlined, and the D grade was and I-75) that ran through the community, and the given to their communities as they were seen as a threat Lafayette Park development, which was proposed in 1953, and began construction in 1956, the same year to property values. that the Federal-Aid Highway Act was enacted.

A substantial portion of Detroit's redlined neighborhoods surrounded the city's downtown core, which was where most black people were living in the 1940s and 50s. Neighborhoods such as Black Bottom and Paradise Valley were home to the overwhelming majority of African Americans in Detroit, and were once thriving communities with hundreds of black-owned businesses along and adjacent to Hastings Street, which earned the nickname "Detroit's Black Wall Street". These communities were also home to many immigrants including Germans, Italians, Irish, and Jews.

As a result of lingering economic challenges from the Great Depression, overpopulation, and a severe lack of municipal services due to disinvestment through systematic racism, living conditions in Black Bottom were deteriorating rapidly. As early as 1930, it was not uncommon for Detroiters to refer to the neighborhood as a "slum" or a "ghetto". In 1944, Detroit's mayor, Edward Jeffries, and the city council revealed a plan to tear down "old structures" around the city, which is speculated to be a racially charged response to the fierce race riot of 1943. It wasn't until the National Housing Act of 1949 that the city had the money necessary to demolish "old structures" in the name of urban renewal. Because living conditions in Black Bottom were so poor, and a plan to raze the entire community in favor of housing, schools, and commercial space was already



Figure 2.3 *Black Bottom "Ragweed Acres", 1956.* Photo Credit: Unknown, Retrieved at *Detroits-great-rebellion.com*, 2024. detroits-great-rebellion.com/Ragweed_ acres_C.JPG. Accessed 24 April 2024.

commercial space was already announced, the city of Detroit began condemning and demolishing properties in the neighborhood in the late 1940s. The majority of the neighborhood was demolished by 1954, and demolition was further sped up by the proposal of the Chrysler Freeway (now I-375 and I-75) that ran through the community, and the Lafayette Park development, which was proposed in 1953, and began construction in 1956, the same year that the Federal-Aid Highway Act was enacted.

In the early 1960s, the absence of Black Bottom and surrounding areas which were later also demolished left a massive gash in the urban fabric of Detroit, which was the destruction of 250 acres of the city, displacing at least 130,000 African Americans and saw the destruction of



Figure 2.4 E. Lafayette @ Orleans St. Early 1950s. Photo Credit: Unknown, Retrieved at Freep.com, 2024. Accessed 24 April 2024



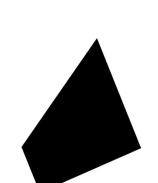
Figure 2.5 E. Lafayette @ Orleans St. 2019. Map Data: Google Maps, 2019. Retrieved at Google.com/maps. Accessed 24 April 2024

350 businesses. The erasure of Black Bottom destroyed generational wealth, and set African Americans back even further than they had already been struggling. Because the Fair Housing Act was not passed until 1968, African Americans still could not buy homes in the rapidly expanding suburbs at this time. Many displaced residents of Black Bottom moved the nearby Brewster-Douglass federal housing block that was built between 1935 and 1955, whereas many others scattered all over the city, which paved the way for the current racial makeup of Detroit. The destruction of Black Bottom had consequences that extended beyond just the destruction of homes, businesses, and institutions. The destruction of this neighborhood created permanent changes to the urban fabric of Detroit. Most notably, this part of Detroit lost its street grid layout, and was replaced by the more suburban typology of Lafayette Park.

In Figure 2.6, the changes to the urban fabric within the footprint of the Black Bottom neighborhood and its adjacencies are shown between 1949 and 2023. This forever transformed the urban landscape of this area, East of downtown Detroit.



Figure 2.6 Black Bottom Change (Composite of data from Google Maps & 1949 Wayne County Aerial)



250 ACRES RAZED BY 1963 **350** BUSINESSES RAZED **123** RESIDENCES CONDEMNED TO MAKE WAY FOR LAFAYETTE PARK

AT LEAST **130**, AFRICAN AMERICANS DISPLACED FROM **URBAN RENEWAL IN BLACK BOTTOM,** EAST TO ELMWOOD CEMETERY, AND **PARADISE VALLEY**

Figure 2.7 Black Bottom Statistics



Figure 2.8 Chrysler Freeway Under Construction, P. Reuther Library, Wayne State University. Retrieved at *Wdet.org*, 2024, wdet. org/2023/11/10/a-street-level-look-at-the-plans-to-remove-i-375/. Accessed 24 April 2024

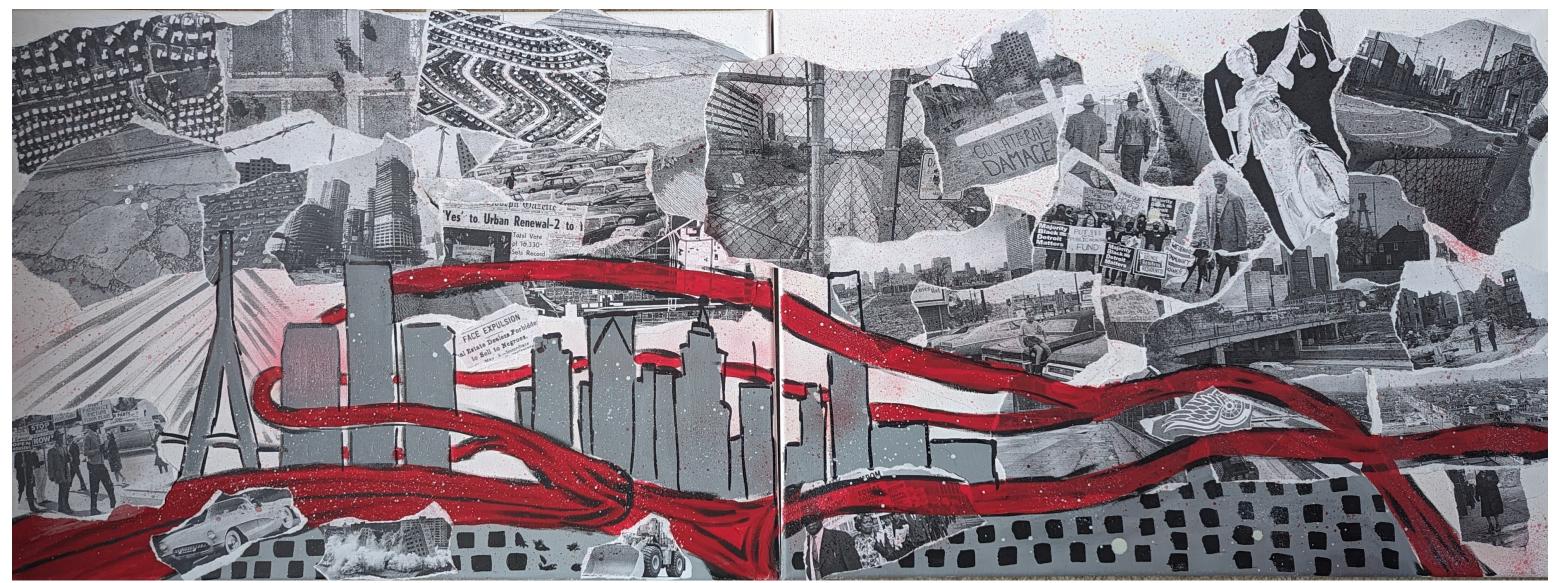


Figure 2.9 Sketch Problem I Mixed Media Collage

As a result of this research, for the Sketch Problem I prompt, a mixed media collage was curated, depicting the harms that urban freeway construction and urban renewal have had on the city of Detroit. The collage (Figure 2.9) depicts the freeway network shown in red seemingly choking the city, while many historical photos are collaged with qualitative photos from the I-375 site. This process allowed for a deeper dive into the injustices faced, facilitating a more empathetic mindset moving forward in the thesis process.

It is not uncommon for urban renewal projects such as Lafayette Park to be constructed adjacent to freeways, especially in the city of Detroit. Figure 2.10 highlights proposed urban renewal projects in Detroit in relation to Detroit's urban freeway network. From this diagram, there is a rather strong correlation between the locations of urban renewal and urban freeways. It can be argued that urban freeways are yet another method of urban renewal.

The correlation between the locations in which urban freeways and urban renewal projects were built was oftentimes not a coincidence, but rather a deliberate attack on low-income and African American communities with the goal of permanent displacement, and relocation into segregated, controlled housing, under the more appealing guise of "slum clearance" to try and keep white people from continuing their suburban flight. Racially motivated urban renewal initiatives such as the destruction of the Black Bottom neighborhood for the construction of Lafayette Park and the I-375 freeway left widespread damage to the urban fabric of Detroit, and the density of the area.

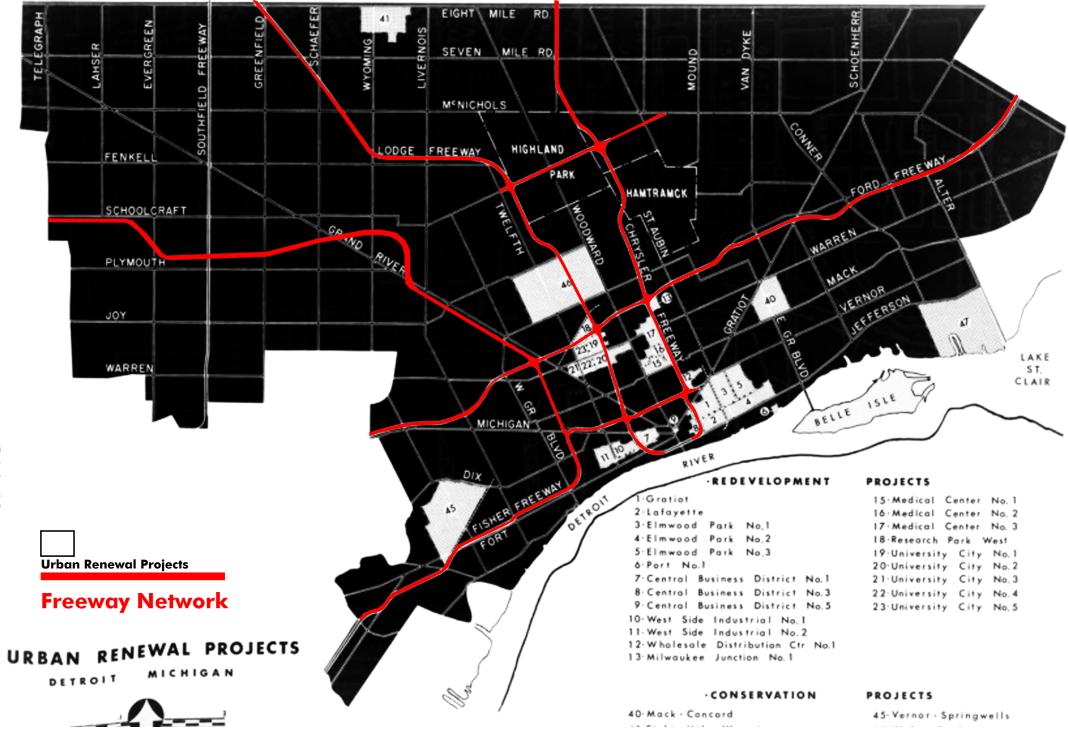


Figure 2.10 Urban Renewal Projects & Freeway Network Map (Adapted from Detroit Urban Renewal Projects Map, 1963 by Detroit City Plan Commission

	15 Medical C	enter
	16 Medical C	enter
.1	17 Medical C	enter
.2	18 Research F	ark
.3	19 University	City
	20 University	City
istrict No.1	21 University	City
istrict No.3	22 University	City
istrict No.5	23 University	City
al No.1		
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Figure 2.11 provides a neighborhood scale of urban renewal plans and the existing/proposed freeway network dating to the late 1950s. The sheer size of the Lafayette Park development can be observed, in place of where Black Bottom used to exist. The John C. Lodge Freeway, also known as M-10 (left) can be seen as it existed in the late 1950s. Jefferson Ave (bottom) and Chrysler Freeway, also known as I-375 + I-75 (right) are shown in a proposed, unbuilt state. Upon closer inspection, it can be seen that slum clearance was also proposed along Gratiot Ave and even for some parts of Eastern Market.

