



# U.S. DOT LADDERS OF OPPORTUNITY

# EVERY PLACE COUNTS DESIGN CHALLENGE

**SUMMARY REPORT** 























#### **EVERY PLACE COUNTS DESIGN CHALLENGE**

#### **ACKNOWLEDGEMENTS**

The U.S. DOT Ladders of Opportunity Every Place Counts Design Challenge was made possible by the participation and involvement of the many volunteers and stakeholders in each challenge city. Project organizers would like to thank everyone involved for donating their time, resources, venues, and expertise.

THE CITY OF SPOKANE and THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION

THE CITY OF NASHVILLE and
THE TENNESSEE DEPARTMENT OF TRANSPORTATION

THE CITY OF PHILADELPHIA and
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U.S. DOT | Every Place Counts Design Challenge Summary Report

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# EXECUTIVE SUMMARY

As transportation infrastructure across the country reaches the end of its design lifespan, public officials face a historic opportunity to invest in infrastructure that can provide communities with increased opportunity, connectivity, health, and quality of life. Transportation Secretary Anthony Foxx has committed to this vision of building Ladders of Opportunity, reconnecting neighborhoods, revitalizing communities, and empowering residents to have a meaningful voice in the transportation decisions that affect their lives. The U.S. Department of Transportation's (U.S. DOT) Every Place Counts Design Challenge is helping to make this vision a reality.

Backed by the Federal Highway Administration (FHWA) Every Day Counts program, Every Place Counts leveraged federal, state, and local resources for practices that enhance mobility and access while building opportunity and equity for local neighborhoods.

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

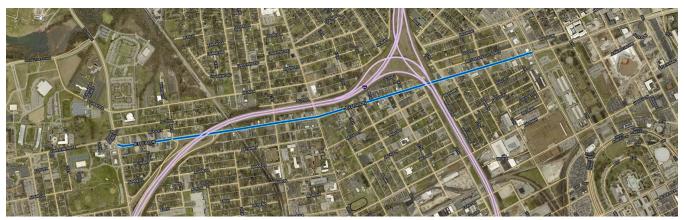
- In Spokane, WA, participants focused on the partially-built US 395 and the aging I-90, examining strategies to build connectivity, restore opportunity, and mitigate impacts of the planned US 395/I-90 interchange.
- In Nashville, TN, community leaders from historically African-American North Nashville discussed reversing the decline of neighborhoods along Jefferson Street where I-40 divides the city.



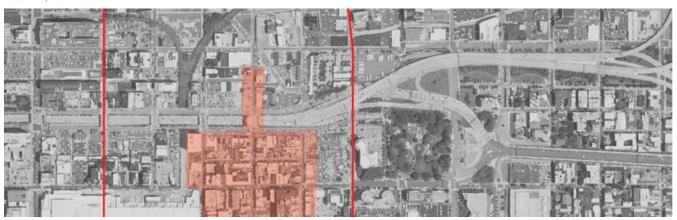
Spokane, Washington

- In Philadelphia, PA, city and regional agencies, community leaders, and residents collaborated on strategies to mitigate I-676's impact on the surrounding neighborhoods, specifically Chinatown, and important civic institutions.
- In Minneapolis/St. Paul, MN, residents and local officials led a conversation about the historic impact of I-94 on minority communities—and how to reverse those effects.

This report summarizes the conversations, concerns, and solutions that emerged during these four workshops. Among other things, the Every Place Counts Design Challenge confirms that, when we acknowledge the negative impacts and consequences of past decisions, and engage and listen to neighborhoods, it is possible to restore opportunity and hope in bisected communities.



Nashville, Tennessee



Philadelphia, Pennsylvania

U.S. DOT found that the following general strategies are applicable to any community undertaking a similar project:

- Engage stakeholders early and continuously to gather feedback and gain support for implementation.
- Use follow-up workshops to refine proposals and seek feedback.
- Commission technical studies to support transportation and green space recommendations.
- Pursue pilot projects, including road diets, lane reconfigurations, street conversions, bike lanes, and tactical approaches to test the feasibility of long-term capital investments.
- Investigate funding opportunities for construction and maintenance of long-term capital projects and features.
- Seek solutions that implement placemaking and economic development strategies while protecting affordability, equity, and character.

From better public engagement strategies to cutting-edge designs for highway caps, the design and policy approaches that emerged in Spokane, Nashville, Philadelphia, and Minneapolis/Saint Paul will resonate across America as more cities apply innovations to address the legacy of their highway infrastructure.



