

Maximizing Transportation Assets by Building Community Connection Through Innovative Deployment of Rights of Way and Airspace

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Research Report
Final Report 2023-28

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FINAL REPORT

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All said, any errors or omissions that may remain in this report are the responsibility of the authors.

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LIST OF ABBREVIATIONS

USC: United States Code

CFR: Code of Federal Regulations

FHWA: Federal Highway Administration

ROW: Right of Way

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.

Methodology

The research team worked with the Technical Advisory Panel (TAP) to identify innovative uses of transportation rights of way, including adjacent uses, under-bridge enhancements, highway caps, and highway removal projects, settling on the following:

- Auburn Avenue in Atlanta (under bridge)
- Park East in Milwaukee (removal)
- Solar Program with Oregon DOT
- I-579 in Pittsburgh Cap (cap)
- I-70 in Denver (cap)
- 11th Street Bridge Project in Washington, DC (economic and community development)
- Capitol Crossing in Washington, DC (cap)
- Claiborne Avenue in New Orleans (proposed under bridge)

The team arranged interviews with key stakeholders for each project and performed extensive literature reviews to analyze how these projects engaged stakeholders, set up governance structures, arranged financing, encouraged community and economic development, incorporated urban design, public art and placemaking efforts, and recorded environmental and health impacts. The study culminated in a symposium and development of lessons learned and recommendations for implementing similar efforts in Minnesota.

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, wellbeing, 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 wellbeing and quality of life, and provide a guide to increasing equity, reducing disparities, and limiting environmental impacts.

CHAPTER 1: INITIAL MEMORANDUM ON EXPECTED RESEARCH BENEFITS AND POTENTIAL IMPLEMENTATION STEPS

The first task in this study (*Maximizing Transportation Assets by Building Community Connection Through Innovative Development of Rights of Way and Airspace*, aka “Innovative ROW”) calls for delivery of a “memorandum providing initial estimates of expected research benefits, documentation of the methodology and potential implementation steps.” Following the initial Technical Advisory Panel (TAP) meeting in July 2021 and subsequent review of materials provided after that meeting, this task report provides those items.

1.1 EXPECTED BENEFITS

Minnesota law calls on the Minnesota Department of Transportation (MnDOT) to better use state highway lands and airspace; provide transportation facilities without undue burden to any community; ensure economic well-being and quality of life; and enhance economic development (MnStat 174.01 Subd 2(2), (4)). Subsequent federal and state regulations and policies further indicate that ideal implementation of these directives include partnering with affected community, business, and governmental entities to further the aims of these organizations while also accomplishing MnDOT’s transportation goals.

This research will create long-term benefits to MnDOT and its public and private partners by articulating innovative methods for providing transportation infrastructure that better meets today’s multi-modal needs, and the rapidly increasing expectations of local and regional governments and the public. Further, this work will also help MnDOT meet social and economic goals of the department and the state by more effectively and efficiently delivering transportation service. Local governments and the public seek ways to reconnect communities severed by highways and seek public use of space on and around highway infrastructure to transform corridors to more pleasant useful additions to the surrounding community. Highway caps, large and small, and use of space beneath bridges are examples of infrastructure projects that incorporate both transportation and non-transportation uses that are in the overall public interest by providing community, social, environmental, and economic benefits while not interfering with the free and safe flow of traffic, or the continued use, operations, maintenance, and safety of the state highway system. By examining new best practices, this research will help MnDOT understand how to better utilize transportation projects as leverage and as a catalyst for community and economic improvement.

Specific benefits include:

- Enabling MNDOT to better evaluate complex proposals and manage requests for non-transportation use of lands and airspace by providing best practices in subject areas the agency lacks specific expertise such as public-private partnerships, non-transportation finance, and funding. A primary example of a complex use of highway airspace is the Rondo land bridge concept over I94 in St Paul, Minnesota.

- Improving transportation project acceptance and assuring timely project delivery by providing strategies, practices, tools, resources, funding sources that better respond to community, and business requests to include community and economic elements in transportation projects such as Rethinking I94.
- Identifying non-transportation funding sources and partners that can be used to meet community and economic goals.
- Developing innovative uses of infrastructure that improve relationships and increase trust with the public as well as private and public organizations, resulting in more effective engagement in future projects.
- Reducing lifecycle costs and operation and maintenance savings that result from transportation projects that are embraced by the surrounding community and that create value in the surrounding area. These benefits may also include increased property values, greater community cohesiveness, reduced disparities through innovative land use and air space use, and reduced need to address adverse impacts when maintaining and ultimately rebuilding the facility.
- Assisting MnDOT in its contribution toward Minnesota’s transition to a low-carbon transportation system. The case studies examined in this research may provide data regarding the ability of these innovative projects to reduce energy use and emissions while maximizing community benefits consistent with the Governor’s directive and subcabinet efforts to implement the Next Generation Energy Act.

1.2 METHODOLOGY

This research will employ a case study approach to review examples of transportation planning innovations that lead to mutually beneficial outcomes, using cases from around the United States and other countries where applicable. Through a systematic review of 4 – 6 cases studies selected in consultation with the TAP, the work will identify best practices and other guidance to support achievement of the benefits articulated above. Specifically, the topics covered in examining these planning processes will include the following categories, and the researchers will seek answers to the questions listed. Data collection methods include stakeholder interviews, media reports, and official documents.

1.2.1 Stakeholder Engagement

What stakeholders were involved? How were they engaged? How was trust built? How was the entire community fully engaged in an equitable process? How did the Environmental Impact Assessment, purpose and needs statements and regional and local land-use plans contribute to the process and how were they incorporated in the outcomes?

1.2.2 Governance Structures

What governmental agencies were involved? Were non-profit and/or private entities included? Why was the participation of multiple government agencies and jurisdictions, as well as other sectors needed? Were any structures (e.g., public private partnerships) created to formalize relationships?

1.2.3 Finance Strategies

What funding streams were tapped for the transportation project and for the alternative non-highway uses? How were funds for construction, maintenance, and programming identified and tracked? Were non-public funding sources involved? Are private entities allowed to use the space? How did multi-disciplinary and multi-sector collaboration help address issues? What processes were followed to allow this collaboration?

1.2.4 Community and Economic Development Measures

How does the project promote business and community vitality, economic retention, and wealth building? How does the project mitigate displacement of people and businesses? Who benefits from the project and its effects? Have these impacts been documented and measured? What criteria was used for measurement? What roles have different stakeholders played in implementing these measures?

1.2.5 Human and Natural Environmental and Health Considerations

Does the project support multiple transportation options, including active transportation, as well as innovative land uses that encourage walking, improve air and water quality, reduce greenhouse gas emissions, address noise impacts, promote community health, and improve quality of life and a sense of social cohesion? How are these impacts measured?

1.2.6 Design Features and Placemaking

How does the project reflect pride of place? How are historical and existing community values and cultures incorporated? What measures are included to enhance personal safety? Does the project promote multi-modal options?

1.3 POTENTIAL IMPLEMENTATION STEPS

The research produced written descriptions of each case study according to these topics. In addition, local champions from the cases presented at a symposium in 2022, where local practitioners were able to provide their own perspectives and insights into recommended implementation steps through engagement with the guest speakers and each other. The symposium took place on August 15, 2022, with 90 participants. More detail is provided in Chapter 5.

Ultimately, this work should result in strategies, practices and implementation tactics that will help MnDOT and its partners understand applicable lessons from the cases studies. In addition to the written

report documents, the research should provide materials, such as decision trees, specific vignettes, and performance measures that MnDOT and other staff can use in identifying, scoping, and developing partnerships for rehabilitating, maintaining, or building new transportation facilities.

CHAPTER 2: CASE SELECTION

The second task in this study (*Maximizing Transportation Assets by Building Community Connection Through Innovative Development of Rights of Way and Airspace*, aka “Innovative ROW”) calls for delivery of a “memorandum providing the case study selections selected in consultation with the TAP.” Following a TAP meeting in July, Frank Douma created a Qualtrics survey (pictured below) for TAP members to rank projects based on key areas of the planning processes:

- Stakeholder engagement
- Governance structures
- Finance strategies
- Community and economic development measures
- Human and natural environmental health considerations
- Design features and placemaking

Q1
Please rate by level of interest using a 1 - 5 scale (1 = little interest, 5 = "Need to know") if you have no interest or feel you do not have enough information to rate, please leave blank. This is interest only! Amount of innovation / ability to implement, etc. will come with greater examination!

Q2
UNDER BRIDGE PROJECTS (LARGE SCALE)

	Stakeholder Engagement					Governance Structure					Finance Strategies					Community and Economic Development Measures					Human and Natural Environment and Health Considerations				
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Underline in Miami (Linear Park)	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Claiborne Corridor in New Orleans (Linear Park, Commercial Development)	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

Figure 2-1 Qualtrics survey questions used to measure TAP interest in, and rank, potential case studies

Six total responses were received from TAP members. All respondents ranked each of the preliminarily selected projects using a scale of 1 – 5 (1 = little interest, 5 = need to know) based on the categories above, which resulted in the following narrowed case study selections. The case study selections (attached) were developed in tandem with between the Principal Investigator and the Technical Liaison and were sent out with background information along with the survey link to TAP members. *See section 2.2 for the background on each case study.*

2.1 NARROWED CASE STUDY SELECTIONS

1. Under Bridge: Auburn Ave Historic and Cultural Project (Atlanta)
2. Under Bridge: Claiborne Corridor (New Orleans)
3. Cap: I-70 cap (Denver)
4. Highway Removal: Park East (Milwaukee)
5. Adjacent to ROW: Oregon Solar Gardens
6. Racial Justice/Highway Cap: Cap in Pittsburgh

A full tally of each project is available in section 2.1.8.

A few of the projects chosen focus on certain categories discussed in Chapter 1 that were highly ranked by respondents. The team will also conduct research for areas within projects that are of particular interest to MnDOT. The specific thinking and focuses for each project are further elaborated below.

2.1.1 Under Bridge: Auburn Ave Historic and Cultural Project (Atlanta)

Auburn has a strong recommendation for a project case because of its small scale, historical preservation, artistic aspect, the use of a transit line, and the context of a freeway running through a community. Auburn combines many elements we are seeking to explore for this project.

2.1.2 Under Bridge: Claiborne Corridor (New Orleans)

Claiborne scored highly. Despite this, some current news stories indicate the project could end up falling into an outright highway removal case. Additionally, upon initial case selection, it was thought that the project would be further along than it is with secured ownership rights and strategic planning documents. Political winds may have shifted the project entirely, garnering so much momentum an outright removal is a possibility.

Despite this, there are many aspects of the project that would be worth looking at further. Claiborne represents a great example of community development and engagement as MnDOT considers other projects it would inform. If early research indicates that Claiborne would not fulfill the requirements for a full case study, it would be worthwhile to examine governance structure, stakeholder engagement, and community collaboration.

2.1.3 Cap: I-70 Cap (Denver)

There are no qualms about this case selection, a complete highway cap, so far. The I-70 Cap comes with great information regarding governance, community enhancement, placemaking, and the entire process from deconstruction to reconstruction. The I-70 Cap contains an equity angle as it removed a largely Hispanic neighborhood and balanced community institutions including a school and a local park in the area.

2.1.4 Highway Removal: Park East (Milwaukee)

Park East scored highly across the board on nearly everything. A highway removal project in the Midwest is also of particular interest. The project is of particular interest thanks to the Midwest aspect given the potential highway removal in Duluth.

2.1.5 Adjacent to ROW: Oregon Solar Gardens

The Oregon Solar Gardens were among the top half scoring projects. USDOT and FHWA are excited about adjacent uses of right of ways. This particular project could provide insight into the rules around solar, Electric Vehicle charging, and adjacent uses that would be of significant interest to the

sustainability offices in MnDOT. Specifically, this project scored highly in sustainability and public health, and would help round out the case selection projects. The Oregon Solar Gardens would help illuminate the maximum uses of right of ways and adjacent spaces.

2.1.6 Racial Justice/Highway Cap: Cap in Pittsburgh

The Cap in Pittsburgh also scored highly, and has an equity bent, similar to Claiborne, Auburn and Park East. Of note, the team would like to explore more about financing the project around the Tiger Grant and early financial stages for the project. However, the project’s purpose was to create a more pleasant setting connections across the highway for an arena in the area. The team will critically examine if the highway cap is serving the community displaced.

2.1.7 “Sidebar” and other cases worth looking into

MnDOT would be interested in further examining aspects of projects that were not selected. The **Capitol Crossing** in Washington, D.C. was rated highly in governance. Additionally, the D.C. Department of Transportation fully sold the air space to developers. MnDOT would be interested in understanding the motivations behind releasing air space as it relates to upcoming projects such as the Rondo redevelopment or alternative uses in Duluth.

“Sidebar” opportunities: For cases like Claiborne where information might not be readily available or changing, a further study into governance structure and stakeholder engagement to understand best practices would be an alternative to a full case study. Other sidebar opportunities would be the planning and engagement work that went into the 11th Street Bridge project in Washington, D.C. and the the 4P (Public, Private, People and Philanthropy) model used in setting up the Rondo Economic Development Trust as part of the Reconnect-Rondo project.

2.1.8 Full tally of each project score

Project	Tally
Clairborne Corridor (New Orleans, LA)	129
I-70 in Linear Park (Denver, CO)	128
Park East Freeway (Milwaukee, WI)	124
Riverfront Parkway (Chattanooga, TN)	107
I-576 Urban Connector Cap (Pittsburgh, PA)	106
Oregon DOT Solar Gardens	101
Capitol Crossing at I-395 (Washington, D.C.)	98
Underline (Miami, FL)	96
Auburn Ave Historic and Cultural Project (Atlanta, GA)	93
Underground at Ink Park (Boston, MA)	89
Cap at Union Station (Columbus, OH)	87
I35 Leif Erikson Park-Duluth Rose Gardens (Duluth, MN)	82
Newtown Pike Extension (Lexington, KY)	71
Heritage Park (Wabasha, MN)	63
Klyde-Warren Park (Dallas, TX)	53

Figure 2-2 Ranking of scores from the TAP

2.2 POTENTIAL CASE STUDY BACKGROUND INFORMATION SENT TO TAP MEMBERS:

2.2.1 Under Bridge (Large Scale)

2.2.1.1 The Underline in Miami, a project to transform the land below Miami's Metrorail into a 10-mile linear park, urban trail, and public art destination. <https://www.theunderline.org/>

- Owned & Controlled By: Miami-Dade County Transportation & Public Works
- Partner/Lead organization: (Possible, needs confirmation) Friends of the Underline, a 501(c)3 nonprofit organization
- Size: 120 Acres
- Status: Not complete

2.2.1.2 The Claiborne Corridor Cultural Innovation District in New Orleans, which is transforming 19 blocks beneath the elevated I-10 expressway along Claiborne Avenue to include market space, classroom and other youth programming, community projects and special event spaces. <https://colloqate.org/claiborne-innovation-district>

- Owner: Louisiana DOT & FHWA
- Size: 19 city blocks
- Controlled By: As of Aug 2017, the space under the highway will be controlled by the city of New Orleans; the city has entered into a Cooperative Endeavor Agreement (CEA) with Foundation for Louisiana to manage the space
- Status: Unknown (not complete)

2.2.2 UNDER BRIDGE (Small Scale)

2.2.2.1 The Underground at Ink Block in Boston, an 8-acre underpass located between Boston's South End and South Boston neighborhoods that includes an urban park, cultural attraction and parking amenity. <https://undergroundinkblock.com/about-2>

- Partner/Lead organization: MassDOT partnered with a nearby developer National Development who owned several adjacent parcels to develop the under bridge area nearby called Ink Block complex. Opened after five years of planning, permitting, design, construction and leasing led by MassDOT in cooperation with the community, city of Boston, Boston Planning & Development and FHWA.
- Funding/Cost: MassDOT spent \$8.5 million to improve drainage, 175 parking spaces and other infrastructure, lights, a dog park, bike storage, bike paths, and boardwalks above storm water

basins. “Pays for itself over 10 years with revenue generated from commercial parking.” (El-Space Toolkit)

- Other Relevant info: This project was part of a program within MassDOT to transform ROW airspace for more innovative uses – We should have a chat with those contacts! From the peer exchange: “Underground at Ink Block (named to coincide with the development partner, Ink Block) is part of MassDOT’s Infra-Space Program, which provides innovative redevelopment opportunities and multimodal solutions for areas under elevated roads, bridges, and/or viaducts.”
- Status: Complete

2.2.2.2 Auburn Avenue Historic and Cultural Information Project in Atlanta, which includes a large public art mural on a bridge underpass and 25 interpretive and gateway signs recognizing buildings, landmarks and cultural institutions that exist or previously existed along Auburn Avenue.

- Partner/Lead organization: the Atlanta Downtown Improvement District (ADID), which is part of Central Atlanta Progress (CAP), a private nonprofit to preserve and strengthen the economic vitality of downtown Atlanta led the project. It is owned and maintained by the city of Atlanta.
- Funding/Cost: Cost not immediately available. Transportation Enhancement funding from the Georgia DOT and additional funds from CAP / ADID were used.
- Other Relevant info:
 - Originally a 19th century settlement west of downtown called Shermantown, Auburn Avenue emerged as the city’s primary Black business district in the early 20th century.
 - The birthplace of Dr. Martin Luther King, Jr., Auburn Avenue’s businesses and religious institutions played a major role in the country’s Civil Rights movement.
 - Designated as a National Historic Landmark in 1976, the neighborhood has been the focus of several economic development and placemaking initiatives in recent years, including the 2014 installation of the Atlanta Streetcar.
 - The above 3 points come from an on-line [virtual tour](#).
 - “More than fifty years ago, Auburn Avenue was a main thoroughfare on the highway to freedom and justice, serving as the headquarters for the churches, businesses and institutions that drove the American Civil Rights movement.” [said Stacey Key, who represents the 5th Congressional district on the GDOT State Transportation Board](#).
- Status: Completed, 2020

2.2.2.3 [Heritage Park in Wabasha, MN. A public park and outdoor concert venue underneath the Interstate Bridge carrying MN-60 over the Mississippi River.

<https://www.wabasha.org/community-resources/recreation/parks-natural-areas>

- Partner/Lead organization: Not immediately clear, but it appears the park is maintained by the city of Wabasha and events are booked and promoted through the Wabasha Kellogg Chamber and Convention and Visitors Bureau.
- Funding/Cost: Not immediately available
- Other Relevant info: Located under the interstate bridge on Main Street, this park area has a pleasant picnic table area, benches and a stage which features entertainment throughout the year. On Fridays in the summer, you can see free outdoor concerts sponsored by our River Junction Arts Council and Thursdays beginning in spring through fall, the Wabasha Farmer's Market is held here.
- Status: Complete

2.2.3 Highway Caps

2.2.3.1 I-70 Denver, a 4 acre cover park to serve as a connector and more suitable setting for an elementary school over new grade separation of interstate highway.

https://www.codot.gov/projects/i70east/resources/cover_park

- Total Cost = \$470M+; Funding includes \$420M TIFIA availability loan, \$50M CMAC funds
- Land Use: 60% will be UA adult soccer field (60 X 100 yards) in east –west orientation, with striping for two U-8 size youth fields (25 X 50 yards) in north-south orientation. 40% is plaza area with concessions, amphitheater, restrooms, splash pad, and playground equipment.
- Ownership: Water-proof membrane and down is DOT, above soil membrane is city of Denver.
- Status: Anticipated completion 2022

2.2.3.2 The Cap at Union Station, I670, Columbus Ohio – High Street Bridge over interstate providing 25,000 square feet of leasable space. <https://casestudies.uli.org/wp-content/uploads/2015/12/C035010.pdf>

- Size = 1.12 acres
- Total Cost = \$9.4 million: \$7.5 million private funds for building and \$1.9 million public funds for bridge
- Ownership: Ohio DOT owns the platform/decking, the city of Columbus owns the structures on top of the platform.

- Status: Complete

2.2.3.3 I-579 Cap Urban Connector Pittsburgh PA. 3-acre public open space and transportation improvement including pedestrian pathways, bicycle routes, intersection revisions, recreation and educational areas, performance areas, rain gardens for storm water management, design elements developed by artists from the neighborhood and other public amenities.

<http://www.pgh-sea.com/index.php?path=i5-ucp>

- Size = 3 acres
- Total Cost = Estimated \$28.8 million construction (\$19 million TIGER grant)
- Will reconnect the Hill District to the Pittsburgh central business district (equity/EJ initiative)
- Ownership: The city of Pittsburgh owns the structure, including foundations and all improvements on the structure; PennDOT owns the highway lighting underneath the structure, ITS, and two new signs.
- Status: Anticipated 2021

2.2.3.4 Klyde-Warren Park Dallas TX. Five-acre park over a downtown Dallas freeway, the result of a public-private partnership. <https://www.klydewarrenpark.org/>

- Size = 5.2 acres
- Total Cost = \$110 million: \$16.7 million, USDOT stimulus funds (ARRA); \$20 million, Texas DOT highway funds; \$20 million, city of Dallas bond funds; \$50 million, Private Donations.
- Land Use: Public space includes a children’s park, reading room, restaurant, performance pavilion, Dog Park, and fountain plaza other water features.
- Status: Completed 2012

2.2.3.5 Capitol Crossing I395 Washington DC. Seven acres, approximately three city blocks mixed use commercial development built over the interstate. Developer purchased air rights for 120M\$ paid to District of Columbia.

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

- Cost: \$1.3 billion, privately funded
- Size: 2.2 million-square-foot development. It consists of five mixed-use, LEED Platinum certified buildings spanning seven acres and include retail, commercial, and residential uses.
- Other relevant info: It is expected to create 8,000 permanent jobs when completed and will generate an estimated \$40 million in annual property tax revenues.
- Status: Construction began in 2014, expected completion in 2021/22

2.2.3.6 4 caps on I-35 in Duluth, MN: Leif Erickson Park – Duluth Rose Garden, Lake Place Park, East, and West Caps: 4 caps over I-35 that allowed for preservation of historic buildings and a connection to the shore of Lake Superior from downtown Duluth. The project also provided weather projection for the highway.

- Total Cost: \$77,429,000: (Leif Erickson Park Tunnel \$22,840,000 (main cost) + \$3,843,000 (restoration, landscaping, ped/bike path); East Tunnel: \$7,148,000 + Superior Street \$743,000; West Tunnel: \$12,790,000; Cost of Lake Place \$21,300,000 (bridge and paving) + \$9,125,000 (surf, boardwalk).) Paid for with 90% Federal funds and 10% state funds, using motor fuel tax revenues.
- Size: Leif Erickson Park Tunnel is 1,480' long; Lake Place Park Tunnel is 725' long and 2.5 acres; West Tunnel/Jay Cooke Plaza is 570' long; East Tunnel is 670' long. A total of ¾ of a mile of the project is covered in caps.
- Land Use: Parks, public transportation and local roads, pedestrian and bike trails.
- Ownership: MnDOT owns the structure, and the city of Duluth manages three parks Lake Place Park, Jay Cook Plaza Park, and Leif Erickson Park in addition to the city streets grid on top of the East and West caps.
- Status: Complete.

2.2.4 Adjacent to Right of Way

2.2.4.1 The Newtown Pike Extension Project in Lexington KY. The project is referred to as the highway that built a neighborhood by the FHWA. The project included a redevelopment plan for an affected neighborhood. <https://newtownextension.com/project-maps/>

- Housing redevelopment plan and community trust included in the highway extension project.
- Other relevant info: This effort included an extensive community engagement approach that helped shape the EIS project document and ultimate project design.
- Status: Nearly complete (2021)

2.2.4.2 Oregon DOT solar gardens on embankments. If deemed appropriate and supported by Office of Sustainability and Health.

<https://www.fhwa.dot.gov/publications/publicroads/12novdec/04.cfm>

- Funding: The State provided a 50-percent tax credit for renewable energy projects (the program sunsets in 2012). Further support came from a 30-percent Federal tax credit for solar investments and accelerated depreciation. Energy Trust of Oregon supplied grant funding, with

Portland General Electric's Clean Wind program making up the gap. The total cost of the demonstration project was \$1.28 million. As with the demonstration, the second project included a tax equity partner but used a "sale, lease-back" contract. That is, the utility financed and constructed the project and sold it upon completion to a tax equity partner, which then leased it back to the utility to operate and maintain. The cost of the 2nd project was \$10 million.

- Other Relevant info: The Oregon Legislature made it a priority in 2003 to streamline the P3 process in the state, and these solar gardens are an example of these partnerships.
- Status: Complete

2.2.5 Highway Removal

2.2.5.1 Chattanooga Riverfront Parkway, Chattanooga, TN. The Riverfront Parkway in Chattanooga, Tennessee, once conceived as a waterfront freight route, had become obsolete by the 1980's; even its intended users were no longer present. In the early 2000s, a plan was accepted to replace the four-lane highway with a more pedestrian-friendly and easily accessible boulevard. <https://www.cnu.org/highways-boulevards/model-cities/chattanooga>

- Cost: Unclear, was part of a \$120 million revitalization plan (page 16 of this [Brookings report](#))
- Size: Part of the 16.1-mile Riverwalk
- Owner: Tennessee DOT? (Map shows parkway as State Road 58)
- Status: completed in early 2000's. Current discussions underway to rebuild / refurbish.

2.2.5.2 Park East Freeway, Milwaukee, WI In the 1990s, the Park East Freeway was underutilized and seen as a barrier to redevelopment efforts. In 2002, demolition began and the removal of the spur and restoration of the urban grid was accomplished with \$45 million through a variety of federal, state, and city sources. <https://www.cnu.org/highways-boulevards/model-cities/milwaukee>

- Cost: \$45 million, including \$25 million in federal funds, and the rest from state and city funds
- Size: 24 acres around a 1 mile corridor
- Owner: city of Milwaukee? (listed as lead agency in planning for the area)
- Other relevant info: Corridor is now McKinley Boulevard
- Status: Complete

CHAPTER 3: DATA COLLECTION

3.1 AUBURN AVENUE (UNDER BRIDGE) – ATLANTA, GA

3.1.1 Background

For over a century, Atlanta has been plagued with transportation issues. Atlanta’s original land use patterns followed the train tracks laid in the late 19th century. Implementation of a public streetcar system altered these patterns, leading to an overall “star-shaped” geography. (Preston 1979) During the first thirty years of the twentieth century, development of the automobile created rapid physical and financial change, and by the 1930s, Atlanta major mode of transportation was no longer the railroad, but the automobile.



Figure 3-1: Wayfinding sign for entrance to project underneath interstate 75/85

A significant roadway development during this time was the Dixie Highway, which was developed to run across ten states from Michigan to Miami, Florida. The Georgia section of the Dixie Highway was completed in 1929 and was a predecessor to Interstate 75. In 1946, the Lochner Plan called for an expansion of the transportation system through a variety of ways, notably, a system of expressways, to keep up with a rapidly growing Atlanta metropolitan area. This plan originally called for expressways to be built west of the city, but to meet transit demand mitigation from the city of Atlanta, the published plan called for expressways to be built through areas of the city where “it would be feasible to purchase suitable rights-of-way, being the most depreciated and least attractive, [were] in need of rejuvenation.” In Atlanta, bolstered by the Federal Aid Highway Act of 1956, this change in policy severed many roadways and neighborhoods and resulted in over 7,000 African Americans being displaced.

When planners faced the choice for Interstates 75 and 85, they selected Auburn Avenue as the route, and today, the I-75/85 Downtown Connector bisects this historic roadway, which was home to one of the most historically significant and largest concentrations of Black-owned businesses in the country (National Park Service 2020a). Originally a 19th century settlement west of downtown called Shermantown, Auburn Avenue emerged as the city’s primary Black business district after the 1906 Atlanta Race Riot. The first twenty years of the twentieth century marked rapid growth of businesses moving to Auburn Avenue. The neighborhood boasted a variety of business and several churches. One of the many significant commercial buildings within the district is the Atlanta Life Insurance Company. The second largest black insurance company in the United States, Atlanta Life Insurance was founded in 1905 by [Alonzo Herndon](#), a former slave from Walton County, Georgia. The company steadily grew so that by 1910, there were more than 42 branch offices. The central building of the Atlanta Life Insurance

Company complex is a Beaux Arts building facing Auburn Avenue. The district also includes the Rucker Building, Atlanta's first black-owned office building, constructed in 1904 by businessman and politician Henry A. Rucker. The *Atlanta Daily World*, the first black-owned daily newspaper, was founded here in 1928. (National Park Service 2020a)

As the neighborhood grew, so too did social activity. The area is home to the city's oldest nonprofits and religious institutions. Sweet Auburn has two YMCA's as well as local fraternal organizations. In the 1930s, Atlanta's West Side started thriving, starting a decline in the number of businesses and residents in Sweet Auburn. Auburn Avenue's business and religious institutions played a major role in the nation's Civil Rights movement. Nearby historic locations include [Our Lady of Lourdes Catholic Church](#),

and [Historic Ebenezer Baptist Church](#), where both Dr. Martin Luther King, Sr. and Dr. Martin Luther King, Jr. preached.