By the end of the 1960s, the Lafavette Park development, adjacent townhomes, and I-375 had transformed the

identity East of downtown Detroit for nearly a decade The memory of Black Bottom was slowly fading, but the injustices faced by African Americans across the city of Detroit and the remainder of the country were far from over. Following the erasure of Black Bottom and Paradise Valley, racial tensions in the city of Detroit were at an all-time high. In Detroit, the destruction of Black Bottom, poor housing conditions, and police brutality were among the top contributing factors to the 1967 race riots which came at a volatile time for the city of Detroit and the US as a whole, during the height of The Civil Rights Movement.



Figure 2.11 Ubran Renewal & Proposed Freeway Network Map (Adapted from Urban Renewal & Proposed Freeway Network, 1950s by Detroit City Plan Commissio

While racial relations in Detroit and across the United referred to as "caps". A freeway lid refers to decking over States have drastically improved since this period in a below-grade urban freeway to create new space above history, many reminders of this era are still prevalent for new development potential or greenspace. Freeway in cities across the country such as the freeways that lids are a viable option due to their flexibility, allowing for the convenience of an urban freeway while allowing destroyed and divided communities, the urban renewal projects that have aged past their prime, and the outdated for development, improved walkability, and greenspaces auto-centric planning strategies that were weaponized within the space that was once solely occupied by the freeway. It is a way of reclaiming urban space that was against African-Americans. lost to freeway development. There are many examples Nearing the end of the 20th century, many cities across of freeway lids across the United States with varying the United States had aging freeway infrastructure that degrees of success that have been built since the 1970s dated back to the 1950s and 1960s. As a result of such as Seattle's Freeway Park (1976), Dallas' Klyde this, cities were left with the high cost of maintenance Warren Park (2012), and Denver's Central 70 lid over I-70 (2023). These freeway lids often have been or replacements of this infrastructure. In the disciplines of architecture and urban planning, attitudes towards constructed with the intent of reconnecting communities that were otherwise segregated by the freeways that urban freeways were already shifting, and car-centric designing and planning strategies received increasing they are being built over.

criticism, however convincing the American public has been a slow, ongoing process.

By the turn of the century, alternative approaches to urban freeways were beginning to manifest in the United States and beyond. Initiatives such as Freeway Park in Seattle, WA (1976), the removal of the Embarcadero Freeway in San Francisco, CA (1993), and the removal of the East Gardiner Expressway in Toronto, ON (2001) showed promise to cultivating a healthier urban environment that began to focus on multimodal transportation, walkability, improved greenspaces, and an overall healthier quality of life. Refer to Figure 8 for a detailed timeline of alternatives to urban freeways and their implementations. Although improvements to urban freeways is a vague term, typically there are two primary types of improvements to the urban freeway that this thesis will focus on

Firstly, there are freeway lids, which have also been



Figure 2.12 Klyde Warren Park, 2018. Photo Credit: HR&A Advisors. Retri at Hraadvisors.com, https://www.hraadvisors.com/portfolio/economic-impact-analysis for-the-expansion-of-klyde-warren-park/. Retrieved 24 April 2024



Photo Credit: HKS and SWA. Retrieved at Architecturalrecord.com, https://www. architecturalrecord.com/articles/16669-in-dallas-a-forthcomina-freeway-lid-park-reunites an-interstate-bisected-community. Accessed 24 April 2024.

In most cases, the construction of freeway lids is normally centered around the implementation of new parks, greenspaces, and trails. A notable example of a project that has seen the inclusion of widespread greenspace is The Big Dig project in Boston, MA. Despite this, there has been a growing case for pushing the notion of the freeway lid further, elevating its impact and significance. Atlanta, GA has proposed a massive freeway lid that aims to include housing, mixed-use development, and new greenspaces. This intervention would elevate the possibilities of freeway lids as a whole, and make them a much more compelling strategy in replacing urban fabric that has been lost to freeways as the possibility for full-scale community development atop urban freeways comes closer to becoming a reality. The second common freeway improvement strategy is to remove the freeway entirely. Freeway removals typically, involve removing and replacing a freeway or freeway section with a street or boulevard. In these types of projects, there is often excess space that is left over from the size difference between the freeway and the resulting boulevard. It is not uncommon for these interventions to also propose new developments as part of the project itself. A notable example of a freeway removal project is the Inner Loop East Redevelopment project in Rochester, NY. This project was completed in 2017 and saw the removal of the East segment of the Inner Loop Freeway that enclosed downtown Rochester, and its replacement with an at-grade street and new mixed-use development lining this street. The project



Figure 2.14 Proposed Stitch Lid in Atlanta envisioned at night. Photo Credit: The Stitch. Retrieved at Thestitchatl.com, thestitchatl.com/project. Accessed 24 April 2024

successfully reconnected downtown Rochester and the East Avenue neighborhoods. Currently, as of 2024, the removal of the Northern segment of the Inner Loop Freeway is proposed as a preferred strategy as the Inner Loop nears the end of its lifespan, but no design has been finalized yet.

A second freeway removal project of great significance is the proposed I-375 Reconnecting Communities project in Detroit, MI which will be a key component and focus of this thesis investigation. This project aims to replace the aging I-375 freeway which runs along the East side of downtown Detroit with an at-grade boulevard. As of Q1 2024, a finalized design has not been proposed, but the project is expected to begin construction by Q1 2025.

In recent years, it has become clear that improvements to urban freeways are increasing in popularity, and won't seem to be going away anytime soon. The majority of these projects that are located in urban areas will likely face large obstacles due to the history of urban freeways being responsible for the destruction of African American communities, and the displacement of hundreds of thousands. The demands of community members adjacent to these project types, especially those who were impacted or knew someone impacted by the forcible displacement that urban renewal and freeway construction brought will be large, and transcend those of a normal urban-scaled design intervention. While improvements to urban freeways, and freeway removals are a massive opportunity to heal wounds of the past, and provide reparations, it is imperative that the entirety of the design/build process is largely informed by community members, and the voices of those who were most impacted by urban freeways to ensure the success of such a project.

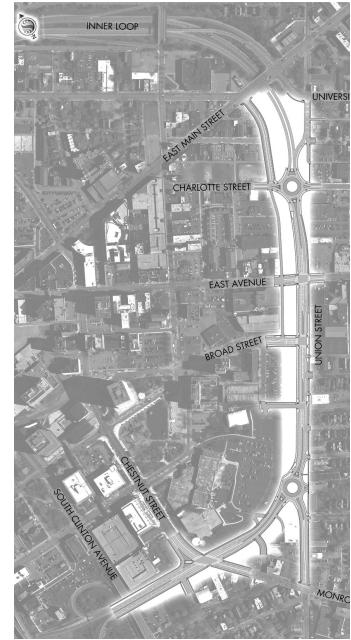


Figure 2.15 Plan of Rochester's Inner Loop East Removal. Photo Credit: Bob Williams. Retrieved at Reconnectrochester.org, 2013, https://reconnectrochester. org/2013/08/latest-inner-loop-plan-a-winner-in-our-book/. Accessed 24 April 2024

03 I-375 RECONNECTING COMMUNITIES PROJECT

The I-375 Reconnecting Communities project is a connection of the boulevard to Atwater Street, and the freeway removal project proposed in Detroit, MI that excess property, which plans for have not yet been identified. The project also will include wide sidewalks will see the removal of the I-375 freeway and its replacement with an at-grade boulevard as an attempt that are up to 20' wide, and a 10' wide cycle track to reconnect Lafayette Park to downtown Detroit while honoring the history of Black Bottom and Paradise Since the early stages of community engagement Valley. This project is being proposed and designed by events and exercises relating to the I-375 Reconnecting the Michigan Department of Transportation (MDOT) Communities Project, there has been strong opposition to and is expected to reach a final design by the end of the project that has been growing louder as MDOT brings 2024, with construction beginning in early 2025. its proposal closer to reality. Many Detroiters, especially residents of adjacent Lafayette Park are concerned with Talks of replacing I-375 in Detroit began as early as issues such as the width of the boulevard, pedestrian 2013, as MDOT began evaluating whether it would be and cyclist safety, emergency response times, and the more worthwhile to replace the freeway as-is or remove lack of honor to the history of Black Bottom / Paradise the freeway in favor of something else. By June 2014, Valley, which MDOT has identified as a focal point of the MDOT unveiled six alternative designs to the current project through their community engagement efforts. By state of the freeway. These alternative designs included the early 2020s, Detroiters and residents of Lafayette Park not only took issue with the design of the boulevard rebuilding the freeway as is, replacing the freeway with a boulevard, and rebuilding the freeway with improved to replace I-375, but MDOT's community engagement efforts began to feel ingenuine, self-serving, and for only pedestrian and cycling infrastructure. By May 2017, after facing delays, MDOT began an environmental their own agenda.

assessment, which narrowed the project down to two different alternatives by December 2017 which both contained an at-grade boulevard in their design. From here, a final alternative was finally chosen in January 2021, after further community engagement commenced. The current design as of Q1 2024 is calling for a sixlane boulevard, not including turning lanes, a reworked I-75 interchange, A rework of Gratiot Ave including the removal of the dangerous Gratiot Connector, A new

Further unpacking the opposition the community has with this project in its current state, the size of the boulevard has been a large area of concern. Compared to the surrounding urban context of downtown Detroit, a sixlane boulevard that swells up to a whopping nine lanes with turning lanes at major intersections is unacceptable to residents and community members. Although the project does have large sidewalks and dedicated cyclist

infrastructure, the boulevard at major intersections is up to 108" wide, which is very pedestrian unfriendly, and dangerous to pedestrians and cyclists.

To many residents, it feels as if MDOT is simply building a highway at grade. Combining this with a 35 mph speed limit and a motorist culture that often speeds and runs red lights, it is clear that this proposal could potentially be very dangerous for pedestrians and cyclists.

Another part of the project that the community has shown great concern towards that can be attributed to the proposed boulevard's size, the number of traffic signals, and the lack of connections to Lafayette Park is the issue of emergency response times. The current design could make it much more difficult for emergency service vehicles to reach destinations in Lafayette Park, especially with game-day traffic coming from the nearby stadiums. Furthermore, MDOT's lack of detail in its plan to offer reparations or some form of restorative justice to descendants of Black Bottom / Paradise Valley through this project of such historical significance has been immensely disappointing to Detroiters, especially those who have ties to Black Bottom / Paradise Vally.

