Building Inequities: The Cultural, Economic, and Environmental Justice Impacts of the Interstate Highway System

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Abstract

The multi-decade development of the Interstate Highway System has been one of the largest determinants shaping the built environment, culture, and economy of the United States. As the largest public works project in history, the Interstate Highway System had a profound influence on the life of virtually every American due to increased economic efficiency, improved automotive safety, and heightened urban and rural interconnectivity. Despite these extensive benefits, the unequal burdens posed by the Interstate Highway System have led to lasting impacts in the form of demolished neighborhoods, polluted communities, and degraded land use patterns experienced most acutely by minority and low-income individuals.

Introduction

The multi-decade development of the Interstate Highway System has been one of the largest determinants shaping the built environment, culture, and economy of the United States. As the largest public works project in history, the Interstate Highway System constructed 40,000 miles of divided controlled-access highways that bridged the nation following World War II (FHA, 1999). This unprecedented level of public investment has had a profound influence on the lives of virtually every American due to increased economic efficiency, improved automotive safety, and heightened urban and rural interconnectivity. Despite these extensive benefits, the unequal burdens posed by the Interstate Highway System have led to lasting impacts in the form of demolished neighborhoods, polluted communities, and degraded land use patterns experienced most acutely by minority and low-income individuals.

The construction and expansion of the Interstate Highway System have had far-reaching implications for environmental justice, economic disparity, and social equity throughout the United States. Despite improving domestic infrastructure and nationwide connectivity, the extensive costs of the Interstate Highway System have, and continue to, disproportionately impact marginalized communities by contributing to ongoing pollution, communal displacement, and economic inequities. Simultaneously, the car-centric planning enabled by interstates has led to policies that exacerbate environmental degradation, harm vulnerable road users, and perpetuate longstanding systemic biases across racial and class lines (Karas, 2015). As a result, meaningful advancement toward environmental justice must necessarily work to unspool the decades of automotive reliance that have strangled the health, opportunity, and mobility of millions of Americans.

Historical Context and Construction Impacts

The Federal-Aid Highway Act of 1956 set the financial foundation for constructing the Interstate Highway System. In contrast to other transportation modalities, such as railways and state highways, the interstate system would be public, toll-free, and federally subsidized. However, funding would only be provided to projects that met interstate standards with controlled access, wide lanes, and high speeds (Weingroff, 2006). As a result, states seeking to improve their infrastructure following the post-World War II baby boom were incentivized to build roadways with wide footprints and limited interchanges that enabled greater safety and higher travel speeds. While these kinds of projects had a limited impact on rural areas with large swaths of undeveloped land, the routing of interstates through urban cores often damaged or destroyed disadvantaged communities, which provided the most economically efficient and politically expedient pathways for construction (Weingroff, 2006).

The unequal distribution of harms and benefits associated with the use, construction, and expansion of the Interstate Highway System mirrors examples from the field of environmental justice. Since forming in opposition to toxic pollution in the 1980s, the environmental justice movement has sought to address inequalities that lie at the intersection of race, class, pollution, and health (Cole & Foster, 2001). Environmental justice concerns often degrade individuals' quality of life through interactions with the built and natural environments, which transmit pollution and inequality. These impacts are most acutely faced by minority populations and those lacking access to political or economic resources needed to combat harmful developments (Cole & Foster, 2001). Throughout its history, the Interstate Highway System has mirrored these trends by building inequities through certain communities that continue to experience the cumulative impacts of demolished neighborhoods, acute pollution, and economic isolation.

The national scope of the interstate system meant that construction was frequently seen as a collective issue that precluded or overruled local concerns. As a result, interstate alignments, particularly those constructed in urban areas, were often determined without considering local community interests or inputs (Coombs, 2022). This primacy of the federal scale meant urban interstates were constructed along developed corridors with the least expensive land. Due to decades of systematic redlining and racially discriminatory housing practices, many of these urban interstate corridors, built using federal funds, cut directly through vibrant neighborhoods housing Black and racial minorities (Miller, 2018). These roadway scars have perpetuated and exacerbated historic environmental justice concerns by further entrenching inequalities, including heightened pollution, degraded mobility, and economic inaccessibility, into the built environment of urban America (Cole & Foster, 2001).

