

These aerial photos show American cities before the highway boom of the 1950s and '60s.

Highways radically reshaped cities, destroying dense downtown neighborhoods, dividing many Black communities and increasing car dependence.

Now, **some cities** are looking to take them out.

But reconnecting neighborhoods is more complicated than
breaking them apart.

Can Removing Highways Fix America's Cities?

By Nadja Popovich, Josh Williams and Denise Lu May 27, 2021

ROCHESTER, N.Y. — Built in the 1950s to speed suburban commuters to and from downtown, Rochester's Inner Loop destroyed hundreds of homes and businesses, replacing them with a broad, concrete trench that separated downtown from the rest of the city.

Now, the city is looking to repair the damage. It started by filling in a nearly-mile-long section of the sunken road, slowly stitching a neighborhood back together. Today, visitors of the Inner Loop's eastern segment would hardly know a highway once ran beneath their feet.

As midcentury highways reach the end of their life spans, cities across the country are having to choose whether to rebuild or reconsider them. And a growing number, like Rochester, are choosing to take them down.

In order to accommodate cars and commuters, many cities "basically destroyed themselves," said Norman Garrick, a professor at the University of Connecticut who studies how transportation projects have reshaped

American cities.

“Rochester has shown what can be done in terms of reconnecting the city and restoring a sense of place,” he said. “That’s really the underlying goal of highway removal.”

The project’s successes and stumbling blocks provide lessons for other cities looking to retire some of their own aging highways. Nearly 30 cities nationwide are currently discussing some form of removal.

Some, like Syracuse and Detroit, have committed to replacing stretches of interstate with more connected, walkable neighborhoods. Others, like New Orleans and Dallas, are facing pressure from local residents and activists to address the pollution, noise and safety hazards brought by the mega-roads.



The eastern section of Rochester's Inner Loop highway, before it was removed. City of Rochester



Shawn Dunwoody, a local artist and community organizer, walking along the new Union Street corridor, which replaced the Inner Loop. Mustafa Hussain for The New York Times

The growing movement has been energized by support from the Biden administration, which has made addressing racial justice and climate change, major themes in the debate over highway removal, central to its agenda.

In a wide-reaching infrastructure plan released at the end of March, President Biden proposed spending \$20 billion to help reconnect neighborhoods divided by highways. Congressional Democrats have translated the proposal into legislation that would provide funding over the next five years. And the Department of Transportation opened up separate grants that could help some cities get started.

Pete Buttigieg, who heads the department, has expressed support for removing barriers that divided Black and minority communities, saying that “there is racism physically built into some of our highways.” Midcentury highway projects often targeted Black neighborhoods, destroying cultural and economic centers and bringing decades of environmental harm.

Congress is still haggling over Mr. Biden’s infrastructure plan, but experts say the proposed funding for highway removal represents a shift in the way the government approaches transportation projects.

“As recently as a decade ago,” said Peter D. Norton, a transportation historian at the University of Virginia, “every transportation problem was a problem to be solved with new roads.” Now, the impacts of those roads are beginning to enter the equation.

Turning a Highway Back Into a Neighborhood

Federal and state funds have historically gone to building highways, not removing them. But in 2013, the city of Rochester, in upstate New York, won a nearly \$18 million grant from the Obama administration that allowed it to take out an eastern segment of its sunken Inner Loop freeway, known locally as “the moat.”

Photos from a bird’s-eye view show the road’s transformation:

Inner Loop 2015

Rubble

Dump truck

The original highway spanned six lanes, with access roads alongside.

Dump trucks hauled thousands of tons of dirt to fill it in.

A narrower boulevard replaced the highway, and the rest of the land was opened up for development.

Today, apartments and bike lanes line the street, with many projects still under construction.

People have already moved into townhouse-style apartments where the highway once stood. Scooters and bicycles share space with cars along the new Union Street corridor, a once unlikely sight. Several cross-streets cut off by the highway have been reconnected, encouraging more walking in the area.