Through the November 2023 MDOT Town Hall, MDOT touched on the excess land leftover from the freeway removal playing a key role in reparations, with access to that land becoming first priority of Black Bottom descendants, but the terminology used by MDOT regarding this process has been vague, and there has been a lack of new information about the reparations component of the project and who the potential community partners involved may be. This project will have a generational impact, just as the construction of I-375 and the demolition of Black Bottom have. To many, the current state of the project is looking like a

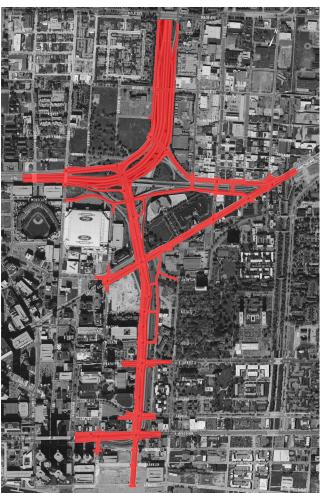


Figure 3.1 Modified I-375 Reconnecting Communities Project Plan, 2023 (Adapted from I-375 Reconnecting Communities Project Plan, MDOT)

big missed opportunity to truly honor those who were displaced in the 1950s.

Community members and residents also took issue with some of the logistical challenges of the project that go beyond just the design. In the state of Michigan, infrastructure projects are well known to go over budget and face construction delays. Many business owners in nearby Eastern Market have loudly voiced opposition to the project due to the construction of the project and its potential to have a devastating impact on Eastern Market as access from I-75 / I-375, and Gratiot Ave would be nonexistent during construction, which at minimum would last until 2028, provided the project is not delayed. These years of potentially drastically reduced business could have the potential to kill off many

The INFRA Grant is also time-sensitive and has an small businesses in Eastern Market and in the general expiration date, which has made meaningful community area. In addition to this, many nearby residents engagement extremely difficult. As of Q1 2024, MDOT had concerns with noise from construction being a disturbance. Some community members also expressed has until the end of March 2025 to begin construction, concern with the vibrations from construction posing a or else they will not qualify for the grant money. This has made community engagement efforts significantly less threat to historical buildings, especially historical churches valuable, as MDOT likely does not have the time or the with their fragile stained glass. Concerns by community means to make meaningful changes to the design of the members were heard at MDOT's Town Hall hosted by project before time runs out. Senator Stephanie Chang on November 4th, 2023.

Nearly all of the issues that the community has identified with this project, can be traced back to one common denominator, the federal grant which is funding the project. The I-375 Reconnecting Communities Project has received \$105 M from the Infrastructure For Rebuilding America Grant (INFRA). What this means for the project, is that it has to be designed a certain way, and meet certain parameters in order to qualify for these funds. In the case of the I-375 project, the boulevard must be able to accommodate a similar volume of vehicular traffic than the freeway that it is replacing could. This has resulted in the current, car-centric design that does little more than replace the freeway with a boulevard of similar vehicular capacity.

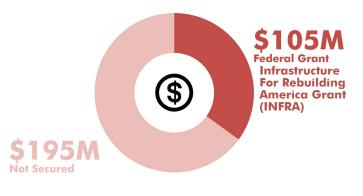


Figure 3.2 I-375 Reconnecting Communities Project Funding

The I-375 Reconnecting Communities Project has strong ambitions to be a reparations project, and an infrastructure improvement project at once, but MDOT has seemingly fallen victim to its own shortcomings. After all, MDOT is a transportation agency that builds and maintains roads, and The I-375 Reconnecting Communities project is a large-scale urban intervention that requires experts in urban planning, architecture, historical preservation, and humanities. It seems that MDOT has underestimated the cultural and historical significance of this project, and has prioritized simply putting the federal grant money to use and building something, rather than doing what is right and rethinking the project.

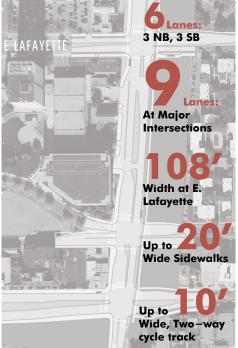


Figure 3.3 I-375 Reconnecting Communities Project Features

"We spare no expenses when it comes to the multimodal options in the corridor. We have sidewalks along the Central Business District that are about 20' wide, a two-way cycle track, and 10' wide sidewalks along the East side."

"This looks a lot like Telegraph Road just relocated downtown"

We've heard some concerns with the width of the boulevard, and that is something we are digging into"

"This seems like a missed opportunity for mass transit"

NB Width: 33'

Roadway Width: 108'

108' Wide

SB Width: 66'

"Can we really walk downtown? Or is this going to be another massive street to navigate like Gratiot?"

"We want it to honor the past, but really it has to be a road that serves not only restorative justice, but serves the new community that surrounds it."

"There's about 30 acres of excess property. We want ot look at how that (land) can be used to enhance the community" **Excess Land**

MDOT

Community Members

Figure 3.4 1-375 Reconnecting Communities Section With Quotes From Community Engagement & Interview (See Appendix I)

"We are using federal transportation dollars to build the project, and with that we have to ensure that we accommodate a certain level of service to traffic to be using those federal dollars."

> "When I talk to people in my community who are descendants of Hastings Street, this is really a slap in the face"

The hope of this coalition is to push for a redesign of the project by pressuring elected officials at the state and municipal levels. In April 2024, the Rethink I-375 Community Coalition completed a letter directed at Michigan Governor Gretchen Whitmer and Detroit Mayor, Mike Duggan to put pressure on MDOT to redesign the I-375 Connecting Communities Project in line with the wants and needs of the community.



Figure 3.8 Rethink I-375 Coalition Meeting Photo Credit: Virginia Stanard



Figure 3.10 Rethink I-375 Coalition Meeting

3.1 COMMUNITY RESPONSE

As evident based on the community response to the project from the November 4, 2023, MDOT Town Hall, the community is extremely dissatisfied with the state of the project. Based on observations from attending this town hall, community members feel that their concerns are not being taken seriously by MDOT. After years of hearing the same things from MDOT and seeing none of the concerns of the community being taken seriously, many have given up and felt that fighting for a better design and approach to this project is a losing battle. Following the November 4, 2023 Town Hall, outraged voices of opposition towards the project reached Detroit City Council. Among those who voiced their opposition to the project were two city council members.

With the deadline of the INFRA grant looming, and the design constraints that are already enforced by the grant, many have felt that the overwhelming majority of the design is already set in stone, that MDOT's community engagement strategies are ingenuine, and are still being done to "check the box" or make MDOT and the I-375 Reconnecting Communities Project look better on paper.

Due to the lackluster, top-down nature of MDOT community engagement efforts, some frustrated residents of Lafayette Park have formed their own community coalition to discuss the project. The Rethink I-375 Community Coalition, formerly the I-375 Community Coalition is currently (Q1 2024) looking



Figure 3.5 MDOT Town Hall, 4 November 2023



Figure 3.6 MDOT Town Hall, 4 November 2023



Figure 3.7 MDOT Town Hall, 4 November 2023. Photo Credit: Quinn Banks. BridaeDetroit

into ways in which it can delay or ideally stop the I-375 Reconnecting Communities Project from being built.



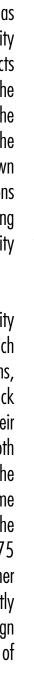
Figure 3.9 Rethink I-375 Coalition Meeting Photo Credit: Virginia Stanard

04 PROPOSING A NEW ALTERNATIVE

While community engagement initiatives such as Create opportunities for new development that matches the character of the area the MDOT Town Hall, and Rethink I-375 Community Coalition meetings are key in understanding the aspects 20 votes of what the community does not want out of the replacement of I-375, they can also inform what the Preserve the character of the existing community does want. This has been seen through the neghborhoods community engagement survey from the MDOT Town 25 votes Hall (Figure 4.1), interviews, and various conversations with community members and business owners during Acknowledge the history of Paradise Valley, both the MDOT Town Hall and Rethink I-375 Community Black Bottom, and surrounding areas **Coalition Meetings.**

With that in mind, two key categories of community engagement can be derived; Community Needs which represent the current existing community, and Reparations, which honor those who were displaced from the Black Bottom and Paradise Valley neighborhoods, and their descendants. The community engagement process both through the MDOT Town Hall, and conversations in the Rethink I-375 Coalition can directly inform what some key design drivers and areas of importance are with the task of designing an alternative project to MDOT's I-375 Reconnecting Communities Project in mind. In other words, this community engagement process can directly inform the design drivers and intentions of a design intervention that is in line with the wants and needs of the community.









44_{Votes}

Improve connectivity to downtown and riverfront

32 Votes

Increase safety for pedestrians and cyclists

54 Votes

Mitigate traffic and congestion where possible



Figure 4.1 MDOT Community Engagement Survey (Adapted from MDOT Town Hall 4 November, 2023)

DESIGN DRIVERS

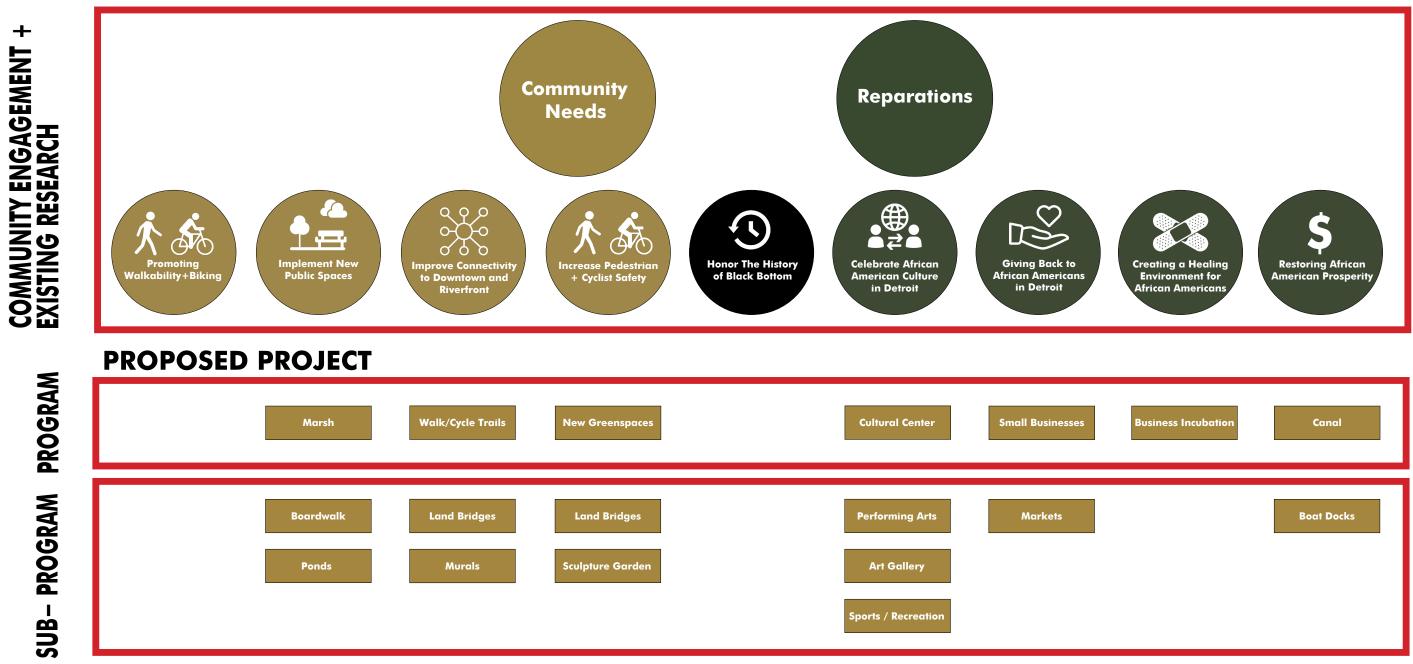


Figure 4.2 Design Drivers of a New Design Intervention

Shown in Figure 4.2 is a conceptual list of program ideas that relate to key areas of concern based on prior research and community engagement. These programs intend to bring forth reparations to descendants of Black Bottom and Paradise Valley while taking into consideration the needs of the current, existing community adjacent to I-375. It is well understood that the current I-375 freeway creates a rather unenjoyable experience for nearby residents of Lafayette Park. The pedestrian experience of walking across I-375 and into downtown Detroit leaves much to be desired, and the freeway itself is seen as a scar on the landscape and Detroit's urban fabric. MDOT's I-375 Reconnecting Communities Project, on the other hand, seems to almost completely miss the mark of community needs. The at-grade boulevard threatens the quality of life of those who live nearby. The boulevard that MDOT is proposing is feared to create more noise, more vehicular crashes, and put pedestrians and cyclists in danger due to the number of crossings, the size of the crossings, and the motorist culture in Detroit which often involves speeding and running red lights.