Despite being entitled to just compensation for land taken by the government under eminent domain, the value of properties owned by racial and ethnic minorities was often depressed by the early announcement of construction plans, which disincentivized community investment. Further, little to no housing was provided to individuals whose dwellings were demolished to make way for interstate corridors. Following the construction of interstates, the surviving adjacent small businesses suffered from decreased automotive and foot traffic as cars used the highway bypass and pedestrian access was impeded (Concas, 2018). The scale of the interstate system and discriminatory racial politics meant that the suffering of individuals and localized

minority groups was frequently dwarfed and disregarded by the national powers and institutional inertia pushing to connect America (Karas, 2015).

For example, in Boston, the construction of I-93 alongside adjacent highways through downtown coincided with a wave of urban renewal that displaced more than 20,000 residents while providing limited relocation assistance. Black residents represented 32% of the displaced residents, despite making up only 5% of Boston's population. Many other residents with demolished homes were recent European immigrants who lacked the systemic understanding and political influence to advocate for just compensation (Susanek, 2024). As a result, many people experiencing the harms of highway construction were left without the community or government resources needed to ensure adequate housing and employment opportunities. This exacerbated existing discriminatory housing and hiring processes, leading to knock-on environmental and economic effects that continue to impact surrounding communities (Valenzuela-Casasempere, 2024).

While the construction of highways had direct impacts on demolished properties and displaced residents, the alterations in urban accessibility, traffic patterns, and pedestrian access caused by high-speed roadways had profound effects on surrounding businesses. In New Orleans, the construction of I-10 through the Claiborne corridor erected concrete and steel rods over an oak tree-lined avenue in the African American Tremé neighborhood (Hawkins, 2024). In the process, over 500 homes were destroyed, with the remaining neighborhoods separated from the local business district. Still today, "the shadow of the interstate highway now towers above the neutral ground where generations of families used to walk to work, interact, picnic, and socialize," leading to a long-term decline in surrounding business activity and quality of life (Gershon, 2021). This trend has been reflected in cities across the United States as early highway construction prioritized automotive mobility over urban vibrancy in the built environment.

While many early interstate construction projects aimed to minimize project costs by building through minority communities, some sought to create deliberate physical barriers between racial groups. In one such example, the routing of I-20 through Atlanta in the 1950s was deliberately designed to serve as "the boundary between the white and Negro communities," as stated by Atlanta mayor Bill Hartsfield (Kruse, 2021). City planners hoped that the destruction of impoverished neighborhoods in the highway corridor, along with the physical separation imposed by the roadway, would keep downtown Atlanta desirable to middle-class whites who were increasingly migrating from urban centers to suburbs. While the highway succeeded in exacerbating and concentrating inequality, the increased speed and ease of automotive transportation accelerated the urban flight of white residents. This depressed the local tax base, leading to degraded municipal services and urban decay in subsequent decades (Kruse, 2021). This confluence of social, economic, and environmental impacts directly implicated the Interstate Highway System in the Environmental Justice movement (Cole & Foster, 2001), contributing to the proliferation of protests and community activism in future years.

Freeway Revolts & Regulatory Responses

Throughout the development of the Interstate Highway System, many construction projects, particularly those in urban areas, faced substantial opposition due to impacts on local communities and culture. However, the success of early community movements relied on developing a broad coalition of support centered around specific impacts. Examples of this include the cancellation of the Manhattan

Expressway system, which would have bisected one of the most densely populated areas in the United States (Sagalyn, 2016), and the rerouting of the Vieux Carré Riverfront Expressway in New Orleans, which would have destroyed much of the culturally rich French Quarter neighborhood (Baumbach & Borah, 1981). In both cases, a large number of community groups, including predominantly white homeowners, voiced opposition to highway construction on the grounds of degraded quality of life. However, highways were rarely canceled when construction impacted a single minority group.

These differential outcomes in construction impacts mirror elements of intersectional oppression that have impacted communities across America for decades. Oftentimes, systemic factors combine to amplify harm among minority and socioeconomically disadvantaged groups (Pulido, 1996). In the same vein as environmental justice concerns surrounding the location of waste facilities and climatic vulnerability, interstate impacts and remediation have often been stratified across racial and class lines. This stratification has meant that movements opposing highway construction in a single community, particularly those with little economic or political influence, have seen less success than movements that successfully mobilized multiple interest groups. As a result, resistance raised by disadvantaged communities, particularly those subject to intersecting oppressions, has been devalued and disregarded by the legal and political institutions charged with protecting them. To address these inequities and environmental justice concerns, activists must work to understand how the nuanced applications and impacts of racial and economic bias influence our social and physical environment over time (Pulido, 1996).