And the big fear of removing a highway — terrible traffic — hasn't materialized.

Lovely Warren, who has served as Rochester's mayor since 2014, said the project is proof the city can undo some of its mistakes.

In the past, "we created a way for people to get on a highway and go directly out of our community," she said, adding that highways also created "barriers that were really detrimental to the communities left behind."

Now, Rochester is trying a different approach: Instead of moving people in and out of downtown as quickly as possible, the city is trying to make downtown a more livable place.

The highway removal and other deconstruction projects are part of a long-term plan for a city still struggling to come back from years of economic and population decline. The big bet: Rebuilding more walkable, bikeable and connected neighborhoods will attract new investment and new residents. And city officials hope it might even reduce car-dependence in the long run.



A new apartment building under construction, next to a florist and interior design shop that sat atop the highway for decades. Mustafa Hussain for The New York Times

But rebuilding a neighborhood from scratch isn't easy, or quick.

Four years after the sunken freeway was filled, many buildings along the corridor are still under construction and new businesses have not yet moved into the space, including a planned pharmacy and grocery store.

Local residents and business owners said they were glad to see the highway go, but many of them had mixed feelings about what followed.

"The success was: It got filled. You now have people living somewhere that was just road before," said Shawn Dunwoody, an artist and community organizer who lives in Marketview Heights, a neighborhood near the removal site.

"We don't have the moat that was there," he said, walking along the new corridor. "But now, when you look down, there's just a whole series of walls," he added, pointing to the large, new apartment buildings that repeat down Union Street.

Others echoed the concern that the redevelopment project brought in too many higher-end apartments (though a portion are reserved for lower-income tenants and other vulnerable groups) without opening up any space for the public: No parks, no plazas.

Erik Frisch, a transportation specialist for the city who worked on the Inner Loop East removal, said the project has so far fulfilled its main goals: bringing in new investment and enlivening the city's East End. But the new neighborhood is still a work in progress.

Rebuilding a neighborhood "is not just an 'Add water, mix and stir' type situation," said Emily Morry, who works at the Rochester Public Library and has written about the neighborhoods razed by the Inner Loop's construction. "You can set up all the infrastructure you like, but there's the human factor, which takes all these different buildings and turns them into actual, viable communities."

Rochester is now looking to take down more of the Inner Loop highway, starting with a northern arm. Officials hope the experience from the first removal will help expedite the process.

Rochester's Inner Loop





By The New York Times ▪ Source: City of Rochester, Nearmap

It took more than two decades of planning to break ground on the Inner Loop removal, even though the project faced fewer obstacles than most.

The eastern highway segment never carried the traffic it was built to serve, so its removal faced scant opposition from daily commuters and business groups. The aging road was due for major upgrades, which would have cost much more than the entire removal process. And there weren't a lot of people already living along the corridor.

Funding and expertise were the biggest barriers to removal.

A few highways had been taken down in the past, but there was no real template. San Francisco's Embarcadero Freeway was irreparably damaged by an earthquake in 1989 and removed two years later. Other, more recent removals targeted waterfront highways and short "spurs" rather than segments of a working highway.

"We are a bit of a proof of concept," said Mr. Frisch, the city's transportation specialist.

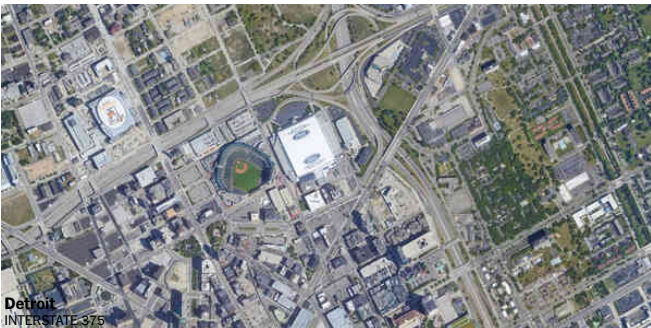
Removing the northern arm of the Inner Loop presents a new challenge. That section of highway carries much more traffic and its removal would reconnect two long-divided neighborhoods: Marketview Heights, a majority Black and Hispanic lower-income community north of the Inner Loop, and Grove Place, a whiter, wealthier enclave to the south.