St. Paul, Minnesota

# ONE: INTRODUCTION

#### **OVERVIEW**

Drawing on the results of the Every Place Counts Design Challenge, this report contains strategies for setting a constructive tone, engaging the affected public, building buy-in from decision-makers, and envisioning realistic solutions to improve health, mobility, access, and prosperity.

Throughout the visioning workshops, a number of broad themes and common values emerged across the four cities. Leaders and residents alike wanted:

- Connectivity within and between neighborhoods.
- Expanded green space and trails.
- Improved safety for all road users including drivers, cyclists, and pedestrians.
- Greater access for multi-modal transportation.
- Increased prosperity without displacement, a higher quality of life, and preservation of community character and cohesion.

Additionally, participants identified a number of common challenges for reconnecting neighborhoods, chiefly: funding, political will, and the lack of local consensus. They also acknowledged that communities have been damaged and sought to engage a full spectrum of affected stakeholders. When these challenges were addressed through leadership, facilitation, and outreach, consensus and community buy-in proved far easier to build.

Each community presented unique opportunities for building connectivity. All four, however, showed particular promise in the authentic identity of their communities, the commitment and engagement of local leaders, the powerful sense of purpose displayed by residents, and the wealth of possible strategies and solutions generated by everyday citizens.

Many of these assets exist in every urban community, no matter how blighted or disconnected. Projects that build on these themes, address these challenges, and harness these opportunities can reverse the effects of infrastructure blight, while those that ignore them face significant challenges. Now is a crucial moment for cities—a time to engage honestly with communities and to connect with their residents who are ready and willing to work for change.



Interstate 40 in Nashville, TN

Specific next steps for each city are detailed in the following chapters; the U.S. Department of Transportation (U.S. DOT) design team found that communities undertaking similar projects should:

- Engage stakeholders early and often to gather useful feedback and gain support for implementation.
- Organize follow-up workshops to refine proposals and seek feedback.
- Commission technical studies to analyze the feasibility of transportation and green space recommendations and chart a path to implementation.
- Pursue pilot projects, including road diets, lane reconfigurations, street conversions, bike lanes, and tactical approaches to test the feasibility of long-term capital investments.
- Investigate funding opportunities for construction and maintenance of long-term capital projects and features.
- Maximize the placemaking and economic development potential of all investments, while protecting affordability, equity, and character.

From better public engagement strategies to cutting-edge designs for highway caps, the design and policy approaches that emerged in Spokane, Nashville, Philadelphia, and Minneapolis/Saint Paul will resonate across America as more cities struggle with the legacy of their highway infrastructure.



Participants in Nashville were asked for "One Word" to describe the current conditions

#### **EVERY PLACE COUNTS**

Since the Federal-Aid Highway Act of 1956, America has spent billions of dollars creating a world-class national transportation system. For decades, that system has been integral to our national economy—supporting the growth of businesses, connecting people and places, and shaping our regions, cities, towns, and rural landscapes. Infrastructure choices made by the U.S. Department of Transportation (U.S. DOT) and elsewhere at the Federal, State, and local levels have strengthened communities and improved the quality of life for residents.

However, that same highway network transportation system often reinforced dividing lines within communities and created physical barriers to opportunity. As major infrastructure was built through existing communities, residents were separated from social and economic centers, key resources and services, and the nearby destinations of their daily lives.

Today, much of that burdensome infrastructure is reaching the end of its initial life—and these communities face a watershed moment. Cities and states are facing the need to invest billions of dollars in transportation projects, which have the opportunity to become catalysts for revitalizing and reconnecting bifurcated neighborhoods. These connections have the potential to spur better health and economic outcomes.

U.S. DOT seeks to help local and tribal governments across the country ensure that current and future transportation projects connect and strengthen communities. Transportation Secretary Anthony Foxx has made reconnecting neighborhoods a priority for improving community health and opportunity, especially in historically low-income and minority neighborhoods.

Through Every Place Counts, U.S. DOT is working to create infrastructure investment outcomes that reflect a more inclusive America, reconnect people to opportunity, and reinvigorate community engagement by empowering decision-makers to develop context-sensitive, stakeholder-driven solutions.

#### STATEMENT OF PURPOSE

On May 4, 2016, the U.S DOT launched the Every Place Counts Design Challenge, offering provided technical assistance to local governments through two-day "community vision" design sessions to improve access to reliable, safe, and affordable transportation in disconnected communities. The purpose of the challenge was to raise awareness about bifurcated neighborhoods, identify innovative practices to reconnect communities, and inform the transportation planning and project life cycle.

