

Reimagining California Freeways and Reconnecting Communities

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List of Abbreviations and Acronyms

4P	people, private, public and philanthropy (funding model)
AASHTO	American Association of State Highway and Transportation Officials
ADA	Americans with Disabilities Act of 1990
ADOT	Arizona Department of Transportation
BART	Bay Area Rapid Transit
BIL	Bipartisan Infrastructure Law
Caltrans	California Department of Transportation
CDOT	Colorado Department of Transportation
CM/GC	construction manager/general contractor
CNU	Congress for the New Urbanism
DOT	department of transportation
DRISI	Division of Research, Innovation and System Information (Caltrans)
DVRPC	Delaware Valley Regional Planning Commission
EOA Plan	Equitable Outcomes Action Plan
FHWA	Federal Highway Administration
GES	Globeville Elyria-Swansea (neighborhood in Denver, Colorado)
HOV	high-occupancy vehicle (lane)
HSR	high-speed rail
IIJA	Infrastructure Investment and Jobs Act
Interstate	interstate
MDOT	Michigan Department of Transportation
MnDOT	Minnesota Department of Transportation
NAE	Neighborhood Access and Equity (federal grant program)
NCHRP	National Cooperative Highway Research Program
NCTCOG	North Central Texas Council of Governments
NEPA	National Environmental Policy Act
ODOT	Oregon Department of Transportation
OPCD	Office of Planning and Community Development (Seattle, Washington)
OTIS	Office of Transportation and Infrastructure Systems (Philadelphia, Pennsylvania)
PCDC	Philadelphia Chinatown Development Corporation
PennDOT	Pennsylvania Department of Transportation
RCP	Reconnecting Communities Pilot (federal grant program)
ROW	right of way
SFCTA	San Francisco County Transportation Authority
SFMTA	San Francisco Municipal Transportation Agency
SR	State Route

TIGERTransportation Investment Generating Economic Recovery (discretionary grants)
TRB Transportation Research Board
TxDOT..... Texas Department of Transportation

Executive Summary

An increasing number of freeway transformation projects are underway across the United States. Many of these projects are funded in part by the Infrastructure Investment and Jobs Act (IIJA) Reconnecting Communities Pilot (RCP) grant program, which is designed to reconfigure highways to counteract a variety of negative community impacts. In 2023, the California Department of Transportation (Caltrans) launched its own Reconnecting Communities: Highways to Boulevards Pilot Program to facilitate the conversion of underutilized highways to multimodal corridors.

To inform Caltrans' future highway conversion projects, CTC & Associates surveyed public agencies and other entities regarding their experience with freeway transformation projects and the impacts to the lives of the people living near them. Survey findings supplemented by follow-up consultations with selected survey respondents and an examination of the literature were used to develop case studies highlighting seven freeway transformation projects. A sampling of relevant literature provided context for three additional case studies.

Key Definitions

This synthesis effort examined selected freeway transformation projects that fall into two primary categories:

- Freeway, or highway, cap.
- Freeway to boulevard.

While there is no statutory or regulatory definition of these terms, Federal Highway Administration (FHWA) publications offer the following definitions:

Highway Cap: Highway caps are structures built over highways that include elements other than streets, namely parks or buildings. Highway caps are technically very wide bridges or decks built over roadways and can vary in length from a few hundred feet to one or more city blocks. (Source: [The Benefits of Highway Cap Parks: A Report to Congress](#), December 2022.)

Highway Cap Park: Highway cap parks are public parks that have been built above highways on top of highway caps. They are one approach to mitigating the negative impacts that highways can have on communities. Highway cap parks can be built during the highway's construction, during highway reconstruction or expansion, or after the highway is completed. (Source: [The Benefits of Highway Cap Parks: A Report to Congress](#), December 2022.)

Freeway to Boulevard: The removal of aging freeway infrastructure and its replacement with a boulevard to accommodate all users, facilitate livable communities and reduce ongoing maintenance expenses. (Source: [Value Capture: Capitalizing on the Value Created by Transportation; Frequently Asked Questions — Asset Recycling](#), undated.)

Case Studies: Freeway Transformation Projects

Survey respondents from three state departments of transportation (DOTs), three local agencies and one regional council of governments described seven freeway transformation projects:

- Atravesando Comunidades (Tucson, Arizona).
- Central 70 (Denver, Colorado).
- Church Street Plaza Bridge/Victoria Park (Oak Park, Michigan).

- I-5 Rose Quarter Improvement Project (Portland, Oregon).
- Chinatown Stitch (Philadelphia, Pennsylvania).
- Klyde Warren Park (Dallas, Texas).
- Reconnect South Park (Seattle, Washington).

Three additional case studies were compiled from a review of relevant literature:

- Central Freeway/Octavia Boulevard (San Francisco, California).
- ReConnect Rondo (St. Paul, Minnesota).
- Inner Loop East (Rochester, New York).

Each of the 10 case studies provides a brief history of the project area, describes the project's intent and considers some or all of the following topic areas:

- Project funding.
- Intended social remedies.
- Community engagement.
- Project impacts.
- Project successes and challenges.
- Best practices.

Each case study concludes with a collection of related resources.

Selected highlights from the case studies are presented below in three categories that identify where each project falls along the continuum of project development:

- Initial planning and design.
- Design complete and ready to construct.
- Completed projects.

A comprehensive review of project funding, project successes and challenges, and best practices for all 10 case studies begins on page 10.

Initial Planning and Design

The case studies highlighted in Table ES1 are still in the planning and/or design phases. Projects in Arizona, Minnesota and Pennsylvania expect to implement freeway caps; the design of a new project in Seattle is yet to be determined. Sponsors from each project are engaging communities to determine the needs and preferences for specific features of the transformation.

Table ES1. Freeway transformation projects in planning and design phases

State (Primary Sponsor) Project Location	Project Name and Type	Project Status	Intended Social Goal	Page Number
Arizona (City of Tucson) Tucson	Atravesando Comunidades* Freeway cap	Planning and design	Reconnect and increase mobility access for low-income Hispanic populations in South Tucson.	24

State (Primary Sponsor) Project Location	Project Name and Type	Project Status	Intended Social Goal	Page Number
Minnesota (Collaboration Among Community Leaders) St. Paul	ReConnect Rondo Freeway cap	Planning and design	Reconnect the Rondo neighborhood, divided by the construction of I-94, to create affordable housing, community spaces and an African American cultural enterprise district.	46
Pennsylvania (City of Philadelphia and Philadelphia Chinatown Development Corporation) Philadelphia	Chinatown Stitch* Freeway cap	Preliminary design and engineering to be completed in 2025	Reimagine the Vine Street corridor to improve neighborhood connections and create equitable mixed-use development opportunities and inclusive mobility options.	67
Washington (City of Seattle) Seattle	Reconnect South Park* To be determined	Initial planning stages; community-selected design anticipated in June 2025	Improve mobility, health, economic opportunity, environmental quality and well-being of South Park residents, a largely minority community.	78

*Denotes a survey respondent.

Atravesando Comunidades, Tucson, Arizona

Highway construction in the 1960s bifurcated South Tucson's largely Hispanic neighborhoods. As the city of Tucson's RCP application noted, "With the construction of Interstate-19 (I-19), residents who previously had direct access to the Santa Cruz River and strong connections to other parts of Tucson became isolated, trapped behind the walls of a freeway."

The Atravesando Comunidades project will develop a new bicycle/pedestrian bridge over I-19, connecting the planned Nebraska Street Bicycle Boulevard and future Airport Wash Greenway to the Spectrum Mall and Chuck Huckelberry Loop shared-use path system along the Santa Cruz River.

Anticipated project impacts:

- *Environment and open spaces.* Investment in the regional flood control district will be supported and access to parks, greenways and the regional shared-use path system will be improved.
- *Local economy.* Area residents will have greater access to jobs, commercial areas, amenities and educational institutions, such as Pima Community College.
- *Transportation.* Removing the barrier the freeway creates will facilitate east-west connectivity for pedestrians and bicycles, and increase direct access to a variety of public transportation resources.

ReConnect Rondo, St. Paul, Minnesota

Prior to the construction of Interstate 94 (I-94), 80% of St. Paul's African American population lived in the thriving Rondo neighborhood between Minneapolis and St. Paul. With the construction of I-94, the community was physically and economically bifurcated, demolishing 700 family homes and closing or tearing down 300 businesses.

In the project's early stages, ReConnect Rondo, a nonprofit organization formed to restore equity and opportunity in the Rondo neighborhood, worked with Minnesota DOT (MnDOT) and the city of St. Paul on the idea of a land bridge across the highway. Now in the design phase, the freeway cap is expected to span over a half-mile segment of the freeway and include affordable and market-rate housing, commercial area and green space. The project also facilitates creation of an African American cultural enterprise district.

Project goals:

- As many as 576 new housing units and more than 1,000 new residents.
- Up to 2,000 new permanent and construction-related jobs.
- Over 100,000 square feet of retail and office space, and up to 36,000 square feet of nonprofit and institutional space.
- Approximately \$3.8 million to \$4.2 million annually in increased city revenue.

Chinatown Stitch, Philadelphia, Pennsylvania

The Chinatown area of Philadelphia, established in the mid-1800s, has been significantly disrupted by the Vine Street Expressway serving as a thoroughfare in the city center. In addition to causing community and economic disruption, the freeway construction has led to increasing traffic congestion, noise and air pollution, and risks to pedestrian safety.

The Philadelphia Chinatown Development Corporation (PCDC), organized in the late 1960s to give the Chinese community and business leaders a voice in matters of local development, is an active partner in the Chinatown Stitch project with the Philadelphia Office of Transportation and Infrastructure Systems. Currently in the planning phases, the project envisions a two-and-a-half-block freeway cap covering the existing below-grade Vine Street Expressway between 10th and 13th streets.

The Chinatown Stitch project seeks to:

- Provide an inviting public green space.
- Create a safe street design that extends Chinatown's character.
- Prioritize the needs of youth, the elderly and those with disabilities.
- Include public buildings and businesses that serve community needs.

The project will include a public park, traffic-calming measures along the local Vine Street and a connection to the Reading Viaduct rail-trail. Preliminary design and engineering will continue through 2025. Construction is anticipated to begin in 2028 and be mostly complete by 2031.

Anticipated project impacts:

- *Affordable housing.* City-owned land will be reserved for affordable housing, and community stewardship will be fostered through various initiatives.
- *Environment and land use.* The project will create green space, improve pedestrian and bicycle infrastructure, and reduce greenhouse gases.
- *Local economy.* Key project objectives are intended to enhance opportunities for low-income residents by building community wealth and creating jobs, protecting small businesses and ensuring equitable project procurement.

Reconnect South Park, Seattle, Washington

Washington State Route 99 (SR 99) cuts through the South Park neighborhood in the Duwamish Valley, 5 miles south of downtown Seattle. The area was originally home to the Duwamish Tribe. In the 1850s, white settlers and migrant communities began to inhabit the area. Agricultural clearing inadvertently led to flooding, and in 1913, city officials decided to deepen and straighten the river channel.

Increased waterway access facilitated industrialization of the neighborhood, which had become largely immigrants and communities of color. Redlining lending practices discouraged home buying and other investments. In 1958, SR 99 was moved from South Park's eastern border to cut straight through the South Park neighborhood, adding to the disruption and environmental degradation from over a century of industrialization.

A technical team is analyzing potential impacts from a variety of freeway solutions under consideration. A community vision plan that focuses on an equitable development strategy to prevent displacement and build community wealth is scheduled to be finalized in 2025.

Design Complete and Ready to Construct

The two projects summarized in Table ES2 have undergone planning, design and community engagement processes; construction of both projects is slated to begin in 2025. Both projects involve the construction of freeway caps that will provide new community spaces to help reunite fractured communities and encourage safer mobility.

Table ES2. Freeway transformation projects ready for construction

State (Primary Sponsor) Project Location	Project Name and Type	Project Status	Intended Social Goal	Page Number
Michigan (Michigan Department of Transportation) Oak Park	Church Street Plaza Bridge/Victoria Park* Freeway cap	Design complete; construction to begin early 2025	Reconnect Orthodox Jewish community and improve mobility on Sabbath and holy days.	43
Oregon (Oregon Department of Transportation) Portland	I-5 Rose Quarter Improvement Project* Freeway cap	Design complete; construction to begin summer 2025	Support reconnection of Lower Albina, the historical heart of Portland's Black community.	58

*Denotes a survey respondent.

Church Street Plaza Bridge/Victoria Park, Oak Park, Michigan

The largest Jewish population in the Detroit area lives in and around Oak Park on the city's northwest side. Interstate 696 (I-696) as it was originally constructed bisected this neighborhood, requiring pedestrian movement from one side of I-696 to the other through the use of three park-like plazas that cross over the freeway. Built in 1987, the Church Street Plaza Bridge, which includes Victoria Park, is the oldest of the three plazas.

This project will reconstruct the Church Street Plaza Bridge, removing and replacing the superstructure and rebuilding the current recreational areas of the plaza, including the Victoria Park playground. Reconstruction will also address current chronic water leaks on the Church Street Bridge that form large,

sharp icicles that dangle over the freeway. The reconstructed area will reconnect the Oak Park community with a more inclusive and accessible space. Construction is expected to begin in early 2025.

Project goals:

- Support the local economy by improving access to specialty businesses that cater to the area's residents with kosher and other unique products and services.
- Add amenities to the community park based on survey responses, including bike repair and fitness stations; installation of benches, pavilions, shade structures and picnic tables; and replacement of playground equipment.
- Eliminate safety concerns, icicle removal and transportation delays with the new structure.

I-5 Rose Quarter Improvement Project, Portland, Oregon

Portland's Lower Albina neighborhood near the Willamette River, considered the heart of the area's Black community, was bisected by Interstate 5 (I-5), destroying hundreds of homes and community vitality. Three interstates (I-5, Interstate 84 (I-84) and Interstate 405 (I-405)) also converge in the Rose Quarter/Lower Albina neighborhood, forcing vehicle traffic down to two travel lanes. I-5 Rose Quarter Improvement Project planners characterize this area as "one of the worst bottlenecks in the country."

This project will replace existing bridges with one large, seismically resilient highway cover over I-5 that reconnects the historical street grid and improves multimodal mobility and access to the Willamette River. Additional improvements cover more than 1.5 street miles and include wider and improved sidewalks and additional bicycle lanes. Ramp-to-ramp connections (auxiliary lanes) and wider shoulders will be constructed to allow an estimated one-third of traffic to travel between I-84 and I-405 by moving from ramp to ramp rather than merging into two lanes of traffic on I-5.

Anticipated project impacts:

- *Affordable housing.* The project would support growth, including affordable housing.
- *Local economy.* Construction spending and contracting opportunities for small/disadvantaged firms would create temporary benefits, permanent relocation of retail and service businesses and increased building capacity; and commercial development would increase area jobs.
- *Transportation.* Interstate and adjacent surface street safety and operations would improve, and multimodal facilities in the project area would be enhanced.

Completed Projects

The four freeway transformation projects highlighted in Table ES3 represent a wide range of experiences, from the Octavia Boulevard project in San Francisco, California, completed 20 years ago, to the Central 70 freeway cap in Denver, Colorado, completed in 2023. Two projects transformed freeways to boulevards (Octavia Boulevard and Inner Loop East), and two projects created public spaces by capping the freeway (Central 70 and Klyde Warren Park).

Table ES3. Completed freeway transformation projects

State (Primary Sponsor) Project Location	Project Name and Type	Project Status	Intended Social Goal	Page Number
California (San Francisco County Transportation Authority) San Francisco	Central Freeway/Octavia Boulevard Freeway to boulevard	Completed in 2005; ongoing improvements	Repair economic, environmental and community harm to the primarily African American Hayes Valley neighborhood caused by the Central Freeway construction and operation, and improve general livability of the area.	28
Colorado (Colorado Department of Transportation) Denver	Central 70* Freeway cap	Completed in 2023	Repair past infrastructure and environmental harms to the largely Hispanic and historically disadvantaged community.	36
New York (City of Rochester) Rochester	Inner Loop East Freeway to boulevard	Completed in 2017; Inner Loop North project underway	Revitalize Rochester's downtown business district and reconnect its central area with surrounding communities.	52
Texas (City of Dallas and Texas Department of Transportation) Dallas	Klyde Warren Park* Freeway depression and cap	Completed in 2012; ongoing improvements	Restore direct access from uptown neighborhoods to downtown Dallas and provide a gathering place for surrounding communities of all backgrounds.	74

*Denotes a survey respondent.

Central Freeway/Octavia Boulevard, San Francisco, California

Completed in 1959, the double-decker elevated Central Freeway connected motorists to U.S. 101 and led to Golden Gate Park, dividing sections of San Francisco's historical Hayes Valley neighborhood. In addition to the physical neighborhood destruction, the primarily lower-income, minority residents were impacted by traffic, noise, air pollution and blighted views. The Loma Prieta earthquake in 1989 severely damaged Central Freeway, which permanently closed in 1992. After the freeway's closure, the congestion and gridlock expected by freeway users did not materialize; a 1999 ballot initiative prevailed and plans for a boulevard to replace the freeway moved forward.

By 2005, Central Freeway was rebuilt as Octavia Boulevard, a surface-grade boulevard extending four urban blocks — from the U.S. 101 off-ramp at Market Street through the Hayes Valley neighborhood to Fell Street. This route serves as a primary link between downtown San Francisco and neighborhoods around Golden Gate Park. The construction of Octavia Boulevard freed up 7 acres for development to help reverse the negative impacts of the division created by the original freeway.

Since the construction of Octavia Boulevard, area planning and transportation agencies have continued to seek improvements to the boulevard and surrounding neighborhoods through these primary efforts:

- Market and Octavia Area Plan (2007).
- Central Freeway and Octavia Boulevard Circulation Study (2012).
- Octavia Improvements Study (2023).

The 2012 Central Freeway and Octavia Boulevard Circulation Study offered the following conclusions:

- The boulevard enhanced livability and the public realm in the Hayes neighborhood, however, ongoing heavy peak traffic causes congestion, air quality and noise impacts, and conflicts with nonmotorized users.
- Isolating the impacts of the boulevard alone are challenging as population and traffic have generally increased throughout the city.
- Nonmotorized travel modes are prevalent for local travel and important to neighborhood vitality, but regional transportation and transit connections are needed so a balance is necessary, especially to encourage additional residents and workers in the area.

The June 2023 Octavia Improvements Study explored ways to “reduce congestion and improve circulation, accessibility, and pedestrian and bike safety in the Market and Octavia area.” The study team identified and prioritized a series of recommendations based on feedback from an outreach survey and its own technical work that includes local safety and connectivity concepts (curb extensions, red light cameras and traffic calming measures) and regional congestion management strategies (transit and high-occupancy vehicle lane and regional express transit hub). These strategies require funding for the next phase of implementation.

Central 70, Denver, Colorado

Interstate 70 (I-70) runs in an east-west direction across Colorado, connecting the state’s Eastern Plains to metropolitan Denver, the Colorado mountains and ski resorts, and the Western Slope. I-70 bisects the Globeville Elyria-Swansea (GES) neighborhoods in central Denver by way of an aging 6,267-foot-long viaduct built in the 1960s. The GES neighborhoods are home to a variety of minority populations and currently have a strong Latino identity.

The Central 70 project covers a 10-mile stretch of I-70 between Brighton Boulevard and Chambers Road. The project removed a viaduct and lowered the interstate while adding a new express lane in each direction. A cap on the newly lowered interstate allowed for the creation of a new, 4-acre park.

Both residents and businesses were concerned about the impacts of demolition of the aging viaduct, including dust, limited access and general confusion caused by a large-scale construction project. Colorado Department of Transportation (CDOT) worked to mitigate impacts to the community with the assistance of a team of bilingual community liaisons who made daily visits to businesses and residents. Selected project impacts:

- *Affordable housing.* Families living in the GES community for multiple generations worried that the investments and improvements would ultimately force them out of their homes. CDOT responded by facilitating a \$2 million grant for affordable housing for residents to stay in their neighborhoods. Housing units are currently under construction.
- *Parks or other public spaces.* The 4-acre cover park created on the freeway cap serves as a meeting place to reconnect the community.
- *Transportation.* The addition of an express toll lane in each direction of the lowered interstate and the replacement of aging infrastructure and its associated structural deficiencies have provided substantial benefit to the traveling public.
- *Workforce development.* Project analyses and community studies indicated that GES residents experience higher levels of unemployment compared to residents in other parts of Denver.

CDOT partnered with WORKNOW — a coalition of organizations that work to recruit, retain and support construction industry workers — to create a workforce development program.

Inner Loop East, Rochester, New York

Rochester's Inner Loop on Interstate 490 encircled the city's central business district and was open to traffic in 1965. As part of the construction process, approximately 1,300 homes and businesses were demolished. The Inner Loop Highway has been seen as a barrier between a declining downtown area and nearby densely populated neighborhoods. Plans to convert the Inner Loop to a boulevard have been in process since 1990.

Begun in 2014 and completed in 2017, the Inner Loop East project converted a two-third-mile stretch of the sunken Inner Loop Expressway on downtown Rochester's east side to an at-grade, two-lane, low-speed boulevard that includes bicycle and pedestrian facilities. The project also converted the surface-level streets that ran alongside the Inner Loop into green space and land for redevelopment.

Project goals:

- Support or enhance community quality of life, such as reconnecting neighborhoods with the center city and improving the visual built environment.
- Enhance economic opportunities by creating new development potential, providing multimodal access and supporting local community land use plans.
- Enhance the center city's transportation network, including reconnecting the street grid system and eliminating structural deficiencies.
- Preserve or enhance environmental health by minimizing air quality, noise and stormwater impacts.
- Transform developable land surrounding the loop into a mixed-use community development that would provide city residents and visitors with places to work, live and play.

The Inner Loop North project, already underway, will redesign the remaining 1.5-mile segment of the Inner Loop Expressway.

Klyde Warren Park, Dallas, Texas

Completed in 1962, Woodall Rodgers Freeway connected west Dallas to Interstate 35E (I-35E) and U.S. Highway 75 (North Central Expressway). The new freeway cut through Freedman's Town, a thriving community before freeway construction that was originally populated by emancipated slaves after the Civil War. Construction displaced many residents and cut others off from access to downtown Dallas.

After a decade of planning, design, fundraising and construction, Klyde Warren Park opened in 2012. This 5.2-acre park, built atop the recessed Woodall Rodgers Freeway, bridges the downtown Dallas cultural district with mixed-use neighborhoods on the city's north side. The park is walkable to and from the city center and includes a lawn and games area, performance pavilion, dog park, children's park, fountain plaza and reading room.

Selected project impacts:

- *Environment.* By incorporating solar and geothermal energy for park buildings and stormwater reclamation, stormwater drainage has been reduced by over 64,000 gallons annually.

- *Local economy.* The value of the surrounding real estate has increased, generating tax revenue that will benefit the city, local school district, roads and other parks.
- *Parks or other public spaces.* The park provides a cultural hub where pedestrians have access to a variety of recreation, performance and gathering spaces.
- *Social impacts.* The freeway cap has improved the walkability of adjacent communities, encouraged higher density infill development, and bike and pedestrian activity.

In March 2024, the North Central Texas Council of Governments and Texas DOT received a U.S. DOT Neighborhood Access and Equity (NAE) grant for Phase II of the Klyde Warren Park project, which will add 1.7 acres to the park for a pavilion, open-air market and festival staging area, indoor/outdoor entertainment areas, and additional green space and multimodal transportation access. The overall success of Klyde Warren Park and its ongoing improvements, as well as nearby Southern Gateway Park, a similar freeway cap over I-35E that supports a community park, has led to additional freeway transformation projects in Dallas.

Case Study Highlights: Project Funding

Estimated and actual total project costs ranged widely, which can be attributed in part to the timing of actual or proposed project completion. Total cost for the smallest project among the 10 case studies — Atravesando Comunidades, in Tucson, Arizona — is estimated at \$1.6 million. At the other end of the cost spectrum are Denver’s Central 70 project, with a total cost of \$1.2 billion, and Portland’s I-5 Rose Quarter Improvement Project, which is estimated at \$1.7 billion. The \$50 million cost of the Octavia Boulevard project in San Francisco must be considered in the context of the time period during which it was constructed (early 2000s).

