

An aerial photograph of a city street undergoing major construction. A large, rectangular area of the street is excavated, filled with brown earth. A yellow excavator is positioned in the lower-left quadrant of this dirt area. To the right, the asphalt road is partially closed off with orange traffic barrels and a yellow safety barrier. In the background, a concrete bridge spans across the street. The surrounding urban environment includes various multi-story buildings, some with parking lots filled with cars. The scene is captured from a high angle, showing the layout of the street and the scale of the construction project.

# Freeways Without Futures

2019

**CNU**

Congress for the  
New Urbanism

# Table of Contents

**P4 / Introduction**

**P8 / Freeways Without Futures**

**P10 / Claiborne Expressway (I-10), New Orleans, Louisiana**

**P12 / I-275, Tampa, Florida**

**P14 / I-345, Dallas, Texas**

**P16 / I-35, Austin, Texas**

**P18 / I-5, Portland, Oregon**

**P20 / I-64, Louisville, Kentucky**

**P22 / I-70, Denver, Colorado**

**P24 / I-81, Syracuse, New York**

**P26 / I-980, Oakland, California**

**P28 / Kensington and Scajaquada Expressways, Buffalo, New York**

**P30 / Graduated Campaigns**

Alaskan Way Viaduct, Seattle, Washington

Inner Loop, Rochester, New York

I-375, Detroit, Michigan

**P32 / Conclusion**

**P34 / Further Reading**

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**Cover Photo: The removal of the Inner Loop, Rochester, New York. Credit / Stantec**

# Introduction

**Freeway construction was a disaster for city neighborhoods in the 20th Century. Many neighborhoods were divided in two—their main streets demolished and businesses closed, disproportionately in minority communities. The African-American Tremé neighborhood in New Orleans is a good example, as the elevated Claiborne Expressway was built in the 1960s over Claiborne Avenue, a boulevard with a central green space that served as the commercial heart of Tremé. Claiborne Avenue was never the same.**

Many freeways built through cities are unnecessary. After San Francisco's 1989 Loma Prieta earthquake, for example, the Embarcadero and Central freeways were damaged beyond safe use. Traffic disasters were predicted when they were closed, but failed to occur. Boulevards replaced the freeways instead, opening up the waterfront and uniting neighborhoods in the City by the Bay.

After 2000, a few cities voluntarily tore down sections of freeway—and found their economies and tax bases rising and the urban fabric healing. Planners and citizens relearned the power of the street grid to support multi-modal traffic, economic development, and city living. The first CNU biennial *Freeways Without Futures*, published in 2008, charted these early restoration efforts, with subsequent reports in 2010, 2012, 2014, and 2017.

As this decade comes to an end, cities and their freeways are at a crossroads. Limited-access highways that were built through cities in the 1950s through 1970s are now at the end of their useful life, and cities

must decide whether to rebuild. Replacement with a boulevard or a grid of surface streets is usually cheaper and may offer significant social and economic benefits. So far, 15 North American cities have either removed or committed to remove or mitigate their freeways. A national movement to replace unnecessary sections of freeways with surface streets has taken hold among city leaders, citizens, and transportation planners.

*Freeways Without Futures 2019* is the tale of ten freeways in cities coast to coast where this movement has spawned active campaigns for transformation. Here are the fundamental questions that these campaigns raise: Do we continue to funnel billions of taxpayer dollars into an aging system that pollutes cities, divides neighborhoods, and occupies valuable land that could instead be used for homes and businesses? Or is there an alternative solution that creates stronger cities and communities?

The pace of urban freeway removal is accelerating. Three cities—Detroit,

Rochester, and Seattle—have begun to dismantle their freeways since 2017, the year of the previous edition of *Freeways Without Futures*. This acceleration reflects widening acceptance that the great age of in-city highway construction is effectively over (the Federal Highway Administration declared the Interstate system complete in 1992), and an increasing support for highway transformation among local and state governments. In selecting projects for this report, we noted the strong presence of city council people and mayors who are engaged in or formally endorsing highway removal campaigns. Some candidates for office are even campaigning on the issue.

The diversity of cities undertaking these projects is also noteworthy. This is not a movement confined to any one geographic region, nor limited only to larger cities or those that are experiencing immense growth. Small and mid-sized cities like Milwaukee, Somerville, Niagara Falls, Chattanooga, Detroit, and Rochester have opted to measure community progress and quality of life by a set of metrics other than travel time:



economic reinvestment and increased tax revenue; the creation of walkable streets and new public space for the community; and gains in public health, air quality, water quality, and climate resilience.

## Economic Gains.

When the Interstate system and other state highways first encroached on cities, they converted valuable land in the heart of downtowns and along waterfronts into clogged arteries of traffic that produced virtually no direct income for local economies. Cities that choose to remove urban freeways have an opportunity to reclaim this real estate to help fulfill the increased demand for walkable, urban living. Reclaiming the land underneath highways can boost and stabilize city populations, providing direct local control of land that can be dedicated to a range of housing choices for individuals and families, from affordable housing below market to workforce housing and flexible choices for young renters and older “empty nesters.” Highway removal is a once-in-a-generation

occasion to revitalize downtowns, neighborhoods, and waterfronts and strengthen local economies.

## A Vibrant Public Realm.

Highways fall flat in this metric, with negative rather than positive outcomes. Few people enjoy walking underneath a highway, let alone spending time around it. On the opposite end of the spectrum, streets and public spaces dedicated to people, not cars, offer members of the community places to relax, shop, and enjoy each other’s company in public. Places like these were destroyed to make way for freeways. Now, the opportunity presents itself to create a new, vibrant public realm for the communities that bore the brunt of highway construction. A city’s public realm exists in its public spaces, the streets and squares that integrate individual buildings into a coherent urban unit. When properly designed, the space between buildings promotes a strong public life and contributes to the civic character of the city.

## A Healthy Environment.

Choosing city streets over freeways means leaving behind the hazards of highly concentrated vehicle exhaust near residences, businesses, and schools. Many urban highway segments run through the densest parts of their cities, exponentially increasing the number of people exposed to toxic fumes and particulates from cars and truck traffic. Known health risks from proximity to highways include increased rates of respiratory ailments and cardiovascular illnesses. Extensively overbuilt highway infrastructure encourages even more driving and perpetuates these conditions. This brief overview does not even take into account noise or the impact of being stuck in traffic, both of which are health hazards.

The removal of a highway is not a silver bullet for every urban issue, but it is more than a simple transportation or infrastructure problem. It intersects with community health, fiscal



Ditch the Ditch rally against the Central 70 highway expansion in Denver. Credit / Brad Evans

responsibility, and equitable urban development. Cities that choose alternatives to highways have decided to prioritize people over vehicles and to address needs that have been underdeveloped in favor of automotive mobility.

This preference for automotive mobility almost always came at a cost to the communities in its path; African American and other minority communities were especially hard hit. Yet even during the Great Age of the Highway, several highway construction projects stalled and were never completed due to community opposition. Famous examples include the opposition of Sammie Abbott and Reginald H. Booker to the construction of a highway through Washington D.C.'s mostly minority neighborhoods at that time, and the confrontation between Jane Jacobs and Robert Moses over the proposed Lower Manhattan Expressway, which would have cut a swathe through modest-income and ethnically diverse Greenwich Village.

This does not mean successful highway construction went forward

unopposed. The many minority communities that now live in the shadow of highways originally fought bitterly and bravely against them; the descendants of those protesters continue to fight to protect and strengthen what remains of their community design and opportunities. The benefits of highway removal must acknowledge the profound need to make reparations in communities that were so disrupted—many of which have persisted nonetheless. Cities need to ensure that both the social and economic value unlocked by dismantling a freeway is channeled to serve its long-standing members of the community.

As cities consider what to do with their aging in-city highways, they should recognize the opportunities for freeway removal and transformation. As the ten projects in this report demonstrate, cities can save money while boosting their economies and improving the lives of citizens by not repeating the mistakes of the 20th Century.

## Inside This Report

This report identifies the ten greatest opportunities in North America to revitalize urban neighborhoods through the removal of the limited-access highways that disrupt them.

At the outset of this report process, CNU sent out a national call to nominate urban freeways for consideration. Thirty-one different highways in twenty-eight cities across North America were nominated.

CNU convened a national advisory committee of transportation and urban design experts with urban highway removal experience. The panel reviewed each submission based on a number of criteria: the age and state of the highway, the quality of alternative boulevard or street design, the feasibility of removal, community support for removal, existing political momentum, redevelopment opportunities, potential cost savings, and potential to improve access to opportunity for underserved communities.