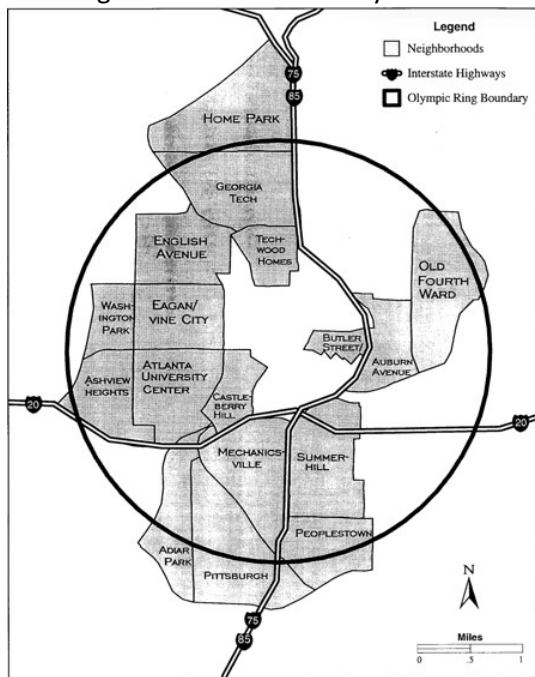


Figure 3-2 Map of neighborhoods affected by construction of I-75/85. The Auburn Avenue neighborhood is on the east side, next to the Old Fourth Ward

The project discussed for this work, the Auburn Avenue Historic and Cultural Information Project, consists of a large-scale mural, four gateway and 21 interpretive signs, all of which adds an extra dimension to the corridor by highlighting the historical and cultural significance, and paying homage to individuals that played a major role in the Civil Rights movement. This project builds upon the economic development initiatives implemented for the 1996 Olympic Games. By 1990, the population of downtown had declined significantly, moving to the suburbs at a great cost to downtown Atlanta. Major headquarters of corporations like UPS, CNN, Home Depot, and Coca-Cola, to name a few, were attracted to downtown, but regional businesses and offices in downtown had shrunk to only 19 percent. Atlanta politics had been also characterized by a partnership between the Mayor and downtown business leadership, a “biracial partnership between African American political leaders

and white business elites.” Part of the efforts the city undertook to prepare for the Olympic Games was for neighborhood redevelopment. In partnership with the Corporation for Olympic Development in Atlanta (CODA), a nonprofit corporation, both the city and CODA began redevelopment efforts for key neighborhoods to “spread the benefits of from the Olympics to poorer neighborhoods.” The physical legacy of urban design because of these efforts includes neighborhood redevelopment and pedestrian improvements to key streetscapes between MARTA transit stations and Olympic venues. CODA identified sixteen neighborhoods to focus redevelopment efforts, and by 1993 CODA-staff prepared neighborhood redevelopment plans that included physical improvements and financial and regulatory incentives to encourage neighborhood revitalization. By 1996, the plans for Summerhill, Old Fourth Ward, Mechanicsville, Butler Street/Auburn Avenue, and Peoplestown had been adopted by city council.

Although these were the “Atlanta Olympics,” the city government played a limited role, and there was little funding available to implement the plans. A “no new taxes” pledge limited the city’s influence on most of the major decisions, from the location of the venues to the creation of Centennial Olympic Park. The city probably would have given a higher priority to projects to benefit the neighborhoods but had no means to fund them; and the business community only raised funds for the projects it considered important. The lack of public funds also meant that public participation in planning for the Olympics was limited. Since most of the funds, sponsors, and development organizations were in the private sector, there was little truly open, public processes in preparing plans and projects.

As stated, through the 1990s Olympic Games process, the city of Atlanta created the first comprehensive development plans for the Auburn Avenue Corridor. Due to insufficient funding and a lack of direction at the time, the original development plan was not implemented. In 2000, there was renewed interest to redevelop the corridor and turn Auburn Avenue into a “heritage tourist landscape,” capturing the experiences and history of African Americans. This renewed interest was spurred by the Butler-Auburn Redevelopment Plan update after the Olympic Games. The city of Atlanta worked closely alongside Central Atlanta Progress (CAP), a 501c not-for-profit organization dedicated to downtown development, to develop the project. However, as discussed in the “Historical Counter-Narrative” section below, a tension remains as the extent preserving and reporting the historical significance of the area supports restoration and development of the thriving Black community that existed prior to the building of the I-75/85 Connector.

3.1.2 Stakeholder Engagement

The Auburn Avenue Culture and History project presents a worthwhile study of collaboration among multiple different entities and uniting them under the same need. City and community groups came together to determine how to mitigate the damage caused by the interstate and further historic preservation.

3.1.2.1 Central Atlanta Progress (CAP)

Central Atlanta Progress (CAP), a 501c not-for-profit dedicated to downtown development, is a main stakeholder as an initiative for the business improvement district in downtown Atlanta, Central Atlanta Progress paid a significant amount for this project to be completed. CAP prides itself on a “long and distinguished history of civic planning and development activities, characterized by public-private partnerships tackling difficult problems over the long term with a very high rate

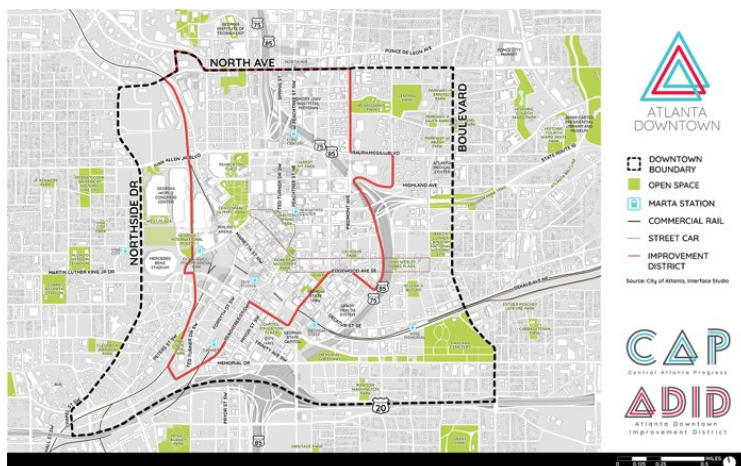


Figure 3-3 CAP and ADID operational areas

of success.” (Atlanta Downtown n.d.) It works to build a 21st century Downtown fit to be the heart of the Atlanta region. Members of CAP include corporations, small local businesses, civic organizations, regional leaders, and property owners. (Atlanta Downtown n.d.)

3.1.2.2 Atlanta Downtown Improvement District (ADID)

For this project, CAP worked in tandem with the Atlanta Downtown Improvement District (ADID), which CAP funds and supports. ADID is a 120-block area of downtown Atlanta that was formed in 1996 after CAP and over 50% of the businesses in the area successfully lobbied for its formation. (Atlanta Downtown n.d.) For this project, CAP and ADID provided funding opportunities for businesses and nearby historic structures through the Sweet Auburn Predevelopment and Technical Assistance fund. (Atlanta Downtown n.d.)

3.1.2.3 Sweet Auburn Works

Sweet Auburn Works is a nonprofit organization comprised of government officials and community stakeholders working together to create a plan for the revitalization of the Sweet Auburn Historic District. They support the economic development projects that promote commerce, tourism, and the preservation of historic places within the area. The Sweet Auburn Historic District was established in 1976 and retains cultural resources of international significance, including the Martin Luther King, Jr. National Historic Park, Dr. King’s childhood home, and King’s Ebenezer Baptist Church.

3.1.2.4 Historic District Development Corporation

The Historic District Development Corporation (HDDC) is a nonprofit community development corporation whose mission is to facilitate the preservation, revitalization and non-displacement of residents in the Martin Luther King, Jr. National Historic District. (Historic District Development Corporation n.d.) HDDC was co-founded by Coretta Scott King, Christine King Farris, and John Cox in 1980 as an all-volunteer neighborhood-based organization charged with preserving and revitalizing the Martin Luther King, Jr. National Historic District. HDDC is comprised of neighborhood residents, community leaders, community businesspeople, and professional advisors. It is a state-certified Community Housing Development Organization (CHDO) with the Georgia Department of Community Affairs. HDDC is also a city-certified Community Housing Development Organization (CDHO) with the city of Atlanta Office of Housing. HDDC designed Sweet Auburn’s renewal without pricing lower-income residents out of the neighborhood. And, since 1994, HDDC has built and rehabilitated more than 110 single-family homes and more than 50 units of affordable rental housing.

3.1.2.5 Georgia Department of Transportation

The Georgia Department of Transportation owned the bridge and had several stipulations throughout the project to ensure the structural integrity of the bridge was sound.

3.1.2.6 City of Atlanta / MARTA

In 2014, Atlanta opened a small loop of transportation in the area—a streetcar. The streetcar ran over six decades ago, getting shut down in 1949 with the rise of popularity in buses. The new streetcar runs a

limited route with 12 stations providing access to downtown attractions including Centennial Olympic Park, the Martin Luther King Jr. Historic Site, and the Sweet Auburn Curb Market, with several stops near hotels, residential, employment, cultural and historic centers. Planning and construction were not smooth, however, as original plans were delayed addressing resident concerns regarding unsafe sidewalk conditions and blocked storefronts.

The Atlanta Streetcar Project was the result of a long-term vision for the proposed Peachtree Streetcar that runs a north-to-south route, and an east-to-west route connecting the Martin Luther King Jr. Historic District to the Centennial Olympic Park area. The 2.7-mile-long Downtown Streetcar was funded by a \$47.6 million Transportation Investment Generating Economic Recover (TIGER) 2 Program grant—the largest one given that round—for the first phase of the streetcar. Funding was also supported through contributions from the city, the Atlanta Downtown Improvement District (ADID) and by grants from the Atlanta Regional Commission’s Livable Centers Initiative. The total project ended up costing \$98 million—including four streetcars and a maintenance facility.

A 2018 report stated that the streetcar resulted in more than \$568 million in public and private investment within a quarter mile of the route. Additionally, new bicycle facilities, upgraded sidewalks and pedestrian environments are all part of the Atlanta Streetcar project. The bisection of Auburn Avenue left residents and the neighborhood isolated. The implementation of the Atlanta Streetcar alongside the Historic and Cultural Information Project helped promote vibrant connections to MARTA rail and local bus services, major employment centers, regional destinations, residential neighborhoods, major educational facilities, and tourist venues in zones that were considered distressed. The Atlanta Streetcar implementation moved forward with a Joint Use Agreement for the I-75/85 ROW between Auburn and Edgewood Avenues.

The Atlanta Streetcar project represents a collaborative effort by the city of Atlanta, the Metropolitan Atlanta Rapid Transit Authority (MARTA), the Atlanta Downtown Improvement District (ADID), the Federal Transit Administration (FTA), and U.S Department of Transportation (US DOT) to bring to fruition transit infrastructure that connected the metro area and the greater region.

3.1.2.7 National Park Service and the King Family and Foundation

The Sweet Auburn Historic District was designated a National Historical Landmark in 1976. The Martin Luther King Jr. Historic District included portions of the Sweet Auburn Historic District and was listed on the National Register of Historic Places. In 2001, the original boundary of the Martin Luther King Jr. Historic District was increased to include contiguous and intact portions of the Old Fourth Ward. This boundary increase included historically residential properties as far as the Interstate 75/85 corridor. The elevated interstate was rebuilt and widened three times its original width since 1980 and is a physical barrier between Martin Luther King Jr. Historic District and the Sweet Auburn Historic District.



Figure 3-4 Atlanta Streetcar, which traverses Auburn Avenue

Historically, both districts were once part of a single African American community. Now, Sweet Auburn is considered downtown, while the Auburn Avenue community is generally viewed as a residential neighborhood on the east side of Atlanta.

In 2018, President Donald J. Trump signed into law H.R. 267, the Martin Luther King, Jr. National Historic Park Act which redesignated Martin Luther King, Jr. National Site to a National Historic Park. H.R. 267 also modifies the boundaries to the park to include the Prince Hall Masonic Temple, where the Southern Christian Leadership Conference (SCLC) established a headquarters on Auburn Avenue in Atlanta in 1957. Doing so allowed the National Park Service to provide technical assistance to the building's owners for repairs, renovations, and maintenance to help preserve historic integrity. (Gomez-Graves, n.d.)

Because of the project's proximity to the National Historic District, an interview cited that the King family and Foundation was a stakeholder throughout the entire project process, alongside the National Park Service.

3.1.2.8 Invest Atlanta

Invest Atlanta is an official economic development authority for the city of Atlanta, with a purpose to strengthen Atlanta's economy and global competitiveness and foster increased opportunity and prosperity for people in Atlanta. Invest Atlanta is chaired by the Mayor of Atlanta, governed by a nine-member board of directors, and leverages bond financing, revolving loan funds, housing financing, tax increment financing (TIF), and tax credits. Invest Atlanta supports the Sweet Auburn Technical Assistance and Predevelopment fund, supporting real estate, historic preservation, and community amenity investments in the area near the under-bridge project.

3.1.3 Governance

The under bridge project presents a unique mix of governance insights, encouraging collaboration between multiple different entities inside and outside of government. Done in partnership with the city and State Departments of Transportation. The ADID, which led the project, applied for a funding grant that would cover 80% of the total construction from the Federal Highway administration. Additionally, the city of Atlanta's Office of Cultural Affairs and MARTA were involved in the project. Stacey Key, 5th Congressional District representative on the GDOT State Transportation Board noted, "How appropriate that GDOT would augment the local investment into this historic community through its Transportation Enrichment (TE) program."

The Georgia DOT owned the freeway wall where the mural and photos would be placed and directed the project to move forward so long as there is no distraction to drivers or impact on usability. CAP and ADID presented a finding that one column served no structural importance and could be removed, but DOT did not want to remove it. The team worked around it and integrated the column into the overall aesthetic design.

The corridor is owned and maintained by the city of Atlanta, per a recent Comprehensive Plan Update, a long-term designation is slotted for Auburn Avenue corridor improvements as well as a complete designation for the “Auburn Avenue Transportation Enhancement (TE) Project” improvements. Specifically, the designation sites signing and street light updates, related to traffic as well as the project enhancements.

3.1.4 Finances

The Auburn Avenue History and Cultural Project was funded through Transportation Enhancement (TE) funding from the Georgia Department of Transportation (GDOT) and Central Atlanta Progress and Atlanta Downtown Improvement District. ADID provided required local matching funds for the GDOT grant and acted as the Project Implementation Manager under contract to the city of Atlanta. It took three years to complete the design and construction of the Auburn project. The team applied for funding from federal highway in 2012 for construction (80%) in total, construction was \$1.3 million.

Costs increased due to structural challenges with the wall - a skew in the wall made it difficult to apply paneling, leaks, and a pillar were all elements the design team had to work around and find funding for. All told, the Federal Government covered \$800,000, and the Central Atlanta Project (CAP) covered the other costs.

Additionally, Central Atlanta Progress and Invest Atlanta launched the Sweet Auburn Technical Assistance and Predevelopment Fund Program in 2019 to support development in the historic Sweet Auburn neighborhood. The fund has committed over \$1.7 million in programmatic and real estate efforts in the neighborhood over the past two years. (Atlanta Downtown n.d.)

3.1.5 Design and Placemaking

With a large design team that included CAP, ADID, Invest Atlanta, the Georgia DOT, and the National Park Service, the goal was to create a cohesive neighborhood identity and character. In a 2013 statement, ADID described the state of the corridor, “Existing historic markers and signs along Auburn Avenue are damaged, inconsistent, and uncoordinated. The Auburn Avenue History and Cultural Information Transportation Enhancement (TE) project is being funded by the Georgia Department of Transportation (GDOT) and the Atlanta Downtown Improvement District and seeks to create a consistent character along the corridor.”



Figure 3-5 Mural placemaking feature within the Sweet Auburn area

According to a Request for Proposals (RFP), the design team worked closely with ADID, the city of Atlanta, GDOT, the Project Steering Committee, and the Atlanta Urban Design Commission when producing and gaining approval for their design. The construction bid had a budget of \$200,000.

These signs were built for the 1996 Olympics by the Corporation of Olympic Development in Atlanta (CODA) and interpreted historical significance. The 21 new interpretive signs and 4 gateway signs replaced the older ones. These signs were designed by Sky Design and developed in partnership with project historian Dr. Karcheik Sims-Alvarado. Gateway markers are meant to narrate four themes: civil rights, entrepreneurs and businesses, institutions, and lifestyles.

Part of the project design included a mural. The mural showcases Auburn Avenue over a 40-year period through a gallery of black and white photos. These photos portray history from 1918 to the 1950s, when the corridor was known as “Sweet Auburn.” The mural was constructed on a wall the size of a football field and several stories high. To be more exact, the mural reaches 267 feet and 7 inches along the underpass, reaching as high as 21 feet, 11 inches. The images were printed on a high-gloss, aluminum material and a protective laminate was applied from the base to 8 feet high. Imagery focused on blown up historical photographs of what Auburn Avenue would have looked like in place of the highway. Images depicted a Veterans Day Parade, a storefront of an Insurance Company started in Atlanta, and various other street scenes. Along with imagery, panels lined the wall explaining each photo. The wall is enormous, and together with historical experts and consultants, the team found photos that could be blown up to match the size of the wall without losing details or becoming distorted. The team also utilized concrete poles while stitching together three images along the wall after the construction team did not want to remove the pole. Beneath the images, seven blocks of text and photos capture slices of history.

Details include:

- World War 1, Parade, 1918,
- Atlanta Life Building, 1932,
- Butler Street and Houston Street, circa 1950



Figure 3-6 Map and interpretive sign in Sweet Auburn



Figure 3-7 A photo from under the interstate, showing signs for the exhibit, a portion of the mural, as well as transit lines

- Yates and Milton Drugstore, circa 1920s,
- Big Bethel AME, circa 1922,
- View down Auburn Avenue with gas station, 1950s,
- Sweet Auburn, 1954

Additionally, there is a lighting component that incurred an additional cost. The lighting fixtures hang from the top of the interstate and call out the streets the highway cuts through, drawing attention to the exhibit from passersby. The light boxes are 12 feet long and 1 foot high, with white letters on a black background are 6 inches high.



Figure 3-8 Photo of a portion of the mural, from ADID.
<https://www.atlantadowntown.com/adid/areas-of-focus/capital-projects/auburn-avenue-history-and-culture-project>

3.1.6 Community and Economic Development

[While the Auburn Avenue Historic and Cultural Information Project has not had as significant economic impacts as other efforts in the area, such as the streetcar, the project was included several efforts to create a significant community space. Central Atlanta Progress and Atlanta Downtown Improvement District led this effort with the involvement of the Atlanta DOT and Georgia DOT. The Cultural Affairs department also had a role in this development as part of the business improvement sector. Additionally, the National Park Service curatorial team was involved from the start as the Dr. King home and a national site dedicated to the King family were nearby. MARTA was also involved as a streetcar was being constructed in the area as part of the project. Finally, three to four historians were consulted for this project to ensure the images chosen as part of the mural design element of the project were accurate to the time; they also had an important role of correcting historical narratives. CAP, as part of an improvement district initiative, worked to garner local support and feedback from residents near the project.

CAP and ADID held multiple in-person public information open houses, where attendees were encouraged to complete a comment card on the three initial concepts for the Underpass Enhancement.¹

¹ Comment card and associated handout available at: <https://ctycms.com/ga-atlanta/docs/burn-avenue-underpass-enhancement-pioh-handout.pdf> Last accessed May 31, 2023

3.1.7 Human and Natural Environmental and Health Considerations

Early conceptualizations for the under bridge project incorporated community input for how the under bridge could be improved. Workshops in 2011 yielded favored designs that included trails along the Corridor, urban forests, covering the interstate in key locations, green walls, and bridge lighting structures.

Efforts to revitalize areas in downtown for the Olympic Games from CODA and the city included pedestrian improvements, trees, street furniture, and open spaces to enhance the city image for visitors. Auburn Avenue was highlighted by CODA as a neighborhood slotted for improvements and received additional funding through a combination of city, federal, and private funding for pedestrian street improvements, and historical signs describing the area and the historical significance. Other amenities like pedestrian improvements to access MARTA transit stations became permanent. New pedestrian plazas and investment in the Centennial Olympic Park are noted urban design amenities that make downtown Atlanta more attractive to visit. These efforts culminated in a comprehensive plan for Auburn Avenue described earlier.

While the Auburn Avenue Historic and Cultural Information Project was small enough in scale to be exempt from the EIS / EA process, the implementation of the streetcar alongside the Auburn Avenue History and Cultural Project represented a reconnection to employment opportunities, residential areas, educational centers, and areas of commerce for residents. An EIS filed for the Atlanta streetcar indicated improved transit services encouraged better connected networks for bus riders, bicyclists, and pedestrians. The EPA supported this project due to the alternative it provides to the sole reliance on automobiles for transportation demand. Regarding air quality, enhanced mass transit, bicycle and pedestrian options are effective methods to reduce the amount of greenhouse gas emissions due to the transportation corridor. Additionally, the use of a streetcar may result in less noise, vibration, and land-use impacts. An Atlanta Streetcar Corridor Development and Investment Guide touted Sweet Auburn as having the highest walk score of all Atlanta neighborhoods, a score that would increase with the addition of the Streetcar.

3.1.8 Historical Counter-Narratives

3.1.8.1 Auburn Avenue Historic and Cultural Information Project – Initial Plans

It is necessary to understand how the Butler-Auburn Plan Update informed CAP's perspective on Auburn Avenue. The Butler-Auburn Plan proposed turning Auburn Avenue into the nation's premier heritage tourist destination focused on the lives and experiences of African Americans. Their vision incorporated mixed-use residential and retail centers and was a culmination of several plans and visions for the street. A planner who drafted the plan stated, "the project was prepared for Central Atlanta Progress and is actually a redevelopment plan update. The original plan was completed in preparation for the 1996 Olympic Games." The Update was prepared within the context of an Imagine Downtown Project funded by Central Atlanta Progress, "the Imagine Downtown Project was a visioning exercise which helped to identify, very specifically, what our investment options were downtown, and what we wanted

downtown to look like when we were done.” CAP then conducted an online survey drawing more than 1900 responses, including CAP members, community members, and hosted a series of community meetings for stakeholders to discuss development ideas. CAP used these meetings to create a vision of what downtown Atlanta should look like and created consensus that helped move the plan forward.

Longtime residents, business owners, and community activists faced uphill battles to position the street toward a future of Black development, stating that the city of Atlanta sought instead to create a landscape that relied on heritage tourism opportunities. The Avenue’s legacy as an important street for African American commerce, the redevelopment vision outlined by the city highlights a specific historic and racialized understanding of the corridor’s history, legacy, and significance to the state, region, and nation. The city and CAP formed a development vision that focuses on a time period in Auburn Avenue’s history when the street was tightly controlled by business leaders. Critics argue that the city is contextualizing Auburn Avenue in this specific framework centers on business development, accommodation, and the relationship between African American civic and business leadership within White Atlanta’s power structure in order to promote the heritage tourist potential and a “culture/entertainment” venue. One critic wrote, “Just as CAP uses a strategic understanding of the history of Auburn Avenue to facilitate the commodification of racial identity, the Auburn Avenue community writes particular aspects of the African American identity and history into the landscape while ignoring larger histories of class and gender tensions in the corridor.” (Inwood 2011)

Auburn Avenue was designated as a National Historic Landmark in 1976, making it a focus for several economic development and placemaking initiatives in recent years including the 2014 installation of the Atlanta Streetcar. This designation would be an important factor for visioning the project, as the Butler-Auburn Plan Update explains,

The waxing cultural and heritage tourism in the United States coincides with an aging, more affluent, baby boom population and a sense of introspection...More people are seeking to reinforce feelings of a common past and affirm a cultural solidarity through visits to America’s celebrated historic natural parks and sites. The National Park Service has at least 38 heritage tourism itineraries online, and the National Trust Preservation lists over 70 ‘Distinctive Destinations’ in their marketing. Sweet Auburn is a natural for each.

To that end, the Butler Plan routinely underlines Auburn Avenue’s financial success, and the promotion of an identity that countered norms of Black life in the American South. Through referencing Auburn Avenue at its economic peak, the Butler Plan emphasizes a successful period in Auburn Avenue’s history and the role it played in marketing Atlanta as a progressive city. Both the Butler-Auburn Redevelopment Plan and the Imagine Downtown project use the history of business-oriented, successful Black leadership to define the street.

3.1.8.2 Broad Economic Investment Concerns

While developing the Butler-Auburn Redevelopment Plan Update, a desire to “capitalize on Sweet Auburn’s historical association with the Civil Rights Movement, [as well as capitalizing on] events and

leaders in many areas of the African American experience.” (Urban College, 2005, p.12). The city of Atlanta distanced itself from Auburn Avenue’s connection to the Civil Rights Movement after building a \$125 million museum dedicated to Civil Rights near the Centennial Olympic Park—roughly a mile and a half away from the Auburn Avenue and Dr. Martin Luther King Jr. National Historic Site, located on land donated by the Coca-Cola Corporation (Jonsson, 2006, p. 3). The selection of this site set off a debate between historians and Civil Rights activists arguing for an Auburn Avenue location, highlighting the APEX Museum of African American History was located on Auburn Avenue and in the process of developing similar exhibits. In an editorial for the Atlanta-Journal Constitution, Morehouse College professor Alton Hornsby argued that the economic impact of the museum would have a greater impact on Auburn Avenue than on the other side. Adding that Auburn Avenue is already a major tourist destination because it is home to the King Center.

Longtime residents, business-owners, and community activists were at one time suspicious of CAP’s plans and the marketing of “Sweet Auburn.” In an interview conducted with a longtime resident and businesswoman in the area, the interviewee cited the “Sweet Auburn Curb Market” restoration efforts as a reason for suspicions. The market restoration began in the late 1980s to preserve and redevelop one of the oldest vegetable markets in Atlanta and was initiated in conjunction with the 1988 Democratic National Convention. The interviewee noted,

The city of Atlanta came up with this ‘great plan’ to help Auburn Avenue. They re-did the curb market. However, the market has no real legacy for the people of this community. During segregation Black people couldn’t even go there. It was the White folk’s market, but you don’t see that there. The whole reason it’s called the curb market is because we couldn’t go inside, we had to stand on the curb to buy vegetables. Yet this is the city’s vehicle for redevelopment?

This story highlights the struggle CAP faced in creating a historic authenticity along the Auburn Avenue Corridor and captures a wider feeling that if Auburn Avenue will look to the past, stakeholders must focus on the future of African American identity related to historic class divisions along the corridor. Another interviewee explains, “I don’t think that Dr. King or Alonzo Herndon, or B.L. Calhoun, or T.M. Alexander or any of those individuals ever in their wildest dreams thought for a minute that Auburn Avenue would stand still, that our destiny would be based on what we used to have, rather than on the potential of what we can be.” Instead of employing the history of Auburn Avenue in a broadly appealing destination, this resident felt that Auburn Avenue’s history was a reason to build for the future and emulate the earlier business success through redeveloping a strong financial and commercial district.

Where CAP wants to utilize Auburn Avenue’s history as a way to transform the corridor into an entertainment venue, community members hoped to turn the historical connection into a future for the corridor, and critics cite the desire to create a “new culture entertainment development that provide flexible performing arts and exhibit space [and] retail entertainment space.” (Atlanta Downtown n.d.) Citing this vision as “neo-liberal economic policies [that] are closely linked to other racist projects that at a minimum ‘reduce’ racial difference and at worse ‘erase racial differences, and pretend that its values [economic, political, cultural] apply to everyone.” (Kobayashi and Peake 2000, p.394). Through the

reconstruction of “Sweet Auburn,” critics explain developers are shifting of racism and racial exploitation that created Auburn Avenue to a discussion of cultural differences to facilitate contemporary marketing of Sweet Auburn and Atlanta more broadly.

3.2 CENTRAL 70 (FREEWAY CAP) – DENVER, CO

3.2.1 Background

At the center of Denver’s northern boundary lie the historic Globeville and Elyria-Swansea neighborhoods, a community of working-class Hispanic families now, it was originally settled by immigrants from Eastern Europe who came to work during Colorado’s gold and silver booms. Separated from most of the city by the South Platte River and rail yards, the neighborhoods and those adjacent have been

subjected to a host of industrial activities that Denver’s more affluent neighborhoods did not want, including meatpacking plants, refineries, wastewater treatment plant, stockyards, and metal fabricators.

The Central 70 area, between I-25 and Chambers Road, is also one of Colorado’s economic backbones. It is home to 1,200 businesses, providing a regional connection to Denver International Airport and moving upwards of 200,000 vehicles per day. The goal of this project is to bring the aging highway into the 21st century and rejoin communities along the way. (Colorado Department of Transportation 2022d)

The Central 70 Project will reconstruct a 10-mile stretch of I-70 between Brighton Boulevard and Chambers Road. The original construction of Interstate 70 as an elevated viaduct tore the neighborhoods in two and resulted in the loss of hundreds of homes. The reconstruction project will remove this viaduct, by building the expanded freeway, which includes an express lane and 3-4 general use lanes in each direction, in a trench where existing elevated viaduct stands. While this removes a noisy eyesore, it still divides the neighborhood. To partially address this issue, part of the new road will be capped by a new park, which will feature a small amphitheater, a splash park, a sports field, play areas, and room for farmers markets and community events. (Colorado Department of Transportation 2022d)

Construction began in August 2018, and according to a progress report published in October 2021, have completed seven bridges, constructed 33,900 linear feet of sidewalk, have constructed 16 ramps, and excavated more than 2.1M cubic yards of dirt, among other things. (Colorado Department of Transportation 2022d)



Figure 3-9 Map of project area - Credit: CDOT Central 70 Overview

CDOT has also made several commitments to the local community as part of the Central 70 Project. These include mitigating the impacts of construction noise and dust, contributing funding for affordable housing and access to fresh food. However, residents view the project as another chapter of their community's present reality, where "progress" will build toward a future that does not include them, as rent and home prices jumping leaves some feeling threatened by gentrification. While the Central 70 project can ultimately offer benefits to the community with its investments in more services and facilities, the project remains an example of the monumental challenges faced when reconciling the large-scale benefits of a freeway with the negative local impacts on the surrounding community.

