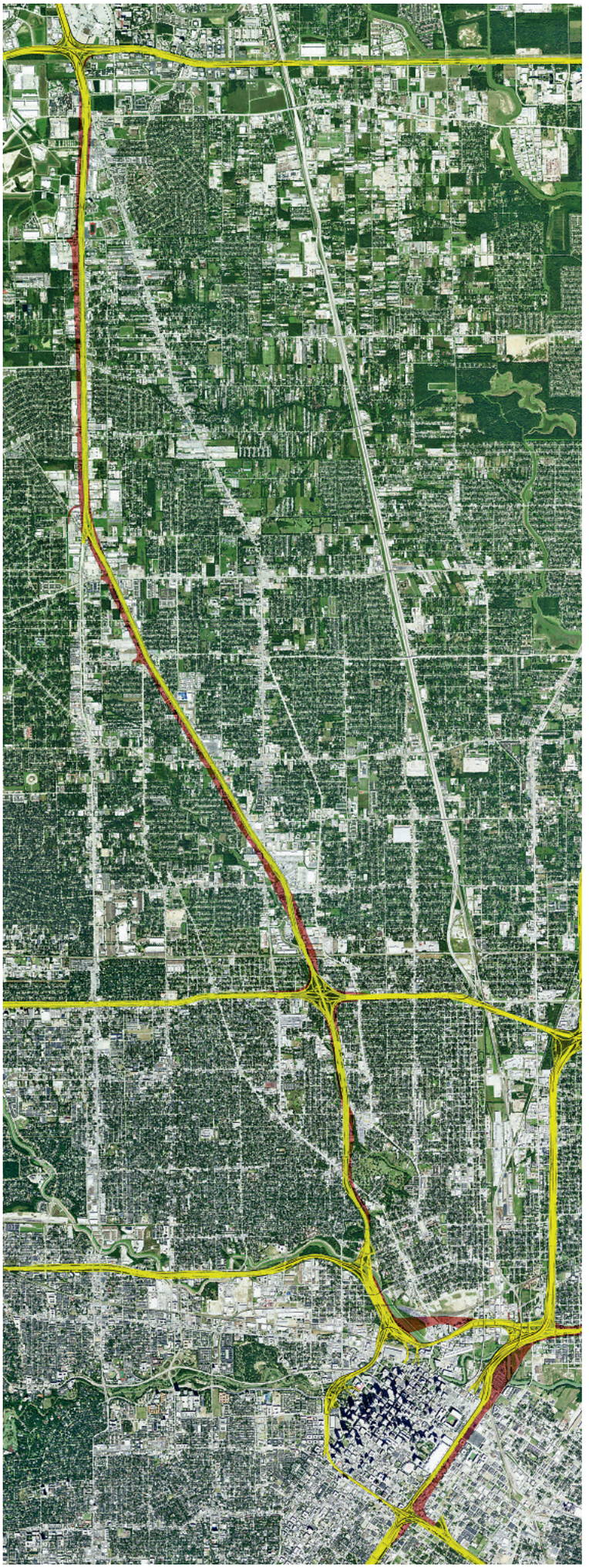
I-45 and I-10 north of downtown. Photo: Iwan Baan.

Aubrey Calaway

Frictions

A simple, two-column table appears early in the Final Environmental Impact Statement (FEIS) for the North Houston Highway Improvement Project (NHHIP). Titled “Project Need and Purpose,” the table appears, at first glance, to be an objective bureaucratic device. The left-hand column describes the dire state of our city’s highways: “The roadway facility does not provide adequate capacity for existing and future traffic demands.” Alarming statistics are cited: a 40 percent increase in daily traffic volume on I-45 between US-59 and I-10 and “serious” to “severe” congestion are predicted by 2040. *Then, on the right, the self-evident solution: more highway.* For Houstonians, this conclusion isn’t surprising. The prairie long ago gave way to sprawling lanes and lots. But highways aren’t inherent to our landscape, nor are they an inevitable product of a growing city. They must be ritualistically rejustified or altered, operations that rely on the levers of government. Instead of serious reconsideration, assumptions are repackaged as doctrine, choices as destiny. In the process, the human hands and beliefs required to enact these processes become obscured.