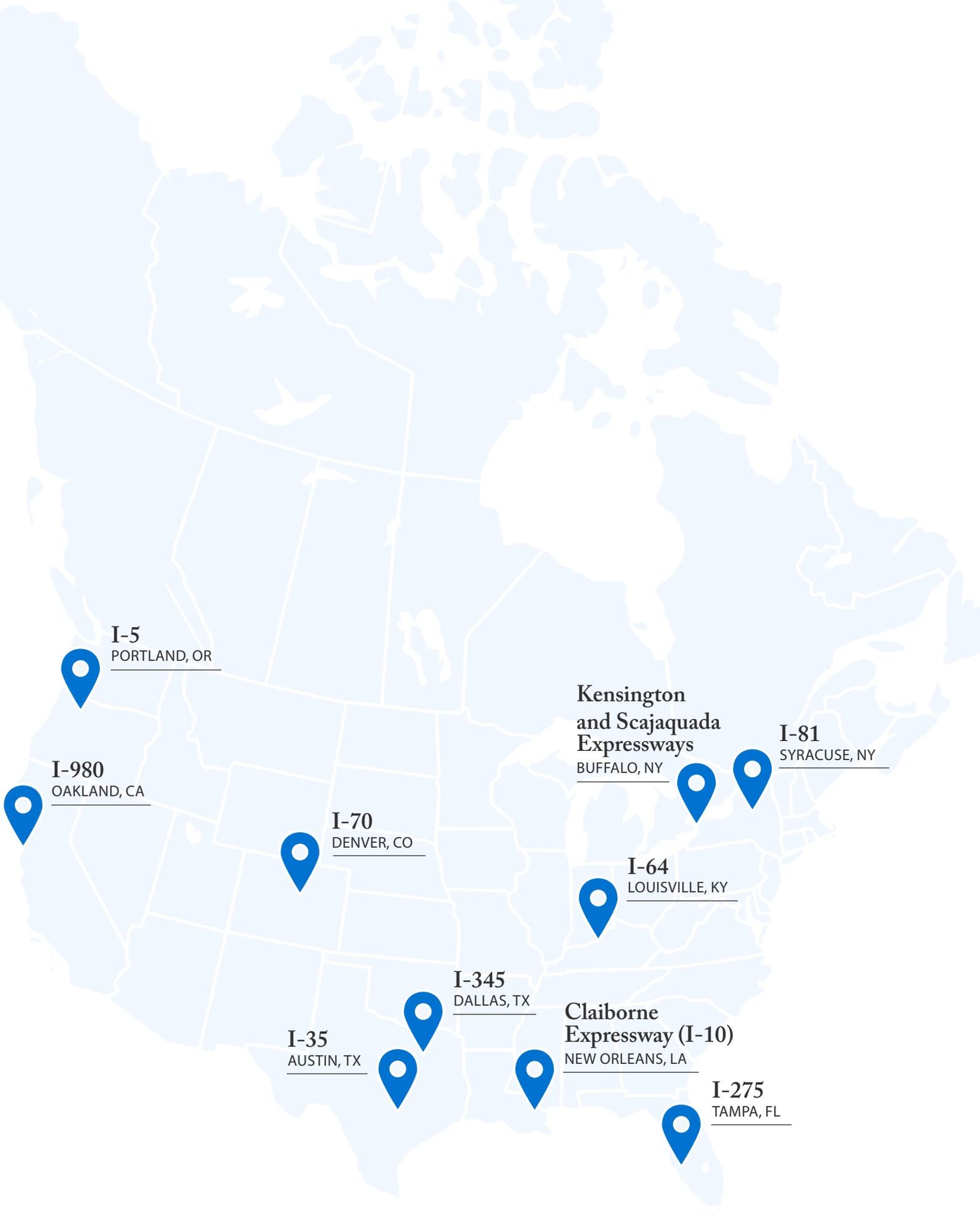
After extensive discussion, the committee identified ten freeways that represent the greatest opportunity for a beneficial conversion to a human-scale alternative. Local advocacy groups and experts were contacted to provide background and information on the existing campaigns.

Additionally, this report contains an update on projects, known as Graduated Campaigns, that are moving forward with removing all or a section of a highway—in two of the three cases, the city has already begun the process of dismantling.

# Freeways Without Futures



Communities across North America are facing a watershed moment in the history of our transportation infrastructure. With cities, citizens, and transportation officials all looking for alternatives to costly highway repair and expansion, these ten campaigns offer a roadmap to better health, equity, opportunity, and connectivity in every neighborhood, while reversing decades of decline and disinvestment.



**I-5**  
PORTLAND, OR

**I-980**  
OAKLAND, CA

**I-70**  
DENVER, CO

**I-345**  
DALLAS, TX

**I-35**  
AUSTIN, TX

**Kensington  
and Scajaquada  
Expressways**  
BUFFALO, NY

**I-64**  
LOUISVILLE, KY

**Claiborne  
Expressway (I-10)**  
NEW ORLEANS, LA

**I-81**  
SYRACUSE, NY

**I-275**  
TAMPA, FL



I-10. Credit / The Advocate

## Claiborne Expressway (Interstate 10)

NEW ORLEANS, LOUISIANA

### HIGHWAY TYPE

Elevated Interstate

### YEAR BUILT

1966-1968

### STAGE OF REMOVAL

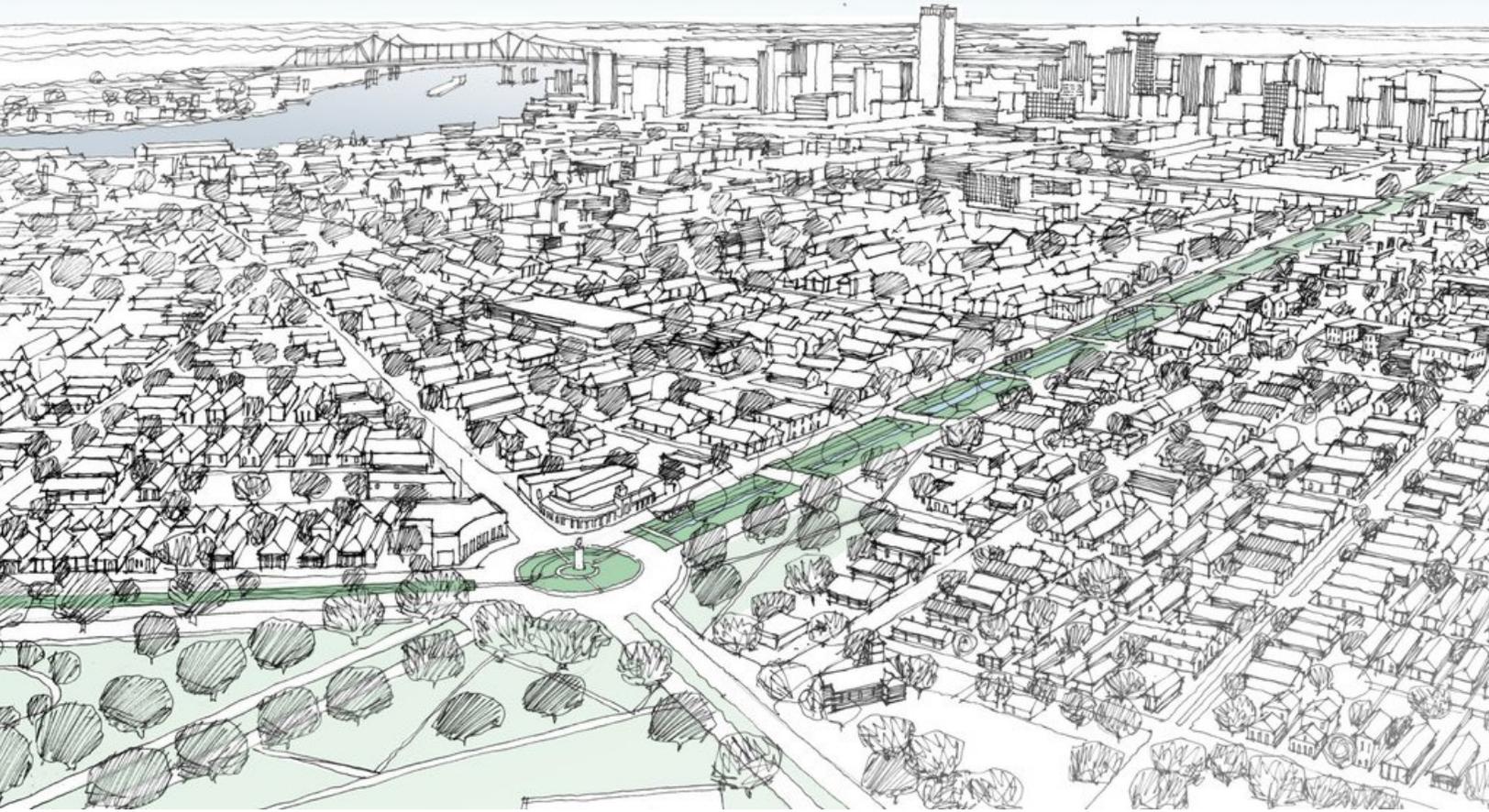
Advocates are actively building support for removal and several studies have been undertaken.

### KEY CHARACTERISTICS

Longtime Tremé residents want to see Claiborne Avenue restored to its former character.

Studies have shown removal of the expressway would have a negligible effect on local traffic.

In 1966, French Quarter residents averted the proposed construction of an elevated expressway through their neighborhood. The primarily African-American Tremé neighborhood was not so privileged. Despite staunch opposition from the community, the Claiborne Expressway was built over Claiborne Avenue, the much-beloved main boulevard and commercial backbone for Tremé. Now, those who came of age during the highway's construction continue the fight to restore Claiborne Avenue and repair the damage caused to their neighborhood.



Today, Claiborne Avenue has been reduced to a frontage road for the expressway, but it had a significantly different character prior to 1966. Its wide, green median was the central public space for the African-American neighborhood and a gathering place for the community, with activities that ranged from pickup ball games to Mardi Gras parades. Claiborne Avenue was a source of community pride and the premier destination for shopping, leisure, and socializing. However, when plans for the Claiborne Expressway were revealed, the Tremé community did not have advocates in the city government to defend it.

Many community members whose friends and families opposed the original construction of the Claiborne Expressway still seek to return Claiborne Avenue to the vibrant street it once was. This includes removing the elevated expressway to restore the 100-foot median, the traffic circle at the intersection with St. Bernard Avenue, and connections to the neighborhood's street grid. Deliberations have long centered on the expressway's removal, and studies have demonstrated that the effect on New Orleans' local

traffic would be negligible, while through-traffic would experience an increase in travel time of only two to six minutes. In 2014, then-Mayor Mitch Landrieu explored removal as an option, but eventually backed away from this alternative. Discussions stalled. The mayor then proposed building a marketplace underneath the polluting highway, which received a less-than-enthusiastic reception from neighborhood residents.

Since 2017, the Claiborne Avenue Alliance—a coalition of residents, property owners, and business leaders dedicated to the thoughtful development of the Claiborne corridor—has led a renewed effort to remove the expressway and rebuild the avenue. The group has set about to document the negative effects the freeway has on adjacent neighborhoods, from severe pollution to the creation of a food desert. The group has also emphasized the positive potential outcomes of removing the freeway. A restored Claiborne Avenue would attract new businesses and jobs to this once-vibrant commercial corridor, as many of the vacant lots adjacent to the highway become redeveloped. All told, nearly 50 acres of land would be

reclaimed from the highway's shadow. The Claiborne Avenue Alliance advocates that the city devote a large portion of this reclaimed land to the creation of affordable housing and commercial spaces. This would address significant community concerns: While many Tremé residents want to see Claiborne Avenue restored, they fear that such an improvement could price them out of the neighborhood.