Through the analysis of the current I-375 freeway, the MDOT project, and the community response have informed what needs need to be met through a project of this scope. The diagram in figure 4.2 outlines these needs, and how they could be met through a programming lens. A project that prioritizes the implementation of new trails and greenspaces may increase the safety for pedestrians and cyclists while promoting walkability and biking, creating new public spaces, and improving connectivity between destinations such as Greektown, Lafayette Park, the Detroit Riverwalk, and Brush Park. In addition to this, a project that includes elements such as a cultural center, business incubation, and enabling small businesses and start-ups may be key in finding ways to offer reparations to descendants of Black Bottom, and African American Detroiters as a whole. While reparations is typically an economic notion, this project hopes to provide reparations economically through the inclusion of business incubation space(s) and encouraging small business growth to African Americans, but also it aims to provide reparations through creating a healing environment of remembrance and reflection that gives back to those who had their homes, businesses, and livelihoods destroyed with the removal of the Black Bottom and Paradise Valley neighborhoods.

In addition to the creation of design drivers to inform a design intervention, it was crucial to outline design intentions as a means of questioning whether chosen design strategies fall in line with some of the long-term goals of a proposed project. This is outlined in Figure 4.3. In other words, the design drivers diagram was a way of identifying a set of needs, and responding to them, whereas the design intentions diagram is concerned with the long-term vision and goals of the project. Throughout the design process, the design intentions diagram can be referenced to ensure that design strategies, decisions, and the overall project scope as a whole fall in line with these intentions. The design intentions of a new proposal should be considered through the phrase "This project should".



omote and encourage ion autointric transit

> Implement new, quality public spaces



Figure 4.3 Design Intentions Diagram

4.1 SITE ANALYSIS

To propose a new urban-scale intervention to replace I-375, a deep understanding of the existing site conditions is necessary. Through a variety of data collection methods, the existing site conditions were analyzed from the perspective of demographics and physical conditions such as topography, zoning, land use, and vacancies in the area. The process of site analysis is crucial in obtaining a deeper understanding of the qualitative aspects of the site area. While understanding the quantitative, data-driven aspects of the site is important, the qualitative aspects of the site help inform the more experiential, sensorial components of the site, and how those components can be accentuated through a design proposal.

A key piece in beginning the site analysis process was thinking about the site through the lens of SWOT: Strengths, Weaknesses, Opportunities, and Threats. By identifying the site through these categories, key areas of focus can be revealed. In this process, identifying threats and weaknesses is crucial to understanding the weak links, and where there can be possible interventions to improve upon in these areas. Understanding strengths and opportunities is just as important, as it is a way of documenting the positive aspects of the site and areas of the site that could benefit from a positive intervention. It is important to keep the strengths and opportunities of the site in mind while proposing a new design intervention, as the positive areas of the site may inform further strategies taken to improve the overall quality of spaces on the site. Figure 4.4 outlines the SWOT Analysis of the I-375 corridor. It should be noted that this SWOT analysis was conducted through the lens of walkability, bike-ability, and overall quality of life as outlined by some of the community needs identified through the community engagement process.

Upon reflecting on the SWOT analysis, the I-375, and I-75 freeways have been identified as threats due to the noise, pollution, and safety concerns that they pose to the urban environment. Much of the land taken up by the freeway's components such as interchanges, entry/exit ramps, and landscaping are considered as weaknesses due to the amount of land that is consumed by these components of the freeway, without providing any value to the urban, pedestrian centric qualities of this part of the city. Many lots adjacent to the I-375 freeway, both vacant and used have been determined to fall under the category of opportunities, due to the proximity to the freeway and how they may interact directly or indirectly with a new design proposal. In terms of strengths, this analysis has identified many nearby buildings in downtown Detroit, prominent sites such as the Detroit Riverwalk, and Lafayette Park to be positive.

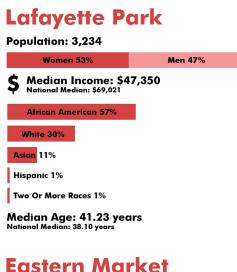
In the case of this analysis, it should be noted that Lafayette Park is considered to be a strength due to the qualities that it offers the area, and the overall perception of this neighborhood, despite it being a large part of what destroyed the Black Bottom neighborhood.



Another important component in the site analysis process was gaining an in-depth understanding of the neighborhoods and surrounding context of the I-375 corridor. This was achieved through analyzing quantitative data such as population and some key demographics. Refer to the Neighborhood Analysis Diagram, Figure 4.5, 4.6. In these diagrams, various demographics of adjacencies to I-375 are listed such as population, median income, the racial makeup of the area, and the median age. The median income and age are also compared to the national average to create a general understanding of the area. In addition to this, the site zoning, usage, and vacancies of the site and its adjacencies give an idea of how the site and its adjacencies are used, what types of programs are taking place here, and where opportunities lie for new development.

Through this process, it has been understood that the median income of Brush Park and Downtown Detroit, also referred to as the Central Business District (CBD), have a median income level that is on the higher side. The proximity of these communities to the I-375 corridor could prompt gentrification fears, as that has been the case in Brush Park especially. While Eastern Market is not a large community in terms of its population whatsoever, its income levels are significantly lower than communities like Brush Park and Downtown Detroit. Eastern Market is home to a lot of small businesses, and gentrification could greatly harm this area. Lastly, Lafayette Park has a rather moderate-income level and is a highly diverse community.

The in-depth understanding of these demographics andquantitative data points to a clearer picture of who may be served by a proposed replacement of I-375. It is also critical to understand the community and design with this data in mind.



Population: 1,041 Women 62% Men 38% Median Income: \$23,279 ledian: \$69,021 African American 96% White 2% Hispanic 0.5% Other 0.5% Median Age: 37.65 years **Brush Park** Population: 1,295 Women 54% Men 46% Median Income: \$56,806 National Median: \$69,021 African American 56% White 35% Two or More Races 4% Hispanic 2% Other 2% Asian 1% Median Age: 35.55 years Downtown Population: 6,151 Women 43% Men 57% Median Income: \$70,592 African American 449 White 41% Asian 6% Two Or More Races 4%



Figure 4.5 Demographics of Communities Adjacent to I-375

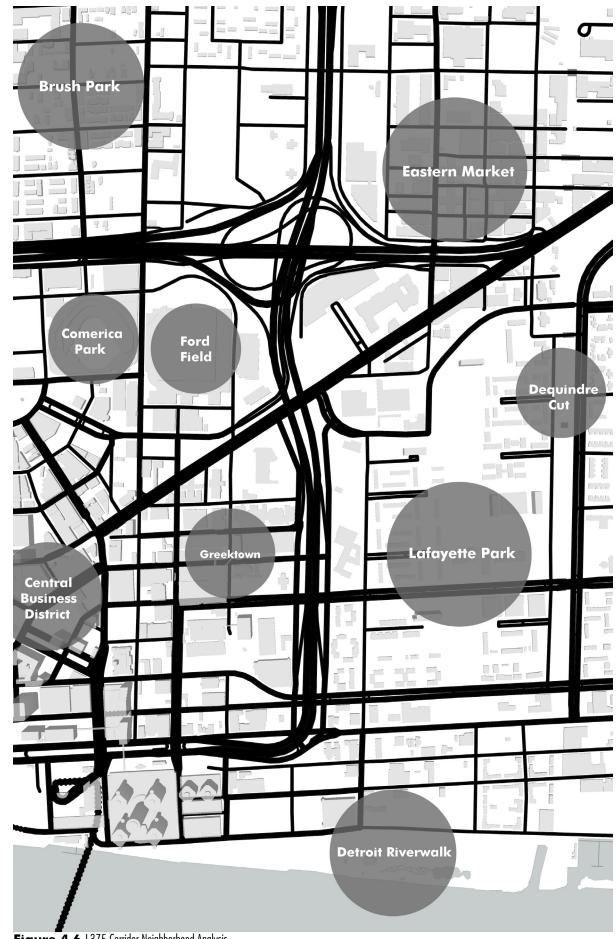


Figure 4.6 I-375 Corridor Neighborhood Analysis

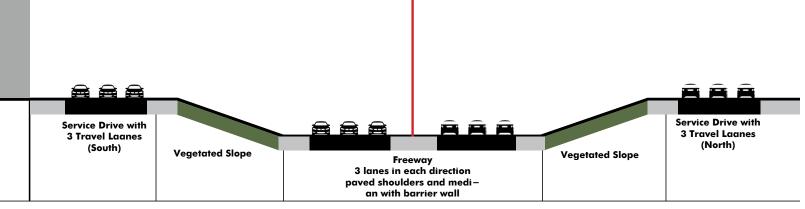


Figure 4.7 I-375 Section (Adapted from I-375 Section, MDOT)

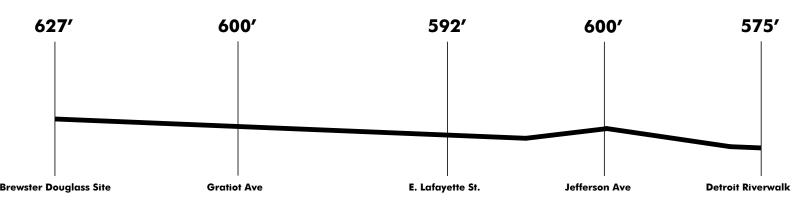


Figure 4.8 I-375 Corridor Topography

Another key piece in analyzing the site was an understanding of the physical conditions. Through the re-creation of an MDOT cross-section of I-375, Figure 4.7, the below-grade freeway can be better understood spatially. The documentation of the current conditions of the freeway allows for an understanding of the way in which it interacts with the site and the rest of the urban conditions. The below-grade nature of the I-375 freeway may be useful in informing the design of a proposed intervention to replace the freeway which could potentially acknowledge the history of the freeway in its design language. In addition to this, the topographic elevation of the site can be understood to gradually slope downwards towards the Detroit River, this may create opportunities for utilizing the topography as a component in a design intervention. It can be understood through the topographic elevation diagram, Figure 4.8 that the highest point of the adjacent area is the Brewster Douglass site, which is 627' above sea level. The lowest point along the Detroit Riverwalk is 575'.