To qualify, applicants were required to: 1) assemble a "community team" of











elected officials, transportation professionals, and a cross-section of community residents; 2) provide a descriptive narrative of a transportation infrastructure challenge that limits access to social or economic centers and other essential services; 3) explain their goals; and 4) submit Letters of Support from their State Departments of Transportation and/or other entities, such as community groups, transit agencies, port authorities, MPOs ,and other political subdivisions of State or local governments.

Date Action

May 18, 2016 Informational Webinar

May 20, 2016 Applicant Registration Deadline
June 3, 2016 Applicant Submission Deadline

On June 27, 2016, U.S. DOT selected four recipients from a number of highly competitive applications for this technical assistance award. Each recipient received a two-day design charrette, hosted by local governments in their community. The sessions gave recipients the opportunity to receive technical assistance on transportation and conceptual design from experts in the field. The design sessions were meant to inform, prepare, and enable recipients to better engage in federal transportation planning, programming, the National Environmental Policy Act process, and funding programs. The U.S. DOT led these design sessions with representatives from regional and national design, architecture, engineering, and planning firms to participate as technical experts in these design sessions.

#### **GOALS**

The Every Place Counts Design Challenge seeks to raise awareness, spark innovation, and encourage inclusive design solutions that bridge the infrastructure divide and reconnect people to opportunity.

#### Challenge Goals

- Encourage communities to reimagine existing transportation projects via innovative and restorative infrastructure design practices that correct past mistakes, reconnect people and neighborhoods to opportunity, and reinvigorate opportunity within communities.
- Empower communities and decision-makers to develop contextsensitive design solutions that incorporate the input of the people and communities they touch.

#### **Selected Projects**

U.S. DOT selected the following four communities to receive a Community Vision Design Session, ensuring a diverse representation of projects and communities:

- Spokane, WA (West) | July 7-8
- Nashville, TN (South) | July 11-12
- Philadelphia, PA (North) | July 14-15
- Minneapolis/St. Paul, MN (Mid-America) | July 18-19

#### **TYPICAL WORKSHOP SCHEDULE**

Each workshop was designed to familiarize the national experts with the local context, engage with community stakeholders, build consensus around local project goals, and develop and share possible strategies to reach those goals.

DAY 1				
Time	Theme			Activity
8:00 AM				Set up Studio/Workshop Room
9:00 AM				Kick-Off Meeting - Introductions - History & Background - Broad Overview of Next Two Days
10:00 AM				Site Visit & Tour
11:00 AM				
12:00 PM				Lunch Meeting & Discussion
1:00 PM		Design		Group Table Exercises
2:00 PM	Discovery			- Community Presentation - Overview & Visioning Process - Community Vision Development
3:00 PM				- Community Vision Assessment
4:00 PM				Summarization of Input - Design Team Initiates Starter Ideas
5:00 PM				Prepare for Public Presentation
6:00 PM - 8:00 PM				Public Presentation - Introduction by City Leader - Presentation by Design Team Representative - Question & Answer - Group Exercise

DAY 2					
Time	Theme			Activity	
8:00 AM				Recap of Day 1	
9:00 AM				Theme Refinement - Design Team Continues Work on Products	
10:00 AM				- Stakeholders Continue to Refine Themes	
11:00 AM		gn			
12:00 PM		Design	Desi		Lunch Meeting & Discussion
1:00 PM			Documentation		
2:00 PM				Finish Products & Prepare For Final Presentation	
3:00 PM				Final Public Presentation - Recap Design Challenge	
3:00 PM - 5:30 PM			DO	- Necap Design Chanlenge - Presentation of "Big Ideas" - Q&A & Comments from Public	

#### HOW TO UNDERSTAND THIS DOCUMENT

The following four chapters are dedicated to the work completed in each of the selected communities. The designs shown in the following examples represent some of the illustrative ideas that helped make the Every Place Counts Design Challenge visioning workshops so productive. However, the images shown are only conceptual and are likely to evolve through continued community engagement before implementation.

Each location will need to prioritize the recommendations below relative to their overall local transportation needs. The results of the Every Place Counts Design Challenge should be seen as a framework for identifying community needs and desires to launch a more in-depth process.

### TWO: SPOKANE, WASHINGTON

#### **ISSUES AND GOALS**

The City of Spokane, WA applied for the Every Place Counts Design Challenge to bring together transportation officials, community leaders, design experts, and local stakeholders to discuss strategies for reconnecting the East Central Neighborhood across Interstate 90, as well as at the unbuilt connection of US 395 and I-90. The City's goal was to host a productive exchange between decision-makers and residents to generate solutions that would maximize connectivity while minimizing the impact of I-90 and US 395 on the community.