Political traction for the expressway's removal is again on the rise. Recently, Mayor LaToya Cantrell sent her staff to tour the former site of the Embarcadero Freeway in San Francisco, one of the first elevated freeways in the United States to be converted into a boulevard. City Council president Jason Williams also joined them.

Longtime Tremé residents have made sure to perpetuate conversations around the highway's removal and the restoration of Claiborne Avenue. Their persistence stems from memories of a great avenue, once an economic and cultural asset for the community, and a vision for the future that provides a similar place for generations to come.



# Interstate 275

## TAMPA, FLORIDA

### HIGHWAY TYPE

Hybrid elevated and at-grade Interstate

### YEAR BUILT

1962-1964

### STAGE OF REMOVAL

Removal is being studied as a possible alternative in official studies.

### KEY CHARACTERISTICS

#blvdtampa proposal incorporates extensive public transit into its plan to replace I-275.

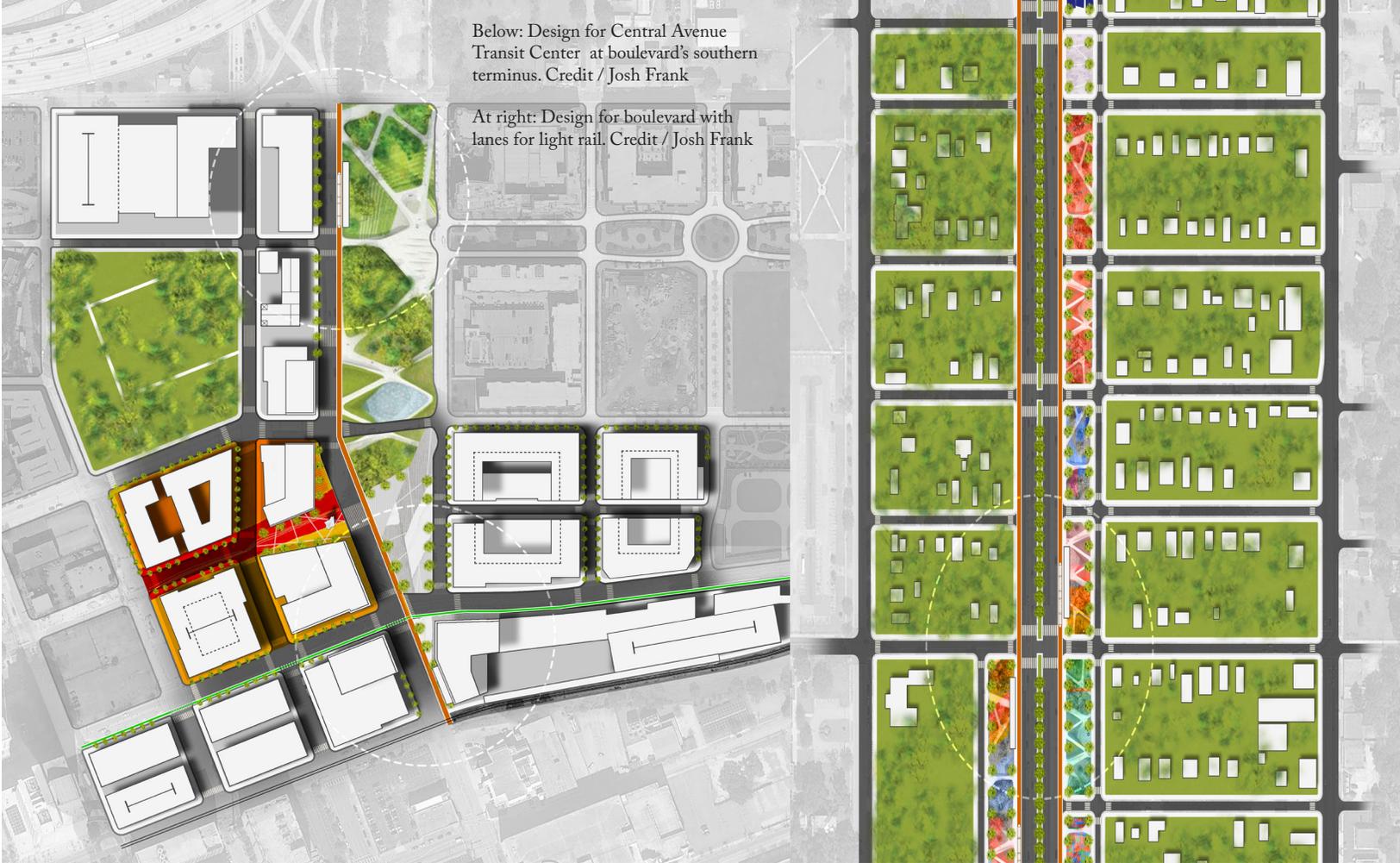
Majority of trips on I-275 have both local origins and destinations, which a boulevard is well-suited to handle.

Emphasis on transit also aims to reduce the number of automobile trips along the corridor.

The 11-mile stretch of I-275 that runs through Tampa touches every one of its downtown neighborhoods. Many of these neighborhoods have still not recovered from the damage done by I-275 when it opened in the early 1960s. Now there is a remarkable opportunity to reclaim this corridor for public transportation in one of the most underserved transit markets in the United States.

Below: Design for Central Avenue Transit Center at boulevard's southern terminus. Credit / Josh Frank

At right: Design for boulevard with lanes for light rail. Credit / Josh Frank



I-275 was built on top of Tampa's former Central Avenue and split the entire city in half. Incalculable damage was done to Tampa's rich ethnic and historic neighborhoods, including Ybor City, the former cigar manufacturing capital of the world; and Central Park, the African-American neighborhood that some called the "Harlem of the South"—a one-time home to Ray Charles and often visited by top musicians of the era like Chubby Checker and Ella Fitzgerald.

Recent proposals by the FDOT to reconstruct the aging freeway with an expanded footprint and variable toll lanes have catalyzed community opposition to the project. One concerned citizen, Josh Frank, has started a movement, #blvdtampa, that envisions a future for Tampa without I-275.

Armed with extensive traffic data, Frank has demonstrated that Tampa is ill-served by a limited-access highway—as the majority of vehicles that travel I-275 have both local origins and destinations within the city. Instead of rebuilding the highway, #blvdtampa proposes replacing it with a boulevard more suited to local traffic.

The transformation of I-275 into a wide, landscaped boulevard, featuring bike and pedestrian paths and either light commuter rail, bus rapid transit, or a modern streetcar would give Tampa an urban spine around which to grow. The boulevard could include slow-moving local lanes protected from the main traffic, on-street parking, cycling access, pedestrian refuges that reduce crossing distances, and bus shelters.

The economic benefits of this proposal are substantial. Estimates to rebuild the highway range from \$3-9 billion, much of which could be saved with the boulevard option. The removal of the oversized highway would immediately open up more than 35 acres for development, boosting the City's tax base. Coupled with investment in public transit along the corridor, depressed property values in the neighborhoods around the highway would be expected to rise.

Moreover, the boulevard option has the potential to significantly improve the quality of life for people who live nearby. Thousands of homes lie within 1,000 feet of the highway, where air pollutants are most concentrated. Increased transit

service on the boulevard would remove polluting vehicles from the road and offer alternatives to driving for residents who currently have few other options.

Although the proposed 11-mile removal of I-275 is ambitious, local organizations such as Sunshine Citizens, Heights Urban Core Chamber, and the Tampa Heights Neighborhood Association, as well as several members of the Hillsborough County commission and candidates for Mayor of Tampa, support transformation of the highway. The strong community support for the #blvdtampa proposal has led the Hillsborough Metropolitan Planning Organization, Tampa's regional planning agency, to include it as an option in its long-range transportation plan. Currently the campaign has begun to advocate its plan at the state level, as organizers have met twice with local District 7 FDOT officials, who now recognize the multi-modal transit corridor as an alternative option.



I-345. Credit / Coalition for a New Dallas

# Interstate 345

## DALLAS, TEXAS

### HIGHWAY TYPE

Elevated Interstate

### YEAR BUILT

1973

### STAGE OF REMOVAL

Removal is being studied as a possible alternative in official studies.

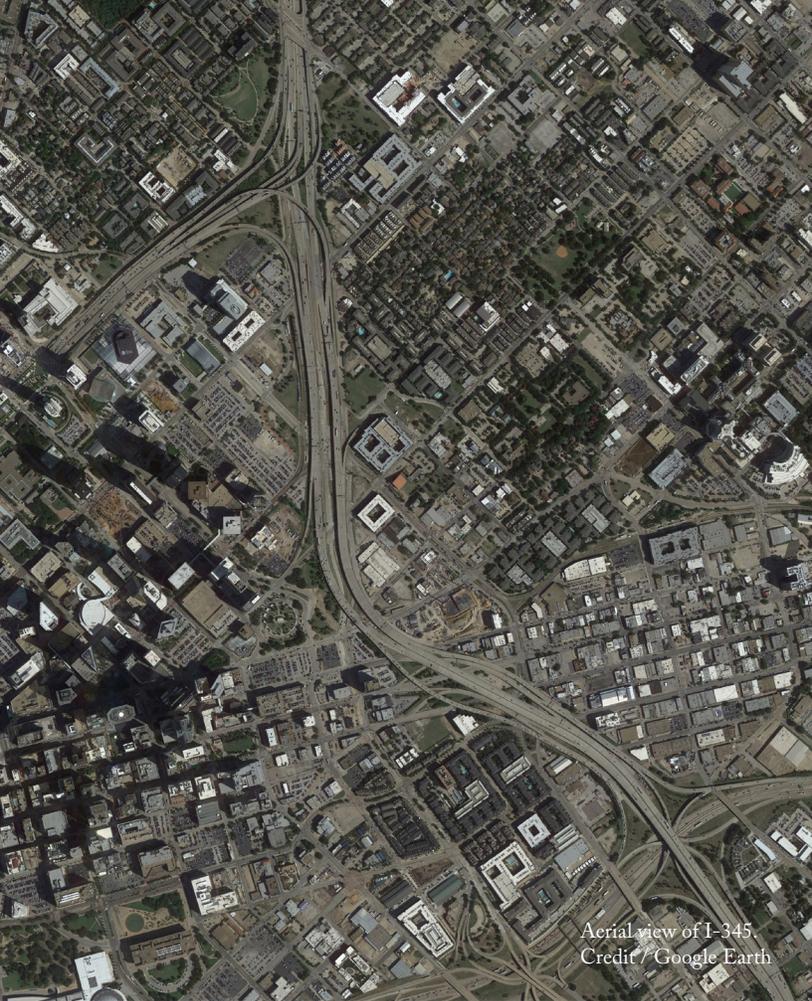
### KEY CHARACTERISTICS

Local advocacy group A New Dallas has shown the immense amount of economic development the removal of I-345 could generate.

