

The American Freeway: Socio-Economic, Cultural, and Racial Impacts in the Past, Present, and Future

Jonah Khersonsky¹ and Jacqueline Lubitz^{1#}

¹Montclair High School

#Advisor

<u>ABSTRACT</u>

Although a European invention, the United States has become the pinnacle of freeway construction. Freeways, limited access highways, or any synonym are roads that accommodate fast moving vehicles and nothing else, for the sake of efficient long-distance travel. A seemingly normal part of daily life to most, freeways have a very meaningful history. This paper examines the tremendous undertaking of the construction of the Interstate Highway System, and what followed in succession. From the creation of a car-dependent people to barriers against integration, freeways are extremely relevant in the United States' modern history. Today, highways and freeways continue to perpetuate geographically based inequalities and disparities along racial lines. They also contribute to the burning of fossil fuels and destruction of natural habitats, two of the largest factors in the incredibly pressing issue of climate change. Their future remains uncertain, and this paper examines this using past instances of anti-freeway movements. Solving the issue of freeways is vital to ensure equality and a high quality of life for all.

Introduction

The average American will go but a single day without getting into an automobile and traveling down a freeway. Limited-access highways have become a central facet of American society. They weave through the countryside and cut through cities, shaping the American landscape. The total length of all roads in the US is 94,000 miles, enough to go around the world four times (US FHA). Freeways have revolutionized and shaped modern travel, as today's world is extremely reliant on them. Freeways have also created the dependence on cars associated with the American lifestyle (Karas 7). This has had negative effects on the health of the American people, American cities, and the environment. Freeways exhibit multiple dualities: they support the economy but bring negative impacts to other aspects of society, they created new neighborhoods out in the suburbs while simultaneously destroying urban centers. When urban neighborhoods were destroyed, minority groups were disproportionately affected. In fact, the construction of freeways was disastrous for thousands of African American communities, which still feel the effects from the destruction today.

Freeways and car dependency has turned into an endless cycle: as more freeways are built, car dependency increases, leading to widening of roads and construction of even more freeways. This has a domino effect associated with it, as cities, environments, and populations are destroyed.

In 1903, Ford put the automobile on the market. During that year, only 12% of the roads were paved (Blas 1). Since then, the US has come a long way, but at what cost? As historian Evan Bennett puts it: "Were they highways to heaven or roads to ruin?" (Blas 1). The Interstate System and building of freeways directly harmed the American people and environment, despite the initial positive impacts. It created unsustainable urban sprawl that created a dependence on cars while simultaneously destroying urban and minority communities.



History of the Interstate System

The fiery frenzy of concrete laying and pillar installing had humble beginnings. In 1916, after lobbying from the automobile industry, President Wilson passed the Federal-Aid Road Highway Act. This created the Bureau of Public Roads (Blas 1). Most roads were unpaved, and most people didn't own cars, so the BPR would just be another obsolete federal organization.

In the first three years of the Bureau's life, it only distributed half a million dollars and only 12.5 miles of road were paved (Blas 1). Americans were not yet ready for freeways. In Europe, however, limited-access highways were beginning to connect cities. The concept of the freeway itself was developed by Europeans (Khalaj et al. 3). In fact, FDR would be later inspired by Hitler's construction autobahns in Germany (Blas 2). Hitler had constructed these roads in order to facilitate the movement of droves of his nazi troops, foreshadowing the construction of interstates in the US as a defense measure, which was a huge excuse for the effects of their construction.

During WWI, the few road projects in progress were terminated. Many roads deteriorated during the course of the war as a result of heavy military trucks. (Blas 2) This would be consequential as the US entered the 1920s, with big consumerism and credit allowing most people to buy cars for the very first time. Demand for paved and safe roads increased greatly during the following decade, however low government spending kept large federally funded road projects at bay. The New Deal arrived with FDR's presidency, creating road building projects to curb unemployment (Blas 2). This was the first time that highways were being actively constructed across the nation. These efforts were widely appreciated by the public, the new jobs provided relief to the unemployed during the Great Depression while roads became safer and efficient. The first successful construction was the Pennsylvania Turnpike in 1938 (Blas 2).