Funding for the 10 freeway transformation projects comes from a variety of state and federal funding sources and private sector funders. Several projects received funding through the federal RCP grant program. Other funding sources include the Highway User Revenue Fund (*Arizona*); Statewide Bridge and Tunnel Enterprise, a government-owned business within CDOT that is funded by vehicle registrations (*Colorado*); Transportation Investment Generating Economic Recovery (TIGER) discretionary grants (*New York*); and NAE grants (*Pennsylvania, Texas*).

Case Study Highlights: Project Successes

Below is a sampling of the project successes highlighted in the case studies that consider community engagement, environmental impacts of the transformation projects and project efficiencies.

Community Engagement

- Strong support from the community and local elected officials contributed to the success of the initial phases of the project (*Atravesando Comunidades, Tucson, Arizona*).
- PCDC was a trusted community partner to the city of Philadelphia to ensure extensive outreach to the underrepresented, including those with limited English proficiency, seniors and residents with limited internet access. The result was a community-generated vision that lays a strong foundation for the project (*Chinatown Stitch, Philadelphia, Pennsylvania*).
- Project developers reported success in supporting the development of a community coalition and growing community awareness about the legacy of SR 99 and residents’ ability to choose a different future (*Reconnect South Park, Seattle, Washington*).

Environmental Impacts

- Elementary school improvements and freeway noise reduction were significant successes (*Central 70, Denver, Colorado*).
- An independent environmental peer review of the project area focused on climate change, air quality and noise impacts, and opportunities to mitigate these factors on the project. Reviewers identified several construction practices to reduce impacts that are being incorporated or further evaluated (*I-5 Rose Quarter Improvement Project, Portland, Oregon*).

Project Efficiencies

- The project was completed on time and on budget, and infrastructure quality is extremely high (*Central 70, Denver, Colorado*).

Case Study Highlights: Project Challenges

Respondents offered a limited perspective on the challenges encountered when preparing for or completing a freeway transformation project as highlighted below:

Administration:

To date, the most significant challenges have been:

- Securing the final grant agreement with FHWA (*Atravesando Comunidades, Tucson, Arizona*).
- The time required to complete the grant and intergovernmental agreements to permit the use of funds (*Chinatown Stitch, Philadelphia, Pennsylvania*).

Building trust. The most significant challenge to date centers on building trust with local communities and agencies that have come to take the highway for granted and fear potential change (*Reconnect South Park, Seattle, Washington*).

Buy-in. The state has a general reluctance of freeway caps (*Klyde Warren Park, Dallas, Texas*).

Community outreach. Early in project development, planners found it difficult to “pull together a coalition of the project and community partners to unite behind a common vision,” and building trust with Albina’s historical Black community has been challenging. To address this issue, Oregon Department of Transportation (ODOT) has “asked to be a community partner and advisor that [will] hold the project accountable to the community-identified project values” (*Rose Quarter, Portland, Oregon*).

Congestion and conflicts with nonmotorized users. The 2023 Octavia Improvements Study explored ways to “reduce congestion and improve circulation, accessibility, and pedestrian and bike safety in the Market and Octavia area.” The 2023 report includes recommendations for local safety and connectivity (curb extensions, red light cameras and traffic calming) and regional congestion management (transit and high-occupancy vehicle lane and regional express transit hub) (*Central Freeway/Octavia Boulevard, San Francisco, California*).

Cost. Project costs were substantial (*Central 70, Denver, Colorado*).

Project management. The risks associated with delay required oversight from experienced project managers (*Central 70, Denver, Colorado*).

Utility coordination. The project area included a particularly dense utility corridor that required coordination with three different railroad companies (*Central 70, Denver, Colorado*).

Case Study Highlights: Best Practices

The best practices offered by survey respondents and identified through the literature informing other case studies are presented below in six topic areas:

- Project development.
- Project oversight.
- Project administration.
- Working with partners.
- Project design.
- Community engagement.

Project Development

- *Identify where important community needs* are not being met by your agency or where the collaboration of agencies could make a difference in repairing past harms (*Atravesando Comunidades, Tucson, Arizona*).
- *Base the project scope on feedback* from the community, local elected officials and leaders, and elders (*Atravesando Comunidades, Tucson, Arizona*).
- *Adopt project values* that the community recommends in concert with a formal advisory body to guide project work (*I-5 Rose Quarter Improvement Project, Portland, Oregon*).

Project Oversight

- *Establish advisory bodies* made up of leaders from the community or communities most impacted by the initial construction of the highway or who will be most impacted by the new construction (*I-5 Rose Quarter Improvement Project, Portland, Oregon*).

Project Administration

- *Anticipate changes to policy.* New national and state highway regulations adopted while construction was underway introduced challenges. These “unforeseen obstacles were balanced with new municipal regulations” (*Klyde Warren Park, Dallas, Texas*).
- *Limit costs* by:
 - Working with community-based organizations.
 - Encouraging design and planning firms to contribute staff time pro bono or at discounted rates.
 - Organizing and relying on volunteers and community capacity (*Reconnect South Park, Seattle, Washington*).
- *Ensure good agency and contractor management teams* (*Central 70, Denver, Colorado*).
- *Get the funding mix right.* Several groups funded the project, which provided a “solid foundation of support and also led to a need to balance competing interest[s]” (*Klyde Warren Park, Dallas, Texas*).
- *Limit costs* by reducing the project scope and employing in-house engineering expertise (*Atravesando Comunidades, Tucson, Arizona*).

- *Limit delays* by looking ahead to ensure an adequate understanding of procurement processes. Federal contracting requirements are time-intensive and can limit participation at the local level (*Reconnect South Park, Seattle, Washington*).
- *Use a construction manager/general contractor (CM/GC) model* to optimize innovation, improve community partnerships and increase economic opportunities for the community. By working together early, the project team can reduce costs, lower risk, save time and help identify important design alternatives ahead of construction (*I-5 Rose Quarter Improvement Project, Portland, Oregon*).

Working with Partners

- *Prioritize interagency coordination* at city, regional and state levels from the outset of a project to ensure partners are aware of and invested in the project and potential changes. A great success for Seattle's Office of Planning and Community Development to date has been the partnership with Washington State DOT and that agency's increased understanding of — and support for — the importance of studying mitigation of highway impacts on communities (*Reconnect South Park, Seattle, Washington*).

Project Design

- *The design process is important.* The right people must be sitting around the table on a regular basis. Problems and constraints must be raised and solutions agreed to during schematic design, not after a design is prepared and presented. This includes design sign-off by all interested parties (*Octavia Boulevard, San Francisco, California*).
- *Practice good planning and design:*
 - *A cost-benefit analysis* illustrated the benefits of the project to the community. The city of Rochester's engineering studies demonstrated that the project would be less expensive than maintaining and rehabilitating all of the bridges over the current expressway.
 - *Visualization tools* used during the design phase helped the public envision the changes contemplated by the new construction and how they would interact with the new roadway (*Inner Loop East, Rochester, New York*).

Community Engagement

- *Allow sufficient time* during the design process for community outreach that includes public meetings, online surveys and media blasts. This feedback was crucial to finalizing a design that addressed community interests (*Church Street Plaza Bridge, Oak Park, Michigan*).
- *Build community trust* by including agency staff members who understand cultural customs and specific dialects, language barriers and preferred communication methods within the impacted community (*Central 70, Denver, Colorado*).
- *Citizen participation and advocacy* may not be everything, but it is extremely important in terms of getting inherently conservative city governments and bureaucracies to consider and eventually implement an innovative street design (*Octavia Boulevard, San Francisco, California*).
- *Engage the community* early and often (*Central 70, Denver, Colorado*).
- *Ensure diversity* by including people of all ages, abilities and socioeconomic backgrounds in the scoping and design process, and use nontraditional engagement strategies like a city-hosted free bike repair in a local park that also offers free food (*Atravesando Comunidades, Tucson, Arizona*).

- *Mitigate negative impacts* on surrounding communities through the use of public outreach early in project development (*Atravesando Comunidades, Tucson, Arizona*).
- *Work with communities to:*
 - *Actively engage* both proponents and opponents to explore multiple pathways and build common denominators that can advance a community-chosen outcome.
 - *Build trust* by creating relationships and processes to allow stakeholders to explore alternatives and overcome reflexive opposition to — or fear of — changing the status quo.
 - *Leverage existing forums* to avoid extra burden on residents.
 - *Meet communities* where they are and understand what they may have already shared regarding priorities.
 - *Reserve resources* to pay community members for their contributions (e.g., gift cards) and provide childcare and food at events to minimize the burden of participation (*Reconnect South Park, Seattle, Washington*).

Related Research and Resources

To supplement survey findings, a literature search of publicly available domestic research and related resources identified a sampling of publications that are organized into four topic areas:

- Possible funding sources.
- Program or project assessment.
- Support for highway removal.
- Impacts of highway removal.

Resources are further categorized within each topic area as national, state or nonprofit/advocate resources.

Tables ES4 through ES7, which begin on page 16, summarize these publications, providing the publication or resource title, the year of publication, the type of resource and a brief description of the resource. More information about each resource can be found in Chapter 3 of this report.

Gaps in Findings

The 10 case studies developed for this Preliminary Investigation represent a small fraction of the freeway transformation projects that are under consideration, in development or completed. In fiscal year 2024 alone, on January 10, 2025, U.S. DOT awarded \$544.6 million in RCP grant funding for 81 projects in 31 states. These awards included both capital construction and community planning grants. While the case studies in this report can inform next steps for Caltrans, more can be learned from other freeway transformation projects underway in California and other states.

The limited scope of this Preliminary Investigation precluded extensive follow-up contacts with survey respondents.

Next Steps

Moving forward, Caltrans could consider:

- Consulting with one or more of the agencies or organizations responding to the project survey to learn more about project development.
- Reviewing the use of advisory bodies by case study agencies to determine their possible applicability to California projects.
- Examining the funding sources described in the case studies to identify similar sources that might be relevant for California projects.
- Investigating the applicability of the CM/GC model for new freeway transformation projects in California.

Table ES4. Possible funding sources

Publication or Resource (Year)	Resource Type	Excerpt from Abstract or Description of Resource
Reconnecting Communities and Neighborhoods Grant Program (2023)	National	Describes the RCP discretionary planning, capital construction and technical assistance grant program dedicated to reconnecting communities that were previously cut off from economic opportunities by transportation infrastructure.
Reconnecting Communities: Highways to Boulevards; Converting Underutilized Highways to Restore Community Connectivity (2024)	State: California	Describes the state's program to plan for and fund the conversion of key underutilized highways into multimodal corridors to reconnect communities divided by transportation infrastructure.

Table ES5. Program or project assessment

Publication or Resource (Year)	Resource Type	Excerpt from Abstract or Description of Resource
Highway Infrastructure: Better Alignment with Leading Practices Would Improve DOT's Reconnecting Communities Pilot Program (2023)	National	Addresses highway removal and capping projects that received federal funds from 2012 through 2021, key considerations for effective planning of selected projects and how the RCP program aligns with leading practices.
Highway Removals: Communities Reunite, Breaking Down Barriers and Righting Wrongs of the Past (2022)	Nonprofit/Advocate	Discusses highway removal projects in Texas, Massachusetts and Minnesota.
Highways and Health: Reimagining Our Roadways (2022)	Nonprofit/Advocate	Summarizes a webinar focused on the impacts of highways on communities and health and insights into solutions to mitigate those health consequences. Provides link to the webinar.
Eight Completed Highway Removals Tell the Story of a Movement (2022)	Nonprofit/Advocate	Describes eight highway transformation projects in the U.S., Canada and South Korea, illustrating the historical precedent of these projects and the potential impacts and benefits of removing highways from cities.
Freeways Without Futures (2019)	Nonprofit/Advocate	Describes 10 freeway transformation projects in cities across the U.S. as alternatives to aging systems that pollute cities, divide neighborhoods and occupy valuable land, and could instead be used for homes and businesses. Identifies core principles for highway transformation.

Publication or Resource (Year)	Resource Type	Excerpt from Abstract or Description of Resource
Put a Park On It: How Freeway Caps are Reconnecting and Greening Divided Cities (2018)	Nonprofit/Advocate	Assesses the design, function and placement of 18 completed and nine proposed cap parks in the U.S. and explores the emerging sustainability discourse of cap park planning to identify four development models that can be adapted worldwide to green below-grade freeway segments and reconnect communities. Addresses housing affordability and gentrification concerns for adjacent communities.
Rethinking Highways in American Cities (2013)	Nonprofit/Advocate	Considers the historical evolution of freeway construction and its devastating effects on urban neighborhoods and the obstacles to urban freeway removal efforts. Illustrates the opportunities to reconnect urban neighborhood transportation networks through technical improvements to the standard transportation planning process and visionary leadership.
Highways to Boulevards: A Fact Sheet (undated)	Nonprofit/Advocate	Discusses the highway-to-boulevard movement, including its history, benefits and recent developments.
Highways to Boulevards Resources (undated)	Nonprofit/Advocate	Provides links to videos, academic research, reports, books and articles on highway-to-boulevard conversions.
Completed Highways to Boulevards Projects (undated)	Nonprofit/Advocate	Highlights 18 completed highway-to-boulevard projects.
Rethinking the Urban Freeway: Options for Rebuilding, Replacing, Altering or Otherwise Addressing Aging Freeways (2013)	Nonprofit/Advocate	Summarizes impacts and challenges associated with urban freeways and provides infrastructure and policy options and implementation suggestions for addressing aging highways. Identifies the imperative to balance regional transportation needs with community goals for economic development, greater social equity, improved environmental outcomes and other social considerations.

Table ES6. Support for highway removal

Publication or Resource (Year)	Resource Type	Excerpt from Abstract or Description of Resource
Past, Present and Future of Reconnecting Communities (2023)	National	Presents a storymap that describes “historic context and need for this pilot, and the future we seek to establish through reconnection and restoration of communities.”
U.S. DOT Ladders of Opportunity/Every Place Counts Design Challenge: Summary Report (2021)	National	Summarizes workshops in four cities engaging directly with neighborhoods adjacent to planned or existing transportation infrastructure projects to explore design and policy approaches for creating connected, economically prosperous, and environmentally and physically healthy communities.

Publication or Resource (Year)	Resource Type	Excerpt from Abstract or Description of Resource
Transportation Transformations: How Highway Conversions Can Pave the Way for More Inclusive and Resilient Places (2023)	Nonprofit/Advocate	Highlights connections among transportation infrastructure and health, resilience and real estate development opportunities; shares promising examples; and recommends leveraging public and private funds to support efforts to reconnect communities divided by automobile-oriented infrastructure.
Webinar: Transportation Transformations: How Highway Conversions Can Pave the Way for More Inclusive and Resilient Places (2024)	Nonprofit/Advocate	Explores promising examples of how communities converted highway infrastructure to create welcoming, people-centered environments while supporting equitable outcomes, environmental resilience and real estate project successes. Provides links to PDF files of the webinar transcript and the 79-slide PowerPoint presentation.
Prioritizing Effective Infrastructure-Led Development: A ULI Infrastructure Framework (2021)	Nonprofit/Advocate	Discusses a framework for equitable and resilient infrastructure investments that create both long-term real estate and community value. Reviews lessons learned from global infrastructure investment approaches.

Table ES7. Impacts of highway removal

Publication or Resource (Year)	Resource Type	Excerpt from Abstract or Description of Resource
Impacts of Freeway Siting on Communities of Color (2021)	State: California	Explores state transportation agency approaches to developing an equity-focused freeway inventory and best practices that have been implemented to document the impacts of freeway siting on communities of color.
ConnectOakland (undated)	State: California	Presents a vision to transform the existing Interstate 980 (I-980) right of way (ROW) into a new, vibrant, transit-oriented corridor while also serving as a natural multimodal connection hub for BART, Caltrain and high-speed rail.
Effects of Freeway Rerouting and Boulevard Replacement on Air Pollution Exposure and Neighborhood Attributes (2019)	State: California	Investigates the effects of freeway routing decisions on exposure to traffic-related air pollution and neighborhood socioeconomic and demographic change. Finds that while freeway rerouting reduced annual average pollutant concentrations, evidence also indicated environmentally driven neighborhood change.
Creating Livable Infrastructure: The ConnectOakland Vision to Reconnect Neighborhoods and Connect Cities Through Freeway Removal (2016)	State: California	Presents the ConnectOakland vision for I-980 as a case study for current and future patterns of highway removal, and part of the national movement to rethink the role of urban highways and holistically re-envision the U.S. transportation infrastructure.

Publication or Resource (Year)	Resource Type	Excerpt from Abstract or Description of Resource
<u>Maximizing Transportation Assets by Building Community Connection Through Innovative Deployment of Rights of Way and Airspace</u> (2023)	State: Minnesota	Examines innovative ROW projects nationwide, focusing on how practices for redeveloping transportation assets can meet ambitious goals like mitigating environmental impacts, encouraging placemaking and enhancing economic opportunity while continuing to meet the projects' transportation purposes.
<u>"Freeways Without Futures": Urban Highway Removal in the United States and Spain as Socio-Ecological Fix?</u> (2023)	Nonprofit/Advocate	Examines three dimensions through which the carbon implications of highway removal projects can be understood: national policy changes in urban infrastructure planning and governance; material conflicts between demolition and tunneling and their implications for regional metabolisms; and local sustainable development politics and their distributional contradictions.
<u>Highway to Inequity: The Disparate Impact of the Interstate Highway System on Poor and Minority Communities in American Cities</u> (2015)	Nonprofit/Advocate	Explores the expressway teardown movement in the context of racially disparate outcomes of the transportation network and the need to remedy the harm imposed on poor and minority communities in urban America.

1 Introduction

1.1 Background

An increasing number of freeway transformation projects in development across the United States are funded in part by the Infrastructure Investment and Jobs Act (IIJA) Reconnecting Communities Pilot (RCP) grant program. This program is designed to reconfigure highways that produce various negative community impacts, including infrastructural barriers, noise and air pollution, and unsafe street design. In 2023, the California Department of Transportation (Caltrans) launched its own Reconnecting Communities: Highways to Boulevards Pilot Program to plan for and fund the conversion of underutilized highways to multimodal corridors.

As one of several agencies in California that are working to reimagine freeways, Caltrans is interested in learning more about highway transformation projects within the state and across the country. It is particularly interested in how other agencies have engaged with communities; identified anticipated impacts; sought funding; and limited costs, delays and negative impacts to surrounding communities.

1.2 Project Description

Information for this project was gathered through two activities:

- *Survey of selected agencies and organizations.* An online survey was distributed to selected state, regional and local departments of transportation (DOTs) and other agencies and organizations expected to have experience with freeway transformation projects. Respondents described a specific transformation project, including practices associated with the relinquishment of interstate, project impacts and best practices, successes, challenges and recommendations for other agencies undertaking a freeway transformation. Information gathered through the survey informed the development of seven case studies describing agency experience.

Survey questions are provided in [Appendix A](#). The full text of survey responses, including respondent contact information, has been made available to Caltrans separately.

- *Literature search.* An examination of publicly available domestic resources and in-progress research supplemented survey findings and informed development of three additional case studies.

1.3 Key Definitions

While there is no statutory or regulatory definition of these terms, Federal Highway Administration (FHWA) publications offer the following definitions:

Highway Cap: Highway caps are structures built over highways that include elements other than streets, namely parks or buildings. Highway caps are technically very wide bridges or decks built over roadways and can vary in length from a few hundred feet to one or more city blocks. (Source: [The Benefits of Highway Cap Parks: A Report to Congress](#), December 2022.)

Highway Cap Park: Highway cap parks are public parks that have been built above highways on top of highway caps. They are one approach to mitigating the negative impacts that highways can have on communities. Highway cap parks can be built during the highway's construction, during highway

reconstruction or expansion, or after the highway is completed. (Source: [The Benefits of Highway Cap Parks: A Report to Congress](#), December 2022.)

Freeway to Boulevard: The removal of aging freeway infrastructure and its replacement with a boulevard to accommodate all users, facilitate livable communities, and reduce ongoing maintenance expenses. (Source: [Value Capture: Capitalizing on the Value Created by Transportation; Frequently Asked Questions — Asset Recycling](#), undated.)

1.4 Survey Response

Respondents described seven freeway transformation projects:

- Atravesando Comunidades (Tucson, Arizona)
Responding agency: City of Tucson Department of Transportation and Mobility
- Central 70 (Denver, Colorado)
Responding agency: Colorado Department of Transportation (CDOT)
- Church Street Plaza Bridge/Victoria Park (Oak Park, Michigan)
Responding agency: Michigan Department of Transportation (MDOT)
- I-5 Rose Quarter Improvement Project (Portland, Oregon)
Responding agency: Oregon Department of Transportation (ODOT)
- Chinatown Stitch (Philadelphia, Pennsylvania)
Responding agency: City of Philadelphia Office of Transportation and Infrastructure Systems (OTIS)
- Klyde Warren Park (Dallas, Texas)
Responding agency: North Central Texas Council of Governments (NCTCOG)
- Reconnect South Park (Seattle, Washington)
Responding agency: City of Seattle Office of Planning and Community Development (OPCD)

These case studies are presented in Chapter 2. Additional research examined project elements not addressed by the survey respondents; the information from this research supplements the survey findings in each case study.

Three additional projects are included with the survey case studies:

- Central Freeway/Octavia Boulevard (San Francisco, California)
- ReConnect Rondo (St. Paul, Minnesota)
- Inner Loop East (Rochester, New York)

Case study development for these three projects relied solely on publicly available resources.

The freeway transformation projects highlighted in Chapter 2 fall at various points along the continuum of project development, from projects in the initial planning stages (Reconnect South Park in Seattle) to improvements now being made to projects completed 20 years ago (Central Freeway/Octavia Boulevard in San Francisco).

1.5 Organization of This Report

Chapter 2 of this report presents 10 case studies that synthesize survey findings and the results of relevant literature. Each case study concludes with a **Related Resources** section that cites the publications contributing to case study development. Chapter 3 supplements the case studies with a sampling of additional relevant literature. [Appendix A](#) provides the survey questions.

2 Case Studies: Freeway Transformation Projects

2.1 Background

The case studies presented in this chapter are identified and summarized in Table 1, including the state and primary sponsor, and the freeway transformation project location, name, type and status. An asterisk (*) following the project name denotes projects for which a survey response informed the case study.

Table 1. Freeway transformation projects presented in case studies

State (Primary Sponsor) Project Location	Project Name	Project Type	Project Status
Arizona (City of Tucson) Tucson	Atravesando Comunidades*	Freeway cap	Design in process
California (San Francisco County Transportation Authority) San Francisco	Central Freeway/Octavia Boulevard	Freeway to boulevard	Completed in 2005; ongoing improvements
Colorado (Colorado DOT) Denver	Central 70*	Freeway cap	Completed in 2023
Michigan (Michigan DOT) Oak Park	Church Street Plaza Bridge/Victoria Park*	Replacement freeway cap	Design complete; construction to begin early 2025
Minnesota (Collaboration of nonprofit, city and state partners) St. Paul	ReConnect Rondo	Freeway cap	Design in process
New York (City of Rochester) Rochester	Inner Loop East	Freeway to boulevard	Completed in 2017; Inner Loop North project underway
Oregon (Oregon DOT) Portland	I-5 Rose Quarter Improvement Project*	Freeway cap	Design complete; construction to begin summer 2025
Pennsylvania (City of Philadelphia Office of Transportation and Infrastructure Systems and Philadelphia Chinatown Development Corporation) Philadelphia	Chinatown Stitch*	Freeway cap	Preliminary design and engineering to be completed in 2025
Texas (City of Dallas and Texas DOT) Dallas	Klyde Warren Park*	Freeway depression and cap	Completed in 2012
Washington (City of Seattle) Seattle	Reconnect South Park*	To be determined	Initial planning stages; community-selected design anticipated in June 2025

*Denotes a survey respondent.

Case studies for the freeway transformation projects introduced in Table 1 are presented below. With these projects in various stages of project development, from the initial planning stages to project completion, varying levels of detail are provided for some or all of the following topic areas:

- Background.
- Project description.
- Project funding.
- Intended social remedies.
- Community engagement.
- Project impacts.
- Project successes.
- Project challenges.
- Best practices.
- Related resources.

2.2 *Atravesando Comunidades*

Project Location:	Tucson, Arizona
Project Type:	Freeway cap Bicycle/pedestrian bridge and greenway
Project Sponsor:	City of Tucson
Project Status:	Design in process
Intended Social Goal:	Reconnect and increase mobility access for low-income Hispanic populations in South Tucson.