An additional piece of research that was crucial to the site analysis phase was extensive photo documentation of the qualitative traits along the I-375 corridor and Gratiot Avenue. Through this photo documentation process, some noticeable qualities emerged; There was a neartotal lack of pedestrian activity in the area. Although it was a 55-degree day in October, the area felt empty and lacked life. There was a fair amount of debris along sidewalks such as construction signage and equipment and a broken street light. The pedestrian bridges over I-375 were in disrepair, and guite literally crumbling. The importance of site documentation through photography is crucial as not only does it provide an opportunity to experience the site in real-time, but it also provides the ability to look back and see how the site changes from many perspectives such as time of day, season,

etc. Additionally, the notion of the SWOT analysis can also be applied to photos, not just maps or site plans.

Overall, the pedestrian experience in the area is not ideal, and could greatly be improved. The site has a lot of potential for a pedestrian-friendly design intervention at the urban scale, as there are many areas of opportunity for improvement. This may look like replacing the freeway with a design intervention that caters to the pedestrian and cyclist experiences in the form of greenspaces, or potentially even urban infill. Regardless of what a design intervention may look like, it is widely agreed that I-375 and MDOT's I-375 Reconnecting Communities Project are a threat to the quality of life in the Downtown/Lafayette Park areas of the city. Refer to Figure 4.10 for the photo documentation of the site.



Figure 4.9 Existing Site Conditions. Map Credit: Google



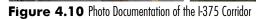
































The final step in the site analysis phase of the thesis investigation was an in-depth analysis of the zoning, usage, and vacancies within the I-375 corridor and its immediate context. Refer to Figure 4.11 for a zoning map of the I-375 corridor. Through the process of documenting zoning within the area, it has been revealed that much of the zoning is actually informed by the I-375 freeway itself. In Detroit, it is not uncommon to find neighborhoods that are physically and geographically bound by urban freeways. Because urban freeways sliced through neighborhoods when they were constructed, this division actually reinforced new boundaries. In the case of the I-375 corridor, the same can be said about zoning, most notably looking at the Brush Park and Eastern Market neighborhoods. Brush Park is almost entirely comprised of PD (Planned Development), whereas the shown portion of Eastern Market is entirely zoned as MKT (Market).

Within the Existing Usage Diagram, Figure 4.12, the usage of buildings within the I-375 corridor is documented according to the legend of the diagram. Through this process, it has been discovered that Downtown Detroit is largely comprised of recreational building uses, parking structures, and mixed-use, with very little residential. On the other hand, neighborhoods such as Brush Park and Lafayette Park are dominated by residential. Unsurprisingly, Eastern Market is dominated by its retail usage. Lastly, mapping vacancies and surface lots was an important part of the site analysis, especially in discovering what opportunities may exist for the future of these vacant sites. Most notably, the Brewster-Douglass site is the largest vacancy within the corridor. It can also be noted that Downtown Detroit has significantly more surface lots than any other area within the corridor. It should also be noted, that two large surface lots adjacent to the Renaissance Center may hold opportunities for redevelopment, especially with the proximity of the Detroit Riverwalk. Refer to figure 4.13 for vacancies and surface lots.

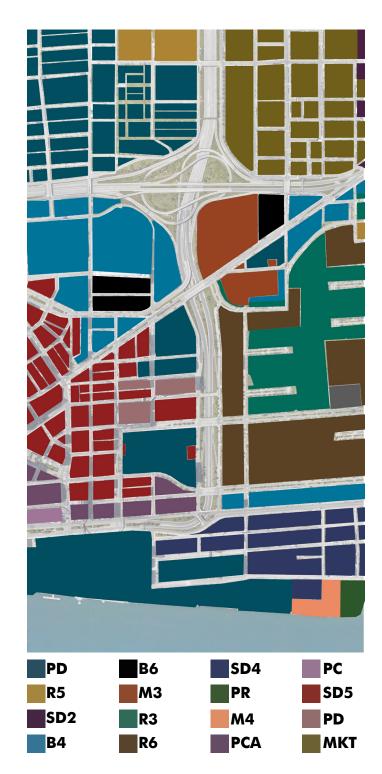


Figure 4.11 Existing Zoning in the I-375 Corridor



Figure 4.12 Existing Usage in the I-375 Corridor



Figure 4.13 Existing Vacancies in the I-375 Corridor

05 DESIGN DEVELOPMENT

The phase of developing a design intervention to replace on the site with or without the presence of I-375. I-375 began with the idea of embracing the divide This was the result of Marcus' thesis based on flood resilience being combined with this thesis on caused by the freeway and turning it into something that serves as an opportunity to reunite. In other words, improvements to urban freeways. In this early stage, the turning something that can be perceived as harmful, canal would replace the footprint of the current I-375 and turning it into something that can be positive freeway, with the water in its place acknowledging the and restorative to the community. While I-375 has history of what I-375 did to the city of Detroit. Having historically been viewed in a negative light for it being not yet researched ways in which vehicular traffic could move through the city in a similar fashion to what a contributing factor in the demise of the Black Bottom neighborhood, It cannot be ignored that it has been an exists today, I-375 was reconstructed over the canal. important part of Detroit's history. The initial idea that facilitated thinking about the replacement of I-375 was While a more refined version of this design would creating a design that acknowledged the existence of keep the existing bridges that span over the existing freeway, the model showcased (Figure 5.1,5.2) is I-375, and its role in the demise of the Black Bottom neighborhood. Oftentimes in freeway removal projects, highly conceptual and speaks to a much broader idea, rather than a refined design intervention. Throughout there is a tendency to want to completely remove any the process of design development, design ideas, and evidence of the freeway that had existed beforehand. From the beginning, the intention of a proposed I-375 concepts were assessed on how well they could address removal has been to turn the space occupied by the the community needs identified through previous freeway into a positive moment of acknowledgment community engagement, as well as the need to honor and healing, while still retaining the historical the history of Black Bottom and provide reparations. The reminders of the past to make amends with them. Winter Design Brief marked a transition of the thesis investigation from a primarily research-driven phase into a phase of making and conceptualizing design ideas. Initially, as an early design exercise, a design that

Initially, as an early design exercise, a design that featured a large canal and a reconstructed I-375 freeway that was elevated above street level was showcased as the winter design brief of the thesis. The Winter Design Brief was an effort in collaboration with Marcus Puste that led to the notion of a canal being present







Figure 5.2 Winter Design Brief Model

Figure 5.1 Winter Design Brief Model

5.1 CANAL FEASIBILITY

In response to the Winter Design Brief, more questions began to mount pertaining to the technical feasibility and viability of having a canal in place of I-375. Although the topographic elevation had already been looked into in the Site Analysis phase, more research pertaining to the viability of a canal in this location was necessary. To facilitate this research, a broader understanding of the history of Detroit's natural landscape was necessary. The most critical piece of this was understanding Detroit's historical rivers and creeks, as a system of the historic marshes that once occupied the banks of the Detroit River.

A key method of researching the viability of this canal intervention was facilitated through the mapping of these historic creeks that once were the main source of drainage for the city. From the Historical Creeks Diagram (Figure 5.3), it is important to note May's Creek, Savoyard Creek, Bloody Run Creek, and Conner Creek. These naturally-fed creeks were not attached to a larger network of rivers/creeks and were able to be fed by rainwater. It is also important to note that these creeks were oriented relatively perpendicular to the Detroit River. Because of this orientation to the Detroit River, it may be possible that the proposed canal that will replace I-375 could serve as a natural stormwater-fed drainage system, just like the historical creeks. When analyzing the Historical Creeks Diagram, it becomes apparent that the Bloody Run Creek in particular may suggest the possibility of a canal-like design intervention at the site of.

I-375. Bloody Run Creek was a naturally fed creek that existed within the Elmwood Cemetery, just over one mile East of the I-375 freeway, with the topography remaining relatively unchanged between these two locations.

Historically speaking, by the early 1900s, as the city of Detroit continued to grow, it filled in and paved over virtually all of its natural creeks, which has partially been attributed to some of the flooding issues that the city of Detroit faces today. Detroit replaced these creeks with a combined sewer system, which by today's standards is outdated, and struggles to keep up with current rainfall increases that have been attributed to climate change. See Figure 5.4 for a map of this combined sewer system.

From the perspective of floodwater mitigation, a canal that replaces I-375 could be a viable solution in helping prevent future floods in Detroit. This is in combination with topography that naturally slopes towards the river from the Brewster Douglass Site and the existing adjacent interchange.

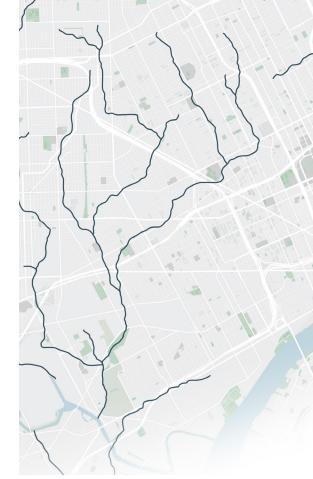
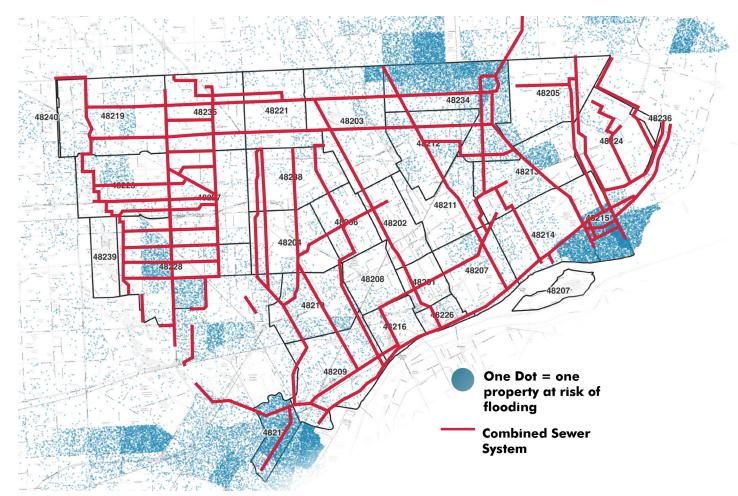


Figure 5.3 Historical Creeks Diagram



- 1: May's Creek
- 1: Savoyard Creek
- **3: Proposed Canal**
- 4: Bloody Run Creek
- **5: Conner Creek**

Figure 5.4 Detroit Combined Sewer System + Flood Risk (Adapted From Current Flooding Risk Map In Detroit by Alex B. Hill via Detroitography.com)

5.2 EARLY DESIGN CONCEPT

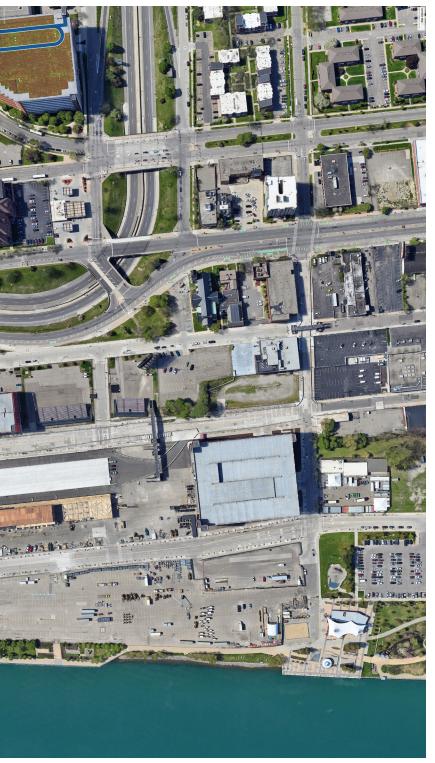


Figure 5.5 Existing Site Conditions, 2023. Map Credit: Google



Following the Winter Design Brief, and a period of reflection in light of its outcome, the next exploration for creating a proposed design intervention was to begin the process of designing components of the canal, greenspaces, and trails that were to be a significant part of the proposed replacement of I-375 and initially conceptualized in the Winter Design Brief. A great emphasis was placed on developing what a conceptual greenspace design could look like in plan view. With interventions such as the Dequindre cut in mind, this linear greenspace is imagined as a park space, but also a transitional space that people would use to move through space. Figure 5.6 is the result of focusing on the design of the proposed site and exploring connections to the Detroit Riverwalk. This site plan also shows part of the redesign of Jefferson Ave to accommodate the removal of the entrance to I-375, and some programming concepts that could occupy what is currently the GM riverfront parking lots. While this concept offered a more zoomed-in look at a specific moment within the site, a more urban-scaled version of this design concept had not been realized at this point in the thesis investigation.