3.2.2 Stakeholder Engagement

The project is being constructed and financed under an agreement between the High Performance Transportation Enterprise (HTPE) and Colorado Bridge Enterprise (CBE), both part of the Colorado Department of Transportation (CDOT), and Kiewit Meridiam Partners, LCC, (KMP) a company incorporated by Kiewit Development Company, a major infrastructure developer and investor, and Meridiam, a global equity investment firm. (United States Department of Transportation, Build America Bureau n.d.)

KMP and CDOT are leading the effort to engage the businesses and affected community members. CDOT has identified and summarized the businesses in the Elyria-Swansea area that are impacted by the construction. Each business write-up includes a photo, a write up on the business itself, hours of operation, and location and contact information. (United States Department of Transportation, Build America Bureau n.d.) KMP relied on strong relationships and "good old-fashioned communication" with CDOT, the city and multiple third-party stakeholders, including Denver Water and Union Pacific Railroad. Denver Water was crucial, as there are three water conduits that go north-south across the project, with 850 linear feet of utilities per acre. Additionally, CDOT utilized ProStar Pointman software to manage the data gathered from potholing, allowing KMP to see where the utilities are in real time. KMP also collaborated closely with Union Pacific Railroad, which ultimately changed the track phasing to save five months on estimated construction time.

Efforts to engage the surrounding community, however, were not as smooth. Ultimately, multiple pieces of litigation to stop the project were filed, and while they were largely unsuccessful, one did result in an agreement in December 2018 to provide an independent health impact assessment, which is currently underway. (Colorado Department of Transportation 2022b)

In addition to addressing the potential physical harms of the freeway, residents were also wary of potential "positive" effects, that is, that if the project improved the area too quickly, issues of gentrification and displacement also arise. A 2020 report from the National Community Reinvestment Coalition found Denver was the second most intensely gentrified city in the nation from 2013-2017, trailing to San Francisco. On the other hand, data compiled by the Denver Department of Public Health and Environment found that Elyria-Swansea was 80.49% Hispanic, with about 19.5% of families living below the federal poverty level between 2013-2017. Citywide, only 4.52% of Denver families were below the line comparatively. To help address this issue, in 2018, the the Globeville, Elyria-Swansea

(GES) Coalition organized for housing and health justice, announced an Affordable Housing Collaborative, a nonprofit community land trust model with the goals of creating new affordable housing and preserving existing affordable housing and educational opportunities to help families transition toward home ownership. CDOT and the city of Denver contributed \$2 million to this effort.

3.2.3 Governance

The project is governed by the Denver Regional Council of Governments (DRCOG), Colorado Department of Transportation, and the city and county of Denver. After the Federal Highway Authority’s final approvals in January 2017, CDOT embarked on an 18-month long procurement process for a 30-year, design-build-finance-operate-maintain (DBFOM) partner. The DBFOM that resulted is between HTPE, CBE and KMP, as noted above. At the end of the 30-year term, CDOT will assume ownership and be responsible for ongoing maintenance. (Colorado Department of Transportation 2022d)

Within this structure of governance for the project, there does not appear to be space for community input or long-term community representative input. According to an interview with a local stakeholder, “There was no collaboration with the community, I did not witness that. There was no committee, no advisory group that was more a part of the process where there was a collaboration and communication between CDOT and community that came close to equal respect. If I were going to advise a freeway agency on how to do these things successfully, you need to work with the people in the community and bring them into the decision-making process, be genuinely open to hearing their experiences, history, and understand that only after that can you find solutions through their eyes.” (EarthJustice 2022) Even within local open houses for the project, there were concerns that residents were monolingual Spanish speakers, and no effort on CDOT’s part to have translators. “[The open houses] were more like CDOT is coming to the neighborhood to hear from you, you tell us, and we’ll take it back to the offices and let you know.” (EarthJustice 2022)

3.2.4 Finances

A Design-Build-Finance-Operate-Maintain (DBFOM agreement) set up the financing for the project. The State will compensate KMP, as the

Table 3-1 Comparison of public private partner models (Central 70 is DBFOM)

	Identify Infrastructure Need	Propose Solution	Project Design	Project Financing	Construction	Operations/ Maintenance	Ownership
Design/Build	Public Sector	Public Sector	Private Sector	Public Sector	Private Sector	Public Sector	Public Sector
DBOM	Public Sector	Public Sector	Private Sector	Public Sector	Private Sector	Private Sector	Public Sector
DBFOM	Public Sector	Public Sector	Private Sector	Private Sector	Private Sector	Private Sector	Public Sector

concessionaire, with availability payments made by CBE and HPTE over a 30-year agreement after the construction is completed. (United States Department of Transportation, Build America Bureau n.d.)

The total project is expected to cost \$2.2 billion over 30 years. (Murray 2017b) Funding sources include:

- \$850 million from the Statewide Bridge Enterprise's Bridge Special Fund (created under SP 108 to finance and repair structurally deficient bridges, I-70 viaduct is the last of the original bridges to be addressed)
- \$50 million from Denver Regional Council Of Governments (federal Congestion Mitigation and Air Quality Funds),
- HPTE Express Toll Lane revenue (payments over 30 years)
- General Fund transfers to CDOT - \$180 million through Senate Bill 228
- \$37 million from the city of Denver

The largest funding source for the I-70 East is the Colorado Bridge Enterprise (CBE), which was brought about due to passage of the Funding Advancements for Surface Transportation and Economic Recovery (FASTER) act in 2009, establishing CBE to accelerate the repair and construction of deficient bridges. The viaduct was determined to be among the 30 worst bridges on the list. The I-70 viaduct represented 61% of Colorado's total CBE eligible bridge deck area.

The High Performance Transportation Enterprise (HPTE) was formed by the legislature in 2009 to help CDOT find ways to pay for important transportation infrastructure projects. (Colorado Department of Transportation 2015) It operates as a government-owned, independent business with CDOT. HPTE conducted a Value for Money analysis for the I-70 East project. The analysis compared delivery methods, including Design Build Finance Operate and Maintain model. The analysis found key benefits: the construction entity would be responsible for increased costs, construction and operations, maintenance and rehabilitation risks are transferred to the construction entity, private lenders provide oversight and monitoring throughout construction, and payments are limited to annual performance payments which limit budget exposure. The report concludes, "Across many elements of risk and transfer, DBOM and DBFOM achieve similar results. However, DBFOM provides somewhat more risk transfer and certainty in three areas: Project Financing Schedule, Lifecycle Maintenance Cost, and Long-term Security Cost." Finally, it should be noted there are some critiques to this public-private partnership providing less transparency, especially because KMP considers the financial modeling it used during negotiations are proprietary. (Murray 2017a)

KMP, the Developer and concessionaire, (Murray 2017b) paid over half the upfront cost -- \$678 million -- and was provided a TIFIA Loan of up to \$464.9 million to finalize the construction of the project. (Mulero 2021) CDOT is responsible for long-term sizable annual payments to Kiewit Meridiam Partners to repay for the significant borrowing, and will also compensate them for operation and upkeep of the highway. KMP, in their winning bid, projected it could deliver the project for \$71 million less in construction costs than CDOT's original estimates. The TIFIA loan also contributes to other loans and improvements going toward improvements around the airport in the area.

Art grants from Denver Urban Arts Fund paid for the two viaduct art pieces, which are discussed further in the placemaking portion below.

A legal challenge from the local community resulted in a December 2018 agreement where CDOT contributed \$550,000 for an independent neighborhood health study, \$25,000 for a monitoring position on the study’s team and another \$25,000 for additional trees and landscaping along neighborhood boundaries.



Figure 3-10 Central 70 and local artists transformed the viaduct and sound walls.

3.2.5 Placemaking

The Central 70 project partnered with local organizations and artists to create art for walls of the viaduct and sound walls adjacent to Swansea Elementary School. The Denver Urban Arts Fund was able to fund two viaduct art pieces meant to inspire and beautify the viaduct until the Central 70 project removed it. Building off the successes of the two viaduct events, CDOT teamed up with local artists to transform the blank sound walls on the south side of the Swansea Elementary School into an urban art exhibit. Finally, the Globeville Elyria-Swansea (GES) neighborhood provided input for the people/places/culture themes for the retaining walls that sit currently adjacent to the interstate but will be installed in the lowered section of the Central 70 project. (Colorado Department of Transportation 2022a)

The Final EIS statement described the neighborhood character for each segment of the I-70 corridor, highlighting that the existing conditions of the I-70 East corridor are varied and lack a cohesive theme. (Colorado Department of Transportation 2016)

Specifically, support structures, edge elements, medians, and landscape treatments are inconsistent in aesthetic character and quality. In the portion describing creating an aesthetic for two speeds of travel, the report states, “the design of all highway elements should be coordinated across segments to ensure that future construction will define a single, unique, identity for I-70 East. The pattern, color, and texture of these elements will respond to a segment’s individual character within the overall theme.” The east-west theme will look to the natural landscapes, taking cues from Colorado’s natural landscapes. The theme encourages subtle, natural transitions throughout the segments, and could be expressed through “organic forms, Indigenous shapes and lines that lead to the horizon.”



Figure 3-11 Illustration of different neighborhood characteristics

The north-south aesthetic design in the final EIS stated that elements should be expressed visually for slow moving traffic and to create safe environments for pedestrians and bicyclists. The theme here is “Welcome to the Neighborhood, which looks to cultures, customs, art, businesses and establishments that are local to the communities through which the corridor passes.” The north-south theme looks to the urban and suburban communities of Colorado and the people who make the region. As such, the approach to form, shape, and lines are urban and modern, and geometric more than organic. The color palette suggested should reference local art, housing, and community landmarks.

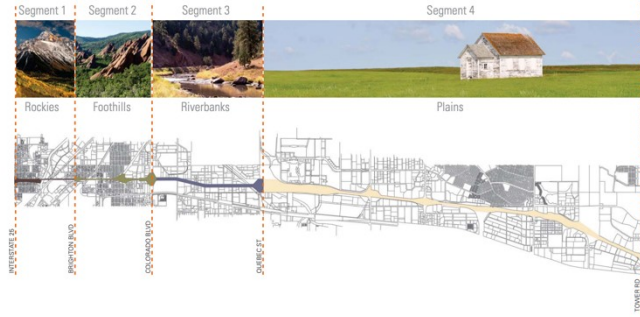


Figure 3-12 Illustration of geographic characteristics

Additionally, a landscape planting program “will be included with every project in the corridor.” The program would be completed in partnership and agencies and communities. These landscape planting programs include landscape planting, maintenance, and funding. There is substantial recommendations for the planting and landscape aspect of the corridor, including notes about selecting plants that can survive with little to no maintenance, among other things.

3.2.6 Economic Development and Community Engagement

A 2015 report noted that the EIS for I-70 East involved eleven years of study, with detailed analyses of environmental and community impacts of alternatives, and community outreach “process exceeding any effort in CDOT history.” (Colorado Department of Transportation 2015)

Central 70 construction set the goal to have 20% of the workforce from nearby neighborhoods. To accomplish this, the Central 70 partnered with WORKNOW, a local job recruitment, advancement, training and support platform for people living in neighborhoods directly impacted by construction projects. WORKNOW provides free entry-level and advanced job training classes, career coaching, financial planning, and access to local family support services such as childcare or the purchasing of construction equipment and tools. WORKNOW supplies resources like this through a partnership with Gary Community Investments, the Center for Workforce Initiatives at Community College of Denver, the Colorado Department of Transportation, and the city and county of Denver Office of Economic Development/Denver Workforce Services (Colorado Department of Transportation 2022b). CDOT received approval under Special Experiment Project 14 for the U.S. Department of Transportation pilot program to execute a geographic-based hiring preferences for the I-70 East Project. (Colorado Department of Transportation 2022b) Finally, area residents were also encouraged to search Kiewit job postings, signatory unions, and subcontractor job openings.

3.2.6.1 Community Commitments and Engagement

As part of the NEPA process, Central 70 and CDOT committed to identifying alternative methods, and what can be done to mitigate the environmental impacts of the project. The Record of Decision (ROD) document spells out the various commitments CDOT and the Central 70 project must follow. As a legally binding document, the ROD is the final phase of approval for the first phase of the project. The fifth chapter of the ROD for this project details the mitigation commitments, including pollution control requirements for construction equipment, funding for affordable housing, and improvements to Swansea Elementary School. (Federal Highway Administration and Colorado Department of Transportation 2017) The ROD reads: “Considering the comments received on the project alternatives, the project team has developed additional mitigation measures for the environmental justice and historic resources beyond those required or normally provided in Colorado to lessen the adverse impacts in the project area. Any mitigation measures included in the ROD for the project must and will be completed (even if the project has funding issues as it is constructed).” (Federal Highway Administration and Colorado Department of Transportation 2017)

The Central 70 Project solicited community outreach through a dynamic process that includes residents, businesses, property owners, agencies, stakeholders, and community groups. The Project used a variety of techniques including:

- Hiring residents from the neighborhoods;
- Conducting and requiring training for those interacting with the public;
- Conducting door-to-door outreach meetings in neighborhoods;
- Holding block meetings within neighborhoods;
- Attending neighborhood association and business meetings;
- Providing translation, child care, and meals at meetings;
- Establishing working groups to focus on specific issues;
- Involving the media proactively and
- Meeting with local and state elected officials

CDOT made 150 community commitments, many without precedent in Colorado. Some notable commitments include building a 4-acre park over the highway that include features selected by the community, ensuring there is a 20% local hiring requirement, on-the-job training, and leveraging a \$400,000 grant to support workforce development with WORKNOW. Roughly 680 people from 15 surrounding ZIP codes have been hired to work on the I-70 expansion since November 2018, with 68 residents from the Globeville and Elyria-Swansea neighborhoods have been hired for the project. (Alessandrini 2022)

Additionally, Swansea Elementary school received two new classrooms with a new HVAC system. The final design for a new playground and multi-purpose field is underway. These are just a few of the community commitments CDOT and Central 70 have implemented as part of the NEPA process.

Central 70 also committed to facilitating utility costs to residents for storm windows and air conditioning units, among other things, for residents within a certain area of construction in order to mitigate dust

and noise during construction. By the end of 2019, more than 260 homes had home improvements completed. CDOT also hired Northeast Transportation Connections to help ensure residents have access to schools, homes, and businesses throughout construction. CDOT provided funding and financial counseling for displaced people through funding the Community Resources and Housing Development Corporation (CRHDC), and displaced residents were also entitled to benefits provided under the Uniform Act. (Federal Highway Administration and Colorado Department of Transportation 2017) It should be noted that this effort falls short for many residents. CDOT's calculations of what areas qualified for these mitigation efforts resulted in one side of a street with new windows that block some sound, while leaving residents across the street untreated, which appeared peculiar to the latter group.

Finally, CDOT will provide \$100,000 to help increase access to fresh food through an agreement with the city after two convenience stores in the Elyria and Swansea neighborhoods were relocated. CDOT provided the sum to the Denver Office of Economic Development's Globeville/Elyria-Swansea (GES) Healthy Food Challenge to help facilitate access to fresh food.

3.2.6.2 Diving Deeper into Community Engagement

Despite these efforts, residents felt that the overall disruption of building an expanded freeway in a trench through the neighborhood exacerbated, rather than repaired the damage the original elevated viaduct had caused to a once stable and cohesive social unit shattered. Regarding community engagement, one stakeholder said, "CDOT's mission is to build roads, I don't think they were well equipped to deal with impacted communities in a way that felt genuine, and that felt like CDOT understood their concerns. They could have used some diversity, equity, and inclusion training."

Members of the Globeville and Elyria-Swansea community remember shopping on the once-busy boulevard in the neighborhood, using it as a central place to congregate; and mourn the loss of it as a result of the construction of I-70, "CDOT never seemed to get that." An overall disconnect between the needs of the community and the impact of the freeway is apparent, "Imagine you've got someone who grew up or lived in [the neighborhood] for a long time and lived with the freeway for much of that time, to hear CDOT say 'congratulations you get a cap,' there's a disconnect. It doesn't address the needs of the community and sense of disruption and injustice that they have felt, living not just with the freeway but with everything else." The overall collaboration process reportedly felt disengaged, too. CDOT conducted surveys of residents, but "the feeling was, we're coming to hear from you, you tell us, and we'll take it back to the office and let you know." There was no committee, group, advisory group that was more a part of the decision-making process with close collaboration and communication between CDOT and the community.

Earthjustice represented several community groups in two lawsuits arguing the freeway expansion created a disproportionate impact on the communities, particularly a community of color. Given alternative route expansion opportunities, Globeville and Elyria-Swansea (GES) felt they had drawn the short end of the stick with no opportunity to voice their concerns or be heard. Earthjustice worked with local leaders and advocates for the lawsuit to discuss how CDOT had been treating the community and drafted a petition for review from the Federal Highway Administration (FHWA). The result was that

FHWA felt the project did not disproportionately impact the community. A settlement agreement was reached wherein CDOT would have to conduct a health impact study, community notification system for air quality and noise notifications, and provide funding for trees to be planted.

Community members of Globeville and Elyria-Swansea have repeatedly felt that their concerns over air quality, noise, and the plan itself have been ignored. In the early stages, some residents preferred the viaduct because it did not obstruct access between north and south parts of the neighborhood or the school, with free access at cross streets. This was compounded when a proposal to expand a freeway through a wealthier part of Denver was successfully fought off. Residents continuously felt as though CDOT was not listening to alternative ideas for I-70, that the Cap was moving forward one way or another. Additionally, residents were upset homes were being torn down for an expansion that included tolls, which residents felt would not benefit the community itself. Given remarks from the Secretary of Transportation and CDOT about righting past wrongs and environmental justice, CDOT, community members felt, did not adequately consider alternative expansions in other areas of Denver.

A notable item the community brought forward into their lawsuit that was not fulfilled was a deeper dive into the I-270 alternative route, or an alternative design like the Big Dig in Boston. Additionally, some felt CDOT dictated the length of the cap by the cost, “it is as long as it can be without needing special ventilation and air filters.” (EarthJustice 2022) One option community members would have preferred an actual tunnel with more ventilation and space along the top of the tunnel to allow exhaust to escape.

Despite the settlement agreement, community members still feel the impacts of living in a freeway construction zone: dust, noise, and variances given to the construction company allows construction to happen outside of common hours. CDOT is upholding the settlement agreement, despite having difficulty finding an unbiased researcher to perform the health impact study. There remains abundant skepticism: “CDOT is not doing what their clients wanted them to do by highlighting the cap on the freeway as a really great solution. [The community] didn’t want the cap, and they are skeptical that CDOT would maintain the facilities on top of the deck with playgrounds and parks in the neighborhood already in disrepair.” An overall feeling of freeway expansion without doing enough to mitigate the damages is felt.

3.2.7 Human and Natural Environmental and Health Considerations

After reviewing the NEPA documents, the Swansea and Elyria community members voiced their concerns about mitigation efforts on behalf of CDOT and the Central 70 project for the residents and neighborhoods. Several community members and Habitat for Humanity of Metro Denver, faith leaders, neighborhood development collectives, and environmental non-profits to name a few, commented against the findings of the I-70 Final Environmental Impact Statement. Many, if not all, cited the injustice of air pollution, noise, and possibly health impacts of the project on two communities without political power. One comment on the FEIS from the Elyria and Swansea Neighborhood Association reads: “No other neighborhood in the city of Denver would have a project like this forced upon them. We have concluded that this project is imposed on Elyria and Swansea because our population is poor, minority,

and without political influence.” (Federal Highway Administration and Colorado Department of Transportation 2017)

CDOT has made commitments to provide environmental protections during and after construction. Some of their promises include:

- Monitoring air quality and pollutants
- Controlling dust with watering trucks
- Retrofitting older construction vehicles with new emission controls
- Collecting up to 2,000 soil samples along the 10-mile corridor to determine which can be reused
- Adding bicycle and pedestrian enhancements
- Testing groundwater if found to ensure it is safe

Due to substantial comments from the public concerning air quality and details in the settlement agreement, a Health Impact Assessment is currently underway. A stakeholder interview indicated the assessment was delayed due to difficulty finding a non-biased lead researcher. Additionally, documents related to the settlement describe the I-70 project would work the EPA and Colorado Department of Environmental Health throughout the process, “Thus, a health impacts assessment would, at most, show very minor differences between alternatives with much lower impacts than historic or current levels in terms of air quality impacts.” (Federal Highway Administration and Colorado Department of Transportation 2017)

Additional concerns arose given COVID-19 forcing residents to be in place during construction. Community groups have helped residents get a place outside of the construction area to facilitate better sleep while crews work “at all hours.” Residents do not feel that enough is going back to the community, “We need things here, done in the community. We need that funding for the residents. There’s no funding for that, there’s funding for new streets, there’s no funding for more trees, there’s no funding for anything.”

Diverting the freeway traffic below grade required construction teams to balance keeping the roadway surface out of the groundwater while maintaining vertical clearances for the bridge crossings and the park on the cap. The solution presented stormwater challenges that was addressed with a trench draining to the low point, entering a lift station that pumps it 35 ft up to grade. It then transitions to a traditional water-quality pond before it is discharged into conduits carrying it into the South Platte River. A separate concrete storage tank was built next to the pump station to accommodate the 3,500 gallons of water per minute that the deluge system would drop if there was a fire. This water is then diverted into a separate drainage system and tank to be tested and treated.

As KMP performs the viaduct demolition, the materials are being “100% recycled...the steel is melted down for reuse while the concrete is processed on site at a crushing yard.” The concrete will be reused as a new road base for the eastbound lanes of I-70, with excess available for other projects.

3.2.7.1 Environmental Justice Considerations

Per executive order 12898 (United States Government 1994), CDOT recognized the project passed through environmental justice neighborhoods. The agency committed to “providing an unprecedented level of public involvement tailored to the low-income and minority populations of this project area to find ways to improve the project and lessen its impacts.” The team notes the variety of tools implemented to solicit input and involvement from stakeholders including:

- Opening a project office within the project area
- Locating all public meetings within the project area, accessible via public transportation
- Providing childcare, food, and Spanish translation at every meeting
- Distributing announcements in local and regional media and at faith-based organizations
- Using local businesses to cater meetings and provide translation services, and
- Employing project area residents to lead and staff outreach efforts.

3.3 CLAIBORNE CORRIDOR, NEW ORLEANS, LA

3.3.1 Background

The Claiborne Corridor in New Orleans boasts deep cultural roots dating back to the Mardi Gras Indians and slavery era artisans. It was a mecca of Black-owned businesses that some say rivaled the Harlem Renaissance.

The building of Interstate 10/Claiborne Expressway in the 1960s tore the community apart, slicing through the neighborhood of Tremé (tre-may), located next to the French Quarter. Tremé was New Orleans’ main community of free people of color, and renowned for its African-American and Creole-influenced food, music, and culture. Claiborne Avenue stretched seven blocks through Tremé and was its main boulevard and commercial corridor, complete with wide streets, and a tree-lined median park that served as a main gathering place. (Gershon 2021)

Three-fourths of the businesses closed after the freeway cut through the neighborhood, and hundreds of homes, trees, and a thriving corridor had been razed over. (Gershon 2021) Hurricane Katrina hit in 2005, and at the time more than 40% of residents were living in poverty, as well as general life expectancy being 20-25 years shorter in the neighborhoods along the freeway. Demolition of the interstate above Claiborne seemed increasingly possible, and the idea was included in some of the city’s earliest rebuilding plans drafted after the Hurricane. (Gershon 2021)

From there a split was born. Some saw the freeway as a scar upon the landscape, developers saw it as a real-estate boon, and some wanted to maintain the culture that had developed after the highway was built. In 2010, the Highway to Boulevard’s program from the Congress for New Urbanism (CNU) helped the city gain a \$2 million federal TIGER grant to fund the Livable Claiborne Corridor (LCC) study. The study presented three major options (Congress for New Urbanism 2010):

1. Maintain the expressway with \$300 million for repair and maintenance over 20 years,
2. Remove ramps and develop street infrastructure in residential areas, with \$100 million to \$452 million to pay for these changes over the same time period, or
3. Remove the expressway entirely and develop a street-level urban boulevard with alternative transportation infrastructure which would incur about \$1 billion to \$4 billion in costs and reclaim nearly 50 acres of land for open space and redevelopment.

Mitch Landrieu, who was Mayor of New Orleans at the time, said he wanted to take a different approach with the Claiborne Corridor. However, after seeing the analysis of the cost of removal and alternatives from the 2014 study, his interest in removal waned, stating, “it would be great if you could do it, but it takes a huge amount of money, planning, and commitment of the neighborhoods themselves, which was more complex than we originally thought.”

Despite the possibility of demolishing the freeway, some remained concerned that doing so will either worsen the neighborhood's devastation or trigger a wave of gentrification that will drive out longtime residents. Others believe the funds may be better used for neighborhood priorities. Several small business owners have mentioned highway removal would only produce a marginal increase for their businesses, believing that government funding is the only way for small businesses in Tremé to flourish. (Sanders 2021) Nyree Ramsey, Tte Executive Director of the Ujamaa Economic Development Corporation, an organization focused on the redevelopment of the Claiborne Corridor, says, “We must decrease vulnerability and increase economic security,” when it comes to mitigating gentrification following removed overpasses. (Sanders 2021) One resident said, “With the size of the ramps, how can you move all that concrete without tearing up the neighborhood even more? When it was built it was disruptive, I do not like it, but I am not sure you can take it down without causing even more damage. We might have to just live with it.” (Burch 2021a)

With middling support for the removal, Landrieu and many neighborhood advocates and officials put their weight behind a rehabilitation effort for the expressway that pushes for the creation of businesses and investments in unused space underneath the highway. , After a decade of community input, city leaders partnered with the Foundation for Louisiana to launch the Claiborne Cultural Innovation District (CID) based under I-10/Claiborne Expressway, but this plan faces its own complexities because of zoning issues and challenges of the surrounding structure of the expressway itself.



Figure 3-13 Claiborne Expressway conceptual design
<https://colloqate.org/claiborne-innovation-district>

Years of heated discussion over what to do about the corroded roadway deck pitted locals against political and commercial interests and produced little except animosity. However, the deck's

deterioration, the risk it presents to drivers who have nowhere to pull over safely during a breakdown or traffic stop, the frequency of drive-by shootings, the drastic eminent domain takings needed to repair the deck, changed public opinion in favor of removal. Community advocates largely supported removal, yet residents remained wary. Residents, according to Asali DeVan Ecclesiastes the director of the Ashe Cultural Arts Center, said residents were concerned with how it would impact real estate, which was already filling with short-term rentals for the rebounding tourist industry and cultural capital of the neighborhood. Black renters were forced out of their homes, with Airbnb in their place, advocates for and against the highway removal said gentrification is already strong within the neighborhood. “What became clear to us, we who work in the community and studied what has happened when these highways are removed, is that there’s an immediate and aggressive displacement of the existing community. We decided the preservation of our neighborhoods and our cultural ties and traditions were more important than the interstate coming down.” (Gamboa et al. 2021)

The dispute over the Claiborne Expressway blooms and withers with some regularity. Despite vehement rhetoric, thorough assessments, and plentiful plans, few results have been provided to the formerly thriving Tremé. Currently, it is largely unclear what plans are in store for the Claiborne community or I-10. Residents call for multiple paths forward, ranging from turning the existing structure into a linear park, removing the expressway altogether, removing the ramps, or letting it be. It appears there is no consensus or common vision upheld by the community.

In the meantime, residents continue to use the space under the highway, with improvised cookouts and games underneath the expressway taking place. During Mardi Gras, carnival revelers and brass bands reverberate through the highways’ columns. And pillars standing in place of white oak trees are painted with local artist renderings of New Orleans heroes and traditions. A few residents articulated that while the neighborhood has changed, the culture is still alive and worth preserving, “As African Americans, we have to hold onto what is ours, and Claiborne Avenue, no matter what you do, will always be ours. People talk about taking down the highway, but I think we need to keep on making it our own.” (Gamboa et al. 2021)

3.3.1.1 Assessment as a Best Practice

After diving into the history of Claiborne and trying to grasp where it is at today, the ROW team has discovered that stakeholders appear to be divided, without a strong and responsive governance structure, and no plan to move forward outside of renewal efforts to support the culture that continued to thrive despite the interstate. Consequently, **we recommend not including Claiborne as a “best practice” case study.** As discussed below, the lack of a clear vision for moving forward, funding sources, and strong government structures make it difficult to paint a cohesive narrative, capture an understanding of where this project will go, or discern best practices.