Background

Highway construction in the 1960s bifurcated South Tucson's largely Hispanic neighborhoods. As the city of Tucson's RCP application noted, "With the construction of Interstate-19 (I-19), residents who previously had direct access to the Santa Cruz River and strong connections to other parts of Tucson became isolated[,] trapped behind the walls of a freeway." I-19 created a barrier between these neighborhoods and commercial services in this area of southwest Tucson, which was designated an area of persistent poverty under the Bipartisan Infrastructure Law (BIL).

Project Description

The Atravesando Comunidades project will develop a new bicycle/pedestrian bridge over I-19 that reconnects communities and connects nonmotorized users of the Tucson Loop shared-use path to trail systems in an expanded Airport Wash Greenway. Figure 1 shows the project area.

In the Move Tucson Equity Analysis, the surrounding neighborhoods were classified in the highest 20th percentile concentration of transportation-vulnerable populations. This project was prioritized to address the needs of historically disinvested communities and will also support preconstruction tasks for the Airport Wash Greenway. Expansion of the Airport Wash Greenway is slated to begin construction in 2026 (see Figure 2).

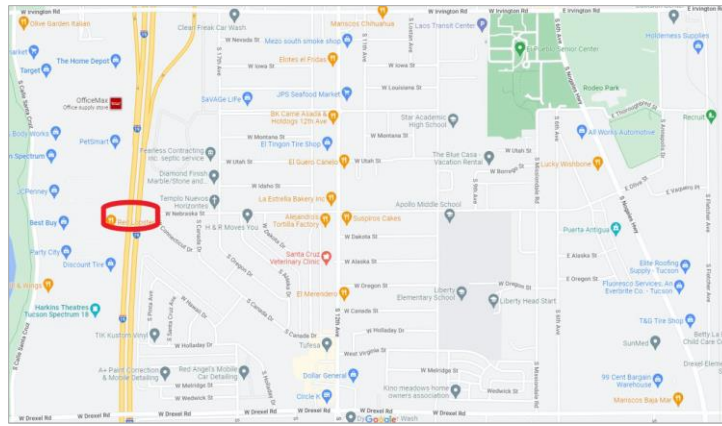


Figure 1. Location of planned bicycle/pedestrian bridge
(Source: Google Maps.)



Figure 2. Atravesando Comunidades: Supporting preconstruction of the Airport Wash Greenway
(Source: [City of Tucson](#).)

The project area is located primarily within the Arizona Department of Transportation (ADOT) right of way (ROW). The final project design will determine any property acquisition that may be required to supplement the ROW owned by ADOT and the city of Tucson.

The project team is:

- Developing a design concept.
- Preparing preliminary and final design plans.
- Assisting with public engagement.
- Preparing environmental clearance documents in accordance with ADOT and FHWA requirements.
- Identifying utility and agency coordination tasks to create a shovel-ready project for construction.

Project Funding

The estimated total project cost is \$1.6 million. The project secured a \$900,000 planning award through the federal RCP grant program; Arizona's Highway User Revenue Fund provided a local matching grant of \$125,000.

Intended Social Remedies

As the city of Tucson's RCP grant application noted, "For over 60 years, people in South Tucson have been exposed to air and noise pollution, living in a food desert, while being cut off from economic opportunity." The planned bicycle/pedestrian bridge and greenway seeks to reconnect the South Tucson community, decreasing access barriers to healthcare, local businesses, neighbor visits, recreation and open spaces.

Project planners hope that community-led and community-based engagement will encourage reparation of previous harms and reduce mistrust of local government that has resulted from urban renewal, displacement and disenfranchisement associated with freeway construction.

Community Engagement

The bicycle/pedestrian bridge and greenway was initially conceived in the context of Move Tucson, the citywide transportation master plan that focuses on equitable mobility options. From November 2019 to August 2021, more than 4,000 Tucsonans actively participated in the first phase of the Move Tucson planning process, sharing more than 1,500 project ideas and 6,000 comments. Common themes identified across all phases of engagement focused on providing safety for all modes, improving mobility options and investing in the city's transportation infrastructure while creating comfortable walking and biking connections for all ages and abilities.

A series of community-based and community-led engagement processes will support the design process to identify alignment alternatives and bridge and multiuse path concepts that shape the final bridge design. Users of local mobility projects that serve those who bike, walk or use transit have been invited to be a part of the process through nontraditional engagement strategies such as a city-hosted free bike repair event in a local park that offered complimentary food. This type of engagement presents an opportunity to discuss the project and gather feedback on design alternatives.

Anticipated Project Impacts

Project planners hope to accomplish several improvements through the project:

Environment. In addition to improving access to parks and other open spaces, the project will support investment in the regional flood control district.

Local Economy. With a new bicycle/pedestrian bridge, area residents will have greater access to jobs, commercial areas, amenities and educational institutions, such as Pima Community College.

Parks or Other Public Spaces. While Tucson is generally known for its bicycle-friendly culture and network of multiuse paths, the benefits have historically not been spread equitably throughout the metro area. The bicycle/pedestrian bridge and greenway will provide access to traditionally underserved communities in South Tucson. Residents will have improved access to greenways, waterways and linear parks along the Santa Cruz Loop, which offers more than 40 miles of pathways that are part of the regional shared-use path system.

Transportation. East-west connectivity for pedestrians and bicycles will be improved by removing the barrier the freeway creates and constructing a bridge for nonmotorized travelers that complies with requirements of the Americans with Disabilities Act of 1990 (ADA). Direct access to a variety of public transportation resources will also be improved.

Project Successes

Community support. Strong support from the community and local elected officials contributed to the success of the initial phases of the project.

Project Challenges

Administration. The most significant challenge encountered to date has been securing the final grant agreement with FHWA.

Best Practices

- *Limit costs* by reducing the project scope and employing in-house engineering expertise.
 - *Mitigate negative impacts* on surrounding communities through the use of public outreach early in project development.
 - *Identify where important community needs* are not being met by your agency or where the collaboration of agencies could make a difference in repairing past harms.
 - *Base the project scope on feedback* from community, local elected officials and leaders, and elders.
 - *Ensure diversity* by including people of all ages, abilities and socioeconomic backgrounds in the scoping and design process, and use nontraditional engagement strategies.
-
-

Related Resources

Atravesando Comunidades: Tucson's Greenway and Bike/Ped Bridge Project, Reconnecting Communities Pilot Program, City of Tucson, 2022.

https://4273298.fs1.hubspotusercontent-na1.net/hubfs/4273298/Tucson_RC_Planning_Grant_Application.pdf

This is the city of Tucson's RCP grant application, which describes the greenway and bicycle/pedestrian bridge project and its justification. The application provides background, history, maps and narratives of how the following merit criteria are met:

- Equity, environmental justice and community engagement.
- Mobility and community connectivity.
- Community-based stewardship, management and partnerships.
- Equitable development and shared prosperity.

Reconnecting Communities Pilot Program FY 2022 Award Fact Sheets, Federal Highway Administration, 2023.

<https://www.transportation.gov/sites/dot.gov/files/2023-02/RCP%20Fact%20Sheets%202022.pdf>

This summary of the RCP awards for fiscal year 2022 includes a brief description of the Atravesando Comunidades project (see page 13 of the PDF).

Move Tucson: Delivering Mobility Choices, City of Tucson, Arizona, Fall 2021.

https://assets.tucsonaz.gov/share/transportation/movetucson/Plan_Fall2021.pdf

This is the city of Tucson's transportation master plan. Regularly updated project lists that are informed by network conditions and community input are available at <https://movetucson.tucsonaz.gov/>.

2.3 Central Freeway/Octavia Boulevard

Project Location:	San Francisco, California
Project Type:	Freeway to boulevard
Project Sponsor:	San Francisco County Transportation Authority
Project Status:	Completed in 2005; ongoing improvements
Intended Social Goal:	Repair economic, environmental and community harm to the primarily African American Hayes Valley neighborhood caused by the Central Freeway construction and operation, and improve general livability of the area.

Background

This case study offers a unique glimpse into the long-term impacts of freeway conversions on community, transportation and urban renewal. Completed in 1959, the double-decker elevated Central Freeway connected to U.S. 101 and led to Golden Gate Park, bisecting sections of San Francisco's historic Hayes Valley neighborhood. In addition to the physical neighborhood destruction, the primarily lower-income, minority residents were impacted by traffic, noise, air pollution and blighted views.

The Loma Prieta earthquake in 1989 severely damaged Central Freeway, which permanently closed in 1992. Significant disagreements among San Francisco residents ensued, with residents of nearby neighborhoods such as the Hayes Valley seeking removal of the freeway to make way for a boulevard, while freeway users who lived elsewhere in the city wanted Central Freeway rebuilt to avoid traffic congestion.

As local politicians initially avoided the issue and discussions of pros and cons of freeway removal, citizen ballot initiatives from both sides sought a voter-approved solution. After the freeway's closure, the congestion and gridlock expected by freeway users did not materialize, a ballot initiative prevailed and plans for the boulevard moved forward.

Project Description

By 2005, Central Freeway was rebuilt as a surface-grade, four-block-long urban boulevard, beginning at the U.S. 101 off-ramp at Market Street and running through the Hayes Valley neighborhood to Fell Street. Serving as a primary link between downtown San Francisco and neighborhoods around Golden Gate Park, the construction of Octavia Boulevard freed up 7 acres for development to help reverse the negative impacts of the division created by the original freeway.

The boulevard was designed to be visually appealing and pedestrian-friendly. Four central lanes buffered by vegetation and flanked by local lanes in each direction allow separation between neighborhood traffic and heavier arterial traffic.

Design challenges described by Octavia Boulevard planner Elizabeth Macdonald involved compromises between design principles that make multiway boulevards work well and more standard engineering

practices such as wider lanes that facilitate emergency vehicle access and allow for freer movement at intersections. The side lanes ultimately included parking, walkways and ample landscaping (see Figure 3 for an example of a sidewalk extension). A new park, Patricia's Green, sits at the boulevard terminus between Fell and Hayes streets.



Figure 3. New sidewalk extension at Hayes and Laguna streets
(Source: [San Francisco Municipal Transportation Agency.](#))

As an *SFGATE* article noted in 2007:

In the 15 months since it opened, San Francisco's Octavia Boulevard has been hailed as a model for other cities. It has been honored at the local and national level, including an award last month from the American Planning Association.

Project Funding

Demolishing Central Freeway and building Octavia Boulevard cost over \$50 million at the time of construction. Caltrans paid the freeway demolition cost of \$26 million, and the city of San Francisco paid \$24.3 million toward engineering and construction costs, with funds raised from the sale of vacant land created by the freeway's removal.

Surrounding Community Context

Changes in the neighborhoods surrounding Octavia Boulevard began before the boulevard's construction. Nearby neighborhoods experienced gentrification between 1990 and 2000, when average per capita income more than doubled. An American Association of State Highway and Transportation Officials (AASHTO) case study characterized the community's redevelopment as simultaneous with the boulevard's construction:

Development of the boulevard from 2003-2005 coincided with redevelopment of the surrounding community, which has brought about shift in land uses, created high-end retail opportunities

along a commercial strip (located on the north side of the park on Hayes Street) and led to an increase in housing values.

Figure 4 shows elements of the completed streetscape.



Figure 4. 2017 Octavia Boulevard Open Streets event (left); landscaped center median (right)

(Source: [San Francisco Municipal Transportation Agency](#).)

Community Engagement

Competing citizen ballot initiatives in the late 1990s vacillated between retrofitting but not demolishing the freeway and replacing the freeway with a boulevard. The UC Berkeley Simulation Laboratory built a physical model of a proposed boulevard and a driving simulation video to help the community visualize what the boulevard would look like and how it would be used. A more organized anti-freeway effort led to a third referendum in 1999, and the “Build Octavia Boulevard” ballot measure passed.

During the design process, alternative intersection approaches were presented at communitywide evening meetings. A separate bicycle lane idea emerged from those meetings, and the San Francisco Bicycle Coalition collaborated on the final bike lane design.

In a 2006 *ACCESS Magazine* article, Octavia Boulevard planner Elizabeth Macdonald provided more details of the collaborative planning process:

It took the efforts of many people to get Octavia Boulevard built, but without a doubt local citizen activists really made the project happen. A group of concerned residents met continually, addressing problems and envisioning potential solutions even before the 1989 earthquake, and pushed for something better than they had. City bureaucrats were instrumental as well, particularly traffic professionals from the Departments of Parking and Traffic and Public Works. Each had to give a little and bend long-standing norms to help reach compromises. In the end, the Public Works Department prepared the construction drawings and saw Octavia Boulevard and Hayes Green through to completion.

Community engagement in Octavia Boulevard maintenance and improvements continues. The June 2023 *Octavia Improvements Study* collected site-specific feedback, transportation challenges and community preferences through virtual town halls, digital map-based surveys and social media outreach.

The Market and Octavia Community Advisory Committee originated during the boulevard design process and was formally created in 2008 in Section 341.5 of the San Francisco Planning Code as a mechanism to consult with the San Francisco Planning Department. The committee, which recognized during the design process that “no one gets everything; everyone gets a lot,” provides advice to the planning director, Planning Commission and others on the implementation of the Market/Octavia Area Plan, including prioritizing projects for funding.

Project Impacts

Below is a brief summary of the impacts resulting from the Octavia Boulevard project:

Land Use. Demolition of Central Freeway left 22 parcels of vacant land. By 2007, the city of San Francisco sold seven parcels to the San Francisco Redevelopment Agency and five to private developers. Since 2002, about \$25.5 million in revenue has been generated from selling these 12 parcels for primarily residential development.

Some parcels were sold for mixed-use development with commercial uses on the ground floor. There were also observations that many businesses changed from liquor stores and mechanic shops to trendy restaurants and boutiques. The city’s requirement that affordable housing be included in the construction area may have decreased investment in commercial, job-creating uses.

Residential Housing. The San Francisco Planning Office and the Mayor’s Office of Economic Development originally estimated that 350 to 400 housing units could be located on the ROW. As of 2010, about half those homes had been constructed. Condominium prices increased from 66% of the city average to 91% after the boulevard’s completion. One study analyzing housing prices in the area from 1987 to 2007 found that when Central Freeway was operating, prices increased with distance from the freeway corridor. In 2005, after Octavia Boulevard opened, sale prices in the corridor increased by \$116,000.

Housing development in the boulevard continues, described in the June 2023 *Octavia Improvements Study*:

Between 2015 to 2019, 1,900 housing units were built in the Market Octavia Plan Area, which is more than twice the amount of housing units added in the previous five years combined. New developments included ground-floor commercial space for local retail and commercial square footage doubled. Commercial employment increased by over 20% during this time.

Transportation. While traffic on Octavia Boulevard and surrounding streets dropped to half of what the Central Freeway accommodated, by design the boulevard handles large traffic volumes and disperses peak hour congestion on nearby connector streets.

Ongoing Area Planning

Since the construction of Octavia Boulevard, area planning and transportation agencies have continued to seek improvements to the boulevard and surrounding neighborhoods through these primary efforts:

Market and Octavia Area Plan (2007). Part of the San Francisco General Plan, this area plan adopted by the San Francisco Planning Commission in 2007 has been amended several times, most recently in 2020. Originally intended to promote affordable housing and limit displacement of long-time

residents, the lengthy plan addresses multiple goals, including affordable housing, design principles, streets and open space, transportation and transit, and mixed-use development.

Central Freeway and Octavia Circulation Study (2012). Recognizing the Market-Octavia area is “ground zero for competing interests of neighborhood livability, system performance and regional access,” San Francisco County Transportation Authority (SFCTA) evaluated the transportation network in the Market-Octavia area since the removal of Central Freeway and opening of Octavia Boulevard in 2005. Working with stakeholders and a Technical Advisory Committee of partner agency staff, including Caltrans, the study:

- Analyzed transportation conditions and needs, finding morning and afternoon peak congestion, particularly in high pedestrian areas. The study identified the need for additional pedestrian infrastructure and noted that “historic collision patterns reveal that multiple intersections and streets in the Study Area have elevated numbers of collisions involving automobiles and non-motorized travelers (pedestrians or cyclists).” (Figure 5 is an example of an Octavia Boulevard intersection.) Local transit reliability, speed and crowding were found to be of concern, and regional transit access is limited.



Figure 5. Octavia Boulevard intersection with planted median
(Source: [San Francisco Municipal Transportation Agency](#).)

- Provided recommendations for near-, mid- and long-term improvements with a focus on multimodal, transit and pedestrian safety. Summarizing the study’s findings, the authors offered “high-level summary recommendations” and described possible next steps.

Octavia Improvements Study (2023). The objectives of this SFCTA study were to “improve road safety for vulnerable users, strengthen the integration of transportation alternatives and land uses, enhance circulation and accessibility on Octavia for all modes, increase transportation options to reduce driving trips, and help achieve the city’s climate action goals.” Study authors recommend strategies to improve local safety and connectivity and to manage regional congestion, and describe how to fund and implement these strategies.

Assessing the Octavia Boulevard Project

The boulevard is a popular thoroughfare in a heavily populated metropolitan area. SFCTA, working with its stakeholders, is continually trying to improve mobility and livability for nearby residents.

A 2007 working paper prepared for the University of California Transportation Center concluded that although gentrification may result from freeway-to-boulevard conversions, affordable housing policies can help; such urban reprioritization “gives more emphasis to neighborhood quality and less to automobility,” and yields “net positive benefits without seriously sacrificing transportation performance.”

Shortly after Octavia Boulevard was completed, designer Elizabeth Macdonald identified potential improvements, such as more traffic calming and different surface material for local access roads to signify a pedestrian realm. The mix of intersection controls confused drivers and could have been simplified. The transition from the remaining freeway to the boulevard could have been clearer to provide cues for speed reduction.

Authors of the 2012 Octavia Boulevard circulation study offered the following conclusions:

- The boulevard enhanced livability and the public realm in the Hayes neighborhood, however, ongoing heavy peak traffic causes congestion, air quality and noise impacts, and conflicts with nonmotorized users.
- Isolating the impacts of the boulevard alone are challenging as population and traffic have generally increased throughout the city.
- Nonmotorized travel modes are prevalent for local travel and important to neighborhood vitality, but regional transportation and transit connections are needed so a balance is necessary, especially to encourage additional residents and workers in the area.

Responding to Current Challenges in the Project Area

Compounding the congestion and conflicts with nonmotorized users noted in the 2012 circulation study, between 2015 to 2019 the Market Octavia Plan Area added 1,900 housing units, more than twice the amount of housing units added in the previous five years combined. As the June 2023 Octavia Improvements Study observed, “[T]he prevalence of collisions on Octavia have classified the boulevard as a high injury street in San Francisco’s Vision Zero program. The Octavia and Haight St. intersection is identified as a Pedestrian High Injury Intersection.”

To address these and other concerns, the Octavia Improvements Study explored ways to “reduce congestion and improve circulation, accessibility, and pedestrian and bike safety in the Market and Octavia area.” The study team identified and prioritized a series of recommendations based on feedback from an outreach survey and its own technical work:

Local Safety and Connectivity Concept Recommendations

- *Bulbouts or curb extensions.* Raised curbs that narrow the travel lane at intersections or midblock locations to effectively shorten the crossing distance and slow speeds for vehicles making right turns. Install six spread out across four intersections. Total cost: \$1,850,000.
- *Red light cameras.* Automated cameras to enforce illegal red-light running and illegal right turns. Install at the Market/Gough Street intersection. Total cost: \$600,000.
- *Octavia Street traffic calming.* Sidewalk/median changes, raised crosswalks, signal improvements and speed humps. Total cost: \$3,575,000.

Regional Congestion Management Strategy Recommendations

- *Transit and high-occupancy vehicle (HOV) lane on Oak Street.* Study the implementation of HOV and transit lanes on Oak Street that connect the existing and planned managed lane and freeway network.
- *Regional express transit hub.* Plan for regional and local express transit service, and study a regional transit hub at the Civic Center to enable closer connections from western neighborhoods.

These strategies require funding for the next phase of implementation.

Best Practices

In a 2006 *ACCESS Magazine* article, Octavia Boulevard planner Elizabeth Macdonald reflected on best practices for a successful freeway-to-boulevard project:

- *Project design.* The design *process* is important. The right people must be sitting around the table on a regular basis. Problems and constraints must be raised and solutions agreed to during schematic design, not after a design is prepared and presented. This includes design sign-off by all interested parties.
- *Public engagement.* Citizen participation and advocacy may not be everything, but it is extremely important in terms of getting inherently conservative city governments and bureaucracies to consider and eventually implement an innovative street design. When one considers all that the citizens brought to the table — referenda, political activism, willingness to keep learning, advocating, and discussing over many years, unwillingness to give up, personal funds — one cannot escape the conclusion that their efforts are a main reason that Octavia Boulevard exists.

Related Resources

Case Study: Project: Central Freeway, San Francisco, EconWorks: Improved Economic Insight, American Association of State Highway and Transportation Officials, 2015-2025.

https://planningtools.transportation.org/290/view-case-study.html?case_id=81

This case study details Central Freeway/Octavia Boulevard project, including state, county and local economic impacts; background, description and motives; and other project impacts.

Octavia Boulevard, San Francisco California, Congress for the New Urbanism, undated.

<https://www.cnu.org/what-we-do/build-great-places/octavia-boulevard>

This web page contains a short description of the Octavia Boulevard project.

Market & Octavia Community Advisory Committee, San Francisco Planning, 2025.

<https://sfplanning.org/project/market-octavia-community-advisory-committee-cac>

This ongoing committee provides advice to the planning director, planning commission and others on the implementation of the Market/Octavia Area Plan and the related community improvements. The web page includes meeting schedules and materials.

Octavia Boulevard Enhancement Program: Improving Safety On and Around Octavia Boulevard, San Francisco Municipal Transportation Agency, 2024.

<https://www.sfmta.com/projects/octavia-boulevard-enhancement-program>

This website includes information on five sets of projects.

Octavia Improvements Study, San Francisco County Transportation Authority, June 2023.

https://www.sfcta.org/sites/default/files/2023-07/Octavia_Improvements_Study_Report_FINAL_2023-06-27.pdf

Study objectives are “to improve road safety for vulnerable users, strengthen the integration of transportation alternatives and land uses, enhance circulation and accessibility on Octavia for all modes, increase transportation options to reduce driving trips, and help achieve the city’s climate action goals.”

Market and Octavia Area Plan, San Francisco General Plan, San Francisco Planning Department, April 5, 2007; last amended July 28, 2020.

https://generalplan.sfplanning.org/Market_Octavia.htm

This area plan covers multiple goals, including affordable housing, design principles, streets and open space, transportation and transit, and mixed-use development.

Central Freeway and Octavia Circulation Study, San Francisco County Transportation Authority, June 2012.

<https://www.sfcta.org/sites/default/files/2019-03/Final%20Report%20ENCLOSURE.pdf>

From the introduction: The Circulation Study was conducted to assess the performance of the transportation system in the Market-Octavia neighborhood, recommend transportation improvements in the area, and consider other relevant local and regional transportation issues. The Study had a twin focus: examining local (neighborhood-level) needs to address livability, and considering the larger network level to address regional accessibility.

From Elevated Freeways to Surface Boulevards: Neighborhood, Traffic, and Housing Price Impacts in San Francisco, Robert Cervero, Junhee Kang and Kevin Shively, Working Paper, University of California Transportation Center, December 2007.

https://escholarship.org/content/qt5ps0v8d2/qt5ps0v8d2_noSplash_b3dff1ee4f704a58fb375ee27bb501b8.pdf

This working paper discusses the neighborhood, traffic and housing price impacts of replacing elevated freeways with surface boulevards, using Octavia Boulevard as one of two examples. Interviews, literature reviews and statistical analyses show freeway conversions generally lead to gentrification of once-declining neighborhoods, although public policies like affordable housing mandates can temper displacement effects. The authors conclude that freeway-to-boulevard conversions, a form of urban reprioritization that gives more emphasis to neighborhood quality and less to automobility, have yielded net positive benefits without seriously sacrificing transportation performance.

“San Francisco: An Urban Success Story: Octavia Boulevard an Asset to Post-Central Freeway Area,”

John King, *SFGATE*, January 3, 2007.

<https://www.sfgate.com/bayarea/place/article/SAN-FRANCISCO-An-urban-success-story-Octavia-2659608.php>

This online article details the history and opening of Octavia Boulevard and discusses transportation and other issues.