However, political resistance and the advent of WWII canceled FDR's plans for a highway system. (Blas 2). Once again, the US proved it wasn't truly ready for an interstate system. Not many people could buy automobiles during the depression, and as the US's involvement in the war became inevitable, the public and government turned their attention away from the construction of roads. During WWII, the need for more freeways was exposed. Military transport was difficult on the deteriorating, narrow, and unsafe roads (Blas 2). These conditions were hurting the war effort, and the idea of an interstate system became part of wartime propaganda.

Eisenhower was an early supporter of a new highway system (Blas 2). As supreme commander during World War II, he witnessed firsthand the advantages that an integrated national highway system gave to other nations. As the war ended and the nation moved on, the creation of an interstate system became a probable part of the American future.

The US was in the post-war boom of the 1950s and the growing economy and modernization meant that it was finally time for the US to catch up with the European nations and their growing intercity freeway networks. Many cities were undertaking measures to widen streets and reclassify city layouts that were only slightly successful (Khalaj et al. 3). A growing reliance on cars completely overshadowed these efforts. As populations grew and moved, the face of the nation was changing. It was inevitable that the US would need an interstate system in the next decade.

One of Eisenhower's first actions as president was submitting a proposal for a Transcontinental Highway System to Congress (Blas 3). There were plenty of motives for the creation of the Interstate Highway System. Road safety was a large one: by 1955, 36,000 people had been killed in auto accidents and 1 million were injured annually (Blas 2). For the first time, road accidents had become a public health issue. Another relevant motive was the Cold War. The government wanted better highways so that people could escape easily if a nuclear attack were to occur (Blas 2). The American public also felt safer this way, which the government used to its advantage in promoting the highway system as a part of its Cold War propaganda. Highways were efficient defense measures and allowed for fast military transportation. Besides the movement of troops and supplies, freeways have other, less known defense functions. Today, highways can also be used as landing strips. For example, in December 2020 a small plane made an emergency landing in the middle of a straight strip of highway in Minnesota. During wartime, the ability to conduct emergency landings safely practically everywhere would be very important. Overall, the Interstate System would greatly fortify the US's internal security.

On June 26th, 1956, Eisenhower signed the National Interstate and Defense Highway Act and construction on the Interstate System Began. (Blas 3). It took 37 years to complete the original plans for the network (Blas 3). It was the largest public works project ever undertaken in US history (Blas 1). Funding was also a large aspect of the construction: 90% of the funding came from the federal government (Blas 3). This was unprecedented, and also in paradox to the conservative anti-government spending environment of the time. In this case, however, it was justified, as the government had convinced the public that the freeways were necessary to protect the American people in the event of nuclear onslaught. The federal government obtained a lot of the money from the Highway Trust Fund Act of 1956, which increased gasoline and tire taxes to help fund the construction (Blas 3).

There were many initial positive impacts that graced the nation as the roads were strung across its landscape. The way that roads were classified, their width, signage, and other aspects, were all standardized across the entire nation (Blas 3). Roads were a lot safer and interstate travel became much easier. The overall American quality of life improved. The Road information project revealed that over the first 50 years of the Interstate Highway System, the interstates saved about 234,000 lives (Blas 3). An immediate impact of the interstates was economic growth (Blas 3). Goods could now be shipped farther and cheaper, market sizes grew, things became cheaper while the economy grew. The birth of the trucking industry also occurred, which created jobs and revolutionized the way products are transported long distances (Blas 3). Large companies now operated out of distribution centers where they could mass produce products and then truck them to every corner of the nation. Rural isolation was coming to an end (Karas 2). Even with modern technologies, rural areas were still heavily isolated from the rest of society. This was especially true given the fact that by the mid-1900s, most of the population lived in urban areas or closer to cities. As more people traveled through rural areas between cities via the interstates, towns near them began to grow. The Interstate Highway System had created a new, integrated United States.