The ROW team acknowledges how critical Claiborne’s story is for repairing the harm caused by interstates, and there are still lessons to be learned from this story, so we provide the results of our research into this area below. We also recommend that a deeper dive into the 2012 CNU study to better understand what elements contributed to receiving the TIGER Grant award could be worthwhile.

3.3.2 Stakeholder Engagement

3.3.2.1 Ujamaa Economic Development Corporation - Claiborne Corridor Cultural Innovation District (CID)

An extension of the Ujamaa Economic Development Corporation, the Claiborne Corridor Cultural Innovation District (CID) is a 19-block transformation of the elevated I-10 expressway. The organization was organized with a mission of equitable redevelopment of the Claiborne Corridor and adjacent communities. The CID area was built with green infrastructure and has a world-class market with vendors, it includes classrooms and exhibit space, interactive technology and educational demonstrations.

Notably, the CID views the I-10 expressway as not an injurious structure, but actively sets out to make it more purposeful for the community surrounding it. CID has transformed the space beneath the expressway as a community gathering spot for retailers, food and beverage services, activities, and experiences.

Ujamaa was established with stakeholders including the Foundation for Louisiana, New Orleans Redevelopment Authority, Ashe' Cultural Arts Center, Market Umbrella, the New Orleans Business Alliance, and Claiborne Corridor business owners and residents.

Ujamaa includes a Merchants Association with business owners and entrepreneurs. Additionally, the Own the Crescent program was recently awarded \$1 million by JP Morgan Chase to provide pathways to affordable homes. Additionally, Ujamaa works with LaunchNOLA, HousingNOLA, Good Work Network, Neighborhood Development Foundation, and Empower Your Cents to provide business training, homebuyers and landlord training. There is also a partnership with a CDFI Consortium that provides capital for residents and businesses that have been excluded.

To build the goals for the CID and Ujamaa efforts, 10 community meetings were held over 11 months and involved over 300 community members. The [master plan developed](#) by Ujamaa splits the 19-block area into 4 conceptual zones: the garden of the moors, backatown plaza, tambourine and fan, and spirit circle. (Ujamaa EDC 2019)

3.3.2.2 Claiborne Avenue Alliance

Another neighborhood group, the Claiborne Avenue Alliance was founded in 2017 and calls for a freeway removal, and for funds to improve the avenue's existing building stock, and the restoration of the median as public open space. (Claiborne Avenue Alliance and Collective Form n.d.) The Alliance has notable partnerships and public sway, working with Thriving Earth Exchange, the LSU School of Public Health, and Anthropocene Alliance to fund community input initiatives, community garden grants, and public health studies. Additionally, the CAA worked with Anthropocene Alliance to get a Kresge Foundation COVID-19 grant to establish a community garden.

3.3.2.3 Livable Claiborne Communities Study Stakeholders

Regional and local citizens of New Orleans who live, work, operate businesses, own property, recreate or rely on the Claiborne Corridor. The LCC team reached out to study area residents' businesses and landowners, developers, foundations, business interests and state and city agencies.

PAC and GC members represented interests beyond the immediate residents of the study boundaries and included the Port of New Orleans, the Louisiana Motor Transport Association, the Regional Planning Commission and Jefferson and St. Bernard Parishes. There were also additional meetings with the West Jefferson Civic Association, the New Orleans Board of Trade, New Orleans East Regional Library and a Regional Planning Commission-hosted public presentation.

3.3.3 Governance

The lack of a clear, cohesive and transparent governance structure has hindered the Claiborne Corridor development. Kristin Gisleson Palmer, a city council member who represents Tremé and chaired the Transportation Committee, advocated for taking down the expressway and wrote a grant that led to the funding for the Livable Claiborne Communities Study. This was guided by a Governance Committee of fourteen primary stakeholders. However, we were unable to obtain any additional information about this group, or any other official governing entity for the project.

3.3.4 Finances

Similarly, and related to Governance, no clear plan for financing any of the proposed options is evident. With estimates for the removal running at a billion dollars or more, many in the area expressed they would rather see that money invested in affordable housing, flood protections, and job creation to maintain the neighborhood and its permanent residents.

3.3.5 Placemaking

A critical component of the Claiborne Corridor project is reestablishing a sense of place. Many plans and ideas share a component that restores the median and restores the lost tree canopy. Additionally, many plans call out the opportunity to create affordable housing through infill developments and the rehabilitation of existing homes that have fallen into disrepair. Painted pillars honor luminaries from New Orleans' African American community and pivotal civil rights figures.

3.3.6 Economic Development and Community Development

Both the Innovation District and the Claiborne Alliance give strong efforts to engage community and encourage business investments for new and old entrepreneurs. Both have programs that support learning and financial literacy.

3.3.6.1 Livable Claiborne Community Study

Outreach was focused on identifying and integrating public common ground into the study's goals, scenarios, and implementation strategies which drove the agenda and programming for every public meeting. Open houses, study team presentations, participant group exercises and question and answer sessions were crucial to the study. The outreach team video and audio taped all public meetings and gathered one-on-one interviews from meeting participants who choose to ensure their input was on the record. In addition to the first LCC Citywide meeting, the team held four additional neighborhood-based meetings to help identify priority issues.

The LCC study team recognized the cultural traditions that are critical to the study area, including the Mardi Gras Indian tribes and the Social Aid and Pleasure Clubs. The LCC study team held four meetings focusing on the Mardi Gras Indians, Social Aid and Pleasure Clubs and the cultural community at large.

3.3.6.2 Innovation District

Many of the newer stores opening along the Corridor follow the streetcar line extension that happened in 2018, and it also spread gentrification – the LCC area outpaced the city with store openings, 93% to 56% citywide between 2015 and 2018. This could lead to a fear of gentrification as the streetcar extends further.

The US Department of Commerce gave the CID \$820,000 for a green marketplace with plans to encourage 50 small and micro-businesses and eight anchor businesses.

3.3.7 Human and Natural Environmental and Health Considerations

The Clairborne Community Alliance commissioned a study by the Louisiana State University Health Sciences Center School of Public Health to analyze decibel levels, air quality, and other health indicators that could be seen as a result of the interstate. (Katner et al. 2019) The study highlighted concerns from the traffic-related air contaminants, lead in the soil, noise pollution and fine particulate emissions.

With support from the city, state, regional agencies, and the Greater New Orleans Funders Network, a master plan for a 19-block Claiborne Cultural Innovation District (CID) was developed. (Ujamaa Economic Development Corporation 2019) The master plan was expansive, going beyond job creation and including proposals that would provide residents with access to financial trainings, technical assistance, and improved health outcomes and public transit outcomes. The master plan shows bioswales, holding ponds, drainage systems, and rows of live trees as elements of green infrastructure and environmental sustainability measures.

3.4 OREGON SOLAR PROGRAM

3.4.1 Background

Along Oregon's Interstate 5 and 205 interchange sits an array of hundreds of solar panels stretching 540 feet. This array is helping to provide the interchange with clean, renewable energy through a unique public-private partnership, and serves as the nation's first roadside solar photovoltaic demonstration project.

The efforts made by Federal, state, and local public agencies to deploy renewable energy technologies like solar photovoltaics (or solar PV) stem from a growing awareness of the environmental costs of fossil fuel energy production and the release of climate changing greenhouse gases. Additionally, there is growing recognition about how solar PVs can provide tangible economic and social benefits, including local job creation and increasing the nation's energy security.

Department of Transportation's nationwide have used solar PVs in a range of highway applications: to electrify signs and signals, flashing beacons, weather information systems and traffic counters to name a few. DOTs are turning their attention toward medium to large-scale deployments of solar PV. The Oregon Department of Transportation (DOT) completed the construction of the nation's first solar PV system in a highway right-of-way in 2008.

The Oregon Solar Highway project is still running seamlessly and feeds clean, renewable energy into the electricity grid. A 104-kilowatt (dc) ground-mounted solar array made up of 594 solar panels, the Solar Highway project sits at the interchange of Interstate 5 and Interstate 205 south of Portland, Oregon. It offsets over one-third of the energy needed for freeway illumination at the site itself. Solar energy produced by the panels feeds into the grid during the day, running the meter backwards for the energy needed to light the interchange at night.

ODOT lists several factors that contributed to the project's success, including the willingness of agency leaders and staff to embrace the uncertainty of a public-private business model.

3.4.2 Stakeholder Engagement

The project was developed through a public-private partnership between the Oregon Department of Transportation, Portland General Electric and U.S. Bank as PGE's tax equity partner. Citizen engagement included many voicing concerns and overall hesitations about the pathway constructed for workers and tourists to view the solar panel site. A majority of citizens who complained about the trail still supported the solar project.

ODOT was responsible for assuring the project site was "shovel ready," completing a site feasibility study that ruled out potential environmental and transportation system conflicts.

PGE, via a subsidy formed just for the project, took responsibility for the project financing, ownership and coordinating the engineering design, construction, and maintenance long term.

3.4.3 Governance

The Oregon Solar Highway Program was supported by policies of the Transportation Commission and the governor calling for the development of sustainable energy resources. The clean, renewable source of energy from the solar garden helps ODOT meet a mandate set by Oregon Governor Ted Kulongoski that state agencies obtain all of their electricity from renewable sources. The Oregon Legislature made it a priority in 2003 to streamline the P3 process in the state, and these solar gardens are an example of these partnerships. The Oregon Solar Highway Program was supported by the policies of the Transportation Commission and the Governor calling for the development of sustainable energy resources.

ODOT project Director Alison Hamilton explained the unique partnership allows “the public to get multiple values out of this right-of-way asset.” By using state and federal tax credits, the renewable energy projects are developed at least possible cost, benefiting the utility rate payers including ODOT and the State of Oregon. At the same time, ODOT gets green energy at grid rates instead of the higher green energy rate. The project sits on the transportation system right of way, the solar panel array is not owned by ODOT, while the interchange is. Portland General Electric owns and operates this solar power plant. The solar energy produced by the array feeds into the grid throughout the daytime and runs the meter backwards for the energy needed at night through a Solar Power Purchase Agreement with PGE.

The solar energy project is owned, operated, and maintained by the utility, which also assumes risk and is responsible for the maintenance of the right of way for the term of the contract (from 25 years up to 40 years or more). The utility also gets to count the project toward these renewable energy portfolio requirements.

3.4.3.1 FHWA and Solar Right of Way

The Federal Highway Administration has issued guidance on the utilization of interstate right-of-way for installing renewable energy facilities. (Federal Highway Administration 2018) The guidance is clear that regulations allow renewable energy facilities within the right of way only when it does not impede the highway. (Oregon Department of Transportation n.d.) If that is possible, the project can be achieved through either utility accommodation and airspace lease. (Oregon Department of Transportation n.d.)

- **Utility Accommodation:** FHWA provides a two-part test to determine if a renewable energy facility can be sited with a utility accommodation. The test is designed to check if the facility meets the regulatory definition of a utility in the highway right-of-way. The first part is satisfied, as any renewable energy facility and solar PV facilities produce electricity. The second part asks if the facility meets public service criteria by providing services to the general public or when it is dedicated to the transportation agency for its own use. By providing power for illuminating the interchange, this project meets both parts of tis criteria.
- **Air Space Lease:** Airspace leases are permitted when the alternative is not in conflict with the continued operation, maintenance and safety of the highway facility. Transportation agencies

are required to charge a fair market value lease rate for the use of the property; however, FHWA offers guidance that points out certain circumstances where the transportation agency can charge below market lease rates if it is for the social, environmental or economic purposes within the public interest. The guidance suggests renewable energy facilities and other projects that positively address climate change or contribute to improvements in air quality could get this exception.

As other states express interest in following Oregon's lead, Project Manager Hamilton said each state will have unique circumstances and utility regulations. Hamilton recommends project proponents work with or through their utility to learn the most efficient and cost-effective way to size, permit, and connect a project, and to determine the most advantageous financing and ownership models. In Oregon, the larger the installation, the better, as they are able to spread fixed costs between more kilowatts, bringing down the cost per installed kilowatt.

3.4.4 Finances

Through the innovative public-private partnership, the Oregon Solar Highway Program was able to leverage state, federal and ratepayer incentives. Because the Oregon Solar Highway projects were financed with state and federal tax credits and grants, the development team asked how to advance the public values gained by investing in these public resources. From there, a conscious decision was made to seek out more than the lowest common denominator: cost. For the investment of the public resources – state and federal tax credits, utility incentives, and Clean Wind Funds from PGE clean energy customers – a higher return on investment was achieved. The return for the public included new, sustainable businesses, jobs, renewable energy production, innovative green technology, and national leadership in sustainable development.

The State provided a 50-percent tax credit for renewable energy projects (the program sunset in 2012). Further support came from a 30-percent Federal tax credit for solar investments and accelerated depreciation. Energy Trust of Oregon supplied grant funding, with Portland General Electric's Clean Wind program making up the gap. The total cost of the demonstration project was \$1.28 million. As with the demonstration, the second project included a tax equity partner but used a "sale, lease-back" contract. That is, the utility financed and constructed the project and sold it upon completion to a tax equity partner, which then leased it back to the utility to operate and maintain. The cost of the 2nd project was \$10 million.

As a regulated utility, PGE could not fully take advantage of the tax incentives, so it partnered with a financial institution serving as a tax equity partner through a limited liability company (LLC). This financial company owned the project while the tax incentive benefits were derived, after this PGE acquired the project.

The Solar Highway Program highlights a few federal funding incentives that could be used to facilitate the development of renewable energy projects. Citing the most valuable ones are the investment tax credit (ITC) and the modified accelerated cost-recovery system (MACRS).

- Investment Tax Credit: Provides a tax credit to project owners equal to 30% of the expenditures for investments in solar PV systems. These costs include labor and design fees.
- MACRS Accelerated Depreciation: This is a method for calculating federal accelerated depreciation of business equipment. For a solar project, the owner would be able to deduct 85% of the tax basis.

Most states offer tax credits to offset taxpayer investments in residential or commercial photovoltaic systems, with differing values of the tax credits between states. As with federal tax incentives, tax exempt entities may not be able to take advantage of state tax credits without a private sector partner with state tax liability. Additionally, some states offer a tax credit as either a capacity-based incentive or a production-based incentive. Capacity-based incentives provide the taxpayer a fixed subsidy for each DC watt (\$/DC watt), while production-based incentives provide the taxpayer a variable subsidy, usually at a fixed rate, for each kilowatt hour (\$/kWh) of electricity produced.

The policy landscape for renewable energy incentives is constantly changing, and what may be true one year may no longer be true the next. An Oregon Solar Highway Program manual encourages prospective DOTs to conduct their own research and analysis for the availability and applicability of financial incentives and other funding opportunities.

3.4.5 Placemaking

For selecting a site for a solar PV project, FHWA states the site's options have to pass a safety filter, meaning the locations had to be outside of a safety zone and situated to avoid producing glare from oncoming headlights.

Further considerations include identifying parcels that the department would not need for at least 20 years. The parcel would also need access to the utility grid, freedom from environmental constraints like being located outside of areas with threatened or endangered species, good solar access free from shade, and public visibility.

3.4.6 Economic Development and Community Engagement

The project created about 70 direct and indirect jobs during construction. It is unclear how many jobs were sustained after construction of the facility was completed.

PGE, in partnership with the State of Oregon, implemented the Oregon Community Solar Program, giving customers of PGE, Pacific Power, and Idaho Power an opportunity to subscribe to a portion of a community solar project alongside other customers. When subscribed, customers receive a credit on their

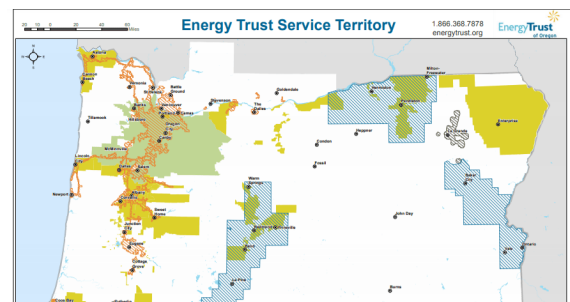


Figure 3-14 Electricity Provider Map, featuring Pacific Power (Gold) and Portland General Electric (Green)

monthly utility bill for the electricity generated from their portion of the program. This is touted as a good option for renters, people who live in multifamily buildings, or homeowners and businesses that can't serve their full energy needs with rooftop solar, or those who do not have the means to invest in a rooftop solar system. Each provider (PGE, Pacific Power, and Idaho Power) serves different parts of the state, distribution of access is spread statewide.

Portland General Electric and Pacific Power combine to produce about 70 percent of Oregon's power, with Idaho Power serving another small portion of the population. About 35 percent of Oregon's population is centered in Central Oregon, and not served by any of these utilities; despite this, Central Oregon is the primary source of solar energy for the state.

The Oregon Community Solar plan has multiple components for small partners and accessibility for low-income residents. A firm cap prohibits any single customer from accounting for more than 40 percent of a given project's capacity, of 2 MW of total capacity across all projects. Additionally, 40 percent of project capacity is reserved for residential or small commercial customers. Ten percent of any given project must also be set aside for low-income customers. And low-income customers receive a discount of at least 20 percent on every project – meaning that the sum of monthly fees associated with project participation must be at least 20 percent lower than the value of the bill credit rate. Low-income customers are also exempt from the \$1.50 kW DC/month participant fee.

It should be noted that although the program is meaningfully cheaper for low-income households, contributing to greater access, there have been calls to extend the geographic reach to central and eastern Oregon, as well as calls to increase access for Indigenous communities in Oregon. Oregon has seven reservations, and home to over 100,000 Indigenous people, making up 3 percent of the total population.

3.4.7 Human and Natural Environmental and Health Considerations

The project generates about one-third of the electricity necessary to light the freeway interchange. It partly replaces the non-renewable electricity sources and eliminates about 43mt of carbon dioxide equivalent emissions per year. It is worth noting that citizens expressed concern about the 300 trees that were chopped down for the project.

3.5 I-579 CAP, PITTSBURGH, PA

3.5.1 Background

The historic Lower Hill was once a densely populated neighborhood and an important part of the predominantly African-American Hill District community in Pittsburgh until it was cleared as a part of urban renewal. The Lower Hill was declared blighted, and by 1956, 413 businesses and over 8,000 residents were forced to relocate and 1,300 buildings on 95 acres of land were demolished. The thriving community became mostly surface parking. (Kinney 2018)

During this time, the I-579 Crosstown Boulevard was constructed on the border between Downtown and the Hill District. It created a trench separating what was left of the Hill District from the economic and cultural life of Downtown. Further, the highway shifted traffic patterns and isolated and divided the neighborhood from Downtown.

According to Census data, the Hill District population dropped from 53,648 in 1950 to just 9,457 in 2013. The Hill District is a distressed neighborhood, with unemployment over 21.2%, a median household income of \$18,827, and 41.0% of the residents living below the poverty line. (Kinney 2018)

The Cap Project aims to repair the injuries of the 1950s to extend the economic strengths of Downtown to the Hill District. The project also facilitated improvements to the adjacent intersections and underutilized vacant land parcels. (Pennsylvania Sports and Exhibition Authority 2016c) All told, the improvements include:

- ADA compliant curb-cut ramps, crosswalks constructed with associated signs, audible pedestrian signals, and pavement markings for intersections;
- ADA compliant pedestrian and bike pathways and other public amenities
- Green infrastructure
- A new bus stop and system connecting the city with its Oakland suburb
- A new bike sharing station

Construction on the Cap continued despite COVID-19 restrictions through 2020 and 2021, and according to PennDOT, the Cap is set to open in 2022. (Guza 2020) It opened ahead of schedule, as officials gathered for an



Figure 3-15 A "current" photo and drawing of the proposed cap area

official ribbon cutting ceremony in November 2021. (Doughty 2021)

3.5.2 Stakeholder Engagement

Public engagement was a large portion of the park elements and experience planning process, with several working meetings being held beginning in 2016. The public was able to articulate park elements, and vote on a preferred park layout. One community desire was the incorporation of art, including standalone art, surface elements, and base construction that allowed for art to be embedded.

There is a lot of detail regarding the process for selecting the art – including the Office of Public Art (OPA) releasing a national request for qualifications for artists to participate on the design team. A nine-member selection committee comprised of Hill District stakeholders (4 members), representatives from the Sports Exhibition Authority’s art committee (2 members), a Department of City Planning (1 member), and the project’s landscape designer, LaQuatra Bonci Associates (1 member). Artists who were past or present residents of the Hill District also became part of the design team, and another artist was added as a result of their experience integrating art with PennDOT’s transportation projects. (Pennsylvania Sports and Exhibition Authority 2016c) The Committee recommended a Hill District resident with an architecture background, too.

A wide array of letters of support were submitted for the TIGER Discretionary Grant application for the project. Organizations like the Urban Redevelopment Authority of Pittsburgh, YMCA, VisitPittsburgh, Pittsburgh Bike Share, Pennsylvania Downtown Partnership, Green Building Alliance, Bike Pittsburgh, Duquesne University, State Representatives, City Council members, U.S. Senators, and Congressional Representatives are a few of the senders. (Pennsylvania Sports and Exhibition Authority 2016c)

Phasing Plan

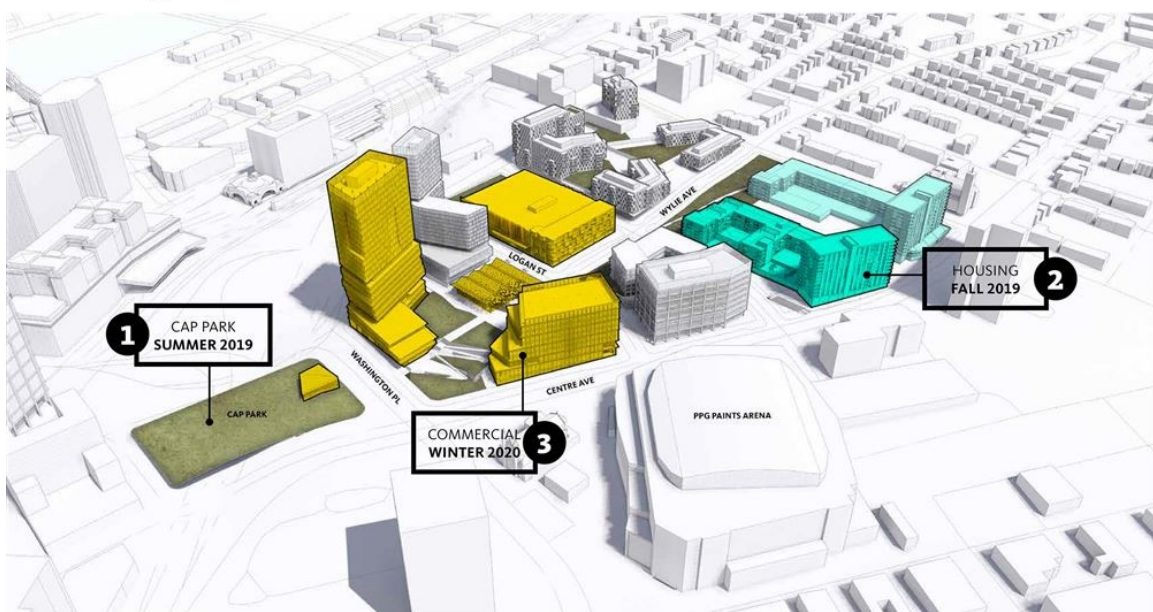


Figure 3-16 A rendering of the first three phases of development at the former Civic Arena site

Finally the Sports Exhibition Authority (SEA) was also a key player as it owned a portion of the land being built upon for the Cap, about 28-acres, which was the site for a former arena for the Penguins, the professional hockey team in the city. At the time the CAP was conceived, the SEA was in active negotiations to build a headquarters on the north end of the site near Washington Place. (Belko 2019)

It should be noted that Pittsburgh has many nonprofit and community-based organizations, with 90 neighborhoods each having around 8-10 organizations. A community member interview indicated that this plethora of organizations makes it unclear if the Cap should be touted as highly for its stakeholder and community engagement, or long-term visioning process. Despite the number of public and private entities involved in the planning process, it is unclear who has the interest and responsibility to implement a vision for the space or what programming will be there in the short and long term. (Pittsburgh Downtown Partnership 2022)

3.5.3 Governance

The project was largely initiated and undertaken by the Sports and Exhibition Authority (SEA), the city of Pittsburgh, PennDOT, and the Federal Highway Administration. The Cap sits at a convenient location, adjacent to the Penguins arena and at the site of the formal civic arena. SEA is a significant property and land owner in the greater downtown area of Pittsburgh; despite this fact, it is felt by some that SEA “was not a good property owner with being conscious of the needs, goods, and community perspective...they were excited to transfer the project out of its hands as soon as possible and onto the city.” (Pittsburgh Downtown Partnership 2022) Despite PennDOT’s involvement in construction management and oversight, residents saw that because “it was not a state-owned road and wouldn’t impact district 11, they were very hands off.” Despite the varied local and state entities involved, commitment to the city vision is always a question.

The designer and engineer for the project is HDR Engineering (HDR). Sub-consultants include A&A; American Geotechnical & Environmental Services; Cardon TBE; Christine Davis Consultants; Collective Efforts; LaQuatra Bonci and Associates; Monaloh Basin Engineers; and Santangelo & Lindsay. (Pennsylvania Sports and Exhibition Authority 2016c)

The city of Pittsburgh managed the construction contract and coordinated with the SEA on the administration of the project. PennDOT is responsible for construction management and oversight. Sub consultants include Michael Baker International (construction management) and SAI Consulting Engineers (construction inspection). (Pennsylvania Sports and Exhibition Authority 2016c)

Upon completion, the city will own and maintain the Cap Park. Noted later in this report, some community members expressed skepticism that the city will implement a proper vision and upkeep of the infrastructure, green elements, sidewalks, and other amenities.

3.5.4 Finances

The project began construction in 2019 and cost about \$32 million to build. It was funded by a combination of local, state and federal monies, including funds from the U.S. Department of

Transportation, the Pennsylvania Department of Conservation & Natural Resources, the Richard King Mellon Foundation, the Heinz Endowments and the Sports & Exhibition Authority of Pittsburgh and Allegheny County. (Pennsylvania Sports and Exhibition Authority 2016c)

Construction costs for the project were \$32 million, \$19 million of which came from a federal Transportation Investment Generating Economic Recovery (TIGER) Discretionary Grant. (United States Department of Transportation 2019) The TIGER program was developed by USDOT to fund multi-modal projects that could advance regional objectives. Applications were evaluated competitively, applications had to address five long-term outcomes: safety, economic competitiveness, state of good repair, livability and environmental sustainability. Applications were also evaluated based on economic recovery, innovation, and partnership. (United States Department of Transportation 2014)

Securing the TIGER grant rested on repeated grant applications, securing broad support from community representatives, and the infrastructure and connectivity improvements. (Haptas 2016) The I-579 Cap project fact sheet cites the improved connection between the Hill District and Downtown, and transportation improvements with a new bus stop, bike sharing location, pedestrian signals, and improved ADA-compliant crosswalks and walkways. (United States Department of Transportation 2019)

Other funding sources were:

- Commonwealth of Pennsylvania: In 2013, the Commonwealth awarded a Redevelopment Assistance Capital Program grant for the Lower Hill roadway and related infrastructure work, which includes a new, mixed use development in addition to the I-579 “Cap.” Approximately **\$3.4 million** of this funding is used as a local match for the I-579 Cap TIGER grant. (Pennsylvania Sports and Exhibition Authority 2016c)
- Urban Redevelopment Authority of Pittsburgh: \$75,000 put towards construction as a local match in the FY2015 TIGER application (Pennsylvania Sports and Exhibition Authority 2016c)
- SEA: \$315,000 toward construction as part of the local match for the I-579 Connector Cap. (Pennsylvania Sports and Exhibition Authority 2016c)
- Pittsburgh Arena Real Estate Redevelopment, LP (PAR): The CAP Project incorporates a 0.6 acre portion of a parcel covered by an agreement between PAR and SEA. PAR funded estimated improvements to the site not less than \$900,000 (Pennsylvania Sports and Exhibition Authority 2016c)
- A land appraisal found the four sections of land that would be built upon for the Cap to be worth \$6,950,000 (Belko 2019)
- Richard King Mellon Foundation: Trustees of the Richard King Mellon Foundation approved a conditional grant worth \$1,000,000 to the Sports & Exhibition Authority for a greenspace connecting downtown Pittsburgh and the Lower Hill District. The payment is granted on the condition the TIGER grant is secured. (Pennsylvania Sports and Exhibition Authority 2016c)

- Hillman Foundation: The Board of Trustees of the Hillman Foundation approved a contribution of \$750,000 to the Sports & Exhibition Authority of Pittsburgh and Allegheny County. Payment is also conditional upon TIGER Funding being secured. (Pennsylvania Sports and Exhibition Authority 2016c)
- Commonwealth of Pennsylvania, Commonwealth Financing Authority (CFA): SEA applied for funding for the Multimodal Transportation Fund (MTF) in 2016, after revising the project budget, CFA awarded matching funds of \$30,525,894. The award letter mentioned that Pennsylvania’s historic transportation legislation that created MTF requires that the awarded assistance be matched by local funding not less than 30% of the non-federal share of the total cost. The maximum reimbursed amount for engineering, design and inspection costs should not exceed 10% of the grant award amount. (Pennsylvania Sports and Exhibition Authority 2016c)

3.5.5 Placemaking

The Frankie Pace Park, named after a late Hill District community advocate, area of the cap project spans three acres. (Belko 2019) Frankie Pace Park includes “story walls” celebrating the life of abolitionist and journalist Martin Delany and longtime activist Frankie Pace; a colored rendering on the sidewalks of the Sankofa bird, a mythical creature in African culture; and an outdoor classroom garden.