TxDOT's CityMAP study agrees with this assessment.

The CityMAP study also shows the removal of the highway would have little negative impact on traffic.

Since 2013, local advocacy group A New Dallas has captured public attention and made a strong case to remove I-345, an imposing concrete barrier that divides the city's historic Deep Ellum neighborhood from downtown and has spawned vacant lots and disinvestment along its 1.4-mile path. As a result of A New Dallas's research showing that uniting Deep Ellum and downtown would generate significant economic development, TxDOT is considering removing the elevated interstate.



Aerial view of I-345.  
Credit / Google Earth



Potential development along I-345 corridor.  
Credit / A New Dallas

Total study area: 245 acres  
Proposed Developable Acreage: 186.44 acres  
Repositioned Underdevelopment: 118.29 acres  
Recaptured ROW for development: 63.93 acres  
Proposed Open Space/Park land: 7.7 acres

I-345 in Dallas is nearing the end of its lifespan. When it was built more than 40 years ago, I-345 separated the predominantly African-American Deep Ellum neighborhood from downtown. In its mid-20th Century heyday, Deep Ellum was a mecca of jazz and blues in the Southwest, and was one of first commercial districts in the city for African-Americans and European immigrants. The construction of I-345 obliterated the 2400 block of Elm Street, which had been the heart of the neighborhood. By the end of the 1970s, few of the community's original businesses survived. While Deep Ellum now enjoys new life as a music and arts district, the presence of I-345 still inhibits its full integration into the city.

Residents Patrick Kennedy and Brandon Hancock view the deteriorated state of I-345 as an opportunity to consider alternatives to the highway. Together, they founded A New Dallas to advocate for creating a better city through the removal of I-345. The organization has commissioned studies that demonstrate the social, economic, and environmental benefits for a Dallas without the highway. When TxDOT released its CityMAP assessment of Dallas' urban highways, it included two options for

I-345's transformation: One replaces the elevated highway with a tunnel and surface boulevard, the other with only a surface boulevard.

A New Dallas deems the tunnel an unnecessary expense, as the existing street network adjacent to the highway has a capacity of 178,000 cars a day, far exceeding the current traffic of 105,000 cars a day. The group estimates that burying the highway would cost between \$900 million and \$1.2 billion, while replacing it with a boulevard will cost only approximately \$65 million.

The economic benefits of removal also surpass those of burial. The removal of the elevated highway will open up 245 acres of urban land for potential development—envisioned as walkable urban blocks, with squares and neighborhood public spaces within a short distance of each building. According to TxDOT's CityMAP study, the complete removal would generate \$2.5 billion in new property value, while the burial would generate \$1 billion less, as it still requires more than 30 acres of the public right-of-way. Similarly, the city would receive \$80 million each year in tax revenue with complete removal, but only \$50 million with the below-

grade modification. This extra revenue could be leveraged to boost housing affordability and quality of life along the I-345 corridor. Moreover, the land reclaimed from the highway's right-of-way will return to the city, putting the public in the driver's seat of planning and implementation for redevelopment.

These powerful economic arguments have made it possible for A New Dallas to build a coalition of community members, urban planners, developers, and civic leaders from across the political spectrum in support of full removal of I-345. The common threads among all these supporters are that they value metrics and consider a broad range of criteria in determining the success of public infrastructure. As Dallas continues to experience rapid urban growth and increased demand for housing, the removal of I-345 offers one way forward to keep the city livable.



I-35. Credit: / Heyden Black Walker

# Interstate 35

## AUSTIN, TEXAS

### HIGHWAY TYPE

Hybrid elevated and at-grade Interstate

### YEAR BUILT

1962

### STAGE OF REMOVAL

TxDOT is about to undertake a second environmental review process on rebuilding I-35 in this corridor.

### KEY CHARACTERISTICS

Long-standing support exists for burying and capping the portion of the highway between Downtown and East Austin.

The Austin City Council has asked TxDOT to study the cut-and-cap vision as part of its environmental review.

Since 2012, grassroots coalition Reconnect Austin has advanced an alternative, human-scaled vision for the I-35 corridor. The north-south section of I-35 that cuts through downtown Austin carries a high amount of traffic—more than 200,000 vehicles a day—but inhibits travel between East and West Austin. Given the level of interregional traffic, the complete removal of the highway is infeasible, but Reconnect Austin has proposed a solution that can repair Austin’s urban fabric while maintaining a similar level of service for automobiles.

View of I-35 from E. 5th Street, looking east. Credit / Reconnect Austin



Rendering of E. 5th Street without I-35. Credit / Reconnect Austin



Perspective rendering of East Avenue Parkway. Credit / Reconnect Austin

The I-35 corridor redesign proposed by Reconnect Austin seeks to take TxDOT’s implementation of depressed freeway lanes in Austin one step further. Reconnect Austin endorses a four-step plan to restore the city’s urban grid and reunify East and West Austin: (1) Remove the elevated highway between Cesar Chavez Street and Martin Luther King Jr. Boulevard; (2) Remove existing highway frontage roads to reclaim 30 acres of downtown land; (3) Bury this section of I-35 below ground; and (4) Cover these depressed lanes with a new, narrower, pedestrian- and bicycle-friendly boulevard.

Reconnect Austin envisions a new boulevard that recaptures the dynamic urban space of the former East Avenue the highway replaced. Its design for a new East Avenue Parkway would be consistent with Austin’s Great Streets Master Plan and include more-than-adequate space for pedestrians, cyclists, and dedicated transit lanes. The reconnected grid would create as many as 11 cross streets, “providing better traffic dispersion and more connections for cycling and walking.” The narrower right-of-way with new buildings to define it and the large median in

the middle of the street would make pedestrian travel between East and West Austin far easier and more pleasant.

By capping I-35, the 30 acres of land currently under its frontage roads could be opened up for mixed-use development as part of a tax increment financing (TIF) district. The potential valuation from this land is an estimated \$10 billion, which would increase the tax base for local jurisdictions by millions of dollars. If handled with care, this could lead to the creation of up to 4,500 market-rate and affordable housing units in a walkable location, ideal for people seeking or currently holding low- and moderate-income jobs downtown.

Reconnect Austin acknowledges that the removal of I-35 also has the potential to accelerate gentrification and displacement, as the area becomes more economically robust and aesthetically attractive, potentially leading to soaring land values. Having a plan in place to protect against displacement is a high priority. New public spaces along the boulevard, designed with sensitivity to the dynamic cultures of East Austin, past and present, could become monuments to—and gathering places

for—minority communities that are in some ways being negatively affected by the economic realities of a booming city with an increasingly popular core. At the same time, the reclaiming of access roads as developable land — which would increase residential supply closer to downtown — could, in the long run, help to meet the demand for affordable housing.

TxDOT is about to undertake an \$8.1-billion renovation of a 66-mile stretch of I-35 in and around Austin, the cost of which would likely not vary significantly if the downtown portion were depressed instead of simply rebuilt. TxDOT’s estimates for the cost of capping these depressed lanes comes to \$300 million. Local support—from neighborhood groups, civic organizations, boards and commissions, city council, the Chamber of Commerce, and the Downtown Austin Alliance—in conjunction with TxDOT’s planned renovation, makes for an ideal, once-in-a-generation opportunity to reshape downtown Austin by capping I-35.



I-5. Credit / Riverfront for People

# Interstate 5

## PORTLAND, OREGON

### HIGHWAY TYPE

Hybrid elevated and at-grade Interstate

### YEAR BUILT

1966

### STAGE OF REMOVAL

A long-standing conversation exists around the removal of the highway. The Portland City Council has previously voted to include studies of the concept in Portland's Central City Plan Update.

### KEY CHARACTERISTICS

Portland has once before removed a waterfront freeway, Harbor Drive.

Citizen groups like Riverfront for People have long advocated for the removal of I-5 through the Central Eastside.

ODOT has encountered community resistance to its plans to expand I-5 in Portland's Rose Quarter, and transformation of the highway would make an expansion unnecessary.

Portland is a tale of two waterfronts. On the west bank of the Willamette River, Waterfront Park offers Portland's residents direct access to the river in place of the former route of Harbor Drive, a freeway removed by the city in 1974. On the river's east bank, I-5 deprives the growing Central Eastside neighborhood of similar access, but offers Portland a chance to repeat history.



Rendering of the Central Eastside without I-5.  
Credit / Riverfront for People and Crandall Arambula

Ironically, the construction of I-5 facilitated the removal of Harbor Drive. Once the new Interstate was built in 1966, Harbor Drive was viewed as redundant, and a citizen-based campaign, Riverfront for People, advocated for and successfully championed its removal and replacement with Waterfront Park.

When I-5 was constructed, Portland's Central Eastside was primarily an industrial area. But in recent decades, many of the larger industrial businesses have decamped to other regional locations, and the area has transitioned into a wider mix of uses that combine offices and housing with small-scale industrial businesses and manufacturers.

The neighborhood has become a destination for locals and visitors alike because of its high concentration of breweries and distilleries. This transformation has been constrained by the freeway, leaving a major gap in activity and preventing the neighborhood from reaching its potential along the river.

The challenges for this neighborhood are only increasing with time. By

2035, Central Eastside is expected to grow by 7,000 households and 8,000 jobs. Such strong growth will put a premium on housing and likely will lead to rising costs, unless preventative measures are taken. At the same time, the neighborhood's density will increase. More residents can live closer to their jobs, which lessens the city's need for extensive highway infrastructure.