Figure 5.6 Proposed Site Conditions (Adapted from Existing Site Conditions, Google)

An additional key step in developing ideas forward was the creation of another physical model. The next step in the thesis process was Sketch Problem II, A prompt to create conceptual work based on prior research. For the Sketch Problem II phase of the thesis investigation, a model based on the design concept (Figure 5.7, 5.8, 5.9) was developed to provide a more detailed understanding of the design concept, spatially and contextually. The process of creating this physical model brought a greater sense of scale, context, and life to the overall design concept. In addition to this, this model reflected new changes such as the inclusion of the existing bridges, and more importantly, the decision to re-use the existing I-375 service roads as a means of getting vehicular traffic into the city from I-75. Through conversations with thesis advisors following internal pin-ups, it was decided to include the existing service roads from the existing freeway, rather than not having a viable way for vehicular traffic including emergency responders to move through this part of the city.



Figure 5.7 Sketch Problem II Site Model



Figure 5.8 Sketch Problem II Site Model



Figure 5.9 Sketch Problem II Site Model

5.3 LAND USE PLANNING

In Figures 5.10,5.11, and 5.12, Proposed changes to zoning, land use, and vacancies are shown that reflect the design drivers and intentions of the project. These diagrams can be compared to the existing zoning, land use and vacancy maps from the site analysis phase. Changes to zoning include re-zoning the I-375 Corridor to a PR zone (Parks & Recreation). This allows for greater flexibility and potentially less interference from the city of Detroit concerning what can be built on the site. In addition to this, the Detroit Riverwalk will be completely re-zoned to a PR zone to allow for greater cohesiveness and consistency, allowing a proposed design intervention to more seamlessly blend into the Detroit Riverwalk. It should also be noted that the currently vacant Brewster-Douglass site is proposed to become a PR zone as well to support potential design interventions relating to the removal of I-375. The proposed land use diagram suggests that the I-375 Corridor and Brewster Douglass site will transform into park space as well. Lastly, the proposed land use diagram suggests that the Brewster Douglass site will no longer be vacant as it had the potential to become activated in the removal of I-375.

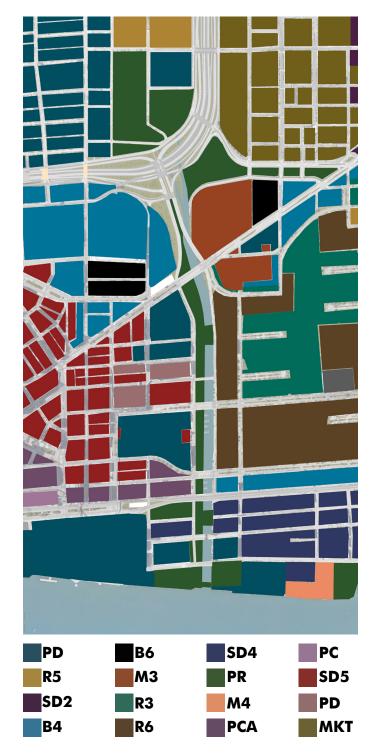






Figure 5.11 Proposed Usage of the I-375 Corridor



06 BLACK BOTTOM MEMORIAL DISTRICT

To push the design further, and reach a final design, it was crucial to consider the interaction that this new design intervention would have with the surrounding context, what the connections would look like, and how it would integrate itself into the urban fabric of Detroit. In addition to this, it was also key to consider how the canal would be fed, and how it could be designed for a variety of seasons and conditions. As mentioned earlier, the Brewster Douglass site would play a key role in this project. This currently vacated site would be redeveloped into a marsh that now not only honors the historic, natural landscape of Detroit but contains stormwater retention ponds, which would collect and then discharge stormwater under I-75, through the canal, and then eventually to the Detroit River.

The Black Bottom Memorial District will consist of numerous design features at the urban scale, which include the following:

- Repurposed I-375 Service Roads
 - Allows for vehicular traffic to reach Jefferon Ave from major arteries such as I-75 and Gratiot Ave.
- The Rework of Jefferson Ave

- Excess space taken up from I-375 onramp to be redeveloped into greenspace.

- Cultural Center
 - To celebrate the history of African African American Detroiters and descendants of Black Bottom.
- Connection to Detroit Riverwalk
- -New Marshland
 - To honor Detroit's historic landscapes and marshes.
 - To collect and expel stormwater to the Detroit River.
- MDOT Designed I-75 Interchange
 - Reusing MDOT's I-75 Interchange that is present in the I-375 Reconnecting Communities Project.
- Land Bridges
 - To promote connectivity between Downtown Detroit and Lafayette Park/Rivertown Neighborhoods.
- Canal + Greenspaces

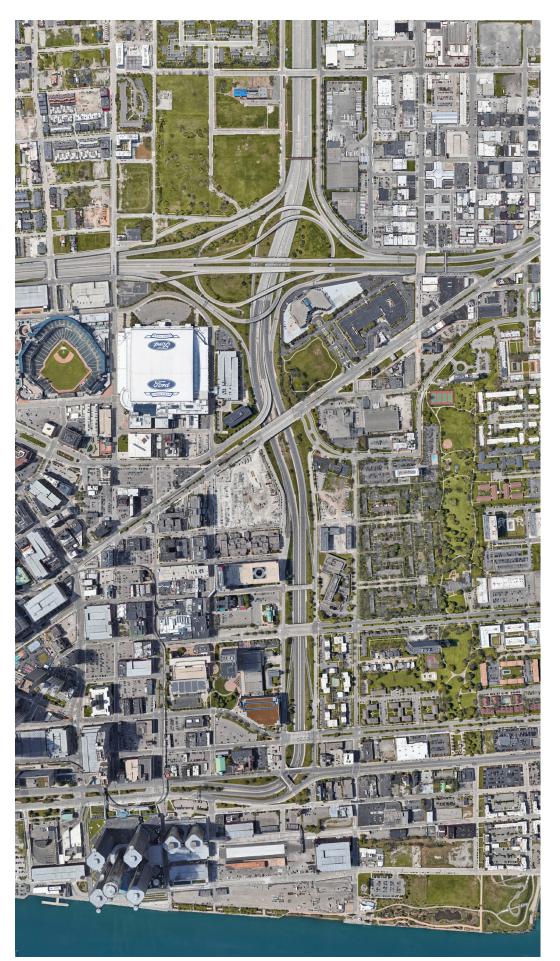




Figure 6.1 Existing Site Conditions. Map Credit: Google

The Black Bottom Memorial District serves as a design intervention that promotes walkability, biking, and the safety of pedestrians and cyclists while providing a restorative, healing environment consisting of lush greenspaces. In addition to this, the Black Bottom Memorial District is an urban-scale vignette with the capacity to support numerous programs that offer a form of reparations to African American Detroiters, especially those who are descendants of Black Bottom.

traffic from small boats, kayaks, and canoes from the canal. Because reparations are typically seen as an economic notion, the inclusion of an on-site business incubator space would serve to assist in small business startups for African American Detroiters, in addition to excess space on-site being utilized for small businesses.

6.1 THE NEED FOR REPARATIONS

Because of the storied history of Black Bottom, and the severity of the injustices that were committed against the African Americans who lived there, it is no secret that there is a strong need for reparations. To provide a restorative environment to those who descended from Black Bottom and African American Detroiters as a whole, the Black Bottom Memorial District will create a healing environment through the use of greenspaces, biophilic design, the implementation of water in the design, and the physical separation from street level. The inclusion of historical markers and murals will also be featured throughout the site. These holistic design principles will facilitate various programming approaches that will provide a tangible form of reparations to the community, and those who descended from Black Bottom. In addition to this, the project will serve as an opportunity for the city of Detroit to acknowledge the part that it played in these historical injustices, and begin to work towards repairing relationships with African American Detroiters.

Within the finalized programming concept, Figure 6.3, the

various programs that the site could support to facilitate reparations are outlined. For instance, an African American cultural center may educate visitors about the history of Black Bottom and the systemic racism that African Americans in Detroit and across the US faced. and still continue to face today. The cultural center also has the potential to support functions such as art galleries, performing arts spaces, event/convention spaces, and even the potential for recreational sports facilities. Another key programming move is the inclusion of small businesses and markets with the adjacency of the Eastern Market in mind. Currently, as of April 2024, the south side of Eastern Market is bordered by the Gratiot Connector, which connects I-375 to Gratiot Ave. In the Black Bottom Memorial District proposal, this connector is removed, and excess land holds the potential to take advantage of the implementation of African-American-owned businesses and/or markets. In addition to this, the activated greenspace which runs adjacent to the canal could also support small businesses from the increased foot traffic, cycling traffic, and

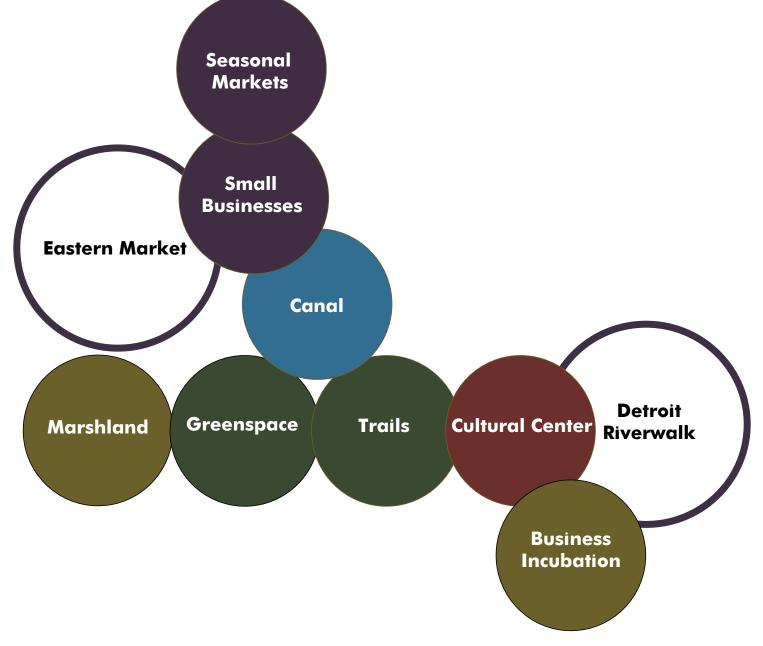




Figure 6.4 Human- Scale Rendering of Proposed Black Bottom Memorial District

6.2 HUMAN EXPERIENCE

Because of the large, urban-scale nature of the Black The greenspace adjacent to the canal would be lined Bottom Memorial District, offering a human-scale with native trees, shrubs, and plantings to accentuate view of the project was crucial to fostering a deeper the natural historic landscape of the area, and properly understanding of some of the experiential qualities of tie into the Detroit Riverwalk's landscape motifs and the project. Because much of this proposed design was design choices. As for the proposed marsh on the former developed in plan and section view, it was important Brewster Douglass site, this would create an urban to envision the design through additional methods marsh of plantings that are native to Detroit's historic such as renderings, and a 3D model. While the overall marshes. In addition to this, a boardwalk throughout the design, layout, and placement of elements within site would allow visitors to more closely interact with the design can be understood, the human experience this natural-inspired landscape. This intimate interaction cannot be understood. Through the creation of humanwith natural elements reminiscent to Detroit's historic marshes would facilitate the creation of a healing scale renderings, Figure 6.4, and Appendix II, a greater emphasis was placed on creating an experiential view environment that serves African American Detroiters, of what the Black Bottom Memorial District may bring descendants of Black Bottom, and all Detroiters as a to the city. Most notably, through these renderings, whole. The intention of this design intervention from the beginning has been the creation of a truly free, accessible the scale and physical separation from street level is apparent. In addition to this, it can be seen that the space for all Detroiters, akin to the Detroit Riverwalk. below-grade canal and greenspace would be bordered by concrete walls and the existing overpasses would be restored. This visually is reminiscent of the freeway that is being replaced, and acknowledges the history of the freeway destroying Black Bottom, rather than drastically transforming the area with no visual resemblance to the freeway, as if it never existed.