Figure 3-17 Entering Frankie Pace Park

The Cap Project’s integrated enhancements include:

- Story walls celebrating the life of Hill District figures Martin Delany (1812-1885, abolitionist, journalist, educator) and Frankie Pace (1905-1989, community organizer);
- Wayfinding signage system highlighting the park’s amenities;
- Art pylons;
- A colored paving pattern depicting the Sankofa Bird;
- An outdoor classroom garden with an interactive musical theme;
- A water course that is part of the storm water management system.



Figure 3-18 View of Frankie Pace Park looking toward Centre Avenue and PPG Paints Arena

The Civic Arena was constructed in the Lower Hill in 1961, renamed the Mellon Arena in 1999 and was the Penguins’ home venue until 2010, before the team moved to the CONSOL Energy Center (now the PPG Paints Arena). There, big concerts, political rallies and sporting

events were held at the arena, but it never became the cultural district the city envisioned. The I-579 cap and park is built where the Civic Arena stood until its demolition. (Rommen 2019)

The Park project itself reportedly only comes after the Penguins moved to another site. In 2007, the Pittsburgh Urban Redevelopment Authority gave the Penguins exclusive development rights to the acres surrounding the Civic Arena. In 2012, the team turned the land into a parking lot with over 2,000 spaces. Facing the threat of losing a fifth of their parking revenue unless they develop 6.45 acres of land by 2020, the Penguins sought to unite the communities with the Cap project, starting with the park, a cap over the highway separating the neighborhoods. Some residents saw the park represents a takeover of the historically Black neighborhood, “[It] represents Downtown taking over a portion of the Hill District, not the other way around. They want the lower Hill, including this cap, to look like a hockey game. What I mean by that is that not many Black people will be participating,” said Carl Redwood, a community activist and chairman of the Hill District Consensus Group. (Rommen 2019)

Additionally, The Lower Hill District is undergoing rapid redevelopment that is greatly impacted by the COVID-19 pandemic. The city’s Black population is also declining – a direct result of the displacement and lack of affordable housing. From 2000 to 2015, 15,000 Black residents left the city, while the population of Black people in suburbs nearby has increased. A key initial ask from community members was a housing priority with the development. Chairman of the Black Political Empowerment Project Tim Stevens said the Cap should be focused on the needs of the community; providing housing for existing Lower Hill residents “is a way you begin to heal. You show specific concrete results in term[s] of people being able to live on the land they used to reside on.” (McKinney 2019)

3.5.6 Economic Development and Community Engagement

Public meetings were held throughout the process, starting in 2016 for feedback on the design and elements people wanted to see. There was also an opportunity for people to vote on what to name the park featured on the Cap. However, it is unclear how comprehensive community engagement was, as described by an interview with a local nonprofit representative, “Like any public process, there are constraints that have to be met for project meetings and the level of reach communicating benefits, the value of the project, and I’m not sure if people ever got it.” (Pittsburgh Downtown Partnership 2022). Importantly, there were indications that despite many public agencies working together, there may have been poor interdepartmental communication, and “many public entities involved in the project, but no one claimed responsibility [for the project].” (Pittsburgh Downtown Partnership 2022)

However, it should be noted that the project received a lot of buzz for Pittsburgh, but it is unclear if the residents near the cap would view it as a “tremendous lift to my quality of life or [that it has] improved my quality of life or experience living in the area...it hasn’t even made it easier to access downtown.” (Pittsburgh Downtown Partnership 2022) While the Cap may not degrade the area and did not “make the same mistakes as in the past,” it is perceived by some to have a lack of intentionality. Pedestrian accessibility was cited as a key improvement thanks to the Cap, yet residents cite there are still foundational challenges that haven’t been addressed, such as degraded sidewalks, an overall design that

favors vehicles, a lack of greenspace management, and no remedy to the uphill landscape at the site of the project. (Pittsburgh Downtown Partnership 2022)

Candidly, the project is viewed by some as not realizing its unseen potential for creating the reparative impact intended. Specifically, the project did not “locationally lift the place up or solved any of the challenges...if anything, it amplifies these challenges more.” Pedestrian experiences near the site, a lack of connection between both neighborhoods the Cap bridges and the vehicular orientation of the site are cited as some of the reasons for the Cap’s mixed response. Additionally, a lack of cohesive, long-term vision for the Cap through the planning process and after opening contributes to feelings of failed potential. “This lack of intentionality is seen by the community.” (Pittsburgh Downtown Partnership 2022)

3.5.7 Environmental and Health Measures

The Cap utilized green infrastructure strategies including capturing and retaining stormwater on the site, energy efficient lighting, natural rain gardens, specially designed tree planters to minimize runoff, and increased plants and trees for cover. The Cap also used repurposed materials to minimize the carbon footprint. The Cap also aims to reduce the urban heat island effect created by the concrete on I-579 and mitigates noise with the pedestrian and bike corridor by providing space and access to choose alternative methods of transportation from car traffic. (Pennsylvania Sports and Exhibition Authority 2016c)

A community stakeholder interview indicated that the Cap is successful in having more green spaces, but called into question the strategy and level of responsibility for the green spaces after the project opened. (Pittsburgh Downtown Partnership 2022)

3.6 PARK EAST FREEWAY REMOVAL AND I-794 ROW USE AGREEMENTS, MILWAUKEE, WI

3.6.1 Background

The Park East Freeway was a remnant of an abandoned 1960s plan to encircle downtown Milwaukee with freeways. The Park East freeway is referred to as the Park East and Park West freeways, where the Park West segment of I-43 was supposed to have a northwesterly alignment to the west of the North South freeway. The Park East freeway was to connect to the proposed to connect to the Lake Freeway – a proposed waterfront expressway running along the shore of Lake Michigan.



Figure 3-19 The Park East Freeway, and the north side of downtown Milwaukee.

<http://www.wisconsinhighways.org/milwaukee/park.html>

Due to the public opposition of the obstruction of the lake, construction started later than intended, and was canceled in 1971, never to be built. Similarly, the Park west freeway was stopped in 1971 after an Environmental Impact Statement was ordered by US District Judge John Reynolds under the relatively new environmental protection legislation, the National Environmental Policy Act (NEPA) in 1969. In January of 1977, the Park West freeway alignment was rejected based on this EIS. As such, the Park East freeway was destined to be underutilized, as the other connecting segments of the proposed loop were never completed.

The Park East freeway was relegated to an .8-mile elevated segment running from 12th Street to N Jefferson Street. The freeway became a “blighting” influence on the neighborhood creating a barrier “between northern downtown and the rest



Figure 3-20 Proposed configuration for the Park East freeway

of the city had decreased property values on surrounding land.” (Snyder 2016) As it cut from east to west, it effectively served to separate Milwaukee’s north side from the rest of the redeveloping downtown.

The site preparation and construction of the Park East Freeway led to the razing of multiple blocks of development and consumed 16 acres. In 1999, the Park East Freeway carried roughly 54,000 vehicles on an average weekday. However, it limited access to downtown Milwaukee with only three exists. It also interrupted the street grid, and traffic problems plagued the three main intersections where most north-south traffic was funneled through.



Figure 3-21 Former Park East Freeway, city of Milwaukee (view is from the northwest)

In 1999 the State of Wisconsin, Milwaukee County, and the city of Milwaukee approved the removal of the freeway spur with support of local residents and businesses. In 2002, the elevated Park East Freeway became one of the first freeways removed without an earthquake or infrastructure failure, when it was replaced with a six-lane landscaped McKinley Avenue that is fully connected to the existing and re-created street grid at the cost of \$45 million, using Federal ISTEA money and local Tax Incremental Financing. In total 24 acres of land spread along 28 city blocks was opened for development.

3.6.2 Stakeholder Engagement

The Park Freeway in Milwaukee was a complex and controversial undertaking for the city. Despite the freeway being included in the final 1950s and 1960s system plans for Milwaukee, the Park Freeway system was partially constructed, partially cancelled, and never-finished in three segments until 2003. Originally, the freeway would have started in the northeast corner of downtown, proceeded west to the North-South freeway. This portion was called Park East. From there, the Park West freeway was planning to continue northwesterly before bending west again to meet at the Stadium Freeway.

The first organized opposition to the Milwaukee Freeway system was in September 1965, protesting the “Downtown Loop Closure Freeway,” a portion of the freeway that stretched between the eastern ends of Park East and the East-west freeway. The opposition continued until 1971 when groups obtained a court injunction against the freeway that was later upheld by the State Supreme Court. The Lake Freeway north of the East-West freeway faded into history. The fate of the stub Park East was sealed. Opposition to the North-South portion was more impassioned, though. The process of removing residents from the path of the freeway produced vehement opposition, largely due to the treatment of evictees and the condition of replacement housing. Work on Park West was ramping up as opposition wound down and progress on construction came at a fast pace.

The federal government played a key role financing both the highway construction and the demolition. Additionally, the National Environmental Policy Act (NEPA) which passed in 1969, played a role in arming local environmental groups and activists with a tool to stop the construction of the highway. The lawsuit was brought claiming an environmental impact statement had to be prepared before construction started. In his book, *Greater Milwaukee's Growing Pains, 1950-2000: An Insider's View*, Richard W. Cutler notes that freeway opponents gained a very useful tool with NEPA, saying: "They [the opponents] brought suit in federal court claiming that an environmental impact statement had to be prepared under NEPA before construction could commence. The started suit notwithstanding the fact that before the legislation was enacted in 1969, 99 percent of the land had been acquired and 1,590 homes had been cleared at a cost of \$22 million. On June 2, 1972, just days before a \$6 million construction bid was to be let, U.S. District Judge John Reynolds restrained the letting of contracts, ruling than an environmental impact statement had to be prepared before construction could commence." While the Park West freeway construction had ground to a halt, pro and anti-freeway forces fought in municipal, county, state government, and public opinion. The Park East spur was completed and opened to traffic in 1971. After three years of halting the work on Park West, the public hearing for the Environmental Impact Statement for the portion of the freeway running to the Stadium Freeway was held in 1975. Most area residents spoke out in opposition, yet the EIS was completed at the state level and forwarded to the Federal Highway Administration for review. In 1977, FHWA rejected the Park West EIS, noting "opposition on many fronts." Due to the Stadium Freeway North cancellation, the Park West corridor remained of little utility. (Snyder 2016)

With the rejection of the Park Freeway West EIS in hand, Governor Patrick Lucey appointed a Park Freeway West task force in 1977 to come up with a process for the vacant land cutting northwest across Milwaukee. The task force recommended the right of way be sold for housing. Twenty years later, vacant parcels on the former right of way remain empty and undeveloped.

Similarly, in 1981, legislation removed the unbuilt portion of Park East through a process called "de-mapping." The right of way was sold off for redevelopment, including the Eastpointe Commons. In 1988, the fate of the Park East spur was relatively sealed after the election of Mayor Norquist, who saw the stub as a barrier to redevelopment efforts. Details about Mayor Norquist's efforts to engage with stakeholders are expanded upon in the governance section. In summary, through the Downtown Development Plan, and the Park East Redevelopment Plan, a comprehensive effort was undertaken to show how the spur hindered development and brought together county, city, and federal officials, alongside community members and business owners to agree on removal of the spur. The Downtown Development Plan and Park East Redevelopment Plan process culminated in a less controversial process and outcome than the Park Freeway system planning and implementation.

The window of opportunity fully opened with the election of Mayor John Norquist and the development of the Downtown Master Plan in 1998. Prior to that point, the Mayor had been working with state and county government to negotiate sources of funding. The creation of the Downtown Master Plan, and Park East Redevelopment Plan by extension, provided Norquist with a venue to express his vision and gain support.

3.6.3 Governance

The Park East Freeway removal project was a multiyear intergovernmental agency and business collaboration. Strong political leadership at many levels helped move this project forward. Most of the work was done by contractors to the city of Milwaukee and Milwaukee County in efforts to reclaim abandoned and blighted highway and adjoining properties on the northeast side of Milwaukee. And the Redevelopment Authority of the city of Milwaukee managed the process of selling the reclaimed land back to local businesses, with most of the sales proceeds put back into the project. (Milwaukee Department of City Development 2004)

Led by longtime Mayor of Milwaukee, John Norquist, the city of Milwaukee began to explore the idea of removing the incomplete spur. Mayor Norquist was an influential anti-freeway advocate; and after being elected to the Wisconsin State Assembly in 1975, the state Senate in 1983, and then as Mayor from 1988 to 2004. Norquist began promoting the idea of removing the Park East freeway spur as soon as he was elected in 1988. That same year, Norquist appointed Peter Park as Planning Director and together, they would have to obtain a number of stakeholder approvals. Mr. Park was previously involved in the University of Wisconsin-Milwaukee's Architecture Department research diving into the "implications of tearing down urban freeways." (Napolitan and Zegras 2008) In his role as Planning Director, Park worked to change the mindset of city engineers that capacity should never be reduced. He played an important role in garnering the support of government officials and the public for demolishing the Park East Freeway.

In the 1990s, Wisconsin removed the designation of the right of way land required to build out the Park East Freeway as a transportation corridor, giving way to its redevelopment as the East Pointe neighborhood. The East Pointe neighborhood grew into a vibrant community of shops and residences, and this development grew to be part of the larger effort to revitalize the downtown area. The success of East Pointe led to the reevaluation of whether reconstruction of Park East was the best course of action. Peter Park proposed removing the freeway, and Mayor John Norquist championed this notion and began a community-based campaign to gain support. The general level of support for this project was strong, as other city agencies and community leaders advocated for the project.

ESTIMATES OF AVERAGE DAILY TRAFFIC VOLUMES ON EXISTING FREEWAY FACILITIES
ADJACENT TO THE MILWAUKEE CENTRAL BUSINESS DISTRICT
AFFECTED BY THE DOWNTOWN FREEWAY LOOP

Freeway		Range of Current (1977-1981) Traffic Volumes (Vehicles Per Average Weekday)	Probable Range of Future (2000) Traffic Volumes (Vehicles Per Average Weekday)		Probable Congestion Status in Year 2000 During Peak Periods		Year 2000 Design Capacity (Vehicles per Average Weekday)
			With Completion of Proposed Freeway Loop	Without Completion of Proposed Freeway Loop	With Completion of Proposed Freeway Loop	Without Completion of Proposed Freeway Loop	
Name	Termini						
Lake Freeway (IH 794)	Carferry Drive to East-West Freeway	18,600	54,000	42,000	No	No	82,000
North-South Freeway (IH 43)	Hillside Interchange to Marquette Inter- change	99,000- 109,000	103,000- 112,000	116,000- 125,000	Yes	Yes	82,500 115,000
North-South Freeway (IH 94)	Marquette Inter- change to National Avenue	110,000	108,000	120,000	No	No	115,000
Park Freeway- East	Hillside Inter- change to Stub End	18,000- 34,000 ^a	23,000- 38,000	15,000- 36,000	No	No	82,500
East-West Freeway (IH 794)	Marquette Inter- change to Lake Freeway	8,000- 68,000	48,000- 69,000	48,000- 69,000	No	No	82,500

^aPark Freeway-East currently terminates at freeway ramps connecting to N. Broadway Street and N. Milwaukee Street.

Source: SEWRPC.

Figure 3-22 Traffic Analysis of Park East Freeway

In the mid-to-late 1990s, Mayor Norquist and Peter Park focused their attention on convincing the public and government officials that removing the freeway would benefit the city. In 1998, Norquist and Park began formalizing efforts to demolish the Park East freeway to make a large tract of land available with an at-grade boulevard replacement. The city of Milwaukee and the Milwaukee Redevelopment Corporation, and the Wisconsin Center District Board contracted Nelessen Associates to develop a comprehensive master plan. The plan process involved community participation through public workshops. The outcome of these workshops showed an overwhelming sentiment that the Park East freeway had no future in the new Master Plan for downtown Milwaukee; as it identified the removal as a key element in revitalizing downtown. (Napolitan and Zegras 2008) The process was not entirely without controversy, however. During the 2000 Mayoral election, the platform of Norquist's opponent, George Watts, proposed to keep the Park East Freeway, and complete the freeway system as originally proposed in the 1950s. Even after losing the race, Watts continued his opposition to freeway removal, launching a lawsuit to stop the razing of the spur. A judge threw out the lawsuit seven months later, eliminating the last barrier to removal.

A key stakeholder included businesses. Many businesses were concerned about the impacts of the removal of Park East on traffic. The support of the business community was secured in large part based on a study released by the Southern Wisconsin Regional Planning Commission (SWRPC) that concluded the replacement of the freeway with an at-grade roadway would have minimal impacts on traffic congestion. (Southeastern Wisconsin Regional Planning Commission 2001)

Next, the Common Council had to be swayed. Like business owners, the Council was against the plan with concerns over the loss of capacity and access to the downtown. Through an interdisciplinary planning process, the public and Common Council were able to envision what the potential for the area was. Using the Embarcadero Freeway in San Francisco as an example of revitalization due to freeway removal, people in Milwaukee were able to envision the development possibilities for downtown. San Francisco mainly showed that the value of properties would most likely rise, a point in favor for removing the Park East spur. After the downtown aldermen and business owners were in favor of removing the freeway, the remaining alderman on the Common Council also supported the project. (Napolitan and Zegras 2008)

Then, Governor Tommy Thompson and the Milwaukee Board of Supervisors began considering supporting the removal of the spur when Harley Davidson, a motorcycle manufacturer, expressed interest in locating a museum in the downtown area. The prospect of such a large and popular company in downtown Milwaukee helped open the eyes of the Governor and county to the possibility for development in the site. Although the company decided on an alternative cite, it was considered a significant factor in generating support of the governor and the county. (Napolitan and Zegras 2008)

County support would be critical for the freeway spur to be removed because the land underneath the freeway and surrounding land – the right of way – would revert from the Federal Government to the County. The County Board of Commissioners, the lead agency for this project, approved the removal by a wide margin. The City Council agreed to the removal by a unanimous vote. Both the city of Milwaukee and then-Mayor John Norquist assumed the leadership role in the teardown and redevelopment efforts. Shortly after the city of Milwaukee began plans to develop a Park East Redevelopment plan, the city, county and state DOT initiated a preliminary engineering study and environmental impact assessment study to provide recommendations on alternatives for the removal of the freeway. Using traffic modeling to predict what would happen when Park East was removed, the results indicated recreating the street grid where the freeway was improved traffic flow. The county, city, and state DOT performed an alternatives study, including two removal and reconfiguration alternatives and a no-build alternative. Both removal alternatives called for changes to on-street parking and directionality on neighboring streets.

The at-grade roadway alternative was selected. The County was selected as the lead agency for the environmental and public processes before the removal of the freeway, and the Wisconsin DOT oversaw designing facilities to reconnect the street network to Interstate 43. The city of Milwaukee was responsible for modifications to the local street grid and the new river crossing.

3.6.4 Finances

In April of 1999, a funding agreement was cultivated between Mayor Norquist, the County Executive of Milwaukee County and the Governor to use Interstate Cost Estimate (ICE)

<u>State</u>			<u>Local</u>			<u>Grand</u>
<u>ICE</u>	<u>Match</u>	<u>Total</u>	<u>ICE</u>	<u>Match</u>	<u>Total</u>	<u>Total</u>
6.8	1.2	8.0	14.5	2.5	17.0	25.0

Figure 3-23 State and Local Contributions Toward ParkEast Costs

funding allocated to the State of Wisconsin. Shortly before the 1999 deadline, the State of Wisconsin had to use or lose the funds, the state agreed to allocated \$25 million of the state \$241 million in ICE money to the removal of the spur. The final funding allocation according to the Letter of Agreement of Allocation of ICE dollars on Milwaukee Transportation Projects was \$21.3 million and 3.7 million from the local (state, city, and county) match for a total of \$25 million.

Gaining the Intermodal Surface Transportation Efficiency Act (ISTEA) funding was an uphill battle, as DOT had invested \$12 million in retrofitting the freeway in hopes of stopping the demolition and Governor Thompson was pro-highway. Because the State of Wisconsin, Milwaukee County, and the city were unable to establish a consensus on the number of major transportation projects in Milwaukee for the 1980s and 1990s, Congress offered the parties federal funding to encourage cooperation. That funding provided that \$241 million of unspent federal funds could be spent at the request of Governor Thompson in consultation with local government officials. As the 1999 deadline neared for the funds to be forfeited, a consensus was reached when Norquist ceded support for an interchange on I-794. (Napolitan and Zegras 2008)

As stated, in 1999, Mayor Norquist, the County of Milwaukee, and the Governor came to an agreement on how to use the ICE funding, a portion available under the ISTEA legislation. The agreed upon split allocated \$25 million of ICE funding to the removal and reconfiguration of the Park East Freeway reconfiguration, \$92 million to study and improve the mass transit system, \$51 million to reconstruct the 6th street viaduct and building ramps, and \$75 million for the Marquette Interchange reconstruction. The basic ICE allocation stated that total ICE dollars were to be divided equally between the State of Wisconsin, the city, and the county – entitling each entity to \$120.5 million. It also stipulated that city and County would distribute the remainder of their funds to projects identified in Wisconsin District Transportation Study.

The city and county utilized tax increment financing to clean the land and re-establish a connected street grid. The city spent between \$12 and \$20 million on the infrastructure once the freeway was demolished. The corridor has attracted \$886 million in investments with more than \$300,000 on the way. As of April 2019, the County reported that the project encouraged more than \$2 billion of economic impacts.

On August 26, 2005, Milwaukee County approved the demolition and annexation of the Park East Freeway. The Annex Removal Project had an estimated cost of \$5.2 million. The Federal Highway Administration (FHWA) approved the eligible use for the Park East Freeway remnant parcel sales. The share of the proceeds from the FHWA were deposited into the WISDOT Transportation Fund as the parcels are sold. Generated money from sold parcels were to be used by WISDOT “to fund only transportation project which would be eligible under Title 23, in Milwaukee County.”

The County provided a check to WISDOT for each sale of the Park East Freeway Land parcels. WisDOT will use the FHWA share of the proceeds for each remnant of the parcel sale to pay for county costs and expenses directly related to the Annex Removal Project up to \$5.2 million.

The Park Freeway Plan and Agreement provides that the proceeds from the sales of remaining parcels will be divided between the FHWA, WisDOT, and the County. The FHWA received 52.2%, and the County received 47.8% of the proceeds from sales of remaining parcels. Remaining parcels provides the 52.2%

3.6.4.1 Park East Redevelopment Compact (PERC)

Milwaukee County sought the sale of significant real estate assets, including 16 acres of land in the Park East freeway corridor. Through offsetting basic operating expenses or tax levies, the county saw these as necessary to provide long-term and sustainable benefits to the community. The Park East Redevelopment Compact (PERC) provided opportunity to create jobs and a tax base on the land and community. The Resolution also created the Community and Economic Development (CED) Fund, comprising of a series of programs designed to address ‘gap’ needs in the marketplace. The revenue produced by the sale of real estate assets (except for park land sales) was allocated to the CED Fund by the County Board. The Board laid out some uses of the CED Fund:

- Minority Business Working Capital
- Small & Minority Business Contract Financing
- Housing Development
- Neighborhood Business Development
- Economic Development
- Environmental Mitigation/Brownfields
- Park East Redevelopment Compact (PERC)

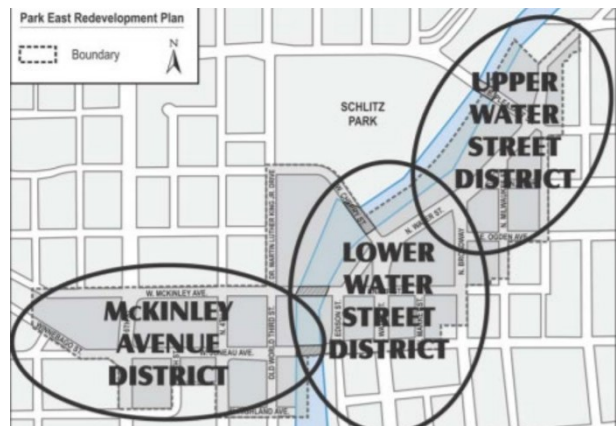


Figure 3-24 Map from the Redevelopment Plan depicting new neighborhood boundaries.

The Park East Redevelopment Compact (PERC) established policies for the sale of the County’s Park East land to provide additional sustainable community benefits. Each parcel of Park East Land was sold via competitive Request for Proposals that were reviewed and approved by the County Board.

3.6.5 Placemaking

Under the direction of Milwaukee City Planner Peter Park, the city of Milwaukee drafted a form-based code for the renewal code to encourage development that reinforced the area’s original form and character before the freeway.

About the Land: The land in the Park East redevelopment area encompassed 64 acres of public rights-of-way. The existing transportation easement beneath the freeway spur meant a substantial amount of land (16 acres) within the redevelopment area was publicly owned. These 16 acres beneath the freeway spur reverted to Milwaukee County, and some or all of the land became available for development once

the public improvements were completed and the easement was lifted. The city of Milwaukee and the Redevelopment Authority owned 3.7 acres of the land within the redevelopment boundary outside of the transportation corridor. The remaining privately owned land – about 37.7 acres – was vacant or underutilized. Currently, the dominant land use within the redevelopment boundary is commercial at 21.9 acres. Manufacturing accounts for 7 acres, and residential and mixed-use combined are 2 acres of land.

The Park East Freeway was replaced with a surface boulevard that reconnects it to the grid. Most of the one-way streets in the area were converted to two-way streets; and lane widths on the road were narrowed, slowing traffic, and increasing space for pedestrians.

The Community Vision contract for Milwaukee requires the recommendation of a series of catalytic projects for early construction. (Nelessen 2021) These projects were implemented early because of the leadership of Mayor John Norquist and Planning Director Peter Park, with special assistance and financing by the Milwaukee Redevelopment Authority. A few examples of these projects include:

- The Milwaukee Public Market, which was built on an empty lot adjacent to the freeway. A modern take on traditional form in scale and detail. This was an early catalytic project.
- The Riverfront Walkway was extended into downtown. The walkway has been an economic, market, visual and spatial success in downtown Milwaukee.
- Commercial sidewalk upgrades have helped revitalize the downtown pedestrian realm. Streetscape improvements include widened sidewalks, streetlights, awnings, and redesigned buildings with display windows instead of a blank wall. (Nelessen 2021)



Figure 3-25 Milwaukee Public Market, Figure 2: Downtown Milwaukee sidewalk, Figure 3: Art installation at the Riverfront Walkway (Nelessen 2021)

3.6.5.1 ParkEast Redevelopment Plan

The Park East freeway area released 26 acres of land for redevelopment. The city created three new neighborhoods called the McKinley Avenue District, the Lower Water Street District, and the Upper Water Street District. Each of these neighborhoods were developed using new urbanist design codes— with mixed use developments including residential, office development, and retail. The Park East Redevelopment Plan was approved by the Common Council in 2004 and consists of three documents

intended to guide future development of the areas in a predictable manner that optimized long-term public and private investments. Below are three brief paragraphs on the Park East Redevelopment Plan. (Milwaukee Department of City Development 2004)

1. **The Master Plan:** The Master Plan laid out the overall, comprehensive vision for future development and was written to facilitate the decision-making process for land uses, design variances, and financial assistance requests. It creates three districts within the corridor: the Upper Water Street, Lower Water Street, and McKinley Avenue Districts. The momentum for removal of Park East was accelerated by the city-led effort to develop a comprehensive master plan that would become the Downtown Master Plan for the city.
 - a. Upper Water Street: Future development would continue the residential opportunities found to the east, with higher density townhomes, apartments, and neighborhood-supported retail on the ground floor. This development should create an extended downtown residential neighborhood that connects Brady Street, Beerline “B” and the original Park East or Ogden area neighborhoods.
 - b. Lower Water Street District: An area with development that includes mixed-activity developments to complement existing patterns of small-scale entertainment. The goal was to promote increased pedestrian activity and the maximized use of the riverfront parcel to create an attractive high-tech office location.
 - c. McKinley Avenue District: This area contains large parcels suitable for large buildings like corporate offices and entertainment venues. The overall intent was to create concentrated corporate offices to facilitate daytime populations which would support entertainment and restaurant venues.
2. **The Renewal Plan:** A document that lays out land use opportunities. The goal is to promote efficient, economical, and productive use/reuse of the land, buildings, and watercourses. Three maps found in this document can be found at the end of this brief write-up. A few objectives related to the Park East corridor include:
 - a. Promoting residential, office, and mixed-use developments,
 - b. Extending the RiverWalk in the front of new mixed-use buildings,
 - c. Enhancing pedestrian connections across the Milwaukee River,
 - d. Enhancing the success of the Water Street with new entertainment venues, and
 - e. Providing urban open space.
3. **Development Code:** This document defines land use and design standards. The code is form-based and emphasizes the public qualities of buildings. These standards are graphically expressed and organized in a user-friendly format. It also details the Redevelopment District

(RED) specialized zoning. RED zoning was a crucial element in transforming the area for better business practices, mixed-use designs, and residential areas. Because the Park East District also intersects a portion of the Milwaukee River, development along the border of the river has to also be consistent with Milwaukee RiverLink Guidelines, which aim to maintain the River as a natural resource and create recreational opportunities.