Central Eastside's rapid growth makes this an opportune time to consider the removal of I-5, to be replaced by surface streets. The 43 acres gained through highway removal would increase business and housing opportunities, which in turn would help accommodate the area's growth. Removing the freeway would enable the Central Eastside neighborhood to take better advantage of its existing transportation options.

Removing the highway would also create an opportunity to enhance the existing Eastbank Esplanade into a signature park in the heart of the city where people could enjoy the Willamette's new accessibility via transit, through the regional bike network, and from the many residences and hotels that

are within a 30-minute walk from the location.

Many ideas for transformation of I-5 at this location have been explored. Most recently, then-Mayor Sam Adams released a plan for a tunnel in 2012. However, a tunnel might add unnecessary expense—a combination of other routes in the city have the potential to support the traffic capacity of I-5. Interstate through-traffic could be rerouted to I-405, a short highway west of downtown that runs parallel to, and connects with, I-5 at both ends.

Groups like Riverfront for People have long campaigned for the removal of the elevated I-5 and current political momentum in the city is gathering against overbuilt highway infrastructure. The citizen group No More Freeway Expansions Coalition is working to block the ODOT's expansion of I-5 in Portland's Rose Quarter, just to the north of the Central Eastside. This is an opportunity to reconsider whether other parts of the highway are necessary. A redesigned Central Eastside riverfront, made possible by highway removal, is not hard to imagine. Portlanders need only look across the river.



I-64. Credit / Will Clardy

# Interstate 64

## LOUISVILLE, KENTUCKY

**HIGHWAY TYPE**  
Elevated Interstate

**YEAR BUILT**  
1976

**STAGE OF REMOVAL**  
Advocates are pursuing a dialogue about the highway's removal.

**KEY CHARACTERISTICS**  
8664 movement gathered 11,000 signatures to support the removal of I-64 from Louisville's waterfront.

The movement draws inspiration from other cities that have removed a waterfront highway, like Chattanooga, San Francisco, Portland, and Seattle.

Louisville's highway infrastructure is vastly oversized for a mid-sized American city.

Three Interstate highways and two Interstate beltways crisscross the urban core of Louisville, the 29th largest city in the United States. This level of infrastructure far surpasses Louisville's needs, but still Kentucky and Indiana continue to pour money into local highway projects, most recently the \$2.6 billion Ohio River Bridges Project. One citizen group, 8664, has advocated for a return to infrastructure on a human scale, namely the replacement of an elevated section of I-64 along the Ohio River with a street-level boulevard.



I-64 runs the length of Louisville's downtown waterfront, in many parts directly along the river's edge. For decades, the highway has created a formidable barrier between the city and arguably its most significant amenity, its waterfront. While other parts of Louisville have enjoyed a revitalized waterfront, the same cannot be said for area between 22nd Street and the Clark Memorial Bridge. Here, the highway occupies the land directly adjacent to the water, with only a narrow riverwalk as greenspace.

Starting in 2005, citizen group 8664 campaigned to reclaim this land for the city. In place of I-64, Louisville would gain an expanded waterfront park with a parallel parkway. The four-lane parkway would be designed with pedestrians in mind, with frequent crossings, street trees on both sides, and a green median along its center. Although able to handle vehicle traffic, its primary goal would be to facilitate access to the waterfront to those who live, work, and visit downtown.

The transformation of this two-mile stretch along the river between I-65 and I-264 would free over 60 acres of land

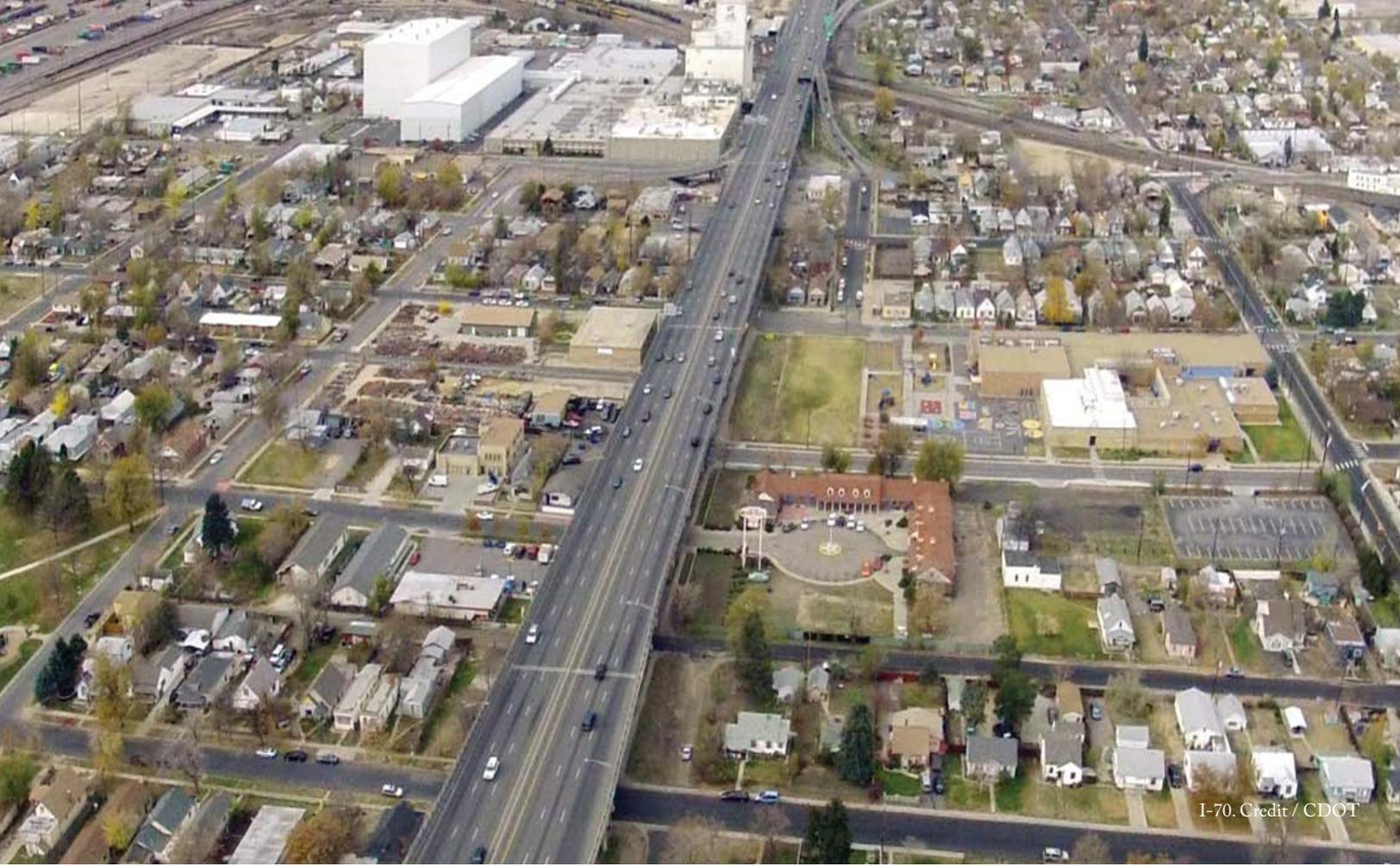
around many of Louisville's landmark civic features, including the Muhammad Ali Center and the Louisville Slugger Museum & Factory. Much of this land could be devoted to parklands and pedestrian access to the river, which would further strengthen the city's cultural assets.

Private property owners would see benefits too. Where waterfronts have been carefully saved or reclaimed as public space, a zone of enhanced value radiates out from the waterfront for distances of a quarter to a half mile. For Louisville, this means an area of roughly 60 to 120 city blocks would rise in property value.

Furthermore, with a combination of tweaks to existing traffic patterns, the 8664 proposal meets demands for projected traffic volumes. Through-traffic along I-64 would be re-routed to I-265, Louisville's outer beltway, which increases travel distances by only five miles. The combination of the new four-lane parkway and existing east-west streets along the riverfront corridor can handily accommodate the remaining 80,000 cars per day that use I-64 for local destinations.

8664 was formed in response to the Ohio River Bridges project, a joint venture by the States of Kentucky and Indiana that proposed the expansion of the Kennedy Memorial Bridge downtown and the construction of a second bridge eight miles upstream. 8664 opposed the expansion of the bridge downtown and saw this as an opportunity to re-envision the city's waterfront as a place for people, not cars. Although 8864's alternative fell within the bounds of the Ohio River Bridges' environmental impact assessment and the group gathered the support of 11,000 petitioners, the \$2.6 billion construction of the bridges proceeded unaltered.

Since its re-opening in 2016, traffic on Kennedy Memorial Bridge has decreased 49 percent, as drivers are hesitant to pay tolls up to \$4 and instead have opted for free routes. There is, however, a silver lining to this underuse and overexpenditure on highway infrastructure: The same basic urban conditions that spurred the 8664 movement are still in place, and I-64 remains a prime candidate for removal in order to downsize infrastructure to a level appropriate for a mid-size city.



# Interstate 70

## DENVER, COLORADO

### HIGHWAY TYPE

Elevated Interstate

### YEAR BUILT

1961-1964

### STAGE OF REMOVAL

Despite widespread community opposition, CDOT has committed to sinking and widening the highway.

### KEY CHARACTERISTICS

Significant environmental justice concerns surround the Central 70 expansion.

Three neighborhoods and an elementary school will be exposed to a high volume of vehicle emissions from the proposed depressed highway.

Current political climate in Colorado is opposed to freeway expansion.

Highways are known sources of pollution. Air quality decreases significantly for residents who live within 1,000 feet of a highway. Yet in Denver's Elyria, Swansea, and Globeville neighborhoods, CDOT is about to undertake an expansion of I-70 that threatens to displace 5 percent of the neighborhood's population and bring even more of its residents into 1,000-foot pollution threshold where vehicle emissions cause increased rates of asthma, heart attack, stroke, lung cancer and pre-term birth.