Spokane's main highway, I-90, runs east-to-west through downtown Spokane and adjacent neighborhoods. When it was built more than 50 years ago, I-90 bisected the working-class East Central Neighborhood and removed hundreds of homes. The highway still poses a significant barrier to connectivity between residential areas to its south and the mix of civic and religious institutions, employers, and educational facilities to the north.

Meanwhile, the currently under construction US 395 / North Spokane Corridor has undergone many planning and design iterations since its original 1997 proposal. As a part of this project, the design and footprint of the highway's connection to I-90 have been scaled back, leaving vacant a swath of land that had been acquired for the larger roadway along I-90. As final designs are not complete, the City has raised questions: How should the new highway connect to the existing I-90 in East Central Neighborhood? Can it be done in a way that connects, rather than further bisects, the community?







The reduction of the I-90 footprint in the I-90 modernization project (a part of the US 395 / North Spokane Corridor project), has left areas of vacant land where affordable neighborhoods once stood. Ideas were sought for how to use these vacant half-blocks, which run 1.5 miles along the length of the corridor, and to help neighborhood leaders and residents envision a positive future.

With the assistance of the design team, officials and stakeholders gathered for two days to brainstorm creative and practical solutions to improve connectivity between I-90, the partially unbuilt US 395, and the interchange between the two in the East Central Neighborhood. In addition to creating a comprehensive design strategy for greater connectivity, stakeholders sought assistance with the following:



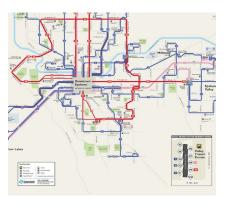
#### **Bike/Pedestrian Facilities**

An important feature of the US 395 project is a new trail, called the Children of the Sun Trail, which will run alongside US 395 when complete. Spokane has an extensive trail system and the city would like to improve its connectivity, quality, and usage. The Every Place Counts Design Challenge provided an opportunity to think comprehensively about how the forthcoming Children of the Sun Trail might connect to the existing trail system—particularly within the East Central Neighborhood.



#### Safe, Attractive Overpasses

Neighborhood residents wanted to provide input on the three replacement pedestrian overpasses that are planned to cross I-90, and how they could be designed to provide safe and attractive passage for pedestrians and cyclists in strategic locations.



#### **Improved Transit Connections**

Spokane is currently developing a high-performance transit system for the Sprague Avenue Corridor in the East Central Neighborhood. The Every Place Counts Design Challenge provides an opportunity to study how best to connect residents south of I-90 with the proposed enhanced transit services.

#### **EXISTING CONDITIONS**

In the late 1950s, I-90 was constructed through the heart of Spokane, bisecting the historic working-class neighborhood of East Central Spokane and siphoning energy from East Sprague Avenue, which runs parallel to the highway.

Today, another limited access highway is making its way through Spokane's historic neighborhoods. The US 395 / North Spokane Corridor project, located just east of downtown, is a four- to six-lane highway that will connect to I-90 once complete. Over \$750 million in funding for the completion of the new US 395 / North Spokane Corridor was dedicated in 2015. This funding will be used between 2016 and 2029 to construct the remaining southern half of the freeway, construct the Children of the Sun Trail, and connect them to I-90 and the City's existing trail system.

Based on the Washington State DOT's (WSDOT) latest official traffic volumes, a small traffic study was conducted during the visioning workshop. Each day, I-90 carries approximately 128,800 vehicles through downtown Spokane. The two highways that feed I-90 from the east have a combined daily total of 19,700, which is approximately 15% of the daily volume in the downtown. Conservatively, half of the 15% originated from or was destined to Spokane.

Consequently, no more that 7.5% of the traffic on I-90 in downtown Spokane (less than 9,700 vehicles per day) is through traffic, which means that 92.5% or more of the traffic on I-90 is comprised of local trips that begin and end within the city. That imbalance indicates that I-90 is overbuilt for the 9,700 cross-state vehicles that travel through Spokane and the primary function of I-90, currently in Spokane, is local trip-making and local access.

These numbers provide the residents with a number of opportunities to better manage traffic flow and reconnect neighborhoods. For example, the East Sprague corridor community is in the process of designing a new streetscape for East Sprague Avenue and has already began upgrading public lighting (street, underpass, and alleyway) in and around the City's E. Sprague Targeted Investment Area.