“Building a Boulevard,” Elizabeth Macdonald, *ACCESS Magazine*, Spring 2006.

<https://www.accessmagazine.org/wp-content/uploads/sites/7/2016/07/Access-28-02-Building-a-Boulevard.pdf>

This article recounts the history, design and building of Octavia Boulevard, written by a member of the project’s primary design team. A discussion of potential improvements is included.

2.4 Central 70

Project Location: Denver, Colorado

Project Type: Freeway cap
Community park over lowered freeway

Project Sponsor: CDOT (with partners)

Project Status: Completed in 2023

Intended Social Goal: Repair past infrastructure and environmental harms to the largely Hispanic and historically disadvantaged community.

Background

Interstate 70 (I-70) runs in an east-west direction across Colorado, connecting the state’s Eastern Plains to metropolitan Denver, the Colorado mountains and ski resorts, and the Western Slope. Located north of Denver, I-70 provides access to an area that includes Denver International Airport and downtown Denver. Twelve hundred businesses are located in this central area, which is bordered by Interstate 25 (I-25) on the west and Chambers Road on the east. The segment of I-70 that traverses through this area accommodates approximately 200,000 vehicles per day.

I-70 bisects the Globeville Elyria-Swansea (GES) neighborhoods in central Denver by way of an aging 6,267-foot-long viaduct built in the 1960s. As the Central 70 project neared completion, then-Denver Mayor Michael Hancock commented, “They came through neighborhoods, tore neighborhoods up, divided neighborhoods, ended and destroyed businesses and the livelihoods of many people without apology or without engagement.” The GES neighborhoods are home to a variety of minority populations and currently have a strong Latino identity.

CDOT worked with the affected communities in determining how to renovate the infrastructure and address the current and potential harm and environmental hazards to the low-income, minority and historically underserved community. (A 2017 study ranked the GES neighborhoods as the most polluted ZIP code in America.) CDOT’s commitments to the local community as part of the Central 70 project included mitigating the impacts of construction noise and dust, and contributing funds for affordable housing and fresh food access.

Historical context for the Central 70 project is provided in Table 2.

Table 2. Historical perspective of the Central 70 project

Time Period	Activity
1800s	Eastern Europeans settled in the area to work in meatpacking and smelting businesses along the South Platte River.

Time Period	Activity
1940s	Following World War II, Latinos and African Americans began moving to the area seeking work.
Late 1950s to 1960s	Construction of I-25 and I-70, which intersect just north of Denver, demolished houses and divided the GES neighborhood.
2003 to 2016	Ongoing community outreach and scoping resulted in a final Environmental Impact Statement and Record of Decision.
2018	The Central 70 project breaks ground.
November 2022	A ribbon cutting celebrated the park opening.
July 2023	The Central 70 project was completed, and the operations and maintenance period began. Express lane tolling began July 11, 2023.

Project Description

The Central 70 project covers a 10-mile stretch of I-70 between Brighton Boulevard and Chambers Road. The project removed a viaduct and lowered the interstate while adding a new express lane in each direction. A cap on the newly lowered interstate allowed for the creation of a new 4-acre park (see Figure 6).



Figure 6. New 4-acre park with I-70 running underneath

(Source: Federal Highway Administration.)

Relinquishment

To accommodate affordable housing, CDOT is disposing of interstate ROW in accordance with federal regulation 23 CFR 710.403, which requires concurrence from FHWA for the property disposal. CDOT has also relinquished some portions of the frontage roads to the city and county of Denver for use as part of the local road system.

While CDOT did not have any requirements for the disposition of excess property on this project, the agency has worked closely with community groups to dispose of properties to benefit the community and comply with federal and state requirements, including the Colorado statutes related to the disposal of property for affordable housing:

- Colorado Revised Statutes Title 43. Transportation § 43-1-210. Acquisition and disposition of property—department of transportation renovation fund.
- Colorado Revised Statutes Title 24. Government State § 24-82-102.5. Unused state-owned real property—cash fund—legislative declaration—definitions.

Project Funding

The \$1.2 billion cost of the Central 70 project represents the largest project CDOT has undertaken. As a public/private partnership, CDOT delivered the project using the design, build, finance, maintain method, in which the debt is repaid over a 30-year maintenance term through availability payments, assuming the terms of the performance-based contract continue to be met. The developer used private activity bonds authorized through the Secretary of Transportation and secured a loan under the federal Transportation Infrastructure Finance and Innovation Act.

Statewide Bridge and Tunnel Enterprise, a government-owned business within CDOT that is funded by vehicle registrations, contributed \$850 million toward the Central 70 project. Other project funding sources:

- Denver Regional Council of Governments: \$50 million.
- State appropriations: \$180 million.
- City of Denver: \$37 million.

The express lanes added as part of the Central 70 project are HOV toll lanes. The Colorado Transportation Investment Office, a division of CDOT, collects tolls on these lanes and is responsible for paying a portion of the Central 70 project's availability payments with those funds.

Intended Social Remedies

The largely Hispanic GES community has long been disadvantaged, and CDOT sought to not only mitigate impacts from the Central 70 project but to repair past harms exacerbated by the original highway construction that divided and disrupted the community.

Community Engagement

Starting in 2004, CDOT worked with various agency partners, stakeholders and community members on project alternatives, hosting more than 300 public meetings over 15 years to gather input. Through corridorwide meetings, working groups and other community meetings, substantial community input heavily influenced the analysis of alternatives.

The preferred alternative included the lowered highway section with managed lanes and addressed community and stakeholder concerns while causing the least overall impact. The cover park concept was introduced by the community and supported by a letter signed by more than 500 residents advocating for the preferred alternative and inclusion of a park and green space.

Figure 7 provides a before-and-after illustration of the project area.



Figure 7. Aging viaduct removed in the Central 70 project (left); 4-acre cover park over the lowered interstate (right)
 (Source: [Innovator Newsletter](#).)

Project Impacts

Both residents and businesses were concerned about the impacts of demolition of the aging viaduct, including dust, limited access and general confusion caused by a large-scale construction project. CDOT worked to mitigate impacts to the community with the assistance of a team of bilingual community liaisons who made daily visits to businesses and residents.

Mitigating Construction Impacts

The Central 70 project required suppression methods to minimize the amount of dust in the community. Businesses directly adjacent to the viaduct, however, were concerned about the significant amount of water and other methods that were used to decrease the amount of dust associated with operations, as well as the loss of customers due to the demolition and confusion over road closures.

Highlighted below are measures taken by CDOT to mitigate construction impacts:

Impact mitigation for GES neighborhood residents. For the 260 homes that were directly adjacent to the viaduct and would be most impacted by construction activities, CDOT:

- Partnered with the city and county of Denver and the nonprofit Energy Outreach Colorado to install hundreds of storm doors, windows and air conditioning units.
- Provided utility credits to be used throughout construction to pay for the newly installed units.
- Undertook efforts to block out any construction noise and dust, and addressed safety concerns while CDOT's teams were in these homes.

Impact mitigation for businesses. While neither CDOT nor the project's contractor could provide compensation for a full month's rent due to blocked access, the Central 70 project found other ways

to bring attention to these businesses and provide some financial support through actions sponsored by CDOT:

- Designed and printed 100 \$5-off coupons for each business that was directly impacted by the demolition and provided \$500 checks to each of these businesses.
- Provided free advertising for the impacted businesses on the agency website and sent weekly e-blasts to 4,000 subscribers.

Other Project Impacts

Below is a brief summary of the impacts of the Central 70 project informed by survey responses and publications describing project development:

Affordable Housing. CDOT learned in public meetings that gentrification was a significant concern for the community. Families living in the GES community for multiple generations worried that the investments and improvements would ultimately force them out of their homes. CDOT responded by facilitating a \$2 million grant for affordable housing for residents to stay in their neighborhoods. Units are currently under construction.

Community Education. Swansea Elementary School is located a few hundred feet from I-70. While CDOT offered to move the school, the community declined, noting that the school is the heart of the community. CDOT instead provided \$18.5 million for improvements:

- Relocating the playground to be farther away from the construction and installing new playground equipment.
- Installing a new heating, ventilation and air conditioning unit.
- Renovating the school's main entrance.
- Building two new early childhood education classrooms.

CDOT continues to closely coordinate with the school's staff through weekly task force meetings to ensure needs are being met and concerns are addressed.

Community Health. CDOT is providing \$100,000 to bring fresh food to the GES neighborhood. Residents currently live in a food desert where access to affordable, healthy food — particularly fruits and vegetables — is limited. CDOT is coordinating with the city and county of Denver to find the ideal location for a grocery store within the community.

Environment. The impact of highway noise to the adjacent communities is greatly diminished by lowering this segment of I-70.

Parks or Other Public Spaces. The new 4-acre cover park created on the freeway cap serves as a meeting place to reconnect the community.

Transportation. The addition of an express toll lane in each direction of the lowered interstate and the replacement of aging infrastructure and its associated structural deficiencies have provided substantial benefit to the traveling public.

Workforce Development. Project analyses and community studies indicated that GES residents experience higher levels of unemployment compared to other parts of Denver. CDOT partnered with WORKNOW — a coalition of organizations that work to recruit, retain and support construction

industry workers — to create a workforce development program. Residents impacted by the Central 70 project, whether or not they had prior construction experience, were recruited, hired and provided with on-the-job training. CDOT required the contractor to provide 200,000 training hours for employees in skilled crafts, and that goal was surpassed in 2020.

Project Successes

- *Efficiency.* The project was completed on time and on budget.
- *Quality.* The survey respondent noted that the infrastructure quality is extremely high.
- *Project management.* A project of this magnitude with this level of risk benefited from a dedicated team of the best possible staff to manage the budget and timeline.
- *Community impacts.* Elementary school improvements and freeway noise reduction were considered significant successes.

Project Challenges

- *Cost.* Central 70 project costs were substantial.
- *Project management.* The risks associated with delay required oversight from experienced project managers.
- *Utility coordination.* The project area included a particularly dense utility corridor that required coordination with three different railroad companies.

Best Practices

- *Engage the community* early and often.
 - *Ensure good agency and contractor management teams.*
 - *Build community trust* by including agency staff members who understand cultural customs and specific dialects, language barriers and preferred communication methods within the impacted community. As the respondent noted, “If you have a distrusting community, it can be seen as an insult to send in someone that doesn’t understand them and that you are just checking a box.”
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Related Resources

Central 70 Project, Colorado Department of Transportation, 2024.

<https://www.codot.gov/projects/archived-project-sites/i70east>

This website provides details of the project.

“How a Denver Neighborhood Became One of the Most Polluted Zip Codes in America,” Amanda Horvath, Rocky Mountain PBS, November 6, 2023.

<https://www.rmpbs.org/blogs/rocky-mountain-pbs/80216-polluted-zip-code-timeline>

This online article provides a brief environmental history of the GES neighborhood and includes a historical timeline of industrial development, environmental lawsuits and Central 70 project.

“Colorado Bridge Connects People to Opportunities,” *Innovator Newsletter*, January/February 2023, Volume 16, Issue 94, Federal Highway Administration, 2023.

https://www.fhwa.dot.gov/innovation/innovator/issue94/page_02.html

This newsletter article describes the Central 70 project as one that uses “infrastructure upgrades to re-connect communities.”

Figure 8 provides an illustration of the completed Central 70 project.



Figure 8. Representation of the completed Central 70 project

(Source: Colorado Department of Transportation.)

“Central 70 Project Celebrated, Construction Nears Completion,” Jennifer McRae, CBS News Colorado, June 29, 2022.

<https://www.cbsnews.com/colorado/news/central-70-project-celebrated-construction-nears-completion/>

This brief article describes a site visit by various dignitaries as the Central 70 project neared completion.

“CDOT Central 70 Project: Title VI Mitigation Efforts,” American Association of State Highway and Transportation Officials, *Virtual AASHTO Agency Administration Conference*, 2021.

<https://transportation.org/agency-admin/wp-content/uploads/sites/44/2023/04/Central-70-AASHTO-Presentation-Read-Only1.pdf>

This conference presentation describes and illustrates the Central 70 project, project impacts and mitigations, environmental testing, workforce opportunities and other project benefits.

WORKNOW: We Collaborate in a New Way for YOU, WORKNOW, undated.

<https://work-now.org/>

This coalition of organizations provides training and resources for families living in Denver metro neighborhoods impacted by regional infrastructure construction projects. Resources include coaching and placement assistance and support services like childcare, transportation and construction tool purchase.

2.5 Church Street Plaza Bridge/Victoria Park

Project Location:	Oak Park, Michigan
Project Type:	Replacement freeway cap Pedestrian bridge and plaza
Project Sponsor:	MDOT
Project Status:	Design complete; construction to begin early 2025
Intended Social Goal:	Reconnect Orthodox Jewish community and improve mobility on Sabbath and holy days.

Background

The largest Jewish population in the Detroit area lives on the city's northwest side, in and around Oak Park. Interstate 696 (I-696) as it was originally constructed bisected the neighborhood, requiring pedestrian movement from one side of I-696 to the other through use of three park-like plazas that cross over the freeway. Built in 1987, the Church Street Plaza Bridge, which includes Victoria Park, is the oldest of the three plazas.

Project Description

MDOT is planning to reconstruct the Church Street Plaza Bridge in suburban Detroit, including existing recreational areas in Victoria Park, at a point along I-696 that bisects the Orthodox Jewish community of Oak Park. The project will remove and replace the superstructure and rebuild the current recreational areas of the plaza, including its playground. The reconstructed area will reconnect the Oak Park community with a more inclusive and accessible space. Construction was anticipated to begin in early 2025. This project is expected to continue to support anti-displacement measures for the Jewish community that counteract the displacement that began with the construction of I-696. Figure 9 shows the location of Victoria Park, one element of the Church Street Plaza Bridge.

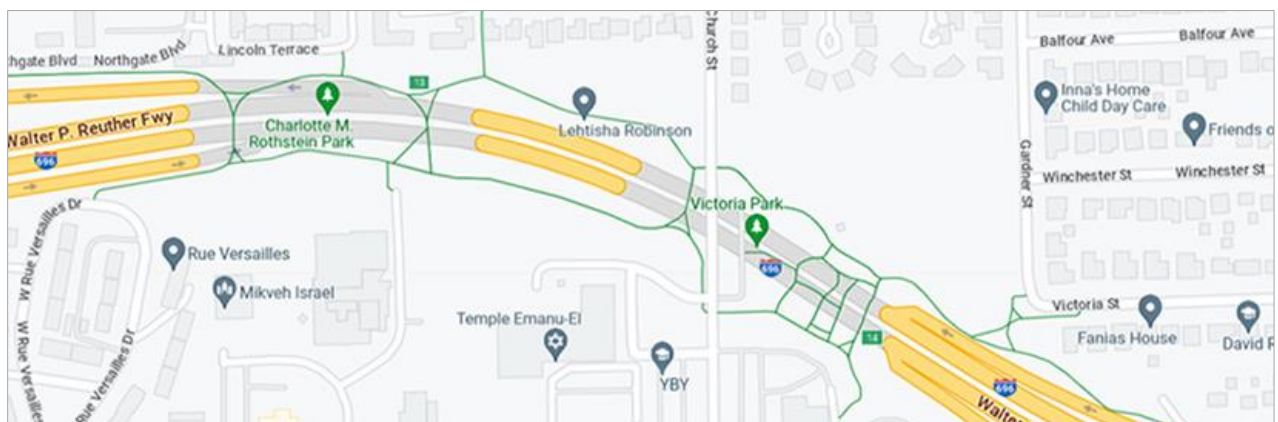


Figure 9. Map showing the location of Victoria Park
(Source: [Oakland County, Michigan.](#))

Project Funding

MDOT received \$21.7 million under the RCP grant program that will be used toward the estimated \$43 million total project cost. State matching funds and other federal funding sources will make up the difference.

Intended Social Remedies

A central commerce and community area of Oak Park, including schools, places of worship, shops and restaurants, is located on the opposite side of I-696 from many residences. Since Orthodox Jews do not work or drive on Jewish holy days or the Sabbath — from sundown on Friday until nightfall on Saturday — transportation to synagogues and community events is by foot across the Church Street Plaza Bridge.

By ensuring a safe and accessible crossing, the reconstructed Church Street Plaza Bridge will provide a safe route to religious facilities, kosher grocery stores, butcher shops and bakeries. The project will not increase the distance community members have to travel to these important amenities and will provide easier access for older pedestrians and people with disabilities.

Community Engagement

An online survey gathered community needs for the replacement of the Church Street Plaza Bridge in Oak Park during project planning. Community feedback led to the decision to retain the current size of the bridge deck. Once the deck size was determined, multiple town hall events gathered additional comments on the project design and potential impacts, including pedestrian detours during construction (see Figure 10). Multiple meetings involving MDOT, FHWA and the city of Oak Park facilitated completion of the bridge deck design.



Figure 10. Proposed plaza bridge and pedestrian detour map
(Source: Michigan Department of Transportation.)

Anticipated Project Impacts

The Church Street Plaza Bridge project seeks to accomplish several primary goals:

Local Economy. Replacing the Church Street Plaza Bridge is intended to assuage impacts on specialty businesses that cater to the area's residents with kosher and other unique products and services.

Parks or Other Public Spaces. Reconstruction of Victoria Park, which is part of the bridge plaza, is expected to result in greater community use. Amenities that will be added to the community park based on survey responses include bike repair and fitness stations; installation of benches, pavilions, shade structures and picnic tables; and replacement of playground equipment.

Transportation. Bridge reconstruction will remove an ongoing burden for MDOT and alleviate risk to travelers. Chronic water leaks on the Church Street Plaza Bridge form large, sharp icicles that dangle over the freeway, requiring annual maintenance costs of \$300,000 to remove icicles and causing highway travel time delays. Safety concerns, icicle removal and transportation delays are expected to be eliminated with the new structure.

Project Successes

Project design. Project planners identified a final design for the Church Street Plaza Bridge replacement that incorporates the community's desires and meets the safety and mobility needs of MDOT.

Project Challenges

None noted by the survey respondent.

Best Practices

Community outreach. Allow sufficient time during the design process for community outreach that includes public meetings, online surveys and media blasts. This feedback was crucial to finalizing a design that addressed community interests.

Related Resources

"MDOT Open House May 15 to Reconstruct the Church Street Plaza Bridge Over I-696 at Victoria Park in Oak Park," Press Release, Michigan Department of Transportation, May 4, 2023.

<https://www.michigan.gov/mdot/news-outreach/pressreleases/2023/05/04/mdot-open-house-may-15-to-reconstruct-the-church-street-plaza-bridge-over-i-696-at-victoria-park>

This open house notice includes a project description and links to a form used to collect input on new elements for the Church Street Plaza Bridge.

"MDOT to Replace Oak Park's Victoria Park Overpass Bridge," Louis Finkelman, *Detroit Jewish Times*, April 18, 2023.

https://www.thejewishnews.com/community/mdot-to-replace-oak-park-s-victoria-park-overpass-bridge/article_2158c93f-206e-52db-b354-ace980319f58.html

This newspaper and audio article describes the construction set to begin in 2025, project history, needs, access during construction and public input opportunities.

“MDOT Awarded Grant to Replace Vital Community Pedestrian Bridge Over I-696,” Press Release, Michigan Department of Transportation, March 2, 2023.
<https://www.michigan.gov/mdot/news-outreach/pressreleases/2023/03/02/mdot-awarded-grant-to-replace-vital-community-pedestrian-bridge-over-i-696>

This MDOT press release details project plans, benefits and importance to Jewish community.

2.6 ReConnect Rondo

Project Location:	St. Paul, Minnesota
Project Type:	Freeway cap Land bridge
Project Sponsors:	Nonprofit organization (ReConnect Rondo) in collaboration with Minnesota DOT and city of St. Paul
Project Status:	Design in process
Intended Social Goal:	Reconnect the Rondo neighborhood, divided by the construction of Interstate 94 (I-94), to create affordable housing, community spaces and an African American cultural enterprise district.

Background

Prior to the construction of I-94, which occurred during the period 1956 to 1968, 80% of St. Paul’s African American population lived in the thriving Rondo neighborhood between Minneapolis and St. Paul. The highway bifurcated the community physically and economically, demolishing 700 family homes; closing or tearing down 300 businesses; and contributing to the loss of 61% of Rondo residents and 48% of Rondo homeowners.

Advocacy efforts since the 1980s have sought to restore the community’s unity. In 2015, Minnesota’s then-Transportation Commissioner Charlie Zelle and then-St. Paul Mayor Chris Coleman formally apologized for the agencies’ participation in the destruction of the Rondo community.

ReConnect Rondo is a 501(c)(3) nonprofit organization formed by neighborhood leaders in 2016 with the goal to “reverse the devastation caused by the original I-94 construction” and “dedicated to restoring equity and opportunity in Rondo by leading a united effort in pursuit of one common goal — a revitalized African-American Cultural Enterprise District connected by a community land bridge.”

In 2018, ReConnect Rondo began investigating the land bridge concept in cooperation with Minnesota DOT (MnDOT) and the city of St. Paul.

Project Description

ReConnect Rondo is currently in the design stages for a freeway cap — or land bridge — that would span over a half-mile segment of I-94 for five blocks between Chatsworth Street and Grotto Street, to the west of downtown St. Paul. Proposed development on the freeway cap includes affordable and market-rate housing, commercial and small-business space, parks and green space. The bridge would reconnect the Rondo community and facilitate creation of an African American cultural enterprise district.

Figure 11 provides a rendering of the proposed land bridge.



Figure 11. Artist's rendering of proposed ReConnect Rondo land bridge

(Source: [ReConnect Rondo](#).)

A 2020 feasibility study focused on three concepts, all contemplating some form of recreational, commercial or residential facilities:

- Expanding an overpass bridge 1 to 3 acres in area.
- Freeway cap, 5 to 7 acres in area, to support one- to two-story development.
- Expanded freeway cap, 15 to 22 acres in area, to support one- to two-story development.

Planning and financing occurred throughout 2024 and included a Restorative Development Neighborhood Plan, which is currently undergoing community review and will be submitted for formal adoption by the city of St. Paul in early 2025. The plan covers six key elements:

- Transportation and mobility.
- Parks and open space.
- Economic opportunity.
- Housing opportunity.
- Environment and resilience.
- History, culture and arts.

Project design and development is scheduled to be completed by 2026, when construction will start. Simultaneously, MnDOT's Rethinking I-94 effort began in 2016 to improve the roughly 7.5-mile stretch of I-94 between Minneapolis and St. Paul. MnDOT has conducted community engagement to gather feedback on the alternatives currently under consideration, in addition to no action:

- Updating the existing freeway infrastructure.
- Rebuilding existing freeway to three lanes in both directions with one managed lane.
- Rebuilding existing freeway to four lanes in each direction with one managed lane.

While the Rondo area is within the Rethinking I-94 project area, the Rondo land bridge project is being led by ReConnect Rondo.

Project Funding

The development of a land bridge to cap I-94 and connect the bifurcated Rondo community has received funding from multiple sources:

- 2017: A three-year grant from the John S. and James L. Knight Foundation to support community engagement efforts, personnel capacity and project funding opportunities.
- 2021: \$500,000 from the city of St. Paul and \$150,000 grant from the Metropolitan Council to support the Rondo Anti-Displacement and Community Investment Strategy.
- 2022: RCP planning grant of \$2 million and \$6.2 million appropriated by the Minnesota Legislature to match federal funds for project planning and development.
- 2024: Second RCP planning grant of \$2 million to support environmental analysis and assessment of impacts.

Construction costs are estimated at between \$392 million and \$460 million. ReConnect Rondo is committed to a funding model that incorporates *people, private, public and philanthropy* (4P) into the financing, funding and building of an African American cultural enterprise district in Rondo. An estimated \$170 million for development on the land bridge would be financed via public-private partnerships. Figure 12 provides a map of the proposed project area.