When I-70 was completed in 1964, the elevated highway diminished the value and changed the character of the primarily Latino neighborhoods along its course. Fifty-five years later, the aged viaduct is in need of significant repairs. Community organization Unite North Metro Denver proposed an alternative in place of the elevated highway. A tree-lined boulevard, with roundabouts instead of interchanges, would re-establish the community grid, free up land for development, and raise property values.

Instead, CDOT has so far opted to replace and expand the highway. In August 2018, it broke ground on the \$1.2 billion Central 70 project, one of the most expensive projects ever undertaken by the agency. Over the next fifty to sixty months, CDOT will remove I-70's elevated viaduct and replace it with a sunken freeway nearly three times as wide. The project has serious repercussions for the neighborhoods around it. To expand the highway, the state must seize and demolish 56 residences and 17 businesses, including one of the few groceries in the area. The plan also includes the demolition of Swansea

Elementary School's playground and the school building itself would be directly adjacent to the 14-lane highway.

When CDOT's plan was revealed, a second community group, Ditch the Ditch, responded and raised environmental justice concerns. In addition to air quality issues, lowering I-70 below grade has the potential to contaminate groundwater sources, a fact that CDOT itself readily admitted when it shelved proposals to reconstruct I-70 as a tunnel.

In particular, Ditch the Ditch supporters took issue with CDOT's proposed concession to the Swansea neighborhood. As a replacement for the demolished playground, CDOT proposed to cap a 4-acre area over I-70 and build a park above the highway. But with the rest of the road still uncovered, the children and others who used this greenspace would be exposed to the emissions from traffic below. The residents of the Elyria, Swansea, and Globeville neighborhoods, which all already belong to the most polluted ZIP code in the United States, would be subject to even more environmental hazards from the highway expansion.

With the support of the Sierra Club, several local organizations and neighborhood associations filed an injunction against the project on the grounds that it had not adequately addressed the environmental concerns for the community. As of December 2018, CDOT chose to settle the lawsuit and agreed to contribute \$550,000 to an independent health study that will provide a greater understanding of public health and environmental hazards in the Globeville, Elyria and Swansea neighborhoods.

CDOT first proposed the reconstruction of I-70 in 2004. Fifteen years later, it runs contrary to recent transportation developments in Colorado. On the November 2018 ballot, voters turned down two proposals (Propositions 109 and 110) to allocate billions of dollars of funding to highway widening and expansion across the state. The state also elected Jared Polis as governor, who campaigned on the dual issues of cutting vehicle emissions and increased mass transit. In light of these developments, the Central 70 project appears to be behind the times—and proposals such as those by Unite North Metro Denver are more in line with current demands.



# Interstate 81

SYRACUSE, NEW YORK

## HIGHWAY TYPE

Elevated Interstate

## YEAR BUILT

1957

## STAGE OF REMOVAL

NYSDOT is considering the replacement of the elevated freeway with a community grid as one of two options. Mayor Ben Walsh fully supports the community grid option.

## KEY CHARACTERISTICS

NY Gov. Andrew Cuomo has called the highway a “classic planning blunder.”

Advocates favor the replacement of the highway with a network of streets rather than a single boulevard.

A boulevard is not the only type of street that can replace an in-city freeway. In Syracuse, a coalition has rallied around the removal of the elevated portion of I-81 that enters downtown from the south. In its place, members of the coalition support reconnecting the street network that the highway damaged several decades ago. This option, officially known as the ‘community grid,’ favors relatively small streets that enable walkability and fine-grained urban development.



For over five decades, the elevated 1.4-mile stretch of I-81 known as “The Viaduct” has split downtown Syracuse in half. The urban neighborhoods around the highway have suffered from its construction: It destroyed a historic African-American community, disrupted the flow of city streets, and paved over countless historic homes and sites. The disparity it has created between those who could afford to move to the suburbs and those who remained contributes to Syracuse’s high poverty rate.

But like many in-city highways, I-81 in Syracuse has reached the end of its lifespan. Now NYSDOT and city residents must decide its fate.

Grassroots movement ReThink81 has advocated that when the aged viaduct is taken down, it stays down. The movement offers an alternative for the city and has created images showing what the current viaduct corridor could look like without the highway. These visions emphasize streets on a pedestrian scale, rather than a boulevard with six or more lanes. None of the streets has more than four travel lanes; all include ample sidewalks, with at least one bike lane separated from fast-moving traffic

by on-street parking. In this scenario, Interstate traffic would be rerouted around the city via I-481, which would be renamed I-81. With the viaduct gone, local traffic would be dispersed through an enhanced street grid system.

These common-sense designs have won over many supporters. Hundreds have attended rallies in support of the community grid. Nearly 20 local organizations and associations have joined the Moving People Transportation Coalition, to increase awareness of the advantages of the community grid. Syracuse’s primary local newspaper, *The Post-Standard*, published a front page editorial last July—its first in 37 years—titled “Let’s unite Syracuse: Replace I-81 with a community grid.”

The idea has also gained traction at the political level. Recently elected Syracuse Mayor Ben Walsh campaigned with the community grid as part of his platform. But he was far from alone; three of the four mayoral candidates last election came out in favor of the grid—as a group they garnered well over 90 percent of the vote—and Common Council is also on board. Even New York Governor Andrew Cuomo has weighed in, calling

the elevated viaduct “a classic planning blunder.”

The community grid option also has social and economic upsides for the city. The removal of the highway has the potential to return up to 18 acres of developable land to the city. The American Institute of Architects I-81 Task Force estimates that redevelopment of this land could result in the creation of \$1.5 billion in property value and \$3.6 million annually in tax revenue.

This redevelopment is an opportunity to create more inclusive opportunities for the members of Syracuse’s community historically left out of the system. The Syracuse Housing Authority, which already owns land along the I-81 corridor, foresees being able to add another 600 below-market-rate units.

Because of the identifiable benefits and extensive support for the community grid option, NYSDOT is considering it as one of two options for the replacement of the I-81 viaduct. A decision ten years in the making is imminent, as is the opportunity to revive the bustling streets of Syracuse’s past.



I-980. Credit / ConnectOAKLAND

# Interstate 980

OAKLAND, CALIFORNIA

## HIGHWAY TYPE

Depressed Interstate

## YEAR BUILT

1985

## STAGE OF REMOVAL

Advocates are actively building a coalition for removal and have the support of Oakland Mayor Libby Schaaf. Removal is included as an option in the Downtown Oakland Preliminary Draft Plan (2019).

## KEY CHARACTERISTICS

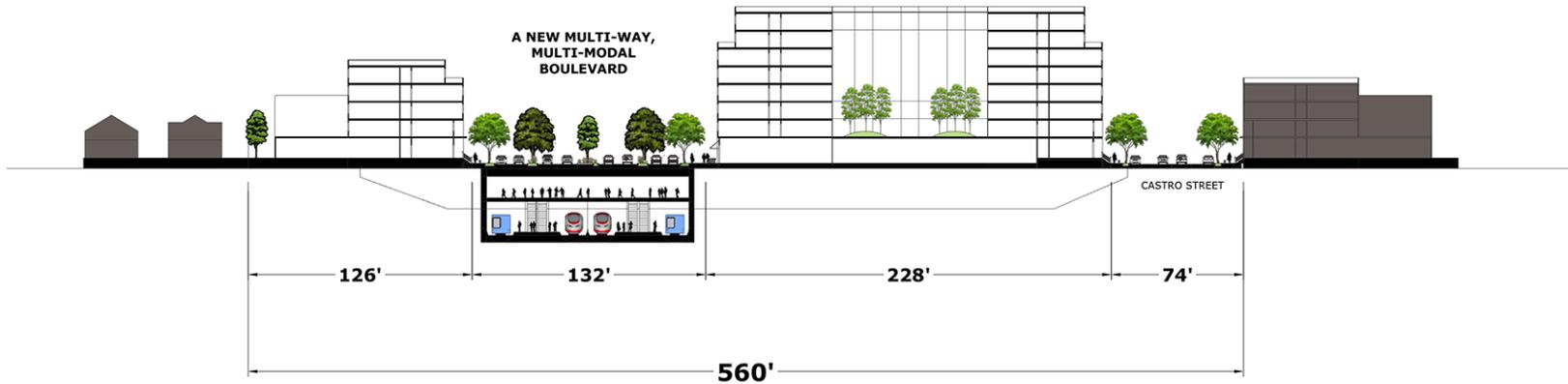
Highway is severely underused and occupies a 560-foot right-of-way.

The removal of the highway creates an opportunity to better integrate Oakland into regional transit networks.

I-980 remains a testament to the intense disapproval for freeway construction at the end of the highway-building era. Public opposition to its construction was so strong that the project was abandoned in 1971, only to be resurrected and finally completed over a decade later. Now, the excessively wide highway prevents West Oakland from enjoying the revival experienced by Uptown Oakland, the neighborhood on the opposite side of I-980 and its parallel frontage roads.



Oakland's restored street network with the removal of I-980. Credit / ConnectOAKLAND



Section of boulevard to replace I-980, with 560' right-of-way for scale. Credit / ConnectOAKLAND

The economic benefits promised as part of this highway's construction failed to materialize. Instead, the West Oakland neighborhoods adjacent to I-980 experience some of the highest asthma rates in the state of California (in the 99th and 100th percentile) and have notably poor access to healthy foods. Meanwhile, less than a quarter mile away across I-980, Uptown Oakland is undergoing a renaissance. West Oakland residents should be able to walk to Uptown's services and amenities, but are effectively cut off by a daunting route that consists not only of the Interstate highway, but also a pair of frontage roads that serve fast-moving traffic. The right-of-way for all of this asphalt is an enormous 560 feet wide.

Caltrans acknowledges that the current number of lanes is excessive to accommodate the 92,000 cars per day that travel the road, a volume that accounts for only 53 percent of possible capacity. Most of these vehicles are local traffic, with both origins and destinations along the northern part of the corridor. Most trucks that prefer wide lanes to service Oakland's port already opt for I-880 over I-980. A surface boulevard integrated into a street

grid along the route of I-980 would have the capacity to handle the traffic in a more suitable fashion.