For current residents of Marketview Heights, the crucial question is: What will reconnection bring? More opportunity and less pollution? Or another round of displacement?

Dozens of Projects Across the Nation

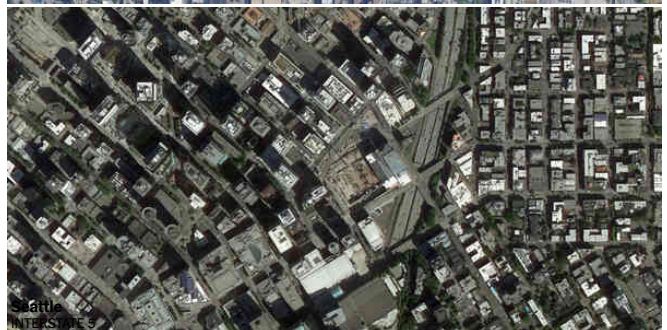
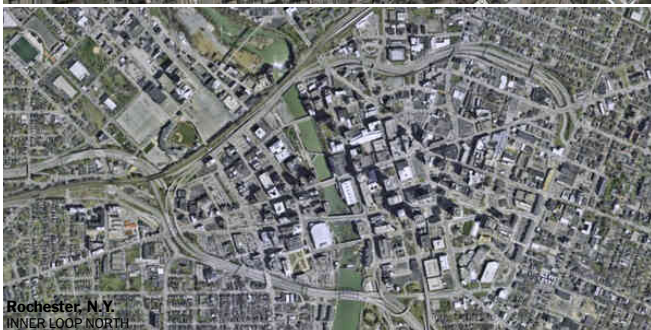
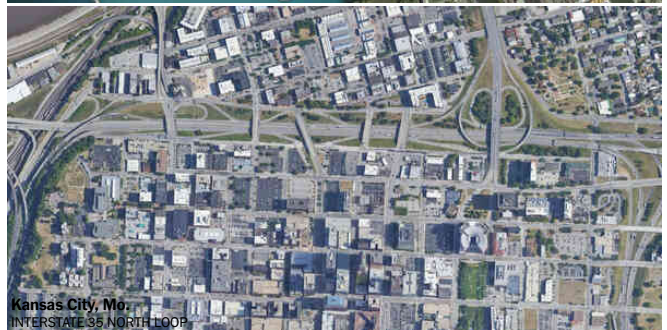
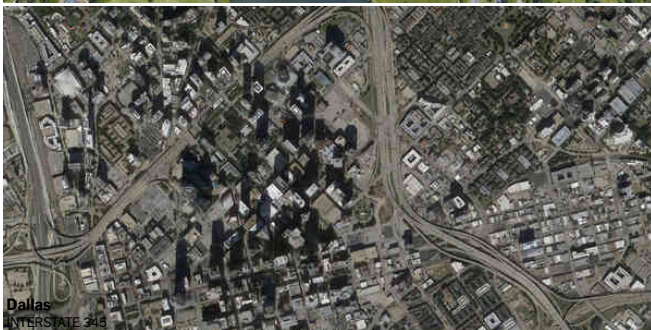
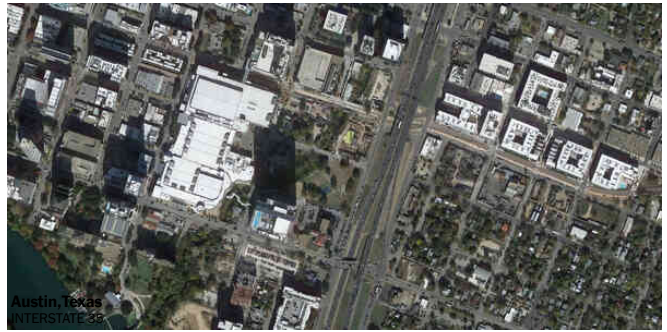
In recent years, more cities have started to seriously rethink some of their highways. The Congress for the New Urbanism, a group that tracks highway removals, counted 33 proposed projects in 28 American cities. And the idea is being discussed in many others.