Some community highway opposition projects were successful even during the initial decade of the Interstate Highway System, when regulatory roadblocks were minimized and national momentum was strongest. For example, in the 1950s, residents of Memphis protested the routing of I-40 through Overton Park, the principal greenspace in the region, due to its low construction cost. The local protests eventually coalesced into the group: Citizens to Preserve Overton Park (CPOP), which lobbied local and state authorities to pursue alternative routes. After exhausting administrative review processes, the group appealed legal decisions up to the Supreme Court, which, after deliberation, required local authorities to demonstrate that there were no "feasible and prudent" alternatives to building through public lands. After nearly 25 years of resistance, I-40 was rerouted, saving Overton Park and numerous other green spaces protected by the new legal precedent (Mohl, 2014). The success of this coalition was derived from its ability to continually pursue legislative and legal challenges while drawing support from the numerous citizens who wanted to preserve public spaces, paralleling traditional conservationist approaches toward environmental justice (Cole & Foster, 2001).

In stark contrast to this success, the construction of the same interstate 200 miles east of Memphis highlights the intersectional construction impacts experienced by minority communities. In Nashville, I-40 was routed through a 2.5-mile urban stretch of land occupied by 128 businesses, 620 houses, and 27 apartment houses serving nearly all Black residents. Despite engendering fierce public opposition and lawsuits on the grounds of racial discrimination, construction was allowed to move forward as courts decided that residents had ample opportunity to provide feedback at previous public hearings. This ruling was held despite state transportation officials not adequately notifying local residents of the public meetings or highway impacts. As a result, eminent domain purchases went forward, and bulldozers began demolishing acquired properties in the right-of-way within hours (Haynes, 2020). These differential outcomes highlight how the

implicit, and at times explicit, racial biases held by past and present decision-makers can reinforce inequalities between different groups alongside structural discrimination in the physical and social environment (Pulido, 1996).

The Development of Regulatory Frameworks

Planners in the initial era of interstate construction faced few limitations when deciding how, when, and where to build highways. As a result, budgetary constraints became the primary determinant of interstate routings (Coombs, 2022). This myopic focus on finances and efficiency had deleterious effects on the fabric of urban areas, the health of the environment, and the well-being of minority communities (Samuels & Freemark, 2022). In recognition of the importance of environmental justice, these impacts and corollary social movements led to the gradual growth of federal legislation designed to enforce restrictions on proposed roadway projects to protect impacted communities.

One of the first pieces of federal legislation impacting highway construction was born out of the Civil Rights Movement. The landmark Civil Rights Act of 1964 prohibited discrimination based on race, color, and national origin in programs and activities receiving federal funds, including highway construction. This law functionally requires state road-building authorities to have mechanisms for collecting data on and responding to complaints regarding racial discrimination in transportation projects. While this represented a meaningful step towards collecting and addressing community concerns, the legal force of the act was severely weakened by the Supreme Court in Alexander v. Sandoval, which made it much more difficult for plaintiffs to prove government discrimination (Welner, 2001).

In tandem with equity concerns, policymakers became more receptive to the environmental impacts associated with roadway construction and automotive traffic. This contributed to the passage of the National Environmental Policy Act (NEPA) in 1969, which required that new highways and significant expansions conduct environmental impact studies before proceeding with construction (Mohl, 2004). In addition, NEPA enhanced public comment requirements regarding large infrastructure projects. Despite these efforts, the inaccessibility of environmental impact statements and lack of protection for disadvantaged communities limited the efficacy of the act in reducing environmental justice concerns associated with highway construction (Costa et al., 2018).

The following decades saw the emergence of automotive pollution standards derived from the Clean Air Act and the Environmental Protection Agency. The confluence of technological advancement and regulatory tightening since the 1970s has led to a meaningful reduction in multiple forms of pollution, with racial and ethnic minority and low-income communities often seeing the greatest improvements (Nunez et al., 2024). This relationship between regulations, health, and minority groups was further highlighted by Executive Order 12898 on Environmental Justice, written in 1994 by President Clinton, which directed federal agencies to evaluate human health and environmental conditions in minority and low-income communities when making policy decisions (EPA, 2024; Cole & Foster, 2001).

Despite the progress enabled by these regulatory frameworks, especially when planning and implementing future expansion plans, federal policy has substantially left historic and ongoing damage caused by existing interstates unaddressed. As a result, disadvantaged communities continued to experience the adverse effects of pollution,

communal degradation, and reduced property values without meaningful restitution from regulatory agencies (Karner & Niemeier, 2013). While increasing political emphasis is being placed on addressing the systemic influences that perpetuate the unequal burden of highways, there remains substantial disagreement surrounding what constitutes both undue burdens and just compensation. These challenges are further exacerbated by the differentiated nature of political alignments and roadway impacts, which preclude the use of a uniform federal policy approach to address the cumulative social, environmental, and economic implications of the Interstate Highway System.