The citizen group ConnectOAKLAND calls for replacing I-980 with a boulevard that has capacity for transit and bike facilities. The I-980 footprint has the potential to build a strong foundation for regional mobility, especially if connected to existing public transit networks like BART and Caltrain. ConnectOAKLAND's vision includes taking advantage of I-980's depressed lanes to create multi-level transit infrastructure and avoid costly tunneling or seizure of private property. The right-of-way for the proposed boulevard would be 75 percent narrower than the highway, making pedestrian crossing easier.

The transformation of I-980 offers other important benefits for the city. The creation of a boulevard will stitch the former street network back together with as many as 15 cross streets and, in the process, create new real estate adjacent to downtown. The boulevard solution reclaims seven western blocks that I-980 encroached upon, and creates 14 new city blocks to the east—around

17 acres in total of publicly controlled urban land. This new land could be developed for any type, use, or intensity that will best serve the interests of Oakland's residents, including affordable housing and community services.

With this proposal in hand, ConnectOAKLAND has engaged private, public, and professional stakeholders. Many local leaders and community activists in West Oakland support the plan and Mayor Libby Schaaf has championed the removal of this underutilized section of highway. The City of Oakland is now exploring the replacement of I-980 with surface streets as part of its Downtown Oakland Plan. Although much work remains to be done, the removal of I-980 would advance many community goals while opening up opportunities for equitable development.



## Kensington Expressway Scajaquada Expressway BUFFALO, NEW YORK

### HIGHWAY TYPE

Hybrid depressed and at-grade state routes

### YEAR BUILT

1957 (Kensington Expressway), 1962  
(Scajaquada Expressway)

### STAGE OF REMOVAL

Studies are complete and community organizations have preferred alternatives to current expressways.

### KEY CHARACTERISTICS

Highways bisect famous Olmsted-designed parks, which advocates seek to restore.

Because of strong community support, NYSDOT is considering alternatives to the expressways in official studies.

Before the age of highways, celebrated landscape architect Frederick Law Olmsted designed the city's Delaware and Humboldt Parks, linked by the tree-lined boulevard of the Humboldt Parkway. The construction of the Kensington and Scajaquada Expressways in the 1960s marred this masterful plan and separated parks and neighborhoods. A half-century later, community leaders recognize that the restoration of Olmsted's original plan will create a stronger Buffalo.



Current Scajaquada Expressway through Delaware Park. Credit / Buffalo Olmsted Parks Conservancy

Proposed Scajaquada Boulevard designed to mitigate automobile traffic. Credit / Buffalo Olmsted Parks

Not only did this pair of expressways deprive Buffalo of quality parklands, but it also severely damaged the neighborhoods along these corridors. The demolition of thousands of homes and businesses in Buffalo’s East Side to make way for the Kensington Expressway displaced city residents, while NYSDOT seized parts of Delaware Park on the justification that it was “vacant land.” Property values in the Hamlin Park neighborhood, situated where these two highways connect, plummeted and remain among of the lowest in the city. Many local businesses in the nearby Jefferson and Fillmore business districts were shuttered as residents moved away.

Fortunately, many of the assets near the expressway corridors remain relatively intact. Humboldt Park (renamed Martin Luther King Jr. Park) endures as the home of the Buffalo Museum of Science. The present-day park reflects the city’s African-American heritage and hosts its annual Juneteenth Festival. The now-bisected Delaware Park is still a popular destination within the city.

Many local organizations, including the Restore Our Community Coalition, the

Scajaquada Corridor Coalition, and the Olmsted Parks Conservancy are working together to restore the original Olmsted parks system through context-sensitive solutions.

These groups support a NYSDOT proposal to cover a one-mile stretch of the Kensington Expressway to reconstruct the former Humboldt Parkway. This proposal re-connects the neighborhoods divided by the depressed highway and creates a pedestrian-friendly environment by relegating fast-moving traffic to the underground lanes.

The parkway would return 14 acres of land to the community and generate opportunities for infill development and affordable housing. In turn, reinvestment to the Jefferson and Fillmore business districts could create up to \$2.8 million in new property tax revenue for the City of Buffalo over a 30-year period, in addition to \$76.7 million in household wealth.

Community members also advocate for a transformation of the Scajaquada Expressway into a tree-lined boulevard/parkway to reduce noise and pollution, increase safety, and reconnect adjacent

neighborhoods’ access to the park. The vision pays homage to Olmsted’s original plan and would consolidate the cultural assets, now separated by the highway, that border the park. These assets include the Albright-Knox Art Gallery and the Buffalo History Museum, which would be within walking distance of each other—if not for the four-lane barrier.

Thanks to the combined efforts of Buffalo’s community organizations, NYSDOT withdrew their proposal last January to rebuild the Scajaquada corridor using highway-like design with limited traffic calming measures. Instead, it will reconsider community-based designs. Stephanie Crockatt, Executive Director of the Buffalo Olmsted Parks Conservancy, hailed the decision as a benefit to Buffalonians now and in the future: “Today we can say clearly that the community has been heard. Thanks to the effort of so many concerned citizens who worked so hard over these past several months, we now have an opportunity to restore the jewel of Olmsted’s system.”

# Graduated Campaigns



These campaigns represent the next stage of the highways to boulevards transformation: projects where authorities have committed to removal. Two of these three projects are already underway and dismantling has begun, with tangible results.

## **Alaskan Way Viaduct**

SEATTLE, WASHINGTON

On Friday, January 11, 2019, the City of Seattle began the process of dismantling the elevated Alaskan Way Viaduct. This freeway had long separated much of downtown Seattle from its waterfront. By the turn of the millennium, it had reached the end of its lifespan. Seattle had committed to its replacement with a boulevard as early as 2007, but in 2009 the State of Washington decided to add a costly highway tunnel with an initial price tag of \$3.1 billion. In the month between the closure of the viaduct and the opening of the tunnel in February 2019, the predicted ‘carnageddon’ caused by the highway’s removal failed to manifest, which suggests that the tunnel was an unnecessary expense.

## **Inner Loop**

ROCHESTER, NEW YORK

In December 2017, the dust began to settle from Rochester’s Inner Loop East project, the decommissioning and infill of a portion of the freeway that ringed downtown. Since its completion, Rochester has witnessed the benefits of the freeway’s removal. Three major mixed-use developments that include below-market-rate apartments have already broken ground and another two projects are already in the pipeline. One of these includes a partnership with local healthcare provider Trillium Health, with plans to dedicate 20 units to supportive housing programs that aid its formerly homeless clients. Rochester is seeking to capitalize on this momentum and is currently studying the removal of the remaining parts of the Inner Loop.

## **Interstate 375**

DETROIT, MICHIGAN

The Michigan Department of Transportation (MDOT) has formally committed to the removal of I-375 through downtown Detroit. The project probably will not commence until around 2022, as MDOT explores design alternatives. Currently, it has settled on two options, both variations on a boulevard design. However, both designs still cater excessively to automobiles and very much resemble the freeway they will replace. Each features a total of eight travel lanes (four northbound and four southbound), which exceeds the number on the current highway. MDOT needs to consider more pedestrian-oriented designs, if Detroit is to reap the full benefits of highway removal.



**Alaskan Way Viaduct**  
SEATTLE, WA

**Inner Loop**  
ROCHESTER, NY



**I-375**  
DETROIT, MI

# Conclusion

**It is no longer an article of faith that in-city highways are forever: As these behemoth structures and routes age, many cities are treating removal not as an “if,” but as a “when and how.” Even with such a commitment, the dismantling of a highway is no small undertaking. The ten cities featured in this report have years of work ahead, and much planning to do before they can restore wholeness and opportunity to the neighborhoods and business districts these routes disrupted.**

When realized, each of the ten projects profiled in this edition of *Freeways Without Futures* will transform their cityscapes, returning acres of land back to local control for parks, business districts, and new housing. With opportunity comes responsibility: Well before demolition day, cities will have to work out complex design and policy considerations to restore integrity to the corridors disrupted by these public works, including making it a priority to prevent displacement and assure that current residents enjoy the benefits of redevelopment. Without careful attention to this core value of maintaining and building on what is already strong in a community, the removal of the highway could simply exert a new generation of inequity for communities that have seen enough.

What are the core principles that new plans for former highway corridors should observe?

## **Design for People.**

Cities must strive to create walkable places out of former highway corridors, designed on a scale suitable for pedestrians. If the street or boulevard that replaces the highway still caters to a high volume of vehicle traffic moving at a fast pace, then many of the benefits of highway removal will fail to manifest. The boulevard will still be an effective barrier for pedestrians, businesses that are supposed to rely on foot traffic will flounder, and property values will remain stagnant. Eight uninterrupted lanes of at-grade traffic mimics the effects of a highway, including its dire public health consequences for nearby residents.

A street design that includes cars but does not make them the highest priority is key: the test of time has shown that a road of four to six lanes is adequate for auto traffic but can still be designed for people and bicycles, with well-proportioned sidewalks, frequent and well-signed crossings, street trees, and one or

more medians that create a desirable and walkable avenue.

## **Offer Alternative Options to Driving.**

The street or boulevard should provide an alternative to automobile travel in the form of public transportation, connected to a transit network that serves the region. The removal of a highway is a divestment from expensive automobile infrastructure. It presents an opportunity to capture and convert trips taken by private automobile into ridership for public transit, which lessens the need to design a street with excessive traffic lanes. Furthermore, the new street or boulevard can incorporate relatively inexpensive forms of public transportation into its design, such as bus rapid transit with dedicated lanes. Many of the communities around highway corridors lack effective public transit; highway removal is an opportunity to remedy this.



## Understand Who Should Benefit—and Follow Through.

The removal of a highway will increase the attractiveness of nearby neighborhoods, and that means property values will also rise. Several projects in the nation, including the 11th Street Bridge project in Washington, DC, put programs in place years ahead of construction that encouraged and supported home ownership by current residents, as well as created protections for renters.

The gentrification that comes with rapid redevelopment is hard to avoid but is not inevitable; with planning, attention, outreach, and strong fiscal tools, long-standing members of a community need not be displaced when a freeway comes down and the market responds. From the beginning, cities need to develop active strategies to combat potential displacement. Fortunately, much of the land currently occupied by freeways will revert to the control of cities upon their removal.