Committed to removing highway or section





Removal under official study



Removal plan proposed



Atlanta
INTERSTATE 75/85



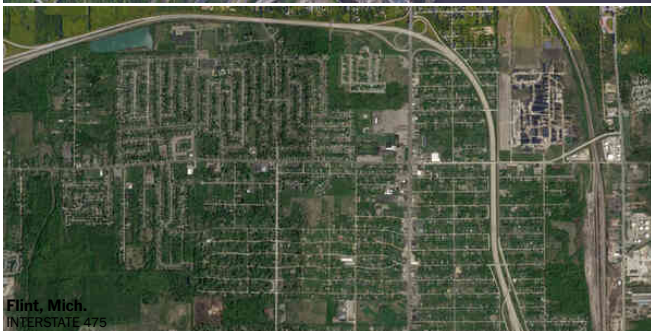
Denver, Colo.
COLFAX CLOVERLEAF



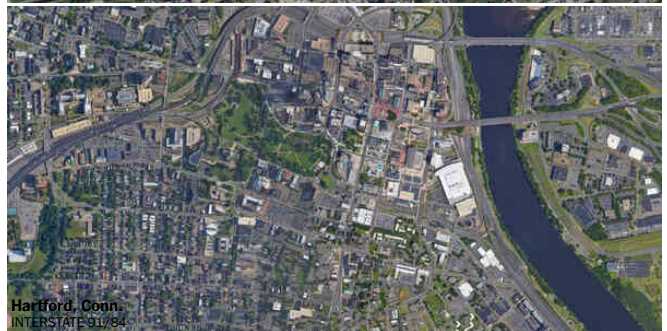
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INTERSTATE 35



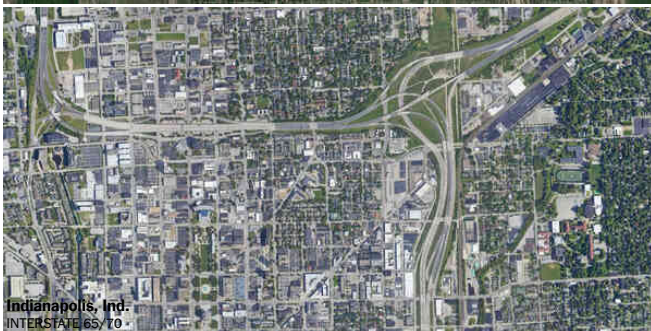
Erie, Pa.
BAYFRONT PARKWAY



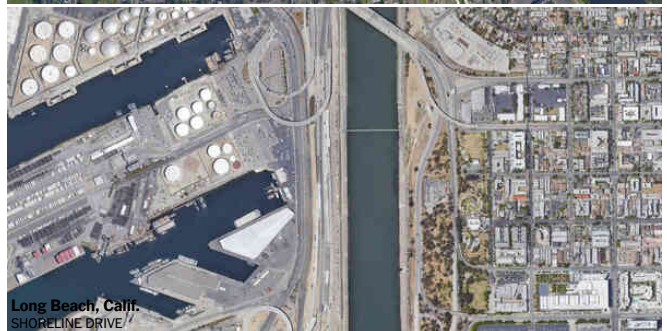
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INTERSTATE 475