Houston's existing highways are shown in yellow, while the proposed NHHIP footprint is shown in orange. Courtesy Segregation by Design.

Houston's streetcars stopped operating in 1940. It wasn't long until the city's patchwork of private bus companies started struggling. Then, a flood of postwar federal dollars introduced a promising new mechanism of urban growth. In 1952, swaths of grassland were cleared for the Gulf Freeway, the city's inaugural highway. Within just three years, commuters were packed into bumper-to-bumper traffic, and Houston was sprawling. Housing developers leapfrogged outwards, purchasing distant expanses of farmland with the expectation that the highway would eventually meet them there. The city itself raced against smaller towns to annex this increasingly populated and taxable suburban frontier. As Houston's cohort of elected officials, business leaders, and developers—mostly white men—filled their pockets, communities of color suffered.

The Fifth Ward, a historically Black neighborhood, once supported a thriving pulmonary system of pedestrian activity. According to transportation scholar Kyle Shelton's *Power Moves*, until the late 1950s, paths weaved through unpaved streets and across neighbors' yards, connecting homes, schools, and the businesses along Lyons Avenue. Then came the East-Tex Freeway, which sliced through these capillaries, splitting the neighborhood in two. As seen in Texas Department of Transportation (TxDOT) aerial photography from 1964, the interchange between I-10 and US-59 alone destroyed thirty-six square blocks of Fifth Ward near downtown.

Similar operations pushed highways through Black communities in Third Ward and Freedman's Town. Displaced residents moved and businesses folded, while those who stayed endured air and noise pollution, in addition to the blight of disinvestment. Outrage about these conditions was folded into the broader struggle for civil rights in the 1960s. But for developers and politicians, the fracturing of communities of color was a necessary sacrifice for their idea of what Houston should be.

Today, the NHHIP may pick up where these historic environmental injustices left off. Expansion of I-45 has been under consideration for almost two decades: TxDOT first recommended building additional capacity in 2002. Their 2017 Draft EIS (DEIS) made public the details—and stunning scale—of the project. The NHHIP promises to be the most dramatic expansion of Houston's highway system in its history, an estimated $9 billion change to the way the city travels. Plans for the project include widening I-45 with four new managed express lanes from downtown to Beltway 8, realigning I-45 to run parallel to I-10 on the north side of downtown and to I-69 on the east, and decommissioning the Pierce Elevated, among other changes. The planning process alone has cost TxDOT—and therefore Texas taxpayers—an estimated $503 million, according to Dug Begley's reporting in the *Houston Chronicle*. But the NHHIP has been met with resistance from residents, turning what seemed to be an infrastructural certainty into a site of contested citymaking.

A Coordinated Response

Fabian Ramirez wasn't surprised when he heard about the NHHIP. "This isn't our first rodeo," he said during a phone call in October 2021. "These tactics are inhumane and irrational. But they aren't new."

Ramirez lives in Northside Village, only two blocks from where his grandparents first settled after emigrating from Costa Rica. His parents later moved out to the suburbs in search of better education for him and his siblings. But he always held out hope of a Northside homecoming. After launching a career in engineering, he bought property along I-10 and made plans to build low-income residential homes for his community. "I want to help build back all the generational wealth we've lost," he explained.

But rather than providing affordable housing and financial assets to his community, Ramirez's property will be lost to the NHHIP. "Once TxDOT finishes expanding I-45, when they relocate I-10, that'll impinge on my property line," Ramirez said, the frustration clear in his voice. "It's still ten years away, but I'd rather be doing something productive with my life in those ten years, not picketing and protesting."

For now, he sees no other option. Ramirez has joined a growing group of Houstonians who are unwilling to accept the sacrifice of urban communities for the sake of a slightly faster morning commute.