The Milwaukee County Board of Supervisors and County Executive and Milwaukee City Common Council and Mayor have endorsed the removal, reconfiguration, and replacement of the Park East Freeway, as has the Governor and the Wisconsin Department of Transportation. A public hearing was held on December 13, 2000, with about 150 people in attendance. Of the 53 speakers at the hearing, 29 spoke in support of the Park East Freeway removal and reconfiguration and 24 spoke in opposition. The public hearing record indicates that those in favor, including the Metropolitan Milwaukee Association of Commerce, cited the anticipated land development and redevelopment benefits, and stated that these benefits offset the reduction in traffic service and accessibility that a surface arterial would provide as compared to a freeway. Those in favor further indicated a preference for the N. 6th Street I McKinley Avenue alternative, 'those in opposition expressed the need to maintain the highest level of traffic accessibility and safety.'"

3.6.6 Economic and Community Development

Removal of the freeway created new opportunities for economic development, which greatly exceeded the costs of removing the freeway. Initiated by Mayor Norquist and Planning Director Peter Park, the Park East removal idea gained approval of the larger public as a vehicle for economic growth and the revitalization of downtown. As the business community and some government agencies were initially leery of the proposed removal, the interest of the Harley Davidson Museum development, the underutilization of the Park East freeway, and the success of East Point Commons development on the former freeway corridor in San Francisco addressed their concerns over a reduction in mobility. Following multiple traffic studies showing traffic impacts would be minimal, tensions were eased among stakeholders.

"The results of the preliminary engineering study and environmental impact assessment being led by the Wisconsin Department of Transportation, in cooperation with Milwaukee County and the City of Milwaukee, indicate that the principal objective of the City of Milwaukee and Milwaukee County, in their endorsement of the removal, reconfiguration, and replacement of the Park East Freeway, is the promotion of land development and redevelopment in the area of the Park East Freeway. (Napolitan and Zegras 2008)"

Notably, the city won a Charter Award for the audacious plan in 2003. The plan and code were developed by the Planning and Design Institute (now acquired by GRAEF, a national structural engineering and planning firm) and encouraged the transformation of unnecessary sections of freeways within cities. (Steuteville 2003a)

In 2002, at the time of the release of the draft Redevelopment Plan, a group called the Good Jobs and Livable Neighborhood Coalition expressed concern the plan would not redevelop Park East equitably. The coalition pushed for the city and Milwaukee County to adopt a Community Benefits Agreement (CBA) to ensure that development practices were equitable, and residents would share in the benefits of the 64-acre redevelopment. (Federal Highway Administration 2019) The County of Milwaukee made strides to incorporate funding to support businesses in the Park East Area. Notably, any Disadvantaged Business Enterprises were allowed to pull funds from the Park East Redevelopment Compact (PERC). The Park East Redevelopment Plan was created as the city of Milwaukee began deconstructing the freeway. The Redevelopment Plan outlined development rules and guidelines to assist developers in the entitlement process. Subsequently, the land became an open canvas with flexible zoning that permitted residential, office, retail, and light industrial uses.

Since the removal of the freeway, the Park East Corridor has seen a reported \$1,060,000,000 in private investments for development projects, with potential to see \$250 million for the few remaining undeveloped parcels. (Federal Highway Administration 2019) Between 2001 and 2006, the average assessed land values per acre in the path of the Park East Freeway grew by over 180%. (Federal Highway Administration 2019) Additionally, the average assessed land values in the Park East Tax Increment District grew by 45% between the same period. These numbers reflect a much higher growth than the citywide increase of 25% experienced during the same time period. Demolition of the Park East Freeway began in 2002 and was completed in 2003. (Federal Highway Administration 2019)

Notably, the Fortune-500 Manpower Corporation moved its headquarters a block from the former highway, and developers began building mixed use developments. Residential and hospitality buildings were constructed, including an apartment complex with a famous steakhouse at the ground level to bring in tourists and residents to the area. Viets Field, formerly known as the Milwaukee School of Engineering (MSOE) soccer field, opened in late August 2013 and sits atop a parking structure that replaced parking spaces that were removed as part of the construction of McKinley Avenue. The buildings described above are just a few of the residential developments implemented (Parsons Brinckerhoff 2014). In December 2020, the American Family Insurance Company announced an effort to rehabilitate the historic Mandel building for a corporate headquarters – bringing in 250 jobs from the suburbs and creating 150 more jobs downtown. (Bocarejo, LeCompte, and Zhou 2012, 22–25) The Milwaukee Bucks built their \$524 million basketball arena and training facility on “arguably the least buildable (parcel) due to the slope and the odd shape,” in a pie-shaped slice of land on North Sixth Street between West McKinley and West Juneau avenues. (Kirchen 2017)

The development within the corridor itself is impressive, but so is the work in adjacent areas that may not have happened if the freeway was still in place. A good example is the redevelopment of the 22-acre former Pabst Brewery complex. (Steuteville 2003b) The industrial site was sandwiched near the intersection of the Park East Freeway and Interstate 43, with institutional buildings including a jail and coroner’s office on the other edges. Now, the complex has been renovated for residential, office, and retail use. Portions are also used for Cardinal Stritch University and University of Wisconsin-Milwaukee’s Zilber School of Public Health.

3.6.6.1 Right of Way Use Agreements

Milwaukee has taken some creative opportunities when considering what to do with I-794. While not opting for outright removal of the interstate, the city has utilized innovative uses of rights of way. A few of these ideas are explored briefly in this section.

In short, the Right of Way Use Agreements are one way to facilitate projects.² The right of way use agreements used in Milwaukee are not leases, they are more specific and detail what uses are allowed or retained. The proposal states what the use of the ROW is currently and that they are not conveying property rights, and, most importantly, the proposal should state the specific purpose for the new use.



Figure 3-26 I-794 Projects Enabled by Right-of-Way Use Agreements

3.6.6.2 Examples of Right-of-Way Use Agreements in Milwaukee

DNR Parking Lot: The City of Milwaukee acquired a building for the right of way to expand 794 into Downtown, it was also sold at a limited cost to the state DNR. The DNR paid \$3 million to DOT for the building, and the remaining 1.8 acres remained public right of way for the freeway. A parking lot ran under the interstate and was not sold to the DNR, but was instead leased to them to be used as a parking lot.

Dog Run: 794 backs up into the Milwaukee River and has all sorts of real estate requirements, building onto it would be difficult since it was designated park land. Instead, a Right-of-Way Use Agreement was established. It only outlined use rights, not property rights – meaning maintenance is acceptable so long as the interstate itself is not touched.

This project represents how the city of Milwaukee operates, making a number business improvement district. This proposed dog run space would bridge two of the business improvement districts. By looking

² https://www.fhwa.dot.gov/ipd/value_capture/defined/row_use_agreements.aspx There are many types of ROW use agreements. A lease is one type of ROW use agreement. Other types of row use agreements might be partnership agreements with another unit of government, Limited Use Permits or Sponsorship Agreements.

at other dog parks under interstates in St. Louis and Massachusetts, developers could present the idea easily. If this is within the public's interest, it would be one way of connecting part of the city that is north of 794 with the third ward south of 794. And, to the east of the river, the public space could be an entertainment venue for small concerts, pickleball, and outdoor dining tables.

Water & Green Infrastructure: In collaboration with the city and county of Milwaukee, the DNR, WisDOT, and the Sewage District alongside social organizations, the team is working on a solution to water, sewage, and snow drainage after flooding issues from the freeway and high-water levels in Lake Michigan. As it stands the project under 794 was presented to the FHWA as an interest for the public. The project will collect runoff from more than six acres of the freeway overpass on a site below the freeway. There is about \$1 million in funding for the infrastructure construction.

3.6.7 Human and Natural Environmental and Health Considerations

The Park East Freeway, built in the late 1960s and early 1970s, was starting to age and deteriorate. The condition was stable enough that using the freeway was not a concern for public safety. In 1999, the Park East Freeway carried an estimated 54,000 vehicles on an average weekday between Interstate 43 and North 4th Street; 33,000 vehicles between North 4th Street and North Broadway, and 23,000 vehicles between North Broadway and North Jefferson Street. (Snyder 2016)

Of the 54,000 daily trips made on the freeway in 1999, a little over one-half of the trips had an origin or destination east of the Milwaukee River and South of the Park East Freeway in the East Town area of the Milwaukee Central Business District (CBD). The remaining trips began or ended in the CBD west of the Milwaukee River or in the area just north of the CBD. (Snyder 2016) In short, of the traffic using the Park East Freeway, most was local rather than regional. Thus, there is little evidence that a freight analysis was done for the Park East Freeway spur.

The Wisconsin DOT, the city of Milwaukee, and the Milwaukee County Board of Supervisors conducted an Environmental Impact Assessment Study (EA) to look at removal alternatives before eventually moving forward with demolition.

A major concern of the Park East freeway removal was the impact on traffic. The Southeastern Wisconsin Regional Planning Commission (SEWRPC), the metropolitan planning organization and regional planning commission for the seven-county area, conducted two studies on the traffic impacts of the removal and reconfiguration of the Park East Freeway. The first study in 1998 assumed the removal of the freeway spur concluded that the impact to traffic would be minimal. An additional study was conducted in 2000 by HNTB, an infrastructure and design firm, on behalf of the Federal Highway Administration (FHWA) concluded that the traffic impacts would be less than originally thought. Additionally, the same studies from SEWRPC conducted environmental impact analyses and found there would be “no substantial environmental impacts...expected as a result of the removal, reconfiguration, and replacement of the Park East Freeway, including socio-economic, natural environment, physical environment, or cultural environmental impacts.”

The same HNTB study analyzed air quality, finding that slightly increased trip lengths and additional travel time would lead to a “modest increase...amounting to less than one percent of all carbon monoxide and hydrocarbon sources from line sources.” These estimates were not found to be significant. The same study analyzed the impact on motor fuel consumption. It found that slightly increased trip lengths because of more travel being placed on congested facilities would require about 94,000 more gallons of motor fuel annually. Again, “this is a relatively modest estimated change, amounting to less than one percent of the motor fuel likely to be consumed in the Region annually in the plan design year.” (Southeastern Wisconsin Regional Planning Commission 2001)

In a 1983 letter to the Southeastern Wisconsin Regional Planning Commission highlighted improved lakefront views, easier pedestrian access, and removed lakefront parking would be found if the spur removal was completed. (Southeastern Wisconsin Regional Planning Commission 1983)

3.7 CAPITOL CROSSING, WASHINGTON, DC

3.7.1 Background

[The northwest quadrant of Washington, D.C., has endured a detrimental effect of urban space for more than 40 years: a 200-foot-wide opening that spans three blocks above a depressed I-395 Freeway that runs beneath the nation's capital from New York Avenue to Southeast Freeway (I-695). The opening is a remnant of the nationwide effort to revitalize cities through high-speed, multilane highways through urban cores. The District plans included an interstate loop within the city, stretching from the west end of the National Mall to the Anacostia River on the east. The I-395 portion goes along the U.S. Capitol's west side and was the second segment built.

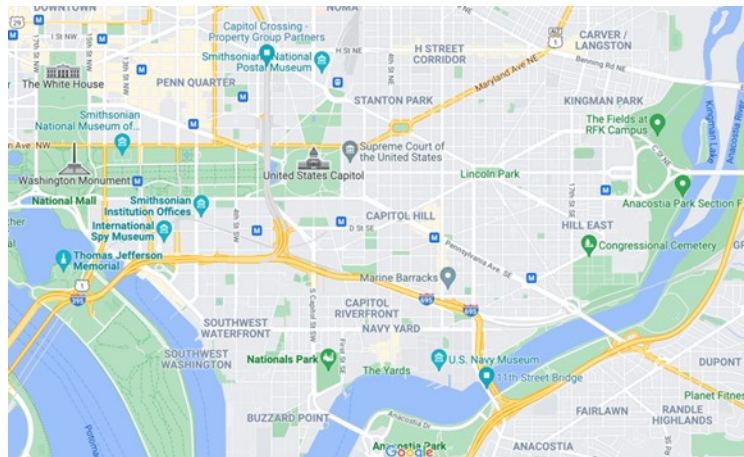


Figure 3-27 A screenshot depicting the locations of the Capitol Crossing site and the Eleventh Street Bridge site

North of Constitution Avenue, the I-395 freeway section would pass through a largely Black and mixed-European working-class neighborhood that had been in decline from white flight and economic woes. In response to the District's difficulties, there was complete reorganization of local government in 1967, giving D.C. simultaneous rule with its first Mayor and City Council. As the area was considered blighted, there was little effort to halt the interstate project from officials. Seven years after construction began, shrinking federal budgets and shifting transportation priorities – alongside protests from wealthier communities proposing alternative highway segments – took their toll on the project. The D.C. loop plan was abandoned, resulting in I-395's abrupt end at Massachusetts Avenue. Over four decades later, an

investment from Property Group Partners (PGP) aims to heal the scar with a \$1.3 billion investment in a Cap.

In the mid-1980s, T. Conrad Monts, submitted an unsolicited proposal to the District of Columbia to buy or lease the air rights over I-395. The proposal detailed Monts' plans to build a \$200 million office and hotel complex. At the time, community activists and DC City Council members pushed back against the proposal. The concerns included a \$12 million relocation cost for the city's financial computer facility and the fact that it was an unsolicited request, yet the proposal was not stopped. In 1989, then-DC Mayor Marion Barry awarded Monts the air rights over I-395 between D Street and Massachusetts Avenue, signing a final lease for the property in 1990. Mayoral support prompted Monts to submit a plan to the D.C. Zoning Commission, calling for three office buildings, a 300-room hotel, and 266 apartments. After it was approved, community activists, DC City Council, and Georgetown University Law Center levied opposition to the plan. Shortcomings of the plan cited by opponents included the size, footprint, and design of the project, and contended that the \$45 million appraisal was too low.

The D.C. Zoning Commission approved the plan in 1991, after requesting modifications that altered the size of the project and minimized traffic flow concerns. Construction had not started by 1995, and Monts was approved for a two-year extension. In 1999, no progress had been made. In the early 1990s, the collapse of the real estate market halted DC developments and left financing difficult to obtain.

By the summer of 2000, the DC City Council sued to evict Monts from the property and compel him to pay \$4 million in lost rent. Monts filed a countersuit seeking \$15 million for spent costs, and \$50 million in compensatory damages. A DC Superior Court grand jury awarded Monts \$8.4 million in damages in 2004. Both Monts and the DC City Council filed for appeals and continued negotiations. In summer of 2004, after public hearings and disputes, the Zoning Commission voted unanimously to deny the request for extension, ending Monts' ability to develop the project.

By 2005, Property Group Partners offered to pay a settlement to Monts in exchange for the right to buy the property from the city at fair market value. Property Group Partners paid the sum in 2009, after Monts' death, and acquired the air rights for the project in 2012. Property Group Partners negotiated with the city wherein the cost of the building would determine how much would be paid to the city for property air rights.

The city's decline in the 1960s, like other urban cores, did not end until nearly the turn of the century. Since then, the District has flourished, with the value of real-estate rising to meet the massive and precedent-setting project like the Capitol Crossing, "We're building land, and the cost of building the land is less than it would be to buy land," said PGP Regional Vice President Bob Braunohler. (Agnese 2017)

The Capitol Crossing is privately funded, and one of the largest ongoing private developments in DC. The project is a 2.2-million-square-foot complex covering 7-acres above I-395 with five mixed use buildings. Each mixed-use building will span three blocks over the highway. A \$1.2 billion real estate development, the Crossing will be built on a platform above a recessed section of I-395, with eight-foot footings sent

100 feet into the ground to support the buildings. (“Center Block at Capitol Crossing” n.d.) The project is expected to have 75,000 square feet of retail, restaurants, cafes, and a four-level garage with 1,146 parking spaces and 440 bicycle parking spaces. It is expected to bring in 8,000 permanent jobs (Office of the Deputy Mayor for Planning and Economic Development n.d.).

What makes this project worth looking at is how the District was able to utilize the right-of-way and encourage green developments that provide housing and jobs. The project is also an interesting way to consider how private developers use capital.

3.7.2 Stakeholder Engagement

The District of Columbia has supported and been committed to the project in some form since its beginning. Even through decades of delays, controversies, and the collapse of the first attempts to construct the project, the idea for the project was never abandoned.

As part of the regulatory process, PGP engaged Georgetown University, the Downtown DC Business Improvement District, the Federal City Shelter, Holy Rosary Church, the Jewish Historical Society, and residents living in nearby buildings. The project required the relocation of DC’s oldest synagogue and the Holy Rosary Church, which were completed without significant project opposition. (Federal Highway Administration Center for Innovative Finance Support, n.d.)

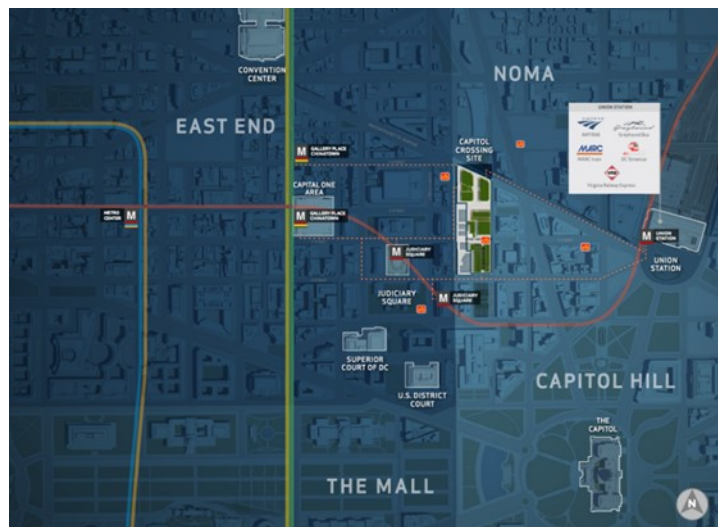


Figure 3-28 Map of the project area

Officials with the Federal Government criticized a request from PGP to close I-395 in order to speed up construction. (Goldchain 2016) The primary complaint highlights the importance of clear stakeholder communication, as FHWA officials were not informed of the proposal and discovered it through media outlets. Further, FHWA was critical because a closure would impact the 90,000 vehicles that stretch of I-395 carries daily. The closure was not incorporated into the original Environmental Impact Statement, and would have required a Finding of No Significant Impact (FONSI) upon re-evaluation, with the potential to include an environmental assessment and environmental impact statement. Altogether, evaluation of the impact would have taken close to 36 months. The closure was not approved. (Federal Highway Administration Center for Innovative Finance Support n.d.)

The FHWA has been critical of the project because the right-of-way agreement and initial processes were conducted under regulations that are no longer relevant. After the project was approved, certain project regulations related to closing and opening of nearby interstates and FHWA personnel changed.

Given that the Capitol Crossing was decades in the making, with numerous starts and stops, changes in regulations and requirements should have been carefully managed to ensure the project was brought up to date with various changes. At the time, FHWA was also critical of PGP's affordable housing component, which was incorporated into the original agreement. PGP's attempts to move the affordable housing units to an entirely different location drew criticism from officials. (Federal Highway Administration Center for Innovative Finance Support n.d.)

3.7.3 Governance

This project is notable as the developer acquired the air rights in fee simple – a rare occurrence that gives them more discretion than most uses of transportation rights of way – through a unique set of circumstances.

In 1988, Conrad Monts, a local developer, acquired the freeway's air rights from the city and proposed a several-building project. The relationship between Monts and the city soured over the years, and by 2005, the site remained vacant while they were entrenched in lawsuits. PGP, then known as the Louis Dreyfus Property Group, approached both parties in 2005 and began negotiating with the city for the site. A years-long process, Monts and the city had difficulty agreeing on the value of the empty space above the freeway. In 2012, the deal closed as PGP would agree to purchase the land below the opening from the city for \$63 million, as opposed to Monts's air-rights-only lease. The final purchase price has yet to be determined as the formula incorporates the cost of building the freeway-hiding deck.

Multiple levels of buy-in had to be acquired for PGP's vision to start. Neil Albert, the city's deputy Mayor for planning and economic development from 2006 to 2010 serving under then-Mayor Adrian Fenty, now heads the Downtown DC Business Improvement District where the Capitol Crossing is located, says, "On the surface, a project like this shouldn't get done" given the multiple development jurisdictions in the District, "but there was a spirit of collaboration that set in at an early stage. The stars really aligned."

PGP's vision is a complex coordination between designers, engineers, and the local and federal government. The Federal Government manages the highway, in addition to D.C. development-related jurisdictional oversight bodies such as the Offices of Zoning and Planning, – it's a partnership unlike anything else the city has seen.

3.7.4 Finances

\$1.3 billion in total for the Capitol Crossing real estate developments and the \$270 million for the Third Street Tunnel transportation improvements associated with overall street grid restoration and I-395 access.

This project is 100% privately funded by \$1.6 billion from Property Group Partners. The Group is relatively quiet about financing for the Capitol Crossing.

The project is supported by DDOT, but is completely privately funded by:

- Property Group Partners (PGP) (Developer)
- Balfour Beatty Construction (Construction)
- Skidmore Owings and Merrill (Master Plan & Architect): Skidmore, Owings & Merrill (SOM) developed the master plan for the Capitol Crossing. SOM manages the construction administration services until the project is complete. (SOM 2021)
- Lee and Associates is a D.C.-based firm, working with the Capitol Crossing project as the landscape architect. As the Capitol Crossing aims to be an “eco district” like no other in D.C., Lee and Associates designed a streetscape and common areas across the highway bridge and garage structures with permeable paving, custom planters, and custom furnishings to provide a “beautiful and comfortable landscape.” The project features 70,000 square feet of retail shops and restaurants connected by a garden promenade.
- Kohn Pedersen Fox (Architect)

3.7.5 Placemaking

Capitol Crossing includes three newly build city blocks in D.C., providing one million square feet for office space and mixed-use projects underway. The project promises 70,000 square feet of retail space, over 1,100 feet of parking space, and 440 bicycle parking spaces. Additionally, new I-395 entrance and exit ramps aim to improve traffic flows and provide safer travel for pedestrians and cyclists along Massachusetts Avenue. (Executive Office of the Mayor 2020)

3.7.6 Economic Development and Community Engagement

According to the FHWA, the Capitol Crossing will utilize air right development as a strategy for economic development, redevelopment, sustainability, and livability. It is projected that the project will generate \$40 million in annual new tax revenue to the District, create 8,000 permanent jobs, 4,000 temporary construction jobs, with more than 51% of the new jobs being filled by District residents. (Executive Office of the Mayor 2020)

Despite the site having 2.2 million-square feet of development opportunities, the residential component of Capitol Crossing was in flux throughout the planning process as PGP weighed alternative uses for the portion allocated to residential use several times. Until 2016, Georgetown University’s Law School had exclusive rights to some land as it sits against the project site. Had their rights had not lapsed, the Capitol Crossing would have included student housing.

In 2018 and 2019, PGP pitched D.C. Economic Development Office on a proposal to provide 100 affordable housing units at an alternative site west of the Nationals Park. The proposal from PGP argued market demand gave rise to hope for a 180,384-square-foot hotel instead of a 150-unit residential

building with ground-floor retail. The 150-unit multifamily building would have included 50 affordable housing units. The development landed on 50-affordable units due to the site being approved under a 1958 zoning regulation, which remained in place until the 2016 zoning code update. (Perry-Brown 2021)

These units would be affordable to residents making between 30 percent and 50 percent of area median income, a greater level of affordability than the 80 percent-of-AMI PGP previously agreed to in 2010.

PGP's application surfaced as PGP sought to generate more office leasing activity for the project's first two office buildings. Much of the application rests on legislation introduced in 2017 by D.C. Council Chairman Phil Mendelson on behalf Mayor Muriel Bowser, opening the door for change. The legislation cemented the affordable housing component for the development, but PGP proposed creating more affordable housing at Buzzard Point than it would have been required to create at Capitol Crossing. It was required to include 50 affordable housing units at Capitol Crossing, and instead proposed funding 100 affordable housing units as part of another development within the same ward. In mid-December of 2018, D.C. Council Chairman Phil Mendelson, on behalf of Mayor Muriel Bowser, introduced legislation that would cement the affordable housing component of PGP's proposal. The legislation would double the number of units to 100 affordable units. (Sernovitz 2019)

In April of 2019, PGP withdrew the application to convert the planned residential space into a hotel, which was tied to an all-affordable residential project in the Southwest portion of the ward, after the construction timing was later than anticipated. PGP proceeded to continue with the originally planned and approved residential component of Capitol Crossing, including the previously planned on and approved 50 affordable units at the center of the development site. (Interactive Zoning Information System 2019)

Now, the center block consists of a 166-unit residential tower and a 221-key boutique hotel linked together by a shared podium. Both are flanked by commercial office buildings. The shared podium includes public space, 20,567 square feet of retail, a triple-height hotel lobby, and below-grade parking and loading connections. The residential portion includes balconies, studio, one-bedroom, and two-bedroom units, and 50 affordable housing units. ("Center Block at Capitol Crossing" n.d.)

This report highlights the affordable housing component of the Capitol Crossing project as a key concern for future projects, as cities nationwide struggle to provide enough housing at affordable rates. Despite the opportunity to provide ample affordable housing units given the sheer size of the development site, the privately funded Capitol Crossing developers repeatedly attempted to change the requirements.

3.7.7 Human and Natural Environmental and Health Considerations

In 2011, an Environmental Assessment for the I-395 Air Rights project commenced. The project was also reviewed under Section 106 of the National Historic Preservation Act, and the environmental assessment included an analysis related to Section 106. In 2012, FHWA approved the environmental assessment with a finding of no significant impact (FONSI). (Federal Highway Administration Center for Innovative Finance Support n.d.)

Developers of the Capitol Crossing have taken measures to ensure the project is green and contributes to a sustainable Washington, D.C. – with the hopes of creating the city’s first eco-district. The five multi-use buildings are expected to be LEED Platinum certified; a feat SOM knows well after building the District’s first LEED certified Gold and Platinum commercial buildings. (Agnese 2017)

A freeway-level cogeneration plant on the 2nd street side will provide the entire site (with the possibility of surrounding buildings) with electricity and usable heat – saving tenants roughly 20 percent on their power bill (Landscape architecture). Extensive water harvesting at the roof and street levels will capture and treat 90 percent of storm water runoff, reducing potable water usage by 45 percent and landscape water usage by 50 percent. What is not used will be cleaned before being released into the city’s combined sewer system. Through tapping into D.C.’s high water table, the Capitol Crossing will capture enough groundwater to service the cooling towers without city-provided water. (Agnese 2017)

The developers, PGP, approached the U.S. Green Building Council (USGBC) and other sustainability strategists, to find other innovations for sustainability for the project. As such, the developers incorporated ‘ecochimneys’, which will filter parking garage air through ground-level plantings before it returns to the sky, “cleaner than the surrounding atmosphere.” (Agnese 2017)

The developers also promise to open important streets to through-traffic, creating new pedestrian promenades, and opening bicycle lanes as additional ways to create the eco-district. The included underground, four-level parking garage would house 1,146 cars and 440 bicycles. (Goldchain 2014)

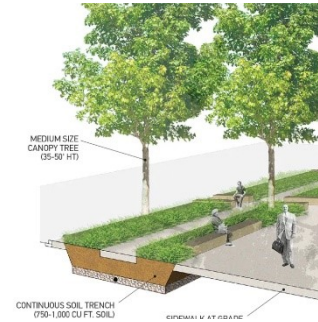


Figure 3-29 At-grade tree planting diagram showing subgrade soil and planting conditions. Image courtesy of Lee and Associates

3.8 11TH STREET BRIDGE, WASHINGTON, DC

3.8.1 Background

As cities recognize the value of transforming underutilized or obsolete infrastructure into vibrant spaces, the Eleventh Street Bridge Park (11th Street Bridge Park) in Washington, D.C., is a worthwhile example to examine. The soon-to-be-completed park in Washington D.C. is constructed on an abandoned bridge across the Anacostia River. The 11th Street Bridge Park will link the upscale Capitol Hill and Navy Yard areas with Anacostia and Fairlawn – historically African-American and predominately low-income neighborhoods east of the river.



Figure 3-30 Drawing of 11th Street Bridge Park

Both communities share common roots as 17th-century riverside villages inhabited by the Nacotchtank, a native Algonquian people. After the tribe was displaced or decimated by European aggression and disease, the remaining members relocated to Anacostine Island (now called Theodore Roosevelt Island) and were likely absorbed into the larger Piscataway tribe of the Chesapeake Bay region. By the mid-19th century, the area had left behind its Nacotchtank beginnings to become incorporated as Uniontown, a largely white working-class enclave that housed workers from Washington Navy Yard nearby. Exclusionary covenants prohibited the sale, rental, or lease of Uniontown property to anyone of African or Irish descent. In 1877, famed abolitionist and orator Fredrick Douglass became one of the first African Americans to own property in the neighborhoods just outside of Uniontown when he bought Cedar Hill, an estate originally belonging to the developer of Uniontown and just beyond the reach of covenants (“Places - Frederick Douglass National Historic Site (U.S. National Park Service)” 2021).