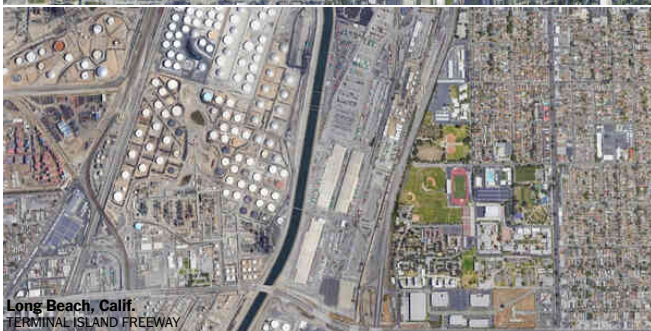
Hartford, Conn.
INTERSTATE 91/84



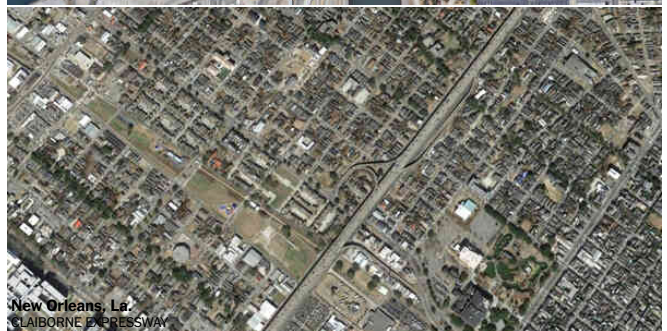
Indianapolis, Ind.
INTERSTATE 65/70



Long Beach, Calif.
SHORELINE DRIVE



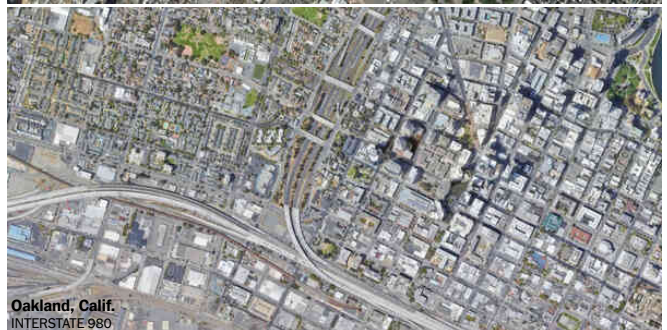
Long Beach, Calif.
TERMINAL ISLAND FREEWAY



New Orleans, La.
CLAIBORNE EXPRESSWAY



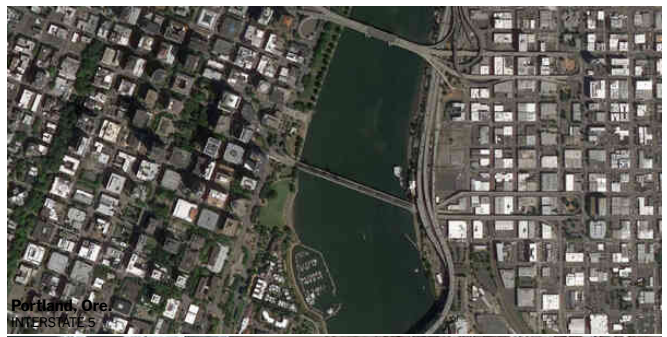
New York City
BROOKLYN-QUEENS EXPRESSWAY