Urban Sprawl, Suburbs, and Destruction of Inner Cities

Urban sprawl is defined as the uncoordinated and unsustainable growth of a city (Batty et al. 4). It "Flattens out" the population: instead of most of the population being condensed near the city center, it is more smoothly distributed among the suburbs. In extreme cases, the distribution of population can be equal everywhere, rendering the "downtown" obsolete. For hundreds of years, populations slowly condensed in cities until the advent of the automobile, which is actively undoing this concentration (Batty et al. 5). Centripetal forces holding people close to the inner cities continue to weaken to this day as cities continue to sprawl outwards.

After WWII, the growth of suburbs began (Blas 2). The Servicemen's Readjustment Act gave veterans of the war financial assistance for college education and housing. This sent great numbers of people into the middle class and, hoping to settle down and start a family, many bought houses in new suburban developments. At the same time, the Great Migration was occurring. Hundreds of thousands of black people were moving from the opportunity-ridden Jim Crow South to large northern cities. This created racial tensions in these cities, as a new population moved into the previously white dominated communities. Violence and riots were rampant as white people failed to accept the new and flourishing black urban communities. These changes ultimately pushed much of the white population out into suburbs, in a phenomenon known as "white flight". As white people emptied city neighborhoods and black people quickly filled them in, the scene was set for the racist impacts of the Interstate Highway System's construction.

Expansion of cities was directly proportional to the increase in ownership of cars (Batty et al. 5). This was because construction of interstates turned suburbanization into a large-scale movement (Blas 3). People could live even farther from the city and still access jobs in city centers. Job opportunities themselves spread out as once bustling downtown centers turned into a desolate reminder of what cities were originally intended to be. New shopping centers, office complexes, fast food chains, and more were all places that could only be accessed by a vehicle via a freeway.

Beltways were built to circumvent cities (Blas 4). This was sometimes even done in multiple layers, as rings of traffic protruded from a center point. A centrifugal force pushes people out of cities as they settle along these beltways. As interstates were constructed, people moved out in droves to new suburban developments. This left many

urban neighborhoods desolate and, even though minority groups would quickly fill in the gaps, these areas were still left underserved as efforts were placed towards the booming suburbs. This would destroy urban neighborhoods even before they were plowed through to build urban freeways. While in Europe freeways would go around large cities and mainly served for interstate travel, the US built freeways in cities as well (Schwartz 221). This would end up making the freeways have the opposite impact of what they were supposed to have, to connect rather than congest. Freeways had another opposite impact: although they were supposed to provide economic stimulation, there was a direct, proportional relationship between a city's proximity to a freeway and its economic decline (Brinkman, Lin 3). Eisenhower believed that urban freeways were especially important for evacuation of large populations out of city centers in the event of a nuclear attack (Schwartz 222). Furthermore, city planners believed that inner city freeways would make regular streets quieter and safer by diverting traffic (Schwartz 239). Nevertheless, the opposite occurred. Freeways brought even more cars into the city clogging city streets and making officials believe that even more car infrastructure is the solution. Freeways didn't only congest city streets, but also destroyed them: one interchange could replace hundreds of homes (Blas 4).

There were also negative effects on the regional level. Differences between regions affected the growth of cities. Cities that were older and grew with immigration weren't inundated as much by construction of interstates as opposed to cities that grew with interstates (Batty et al. 6). Cities like New York City, Boston, and Philadelphia were left almost the same because they were already established as large urban centers with mass transportation. Cities in the Midwest, South, and West were most affected because the cities grew with interstates and their culture grew with automobiles. Interstates led to new developments in population patterns as people moved away from Northern and Eastern States (Blas 4). This led to the creation of the Sunbelt region, which straddles the south of the nation and is the epitome of modern, car-dependent America, covered in flat "urban seas". While the freeways brought economic prosperity to these locations, it left established cities battling with population decline.

Some cities flourished from more traffic passing through while others became neglected (Blas 5). The ones ignored by the construction plans that may have previously been intercity travel centers were now bypassed by highways. The creation of highway bypasses around smaller towns sent people around cities and towns as opposed to through them. Before the Interstate System, a traveler making their way through a city on their way to another would have stopped in the city center at the train station, where they could step out and buy food or other goods from downtown businesses. Today, a traveler would simply use bypass freeways and travel through the suburbs around the downtown area in order to evade traffic. They would most likely stop at a chain restaurant at a strip mall or shopping center before they continued their journey. In this way, the Interstate System would kill many cities and towns, especially the ones that previously served as travel centers.