Anacostia remained primarily white until after World War II, when millions of African Americans from the rural south flooded north in search of economic prospects during the Great Migration. (Halnon n.d.) Southern migrants were drawn to the social and civic capital already created by a small and influential community of African Americans, who lived in greater Anacostia family homes established by freed people. (Halnon n.d.) The federal government’s conversion of DC public schools into the nation’s first fully integrated school system in 1950 drew in family’s hopeful for educational opportunities for their children. (Dean 1998) In response to this influx, DC city planners enacted exclusionary practices and policies that produced the Anacostia Freeway and massive public housing communities throughout Ward 7 and Ward 8. (Dean 1998) The net result of these projects drove many of the city’s African American residents into neighborhoods of concentrated poverty in the city’s east side and cut off amenities, services, and job opportunities found just west in Capitol Hill and Georgetown. (WETA 2007 and NCPPC 1930)

Georgetown became a large and infamous slave port. Following the Civil War, the area remained an industrial port community of mostly Black working-class residents. Young white professionals began buying up Georgetown's inexpensive riverside housing stock just after World War I. (Dean 1998) A combination of escalating housing prices and exclusionary policies and practices are cited as having pushed and kept African Americans out of Georgetown ever since.

Today, Georgetown has the lowest share of Black residents and the highest median home sale price in the city. ("Creating Healthy Places: The 11th Street Bridge Park and Beyond" 2014) Anacostia is about 97 percent Black, and its poverty rate of 46 percent is about two and a half times the city average. ("Creating Healthy Places: The 11th Street Bridge Park and Beyond" 2014) High housing prices in other areas of DC, such as in the H Street Corridor and the consolidation of St. Elizabeth's Hospital Campus in Congress Heights neighborhood by the Department of Homeland Security, have made Anacostia an attractive opportunity for housing speculators. It may already be ramping up, as median home sale prices increased from \$221,000 in 2010 to \$377,000 in 2015 in Anacostia. (Tatian et al. 2015) Throughout DC, renters are significantly burdened by housing costs – a quarter pay 50 percent or more of their income for rent – but Anacostia is one of a few neighborhoods in DC where over 40 percent of the population is rent burdened. (Tatian et al. 2015)

The 1,200-foot bridge is slated for completion in 2023, it will be the city's first elevated park and offer playgrounds, gardens, performance spaces, an environmental education center, public art, and a boat launch. ("THEARC – Building Bridges across the River" n.d.) Building Bridges Across the River, a nonprofit behind the bridge plan, hopes the park can serve as an anchor for inclusive economic opportunity, environmental sustainability, and healthy communities.

For years, Anacostia has suffered from long-term disinvestment, with documented disparities between communities that will be bridged. For example, the child poverty rate is 20 percent on the west side, and 53 percent in Anacostia; the unemployment rate is 6.6 percent on the west side and 20.7 percent in Anacostia. (Tatian and Lei, n.d.) Community members and neighbors of the project were skeptical of the project, having experienced gentrification, rising costs, and displacement following improvements like the park. Planners agreed, understanding the park will be a failure if it cannot serve the full interests of those already living in surrounding neighborhoods. Together, planners and neighbors have pursued equitable development goals as concretely as the bridge's construction itself. ("Building Bridges across the River" n.d.)

The 11th Street Bridge Park is a valuable case study on the challenges posed when an anticipated new public amenity takes shape near distressed neighborhoods and in the context of a rapidly gentrifying city. The Park, and its Equitable Development Plan, offer an opportunity to assess how and whether current residents of surrounding communities can reap the benefits of new developments when economic developers prioritize equity.

3.8.2 Stakeholder Engagement

Washington, DC's 11th Street Bridge Park was launched in 2011 by the Department of Planning of the District of Columbia and is now a project of Building Bridges Across the River at THEARC (BBAR). ("THEARC – Building Bridges across the River" n.d.) In part due to the park's symbolic juxtaposition, park planners have focused on equity from the beginning. The 11th Street Bridge Park planners utilized community engagement to develop the plan's recommendations and benchmarks and metrics that measure equity throughout the project. ("Building Bridges across the River" n.d.) Yet, parks are somewhat of an urban planning challenge to planners. When designed properly, parks provide safe spaces for recreation and build communities through interaction and organized activities; and can help stabilize distressed neighborhoods, reduce crime, and inspire increased local investment. (Chiesura 2004)

As the Bridge Park vision materialized thanks to insight from Harriet Tregoning, the city's director of planning, for how to repurpose a defunct urban structure into a privately operated, publicly owned park that would connect a divisive social and economic barrier – the Anacostia River. Tregoning shared her vision with Scott Kratz, the vice president of education at the National Building Museum, who fielded and gauged interest by presenting over 200 community meetings from 2011 to 2013. ("THEARC – Building Bridges across the River" n.d.) This was supported by a ULI Urban Innovation grant and is detailed further in the finances portion. ("Creating Healthy Places: The 11th Street Bridge Park and Beyond" 2014)

The park was initially met with skepticism from residents east of the river in Anacostia, who were hoping to use the \$30 million raised from the park for education, housing, employment, and more. Scott Kratz, the director of the Bridge Park made good on his promise to listen to residents by attending nearly 200 community and civic meetings, knocking on doors, and showing up to listen to concerns about the project. The input, he notes, shed light on similar desires for an environmental education center, urban agriculture, performance spaces and food sales. (Abello 2019)

Rather than turn the project to community-level activists, or city government – typical leaders of urban development projects – both Katz and Tregoning brought Building Bridges Across the River (BBAR), a DC nonprofit that manages a highly regarded Ward 8 Town Hall Education Arts Recreation Campus (THEARC). (O'Connell 2016a) BRAR was quickly seen as the ideal organization to bring the Bridge Project to fruition because of its physical location east of the Anacostia River, shared goals to revitalize distressed communities east of the river with equitable inclusion, their proven track record of serving low-income neighbors, and ability to foster productive interactions across income levels, and the significant funding possible thanks to BBAR raising \$27 million public and private funds for THEARC in 2005. ("THEARC – Building Bridges across the River" n.d. and "Building Bridges across the River" n.d.)

By 2013, 11th Street Bridge Park was officially a project of BBAR, allowing leaders like Kratz and the director of BBAR, Edmund Fleet, to begin presenting an early “proof-of-concept” to a broad audience. (“THEARC – Building Bridges across the River” n.d.) In 2014, over \$1 million in funds were raised from public and private sources to hire two full-time staff and build out the Bridge Park website. The funding also contributed to the community-engaged Bridge Park design competition. The competition was kicked off with Bridge Park planners holding formal park-design charrettes with neighborhood residents on both sides of the river in 2013. (Urban Learning Network, 2019) These charrettes used stakeholder input to prioritize programming ideas collected over the previous three years and culminated in a complete list of desired facilities. A committee oversaw the design competition, and included the National Capital Planning Commission, the Anacostia Watershed Society, community residents, advocates, food insecurity nonprofits, arts nonprofits, green-space advocates, park administrators, planners, and architects. (“Building Bridges across the River” n.d.)



Figure 3-31 Equitable Development Plan (2018)

After numerous meetings with four finalist design teams, the Bridge Park design oversight committee, and a formal selection jury selected OMA+OLIN, a paired architectural and urban design firm (OMA) and a landscape architecture firm (OLIN). The winning design featured outdoor performance spaces, innovative playgrounds, urban agriculture, classrooms for outdoor education, public art that captures the history of the region, and kayak and paddle boat access to the river – programming concepts requested by community stakeholders.

3.8.2.1 The Equitable Development Plan

Low-income residents, primarily from east of the river, routinely expressed concerns about the attention the Bridge Park innovation would draw to their neighborhoods from developers and wealthy prospective home and business owners. (O’Connell 2016b) They expressed hope for the enjoyment of new amenities, and fear of displacement, “What does this mean for me?” (O’Connell 2016b) To address these concerns and support their goal of serving the full interests of those already living in the area near the project, Bridge Park planners commissioned an economic impact study to gauge the impact of the Park on city-level employment, real estate, and local business. (“Building Bridges across the River” n.d.) The study helped planners form an economic analysis of the Park, but did not include the composition of residents who would enjoy the amenity. It offered no insight into how the Bridge Park would address the ‘hyper-local’ community needs that Kratz heard about at meetings – making sure residents are hired for Bridge Park construction, supporting and maintaining connections with small businesses, and promoting home ownership for existing residents. (“Building Bridges across the River” n.d.)

Needing a new approach, Bridge Park leaders sought the Local Initiatives Support for Corporation in DC (LISC DC). (Local Initiatives Support Corporation 2020a) LISC DC has improved the quality of life for low-income communities since the 1980s, and their priorities include funding projects that are designed to cause equitable improvements in social, physical, and economic conditions of project impact areas. LISC DC provided project management, research, and technical assistance to Bridge Park. (Local Initiatives Support Corporation 2020a) LISC DC offered long-standing community relationships to the project and experience with neighborhood revitalization projects that seek equity for current and future low-income residents. The organization's history of affordable housing preservation also demonstrated their intentional focus on neighborhood revitalization and equitable development. From 1988-2015, LISC DC made 107 investments, totaling over \$78 million in 76 properties across DC, and preserved 3,701 apartments, cooperatives, and condominiums. (Local Initiatives Support Corporation 2020a)

With a partner in place, the Bridge Park team began painting a baseline idea of the surrounding area through data. The Bridge Park's Equitable Development Task Force (EDTF) identified and recruited researchers, planners, and community experts from the DC Office of Planning, the DC Fiscal Policy Institute, and the Urban Institute. ("Building Bridges across the River" n.d.) EDTF was tasked with establishing expectations that were grounded in reality for how the Bridge Park would support equitable development. EDTF gathered data on resident and demographic trends, land-use, ownership, and taxation conditions. ("Building Bridges across the River" n.d.) The EDTF then collected community feedback on equitable development goals that the project should seek to achieve – namely, community members made it clear that jobs and income were greater concern to them than housing. ("Building Bridges across the River" n.d.) The EDTF combined the feedback with economic data and produced three priorities to develop recommendations for the project: housing, workforce development, and small business development.

Next, EDTF launched a second wave of stakeholder meetings, funded by the JPB Foundation, that focused on equitable development. ("Bridging the Divide in Washington D.C." 2023) In 2015, EDTF brought 60 DC-based nonprofit and community leaders, housing and workforce development experts and advocates, and government delegates to discuss equitable development. ("Building Bridges across the River" n.d.) The goal was to produce actionable recommendations. That same year, Bridge Park invited the public to review the recommendations on the east and west sides of the river. Notably, the Bridge Park team invested significant funds and staff time in outreach for these meetings through email blasts, fliers, ads in local blogs, door to door canvassing, and presenting at community meetings. Community members were asked to review and discuss the recommendations through a dot-voting system. Residents supported a Community Land Trust initiative, jobs with viable career pathways, and building and maintaining a small business community. Residents also added increasing capacity for small business owners and greater resources for tenant advocacy. Finally, EDTF brought these recommendations to a final meeting in 2015, with the goal to shift the community mindset from planning into action through an asset-mapping session to identify existing resources and partners in the area. ("11th Street Bridge Park - Equitable Development Plan" 2019)

In 2015, Bridge Park published the 11th Street Bridge Park Equitable Development Plan, outlining several major strategies and 19 recommendations by three topic areas, workforce development, small business development, and housing. (“11th Street Bridge Park - Equitable Development Plan” 2019) EDTF identified neighborhood and individual-level performance measures aligning with the three focus areas, and the Urban Institute organized and refined these measures into a model to measure the implementation of the Bridge Park plan. The second revised EDP was released in 2018, with further strategies for affordable housing, small business, and workforce development. The second plan also includes new strategies for cultural equity. (Bogle, Cohen, and Torres Rodríguez 2021)

While it is too early to know whether the Bridge Park planning has secured equitable results for current residents, we do know that Bridge Park leaders have laid a strong foundation for results through engaging a wide variety of stakeholders, especially residents, in designing the park and setting equitable development goals.

3.8.2.2 The Importance of Establishing an Equity Outcome

Bridge Park is notable for their efforts to implement their equitable development strategies that drive forward inclusive development for Ward 8. (“Equity – Building Bridges across the River” n.d.) Rather than claim to achieve outcomes for the surrounding neighborhoods that are beyond the scope of their direct control or influence, Bridge Park leaders charted a course for equitable development that can be realistically achieved by the direct reach of their own resources and limited sphere of influence. (“Equity – Building Bridges across the River” n.d.) A cautionary note within their Equitable Development document establishes a forward-looking tension for equitable-development work:

“... achieving a set of equitable development results is not the same as achieving actual equity (i.e., fairness and justice) for an historically marginalized community. After all, it is possible to imagine any number of equitable development projects being completed in a previously disinvested-in neighborhood without true equity ever being achieved. In other words, more affordable housing, small businesses, jobs, and cultural experiences may be preserved or created without there ever being enough of these things to prevent displacement of many current residents, much less to substantially mitigate the widespread effects of systemic racism on black and low-income residents living in places like DC’s Ward 8.” (“11th Street Bridge Park - Equitable Development Plan” 2019)

There is no shared equity outcome that can be operationalized with clear metrics – no guideline for Bridge Park, stakeholders, residents, and community leaders to follow to measure their progress. Yet, Bridge Park project provides insights for equitable development efforts within gentrifying communities.

- Develop a realistic plan. Bridge Park leaders have carefully developed strategies that reflect only the direct reach of their resources and limited spheres of influence. The 2018 Equitable Development Plan expanded its scope to include additional voices and new ideas, based on experiences with implementation. In the first EDP in 2015, the Park’s impact area encompassed neighborhoods a mile within its footprint, but experiences finding land for the

Douglass Community Land Trust pushed leaders to redefine their focal point as the “surrounding neighborhoods east of the Bridge Park footprint.” (“Equity – Building Bridges across the River” n.d.)

- Engage a network of partnerships. Bridge Park leaders look for ways to link their strategies with District agencies and goals, like the District’s economic development agencies, employers, resident groups, developers, and lenders. In short, they recognize that a larger network of government agencies, nonprofits, and developers must come together to produce economic development for the District’s marginalized people.
- Set performance-level targets. Bridge Park leaders set performance-level targets to coordinate effort and track progress for achieving equitable development across partners. These targets define tangible numbers each partners aims to achieve within the EDP strategy, and ensure transparency among stakeholders.
- Spread accountability across multiple parties. Bridge Park’s performance-level targets are aligned and owned across multiple resource-holders. These targets account for resident voice and projected population growth.
- Build voices and power. Bridge Park leaders empower resident leadership through tenants’ rights workshops, advocacy workshops, and technical support for small business owners. These activities encourage the existing community to control land use and other aspects of development. (“Equity – Building Bridges across the River” n.d.)

Energetic champions like Bridge Park can bring together a large network of government agencies, nonprofits, developers, funders, and citizens to ensure projects like the Bridge Park yield positive equity outcomes for marginalized people. Bridge Park and its allies have powerfully coordinated their efforts to achieve meaningful results within a relatively short amount of time.

3.8.3 Governance

Once the 11th Street Bridge Park opens, it will be owned by the DC city government, and managed by Building Bridges, and operated by local nonprofits specific to each programming space. Funding from the DC Department of Transportation covers construction costs, and is expected to total to \$47.4 million. (Maher 2019) It appears the Douglass Community Land Trust may face an uphill battle, as speculative redevelopment is starting in the vicinity of the bridge, and furthered by the Tax Increment Financing (TIF) for the Reunion Square development. (Executive Office of the Mayor 2020)

3.8.4 Finances

ULI Washington received \$500,000 from a ULI Urban Innovation grant, as part of the Building Healthy Places Initiative, to support a series of engagements by the District Council around the creation of the park. (“Creating Healthy Places: The 11th Street Bridge Park and Beyond” 2014)

The Building Health Places Initiative emphasizes that social and racial equity are the cornerstone of the initiative and funding opportunities. Focus areas span an array of social determinants of health, including transportation, parks and open spaces, food, buildings, housing, and communities. (“Building Healthy Places Initiative” n.d.)

The Bridge Park has been successful in securing a combination of multiyear competitive grants from national funders, smaller donations from local funders, and city funding. In total, the Bridge Park has raised \$57 million toward its equitable development goals. (“Building Bridges across the River” n.d.) To date, the District Department of Transportation has committed \$38.25 million toward the Park. (Maher 2019) Additionally, DC’s Local Initiatives Support Corporation (LISC DC) provided early strategic and analytical support in the beginning that continues today. (Local Initiatives Support Corporation 2020a) In 2016, LISC DC launched their Elevating Equity initiatives which invested \$50 million through loans, grants, tax credit equity, in-kind services, and technical support to nonprofits that support residents in neighborhoods near the future park. (Local Initiatives Support Corporation 2020b)

The multiyear funding has deeply impacted the Bridge Park development, providing support for capacity building and project initiatives. In 2017, the Bridge Park was awarded a \$5 million implementation grant from JPMorgan Chase PRO Neighborhood Initiatives. (“Bridging the Divide in Washington D.C.” 2023)

The three-year grant allocates \$3 million to start the Douglass Community Land Trust (DCLT) in collaboration with City First Enterprises; \$1 million for minority-owned small businesses in collaboration with a community development investment fund (Washington Area Community Investment Fund); and the remainder for workforce development activities led by the Skyland Workforce Center, a project from BBAR. (Abello 2019)

The Bridge Park has also secured grants from the JPB Foundation, the Kresge Foundation, TD Bank’s Major Grants Initiative, ArtPlace America, the Educational Foundation of America, and the Citi Foundation Community Progress Makers Fund. (Neibauer 2022)



Figure 3-32 Community garden with mural painted by a local artist

3.8.5 Placemaking

Bridge Park leaders, community members, and stakeholders originally articulated three strategies to focus on during development. These strategies included access to housing, workforce development, and small business enterprises. After receiving feedback from the community through their iterative process, a fourth strategy was added that focused on amplifying the surrounding communities’ arts and culture in the 2018 Equity Development Plan. (“11th Street Bridge Park - Equitable Development Plan” 2019)

This strategy focused on using the Bridge Park itself to uphold the art, culture, and creativity of the residents from neighborhoods east of the site itself. The EDP is very clear that it is the culture of Black DC residents—through their voices, forms of expression, and history—that are to be preserved and protected through the Bridge Park’s equitable development strategies. (“Building Bridges across the River” n.d.) The arts and culture strategy does have roots in the early Bridge Park engagement efforts in 2015, wherein residents of Ward 7 and Ward 8 expressed fear of cultural displacement.

Participants in focus groups were clear that Bridge Park should focus efforts on including longtime residents in Bridge Park. (“Equity – Building Bridges across the River” n.d.) Community members were clear that the park should ensure programming is accessible to all people, especially Ward 8 residents. To facilitate this, the team created foundational strategies to guide development and future initiatives: information sharing, accessibility, space, and upholding local artists.

Information sharing refers to the creation of an information hub by BBAR, the core implementers of the Bridge Park’s arts and culture strategy. To date, the emphasis for events has been to showcase visual, performing, culinary, environmental, healing, and literary forms of art from Ward 8 and DC Black culture through BBAR and Bridge Park-sponsored festivals and other events. The key activities for this strategy include a space to crowdsource information like a community bulletin board or kiosk, using the Bridge Park’s website and social media presence to highlight upcoming events and events that provide information on narratives, voices, and history of Black residents. (“Equity – Building Bridges across the River” n.d.)

The second strategy aims to ensure that programming on the Bridge Park is affordable and accessible to all visitors. At the first annual spring Anacostia River Festival in 2017, the Bridge Park cosponsored the event with the National Park Service. The festival featured cross-cultural activities, outdoor games, exploration of riverfront trails, and informal booths on conservation and clean water, and art. (“Equity – Building Bridges across the River” n.d.) Over 9,000 visitors attended the 2017 festival, and east of the river vendors made \$4,165 at the Artist Market hosted by the festival. This strategy also encompasses providing implicit bias training for Bridge Park staff in order to create a welcoming environment for all visitors. (Uliano 2017)

Residents and community members expressed the need for Bridge Park to foster informal gathering spaces that support free and spontaneous programming and creative expression, and that provide spaces for healing and relaxation. (“Equity – Building Bridges across the River” n.d.) An on-going, long-term activity includes ensuring surrounding neighborhood communities can inform park design through continuous feedback, like formal stakeholder groups that took place during the design review committee. An example of this strategy includes Bridge Park’s efforts to grow food. Since 2015, Bridge Park has funded the development of seven “Bridge Park Plots,” urban farms in Ward 6 and Ward 8. In 2018, the Bridge Park Plots harvested 2,685 pounds of fruit and vegetables for local families. These urban farms offer BBAR-sponsored workshops for local chefs, herbalists, gardeners, nutritionists, and aspiring urban farmers. (“Farm & Garden – Building Bridges across the River” n.d.)

Finally, Bridge Park prioritizes programming that fosters collaboration with residents, local organizations, and artists of all disciplines in the surrounding community. A notable key action here is the development of ongoing park programming. Bridge Park partnered with Double Nickels Theatre Company, which gathers and retells stories of Black elders in various venues like a Mobile Front Porch, a flatbed trailer built to resemble a front stoop. (Double Nickels Theatre Company 2016)

3.8.6 Community and Economic Development

One of the objectives of the 11th Street Bridge Park was to mitigate and prevent gentrification and displacement of the current residents. One measure to help meet that goal was developing a community land trust. (“Equity – Building Bridges across the River” n.d.)

In short, a Community Land Trust keeps housing prices down by separating the value of the building from the land beneath it. A Trust can buy and hold the title to the land, lowering costs for the building owner. For apartments, these savings can help keep rent down. The building owner agrees to a limit on profits from selling the property. This allows owners to reap some equity from their investments while keeping the property affordable for current and future occupants. Building Bridges Across the River established the Douglass Community Land Trust in an early win for the project. It currently includes several apartment buildings with rentals and co-ops, single family homes, and commercial space for small businesses and nonprofits. Two-thirds of the Trust’s board are community residents, small business owners and other stakeholders. The Trust is just one strategy Building Bridges is using to tackle the affordable housing crisis in DC.

Building Bridges and the [Anacostia Business Improvement District](#) also helps businesses apply for loans and grants.³ Building Bridges also partnered with Skyland Workforce Center to launch training programs in construction to help ensure local residents will be the first in line for new jobs created by the park. (“11th Street Bridge Park - Equitable Development Plan” 2019)

3.8.7 Human and Natural Environmental and Health Considerations

The 11th Street Bridge Park aims to have several environmental and health-related assets for community members to utilize. Community gardens and urban farms provide fresh produce to nearby residents and offer opportunities for social interaction through volunteer opportunities and educational workshops. Outdoor spaces, like accessible kayaking amenities for the Anacostia River, were highlighted by residents as an amenity they sought for the Bridge Park. Educational spaces outdoors, innovative playgrounds, and spaces for relaxation were also mentioned several times during the Bridge Park planning process by residents.

³ <https://anacostiabid.org/mission> Last accessed March 31, 2023

Infrastructurally, visitors to the Park will be able to access it from both sides of the river, and are connected by a pedestrian walkway that will be serviced by several bus routes. (“Building Bridges across the River” n.d.)

Building Bridges helped build seven community gardens and urban farms, and a community-supported agricultural network that provides fresh produce to hundreds of low-income residents each year. The program also hosts regular volunteer opportunities and educational workshops for community residents. (“Bridge Park Plots” n.d.)

The Landscape Architecture Foundation (LAF) partnered with the 11th Street Bridge Park staff to document environmental performance goals, objectives and metrics to evaluate the Bridge Park’s performance once it is operational. The report covered a wide array of environmental and health performance measures, including stormwater management, habitat restoration, water quality, temperature and urban heat island effects, energy use, air quality, and social and economic factors. (“Building Bridges across the River” n.d.)

Finally, the 11th Street Bridge Park partnered with George Washington University’s Milken Institute of Public Health to conduct a Health Impact Assessment. The first phase captured the current health status of residents living within a half-mile walk shed of the Bridge Park site and conditions related to their built environment. This effort was supported by the Kresge Foundation. The report highlighted stark disparities in socioeconomic status, social capital, health status, and built and food environments briefly described in other areas of this report. Ultimately, the report recommended continued monitoring of the socioeconomic and health data throughout the project and beyond and continued public engagement to learn how residents on both sides of the river want to interact with their parks, river, and food sources. (“Building Bridges across the River” n.d.)

CHAPTER 4: LESSONS LEARNED & OBSERVED BEST PRACTICES

While the cases reviewed for this study come from a variety of geographic locations, contexts and issues, several lessons do present themselves. These are presented in Table 4-1 below, which also shows which cases are the key examples of this practice or recommendation.

Table 4-1 Best Practices and Lessons Learned by Case Study

Key: “X” the case is an exemplary possible best practice. “>” the practice exists, but not an example of the best execution. “O” that the case is a cautionary tale of what can happen if the practice is not followed.								
Corridor	I-579	Solar Program	Auburn Avenue	I-70	Park East Freeway (and I-794)	Claiborne Corridor	Eleventh Street Bridge	Capitol Crossing
City	Pittsburgh	State of Oregon	Atlanta	Denver	Milwaukee	New Orleans	Washington, DC	Washington, DC
Innovation type	cap	adjacent	under bridge	cap	removal	under bridge	Non-category (adjacent bridge)	Non-category (tunnel)
Best Practices and “Lessons Learned”	Infrastructure can cause community wounds, but infrastructure itself cannot heal them	>		>		>		
	Changes cannot be at the expense of the transportation purpose		X	>	X	O		
	Right-of-Way Use Agreements, Utility Accommodations, and other federal innovations can support a wide range of uses. They do not need		X		X			>

	to support the transportation purpose – the use just cannot impair that purpose.								
	Engage and address interests of local surrounding communities	>		X	O	X	O	X	
	Have a visible and transparent governance process	>		X	O		O	X	
	Observe Finance Best Practices (1): ensure funds return to community		>		>	X		X	
	Observe Finance Best Practices (2): ensure highway funds do not need to be returned / reimbursed.					X			

4.1 INFRASTRUCTURE CAN CAUSE COMMUNITY WOUNDS, BUT INFRASTRUCTURE ITSELF CANNOT HEAL THEM

“If you build it, they will come” has made the remarkable definitional journey from a quaint baseball anecdote to a planning cliché. However, the core of a cliché is often a truth, and the case of the construction of urban freeways, that truth is that “they” did come. Unfortunately, “they,” the users of these freeways, were new and uninvited guests in the neighborhoods through which these freeways ran. Nonetheless, these guests, while not necessarily appreciating the sacrifice of the host neighborhoods, were greatly appreciative of their increased speed and mobility, and became a new constituency to be served by the government entities that built the freeways in the name of “progress.”

Over time, it has become clear that in many cases, this progress was not progressive: in the name of improving the lives of those who were better off, the new freeways harmed those that were already worse off. In this research, we have attempted to review and understand whether efforts to mitigate these previous harms with new infrastructure in these transportation corridors have succeeded.

Unfortunately, we have found that many of these attempts have fallen short and conclude that attempting to address previous infrastructure harms by simply building more infrastructure is not likely to achieve the desired goals. This result is likely due to the very nature of government entities charged with building transportation infrastructure: they must continue to serve the needs of the travelling public while trying to reconcile those needs with the needs of those who live next to that transportation facility. The dissonance between these purposes means these government entities are in conflict with themselves and makes them poorly suited to finding and implementing ways to address the harms caused previously.⁴

This is not to say that there is not a role for transportation agencies to be involved in the process, but they should understand their role, and, above all, do a better job of engaging the public, understanding their desires and needs, and developing responses that reflect this input. While our scope is limited, none of our case studies provided an example of new infrastructure serving the desires and needs of the community. However, three of our case studies, Denver, New Orleans and Pittsburgh, serve as examples of the disappointing results that come from infrastructure-based solutions intended to address previous harms caused by the same infrastructure.

In **Denver**, enough residents of the neighborhood initially blighted by the construction of an elevated I-70 did not see the replacement of the elevated viaduct with a new freeway in a trench along the same right of way, and the construction of a cap over a portion of that trench that will provide a playground, park and other amenities, as an improvement, to the point of organizing to bring a lawsuit against the Colorado Department of Transportation. They did not see the provision of high occupancy / toll lanes as a demand mitigation measure that reduced the number of lanes constructed in the new trench, but instead, they saw a noisy eyesore over their neighborhood replaced by a new facility that physically cuts through the neighborhood, restricting access from one side to the other, while more well-off residents of the Denver area pay a small toll to speed through without noticing their impact. While the cap is a significant engineering feat, and it, along with the toll lanes, inclusion of local art, and other modern features of the new I-70, will likely make the new freeway more attractive than the previous viaduct, at the time of this writing,⁵ the design does not appear to reconcile the travel needs of the freeway users with the livability needs of those who live alongside it.