Oakland, Calif.
INTERSTATE 980



Pasadena, Calif.
STATE ROUTE 710



Portland, Ore.
INTERSTATE 5



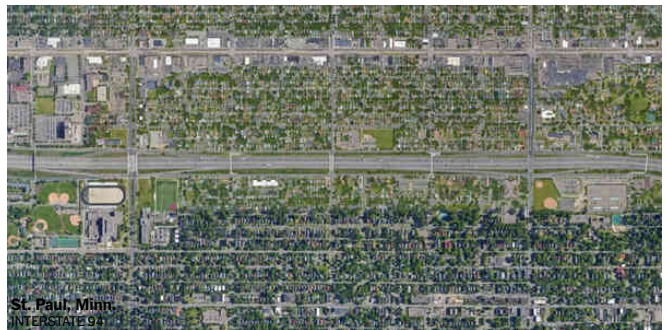
San Francisco
INTERSTATE 280



San Francisco
THE GREAT HIGHWAY



Seattle
STATE ROUTE 99



St. Paul, Minn.
INTERSTATE 94



Tampa, Fla.
INTERSTATE 275

If rebuilding cities is done right, highway removal projects could make life better for local residents as well as the planet, said Dr. Garrick of the University of Connecticut, because denser, less car-centric neighborhoods are crucially important to reducing greenhouse gases that are causing climate change.

The proposed replacements, and their benefits, vary. Some follow Rochester's model, turning former highways into smaller, walkable boulevards. Others are covering highways with parks, or merely replacing them with highway-like streets. Nationwide, many cities also continue to expand highways.

A growing number of removal projects are grappling with the questions of environmental justice central to Mr. Biden's proposal. Historically, vulnerable communities have had little say in infrastructure decisions.

When the National Interstate Highway System was built in the 1950s and '60s, it connected the country like never before. But it plowed through cities with little concern for local effects. State highways and connector roads compounded the damage.

"Highways, freeways, expressways were always hostile to cities," said Dr. Norton of the University of Virginia. But they were particularly hostile to Black communities.

In cities like Detroit, New Orleans, Richmond, Va., and many more, federal interstates and other highways were often built through thriving Black neighborhoods in the name of “slum clearance.”



Detroit's Black Bottom neighborhood, the center of the city's Black community, was demolished to make way for Interstate 375 and other urban renewal projects. Now, the highway is slated for removal. Burton Historical Collection, Detroit Public Library; Cydni Elledge for The New York Times

Most highway projects fit into a broader program of urban renewal that reshaped American cities in the mid-20th century, displacing more than a million people across the country, most of them Black. Cities replaced dense, mixed-use neighborhoods with mega-projects like convention centers, malls, and highways. When public housing was built, it usually replaced many fewer units than were destroyed.

Clearing “blighted” neighborhoods, which was usually a reference to low-income and Black areas, was the intentional goal of many urban highway projects, said Lynn Richards, president of the Congress for the New Urbanism, which advocates for more sustainable cities. “But, you know, where one person sees urban blight, another person sees a relatively stable neighborhood.”

Highways didn't just destroy communities, they also often reinforced racial divides within cities.

White Americans increasingly fled cities altogether, following newly built roads to the growing suburbs. But Black residents were largely barred from doing the same. Government policies denied them access to federally backed mortgages and private discrimination narrowed the options further.

In effect, that left many Black residents living along the highways' paths.



New Orleans' Claiborne Avenue, once a tree-lined boulevard, now sits in the shadow of the Claiborne Expressway. Local groups are pushing to remove the mega-road. The Historic New Orleans Collection; Abdul Aziz for The New York Times

In March, Mr. Biden named New Orleans' Claiborne Expressway as a vivid example of how highway construction divided communities and led to environmental injustice.

The highway looms over Claiborne Avenue, once an oak-lined boulevard that served as “the economic heart and soul of the Black community of New Orleans,” said Amy Stelly, a local resident and urban planner, who has been pushing for the Expressway's removal for most of the last decade. A part of the Tremé neighborhood, the Claiborne Avenue corridor was a central meeting space for local residents and the site of Black Mardi Gras celebrations at a time when the festival was still segregated.

In the mid-1960s, the oak trees were ripped out to make way for the highway, cleaving the neighborhood in two. Over the following decades, the once middle-class area fell into decline. Today, the Expressway corridor is polluted: Local residents suffer higher than average rates of asthma and the soil is contaminated with lead, the result of years of leaded gasoline use in cars traveling into and out of downtown.