"In recent memory, there hasn't been quite the groundswell of public pushback that we're seeing with this project," said organizer and nurse Molly Cook. "In TxDOT's own words, [the NHHIP] will disproportionately affect low-income Black and brown community members. But this is a lose-lose deal for everyone."

Decades before joining anti-NHHIP organization Stop TxDOT I-45, Cook saw how her own father, a white suburbanite, suffered under highway hegemony. "I watched him drive the one and a half hours to and from work downtown, and he hated it. He would have wanted the option to use a park-and-ride or a high-speed train," she recounted. Motivated in part by her advocacy for equitable and sustainable transportation infrastructure, Cook ran as a Democratic candidate for Texas Senate District 15.

Critics have accused TxDOT of minimizing environmental justice concerns throughout the planning process. In its DEIS, the agency admitted that all proposed options for highway expansion "would cause disproportionately high and adverse impacts to minority and low-income populations." But the final version neutralized this claim. Despite finding that the NHHIP would result in *more* adverse impacts than previously thought, TxDOT asserted that increased spending on resident relocation, flood-related resilience measures, and add-ons like bike lanes would neutralize any harm, effectively greenwashing its effects.

Other rhetorical adjustments attracted the attention of local stakeholders. Air Alliance Houston noticed that while TxDOT originally claimed that air quality would improve in the area despite more vehicles passing through, they also claimed that they couldn't measure local changes in air pollution at all. In establishing the City of Houston's position, Mayor Sylvester Turner pointed out that, rather than addressing the concerns about climate change present in their draft proposal, TxDOT simply removed most mentions of it. And, like the DEIS, the FEIS didn't provide any alternative to the removal of an estimated 160 single-family homes, 919 multifamily units, 344 businesses, five churches, and two schools.

After TxDOT self-certified the NHHIP in February 2021 despite significant local resistance, opponents realized that they had to seek a higher authority. "We tried going local, we couldn't go to the state, so we decided to go federal," explained Stop TxDOT I-45 founder Susan Graham. In addition to in-person protests and organizing, the group began a campaign to help Fifth Ward residents file Title VI complaints with the federal government regarding the racial inequities of the NHHIP. In response, the Federal Highway Administration (FHWA) opened an investigation in March 2021. On the same day, Harris County filed its own lawsuit.

A host of problematic escalations followed. When gathering input for TxDOT's ten-year plan, the agency included an intimidating question about a respondent's citizenship before asking for a binary decision—yes to the highway as proposed, or no highway at all. This binary, Graham suspected, led more people to vote yes for the project out of fear of losing all funding for highway repair and maintenance. Opinions landed along a predicable political spectrum: suburbanites tended to be in favor, while those who lived more centrally were mostly opposed. TxDOT later doubled down, threatening to use the funding elsewhere in Texas if the project did not move forward as originally planned, despite federal funds being specifically earmarked for the NHHIP.

The project has advanced, but not without continued challenges from opponents. Despite warnings from FHWA, TxDOT continued its campaign to purchase properties in the expanded right-of-way. Late in 2021, the FHWA granted approval to continue with design work for Segment 3 of the NHHIP, and the federal investigation was paused for Harris County to negotiate with the state. TxDOT was then allowed to continue with limited work on the project in early December 2021. But soon after, a group of local organizations filed a new civil rights complaint against TxDOT, alleging continued discrimination toward communities of color affected by the NHHIP. Whether this will be enough to affect the project's implementation remains uncertain at the time of writing.

Regional Thinking

Positioned as both an intra-agency mediator and regional planner, the Houston-Galveston Area Council's Transportation Policy Council (H-GAC TPC) holds significant bureaucratic power over Houston's infrastructure, including the NHHIP. Of

I-45, I-10, and downtown, looking southeast. Photo: Iwan Baan.

Clayton Homes and I-69/US-59. Photo: Iwan Baan.

the twenty-three members that sit on the council, nineteen represent the interests of suburban cities and counties or are TxDOT officials; only four members—three from the City of Houston and one from METRO—represent the needs of millions of urban Houstonians.