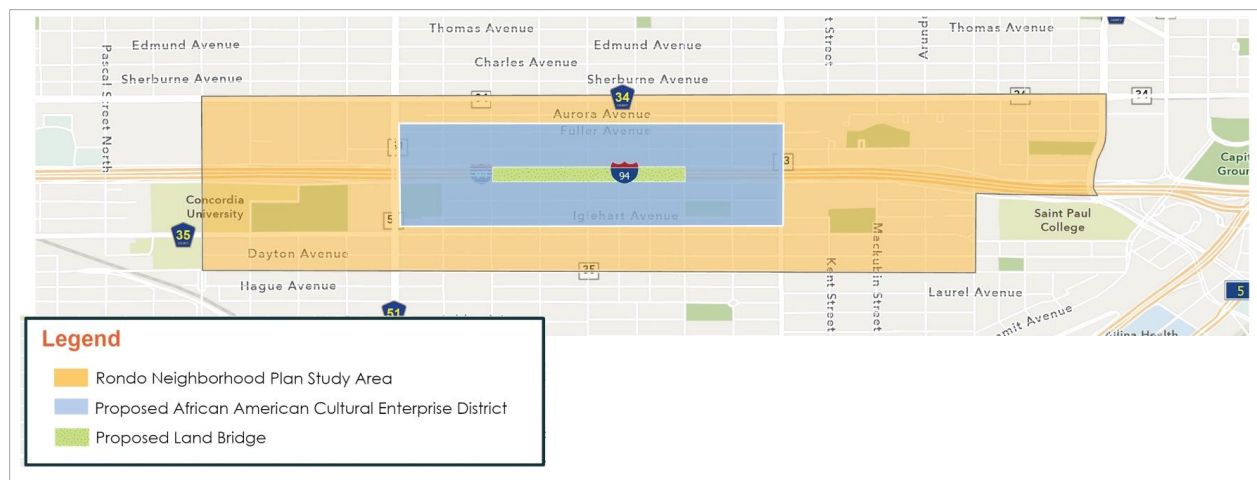


Figure 12. Map of proposed land bridge, African American cultural enterprise district and neighborhood plan study area

(Source: [ReConnect Rondo.](#))

Intended Social Remedies

The Rondo land bridge project is focused on five goals:

- **Neighborhood Reconnection.** Physically reconnecting the neighborhood on both sides of I-94 will be a catalyst for wider communitywide initiatives. Community leadership will be facilitated by the social and cultural reconnection.
- **Affordable Housing.** By providing mechanisms to minimize barriers and financial incentives, the production and preservation of a diverse, safe, healthy and affordable housing stock will allow residents to build wealth.

Considering Affordable Housing

The July 2020 [feasibility study](#) conducted for the Rondo land bridge identified seven fundamental concepts. From among these, an assessment sought to identify concepts that fit the project team's definition of feasibility: *achievability of a concept's implementation without consequential technical or civic impedance through each criterion*. The feasibility study further evaluated three concepts:

- **Concept 1: Street/Bridge Expansions (Short).** An overpass bridge expansion providing a combination of green space and recreation, commercial or residential facilities. Capacity for housing: 50 units (average size of 850 square feet). *From the feasibility study:*

With a maximum of 50 housing units, this concept provides limited opportunity for additional housing, which may be limited to market rate, unsubsidized housing.
- **Concept 2/3: Simple Lid with Development Potential (Medium).** Freeway lid with bridge structural elements to provide a combination of green space and one- to two-story development for recreation, commercial or residential facilities. Capacity for housing: up to 150 housing units. *From the feasibility study:*

With a maximum of 150 housing units, this concept provides limited opportunity for additional housing, which may be limited to predominantly market rate, unsubsidized housing.
- **Concept 5: Lid with 1-2 Story Buildings (Long).** Expanded freeway lid with structural elements that support development of one- to two-story development for recreational, commercial and residential purposes. Capacity for housing: up to 600 housing units. *From the feasibility study:*

The market analysis indicates there is currently moderate demand for housing in the regional market. This concept could provide a combination of market rate and subsidized housing.

-
-
- **Equitable Development.** Collaboration and sustainable wealth-building will create a framework for inclusive economic opportunity for an equitable community.
 - **Public Health and Green Space.** Providing access to green space and outdoor opportunities will promote improvements in public health disparities.
 - **Community Leadership.** Keeping this project a community-led initiative that engages with state, regional and city officials to implement regulatory and policy solutions will maximize community involvement, minimize involuntary displacements and moderate gentrification.

Similarly, the planned African American cultural enterprise district, supported by the land bridge, is focused on:

- Restoring wealth and control for African Americans and the Rondo community.
- Providing opportunities for African American businesses and leaders.
- Revitalizing, protecting and promoting Rondo as a thriving, heritage-rich neighborhood.
- Driving equitable outcomes for African Americans.

To advance this effort, ReConnect Rondo is seeking to:

- Identify official boundaries for Rondo.
- Create a housing stabilization plan.
- Drive priorities for housing affordability, anti-displacement policies and improved quality of life.

Through its “equitable development approach in this restorative movement,” ReConnect Rondo proposes to:

- Connect organizations, leaders and policymakers to help make the community land bridge and an African American cultural enterprise district a reality as well as a beacon of hope.
- Ensure community-led, collaborative efforts representing the community’s best interests.
- Ignite policy changes on national, state and regional levels.
- Defend Rondo against gentrification and involuntary displacement.
- Elevate resources within the community to ensure successful outcomes for African Americans and other residents and organizations.
- Motivate the community to embrace, support and work together toward this essential effort.

Efforts completed in 2024 to advance development of the enterprise district include completion of an anti-displacement and community investment strategy, a neighborhood area development plan and the first restorative developing modeling study.

Community Engagement

ReConnect Rondo has sought ongoing community input, starting in 2016 with imagining and envisioning activities. A commitment to equitable development seeks to “leverage systems, processes, tools and resources to reduce disparities and foster thriving communities.” Among other goals in the land bridge project, ReConnect Rondo intends to:

- Connect organizations, leaders and policymakers.
- Ensure community-led, collaborative efforts.
- Motivate the community to embrace, support and work together toward the effort.

The timeline below identifies specific efforts to engage with the community:

- 2021: Online community meetings.
- 2022: Residents’ meetings with lawmakers.
- 2023: Summit of representatives of 20 communities around the country, including Rondo, to promote discussion of transportation impacts on communities.

Figure 13 illustrates the proposed land bridge over I-94.



Figure 13. Artist's rendering of the proposed land bridge over I-94 in Rondo

(Source: [ReConnect Rondo](https://reconnectrondo.com).)

Anticipated Project Impacts

ReConnect Rondo aspires to several specific outcomes arising from development of the land bridge and African American cultural enterprise district:

- 468 to 576 new housing units.
- 1,304 to 1,872 new permanent and construction-related jobs.
- More than 1,000 new residents.
- 87,750 to 108,000 square feet of retail and office space.
- 29,250 to 36,000 square feet of nonprofit and institutional space.
- Approximately \$3.8 million to \$4.2 million annually in increased city revenue.

Related Resources

ReConnect Rondo, 2024.

<https://reconnectrondo.com>

From the website:

ReConnect Rondo is a 501(c)(3) nonprofit organization driven to bring prosperity to the Rondo neighborhood. We're eager to right the wrongs of the devastation caused by the original I-94 construction. We're ready to work with the Rondo community and others in Minnesota to reverse systemic oppression once and for all. We're passionate about creating an African American cultural enterprise district connected by a community land bridge.

The project's organizational web page includes these subpages:

- [The project](#): Illustrates project timeline through 2030.
- [African American cultural enterprise district](#): Describes goals for the district.
- [Committed to equitable development](#): Details community collaboration goals.
- [ReConnect Rondo News](#): Provides links to press releases and newsletters.

Rethinking I-94 – Minneapolis to St. Paul, Minnesota Department of Transportation, 2024.

<https://talk.dot.state.mn.us/rethinking-i94>

This website provides MnDOT’s description of the long-term effort for improvements to I-94 between St. Paul and Minneapolis with numerous accompanying resources and links. While Rondo is located along this stretch of I-94, MnDOT’s effort does not specifically address ReConnect Rondo.

Rondo Anti-Displacement and Community Investment Strategy, ReConnect Rondo, January 2024.

<https://reconnectrondo.com/wp-content/uploads/2024/07/Rondo-ACDI-Final-Report.pdf>

This report details a strategy to prevent displacement and recommends measures to increase affordable housing, facilitate African American business ownership and preserve cultural heritage.

RONDO 4P Funding Model: A Pathway Leading to Restoring a Community Lost Through Federal Highway Investments, Urban Land Institute, 2022.

<https://reconnectrondo.com/wp-content/uploads/2024/07/Rondo-4P-Funding-Model.pdf>

This report describes the efforts of ReConnect Rondo and the Urban Land Institute in Minnesota to “explore key strategies for creating a community benefits framework through a 4P Funding Model” and offers funding model recommendations.

Rondo Avenue Land Bridge: Feasibility Study Final Report, ReConnect Rondo, July 2020.

<https://reconnectrondo.com/wp-content/uploads/2021/01/Rondo-Avenue-Land-Bridge-Feasibility-Study-Final-Report.pdf>

This feasibility study evaluates the potential land bridge above I-94 and compares three concepts, finding them all feasible. Suggested next steps include involving design/engineering, planning and preconstruction/management.

2.7 Inner Loop East

Project Location: Rochester, New York

Project Type: Freeway to boulevard

Project Sponsor: City of Rochester

Project Status: Completed in 2017; Inner Loop North project underway

Intended Social Goal: Revitalize Rochester’s downtown business district and reconnect its central area with surrounding communities.

Background

Rochester’s Inner Loop on Interstate 490 (I-490) encircled Rochester’s central business district and was opened to traffic in 1965. In the construction process, approximately 1,300 homes and businesses were demolished. At the time of construction, Rochester’s population was approximately 330,000 and has since shrunk to 210,000.

The Inner Loop Highway has been seen as barrier between a declining downtown area and nearby densely populated neighborhoods. Since its construction, residents and jobs have migrated out of the inner city and usage of the Inner Loop has declined. Plans to convert the Inner Loop to a boulevard have been in process since 1990.

Project Description

Begun in 2014 and completed in 2017, the Inner Loop East project converted a 2/3-mile stretch of the sunken Inner Loop Expressway on downtown Rochester's east side to an at-grade two-lane, low-speed boulevard that includes bicycle and pedestrian facilities. The project also converted the surface-level streets that ran alongside the Inner Loop into green space and land for redevelopment.

Following Complete Streets principles and requirements, many cross streets were improved by eliminating bridges, improving directional flows and installing new traffic signals. The project included a variety of Complete Streets design elements:

- Wide sidewalks.
- Frequent crosswalks.
- Protected bike lanes.
- On-street parking.
- Roundabouts.
- Three to five travel lanes.
- Center landscaped medians.
- Context sensitive design features.
- Two-way traffic operations.
- Reconnected city streets.

Figure 14 is a map of the project's location within the city center.



Figure 14. Location of the Inner Loop East project

(Source: [City of Rochester, New York.](https://www.cityofrochester.org/))

The Inner Loop North project, already underway, will redesign the remaining 1.5-mile segment of the Inner Loop Expressway.

Project Funding

Maintenance costs to maintain the below-grade expressway would have exceeded the project cost of \$21 million. Funding for the Inner Loop East project is described on a city of Rochester project website:

- USDOT Transportation Investment Generating Economic Recovery (TIGER) discretionary grant: \$16.8 million.
- State of New York (matching funds): \$3.8 million.
- City of Rochester (matching funds): \$414,000.

Intended Social Remedies

Livability improvements included easy walking or bicycling access between neighborhoods and the downtown. The project reconnected east side neighborhoods with the downtown business district, while mixed-use community development is creating jobs and private investment, and revitalizing the corridor to the benefit of residents and visitors.

Project goals:

- Support or enhance community quality of life, such as reconnecting neighborhoods with the center city and improving the visual built environment.
- Enhance economic opportunities by creating new development potential, providing multimodal access and supporting local community land use plans.
- Enhance the center city's transportation network, including reconnecting the street grid system and eliminating structural deficiencies.
- Preserve or enhance environmental health by minimizing air quality, noise and stormwater impacts.
- Transform developable land surrounding the loop into a mixed-use community development that would provide city residents and visitors with the places to work, live and play.

Community Engagement

The city of Rochester solicited public input on all phases of project development. A citizens advisory committee held numerous meetings in 2000 and 2001 during the project's initial study phase. Four public information meetings were held in 2013 and 2014, and a public open house in 2013. City of Rochester staff also met with individual business and neighborhood associations.

While the city had originally envisioned a boulevard design that mirrored the curve of the Inner Loop to reconnect the neighborhoods and restore the historic urban setting, residents preferred a design that more closely resembled the street grid that existed before the expressway was built.

Letters of support from the community came from neighborhood groups, business associations and developers. Sector 5, a downtown resident advocacy group, wrote an enthusiastic letter of support, noting that removal of the eastern leg of the Inner Loop had been a longtime goal and saying this:

The [c]ity of Rochester has placed a significant focus on investing in the downtown core, and as a result, the quality of life for [c]enter [c]ity residents had been substantially enhanced, and private development has followed. Replacement of the underutilized eastern segment of the Inner Loop

with a properly scaled at-grade boulevard will be a tremendous [complement] to the revitalization efforts already underway.

As a March 2018 State Smart Transportation Initiative blog post described it, Figure 15 provides before-and-after photos that show results of the Inner Loop East project that “involved filling in two-thirds of a mile of the old highway trench to set the stage for future development and a more connected street grid.”

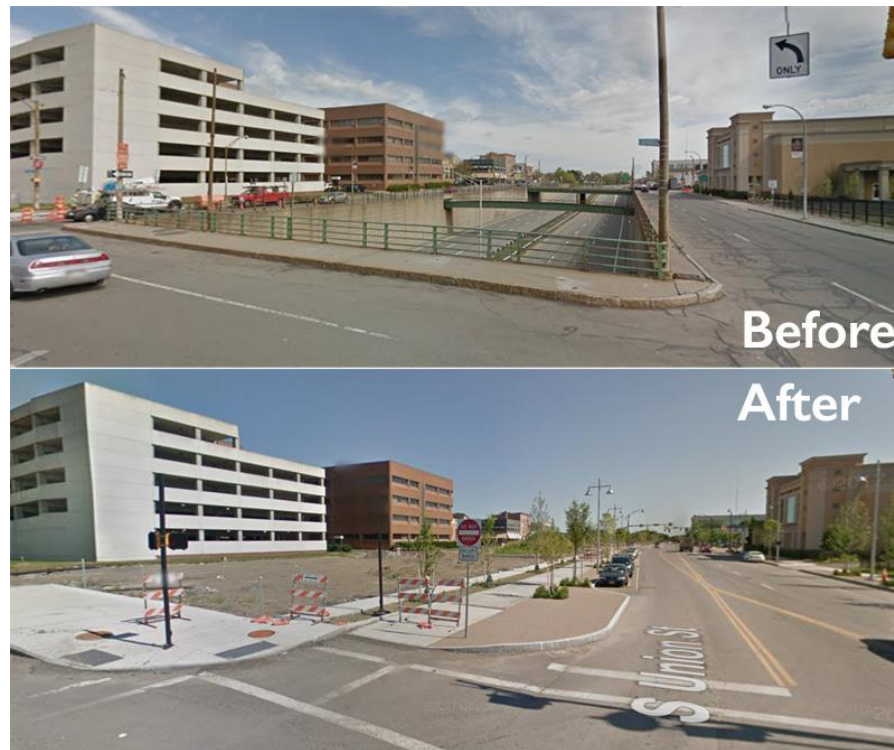


Figure 15. Before-and-after photos of the Inner Loop east project
(Source: [State Smart Transportation Initiative](#).)

Project Impacts

The city of Rochester met its three-year construction schedule and successfully removed the barrier between downtown and adjacent neighborhoods.

Below is a brief summary of the impacts resulting from the Inner Loop East project:

Affordable Housing. A 2022 blog post noted that developers had built 534 new housing units — about half of these units are affordable — on the new land made available by removing the highway.

Land Use. The project opened up roughly 6 acres for redevelopment, which has been ongoing. Potential mixed-use developments are valued between \$8 million to \$11.5 million, and new property taxes will benefit the city, county and local institutions.

Local Economy. The Inner Loop East project created more than 2,000 construction jobs and more than 170 permanent jobs. The benefit–cost ratio of the project is conservatively estimated to be between 1.9 and 2.2.

Figures 16 and 17 provide images of the completed project and an illustration of one of the three projects that were proposed for development on the 6 acres of land freed up by the Inner Loop East project, respectively.

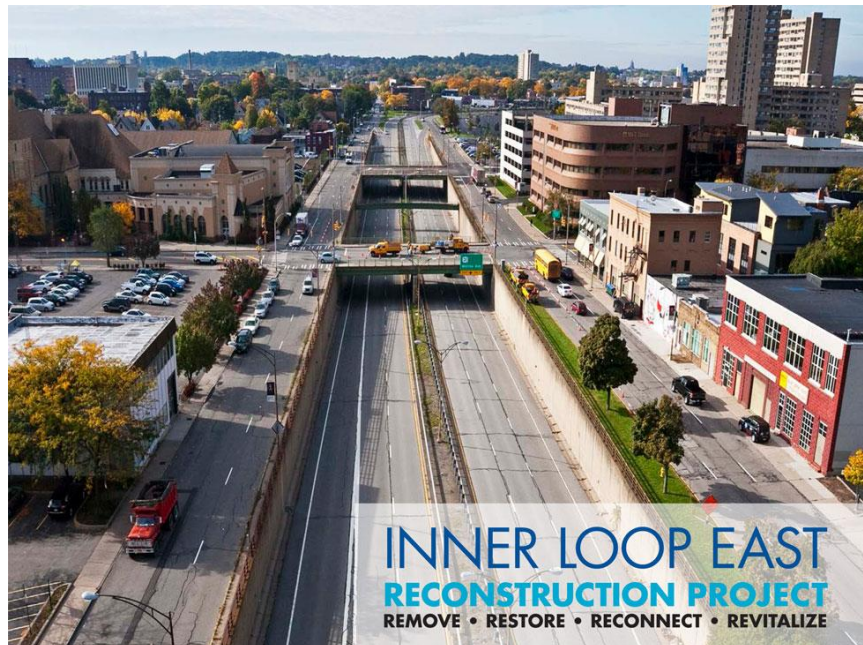


Figure 16. Image of the completed Inner Loop East project
(Source: [Reconnect Rochester](#).)



Figure 17. Proposed mixed-use “Neighborhood of Play” development that includes an expanded Museum of Play, retail, housing and a hotel
(Source: [State Smart Transportation Initiative](#).)

Recreational and Open Spaces. Healthy lifestyles are encouraged through pedestrian and bicycle infrastructure. The project has increased walking by an estimated 50% and biking by 60%.

Transportation. Traffic safety has improved as a result of the project, including the removal of three bridges, two of which needed major rehabilitation, and reestablishing the original low-speed street grid.

Best Practices

The city of Rochester's planning efforts created a strong vision to physically and economically reconnect the central business district and surrounding communities. Community engagement efforts centered around this vision enabled public acceptance of the Inner Loop East project. Other successful practices:

- *Communication.* A project website was key to outreach success as plans, documents, meeting minutes and renderings could be disseminated quickly.
- *Outreach.* Achieving consensus required engaging elected officials and garnering local support.
- *Planning and design.* The project benefited from two important elements of planning and design:
 - A *cost–benefit analysis* illustrated the benefits of the project to the community. The city of Rochester's engineering studies demonstrated that the project would be less expensive than maintaining and rehabilitating all of the bridges over the current expressway.
 - *Visualization tools* used during the design phase helped the public envision the changes contemplated by the new construction and how they would interact with the new roadway.

Related Resources

Inner Loop East Project, City of Rochester, New York, 2025.

<https://www.cityofrochester.gov/departments/des/inner-loop-east-project>

This project website includes milestones, design and benefits, funding sources and public participation summaries.

“Reconnecting Communities: Initiating Restorative Transportation Justice,” Stephen Coleman Kenny, Blog Post, *Transportation for America*, August 2, 2022.

<https://t4america.org/2022/08/02/reconnecting-communities/>

This blog post includes a brief description of the Inner Loop East project and its impacts.

Reconstructing the Inner Loop East — Rochester, New York, Office of Planning, Environment and Realty, Federal Highway Administration, June 2018.

<https://www.fhwa.dot.gov/livability/cia/resources/rochester/>

FHWA's community impact assessment of the Inner Loop East project addresses history and community, project process and results, and lessons learned.

Inner Loop East Transformation Project: Final Design Report — Volume 1, City of Rochester, New York, New York State Department of Transportation and Federal Highway Administration, March 2014.
<https://www.cityofrochester.gov/sites/default/files/migrated/WorkArea-linkit.aspx-LinkIdentifier-id-ItemID-8589960941-libID-8589960928.pdf>

This final design report volume contains analyses of conditions existing before the project and project alternatives. Chapter 5 contains oral and written public comments associated with a 2014 public hearing and responses to those comments.

Project Profile: Rochester Inner Loop East, New York, A Freeway to Boulevard, Center for Innovative Finance Support, Federal Highway Administration, undated.

https://www.fhwa.dot.gov/ipd/project_profiles/ny_freeway_to_boulevard_rochester.aspx

This profile of the Inner Loop East project includes project description, project benefits, funding sources and funding partners, and identified 10 project innovations.

2.8 I-5 Rose Quarter Improvement Project

Project Location: Portland, Oregon

Project Type: Freeway cap

Project Sponsors: ODOT
City of Portland

Project Status: Design completed; construction to begin summer 2025

Intended Social Goals: Support reconnection of Lower Albina, the historic heart of Portland’s Black community.

Background

The original construction of Interstate 5 (I-5) in 1962 decimated the Lower Albina neighborhood, long considered the historic heart of Portland’s Black community. Siting I-5 on a path that bisected the Albina community led to the destruction of hundreds of homes, mostly owned by Black residents, and severed what was once the largest Black neighborhood in Oregon from the Willamette River.

Three interstates (I-5, Interstate 84 (I-84) and Interstate 405 (I-405)) also converge in the Rose Quarter/Lower Albina neighborhood, forcing vehicle traffic down to two travel lanes. I-5 Rose Quarter Improvement Project planners characterize this area as “one of the worst bottlenecks in the country,” noting that the current roadway design also requires rapid merging that leads to “an extraordinarily high number of crashes.” In 2021, ODOT noted that this area was the 28th worst freight bottleneck in the nation.

Project Description

The I-5 Rose Quarter Improvement Project includes the construction of a freeway cap (or, as project planners describe it, a highway cover) that will replace existing bridges with one large, seismically resilient highway cover over I-5 that reconnects the historic street grid. The project includes more than 1.5 miles of street improvements such as wider and improved sidewalks, additional bicycle lanes, additional ADA-compliant street crossings, and safer access into and out of properties throughout the project area. The project will also improve mobility for people walking, biking and driving through the area.

Other project improvements will improve safety and congestion where the three major interstates converge in the Rose Quarter area, the location of the state's highest interstate crash site. Ramp-to-ramp connections (auxiliary lanes) and wider shoulders will be constructed to allow an estimated one-third of traffic to travel between I-84 and I-405 by moving from ramp to ramp rather than merging into two lanes of traffic on I-5.

Construction will begin this summer on the first portion of the highway cover that will connect neighborhoods east and west of I-5 and add a southbound auxiliary lane and shoulder from I-4. Figure 18 shows an early project concept. The graphic highlights different design options that have the same physical infrastructure components (differences between them are operational only):

- Two-way Ramsay design option: Convert North Ramsey from one-way facility to a two-way facility.
- Two-way Wheeler design option: Construct a new travel lane and maintain three existing travel lanes.

Figure 18 also highlights the location of the new Clackamas Pedestrian and Bicycle Bridge (sometimes referred to as Clackamas Crossing). This new construction is expected to provide “a new, lower-stress, physically separated connection over I-5; offer an alternative route for people walking, riding or rolling through the Broadway/Weidler interchange; and provide a direct link between the Lloyd district and the Rose Quarter.”



Figure 18. Conceptual I-5 Rose Quarter project design and cover shape
(Source: [Oregon Department of Transportation.](#))

Relinquishment

The project requires relocation of an off-ramp terminus 1,000 feet south of its current location. The land that was occupied by the former off-ramp is no longer needed for freeway operations, and ODOT

intends to transfer rights of the real property according to the applicable Oregon statute (excerpted in the callout below).

Development of this surplus land might include public park space, a certain percentage of affordable housing or supportive housing for homeless residents. As the survey respondent noted, “A community-led process is currently underway that will determine the final elements to be constructed atop the highway cover.”