Before and After Images of Highway Construction in Two Urban Neighborhoods

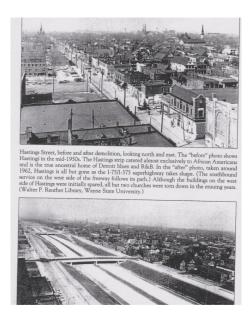


Figure 1. The construction of I-75 in Detroit (1950s-1962).



Figure 2. The construction of an interchange in Downtown Atlanta.

A Car-Dependent America: Impacts and General Socio-Economic Inequalities

By the 1950s, cars were an essential part of daily life in the suburbs (Blas 2). From drive-ins to driver's licenses as a "passage to adulthood", a strong car culture had been created. People spent hours in their car every day. However, car-oriented lifestyles are unhealthy and sedentary (Khalaj et al. 4). A big contributor to the high rates of obesity and chronic diseases in the US is the fact that people don't walk anywhere. The use of cars also encourages the consumption of more fast food, and the two cultures go hand in hand. As car reliance grew, train travel that had dominated the nation for more than a century was declining. Between 1920 and 1966, the percentage of intercity travel conducted



via railroads dropped from 70% to less than 2% (Blas 3). As cars became more efficient, they overtook all other modes of transportation.

Dependence on cars that was created by highways continued to widen the socioeconomic gap (Karas 7). This affected many different people, especially the black population. Much fewer black people had the means of owning a car, which prohibited more of the group from being able to participate in society as easily as the white population. Inequality due to highways didn't come only from race. Anyone who isn't able to travel long distances multiple times a day was also left out from being able to live in suburbs (Batty et al. 10). This can include disabled people, the very old, the poor, and more. With cars, the middle class became more and more isolated. Practically everyone was excluded except for the typical, nuclear white family.

By the 1970s, many underlying negative effects of freeways began to appear (Khalaj et al. 4). These impacts began to cloud the initial positive impacts, and the public began to notice. Freeway revolts sprung up in many cities during the age of social activism in the 1960s and 1970s. The long-term consequences of the American car culture were being revealed.

Issues of sprawl caused by highways include congestion, waste of time, use of non-renewable energy, lack of good social infrastructure, and erosion of agricultural land (Batty et al. 3).

These would end up hurting many communities and having some adverse effects from the original positive impacts, especially in the neighborhoods that weren't as economically or socially viable to protect themselves. For example, the congestion and traffic present on freeways would limit economic productivity, one of the main goals of the Interstate Highway System.

Freeways have had devastating environmental impacts, destroying and polluting habitats (Blas 5). In 1965, the Highway Beautification Act was enacted, which limited billboard use and created litter cleanup systems (Blas 5). However, this failed to address the root of the problem, and only cleaned up the highways themselves rather than the ecosystems they were destroying.

As a result of car dependency and freeways, fossil fuel use went up dramatically (Blas 5). Pollution became a real issue, and the idea of climate change was beginning to take form.

Consumerism surrounding gas would have further reaching impacts: larger demand would lead the United States into conflicts in other parts of the world surrounding oil and gas resources, such as the Middle East. Reliance on cars created a dangerous level of production and consumption of fossil fuels, which continue to damage not only the United States, but the entire world.

Urban sprawl is a largely capitalistic idea. It creates competition surrounding the control of land ownership. It also has short term economic benefits that come without consideration of long-term economic and environmental impacts (Batty et al. 9). It gives corporations more control, the same ones that care for money rather than the wellbeing of people and the environment. It also highlights differences in class when it comes to contributions to climate change. A paradox exists that as people get richer, they can buy more energy-efficient things but at the same time can buy consumer goods that require more energy (Batty et al. 10). For example, a rich person can afford to buy an electric car, but at the same time the large property they own requires hundreds of gallons of water to be used in order to water the lawn every day.