The concrete walls along the canal and greenspace would serve as a canvas for murals and graffiti art that would allow local artists and muralists to tell the story of Black

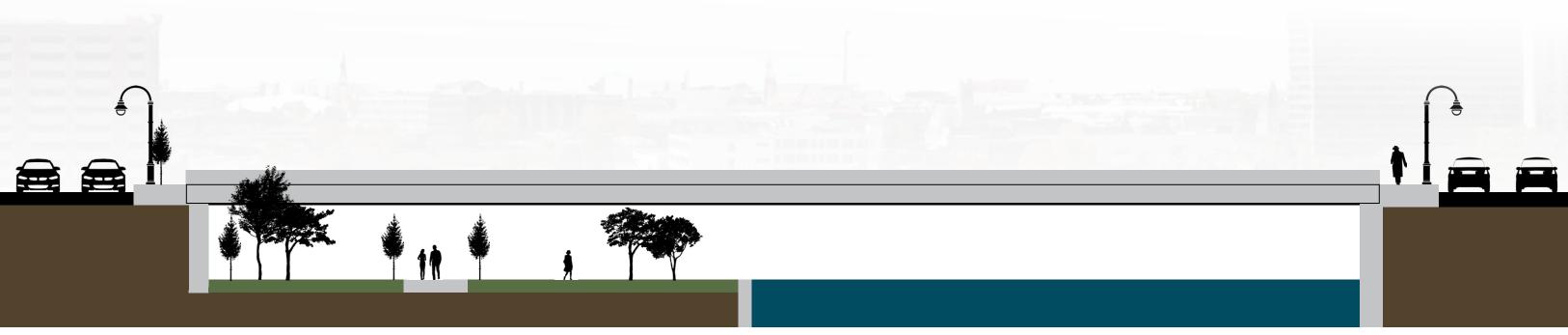


Figure 6.5 Typical Cross Section of Black Bottom Memorial District

Through the section shown in Figure 6.5, the spatial qualities of the site can be understood, specifically in how people interact with the site. The section illustrates the of the site from street level, and how users of the space can escape the busy hustle and bustle of the streets above.

6.3 FINALIZED PROJECT

As the overall design of the Black Bottom Memorial District entered its final stages, one of the final major steps in this thesis investigation was creating a large, urban-scale model that offered a highly contextualized view of the Black Bottom Memorial District in Detroit. This model was based on the finalized site plan of the Back Bottom Memorial District.

The creation of the physical model was a lengthy exercise, and an incredibly ambitious undertaking, given the time constraints of the thesis investigation. This began with digitally modeling the context of downtown Detroit, and the project itself. Every building, parcel, and feature of Detroit's context was manually 3D modeled. The use of programs like CADmapper was a possibility and would have saved time, however, the lack of detail and the inability to show the differentiation between street level and parcels made this an unattractive option. The process of digital fabrication took over a week. Following this process, every building and parcel was 3D Printed. During the process of 3D printing the buildings, the 2x4 MDF base was cut appropriately to reflect topographic differences of the canal, green spaces, and existing I-75 freeway. The base pieces of the model were also cut along what would be Jefferson Ave, and Gratiot Ave, effectively turning the model into a section model of the site. Following the physical fabrication phase of the model, the 3D printed buildings were glued in place, followed by the trees, and lastly the water.

The overall fabrication time of this model was over two weeks, but it serves as a detailed physical representation that brings the Black Bottom Memorial District to life. Refer to Figures 6.6 through 6.15 for photos documenting the fabrication process of the physical model.

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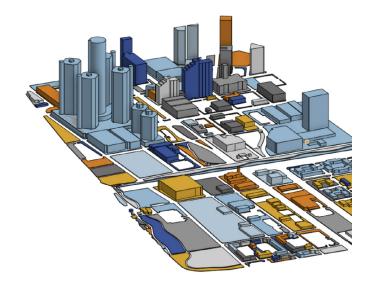


Figure 6.6 Digital Fabrication of Physical Model

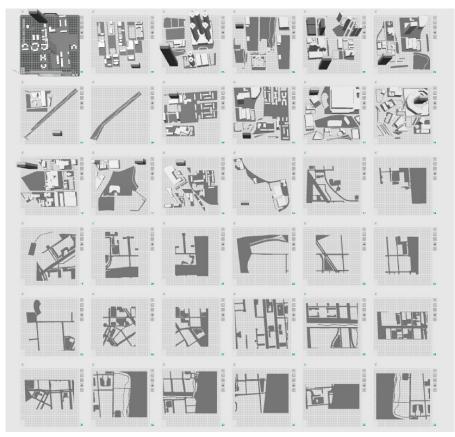


Figure 6.7 Slicing Model Components for 3D Printing

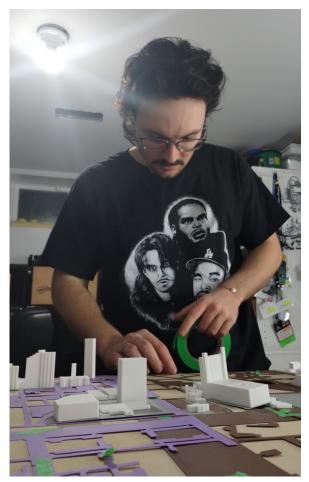


Figure 6.8 Establishing Layout of Buildings

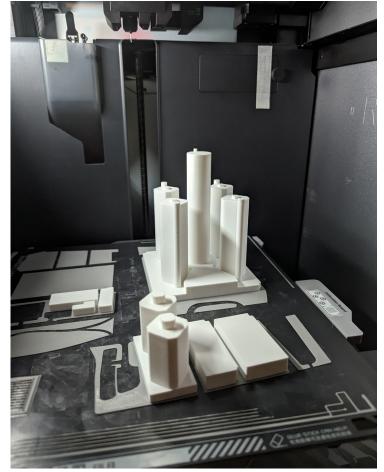


Figure 6.9 3D Printing Process of Model

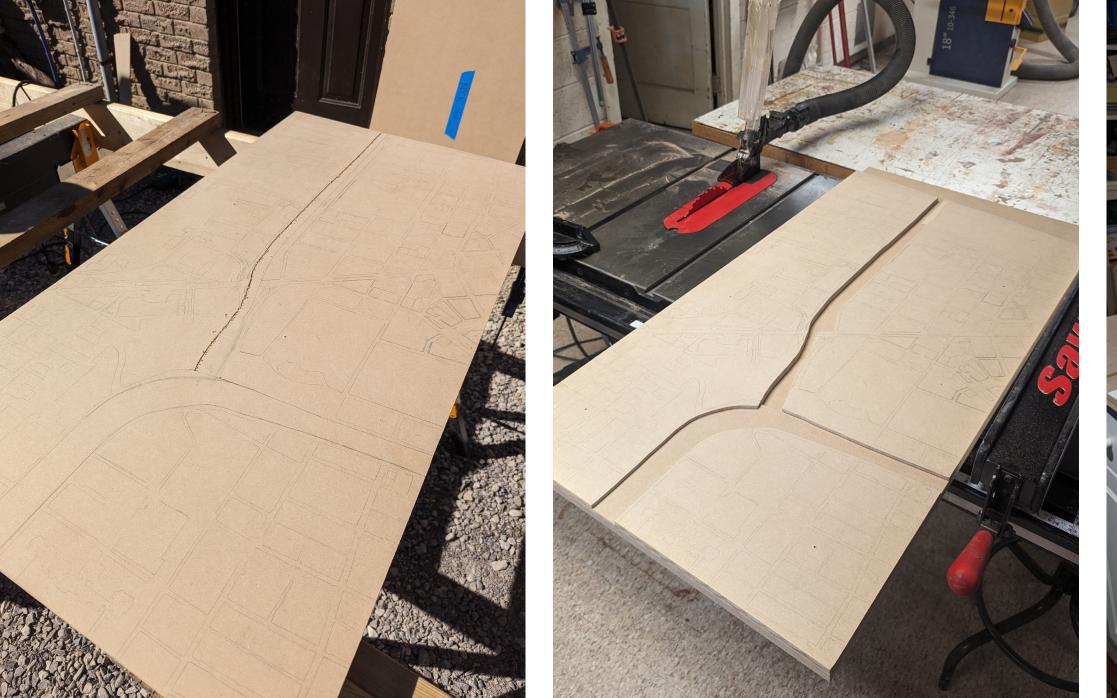


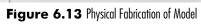
Figure 6.10 Physical Fabrication of Model

Figure 6.11 Physical Fabrication of Model

Figure 6.12 Physical Fabrication of Model







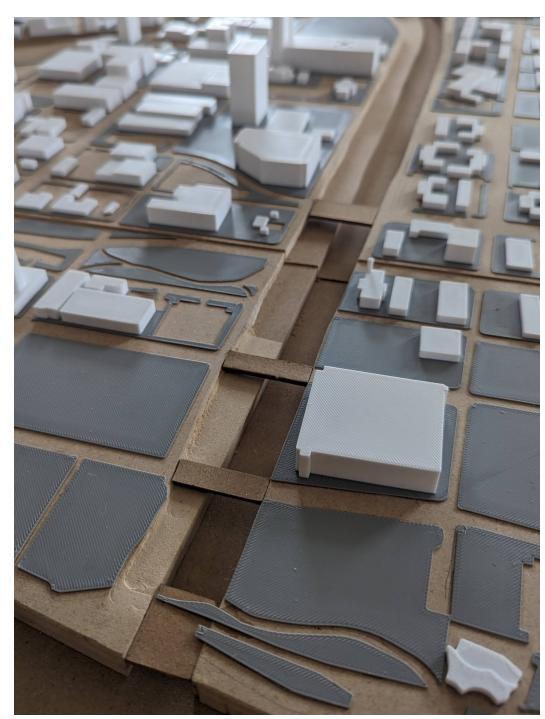




Figure 6.14 Physical Fabrication of Model

Figure 6.15 Physical Fabrication of Model

The creation of the physical model allowed for a spatial understanding of how the project would interact with the context. More importantly, it showed the various areas of connectivity and interaction between the adjacent context and how the project as a whole situates itself within the urban fabric with an emphasis on how pedestrians may utilize the site to move through the city, and the adjacent neighborhoods. The model will be a lasting physical artifact of the work conducted through this thesis investigation and hopes to serve as a tangible method of inspiring future freeway removal projects.