Oregon State Statute Governing Relinquishment

ORS270.100(1)(a)(A), Notice to department before sale of real property:

- (a)** Before offering for sale any real property or equitable interest in real property that the state owns, the state agency acting for the state in the sales transaction shall report to the Oregon Department of Administrative Services that the state agency intends to sell or transfer the real property or the equitable interest. The department, or an agency the department specifically designates, shall notify other state agencies authorized to own real property of the intended sale or transfer to determine whether acquiring the real property or interest in the real property would be advantageous to another state agency.
 - A)** The department shall give the first opportunity after other state agencies to acquire, purchase, exchange or lease real property or an interest in real property that the State of Oregon disposes of or sells to:
 - (i)** The following entities, on the condition that the entities will develop housing on the real property that will be occupied by families and individuals with an income no greater than 80 percent of the median family income for the county in which the real property is located:
 - (I)** Nonprofit organizations; **and**
 - (II)** Indian tribes, as defined in ORS 97.740 (Definitions for ORS 97.740 to 97.760); **and**
 - (ii)** Political subdivisions, as defined in ORS 271.005 (Definitions for ORS 271.005 to 271.540).

Project Funding

To date, the project is partially funded by a combination of state and federal funding. In 2022, the project received an \$800,000 federal RCP planning grant to support community engagement and other planning efforts. A second RCP grant of \$450 million, received in March 2024, will be used to complete the design and construct the core part of the highway cover, including new community space and future development opportunities for the Albina community.

At the time of a January 2025 ODOT project bulletin, the project had acquired about \$850 million in funding. The project’s RCP application estimated the total project cost at \$1.7 billion.

Intended Social Remedies

The survey respondent described the harm repair the I-5 Rose Quarter project is intended to provide:

Public infrastructure projects, including construction of I-5, displaced more than 900 dwelling units (mostly single-family homes) in and near the project area from the 1940s to the 1970s. The project was conceived and developed with consideration of the detrimental effects of past public infrastructure projects on Black residents in the project area. The project will help repair past harm with enhanced east-west connectivity across I-5; new and enhanced transit, pedestrian and bicycle facilities; improved safety benefits for all transportation modes; and improved traffic operations and safety on I-5 and local surface streets.

Figure 19 is an illustration of the project partners' vision for the lower Albina community. This graphic is provided by ODOT "for illustrative purposes only and does not represent a final design; the highway cover development process will be led by the city of Portland, in partnership with ODOT, and strong community involvement."



Figure 19. Rose Quarter partners' vision for Portland's Albina community

(Source: [Oregon Department of Transportation.](#))

Community Engagement

This project has a long history of community engagement that dates back at least a decade. Since its inception in 2015, Albina Vision Trust has engaged thousands of Portland residents to envision and work toward an Albina community that is connected via the I-5 highway cover to the Willamette River. ODOT public outreach efforts in connection with a 2019 environmental assessment included open houses, interviews with members and leaders of the Black community, community events, formation of a community liaisons group, participation in local summer events, briefings and business canvassing. General public outreach has included website updates, news releases, display advertising, social media posts, and print and email newsletters.

During the COVID-19 pandemic, project outreach was limited to virtual formats, including virtual committee meetings, online open houses and workshops, and community and neighborhood Zoom meetings.

Independent Cover Assessment

In response to a directive from the Oregon Transportation Commission, an Independent Cover Assessment conducted “an independent, community-informed process to develop recommendations for a highway cover alternative.” An independent consultant team, in consultation with the community, examined the needs of the stakeholders impacted by the freeway within the Lower Albina community and Rose Quarter area to ensure that the improvements proposed under the plan provided “the greatest potential for restorative justice to Portland’s Black historic Albina community.” This community-led process resulted in the adoption of the current preferred alternative, which was evaluated through the National Environmental Policy Act (NEPA) and approved in March 2024 with a Finding of No Significant Impact.

Equitable Engagement Compensation Policy

Established in 2021, ODOT’s Equitable Engagement Compensation Policy provides tools to address barriers to participation in ODOT-sponsored community engagement activities:

- *Incentives.* Payments made to individuals for one-time meetings and events.
- *Stipends.* Payments made to members of formal advisory committees.
- *Community engagement contracts.* Payments to community-based organizations for specific responsibilities and deliverables.

The I-5 Rose Quarter Improvement Project was among the first to employ these tools. As of March 2024, the project had implemented incentives and stipends and was developing a program to provide community engagement contracts.

Anticipated Project Impacts

Provided below is the survey respondent’s assessment of anticipated project impacts. Responses have been lightly edited for clarity.

Local Economy. Temporary construction impacts to local businesses could result from detours and diversion of traffic and limitations on access. Beneficial impacts of construction spending on materials and local services are expected. ODOT has committed to expanding contracting opportunities for small firms, including Disadvantaged Business Enterprise firms, throughout construction of the project as a part of a jobs creation program for small firms, including those in Portland’s Black community. Eleven commercial retail or service-related businesses would be permanently displaced and relocated.

There are no residential displacements as a result of the project. Increased building capacity on the expanded highway cover could provide suitable conditions for commercial and retail development that could also increase jobs in the study area.

Affordable Housing. The project is consistent with planned land use and would support growth consistent with adopted plans and policies, including the city of Portland N/NE Quadrant Plan, which includes affordable housing.

Displacement. The project would displace and relocate 11 commercial retail or service-related businesses, three landlord-only businesses (properties owned for the sole purpose of leasing), eight to 38 personal-only properties (items not attached to the real property that can be moved, with no need for full relocation) and four outdoor advertising signs. No residential displacements are anticipated. Displaced businesses are not unique to the surrounding community.

All ROW acquisition and relocation activities will be conducted in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (49 Code of Federal Regulations 24), Oregon Revised Statute 35, and the 2018 ODOT Right of Way Manual. Figure 20 identifies estimated ROW impacts.

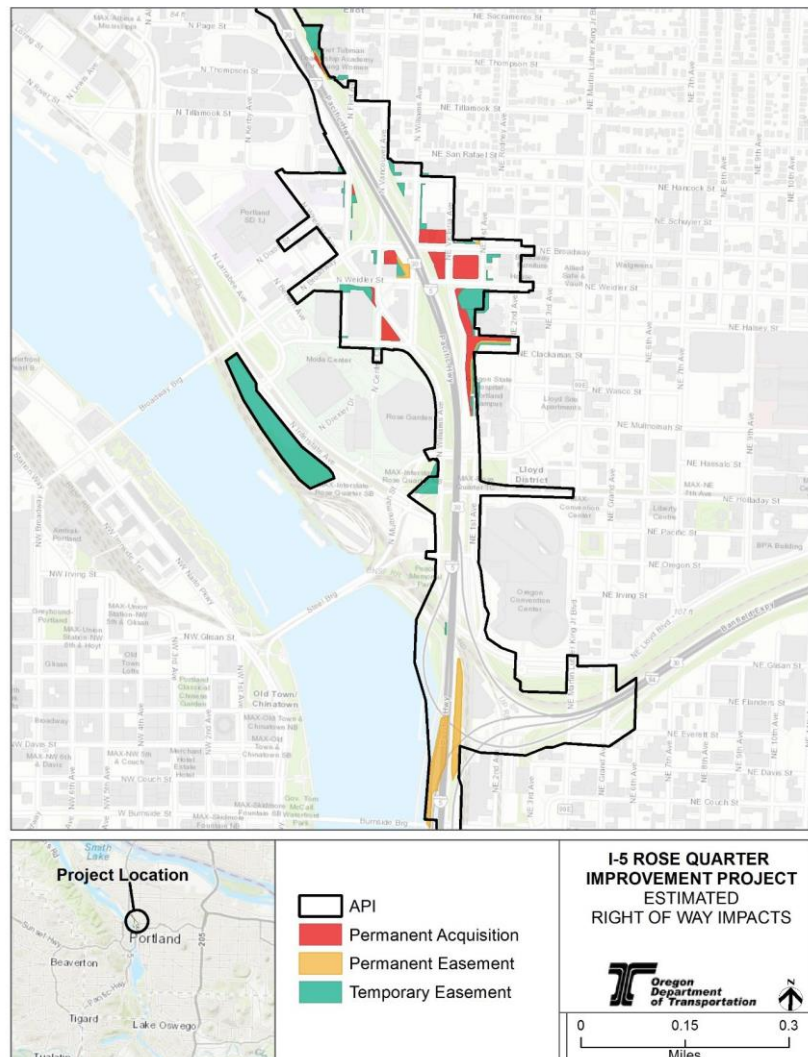


Figure 20. Estimated I-5 Rose Quarter ROW impacts
(Source: Portland Bureau of Transportation and Albina Vision Trust.)

Environment. The project area is heavily urbanized. The project will have no effect on wildlife, wetlands or aquatic resources.

Land Use. The project will convert approximately 2.7 acres of commercial and undeveloped land to transportation ROW. An area of approximately 7.1 acres will be created with the construction of the highway cover, about 4 acres of which will be buildable and could accommodate buildings up to

three stories in the northern portion of the project area and up to six stories on the southern portion.

Parks or Other Public Spaces. The project will not affect parks or other public open spaces.

Transportation. The purpose of the project is to improve the safety and operations on I-5 between I-405 and I-84, at the Broadway/Weidler interchange, and on adjacent surface streets in the vicinity of the Broadway/Weidler interchange, and to enhance multimodal facilities in the project area. The project will improve the pedestrian network with greater separation between motorized vehicles and people walking, biking and rolling at most intersections in the project area.

The project also adds a pedestrian and bicycle bridge across I-5 that connects with the city's Green Loop, a planned route for pedestrians and bicyclists through city neighborhoods on the east and west sides of the Willamette River. The project will have minor effects on transit travel times, depending on time of day and direction of travel. Increased transit ridership could occur with new transit generators (housing and transit-oriented development) on the highway cover. The cover will reconnect a local street (N/NE Hancock) and result in new travel patterns on the local street network with the change to the I-5 off-ramp.

Social Impacts. The highway cover will reestablish connectivity between the neighborhoods of Lower Albina and Lloyd with access across the highway cover and on the reconnected local street, N/NE Hancock, which will support pedestrians, bicyclists and motor vehicles. The new pedestrian and bicycle bridge across I-5 will improve travel for pedestrians and bicyclists by separating them from motor vehicles, improving safety and providing new connections between the neighborhoods of Lower Albina and Lloyd.

Figure 21 illustrates potential highway cover uses.



Figure 21. Potential I-5 Rose Quarter highway cover uses
(Source: Oregon Department of Transportation.)

Project Successes

- *Historic federal funding.* The March 2024 \$450 million RCP grant award for the project is the first federal investment in construction for the project, the largest grant award ODOT has received and the single largest grant awarded through the RCP grant program to date. These funds will be used to complete design and construct the initial, central part of the project's highway cover.
- *Federal environmental approval.* In 2017, project planners began working through the federal environmental review process. In March 2024, FHWA issued a Finding of No Significant Impact for the project, which gives ODOT federal approval to move forward with more detailed project design.
- *Local partnerships.* Local partnerships and community support helped to create a project that will improve the state's transportation system and also contribute to restoring the historic Albina community. Project partners include Oregon's federal congressional delegation, statewide leaders, the city of Portland, Albina Vision Trust, the Portland Trail Blazers and the project's Historic Albina Advisory Board.
- *Addressing negative environmental impacts.* In 2020, ODOT convened a group of national experts to conduct an independent environmental peer review of the project area. This review focused on climate change, air quality and noise impacts and opportunities to mitigate these factors on the project. Reviewers identified several construction practices to reduce impacts that are being incorporated or further evaluated. The project was awarded a 2024 FHWA Environmental Excellence Award that "recognizes ODOT and partners' exemplary achievement in the Community Considerations in Transportation Improvements category."

Project Challenges

Community outreach. As the survey respondent noted, early in project development, planners found it difficult to "pull together a coalition of the project and community partners to unite behind a common vision," and building trust with Albina's historical Black community has been challenging. To address this, ODOT has "asked to be a community partner and advisor that [will] hold the project accountable to the community-identified project values."

Best Practices

- *Use a CM/GC model* to optimize innovation, improve community partnerships and increase economic opportunities for the community. By working together early, the project team can reduce costs, lower risk, save time and help identify important design alternatives ahead of construction.

FHWA's Office of Preconstruction, Construction and Pavements describes the CM/GC method:

The CM/GC project delivery method consists of two phases — design and construction.

When the owner considers the design to be complete, the construction manager then has an opportunity to bid on the project based on the completed design and schedule. If the owner, designer and independent cost estimator agree that the contractor has submitted a fair price, the owner issues a construction contract and the construction manager then becomes the general contractor.

The contractor acts as the consultant during the design process and can offer constructability and pricing feedback on design options and can identify risks based on the contractor's established means and methods. As noted earlier, this process also allows the owner to be an

active participant during the design process and make informed decisions on design options based on the contractor's expertise.

Benefits of the Construction Manager/General Contractor Model

In 2020, ODOT competitively selected a construction manager/general contractor (CM/GC) team to maximize project delivery. Highlighted below are benefits the agency has realized or anticipates from use of this contracting practice:

- *Design*: Project planners received early contractor input that contributed to an optimized schedule, a better understanding of constructability, identification of innovations and value engineering ideas, and effective risk management.
- *Construction*: ODOT expects to gain the additional benefits of a more streamlined construction process tailored to the contractor's own practices. A collaborative approach to addressing the schedule, managing risk, minimizing impacts to businesses and the community, and limiting rework or change orders is expected to contribute to greater efficiency and limit delays.
- *Establish advisory bodies* made up of leaders from the community or communities most impacted by the initial construction of the highway or who will be most impacted by the new construction.
- *Adopt project values* that the community recommends in concert with a formal advisory body to guide project work.

Related Resources

Reconnecting Communities Pilot (RCP) Program Planning Grant Application, Fiscal Year 2022, Portland Bureau of Transportation, City of Portland, Oregon, in Partnership with Albina Vision Trust, October 2022.

https://4273298.fs1.hubspotusercontent-na1.net/hubfs/4273298/Portland_RC_Planning_Grant_Application.pdf

This is the RCP application for the I-5 Rose Quarter Improvement Project.

I-5 Rose Quarter Improvement Project: Revised Supplemental Environmental Assessment, Oregon Department of Transportation and Federal Highway Administration, March 2024.

https://i5rosequarter.org/media/3wj5evj/i5rq_rsea_508.pdf

This environmental assessment evaluates the benefits and impacts of two alternatives: the project moves forward as planned, and the project would not be built (the No-Build Alternative).

"The I-5 Rose Quarter Improvement Project Receives \$450 Million in Federal Grant Funding," I-5 Rose Quarter Improvement Project, Oregon Department of Transportation, 2023.

<https://www.i5rosequarter.org/news/the-i-5-rose-quarter-improvement-project-receives-450-million-in-federal-grant-funding/>

This online news post describes the March 2024 RCP grant award of \$450 million.

“Construction Begins This Summer on I-5 Rose Quarter Improvement Project,” Press Release, I-5 Rose Quarter Improvement Project, Oregon Department of Transportation, January 17, 2025.

<https://content.govdelivery.com/accounts/ORDOT/bulletins/3cd34a6>

This bulletin announces that construction of the highway cover will begin the summer of 2025, along with construction or extension of auxiliary lanes and shoulders.

Flyover + Ramsay Design, I-5 Rose Quarter Improvement Project, Oregon Department of Transportation, October 2023.

https://www.i5rosequarter.org/media/exmp40lt/i5rq_flyover-design_factsheet_v20_remediated.pdf

This fact sheet describes relocation of the I-5 southbound off-ramp that is expected to reroute a significant portion of the I-5 off-ramp traffic to the east of I-5.

Construction Manager/General Contractor (CM/GC), Office of Preconstruction, Construction and Pavements, Federal Highway Administration, March 2021.

<https://www.fhwa.dot.gov/construction/contracts/acm/cmgc.cfm>

This website describes the CM/GC project delivery method.

2.9 Chinatown Stitch

Project Location: Philadelphia, Pennsylvania

Project Type: Freeway cap
Public park and traffic calming

Project Sponsors: City of Philadelphia OTIS
Philadelphia Chinatown Development Corporation

Project Status: Preliminary design and engineering to be completed in 2025

Intended Social Goal: Reimagine the Vine Street corridor to improve neighborhood connections and create equitable mixed-use development opportunities and inclusive mobility options.

Background

Over decades, residents in the Chinatown area of Philadelphia have been displaced and community life has been disrupted by highway construction. While a freeway transformation was proposed as early as 2004, planning was hindered by the lack of funding. The historical context for the Chinatown Stitch project is summarized in Table 3.

Table 3. Historical perspective of the Chinatown Stitch project

Time Period	Activity
Mid-1800s	The Chinatown area in Philadelphia was established in the mid-1800s when Chinese people moved east to escape increasing violence against them in the American West.
1950s	Vine Street is widened, demolishing significant portions of the Chinatown community.

Time Period	Activity
Mid-1960s	As large numbers of families began moving to Chinatown, Pennsylvania Department of Transportation (PennDOT) announced plans for the Vine Street Expressway to serve as a thoroughfare in Philadelphia's city center as part of Interstate 676 (I-676) connecting Interstate 95 to I-676 on either side of the city center. The planned route for the project called for razing the Holy Redeemer Chinese Catholic Church and School, the only school in the community at the time, and the city's Chinese population began work to preserve their community.
1969	Philadelphia Chinatown Development Corporation (PCDC) was established to give community and business leaders a voice in matters of local development.
Late 1980 to Early 1990s	The Vine Street Expressway was constructed. In addition to the community displacement caused by the construction, over 100,000 vehicles a day cause traffic congestion, risks to pedestrians, and noise and air pollution in the Chinatown community.
2003 to 2022	A variety of plans and small-scale projects began to improve community connectivity, placemaking and traffic calming, and to explore the feasibility of a freeway cap.
2011	PennDOT and PCDC collaborated to create the 10th Street Plaza over the Vine Street Expressway on the west side of the 10th Street bridge. The plaza includes an Asian-style pagoda, statues, seating and a sidewalk mural of a koi pond. The intent of the plaza was to provide a crossing from the expressway to the community.
2023	Work on the Chinatown Stitch project over the course of a year culminated in a community vision document that includes a final design concept.

Project Description

The Chinatown Stitch project is currently in the planning phases. The project, also described as *Reconnecting Our Chinatown: Reclaiming Philadelphia's Vine Street Expressway (I-676)*, envisions a two-and-a-half block freeway cap covering the existing below-grade Vine Street Expressway between 10th and 13th streets. The project will include a public park, traffic-calming measures along the local Vine Street and connection to the Reading Viaduct rail-trail.

The Chinatown Stitch project seeks to:

- Provide an inviting public green space.
- Create a safe street design that extends Chinatown's character.
- Prioritize the needs of youth, the elderly and those with disabilities.
- Include public buildings and businesses that serve community needs.

Formal planning began in spring 2023. OTIS and PCDC composed the project team and led an initial study, working with PennDOT, other city departments, Delaware Valley Regional Planning Commission (DVRPC) and a large group of community stakeholders to develop the plan's vision:

Reimagine the Vine Street corridor to improve neighborhood connections [and] create equitable mixed-use development opportunities and inclusive mobility options.

Figures 22 and 23 provide renderings of the preferred two-block cap design concept.



Figure 22. Preferred Chinatown Stitch design concept: Rendering of the proposed conditions of the two-block cap design concept

(Source: [City of Philadelphia](https://www.cityofphila.gov), Pennsylvania.)

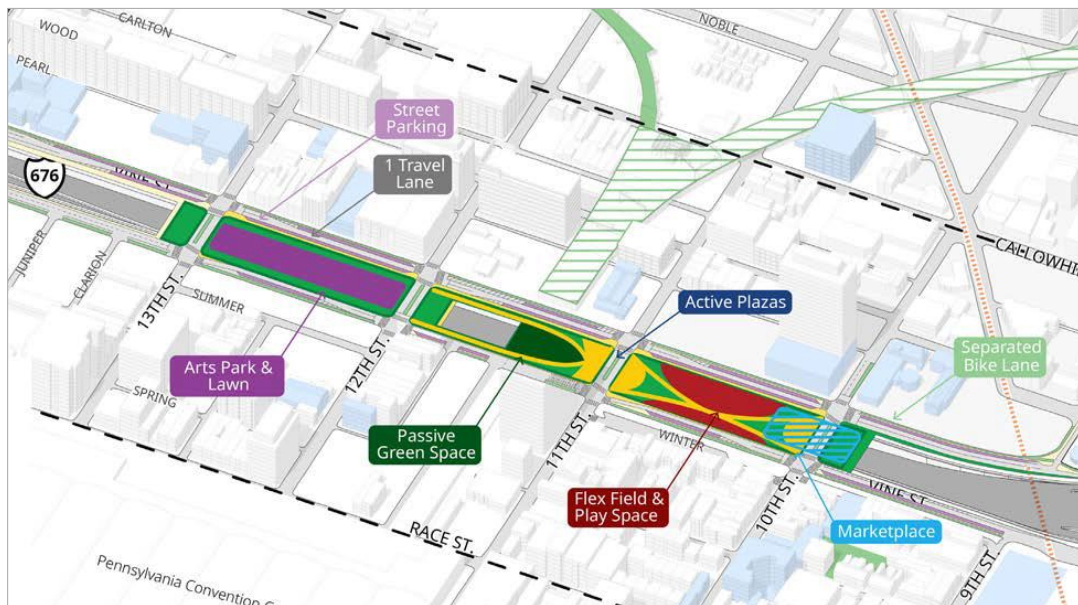


Figure 23. Preferred Chinatown Stitch design concept: Traffic-calming and streetscape improvements to local lanes

(Source: [City of Philadelphia](https://www.cityofphila.gov), Pennsylvania.)

The project team explored local and national examples of freeway caps and streetscapes and developed a conceptual vision, all with community involvement offered through several public engagement opportunities. In December 2023, the project team presented the community with a final vision document that includes a preferred design concept.

The preliminary design and engineering work that occurred throughout 2024 and will continue through 2025 includes consideration of uses and design of amenities, structures and traffic-calming measures. Construction is anticipated to begin in 2028 and be mostly complete by 2031.

The public street ROW in the Chinatown Stitch project area is 190 to 200 feet wide. The sponsoring agency required no relinquishment of interstate or freeway property.

Project Funding

In 2022, the OTIS-PCDC partnership received an RCP planning grant of \$1.8 million to study and define an economically feasible plan that meets community needs. To fully fund the \$4 million planning project cost, matching funds totaling \$2.2 million were provided by the city of Philadelphia, PennDOT, the John S. and James L. Knight Foundation and private local donors.

In March 2024, the project team received a \$158.9 million Neighborhood Access and Equity (NAE) grant under the federal Inflation Reduction Act. These grant funds, the NAE program's largest single award to date, will be used for final design and implementation of the Chinatown Stitch project.

Because the project is still in the planning phase, the project team has yet to identify revenue-generating uses or value capture strategies, but the intent is to use a combination of both to fund maintenance and operations of the facilities constructed on the freeway cap.

Intended Social Remedies

The project aims to create a more connected, equitable and vibrant neighborhood for all residents while reducing barriers to opportunity and improving racial equity throughout the project area.

The Chinatown Stitch study team developed an equity vision for the project:

The Chinatown Stitch will reconnect Chinatown, reduce the negative impacts of the Vine Street Expressway and local lanes and provide [green space]. The Chinatown Stitch will be implemented with complimentary policies and projects to ensure that the project enhances the cultural character of Chinatown as a work live immigrant community, deepen[s] its social cohesion through programming, reserves city owned land to increase affordable housing, does not directly or indirectly displace residents and small businesses, [or] weaken the cultural identity, and will be a well maintained community asset in the vision of the neighborhood plan for decades to come.

Community Engagement

The Chinatown Stitch project builds on previous studies undertaken by the city of Philadelphia, PennDOT, DVRPC and PCDC. PCDC leverages its community network — responding to the historical and ongoing disadvantages faced by the community — to gather meaningful input and inform all project activities to prioritize the needs of economically disadvantaged community members and ensure policies and implementation have an equity focus.

The city of Philadelphia is also working with PCDC to complete an Equitable Outcomes Action Plan (EOA Plan) to ensure equitable distribution of benefits, mitigation of impacts, and affordability of housing and businesses in neighborhoods surrounding the Vine Street Expressway.