Health Impacts & Limited Response

Many issues in environmental justice interact with the concept of slow violence, which describes the long-term impacts of localized pollution. Over time, slow violence can manifest in higher rates of cancer and chronic diseases that impact certain areas at rates much higher than normal (Rice, 2024). These deleterious effects occur as a result of the incremental accumulation of invisible hazards across an ambiguous spatial boundary surrounding a pollution source (Akese & Little, 2018). The socioeconomic, health, and environmental challenges originating from pollution are transmitted through the built and natural environment along channels created and reinforced by human patterns and economic activity (Akese & Little, 2018). In the case of interstates, the continued societal emphasis on global trade and urban mobility has promoted the ongoing use and expansion of roadways that enable the proliferation of slow violence via automotive pollution. Efforts to combat environmental injustices are intrinsically linked to the components of slow violence that reinforce unequal outcomes in health, mobility, and economic opportunity among disadvantaged communities.

The cumulative health impacts associated with automotive pollution are often ignored and isolated from discussions of environmental justice and transportation equity. In practice, many communities most impacted by highway developments serve as sinks that absorb much of the concentrated, cumulative, physical, social, and financial harm associated with automotive transportation (Karas, 2015). These harms manifest physically in decreased life expectancy and increased medical harms, as well as economically through degraded earning potential and reduced human capital (Constant & Davin, 2021). Despite conclusive evidence that links highways and health impacts, many public officials, influenced by a myriad of external factors, have shown little appetite for addressing the root societal and economic enablers of roadway-induced slow violence.

Areas surrounding highways have higher rates of respiratory and cardiac diseases due to pollutants generated by automobiles. Nearly 11% of the United States households are located within 330 feet of an interstate-grade highway (Brugge et al., 2007). As a result of historic housing policies and highway construction alignments, the predominantly Black and minority communities surrounding these areas experience the disproportionate burden of automotive pollution (Samuels & Freemark, 2022). This increased exposure, aggregated over time, contributes to both a decrease in total life expectancy and quality of life due to higher rates of cognitive impairment, chronic health conditions, and cancer (Harris et al., 2015; Brugge et al., 2007; Beelen et al., 2008). These impacts are exacerbated by inequities in healthcare accessibility, leading to knock-on effects that manifest across generations.

Oftentimes, interstates are collocated with industrial manufacturing facilities in urban areas due to the relatively low land prices surrounding industrial sites and the accessibility provided by highways. Such a case occurred when I-70 and

I-25 in Denver were built around historic smelters and the largest oil refinery in the Rocky Mountain Region. As a result, the surrounding communities experience the collective effects of industrial and institutional pollution, which contribute to a 10-year decrease in life expectancy compared to other Denver neighborhoods (Brown, 2016). Inequities such as this compound over time, leading to worse socioeconomic outcomes over generations (Baciu et al., 2017). Colocation entwines highways with more traditional environmental justice protests surrounding the negative effects of manufacturing, waste, and chemical facilities in disadvantaged areas (Cole & Foster, 2001).

These environmental justice concerns have been worsened by the continual expansion of roadway systems to meet forecasted demand and ease transportation for drivers. Roadway expansions frequently result in additional construction, land acquisitions, and pollution, which further impact vulnerable communities without meaningfully reducing traffic or travel times (Mann, 2014). This is due to the principle of induced demand, wherein the addition of new lanes leads more people to drive as their primary means of transportation (Goodwin, 1996). The addition of more cars on the road quickly consumes the additional capacity produced by expansion, contributing to heightened automotive reliance and pollution that worsens the quality of life of surrounding communities and generates calls for the continued expansion of roadways. Such a cyclical relationship has led to the construction of supersized roads, such as the I-10 Katy Freeway in Texas, which, despite being nearly as wide as one-and-a-half football fields, still experiences some of the worst traffic congestion in the United States (Slotboom, 2003).