Car dependency led to a growing stratification of society. Urban sprawl led to "social coagulation", when people form communities based on race, lifestyle, income, and other factors (Batty et al. 11). An already segregated society was becoming more segregated, whether through redlining or social coagulation. People who couldn't afford it weren't able to move to suburbs, leaving them stranded in the crumbling urban communities (Batty et al. 10). Freeways didn't only divide communities by physically crossing through them, they also created division through exclusion.



How the Construction of Freeways Perpetuated Racism

Physical impacts of interstates on the American landscape are well documented, but the disproportionate impact on minority communities is often ignored (Karas 2). This follows the pattern of leaving some parts of history out. History is usually written by the victors, and the people in power don't want to admit the damage that they've caused. Some of these impacts were blatant, some were hidden (Karas 2). Nevertheless, it stands clear that the construction of the Interstate Highway system was directly targeted at destroying black communities.

There is substantiated evidence behind this claim. Often, the justification behind destroying urban black-majority communities was that the neighborhoods would "not constitute a loss" to the city (Karas 6). Planners saw these neighborhoods, filled with rich and diverse culture, as worthless simply because of their racial makeup. Officials would kick African Americans out of their homes but not help them find new ones (Karas 6). This wasn't the case for white people, who were often given plenty of options. Other government programs, such as social security, acted as a safety net and gave white people the resources to be able to relocate. Black people didn't have this privilege, and the government was aware.

Highways would slice through small black communities while ignoring larger portions of the city where black communities were a very small minority (Karas 6). In many cities, such as St. Paul and Hartford, planners deliberately made highways cut through small black communities instead of taking the easier route through white-majority neighborhoods. Furthermore, Eisenhower, the biggest proponent of the Interstate Highway System, refused to act on racial issues during his presidency, including the ones perpetuated by freeway construction (Karas 7). At a time where racial tensions were approaching their highest point, not addressing them may allude to him not concerning himself with the issue of racial injustice.

The construction of highways led to a significant loss of the black population in many cities (Karas 6). While white people willingly moved, black people were forced to flee the bulldozers. Entire neighborhoods would be destroyed (Blas 4). Engineers would be bribed, and poorer neighborhoods were destroyed more often because the land was cheaper to buy (Blas 4). However, the intersectionality between race and social class shows that oftentimes, poorer communities were predominantly black, largely due to the history of oppression. Governments would often hide plans about building freeways in black-majority neighborhoods (Karas 5). In some cases, years would pass between when the government would issue condemnation orders and the actual demolition would occur (Karas 5). Neighborhoods were essentially destroyed even before demolition. Once news of anticipated demolition spread, people moved out. Property rates plummeted and once flourishing communities were left deserted.

Interstates trapped black people and forced them into packed communities between interchanges and freeways (Karas 5). Black-owned businesses failed because they were separated from their customers (Karas 4). This sucked the life and vitality out of these communities, their rich culture and activity being tragically destroyed.

The construction of the Interstate System helped formalize Jim Crow discriminatory patterns (Karas 1). It was a new, more powerful form of redlining. It was yet another tool for the oppressor to assert their position over the oppressed. Building freeways was a way for white people to reclaim urban spaces (Karas 6). They were able to recapture the neighborhoods that white people "lost" as a result of the Great Migration. They then turned the land that minority groups were living on into land that is used for the white peoples' convenience. Today, many of these reclaimed neighborhoods are hotbeds of gentrification.

The construction of highways came at the same time as the black Civil Rights Movement (Karas 5). In the case of Nashville, it exacerbated tensions in the city following the murder of MLK (Karas 6). Across the South, it helped slow down school desegregation following Brown v. Board of Education by separating black communities from integrated schools by freeways (Karas 6). The government used freeways as a loophole to continue perpetuating racism, even when their activities were deemed illegal or unconstitutional.

Black people couldn't fight back against the destruction of their communities due their limited political leverage (Karas 5). At the completion of the Interstate System, most urban black communities looked very different than how they did before – or they were no longer there.



Local Case: Newark, NJ

The phenomenon of racialized freeway building and its effects on minority communities can be observed by examining a map of Newark, NJ. Northern New Jersey, although often ignored in discussions of segregation and racism due to its northern location, has a serious, systemic, and historical issue of redlining. This is shown on the map below, where major freeways have been highlighted.