The consequence of the failure of a government-led solution had even greater consequences in **New Orleans**, along the Claiborne corridor, where planning appears to currently be stalled. We found an initial preference for a freeway removal has led to disagreement regarding the efficacy of an innovative plan to create amenities underneath the existing raised freeway. A 2012 non-profit – led study in the neighborhood created the impression that the freeway could be removed, and the neighborhood restored. However, this plan was apparently adopted without buy-in by the governmental entities that

⁴ Insight inspired by a presentation by Dr. Andrea Roberts of Texas A&M at U of Minnesota Institute for Advanced Study webinar on March 17, 2022

⁵ The I-70 project was not complete as of 2022, when this research was conducted.

had the power to make such a change. When costs of removing the freeway were shown to be prohibitive, alternative plans for making the area underneath the freeway a civic plaza were developed, which were noted by some as an innovative solution to the problem. (“The Analytics of Hope” 2019) However, our discussions with residents, and reviews of their other public statements, show that they feel these plans were imposed upon them and did not represent what they felt was a restorative solution. In the meantime, the significant costs of the freeway removal and the shortcomings of under bridge plans have led to a breakdown of consensus for what a restorative solution may be.

Finally, the cap over I-579 in **Pittsburgh** is a less stark example, as it restores some connection that had been previously lost. However, the beneficiaries of the restored connection are generally not those that were harmed in the first place. The area has changed, and new business and civic entities have replaced those that had existed before. Indeed, it was these new entities, including the body overseeing professional sports stadiums in the area, that championed the project and succeeded in securing the funds that led to its completion. While civic leadership in this way is generally desirable, the project was somewhat promoted as a means of repairing past harms to the surrounding neighborhoods, and our conversations with local neighborhood activists indicate that these benefits have not been realized.

We begin our “Lessons learned and recommendations” section with this rather discouraging lesson not to suggest that departments of transportation and public works should not engage in efforts to improve the livability of surrounding areas and address past harms where possible, but to point out the importance of the need for these entities to recognize that they should not lead such efforts, but instead engage with additional agencies and funders to bring more sophisticated tools that enable shared decision making to develop solutions that support these neighborhoods in meeting their own articulated goals. The subsequent entries discuss what some of these tools may be.

4.2 CHANGES CANNOT BE AT THE EXPENSE OF THE TRANSPORTATION PURPOSE

In nearly all the cases we studied, the original facilities were built with the support of federal transportation dollars, and, with federal dollars come federal restrictions. Most relevant is that these funds have, and continue to come with, the restriction that they be used to serve a “public highway purpose,” as stated in 23 CFR 1.23(b). In other words, the transportation corridor must still move people and goods, and no transportation alternative can affect this purpose. It is easy to see how this restriction led to the construction of many transportation facilities that harmed the surrounding neighborhoods, as investments in surrounding neighborhoods do not directly contribute to that purpose.

Nevertheless, the case studies in Milwaukee, Oregon and Denver show how innovative solutions supported the transportation purpose while not harming, and even enhancing, the surrounding neighborhood, with Milwaukee being most significant in that traffic studies showed that removing the highway better served the transportation purpose of the corridor by reducing congestion more than preserving the freeway would do. On the other hand, the Claiborne corridor case shows how support for any option can fall apart when the primacy of the transportation purpose is not observed.

The Park East Freeway removal in **Milwaukee** is the most dramatic example of how transportation purposes and economic development can be served by the same project. City of Milwaukee leaders were able to show that because the freeway in question was a short spur, or end of the line, ending it a few blocks sooner and restoring a grid of surface streets would reduce congestion and allow traffic to disburse through downtown. By demonstrating that removing the freeway would allow people to travel to their destination more quickly, the city received the added benefit of opening land for development. Had the traffic impacts not been first and foremost in making the case for removal, however, the necessary approvals and resulting economic benefits would likely have never been realized.

The **Oregon** solar program shows similar synergies, but without the need for freeway removal. Instead, ODOT was able to show how placement of solar panels within the existing right of way could power utilities, such as lighting, needed for the safe operation of the freeway, while also reducing operating costs and providing benefits to the environment.

The I-70 Cap in **Denver** is another illustration of combining transportation purposes with other goals. The cap provides a physical connection for the surface streets above the freeway trench while also enhancing amenities for the surrounding neighborhood. However, as noted above, the cap effort should not be interpreted as an overall solution to issues in this community.

Finally, the Claiborne corridor in **New Orleans** serves as a cautionary tale of what can happen when the transportation purpose is overlooked. The 2012 study that led to a neighborhood option in favor of freeway removal apparently did not include any study of traffic impacts. Since it could not be shown that the highway removal option addressed the transportation needs currently served by the highway, this option never received support or buy-in from those responsible for ensuring the safe and efficient operation of the freeway. As a result, when the alternative was chosen, full costs of this action were not considered. Once these were known, those in the neighborhood split into factions over the desired course of action, and it is not clear at the time of this writing that any mitigation projects are underway.

4.3 RIGHT-OF-WAY USE AGREEMENTS, UTILITY ACCOMMODATIONS, AND OTHER FEDERAL INNOVATIONS CAN SUPPORT A WIDE RANGE OF USES. THEY DO NOT NEED TO SUPPORT THE TRANSPORTATION PURPOSE – THE USE JUST CANNOT *IMPAIR* THAT PURPOSE.

While the previous finding discussed how to accommodate the “highway purpose” requirement of 23 CFR 1.23(b), the immediate next paragraph, CFR 1.23(c), allows for non-highway uses, subject to the approval of the FHWA administrator, so long as the use is in the public interest, does not impair the highway itself, and “will not interfere with the free and safe flow of traffic” on that highway. These are enabled by Right-of-Way Use Agreements, which FHWA requires for all non-highway uses as covered in

23 CFR 710.⁶ [Guidance](#) for these agreements allows for leases, sponsorships, permits, partnerships, and/or other innovative arrangements.

In this study, we have two cases that are examples of how Right-of-Way Use Agreements enabled non-transportation uses through creative drafting of these agreements:⁷ the Oregon Solar Program, which used a Utility Accommodation, as articulated in 23 CFR 645; and the developments along I-794 in Milwaukee, which have come into being after the Park East Freeway removal utilizing Right-of-Way Use Agreements. Finally, we have one case, the Capitol Crossing, that demonstrates the challenges of going the more conventional route of acquiring the right of way in fee simple before adding innovations.

In the **Oregon** Solar project, not only were highway purposes accommodated, as discussed above, but ODOT obtained greater latitude for this use, including the ability to turn over ownership, maintenance and operation of the facility to a separate utility, through the utility accommodation process.

In **Milwaukee**, after the Park East Freeway was removed, the city, Wisconsin DOT and other stakeholders engaged with FHWA to develop a number of additional improvements to the downtown area along the I-794 corridor through creation of Right-of-Way Use agreements in each case. The projects ranged from creating parking lots to dog parks to river walks and streetcar maintenance facilities.

Finally, the **Capitol Crossing project in Washington, DC** is a unique development over I-395 where, rather than FHWA retaining control and agreeing to specific uses that conformed with CFR 1.23(c), as is usually the case, the developer ended up purchasing the air rights in fee simple. This result came out of a decades-long process that included changes of highway plans, multiple lawsuits, and changes in developers – a series of events that make the Right-of-Way Use Agreement appear to be simple, in contrast.

4.4 ENGAGE AND ADDRESS INTERESTS OF LOCAL SURROUNDING COMMUNITIES

As noted in the first finding, transportation agencies may find it to be nearly impossible to develop and implement innovative facilities that enhance the surrounding communities while also meeting the needs of the travelling public and the requirements of the federal government. However, our research found several cases where purposeful engagement with the surrounding community, or lack of such engagement, was a critical factor in whether the project was embraced as an amenity or seen as a continued affront to their well-being.

⁶ Several different options for ROW Use agreements are discussed in this document:

https://www.fhwa.dot.gov/ipd/value_capture/defined/row_use_agreements.aspx

⁷ https://www.fhwa.dot.gov/real_estate/right-of-way/corridor_management/alternative_uses_guidance.cfm (last accessed May 13, 2022). In both cases, in addition to meeting the “no harm” criteria listed earlier, the projects must also consider environmental impacts.

I-70 in **Denver** serves as a cautionary tale here, as the cap has been received as an inadequate afterthought to what the residents desired. While the initial planning to rebuild I-70 was under initial consideration, numerous groups engaged in their own visioning processes, with many advocating with complete removal of the freeway, and directing transportation investment in routes that largely by-pass the urban core of Denver, resulting in an urban facility that would have positive impacts for the health and well-being of the local area. However, these alternatives never made their way into CDOT's analysis, and expediency dictated planning for the depressed freeway in the existing corridor. Only after lawsuits were filed and additional negotiations undertaken, were measures added to meet some of the community's requests, including the cap, and plans for an independent assessment of the impacts of the new freeway on the health of the residents.

The I-579 Cap in **Pittsburgh**, while notable for bringing together a wide range of stakeholders, also comes up short in this category. Our research into this case revealed that Pittsburgh is a very well-organized city, with many groups set up to articulate their interests. And while the groups that came together created a diverse and effective coalition, they did not represent the interests of the residents of the Lower Hill neighborhood. While these kinds of results are sometimes endemic to pluralistic processes, the project is disappointing given that one of the stated goals was to repair the harms to the Hill district created by I-579 in the first place.

In contrast, while on a smaller scale, the Auburn Avenue project under I-75/85 in **Atlanta** represents a continuing effort to restore vibrancy to an area that remains less than what it was before the freeway came through. The decentralized nature of Atlanta's government created the opportunity for leadership by non-governmental organizations, and initial efforts in the 1990's created a project that was more a historical interpretive effort for outsiders than a project that would induce pride and a sense of identity for the current residents. However, more thoughtful engagement by Central Atlanta Progress and others more recently has resulted in a project that leverages the area's historic significance to enhance and promote current activities and businesses in the area. While the current efforts have not come close to ameliorating the harms of the past, some mechanisms and processes may have been set up to yield greater progress in the future.

The Park East Freeway removal project in **Milwaukee** is a more striking example of how early engagement can yield greater innovation and success. While the area around Park East did not have as extensive historic harms as other cases, the freeway did serve as a barrier between downtown Milwaukee and areas north of the corridor, stifling community and economic development. Consequently, while one effort in support of the project related to traffic engineering, as discussed above, another focused on identifying and articulating what could result if the freeway was removed. Planners showed how maintenance costs could be reduced for WisDOT while increasing economic activity, and therefore local revenue, for the City. These efforts culminated when it was shown that the resulting land could be used to develop a museum for local manufacturer Harley-Davidson, further cementing civic pride and activity in the area. Even though the museum was ultimately located elsewhere, the private economic interests had coalesced around the new vision.

Finally, the most exemplary case of how engaging local interests can result in successful innovation is the **11th Street bridge project in Washington, D.C.** While the specific context is somewhat different, a bridge over a river, rather than activity to upgrade the area around an existing transportation facility, it addresses a key issue: how to ensure that success of a new project does not result in increasing economic activity to the point that current residents cannot continue to live there. In this case, significant effort was put forward to create entities that engaged with the neighborhood to develop plans that served their needs, and focused on building upon existing community assets, rather than seeking to serve more regional goals. As such, in contrast to the success of Park East, where development of a regional, even statewide, asset was seen as desirable, the 11th Street bridge project provides an example of processes that address improving local assets first.

4.5 HAVE A VISIBLE AND TRANSPARENT GOVERNANCE PROCESS

A key element of generating ongoing support for a project, even after it is finished, appears to be presence of a visible and transparent governance process. If stakeholders and other interested members of the public are aware of who is leading the project, how decisions are made, and how to get involved in the decision-making process, they will feel more invested in the project and see it as an asset to the community. In this sense, governance is similar to the immediately preceding community engagement practice, but while that practice focuses on engagement early in the process, this practice can extend over the life of the facility. Our research yielded two cases where the governance mechanisms are helping to maintain community support, and two where lack of transparency have led to less optimal outcomes.

I-70 in **Denver** is one of the less optimal cases, as changes in the governance process only occurred after members of the surrounding community mobilized with organized interest groups to file formal complaints and other legal actions. These efforts did lead to significant changes, including the cap, and more significantly, based upon our interviews, agreement to a long-term health impact study, but if these results can only be obtained through legal processes, requiring hired counsel, it is a sign that the decision-making process is not visible, transparent nor accessible. The fact that selection of an independent contractor to conduct the health assessment was also a lengthy process also shows that the lack of transparency had prevented development of trust.

A similar, but less acrimonious result occurred in **Pittsburgh** with the cap over I-579, as the coalition of powerful stakeholders that came together to obtain the financing and construction of the cap apparently did not create a long-term plan for maintenance and oversight of the facility. While the city owns and has ultimate responsibility for maintaining the space, such operations have apparently become part of their standard operating procedures, leaving local stakeholders wondering how they may provide input or otherwise contribute to any further long-term vision or enhancements.

The under-bridge project on Auburn Avenue in **Atlanta** provides a contrasting narrative as the decentralized nature of local governance in the area created the necessity and opportunity for various Business Improvement Districts, such as Central Atlanta Progress, and non-governmental entities, such

as Sweet Auburn Works, to organize and speak for stakeholders in the area. While these entities do not appear to have the formal planning and land use powers commonly associated with city government and planning departments, they are local entities that are responsive to local initiatives and that have the ability to articulate and advocate for positions of the local stakeholders.

Finally, the **11th Street Bridge project in Washington, D.C.** may be the gold standard in this area, as the early engagement process discussed above not only engaged local stakeholders at that time, it also created long-lasting governance organizations, such as the Equitable Development Task Force, with the power to articulate visions, develop plans and ensure the implementation of those plans and visions.

4.6 OBSERVE FINANCE BEST PRACTICES (1): ENSURE FINANCIAL BENEFITS RETURN TO COMMUNITY

While it may seem intuitive that funds spent on local projects should return benefits to the local community, the Interstate highway construction projects of the mid-twentieth century, which led to many of the innovations discussed here, are obvious examples of how the opposite result occurred. As a result, planners should make an explicit objective of ensuring expenditure of new infrastructure funds for new innovative right of way uses results in a positive financial benefit for the area where the construction is occurring. In this study, we saw such activity occur in Milwaukee and Washington, D.C., and in a less satisfactory manner in Denver.

There is a definite expectation that the local areas around the Central I-70 in **Denver** will receive some financial benefit from the project, as project funds will support construction of the cap and the health impact analysis resulting from the litigation activities brought about late in the planning process. However, these are a fraction of the total cost of the project and came about through an adversarial process rather than a collaborative one, making the result less than an ideal outcome.

In contrast, in **Milwaukee**, Peter Park, the city planner at the time of the Park East Freeway removal, describes the project as one that met “conservative” goals: it proposed a positive balance by reducing public expenditures while also increasing revenue. The project reduced expenses by removing several miles of freeway that the Wisconsin DOT had to operate and maintain each year, and increased revenue by creating new economic activity that increased property values, and, in turn, municipal revenue. This theme carries through with the Right-of-Way Use Agreements now being put in places along I-794 as well.

The **11th St Bridge project in Washington, D.C.** similarly prioritized awareness of the financial impacts of the project, but rather than simply allowing property values to increase, and reaping the resulting benefits directly to the city coffers, the planners recognized the potential adverse impacts of such gentrification, as discussed above. As a result, they created organizational structures, such as the Community Land Trust, to absorb the property value increase, keeping rents affordable for current residents while also directing expenditures of increased revenue in ways that address the needs and desires of the residents.

4.7 OBSERVE FINANCE BEST PRACTICES (2): ENSURE HIGHWAY FUNDS DO NOT NEED TO BE RETURNED / REIMBURSED.

Finally, the Park East Freeway removal project in **Milwaukee** provides one more useful lesson. As noted above, 23 CFR 1.23(b) requires that federal highway funds be spent in support of “public highway purposes.” Consequently, when a project removes that public highway, the expectation is that the federal funds be returned as their expenditure no longer supports a highway purpose. Such a result would have added significant costs to the Park East project, likely borne by the city of Milwaukee and other local governments. However, by showing how the freeway removal would ease congestion and enhance mobility through the area, the city was able to convince FHWA that removing the highway better served the transportation purpose than keeping it, ensuring that the realized savings would further enhance the financial returns of the project.

CHAPTER 5: CASE STUDY SYMPOSIUM

5.1 INNOVATIVE RIGHT OF WAY SYMPOSIUM

An Innovative Right of Way Symposium was held on August 15th, 2022, over the course of three hours from 12:00 pm – 3 pm CDT using Zoom. A total of 90 participants attended, who were able to utilize the live question and answer function throughout the symposium to ask questions from speakers.

The Symposium was recorded, and the recording is available at: <https://youtu.be/HgTaicQOXYQ>

The University of Minnesota’s Center for Transportation Studies covered this event, and summarized it in this report, which was published in their October 2022 newsletter. This summary can be found at <https://www.cts.umn.edu/news/2022/october/infrastructure> and is reprinted below.

A time-stamped synopsis of the Symposium, speaker bios, Q&A and presentations are included as Appendices A-D.

5.1.1 CTS Summary

Reconnecting divided communities through mindful infrastructure



View of Rondo land bridge looking eastward in St. Paul. Image: Reconnect Rondo

Highway projects in the U.S. have a long-standing history of dividing thriving minority communities to make way for vehicle travel. In recent years, there has been renewed interest, political willpower, and funding to address historical wrongs and repair divided communities. However, these efforts need to be directed carefully—with equitable planning and community engagement—to avoid repeating old mistakes.

In a MnDOT-funded project, researchers Frank Douma and Maya Sheikh from the Humphrey School of Public Affairs studied one approach: developing the rights-of-way and airspace near state highways.

They found that infrastructure such as “caps” or land bridges over highways could support both community health and economic growth.

Douma and Sheikh conducted eight case studies in communities across the nation to examine how public and private resources were used—to greater and lesser effect—to improve the land surrounding highways. They compiled best practices and presented their findings in an online workshop and symposium on August 15.

Speakers provided their on-the-ground perspectives on case studies from Atlanta, Milwaukee, Washington, DC, and the Twin Cities, while other presenters gave a broader perspective on national trends.

Cities have traditionally been built with the intention of delivering vehicle traffic directly into the heart of the city as fast as possible, said Peter Park, associate professor adjunct at the University of Colorado and a former city planner for Milwaukee and Denver.

However, highways tend to make city blocks bigger, limit access, widen streets, increase redundant travel, and overall reduce the performance and capacity of a transportation system. With infrastructure aging out, he said, there is now an opportunity to rebuild with people—not cars—in mind.

Engaging the community’s needs

The first of Douma and Sheikh’s best practices is recognizing that infrastructure alone cannot be relied upon to fix community wounds. “A lot of these cases come from situations where infrastructure caused the issues that we see,” Douma said.

Engaging and addressing the interests of local and surrounding communities is important for mitigating unintentional damage, Sheikh added, as is having a transparent governance process.

Paul Angelone, senior director of the Curtis Infrastructure Initiative, presented the idea of “caps” and “stitches”—which are ways of partially reconnecting land on either side of a highway. A cap is basically a wide bridge that can be enhanced with green space, foot travel access, and other features, and a stitch is a narrower version of a cap.



Rendering of a Rondo streetscape in St. Paul. Image: ReConnect Rondo

Keith Baker, executive director of ReConnect Rondo, demonstrated a positive example of how a cap could be put to practical use. Rondo is a St. Paul African-American community that was divided by I-94 in the 1950s and 1960s. A prosperity study done by ReConnect Rondo found that around 700 homes were lost when the freeway went in, and an intergenerational wealth gap of -\$157 million in unrealized home equity value had developed as of 2018.

ReConnect Rondo is looking to build a cap over I-94 that would reconnect the divided halves of the community. The project, which would cost around \$459 million, could potentially free up 21 acres of land and add around 1,800 new jobs to the area.

Baker said it will be important to ensure that community input be taken into account as the project progresses. “We see the early principle of community ownership as critical for driving transportation investment,” Baker said. “Again, we’re talking about righting past wrongs.”

Maintaining funding

Another best practice—from a more administrative perspective—that Douma and Sheikh drew attention to is that highway improvement projects need to maintain the “transportation purpose” of the affected infrastructure.

Legally, said David Nguyen from the Wisconsin DOT, freeways built using federal money must serve a “public highway purpose,” and if the removal or alteration of a freeway undercuts that purpose, the money has to be given back. However, clauses to this rule can be leveraged if the changes are in the public interest, do not impair the highway itself, or will not interfere with the flow of traffic.

In Milwaukee, for example, the Park East Freeway was removed in 2002. The Federal Highway Administration ultimately waived the public highway purpose requirement because the removal was proven to benefit public transportation needs. Congestion was reduced, and connectivity between downtown and the near north side of Milwaukee was improved, Nguyen said.

A final example of innovative funding is the Capitol Crossing highway cap in Washington, DC. Angelone highlighted the unusual level of private funding that allowed the cap to get beyond the planning stages and embrace environmentally friendly planning and building practices. The project is also a notable example of airspace use agreements.

If a freeway cannot be removed outright, Douma added, there are resources such as right-of-way agreements, utility accommodations, and airspace lease agreements that could be creatively leveraged to improve the land around a freeway. The projects around the Milwaukee I-794 are an example. “You can do this while keeping the core use of the highway intact,” he said.

Returning value to the community

Another best practice is ensuring that the funds generated by improvement projects return to the affected communities.

Gentrification, Park said, is a significant issue that needs to be considered, as “improvement” projects will often increase property values in an area and drive out locals who can’t afford rising housing costs.

Sweet Auburn, Georgia, is a 170-year-old African-American community east of downtown Atlanta that was divided in the 1940s and 1950s by the I-75/85 downtown connector freeway.

LeJuano Varnell, executive director of Sweet Auburn Works, says that fixing the damage caused by the freeway—depressed property values, increased CO2 emissions, loss of historic and neighborhood fabric—will need to focus on putting control of the land back into the hands of the people living there. “The empathy that comes from a real estate development has everything to do with the owner,” Varnell said.

In Washington, DC, the 11th Street Bridge Park project is attempting to mitigate gentrification through careful use of community engagement. The aim of the project is to convert a defunct freeway bridge over the Anacostia River into a pedestrian footbridge. From the very beginning, said Scott Kratz, senior vice president of Building Bridges Across the River, the local minority communities were involved in the planning process.

Two years were spent engaging with the community even before engineers and architects were approached, and the 11th Street Bridge Park’s Equitable Development Plan was created to lay out and address potential problems, Kratz said. A homebuyer’s plan and a land trust were created to generate affordable housing, and a construction training program was created to ensure that the \$90 million project costs were returned to local workers as much as possible.

Overall, Douma concluded, community engagement is one of the most important aspects of remedying the harms of past infrastructure projects. “If one starts by trying to sell a vision rather than by understanding the community’s vision, you will likely run into some problems.”

A recording of the symposium and a summary of the proceedings will be available on the MnDOT project web page.



At the end of the U symposium, participants were surveyed for their takeaways about right-of-way planning. This word cloud highlights keywords from the results.

Writer: Sophie Koch

CHAPTER 6: CONCLUSIONS ON RESEARCH BENEFITS AND IMPLEMENTATION STEPS

6.1 RESEARCH BENEFITS

As noted in Chapter 1, this research was designed to help MnDOT better work with its public and private partners to meet MnDOT’s legislated directives of better utilizing “state highway lands and airspace; provide transportation facilities without undue burden to any community; ensure economic well-being and quality of life; and to enhance economic development” (MnStat 174.01 Subd 2(2), (4)). To do so, the research examined eight case studies of innovative uses of rights of way, including highway caps, under-bridge uses, use of land adjacent to freeways, and even one instance where a freeway was removed. By examining the ways stakeholders were engaged, how the project was governed, how it was financed, the community and economic development measures deployed, how human and natural environmental elements were considered, and what design and placemaking features were deployed, the research team was able to articulate several lessons learned.

6.2 IMPLEMENTATION STEPS

The seven lessons learned are offered as a series of steps MnDOT and its agency and community partners might employ to maximize the value of a transportation asset to surrounding communities, in addition to the travelling public. These steps are presented below.

6.2.1 Infrastructure can cause community wounds, but infrastructure itself cannot heal them.

“If you build it, they will come” has made the remarkable definitional journey from a quaint baseball anecdote to a planning cliché. However, the core of a cliché is often a truth, and in the case of the construction of urban freeways, that truth is that “they” did come. Unfortunately, “they,” the users of these freeways, are new and uninvited guests in the neighborhoods through which these freeways run. Nonetheless, these guests, while not necessarily appreciating the sacrifice of the host neighborhoods, are greatly appreciative of their increased speed and mobility, and became a new constituency to be served by the government entities that built the freeways in the name of “progress.” Over time, however, it has become clear that this progress is not progressive: in the name of improving the lives of the travelling public, the new freeways harmed those who live along the corridor. This research shows that efforts to mitigate these previous harms with new infrastructure are not likely to achieve the desired goals. This is not to say that transportation agencies should not be involved in the process, but they should understand their role, and, above all, do a better job of engaging additional agencies, funders, and the public to bring more sophisticated tools that enable shared decision making that can lead to solutions that support these neighborhoods in meeting their own articulated goals. The subsequent entries discuss what some of these tools may be.

6.2.2 Changes cannot be at the expense of the transportation purpose.

In nearly all the cases we studied, the original facilities were built with the support of federal transportation dollars, and, with federal dollars come federal restrictions. Most relevant was that these funds have, and continue to come with, the restriction that they be used to serve a “public highway purpose,” as stated in 23 CFR 1.23(b). In other words, the transportation corridor must still move people and goods, and no transportation alternative can affect this purpose. Nevertheless, the case studies in Milwaukee, Oregon, and Denver showed how innovative solutions supported the transportation purpose while not harming, and even enhancing, the surrounding neighborhood, with Milwaukee being most significant in that traffic studies showed that removing the highway better served the transportation purpose of the corridor by reducing congestion more than preserving the freeway would do. On the other hand, the Claiborne corridor case showed how support for any option can fall apart when the primacy of the transportation purpose was not observed.

6.2.3 Right-of-Way Use Agreements, Utility Accommodations, and other federal innovations can support a wide range of uses. They do not need to support the transportation purpose – the use just cannot *impair* that purpose.

While the previous finding discussed how to accommodate the “highway purpose” requirement of 23 CFR 1.23(b), the immediate next paragraph, CFR 1.23(c), allows for non-highway uses, subject to the approval of the FHWA administrator, so long as the use is in the public interest, does not impair the highway itself, and “will not interfere with the free and safe flow of traffic” on that highway. These are enabled by Right-of-Way Use Agreements, which FHWA requires for all non-highway uses as covered in 23 CFR 710.⁸ [Guidance](#) for these agreements allows for leases, sponsorships, permits, partnerships, and/or other innovative arrangements.

In this study, we have two cases that are examples of how Right-of-Way Use Agreements enabled non-transportation uses through creative drafting of these agreements:⁹ the Oregon Solar Program, which used a Utility Accommodation, as articulated in 23 CFR 645; and the developments along I-794 in Milwaukee, which came into being after the Park East Freeway removal using Right-of-Way Use Agreements. Finally, we have one case, the Capitol Crossing, that demonstrates the challenges of going the more conventional route of acquiring the right of way in fee simply before adding innovations.

⁸ Several different options for ROW Use agreements are discussed in this document:

https://www.fhwa.dot.gov/ipd/value_capture/defined/row_use_agreements.aspx

⁹ https://www.fhwa.dot.gov/real_estate/right-of-way/corridor_management/alternative_uses_guidance.cfm (last accessed May 28, 2023). In both cases, in addition to meeting the “no harm” criteria listed earlier, the projects must also consider environmental impacts.

6.2.4 Engage and address the interests of local surrounding communities.

As noted in the first finding, transportation agencies may find it nearly impossible to develop and implement innovative facilities that enhance the surrounding communities due to their need to also meet the needs of the travelling public and the requirements of the federal government. However, our research found several cases where purposeful engagement with the surrounding community, or lack of such engagement, was a critical factor in whether the project was embraced as an amenity or seen as a continued affront to their well-being.

6.2.5 Have a visible and transparent governance process.

The presence of a visible and transparent governance process is a key element of generating ongoing support for a project, even after it is finished. If stakeholders and other interested members of the public are aware of who is leading the project, how decisions are made, and how to get involved in the decision-making process, they will feel more invested in the project and see it as an asset to the community. In this sense, governance is similar to the immediately preceding community engagement practice, but while that practice focuses on engagement early in the process, this practice extends over the life of the facility. Our research yielded two cases where the governance mechanisms have been helping to maintain community support, and two where lack of transparency has led to less optimal outcomes.

6.2.6 Observe Finance Best Practices (1): ensure financial benefits return to community.

While it may seem intuitive that funds spent on local projects should return benefits to the local community, the Interstate highway construction projects of the mid-twentieth century that led to many of the innovations discussed here are obvious examples of how the opposite result occurred. As a result, planners should make an explicit objective of ensuring expenditure of new infrastructure funds for new innovative right-of-way uses that result in a positive financial benefit for the area where the construction is occurring. In this study, we see such activity occur in two cases and in a less satisfactory manner in a third.

6.2.7 Observe Finance Best Practices (2): ensure highway funds do not need to be returned/reimbursed.

As noted above, 23 CFR 1.23(b) requires that federal highway funds be spent in support of “public highway purposes.” Consequently, when a project removes that public highway, the expectation is that the federal funds be returned as their expenditure no longer supports a highway purpose. Such a result would have added significant costs to the Park East project, likely borne by the city of Milwaukee and other local governments. However, by showing how the freeway removal would ease congestion and enhance mobility through the area, the city was able to convince FHWA that removing the highway better served the transportation purpose than keeping it, ensuring that the realized savings would further enhance the financial returns of the project.

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