Broader corporate interests have promoted the continued development of roadway infrastructure due to economic reliance and influence. Throughout the late 20th century, corporate actors in American automotive manufacturing continued to lobby for increased funding and development of car-centric infrastructure and planning while oil and gas corporations sought to loosen fuel efficiency standards (Kelly, 2022 & Stromberg, 2016). The policies enacted and continued as a result of this lobbying have led to subsidizing excess pollution and automotive dependence at the expense of public transit and urban resilience. Together, these factors have led to long-term infrastructure development that further worsens pollution, perpetuates slow violence, and exacerbates environmental injustices by prioritizing profits over people.

Cultural, Economic, and Equity Impacts

The built environment is inextricably linked to the ways inequalities and environmental injustice manifest in our world. Lubitow and Miller (2013) argue that sustainable design decisions must incorporate environmental justice principles, recognizing that infrastructure is not just a technical undertaking but a deeply social one. In practice, the consequences of these interactions have often been excluded from the decision-making processes, leading to expanded physical and economic barriers between communities and resources (Lubitow & Miller, 2013). As a result, the design of our nationwide infrastructure and land use has cultivated automotive reliance and degraded public transit that fails to serve vast swaths of the population while reinforcing multiple economic, environmental, and social inequities.

The development of the Interstate system and corollary state highway systems enabled the suburbanization of the United States by decreasing travel times between suburban and exurban residents and urban employment centers. This migration pattern, typically followed by white families, was further entrenched with car ownership in the national psyche due to its associations

with the American Dream of home ownership, independence, and economic advancement (Brody, 2013). Additional federal subsidies for homebuyers have pushed more people into lower-density developments, which contribute to car dependency, increased traffic congestion, and exacerbated automotive pollution that primarily impacts urban dwellers (Shane, 2023) while also contributing to higher obesity rates, pedestrian deaths, and isolation (Miller, 2018). Due to the timescale of public investments, many of these impacts will require decades of systemic remediation to meaningfully address (Lubitow & Miller, 2013).

The prioritization of federal funding for automotive infrastructure has come at the expense of public transportation systems across the country. By making independent car travel, and by extension detached suburban living, more accessible, the Interstate Highway System has contributed to land use patterns where housing and mobility are not well aligned (Mawad, 2021). As a result, transit agencies are tasked with serving wealthier, low-density suburban communities alongside more reliant urban communities. The result has been a nationwide public transportation system that provides inadequate service to both groups and whose use is determined by class as opposed to convenience (Sen, 2022; Spieler, 2020). Due to this, urban areas are increasingly experiencing the environmental and social harms of automotive pollution without the corresponding mobility and economic benefits.

On a broader level, the mass migration of white individuals away from urban areas has had substantial negative implications for large cities, which have experienced the fiscal consequences of a dwindling tax base. As a result, many public transportation systems and local services serving vulnerable communities have been degraded (Ewing et al., 2003). Further, the construction of highways prioritizes the accessibility of urban destinations for those who drive from outlying areas, as opposed to those who live in cities (Poon, 2019). This modal emphasis places large burdens on individuals traveling via foot or bicycle who are subject to hazardous infrastructure that substantially increases their likelihood of being struck by a car (Nehiba & Tyndall, 2023). These risks are disproportionately borne by African Americans and other racial and ethnic minority groups who are less likely to drive than their white counterparts (Dilmaghani, 2022).

Interstates enabled the American car dependency that has shaped land use patterns and cultural associations for more than half a century. As a result, the vast majority of people require a car to traverse our built environment. The cultural association between the American dream, car ownership, and urban mobility systemically disadvantages anyone who does not drive by forgoing investment into public transit and cycling infrastructure (Editors, 2024). This formalized inequality then contributes to an enhanced culture of driving, which exacerbates the cycle of destructive land use patterns that metaphorically and literally divide people from resources, opportunity, and community. Equitable access to each of these elements is a key component of achieving environmental justice and addressing the deleterious systemic consequences of roadway construction (Cole & Foster, 2001). As a result, we must work to reorient our built environment around sustainability, accessibility, and equity to create lasting change (Lubitow & Miller, 2013).

Ongoing Battles and Future Concerns

The concept of just sustainability, coined by Julian Agyeman, redefines environmental justice by integrating equity, social justice, and sustainability within a broader quality-of-life framework. Growing numbers of urban planners recognize that efforts to support environmental justice must go beyond addressing disproportionate environmental harms to consider how equitable access to resources

and opportunities enhances overall well-being (Agyeman, 2008). This shift aligns with the idea that sustainable development must prioritize the needs of the most vulnerable while fostering livable, inclusive communities. Applying just sustainability to transportation projects involves not only mitigating environmental harm but also actively improving equity by reconnecting divided communities, reducing pollution in historically marginalized areas, and ensuring all populations benefit from infrastructure investments.