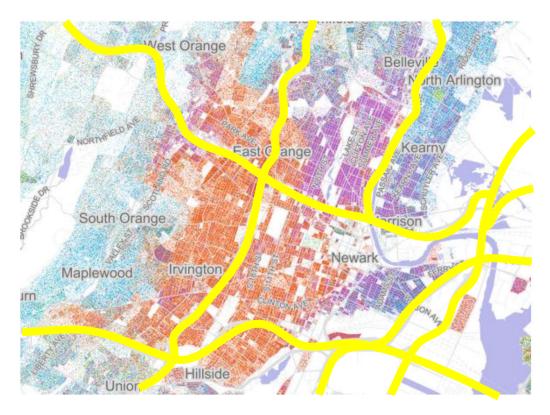


Figure 3. Color-coded map of racial majorities in different neighborhoods of Newark, NJ and surrounding towns (2015).

Table 1. Map legend.

Color	Local Racial Majority
Red	Black/African American
Blue	White
Purple	Hispanic
Green	Asian

This map demonstrates how freeways have caused separation and perpetuated environmental racism. In the red (black majority) areas near Newark, freeways cut through neighborhoods as if there are no obstacles. In the blue (white majority) areas, such as in the upper left, the freeway seems to curve and weave around communities. Upon closer examination it is also evident that the homes and city centers of white-majority neighborhoods are farther from the highways than in black and Hispanic (purple) majority communities. In the lower left and upper right, freeways divide red and blue neighborhoods, which during construction served as a tool to strengthen the effect of redlining. In the upper right, the freeway that passes near North Arlington runs along the river, separating Hispanic-majority com-



munities from access to a river that runs along their community. It also limits connectivity between the purple communities on one side and the blue ones on the other. Lastly, attention can be drawn to the bottom right, where a) the white spots are the industrial and port centers, as well as Newark Liberty International Airport (one of the busiest in the country) and b) a majority of the freeways in that area are especially large, wide, and composed of tall bridges. This means that the majority black and Hispanic communities that surround the freeways, industrial centers, and the airport are subject to living in a noisy and polluted environment, where the quality of life is significantly lower than in places farther away from the industrial zones. This is a form of environmental racism that consolidates minority communities in areas in close proximity to pollution, toxicity, noise, and other factors that limit quality of life. The maze of tall freeways and bridges essentially traps the communities, preventing them from expanding into areas farther away from the high-risk zones. The faint blue area that can be seen to the south of Newark in one of these near-industrial area neighborhoods is the beginnings of gentrification and will most likely result in white people turning the abandoned homes and warehouses of the community into high-priced remodeled apartments, displacing current residents within their own city.

Highway Controversy

Even though Americans have accepted heavy car use into their daily lives and interstates spanning their landscapes, the construction of freeways was never without controversy. The Interstate System itself was heavily controversial, even before it was built. As state highway departments began to release their construction plans, large populations immediately understood the destruction that was imminent. There was immense outrage over the planned demolition of historic districts, schools, parks, and religious institutions by the so-called "concrete monsters" (Karas 2). The US government had already prepared itself for public resistance and began to feed Americans propaganda surrounding the freeways. Most notably, that the Interstate System would help the US defend itself against communism- a particularly sensitive topic during the Cold War era. In the following decades, as the government built the interstates and the energy crisis of the 1970s highlighted the dangers of a fossil-fuel dependent society, a new movement of freeway revolts arose. These revolts were large demonstrations, sometimes lasting days, that would aim to stop the government from pursuing the construction of a freeway through a certain neighborhood or community. Freeway revolts started immediately after construction plans were released and became a notable part of the social movements that categorized the 1960s and 1970s (Karas 3; Blas 6). The largest revolts took place in cities like San Francisco, New York City, Philadelphia, Chicago, and St. Paul (Karas 3). For the most part, these revolts were successful. Jane Jacobs was a famous activist who can be credited with leading the movement against the construction of the Lower Manhattan Expressway (Brinkman, Lin 6). Due to efforts like hers and the thousands of activists, New York City has preserved its connectivity, quality of life, history, and status as an economic epicenter.