The H-GAC is tasked with developing a Regional Transportation Plan, through which they determine the city's transportation needs and goals for the next twenty-five years. This plan, however, creates a self-fulfilling prophecy. By assuming a growing number of car-dependent suburbanites, new highways are justified as the only solution to handle growing demand; that increased highway capacity in turn facilitates the same car-dependence on which it was predicated. The opportunity to reduce demand through alternative transit methods is never considered. So, rather than being dictated by sound data and policy, Houston's growth is at the mercy of perpetually induced demand.

But anyone who has watched as their streets flood in the summer and pipes freeze in the winter knows that Houston cannot make decisions the same way it did twenty-five years ago.

H-GAC has discussed changes to its project selection criteria that could help break this cycle of car-dependent growth, but the state constitution remains a significant roadblock to change. The State Highway Fund, TxDOT's main source of funding, is constitutionally required to be spent on roads and may not be spent on alternative modes of transportation like rail, buses, bike paths, or sidewalks. This provision ensures that TxDOT will remain in the business of highways, regardless of their social or environmental costs, unless the state constitution is amended. This affects major Texan cities: highway expansions in El Paso, San Antonio, and Austin are being protested by local groups, while I-345 in Dallas may be removed.

Some efforts have been made to change these structural difficulties. Introduced in the spring of 2021, state bill HJR 109 would have amended the constitution to allow Texans to vote for more sustainable uses of gas tax revenue. HB 513 would have required TxDOT and H-GAC to consider multiple future scenarios in their decision making. Both bills died in committee. Without a major shift in state politics and Texas's relationship with the oil and gas industry, similar legislative efforts may continue to meet the same end.

Imagining Better Futures

The tables, projections, and processes surrounding the NHHIP lend a sheen of inevitability to the project. But Houston's history shows us that alternate infrastructural decisions are possible. In the late 1960s, the Harrisburg Freeway was planned to rip through the East End, displacing over a thousand residents and intensifying air pollution for those who stayed. As Shelton recounted in *Power Moves*, with the city, county, and state doing everything they could to steamroll opposition, the project seemed all but assured.

Bolstered by the broader civil rights struggles of the era and the passage of the National Environmental Policy Act in 1969, this largely working-class, Mexican American community took hold of the levers of bureaucratic power. They countered the Texas Highway Department's Environmental Impact Statement (EIS) with a document of their own, depicting the East End not as a potential right-of-way, but as a living community in need of sustainable investment. Leveraging the community input requirements of the EIS, these activists turned what might have otherwise been a quiet process into a controversy. Ultimately, they won. Due to support from the EPA, a sympathetic state representative, and a lack of federal resources due to an economic downtown, the Harrisburg Freeway was never built.

For nearly seventy years, Houston has worshipped at the altar of taller, wider, and faster freeways. The NHHIP could very well be the next chapter in this destructive history. But the stakes are higher than the footprint of access roads. Harrison Humphreys of Air Alliance Houston sees an even bigger story playing out. "This project is a bellwether for transportation going forward," he says. He sees promising changes in Houston's commitment to addressing the climate crisis, from Vision Zero to its Climate Action Plan. But "the rebuilding of I-610, I-10, and I-45 is the centerpiece of TxDOT's long-term plan for the region," Humphreys warns. "If Houston wants to be around in 2040 or 2050, we need to commit to sustainable infrastructure now."

There are reasons to be optimistic about our city's future. Political leaders—from Mayor Turner and Harris County Judge Lina Hidalgo up to US Secretary of Transportation Pete Buttigieg—are challenging established ideas about highway maintenance and construction. Groups like Stop TxDOT I-45 find traction in their protests as more people realize the problematic environmental impacts of citymaking. The expansive thinking that's needed to make meaningful change will require more than passive support for bus systems and bike lanes. To achieve a truly just future, Houston must consider all people when we predict, plan, and build—especially those who have been historically marginalized. When we imagine a better future for Houston, everyone benefits.