Throughout the project's planning phase, effective, inclusive and meaningful public engagement tools and strategies were used so that all audiences had an opportunity to be involved in the decision-making process:

- Capacity-building workshops conducted by PCDC empowered Chinatown residents to engage in the project, overcome language and cultural barriers, and foster inclusive community interaction with decision-makers.
- Plain language used in all communications and the availability of interpretation and translation services contributed to meaningful participation by impacted residents. Written materials are available in Simplified Chinese, Traditional Chinese and English. Cantonese and Mandarin interpretation was provided at in-person events.
- Outreach methods such as websites, social media campaigns, mailings and emails, press releases and media alerts communicated project information.
- Direct contact activities that included an online and in-person survey, 22 community workshops, two community visioning workshops, pop-up events and canvassing of business owners provided multiple and diverse opportunities for the community to engage.

In addition to engaging with Chinatown residents, business owners and the wider community, the project team engages with PennDOT; study stakeholders, including DVRPC, Southeastern Pennsylvania Transportation Authority and New Jersey Transit; elected officials; and the Greater Philadelphia community.

During the visioning process, the project team formed four committees:

- *Steering Committee*: Agency leaders and public officials worked to ensure goals were met, coordinated resource allocations and helped overcome barriers.
- *Technical Committee*: Government agencies and technical professionals identified risks and structural feasibility issues, and consulted on design issues, technical and economic analyses and equity goals.
- *Community Collaboration Committee*: Representatives of the Chinatown community and surrounding neighborhoods shared the best ways to communicate with the community to ensure diversity, equity and inclusion, and assisted in identifying community priorities for the project.
- *PCDC Chinatown Advisory Group*: Community representatives, including residents, businesses, institutions, workers and property owners, provided a safe space for stakeholders to have conversations about expectations, priorities and strategies, and helped build consensus.

The community engagement process revealed the two most important goals for the project are to improve the pedestrian environment — including biking — and to add green space and public plazas. Another identified priority, particularly among business owners, is to minimize construction duration and impact, and ensure that parking needs are met.

Figures 24 and 25 provide a before-and-after representation of the project area.



Figure 24. Aerial view of Chinatown Stitch project area as it appears today
 (Source: [City of Philadelphia](#), Pennsylvania.)

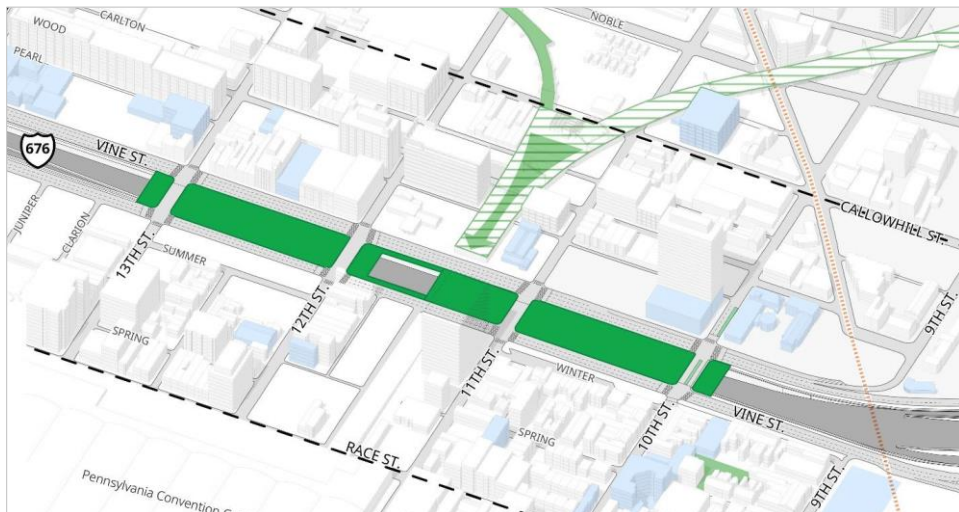


Figure 25. Aerial view of Chinatown Stitch project area with proposed cap
 (Source: [City of Philadelphia](#), Pennsylvania.)

Project Impacts

While the Chinatown Stitch project is still in the planning and design phase, the survey respondent described anticipated project impacts:

Environment and Land Use. Environmental justice is a pressing issue in Chinatown due to its proximity to the Vine Street Expressway. The U.S. Environmental Protection Agency's EJSCREEN report indicates that Chinatown residents face higher levels of particulate matter and diesel pollution than 99% of Pennsylvania residents. The neighborhood's limited green space, combined with high pedestrian activity, exacerbates risks from hazardous air pollution and vehicle traffic.

The Chinatown Stitch Project seeks to address these challenges by creating green spaces, improving pedestrian and bicycle infrastructure, and calming traffic. The project aligns with the Philadelphia

Office of Sustainability's Climate Action Playbook, which aims to significantly reduce greenhouse gas emissions. DVRPC reports that Greater Philadelphia's per capita emissions are 38% below the national average. By planting trees and enhancing infrastructure for active commuting, the project will contribute to further emissions reductions and promote climate resilience.

Local Economy and Affordable Housing. The project aims to strengthen Chinatown's social cohesion by promoting equity through reserving city-owned land for affordable housing and maintaining the area as a community asset. Key objectives, to be addressed in the EOA Plan, are intended to manage neighborhood change by stabilizing the community through enhancing opportunities for low-income residents through various initiatives:

- Community wealth-building and job creation.
- Preventing displacement.
- Protecting small businesses.
- Ensuring equitable project procurement.
- Fostering community stewardship.

Project Successes

- *Outreach.* An entire year of community engagement and planning, conducted during 2023, was effective in determining whether the community wanted a freeway cap and identifying preferences for uses of the new development.
- *Local partnerships.* PCDC was a trusted community partner to the city of Philadelphia to ensure extensive outreach to the underrepresented, including those with limited English proficiency, seniors and residents with limited internet access. The result was a community-generated vision that lays a strong foundation for the project.

Project Challenges

Administration. The primary challenge to date has been the time required to complete the grant and intergovernmental agreements to permit the use of funds.

Related Resources

The Chinatown Stitch: Reconnecting Philadelphia to Vine Street, City of Philadelphia, undated.
<https://www.phila.gov/programs/complete-streets/projects/the-chinatown-stitch-reconnecting-philadelphia-to-vine-street/>

The city of Philadelphia's Chinatown Stitch project website provides updates and links to project materials and documents.

Chinatown Stitch: Reconnecting Philadelphia's Vine Street Vision Report, City of Philadelphia and Philadelphia Chinatown Development Corporation, December 19, 2023.
<https://www.phila.gov/media/20231219094529/Chinatown-Stitch-Vision-Report-December-2023.pdf>

This report details the development of project concepts including the public engagement process and local lane alternatives.

Chinatown Stitch Project Materials, City of Philadelphia, December 19, 2023.

<https://www.phila.gov/documents/chinatown-stitch-project-materials/>

This website provides access to press briefings, design concepts and public meeting materials in Chinese and English.

Philadelphia Chinatown Development Corporation, 2025.

<https://chinatown-pcdc.org/>

This website for a Chinatown Stitch project cosponsor provides Philadelphia Chinatown history and information about efforts to prevent gentrification.

“City of Philadelphia Awarded \$158.9M U.S. DOT Grant for Chinatown Stitch Project,” Press Release, City of Philadelphia, March 11, 2024.

<https://www.phila.gov/2024-04-04-city-of-philadelphia-awarded-158-9m-u-s-dot-grant-for-chinatown-stitch-project/>

This press release announces the awarding of an NAE grant to the city of Philadelphia and PCDC to fund the final design and implementation of the Chinatown Stitch project.

2.10 Klyde Warren Park

Project Location: Dallas, Texas

Project Type: Freeway depression and cap

Project Sponsors: Texas Department of Transportation
City of Dallas

Project Status: Completed in 2012

Intended Social Goal: Restore direct access from uptown neighborhoods to downtown Dallas and provide a gathering place for surrounding communities of all backgrounds.

Background

Woodall Rodgers Freeway, named after a former Dallas mayor, was completed in 1962 to connect west Dallas to Interstate 35 East (I-35E) and U.S. Highway 75 (North Central Expressway). The new freeway cut through Freedman’s Town, originally populated by emancipated slaves after the Civil War and a thriving community prior to freeway construction, displacing many residents and cutting others off from access to downtown Dallas.

Project Description

After a decade of planning, design, fundraising and construction, Klyde Warren Park opened in 2012. This 5.2-acre park, built atop the recessed Woodall Rodgers Freeway, bridges the downtown Dallas cultural district with mixed-use neighborhoods on the city’s north side. Owned by the city of Dallas and operated and managed by the private Woodall Rodgers Park Foundation, the park is walkable to and from the city center, and includes a lawn and games area, performance pavilion, dog park, children’s park, fountain plaza and reading room.

Project Funding

The total project cost of \$112 million was funded through a public/private partnership that received funding from multiple sources:

- Federal stimulus funds (American Recovery and Reinvestment Act): \$16.7 million.
- Texas DOT (TxDOT) highway funds: \$20 million.
- City of Dallas bond funds: \$20 million.

The balance of funding was provided by individual donors directly to the Woodall Rodgers Park Foundation.

In March 2024, NCTCOG and TxDOT received a U.S. DOT NAE grant for Phase II of the Klyde Warren Park project, which will add 1.7 acres to the park for a pavilion, open-air market and festival staging area, indoor/outdoor entertainment areas and additional green space and multimodal transportation access. Figure 26 provides a current view of Klyde Warren Park.



Figure 26. Aerial view of Klyde Warren Park
(Source: [North Central Texas Council of Governments.](#))

Intended Social Remedies

The construction of Klyde Warren Park provides a place for social connection, increasing foot traffic and walkability of the Dallas city center. While Klyde Warren Park has not restored the Freedman's Town community that existed in the area prior to the highway's construction, the survey respondent noted that NCTCOG continues to work toward social equity and sustainable development.

Project Impacts

The Klyde Warren Park project resulted in significant economic and environmental benefits, and provided new recreational and transportation amenities.

Environment. The park incorporates solar and geothermal energy for park buildings and stormwater reclamation, reducing stormwater drainage by over 64,000 gallons annually. Native plants and trees capture an estimated 18,500 pounds of carbon dioxide annually. Additionally, the resulting density of the development around the park leads to a reduction in driving and vehicle miles traveled.

Land Use. The project is encouraging higher density infill development.

Local Economy. Between 2012 and 2015, rents of commercial properties adjacent to the park have increased between 32% and 64%. An October 2022 *Urban Land* article noted that “[o]ver the past decade, the value of the surrounding real estate has increased by \$4.1 billion, generating about \$525 million in tax revenue. That money will now benefit the city as well as the local school district, roads and other parks.”

Parks or Other Public Spaces. Klyde Warren Park is a cultural hub where pedestrians have access to a variety of recreation, performance and gathering spaces (see Figure 27).



Figure 27. Street-level view of Klyde Warren Park amenities
(Source: [Klyde Warren Park.](#))

Social Impacts. The freeway cap has improved the walkability of adjacent communities and has encouraged infill development and bike and pedestrian activity.

Transportation. Several transit and light rail stations are near the public park. A parking garage will accommodate special events in the park.

Project Successes

Encouraging more freeway caps. While the NCTCOG survey respondent noted a general reluctance toward freeway caps in the state, the overall success of Klyde Warren Park and nearby Southern Gateway Park, a similar freeway cap over I-35E that supports a community park, led to four more freeway transformation projects in Dallas.

In addition to the second phase of Klyde Warren Park, three additional projects in the Dallas area will share an \$80 million U.S. DOT NAE grant awarded to TxDOT and NCTCOG. These projects include the second phase of Southern Gateway Park, which will expand the current park deck to more than 5 acres over I-35E and “create a festival stage area, a pavilion, multiuse and open green space, interactive water features, a bicycle/pedestrian bridge with direct access to the Dallas Zoo and additional multimodal transportation access.” The two other projects receiving grant funding will create pedestrian caps over Interstate Highway 30 and State Highway 5.

Project Challenges

Buy-in. The survey respondent noted a general reluctance toward freeway caps in the state that seems to have been overcome by the success of recent freeway transformation projects.

Best Practices

A U.S. DOT case study of Klyde Warren Park offered these lessons learned:

- *Get the funding mix right.* Several groups funded the project, which provided a “solid foundation of support and also led to a need to balance competing interest[s].”
 - *Meet challenges head on.* Project managers dealt with a range of engineering challenges, including climate, the weight of park greenery and a significant land slope.
 - *Anticipate changes to policy.* New national and state highway regulations adopted while construction was underway introduced challenges. These “unforeseen obstacles were balanced with new municipal regulations.”
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Related Resources

1962: Construction of Woodall Rodgers is Completed Through Freedman’s Town, Southern Methodist University, undated.

<https://blog.smu.edu/engagedallas/resource-library/history-of-south-dallas/1962-construction-of-woodall-rodgers-is-completed-through-freedmans-town/>

This blog, a product of Southern Methodist University’s “Engage Dallas” place-based community engagement initiative, tells the story of the Woodall Rodgers Freeway construction in 1962.

USDOT Ladders of Opportunity Every Place Counts Design Challenge: Case Study: Klyde Warren Park, Dallas, Texas, U.S. Department of Transportation, undated.

<https://www.cnu.org/sites/default/files/Spokane%20Case%20Study%204%20-%20Dallas.pdf>

This four-page project description includes photos and a summary of challenges and lessons learned.

Klyde Warren Park: The Town Square of Dallas, Klyde Warren Park, 2024.

<https://www.klydewarrenpark.org/>

The park’s web page includes calendars, maps, things to do and a brief history.

“Highway Removals: Communities Reunite, Breaking Down Barriers, and Righting Wrongs of the Past,” Karen Jordan, *Urban Land*, October 24, 2022.

<https://urbanland.uli.org/sustainability/highway-removals-communities-reunite-breaking-down-barriers-and-righting-wrongs-of-the-past>

This newsletter article includes a brief discussion of the impacts of the Klyde Warren Park project.

“Take a Look: Renderings Released for Klyde Warren Park 2.0,” Bianca R. Montes, *D Magazine*, October 15, 2019.

<https://www.dmagazine.com/business-economy/2019/10/plans-unveiled-for-expansion-of-klyde-warren-park/>

Phase II of Klyde Warren Park development is described in this online article, including funding mechanisms and economic impacts of the park to date.

“How Klyde Warren Park Has Changed Dallas Real Estate,” Christine Perez, *D Magazine*, August 20, 2015.

<https://www.dmagazine.com/publications/d-ceo/2015/september/how-klyde-warren-park-has-changed-downtown-uptown-dallas-real-estate/>

This online article describes how Klyde Warren Park has driven up real estate values in Dallas’ uptown and downtown areas and summarizes surrounding development projects in the planning stages at the time of publication.

Southern Gateway Park, Southern Gateway Public Green Foundation, undated.

<https://www.southerngatewaypark.org/>

This website describes the history and progress of the pedestrian cap construction and an Equitable Development Plan, the result of stakeholder engagement to create an inclusive, functional and welcoming space reflective of surrounding neighborhoods.

“Neighborhood Access and Equity Grant Program Awards NCTCOG \$80 Million,” Press Release, North Central Texas Council of Governments, March 13, 2024.

<https://www.nctcog.org/trans/about/news/neighborhood-access-and-equity-grant-program-awards-nctcog-80-million>

This press release announces the awarding of an NAE grant from the U.S. DOT to NCTCOG in partnership with TxDOT for the second phase of the Klyde Warren Park project. The grant also provides funding for three additional pedestrian freeway cap projects in the area.

2.11 Reconnect South Park

Project Location: Seattle, Washington

Project Type: To be determined

Project Sponsor: City of Seattle Office of Planning and Community Development

Project Status: Initial planning stages; community-selected design anticipated in June 2025

Intended Social Goal: Improve mobility, health, economic opportunity, environmental quality and well-being of South Park residents, a largely minority community.

Background

Washington State Route (SR) 99 cuts through the South Park neighborhood in the Duwamish Valley, 5 miles south of downtown Seattle. Originally home to the Duwamish Tribe, white settlers and migrant communities began to inhabit the area in the 1850s. Agricultural clearing inadvertently led to flooding and city officials decided to deepen and straighten the river channel in 1913.

Increased waterway access facilitated industrialization of the neighborhood, which had become largely immigrants and communities of color. Redlining lending practices discouraged home buying and other investments. In 1958, SR 99 was moved from South Park’s eastern border to cut straight through the South Park neighborhood, adding to the disruption and environmental degradation from over a century of industrialization.

Project Description

The survey respondent described Reconnect South Park as an environmental justice initiative to address the negative impacts caused by the construction of SR 99 through the heart of the South Park

neighborhood. The project is in the study phase. Seattle's OPCD recently formed a technical team to analyze impacts from each potential change scenario that will be included in a 2025 community vision plan.

A variety of freeway solutions are being considered in these early stages of community decision-making. An equitable development strategy to prevent displacement and build community wealth consistent with the project goals will also be developed. While supporting environmental justice for the impacted community is key for this project, OPCD recognizes that any changes to the highway will need to be agreed to — or not strongly opposed by — industry and other stakeholders.

Figure 28 provides a map of potential locations for traffic calming and the primary focus area for the project.

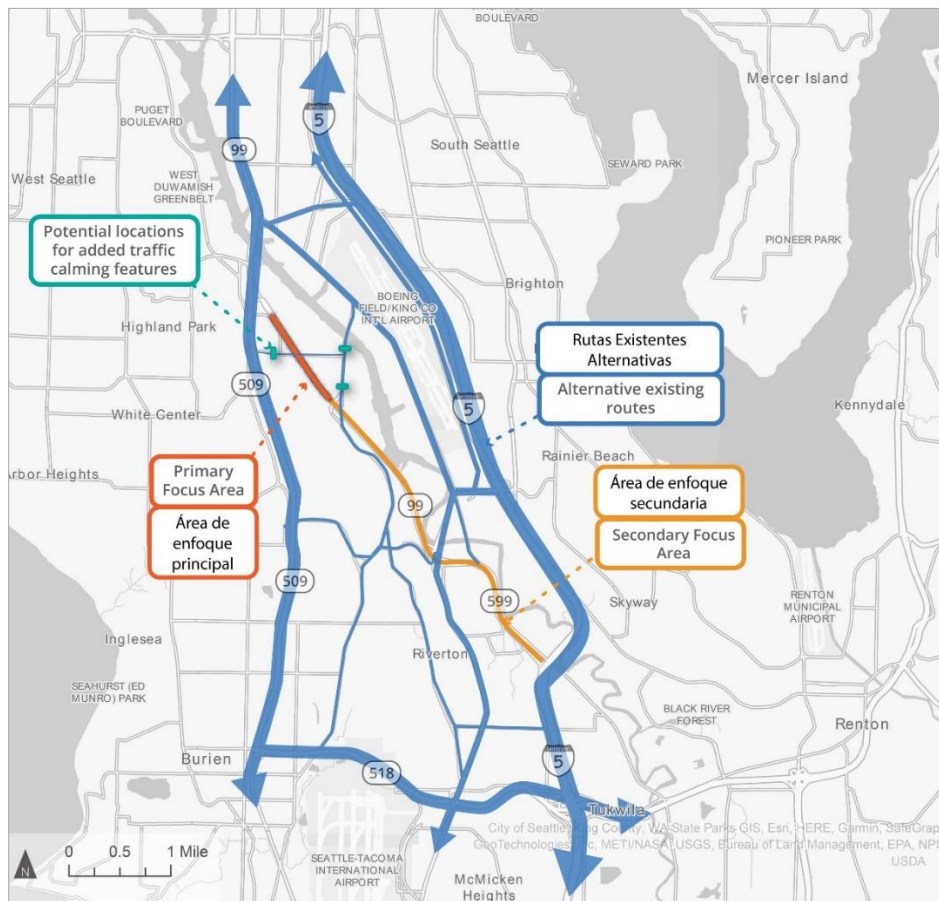


Figure 28. Map of the proposed area for redevelopment of SR 99 and the South Park neighborhood

(Source: [Reconnect South Park Coalition](#).)

Project Funding

Total cost for the project is currently estimated at \$2.8 million. In 2022, Seattle DOT received a \$1.6 million RCP program grant to support a planning study that includes technical studies and community visioning for removing or restructuring SR 99. The Washington State Legislature provided \$600,000 to study options for the project area.

Intended Social Remedies

A wide range of environmental and economic impacts to South Park communities resulted from changes over the past century. The Reconnect South Park project will work to develop community-supported and technically sound strategies for improved mobility, health, economic opportunity, environmental quality and well-being of neighborhood residents.

Community Engagement

The Reconnect South Park Coalition was formed in 2022 as “a diverse group of community leaders, composed of organizers, storytellers, artists and designers, with the mission of engaging Duwamish Valley communities in re-envisioning State Route 99.”

Seattle OPCD started early advocacy for the project in 2022. Outreach focused on educating the neighborhood about potential change scenarios and using community organizing to build residents’ capacities to lead the transformation themselves. Engagement throughout the first half of 2025 will focus on sharing analyzed impacts of scenarios and soliciting community feedback about their preferred option. A community-selected design for reconnecting South Park is anticipated in June 2025.

Figure 29 shows a scale model of the project area partners are seeking to reconnect.



Figure 29. Scale model of the South Park neighborhood

(Source: [City of Seattle](#), Washington.)

Project Successes

- *Community outreach.* OPCD recognizes that engaging with the community may slow the pace of the project, but believes that a more authentic and transformational impact will result when the community is engaged.
- *Local partnerships.* Project developers reported success in supporting the development of a community coalition and growing community awareness about the legacy of SR 99 and residents’ ability to choose a different future.

Project Challenges

Building trust. The most significant challenge to date centers on building trust with local communities and agencies that have come to take the highway for granted and fear potential change.

Best Practices

- *Working with communities:*
 - Actively engage both proponents and opponents to explore multiple pathways and build common denominators that can advance a community-chosen outcome.
 - Build trust by creating relationships and processes to allow stakeholders to explore alternatives and overcome reflexive opposition to — or fear of — changing the status quo.
 - Leverage existing forums to avoid extra burden on residents.
 - Meet communities where they are and understand what they may have already shared regarding priorities.
 - Reserve resources to pay community members for their contributions (e.g., gift cards) and provide childcare and food at events to minimize the burden of participation.
- *Working with other agency partners.* Prioritize interagency coordination at city, regional and state levels from the outset of a project to ensure partners are aware of and invested in the project and potential changes. A great success for OPCD to date has been the partnership with Washington State DOT and that agency's increased understanding of — and support for — the importance of studying mitigation of highway impacts on communities.
- *Limiting costs:*
 - Work with community-based organizations.
 - Encourage design and planning firms to contribute staff time pro bono or at discounted rates.
 - Organize and rely on volunteers and community capacity.
- *Limiting delays.* Look ahead to ensure an adequate understanding of procurement processes. Federal contracting requirements are time-intensive and can limit participation at the local level.

Related Resources

Reconnect South Park, Seattle Office of Planning and Community Development, undated.

<https://www.seattle.gov/opcd/current-projects/reconnect-south-park>

This website provides project focus, background, timeline and documents, and explains how to get involved.

Reconnect South Park, Reconnect South Park Coalition, undated.

<https://reconnectsouthpark.org/>

This coalition website details the past and present of South Park, including history, objectives and alternative futures. Opportunities for involvement and an online survey link are provided.

3 Findings from the Literature

To supplement survey findings, a literature search of publicly available domestic resources identified the publications and other resources presented below in the following topic areas:

- Possible funding sources.
- Program or project assessment.
- Support for highway removal.
- Impacts of highway removal.

Resources are further categorized within each topic area as national, state or nonprofit/advocate resources.

3.1 Possible Funding Sources

National Resources

Reconnecting Communities Pilot (RCP) Grant Program, U.S. Department of Transportation, September 2023.

<https://www.transportation.gov/reconnecting>

From the website: The Bipartisan Infrastructure Law (BIL) established the new Reconnecting Communities Pilot (RCP) discretionary grant program, funded with \$1 billion over the next [five] years.

It is the first-ever [f]ederal program dedicated to reconnecting communities that were previously cut off from economic opportunities by transportation infrastructure. Funding supports planning grants and capital construction grants, as well as technical assistance, to restore community connectivity through the removal, retrofit, mitigation or replacement of eligible transportation infrastructure facilities.

State Resources: California

Reconnecting Communities: Highways to Boulevards; Converting Underutilized Highways to Restore Community Connectivity, California Department of Transportation, 2025.