Recent transportation investments, including the Federal Reconnecting Communities Pilot Grant Program, have helped support environmental justice frameworks for addressing the historic impact of transportation inequities in disadvantaged communities. Funding for this program has gone to reconnecting Chinatown in Philadelphia by moving multiple blocks of I-676 underground, improving bus rapid transit access in Columbus, and enhancing highway mitigation and pedestrian infrastructure surrounding I-5 in Portland (DOT, 2021). Further, the American Infrastructure Act has dedicated more than $66 billion to improve passenger rail service, electrify public transportation, and enhance urban interconnectivity in underserved communities across the nation (White House, 2021).

In tandem with targeted federal legislation, state transportation officials are increasingly shifting away from highway expansions as costs, public opposition, and environmental concerns grow. Both Denver and Los Angeles have redirected funding earmarked for additional highway lanes toward public transit and micromobility infrastructure to meet climate goals and promote economic activity; however, it remains to be seen how effectively these changes are implemented (Brey, 2022). These systemic shifts are occurring in tandem with a cultural reprioritization of transportation modalities to address historical inequities and personal preferences (Blumgart, 2021). As a result, city planners have used the expansion of bike and pedestrian infrastructure to reconnect previously severed neighborhoods while promoting greater visitation to urban destinations (Glickman & Funk, 2024). Together, these remedial and proactive systemic mechanisms guided by communal input have the potential to improve environmental justice by cultivating a built environment tethered to principles of equitable access and just sustainability.

Despite the growth in interest surrounding transportation planning and community resilience, some cities have continued to emphasize automotive infrastructure. For example, in Houston, home to one of the nation's largest highways and least developed public transit systems, state transportation officials have been seeking to spend nearly 13 billion to expand I-45 over 18 years. The project, which would displace more than 1000 residents in minority neighborhoods, has been the subject of lawsuits by local county officials and federal Title IV investigations (Love, 2021 & Milman, 2022). Despite these actions, an agreement has been reached that would allow the expansion to move forward with federal oversight of the relocation and property acquisition process (Strupp, 2024).

In contrast, activists in Oakland have been advocating for the removal of I-980, which cut through red-lined neighborhoods in the 1970s en route to a second Bay Bridge that was never built (Johnson, 2021). Substantial funding has gone into a project designed to convert the functionally redundant interstate into a much smaller at-grade boulevard with greater pedestrian interconnectivity. The removal, expected to begin in 2026, would construct additional housing on reclaimed land and enhance accessibility to public transit (Caltrans, 2024). Due to the historic development of industrial manufacturing facilities in Oakland, these roadway alterations have the potential to induce knock-on effects that reconfigure the local economy

towards sustainable development while addressing an additional source of historic environmental inequities.

The stark contrast between the projects in Houston and Oakland highlights how modern transportation planning decisions can work to exacerbate or remediate historic environmental justice concerns. Even when federal oversight and infrastructure investment seek to promote greater transportation equity, comprehensive community engagement is needed to guide resources towards projects that will generate the largest lasting benefits while balancing the remediation of historic wrongs and the development of future resources. This community activism and appetite for environmental justice will become increasingly important as changing political priorities and economic headwinds push for the prioritization of roadway expansions to the detriment of the people that they serve.

Conclusion

The Interstate Highway System has been the most consequential government project of the last century, returning more than $6 for every dollar invested (Cox & Love, 1996). Despite reducing the urban-rural divide, improving economic interconnectivity, and enhancing road safety, the specific design choices of the Interstate Highway System disproportionately excluded and harmed disadvantaged communities to benefit the nation at large. The resulting concentrated pollution, displacement, and isolation associated with highway construction have perpetuated generational disparities in health outcomes and economic opportunity across racial and class lines. These factors were compounded by broader cultural and economic shifts made possible by the Interstate System, including the degradation of public transit, suburbanized land use patterns, and automotive dependence, which exacerbate environmental justice concerns.

The Interstate Highway System was built on the promise of connecting the nation; however, historic inequities and policy missteps meant that millions of people were divided in the process. While recent progress, including the removal of highways, represents a step in the right direction toward addressing historic environmental injustices, meaningful remediation requires extensive investment in public transportation, community engagement, and environmental enforcement to succeed. As numerous highways reach the end of their service lives, the next century of American infrastructure development will be defined by how well the country can unite to realize the promises of connectivity by building a transportation system that enables opportunity and bridges divides for all.

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