The idea of removing the highway, however, is raising some of the same concerns heard in Rochester.

Not Repeating Mistakes of the Past

Older residents of Rochester's Marketview Heights neighborhood still remember the displacement caused by the construction of the Inner Loop. Many people now fear a second wave if it is removed.

A common argument, said Mr. Dunwoody, the artist and community organizer, is that if the highway is removed “folks are now going to be looking at our neighborhood, and bringing in yoga studios and coffee shops to move us out.”

“People don't want to get gentrified, get pushed out, get priced out,” he said.

To make sure that city officials listen to these concerns, Mr. Dunwoody started a local advocacy group three years ago with Suzanne Mayer, who lives on the other side of the highway, in the Grove Place neighborhood. The group, called Hinge Neighbors, aims to bring local residents into the planning process.



Shawn Dunwoody and Suzanne Mayer stand on a bridge overlooking the Inner Loop's remaining northern arm. Mustafa Hussain for The New York Times

At a community meeting in Marketview Heights in early May, the biggest question on people's minds wasn't whether the highway should come down, but what will replace it.

Miquel Powell, a local resident and business owner working on a prison re-entry program, worried that more large-scale apartments, like those built in the East End, would come to the neighborhood. "That would totally change the whole dynamic," he said. Marketview Heights is mostly free-standing, single-family homes; some are subdivided and most are rented.

Nancy Maciuska, who is in her 60s, said she wants to see more family-centric development in the area if the highway is removed, and some parks to replace those torn down by the construction of the freeway. "So people can raise their families and enjoy Mother Nature," she said.

Hinge Neighbors helped Mrs. Maciuska, Mr. Powell and other local residents put some of their concerns about the Inner Loop North project into a presentation for city consultants and the mayor.

The project is still in early stages and Marketview Heights is only one corner of the area under study for removal. But Ms. Warren said her administration is exploring options that would help keep longtime residents in the neighborhood, including potential rent-to-own housing arrangements.

City officials are scheduled to present a series of options for the project to the community this summer.



Miquel Powell and Nancy Maciuska, both residents of the Marketview Heights neighborhood, presented their concerns about post-highway removal redevelopment to the mayor and other city officials. Mustafa Hussain for The New York Times

The big challenge, according to Dr. Garrick, is that new investments in American cities today tend to lead to gentrification. "We need to figure out how to change without displacing people," he said.

Some of the positive effects of highway removals, like decreasing pollution and increasing property values, can lead to the displacement. A recent study looked at the effects of replacing the Cypress Freeway in Oakland, Calif., with a street-level boulevard and found that the project decreased pollution but increased resident turnover.

Such “environmental gentrification” can also happen when parks and other greenery are introduced to historically disadvantaged neighborhoods.

The proposed Democratic legislation hopes to avoid that paradox. The bill would fund community outreach and engagement by local groups. And it prioritizes capital construction grants for projects that include measures like land trusts that would ensure the availability of affordable housing for local residents.

“It’s no longer good enough for us to remove a highway and make a replacement road beautiful,” said Ms. Richards of the Congress for the New Urbanism. “We have to reconnect the neighborhoods and invest in the legacy residents.”

Additional work by Claire O’Neill and Matt McCann.

Sources: Historic aerial images were taken between 1938 and 1969 and come from the United States Geological Survey. Current satellite and aerial images were taken between 2010 and 2021 and come from Google Earth and Nearmap. A portion of the images were collected by Shane Hampton at The University of Oklahoma, and the rest by The New York Times. Images in the Inner Loop East removal sequence come from Nearmap. A database of cities with active highway removal projects was compiled by Benjamin Crowther at the Congress for the New Urbanism.

Removal categories: The “committed” category covers projects where a highway authority has committed to removing some portion of a highway or removal is in progress. The “under study” category covers projects that are being considered in feasibility studies. The “proposed” category covers projects where an alternative vision and design for the highway corridor has been put forward by local groups.