<https://dot.ca.gov/programs/local-assistance/fed-and-state-programs/rc-h2b>

From the website: In response to the adoption of Streets [and] Highways Code 104.3, the California Department of Transportation (Caltrans) is launching the Reconnecting Communities: Highways to Boulevards (RC:H2B) Pilot Program. The program was established to plan for and fund the conversion of key underutilized highways in the [s]tate into multi-modal corridors to reconnect communities divided by transportation infrastructure. The historical harm will be addressed through community-based transportation planning, design, demolition and/or reconstruction of city streets, parks or other infrastructure.

3.2 Program or Project Assessment

National Resources

Highway Infrastructure: Better Alignment with Leading Practices Would Improve DOT's Reconnecting Communities Pilot Program, Report to Congressional Committees, U.S. Government Accountability Office, May 2023.

<https://www.gao.gov/assets/gao-23-105575.pdf>

From the introduction: Federal funding helped build a national network of highways, producing economic and mobility benefits. But some of these highways divided neighborhoods. The Infrastructure Investment and Jobs Act enacted in 2021 required DOT to establish the Reconnecting Communities Pilot program to “restore community connectivity” through activities such as highway removal or capping. The act and House Report 117-99 included provisions for GAO to review aspects of federally funded highway removal and capping projects.

This report addresses: (1) highway removal and capping projects that received federal funds from 2012 through 2021; (2) key considerations for effective planning of selected projects; and (3) how the Reconnecting Communities Pilot program aligns with leading practices.

Nonprofit/Advocate Resources

“Highway Removals: Communities Reunite, Breaking Down Barriers and Righting Wrongs of the Past,”

Karen Jordan, *Urban Land*, October 24, 2022.

<https://urbanland.uli.org/sustainability/highway-removals-communities-reunite-breaking-down-barriers-and-righting-wrongs-of-the-past>

This article discusses several highway removal projects, including:

- Woodall Rodgers Freeway, Dallas — Klyde Warren Park.
- Southern Gateway Park, Oak Cliff.
- 1-35 Capital Express Central Project.
- Boston Central Artery/Tunnel Project (Big Dig).
- ReConnect Rondo.

Highways and Health: Reimagining Our Roadways (Webinar Takeaways), Auyon J. Ghosh, Rockefeller Institute of Government, August 4, 2022.

<https://rockinst.org/blog/highways-health-reimagining-our-roadways-webinar-takeaways/>

This article summarizes the webinar “Highways and Health: Reimagining Our Roadways.” The webinar is available at the bottom of the web page.

“Eight Completed Highway Removals Tell the Story of a Movement,” Lauren Mayer, *Public Square: A CNU Journal*, Congress for the New Urbanism, May 31, 2022.

<https://www.cnu.org/publicsquare/2022/05/31/eight-completed-highway-removals-tell-story-movement>

From the article:

The Highways to Boulevards movement has been advocating for freeway removal for decades and has had success in the US and worldwide. The eight highway transformation[s] featured below illustrate the historical precedent of these projects and the potential impacts and benefits of removing highways from cities.

The article provides brief descriptions of projects in the United States, Canada and abroad:

- Riverfront Parkway, Chattanooga, Tennessee.
- Mandela Parkway, Oakland, California.
- Harbor Dr., Portland, Oregon.
- I-490 Inner Loop, Rochester, New York.
- Embarcadero Freeway, San Francisco.
- Big Dig, Boston, Massachusetts.

- Chonggye Freeway, Seoul, South Korea.
- Bonaventure Expressway, Montreal, Quebec, Canada.

Freeways Without Futures, Congress for the New Urbanism, 2019.

https://www.cnu.org/sites/default/files/FreewaysWithoutFutures_2019.pdf

From the introduction: Freeways Without Futures 2019 is the tale of [10] 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?

“Put a Park On It: How Freeway Caps are Reconnecting and Greening Divided Cities,” Douglas Houston and Michelle Zuniga, *Cities*, Vol. 85, pages 98-109, February 2019.

Citation at <http://dx.doi.org/10.1016/j.cities.2018.08.007>

From the abstract: The international green infrastructure literature has examined rails-to-trails and freeway-to-boulevard conversions, but these strategies can be impractical or politically unfeasible. An understudied movement among United States cities has demonstrated a strategy for greening freeways that remain in service: freeway cap parks, or decks with parks built in the air space directly above below-grade freeway sections that can help reintegrate communities, conceal traffic, reduce air pollution and provide green space. We provide the first assessment of the design, function and placement of freeway cap parks and assess the emerging sustainability discourse of cap park planning. We examine 18 completed and [nine] proposed cap parks in 24 U.S. cities to identify four cap park development models that can be adapted worldwide to green below-grade freeway segments and reconnect communities. Given historical disparities in freeway placement, we examined the distribution of cap parks and found they are located in areas that could help address disparities in park access in freeways corridors. Our detailed case studies stress the struggle within the cap park sustainability discourse to balance economic, environmental, and equity concerns. Dallas’ Klyde Warren Park is an economic success story, but illustrates how developers use cap parks to sideline equity concerns. Denver’s proposed I-70 cap park illustrates strategies to mitigate environmental justice impacts of freeway expansion projects, but equity concerns remain given continuing impacts of the expanded freeway system. Cap parks should be embraced as a vital component of green infrastructure that reconnects and greens cities divided by freeway construction, but planners should take strong steps to address housing affordability and gentrification concerns for adjacent communities.

Rethinking Highways in American Cities, Peter J. Park, Congress for the New Urbanism, July 2013.

https://itdp.org/wp-content/uploads/2019/12/rethinking_highways-cnu.pdf

From the abstract: Since 2005, the Congress for the New Urbanism’s [CNU’s] Highways-to-Boulevards initiative has argued that replacing urban freeways with surface streets, boulevards and avenues is the most cost-effective, sustainable option for cities with aging grade separated roads. Since the West Side Highway was removed in 1977, CNU has tracked nearly 115 freeway candidates, more than 25 active removal campaigns, and [10] successful removal efforts. The increase in removal candidates and active campaigns has repositioned urban freeway removal not as an experiment, but as a growing trend for communities seeking solutions for aging infrastructure reaching the end of its design life. In “Rethinking Highways in American Cities: New Opportunities for Leadership,” Peter J. Park considers the obstacles that face urban freeway removal efforts. He documents the historical evolution of freeway construction and its devastating effects on urban neighborhoods. Park then considers the financial and political dynamics that made building or (rebuilding) highways in cities a de facto standard. Park also illustrates

the opportunities to re-connect urban neighborhood transportation networks through technical improvements to the standard transportation planning process and a call for visionary leadership.

Related Resources:

Highways to Boulevards: A Fact Sheet, Congress for the New Urbanism, undated.

https://www.cnu.org/sites/default/files/CNU%20Highways%20to%20Boulevards%20Fact%20Sheet%202020_0.pdf

This fact sheet discusses the highway-to-boulevard movement including its history, benefits and recent developments.

Highways to Boulevards Resources, Congress for the New Urbanism, undated.

<https://www.cnu.org/our-projects/highways-boulevards/resources>

This web page provides links to videos, academic research, reports, books and articles on highway-to-boulevard conversions.

Completed Highways to Boulevards Projects, Congress for the New Urbanism, undated.

<https://www.cnu.org/our-projects/highways-boulevards/completed-h2b-projects>

This web page highlights 18 completed highway-to-boulevard projects.

Rethinking the Urban Freeway: Options for Rebuilding, Replacing, Altering or Otherwise Addressing Aging Freeways, Mary Ebeling, Mayors Innovation Project, November 2013.

<https://highroad.wisc.edu/wp-content/uploads/sites/1368/2020/04/2013-Rethinking-the-Urban-Freeway.pdf>

From the conclusion: With challenges come opportunities. The costs of reconstruction and/or repair of an urban freeway often provide a disincentive to rebuilding an aging freeway. Most freeways were initially constructed with 90% of the design and construction costs covered by the federal government, a fact that made the decision to construct a freeway seem simple. The current economic climate and reductions in federal funding assistance is motivating a closer assessment of the costs and benefits of reconstructing these freeways. The realization that a city and state simply cannot afford to replace an aging urban freeway can spark discussions on how to balance regional transportation needs and community goals for economic development, greater social equity, [and] improved environmental outcomes, to name a few. As the number of freeways that cities have successfully removed and replaced with infrastructure that is less damaging to the urban environment increases, other cities have more success stories and best practices to look to.

3.3 Support for Highway Removal

National Resources

Past, Present and Future of Reconnecting Communities, U.S. Department of Transportation, February 2023.

<https://storymaps.arcgis.com/stories/dc61e3bcecd44464b4bfef8299d9d6ce>

This storymap of the RCP grant program provides the “historic context and need for this pilot, and the future we seek to establish through reconnection and restoration of communities.” Tabs in the storymap include spotlight communities, the national story and the future.

U.S. DOT Ladders of Opportunity: Every Place Counts Design Challenge; Summary Report, U.S. Department of Transportation, May 2018.

<https://reconnectrondo.com/wp-content/uploads/2021/01/U.S.-DOT-Ladders-of-Opportunity.pdf>

From the executive summary: In July 2016, U.S. DOT hosted Every Place Counts Design Challenge visioning workshops in four cities to engage directly with neighborhoods adjacent to planned or existing transportation infrastructure projects. These workshops convened federal advisors, state agencies, local officials, community organizations and neighborhood residents to explore design and policy approaches to creating connected, economically prosperous, and environmentally and physically healthy communities.

Nonprofit/Advocate Resources

Transportation Transformations: How Highway Conversions Can Pave the Way for More Inclusive and Resilient Places, Urban Land Institute, 2023.

<https://knowledge.uli.org/-/media/files/research-reports/2023/uli-transportation-transformations.pdf?rev=5bad15f9317e4214a4d86f8aa3f0158b&hash=70C207037A3E698E737D0FD81FAD6BF>

From the executive summary: Transportation Transformations shares promising examples of efforts to reconnect communities divided by highway infrastructure by converting roadways into welcoming, people-centered environments that advance equitable, sustainable, resilient outcomes.

Specifically, the report:

- Highlights connections among transportation infrastructure and health, resilience and real estate development opportunities;
- Makes the case for leveraging public and private funds to support efforts to reconnect communities divided by automobile-oriented infrastructure; and
- Shares promising examples of efforts to reconnect communities through multimodal transportation investments, parks, equitable development and more.

Related Resource:

“Webinar: Transportation Transformations: How Highway Conversions Can Pave the Way for More Inclusive and Resilient Places,” Webinar, Urban Land Institute, March 1, 2024.

<https://knowledge.uli.org/en/webinars/2024/transportation-transformations>

From the website:

Webinar Summary: The creation of the automobile transportation system in the United States contributed to many of today’s pressing issues, including racial and economic segregation, increased greenhouse gas emissions, and a lack of resilience to climate shocks and stresses. However, efforts to transform outdated automobile-oriented infrastructure to promote resilience, health and equity have gained momentum and supported quality of life in communities throughout the United States and beyond.

In this webinar, we explored promising examples of how communities converted highway infrastructure to create welcoming, people-centered environments while supporting equitable outcomes, environmental resilience and real estate project success. Experts delved into inspiring examples of efforts to reconnect communities, discussed the case for leveraging public and private funds to support these initiatives, and explored the connections among transportation infrastructure, health, resilience and real estate, as outlined in the accompanying report

titled *Transportation Transformations: How Highway Conversions Pave the Way for Inclusive and Resilient Places*.

The site provides access to PDF files of the webinar transcript and the 79-slide PowerPoint presentation.

Prioritizing Effective Infrastructure-Led Development: A ULI Infrastructure Framework, Urban Land Institute, 2021.

https://knowledge.uli.org/-/media/files/research-reports/2021/uli-infrastructure-led-development_final.pdf?rev=f775b33c6a3c4409a941dbd1d86c0de8&hash=27DE62DB1C123757B43BFAA463DE516B

From the introduction: Infrastructure, land use and real estate development are intrinsically linked. Over the coming years, U.S. communities face many challenges that will be difficult to manage, including a lack of housing affordability, entrenched inequities in the built environment, and a changing climate. These issues are compounded by the combined challenge of maintaining current infrastructure while needing to invest in forward-looking infrastructure.

As the United States prepares to make the largest infrastructure investment in a generation, an opportunity exists for ULI [Urban Land Institute] members and key partners to identify and promote more equitable and resilient infrastructure investments that create both long-term real estate and community value. Lessons can be learned from global infrastructure investment approaches.

3.4 Impacts of Highway Removal

State Resources: California

Impacts of Freeway Siting on Communities of Color, Preliminary Investigation, California Department of Transportation, August 2021.

<https://dot.ca.gov/-/media/dot-media/programs/research-innovation-system-information/documents/preliminary-investigations/pi-0301-a11y.pdf>

From the executive summary: As part of its efforts to advance equity in transportation planning and policy, California Department of Transportation (Caltrans) is seeking information from other state departments of transportation (DOTs) about approaches to developing an equity-focused freeway inventory and best practices that have been implemented to document the impacts of freeway siting on communities of color. Information gathered from these agencies will be used to develop a historical narrative that could potentially deepen understanding of the long-term impacts on these communities.

ConnectOakland, last updated September 26, 2024.

<http://www.connectoakland.org/>

From the website:

ConnectOakland Vision

Our [v]ision explores one possibility of how to transform the existing I-980 [r]ight-of-[w]ay (ROW) into a new, vibrant, transit-oriented corridor while also serving as a natural multi-modal connection hub for BART [Bay Area Rapid Transit], Caltrain and even High-Speed Rail (HSR). This vision uses the most current knowledge of the I-980 ROW, the surrounding neighborhood conditions, the future transportation needs of the Bay Area, and leverages Oakland's central location within that system. The vision is meant to be a starting point — to begin discussion of how to ameliorate a long-standing blemish of the past and create a new patch of urban fabric that can be a game-changer for the future.

The team has met with, and continues to meet with, key professionals, stakeholders and community leaders to learn as much as possible about how this project can best achieve its goals. As new information is gathered, the ConnectOakland team will work collaboratively to further refine the concept into an actionable plan.

Access to a presentation about the impact and potential of the I-980 corridor and other resources are available at the website.

Related Resources:

“Effects of Freeway Rerouting and Boulevard Replacement on Air Pollution Exposure and Neighborhood Attributes,” Regan F. Patterson and Robert A. Harley, *International Journal of Environmental Research and Public Health*, Vol. 16, Issue 21, November 2019.

<https://doi.org/10.3390%2Fijerph16214072>

From the abstract: Freeway rerouting and replacement with a street-level boulevard are urban transportation policies, that may help redress disproportionate air pollution burdens resulting from freeway construction that took place during the mid-20th century. However, environmental justice activism for freeway rerouting and urban green space creation may have the unintended consequence of environmental gentrification. In this paper, we investigate the effects of freeway routing decisions on exposure to traffic-related air pollution and neighborhood socioeconomic and demographic change. We focus on the effects of rerouting the Cypress Freeway in West Oakland, along with the construction of a street-level boulevard (Mandela Parkway), on the original freeway alignment. The impacts of two rebuild scenarios, freeway rebuild-in-place and reroute, on near-roadway NO_x [nitrogen oxide] and BC [black carbon] concentrations are compared. We also assess changes in demographics and land use in West Oakland, between the time when the Cypress Freeway was damaged by a major earthquake and after completion of Mandela Parkway. Our research indicates that freeway rerouting reduced annual average concentrations of both NO_x (–38% ± 4%) and BC (–25% ± 2%) along the Mandela Parkway alignment. However, there is evidence of environmentally driven neighborhood change, given that there are larger decreases in the long-time Black population (–28%) and increases in property values (184%) along Mandela Parkway, compared to West Oakland as a whole. There are some attributes along the Mandela Parkway that enable low-income residents to live in proximity to the street-level boulevard, such as affordable housing.

“Creating Livable Infrastructure: The ConnectOakland Vision to Reconnect Neighborhoods and Connect Cities Through Freeway Removal,” Andrew Faulkner, Jonathan Fearn, Chris Sensenig and Brian Stokle, *Journal of Green Building*, Vol. 11, No. 2, pages 1-21, Spring 2016.

Publication available at <https://doi.org/10.3992/jgb.11.2.1.1>

From the introduction: Throughout the second half of the 20th [c]entury, our nation’s cities were marred by the onslaught of unsustainable suburbanization and the expansion of limited access highways that ripped through urban centers and divided communities within them. Paired with systematic disinvestment from redlining and white flight, these forces combined to create lasting physical, social and economic hardships in cities across the U.S. Over the last 20 years, cities have rebounded in America and new patterns of thought focused on livability, walkability and urban form have started to sprout: from the Big-Dig in Boston to Octavia Boulevard and the Embarcadero in San Francisco, cities are reassessing the value of highways that solely move automobiles through cities, and have started to focus on how these pieces of infrastructure impact the daily lives and economic interests of their residents and visitors.

In Oakland, California, through the efforts of ConnectOakland, the city is taking up the mantle of this new pattern of thought and is beginning the planning process to reconnect West Oakland to Downtown by transforming an underutilized freeway (I-980) into a multi-modal transportation corridor that reestablishes the historical urban grid. The project's dual benefit will reconnect two of Oakland's historical neighborhoods while better connecting Oakland along with the entire East Bay to San Francisco, San Jose and Silicon Valley through the incorporation of a second transbay tunnel for Bay Area Rapid Transit (BART), commuter rail (Caltrain) and high speed rail (HSR). This article will explore the ConnectOakland vision for I-980 as a case study for current and future patterns of highway removal, and as a part of the national movement to rethink the role of urban highways and holistically re-envision the U.S. transportation infrastructure.

State Resources: Minnesota

Maximizing Transportation Assets by Building Community Connection Through Innovative Deployment of Rights of Way and Airspace, Frank Douma and Maya Sheikh, Minnesota Department of Transportation, June 2023.

<https://cts-d8resmod-prd.oit.umn.edu/pdf/mndot-2023-28.pdf>

From the executive summary: This Minnesota Department of Transportation-sponsored research effort examines innovative right-of-way projects nationwide, focusing on how new and innovative practices for redeveloping transportation assets can meet ambitious goals like mitigating environmental impacts, encouraging placemaking, and enhancing economic opportunity while continuing to meet the projects' transportation purposes. The team explored case studies from across the nation and identified best practices and lessons learned to inform future agencies and planners about how to identify new trends in transportation right-of-way projects.

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Potential Applications

As state departments of transportation throughout the United States focus on repairing the damage that highways have caused in communities, this study is a good tool planners can use to better work alongside communities, businesses and other government entities to utilize highway land and airspace, specifically the underutilized and vacant land adjacent to transportation infrastructure, under bridges or in the airspace over interstate highways. Specifically, this study provides innovative insights into community engagement and partnerships, economic development, and how innovative infrastructure changes can enhance quality of life [and] well-being, and increase equity.

Policy Implications

Disparities caused and exacerbated by highways have continued to catch the attention of federal and state decision-makers, particularly regarding efforts to reduce disparities that highways cause in communities. Findings from this study can shine a light on best practices carried out in projects already completed and encourage continued innovative ideas when it comes to vacant highway land and air space. This study can inform partnerships that aim to enhance economic well-being and quality of life, and provide a guide to increasing equity, reducing disparities and limiting environmental impacts.

Nonprofit/Advocate Resources

“Freeways Without Futures”: Urban Highway Removal in the United States and Spain as Socio-Ecological Fix?” John Stehlin, *Environment and Planning E: Nature and Space*, Vol. 7, Issue 3, November 2023.

<https://doi.org/10.1177/25148486231215179>

From the abstract: Urban highways are widely recognized to have devastating social, economic and environmental consequences, locking in fossil energy dependence, racial and class segregation, and suburban sprawl. Today, as much of the infrastructure built during the peak of the midcentury road construction boom in the global North reaches the end of its life span, there is growing interest in removing highways and replacing them with parks, housing and surface boulevards in the interest of economic development, repairing social divisions in urban space, and fostering more sustainable mobility. Based on preliminary research, this paper offers an empirically driven conceptual outline of highway removal projects in the United States and Spain. I argue that highway removal constitutes an opportunity for a “socioecological fix” for the emerging crisis of automobility, but in practice, highway removal projects may reinscribe the scalar contradictions of carbon-intensive urban-regional metabolisms. Through several empirical cases of highway removal projects, I examine three dimensions through which these contradictions can be understood: national policy changes in urban infrastructure planning and governance, material conflicts between demolition and tunneling and their implications for regional metabolisms, and local sustainable development politics and their distributional contradictions. Although the projects sketched here tend to fall short of their transformative promises, I emphasize that highway removal remains a critical arena of urban climate change politics.

“Highway to Inequity: The Disparate Impact of the Interstate Highway System on Poor and Minority Communities in American Cities,” David Karas, *New Visions for Public Affairs*, Vol. 7, April 2015.

<https://www.ce.washington.edu/files/pdfs/about/Highway-to-inequity.pdf>

From the abstract: The Interstate Highway System constitutes one of the most substantial federal investments in the nation’s infrastructure and has provided innumerable benefits in transportation infrastructure. The positive impacts of the road building campaign sparked by President Dwight Eisenhower in the mid-1950s, however, are not without their negative counterparts. Construction of the expressway network had a profound impact on American cities, often cutting through developed neighborhoods and forever changing the social and physical characteristics of urban landscapes. In discussions of the oft-devastating effects of the Interstate Highway System on urban communities, it is impossible to ignore the impact that the system has had on poor and minority communities. A growing body of research has addressed the racial effects of the landmark federal initiative, with many academics alleging that the system’s construction constituted, at least in some cities, a civil rights violation that served to formalize Jim Crow-era discriminatory patterns and some of the original racial boundaries imposed in some urban spaces. In the present context, the still-evolving expressway teardown movement points to the reevaluation of the highway system on the part of policy scholars and public officials, many of whom have addressed the disparate outcomes of the network and have sought to remedy the harm it imposed on urban America.

Appendix A: Survey Questions

The survey below was distributed to a pool of potential respondents expected to have experience with freeway transformation projects.

Caltrans Survey on Best Practices for Reimagining Freeways and Reconnecting Communities

Freeway Transformation Project Description

1. Project name:
2. Project description:
3. Please identify the project type. Select all that apply.
 - Freeway removal
 - Freeway retrofit
 - Freeway mitigation
 - Freeway-to-boulevard
 - Freeway cap
 - Other (Please describe.)
4. Please describe the funding mechanism(s) utilized for this project.
5. Did your agency utilize any revenue-generating or value-capture strategies for this project?
 - No
 - Yes (Please describe these strategies.)
6. Please describe the community's role in the decision-making process that identified the preferred alternative or project design.

Relinquishment of Interstate

1. Did the relinquishment of interstate require a separate federal process beyond your state procedures?
 - Not applicable
 - No
 - Yes (Please briefly describe the federal process your agency completed.)
2. Has your agency ever relinquished freeway property, either part of an interstate or other federally funded parcels, with the purpose of developing affordable housing on this land?
 - Not applicable
 - No
 - Yes (Please describe the steps that were required and how costs were kept low enough to ensure affordability.)
3. Did the project include relinquishment of any freeway right of way?
 - No
 - Yes (Please identify the agency relinquishing the property and the agency accepting it.)
4. Did the relinquishment of freeway right of way encourage or require specific community-determined development? This development might include public park space, a certain percentage of affordable housing or supportive housing for homeless residents.
 - Not applicable
 - No
 - Yes (Please describe how the development was encouraged or required and what resulted, or is expected to result, from relinquishment.)

Project Impacts and Best Practices

1. Please describe the impacts resulting, or expected to result, from this project in the categories below.

Local economy:

Affordable housing:

Supportive housing:

Environment:

Land use:

Parks or other public spaces:

Transit and other transportation-related issues:

Social impacts (community connectivity, health):

Displacement/anti-displacement:

Harm repair:

Other: (Please describe.)

2. Please provide the best practices your agency has identified in connection with this freeway transformation project in the topic areas below.

Limiting costs:

Limiting delays:

Mitigating negative impacts on surrounding communities:

Other best practices: (Please describe.)

Assessment

1. What are the greatest successes for this project to date?
2. What are the most significant challenges your agency has encountered thus far?
3. Please identify your agency's top three recommendations for another agency preparing to undertake a similar freeway transformation project.

Recommendation 1:

Recommendation 2:

Recommendation 3:

4. Please provide links to documents associated with this freeway transformation project. Send any files not available online to susan.johnson@ctcandassociates.com.

Wrap-Up

Please use this space to provide any comments or additional information about your previous responses.