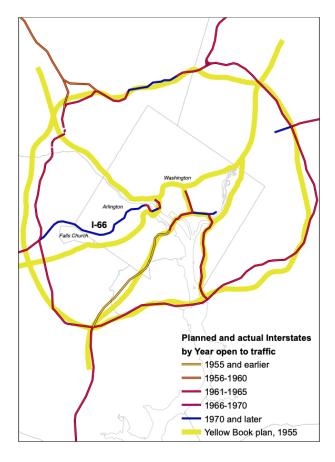


Figure 4. Yellow Book plan for interstates in the Washington, DC metropolitan area overlayed with currently existing interstates.

Figure 4 demonstrates the effect of freeway revolts on the construction of freeways. The revolts began after the federal government released its Yellow Book, which outlined the complete plans for the construction of the Interstate Highway System within metropolitan regions (Brinkman, Lin 7). In Washington DC, the Yellow Book outlined plans for a set of freeways to cut through urban communities throughout the District of Columbia and into central Washington. Freeway revolts successfully deterred the construction of most of the inner-city portions of the Yellow Book plan. Today, only a few freeways wind through the capital's more populated urban communities.

More than twenty American cities have introduced projects to remove inner-city interstates in the last fifty years, and several have already undertaken them (Karas 9). The demolished freeways are usually replaced with parks and other public spaces; however, they are often gentrified and don't accomplish the reversal of original damage done to black neighborhoods just a few decades prior (Khalaj, et al. 10). Nevertheless, they were still successful in improving the quality of life of residents. In Boston, the infamous "Big Dig" buried a central interstate underground (Brinkman, Lin 4). Above the now underground maze of interstates and freeways was a sprawling new park and city center. The traffic patterns were preserved, now going under the city instead of on top. The issue of freeway destruction was even taken to the Supreme Court; the 1971 case of *Citizens to Preserve Overton Park v. Volpe* ruled in favor of antifreeway grassroots organizations to stop the destruction of a park in order to build an interstate through Nashville (Karas 4). This ushered in a new era of environmental law. Later highway acts would require a public hearing and extensive reviews on potential economic, environmental, and social impacts (Brinkman, Lin 6). Despite this, there were still inequalities. The success of these anti-freeway movements largely depended on who was fighting for it.



Many of the successful revolts were against the destruction of majority white communities while the revolts against interstates that were to destroy black urban communities – especially in the South– had largely failed (Karas 4).

Freeway removal is said to be extremely beneficial in assisting the economy, boosting land values, decreasing pollution and smog, and restoring cultural and social activity (Khalaj et al. 5). Essentially, freeway removal promises the same effects that were promised with freeway construction, but without any of the negative effects. Today, anti-freeway movements have evolved from protest to the passive action of people moving to more walkable cities (Khalaj et al. 8). As the population of freeway-ruled cities declines, officials are beginning to realize that the destruction of these towering lanes and pillars is in the best interest of the people and economy.

Conclusion

There exists a great intersectionality between all of the different consequences of freeways in the US. The socioeconomic inequalities that were created are closely related to the racial injustice perpetuated as the highways sliced through black communities. It all returns back to the car-dependent lifestyle that has become ingrained in American society. It continues to perpetuate the same inequalities, fifty years after the completion of the Interstate Highway systems. Today, a disproportionately large percentage of the population that does not have access to a car is black (Berube et al. 3). This severely limits opportunities for minority communities and traps them, as it is difficult to have mobility in an environment that is completely reliant on automobiles. This, like many other racial phenomena, is caused by a deep history of systemic racism and economic divide. Minority groups pay taxes to fund the highway projects that perpetuate racism and destroy their own communities (Valentine). The presence of extra freeways within urban communities also contributes to the "urban heat island" effect, which exacerbates heat waves during the summer and causes illness and death in minority urban communities (Valentine). The negative effects of the interstate system continue to plague black and minority communities to this day. The freeways also continue to destroy and pollute the world as climate change inches closer to a point of no return. A 2008 report by the federal government stated that there needs to be a large-scale reassessment of the transportation and infrastructure systems, and that the government needs to formulate a new approach to environmental and civic-planning policy (Karas 8). American cities that were once pioneers of highway construction are now lagging behind other parts of the world as its roads negatively impact the quality of life of its citizens (Khalaj et al. 2). Especially in the West, where the rapid sprawl is a newer phenomenon, the long-term effects have not been fully established and are being monitored by the US Transportation Research Board (Batty et al. 12). Because of how solidified cars and suburbs are in American society, solutions such as taxes on single-family homes and increasing the price of gasoline would prove to have a trivial effect (Batty et al. 10). The solution isn't to eradicate the car, but to create public transportation that would take many people off the roads (Batty et al. 14). Even with the advent of electric vehicles that take away the traditional environmental impact of automobiles, the ecological and racial impacts of freeways still prevail. Other nations have prospered without urban freeways, and it is time for the US to as well. Dismantling the concrete pillars that stand on top of old neighborhoods - ones that used to have stories, cultures, and people - will bring the nation one step closer to achieving equality, and one step closer to preserving humanity.