Figure 6.16 Completed Physical Model



Figure 6.17 Completed Physical Model



07 CRITIQUE, LIMITATIONS & CONCLUSION

Although the proposed Black Bottom Memorial District holds merit and has the potential to transform the east side of downtown Detroit into an elaborate activated greenspace that facilitates a wide array of programming opportunities to provide reparations to descendants of Black Bottom, and African American Detroiters as a whole, some limitations must be addressed, both in the overall thesis research process, and the final design intervention.

7.1 CRITIQUE OF RESEARCH

Preliminary research on the history of redlining, urban renewal, and freeway construction was well established in the thesis process. A large component of this thesis investigation was the community engagement component of research. While the community engagement research obtained through attending the MDOT Town Hall and being an active participant in the Rethink I-375 Coalition holds great value to the thesis investigation, a deeper foundation of research that extended beyond these two groups of people could have been helpful.

Engaging directly with descendants of Black Bottom to develop an understanding of what they would value in a project that replaces I-375 could have been a better approach to informing the overall reparations



- component. In addition to this, the development of an overall framework that partners with community organizations to further increase the positive impact that this design intervention could have would be another valuable way to improve the overall result. Because of the limited time of the thesis investigation,

7.2 CRITIQUE OF DESIGN INTERVENTION

While the proposed Black Bottom Memorial District design intervention is radical, visionary, and multifaceted in its design and overall approach, there are some concerns and limitations with this design that must be taken into account. While the canal and its adjacent greenspace were designed to more or less retain the same shape as I-375 to acknowledge the scar that it left on the urban fabric of Detroit, it can be argued that this proposal is just as divisive as the freeway itself. Although this project does intend to maintain some form of separation between Lafayette Park and downtown Detroit, it could potentially do more to connect these two neighborhoods together rather than proposing new land bridges and using the existing overpasses.

Another area of concern with the design of the project is the notion of what happens when there is a particularly dry season and the water level in the Detroit River/ canal is low. While Detroit is poised to see a significant increase in rainfall in the future due to climate change, it is important to consider all scenarios, even some that are less likely. A third and final limitation to the design intervention is the lack of detail in the design. Due to the time constraints associated with the thesis investigation and the urban scale of the Black Bottom Memorial District, this design intervention serves as a vignette or a design concept that can be further explored in greater detail. It is by no means a finished product in its entirety. It would have been helpful to see a more refined and finished design product if there had been more time. to inspire future freeway removal projects in cities While the I-375 Reconnecting Communities Project may and encourage departments of transportation to take go down in history as a massive missed opportunity a more community-oriented approach, rather than for designing mass transit and decreasing automobile the top-down approach that MDOT has used in the dependence, it may be an important lesson to other I-375 Reconnecting Communities Project. In addition cities on what not to do when it comes to replacing to this, this thesis investigation hopes to educate aging freeway infrastructure. The city of Detroit people on the importance of facilitating reparations has always been a city historically acclaimed for its through removing freeways and acknowledging the innovations and inventions and has been known for harms of urban renewal/freeway construction, while going above and beyond in work ethic and expectations, showcasing the opportunities that may be had in their yet this project seems to fall so short of that. Through cities. Rather than simply replacing freeways with the proposed Black Bottom Memorial District, this thesis large boulevards and stroads, this thesis intends to hopes to inspire radical interventions that truly rethink showcase what may be possible to honor the history the way freeway removals and infrastructure projects, of historic African American neighborhoods and improve are thought about, planned, and eventually constructed. the quality of life in cities through freeway removals.

7.3 CONCLUSION

To conclude, this thesis investigation was an experience of great importance to give back to the city of Detroit, especially African Americans and those displaced by the construction of I-375 and Lafayette Park. The thesis was made possible by the relevance and importance of this once-in-a-generation issue; the removal of I-375. As this thesis investigation wraps up, the MDOT Reconnecting Communities Project inches closer to becoming a reality. Although the overwhelming majority of residents and business owners in the area are against the MDOT project, and descendants of Black Bottom have called it a "slap in the face", MDOT still is persistent with building this project.

The importance of this thesis investigation is to envision an I-375 replacement that is in line with the wants and needs of the community and also acknowledges the history of Black Bottom and the wrongdoings that were committed against African Americans in Detroit through the destruction of Black Bottom. This thesis and its resulting design intervention hopes

APPENDIX I

A key part of conducting background research on the I-375 Reconnecting Communities Project was interviews. While MDOT declined to interview directly for the purpose of this thesis investigation, An important interview between Stephen Henderson, and Jonathan Loree, the Senior Project Manager of the I-375 Reconnecting Communities Project was posted online by WDET 101.9 FM, under their Reckoning 375 series, which offers a deep dive into some of the controversial issues of the I-375 Reconnecting Communities Project. Through this interview, it is discovered that MDOT wants to create a project that honors Black Bottom, but ultimately it must service a similar amount of vehicular traffic than I-375 currently does. It is also learned that the \$105 M Federal Grant that is funding the project in itself is a direct barrier and informs what the design can look like. Because this Federal Grant is related to infrastructure, it is required that the boulevard that replaces I-375 have a certain number of lanes, and meet a certain amount of traffic serviced in order for the grant money to be used

Detroit Today: MDOT explains why it's Replacing I-375 With a Boulevard



Host | Detroit Today



Senior Project Mar **CMDOT**



"Let's start with the idea of this street. Talk about the street you hope to create in place of I-375 and why it's the plan MDOT has settled on."

"It is a boulevard that is intended to serve multimodal purpose. It's a street that the city can arow around. It's a street that has a smaller footprint than the freeeway so it has opportunities for property redevelopment, or public spaces / land uses / placemaking around the street."



"We spare no expenses when it comes to the multimodal options in the corridor. We have wide sidewalks on the West side along the Central Business Disctrict that are about 20' wide, and a two-way cycle track and 10' sidewalks along the East, providing a strong North-South cycle connection to the riverfront that also ties into the Brush Park area, and we also have strong East-West connections along Macomb Street"



"Let's talk about what was there before, which was the backbone of two neighborhoods that also used to exist in that area; Paradise Valley, and Black Bottom. How similar to what used to be there will this new boulevard be?"

"Our goal really is to honor the history of those neighborhoods within the project and within the corridor. Hastings Street that was there before was a different time for the city. It's certainly not a street that can be recreated today, but we want to make sure that we honor what that street was in the past."

"We're looking at opportunities for how the spaces can be used to honor that. We're looking at public art opportunities, opportunities for historic markers / programs within the area, and we also even identified how the value of land can help support housing and businesses in the area as well. We want it to honor the past, but really it has to be a road that serves not only restorative justice, but serves the new community that surrounds it."



"What would be the restraints that would prevent you from rethinking the project in a grander scale?

"We have to look at everything in the total context. We do have to serve our motoring public customers that are coming in and out of downtown and travelling around the city. We have to make sure it's a safe boulevard and that we are not creating unsafe scenarios with impatient drivers or intersections that people are having trouble traversing. We need to make sure that we are not backing up traffic onto the freeway with our interchange."

"We are using federal transportation dollars to build the project, and with that we have to ensure that we accomodate a certain level of service to traffic to be using those federal dollars."



"I'd like to talk more about those federal dollars and the restraints that they put on the project...What things does the federal government's involvement involvement prevent us from thinking about or doing in the replacement of I-375?"

"In general, we have to follow all of the federal rules and regulations, so we have to meet a certain level of service of traffic in terms of how we design the road. We know we've heard some concerns with the width of the boulevard, and that is something we are digging into. We are currently at 30% design right now, so we are able to further refine some of that."

"We are going to get some newer traffic data to understand the post-pandemic environment and how that may factor into the intersections. We also have the excess land which is purchased through federal and state transportation funds. The excess property has to follow certain disposition processes relative to federal and state requirements. So these are things we have to look at... as well as what community enhancements can come out of that.









"I want to talk about the process you use to talk to people who live and work in this area to come up with the design of the project. Talk about where that began and how its come forward, and whether you think it has been sufficient. Have enough people had enough opportunity to talk about what is happening with I-375."

"We've always used a local advisory committee, so we've always had that kind of structure going back to 2014. We also have one for the environmental assessment, and a new one that we have started this year. Some of those people are consistent, and some are newer to those groups. This includes residential, and stakeholders around the project. Right now we meet with them more or less on a monthy cadence to get feedback on where we are and where we are going... We've done a lot but I think we still have a lot of work to do."

"There's a lot of complex issues to work through that go beyond the road design itself, as we talk about the land-use planning, looking at the surrounding area and some of those community needs and thinking about some of the restorative justice components that can also work into the project. So, that will be a heavy focus for the next 12-18 months. In that process I think we are going to need to be out in the community, which we have done during the environmental phase. We did some living room meetings and would have meetings in some of the co-ops in their lobby areas. I think that's a strategy we're looking at dusting off again now, having more listening sessions in the neighborhoods and meeting people where they are as we work through these really complex planning efforts."



"When you talk about restorative justice, which you have referred to a couple times in this conversation, what kinds of things are you imagining will happen or are possible in this project?

"MDOT highlighted a couple of potential pieces. There's about 30 acres of excess property. We want to look at how that can be used to provide enhancements to the community, so MDOT has committed to using the value of that excess property for community enhancements, looking a little beyond just transportation enhancements."

"It can also aim to honor that history of Black Bottom / Paradise Valley, but also looking at how there could be housing support, or minority owned business incubation support, and pieces like that. It's something that is not MDOT's wheelhouse, or specialty so we look to partner heavily with the City of Detroit, and also some nonprofits to see what opportunities are out there to help drive that forward and make that as successful as possible."



"How are you going about including the voices of those who not only live near I-375, but those and the families of whom were also displaced as a result of its construction of I-375 in the planning and the decision making?"

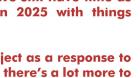
"That is a big challenge. That community is no longer adjacent to the project. We do have different community groups that are part of our advisory committee that can help facilitate some of those conversations. We've heard of voices from people that do have that history, whether it be themselves ot family members, but it's a matter of really getting that group together and being able to focus on those elements. We still have time as we anticipate groundbreaking for the boulevard in 2025 with things wrapping up in 2028."

"This project really started off as an infrastructure project as a response to the freeway, but we realized that with the history here, there's a lot more to it. We're working closely with the city and other partners to make sure that we can address that the way that we need to, and we will really have a lot of work on that in the next couple of years as we continue to progress through the project design."



"I wanna go back and have you talk more explicitly about the federal funds that are involved here. If MDOT did not replace I-375 with this six-lane boulevard, would it threaten that grant money? Is the grant tied to the idea that you are creating a road that has similar traffic capabilities to or potential to the highway itself? "

"It does put that at risk, so we've gone through an environmental process and determined what the project itself is. I do want to say though, that we are at 30% design, so we do have flexibility in looking at the number of lanes and the traffic and how it uses it. We've done a lot of work on that and understanding how we can minimize the width of the infrastructure, but we still need to the vehiclular traffic that is moving around the city. It certainly doesn't mean that all those lanes need to stay there forever, but what we're seeing right now with the traffic is that we need those lanes."





APPENDIX II

In this section, an additional human-scale rendering shows some of the qualitative aspects of the Black Bottom Memorial District. The final design intends to combine the physical separation from street level, and the implementation of dense greenery using native plants and trees to create a healing environment in memory of the Black Bottom neighborhood.



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