Some of this land should be dedicated to the creation of housing options at many price points from below market rate to market rate, to ensure choices for the most vulnerable renters and prospective homeowners in the community. In the case of current and future homeowners, programs that mitigate the cost of ownership—such as abatements on property taxes—can make it easier for legacy residents to stay in their homes through periods of significantly rising real estate values. This pair of strategies is by no means exhaustive, but a starting point.

Many of the same community members who opposed the initial construction of freeways through their neighborhoods and their descendants still live in the neighborhoods that will benefit from highway removal. To see this reparation in their lifetime can be gratifying and even deeply moving—provided they will take part in the renaissance that results. Removal of an in-city freeway represents an opportunity to right a past injustice, while at the same time creating strong and resilient mixed-income, mixed-

use urbanism for the future. The ten projects examined in this report—and the approximately twenty worldwide that have preceded them—offer hope for a different path that does not have to end in an exit ramp.

# Further Reading

## P10 / Claiborne Expressway (I-10), New Orleans

Kaplan-Levenson, Laine. [‘The Monster’: Claiborne Avenue Before And After The Interstate](#). WWNO 89.9. 5 May, 2016.

Stelly, Amy. [Plan for blighted Claiborne Avenue: ill-conceived, exclusionary, lacks due diligence](#). The Lens. 20 December 2017.

[Claiborne Avenue Alliance](#) Website.

[Restoring Claiborne Avenue: Alternatives for the Future of Claiborne Avenue](#). Claiborne Corridor Improvement Coalition and Congress for the New Urbanism. 15 July, 2010.

[Tour: New Orleans’ Tremé Neighborhood and the Claiborne Expressway](#). Nola.com. 17 September, 2018.

[Modeling Environmental Health Impacts of I-10 to Engage Residents and Decision Makers](#). Thriving Earth Exchange Project.

## P12 / I-275, Tampa

Dovey, Rachel. [Tampa Residents Look for Alternatives to State DOT’s Highway Plan](#). Next City. 26 April, 2017.

Frank, Josh. [From Bifurcation to Boulevard: Tampa’s Future Without I-275](#).

Mullane Estrada, Sheila. [Demolish I-275? One expert offers a ‘dream’ alternative](#). Tampa Bay Times. 23 April, 2017.

[#blvdtampa](#) Website.

## P14 / I-345, Dallas

Crain, Zac. [Why We Must Tear Down I-345](#). D Magazine. May 2014.

Macon, Alex. [How to Imagine Dallas Without I-345](#). D Magazine. 2 November, 2017.

[A New Dallas](#) Website.

[Coalition for a New Dallas](#) Website.

[Dallas City Center CityMAP](#). Texas Department of Transportation. 27 September, 2016.

## P16 / I-35, Austin

Barnes, Michael. [Recalling Austin’s ample East Avenue](#). The Austin-American Statesman. 29 August, 2015.

Diaz, Joy and Wells Dunbar. [A Deeper Look at Austin Plans to Bury I-35](#). KUT 90.5. 2 August, 2013.

Ross, Robyn. [Reconnect Austin: Part One](#). The Austin Chronicle. 17 January, 2014.

Ross, Robyn. [Reconnect Austin: Part Two](#). The Austin Chronicle. 31 January, 2014.

[Reconnect Austin](#) Website

Urban Land Institute Austin 2018 Next Big Idea Award: [Reconnect Austin](#). 30 August, 2018.

## P18 / I-5, Portland

Bonner, Ernie. [History of Riverfront for People and Harbor Drive](#). Portland State University College of Urban & Public Affairs.

Maus, Jonathan. [Imagine the Central Eastside, minus that pesky freeway](#). BikePortland.org. 16 November, 2006.

[Central City 2035](#). City of Portland. 9 July, 2018.

[No More Freeway Expansions](#) Website.

[Riverfront for People](#) Website.

## P20 / I-64, Louisville

Kulash, Walter. [Feasibility Review: 8664 Plan, Louisville, Kentucky](#). 28 November, 2007.

Roberts, David. [Louisville’s “Spaghetti Junction” is a testament to how cars degrade cities](#). Vox. 5 January, 2017.

Schmitt, Angie. [Kentucky Spent \\$1.3 Billion on a Highway No One Wants](#). Streetsblog USA. 28 November, 2018.

[8664](#) Facebook Page.

[8664](#) Website.

## P22 / I-70, Denver

Bliss, Laura. [In Divided Denver, a Highway Promises Reconnection](#). CityLab. 12 January, 2017.

Minor, Nathaniel. [CDOT Settles \\$500,000+ I-70 Lawsuit With Neighborhoods, Environmental Groups](#). Colorado Public Radio. 20, December, 2018.

# Further Reading (continued)

Colorado Sierra Club Webpage: [Central I-70 \(North Denver\)](#)

[Ditch the Ditch](#) Website.

[Unite Denver North Metro](#) Website.

## P24 / I-81, Syracuse

Lohmann, Patrick. [Supporters of 'community grid' for I-81 rally downtown in push against viaduct, tunnel.](#) The Post-Standard. 10 October 2017.

Lohmann, Patrick. [Syracuse Housing Authority plan uses I-81 project to resurrect city center, combat poverty.](#) The Post-Standard. 27 December 2016.

Moriarty, Rick. [Cuomo: I-81 in Syracuse a 'classic planning blunder'.](#) The Post-Standard. 11 August 2016.

[AIA CNY I-81 Task Force](#) Website.

[Let's unite Syracuse: Replace I-81 with a community grid \(Editorial\).](#) The Post-Standard Editorial Board. 29 July, 2018.

[ReThink81](#) Website.

## P26 / I-980, Oakland

King, John. [Oakland moving in right direction with idea to replace I-980.](#) San Francisco Chronicle. 19 November, 2015.

King, John. [Time to rethink I-980, spur that cuts through heart of Oakland.](#) San Francisco Chronicle. 24 November, 2015.

[Connect Oakland](#) Website.

[Downtown Oakland Specific Plan.](#) City of Oakland. 01 March, 2016.

## P28 / Kensington and Scajaquada Expressways, Buffalo

Bethel, Bradley, Jr. [Kensington Expressway: Cap It or Fill It?](#) Rise Collaborative. 23 November, 2016.

Kurutz, Steve. [Once So Chic and Swooshy, Freeways Are Falling Out of Favor.](#) The New York Times. 21 October, 2017.

Morrison, Angelica. [Expressway seen as symbol of racial inequity, health problems.](#) WFBO 88.7. 15 January, 2018.

[Buffalo Olmsted Parks Conservancy](#) Website.

[Humboldt Parkway Deck Economic Impact Study.](#) New York State Department of Transportation. 2015.

[The Scajaquada Corridor Coalition](#) Website.

[Restore Our Community Coalition](#) Website.

## P30 / Graduated Campaigns

Black, Lester. [The Tunnel Is Worse Than We Thought.](#) The Stranger. 30 January, 2019.

Gallagher, John. [MDOT moving ahead with plan to rip out I-375 freeway, restore surface street.](#) Detroit Free Press. 5 December, 2017.

Gutman, David. ['The cars just disappeared': What happened to the 90,000 cars a day the viaduct carried before it closed?](#) The Seattle Times. 24 January, 2019.

Loh, Carolyn. [Opinion: I-375 was a mistake. Here's what we can learn from it.](#) Detroit Free Press. 11 December, 2017.

Moon, Cary. [A Bad Case of Tunnel Vision.](#) The Stranger. 9 December, 2004.

Orr, Steve. [Inner Loop land to feature more apartments, city officials decide.](#) Rochester Democrat & Chronicle. 28 June, 2018.

Sharp, Brian. [City eyes \\$1M study to remove remainder of the Inner Loop.](#) Rochester Democrat & Chronicle. 5 July, 2018.

Schmitt, Angie. [A New Neighborhood Will Replace a Sunken Rochester Highway.](#) Streetsblog USA. 01 March 2018.

Schmitt, Angie. [Seattle's Viadom: The 'Carnageddon' That Wasn't.](#) Streetsblog USA. 24 January, 2019.

[Inner Loop East Project.](#) City of Rochester.

# Other Nominated Freeways

South Mall Arterial,  
Albany, NY

I-75/85, Atlanta, GA

Jones Falls Expressway  
(I-83), Baltimore, MD

I-90 Allston Interchange,  
Boston, MA

U.S. Route 35, Dayton,  
OH

I-475, Flint, MI

I-65/70, Indianapolis, IN

I-49, Lafayette, LA

I-195, Miami, FL

Kendall Parkway (SR 836  
Extension), Miami, FL

I-91, New Haven, CT

I-95, Richmond, VA

I-35, San Antonio, TX

I-64, St. Louis, MO

I-705, Tacoma, WA

Gardiner Expressway,  
Toronto, ON

Potomac River Freeway  
and Whitehurst Freeway,  
Washington, DC

# About CNU

The Congress for the New Urbanism (CNU) helps create vibrant and walkable cities, towns, and neighborhoods where people have diverse choices for how they live, work, shop, and get around. People want to live in well-designed places that are unique and authentic. CNU's mission is to help build those places.

With nineteen local and state chapters and national headquarters in Washington, DC, CNU works to unite the New Urbanist movement. Our projects and campaigns serve to empower our members' efforts, identify policy opportunities, spread great ideas and innovative work to a national audience, and catalyze new strategies for implementing policy through design approaches.

All New Urbanists share the conviction that our physical environment has a direct impact on our chances for happy, prosperous lives. Our movement includes professionals, leaders, advocates, citizens, and other like-minded organizations working to identify and address the range of issues impeding the development and redevelopment of well-designed neighborhoods, public places, commercial corridors and rural environments.

CNU works to unite that movement as a connector, convener, alliance builder, and teaching platform. Our staff, members, partners, and allies are the international thought leaders on building better places, and CNU helps bring them together.

Learn more about our Highway to Boulevards program at [cnu.org/our-projects/highways-boulevards](https://cnu.org/our-projects/highways-boulevards).