Acknowledgements

I would like to thank Ms. Jacqueline Lubitz of Montclair High School for her mentorship over the long period of researching, writing, and revising this paper.



References

- Batty, Michael, et al. "TRAFFIC, URBAN GROWTH AND SUBURBAN SPRAWL." Centre for Advanced Spatial Analysis, ser. 70, 2003. 70, https://discovery.ucl.ac.uk/id/eprint/216. Accessed 17 Jan. 2023.
- "Before, During, & After Images of Interstate Highway Injustice." Panethos, 16 Dec. 2020, https://panethos.wordpress.com/2020/12/16/before-during-after-images-of-interstate-highway-injustice/. Accessed 18 Jan. 2023.
- Berube, Alan, et al. "Socioeconomic Differences in Household Automobile Ownership Rates: Implications for Evacuation Policy." UC Berkeley Goldman School of Public Policy, June 2006, gspp.berkeley.edu/assets/uploads/research/pdf/berubedeakenraphael.pdf. Accessed 27 Apr. 2023.
- Blas, Elisheva. "The Dwight D. Eisenhower National System of Interstate and Defense Highways: The Road to Success?" The History Teacher, vol. 44, no. 1, 2010, pp. 127–142., https://www.societyforhistoryeducation.org/pdfs/THT-NHDBlas.pdf. Accessed 17 Jan. 2023.
- Brinkman, Jeffrey, and Jeffrey Lin. "Freeway Revolts! The Quality of Life Effects of Highways." Federal Reserve Bank Philadelphia, Aug. 2022. https://doi.org/10.21799/frbp.wp.2022.24. Accessed 27 Apr. 2023.
- Karas, David. "Highway to Inequity: The Disparate Impact of the Interstate Highway System Poor and Minority Communities in American Cities." New Visions for Public Affairs, vol. 7, Apr. 2015, pp. 9–21., https://filetransfer.nashville.gov/portals/0/sitecontent/Planning/docs/trans/EveryPlaceCounts/1_Highway%20to %20Inequity.pdf. Accessed 17 Jan. 2023.
- Khalaj, Fahimeh, et al. "Why Are Cities Removing Their Freeways? A Systematic Review of the Literature." Transport Reviews, vol. 40, no. 5, 23 Mar. 2020, pp. 557–580., https://doi.org/10.1080/01441647.2020.1743919. Accessed 17 Jan. 2023.
- Schwartz, Gary T. Urban Freeways and the Interstate System. Southern California Law Review, 1975, Hein Online, https://www.law.du.edu/documents/transportation-law-journal/past-issues/v08/urbanfreeways.pdf, Accessed 17 Jan. 2023.
- Stirling, Stephen. "Map of Racial Makeup of Newark, NJ." NJ.com, 15 Oct. 2015, https://www.nj.com/news/2015/10/this_map_shows_a_racial_breakdown_of_every_person.html. Accessed 24 Jan. 2023.
- Valentine, Ashish. "The Wrong Complexion For Protection.' How Race Shaped America's Roadways And Cities." National Public Radio, 5 July 2020, https://www.npr.org/2020/07/05/887386869/how-transportation-racism-shaped-america.