#### **DISCUSSION**



Over the course of two days, the design team led an extensive public engagement process with key stakeholders and members of the community to reimagine the I-90 corridor through the East Central Neighborhood, envision reconnecting neighborhoods on both sides of the highway, and discuss the impacts of the incoming US 395 / North Spokane Corridor. Stakeholders were encouraged to think broadly and boldly while identifying opportunities to implement new ideas.

#### STAKEHOLDER INPUT



Stakeholder conversations covered diverse topics such as complete streets, green infrastructure, and programming in underutilized open spaces as ways to enhance the East Central Neighborhood and mitigate the worst impacts of the current highway. Additionally, some groups discussed redesigning I-90 and the unbuilt portion of US 395 as urban boulevards. As a part of the final presentation, the Every Place Counts design team also proposed "out of the box" ideas such as converting one-way streets to two-way streets and employing urban roundabouts in downtown Spokane as a means to create greater connectivity across the wider street network.

Through the workshop, stakeholder groups refined topic areas into themes to serve as the focus of the two days. Stakeholder input was refined through an iterative process, and by the middle of day two, a vision for the corridor—and the City of Spokane—began to emerge.



#### **Draft Vision Statement**

Residents and business owners stay in Spokane and have the strongest voice in determining design outcomes and receive the receptive ear of local and state decision makers.



#### **Value Statements**

- Ensure public investment is used to strategically encourage private investment.
- Land uses should be supported by planning, infrastructure, financial incentives, and long-term assistance.
- Promote strategic redevelopment of private vacant land and public right-of-way.
- Private redevelopment and infill need to reflect and serve the diverse community.
- Public infrastructure should reflect the values of the community including the impacted neighborhood.

Groups discussed each recommendation to determine the impact-to-effort ratio of each. As the conversation progressed, a number of key benefits and challenges emerged (e.g. partners, potential political barriers, etc.).

One of the major themes that emerged from these conversations was the desire to not create the same challenges again. All agreed that I-90, when built, created a barrier, and that US 395 has the potential to create yet another barrier. By engaging and discussing its impact early on, residents felt more confident than ever that the US 395 project could improve, rather than impair, connectivity for residents and businesses of the East Central Neighborhood, as well as those in northern neighborhoods most impacted by the US 395 development.



Neighborhood streets disconnected by I-90

#### **DESIGN AND POLICY STRATEGIES**

Spokane began the Every Place Counts Design Challenge process hoping to generate strategies for improving connectivity and mitigating neighborhood impacts in the East Central Neighborhood north and south across Interstate 90 and the connection of the partially unbuilt US 395. Several possible design strategies for achieving those goals were developed.

#### CONNECTIVITY AND RECONNECTIONS/CROSSING I-90

#### Improve current and future pedestrian under- and overpasses

Additional connectivity strategies for I-90 included wider, more comfortable pedestrian overpasses at frequent intervals, making ramps gradual to accommodate bicycles, pedestrians, and scooters, improving lighting at underpasses, and adding wayfinding signage to indicate throughways or provide directions to key locations.

In Boston, the Massachusetts Department of Transportation (MassDOT) partnered with a local design studio to put a creative, ornamental light display under Interstate 93 connecting East Berkeley Street to West 4th Street in the South Boston. Since MassDOT began making pedestrian improvements, the underpass has hosted an urban innovation festival and now houses shipping containers hydroponically growing fresh vegetables for a local restaurant chain. Other North American cities such as Toronto, San Antonio, and San Jose have similarly improved the pedestrian experience beneath underpasses with the creative use of lighting and art, as well as programming activities in these spaces.



A light installation under I-93 strengthening pedestrian connections

# Design areas underneath and adjacent to the highway with active community involvement to incorporate neighborhood culture, art, and history

If the US 395 design continues as an elevated limited access highway, possible uses for areas beneath it include parks/parklets, a farmer's market, art installations, stormwater management, and community gardens.







Examples of highway underpasses activated with light displays, art installations, and cultural activities

# Investigate a partial lid or cap over depressed areas of the highway to increase north/south connectivity (multi-use for commercial/residential options)

One way to achieve greater connectivity would be to construct a lid or cap over I-90 at Liberty Park, reclaiming open space lost during the construction of I-90. A cap over the highway adjacent to Liberty Park could serve many constituencies by creating a safe, attractive, and comfortable crossing for pedestrians, bikes, and disabled users. While only an idea, a lid could also enhance connectivity for car travel by reconnecting one or more streets that are currently disconnected by I-90.

Locally, this idea was met with concerns about financial feasibility. Additional investigation of a partial lid or cap would be needed to examine the technical and financial feasibility of a project of this scale within Spokane.

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#### NORTH SPOKANE CORRIDOR

#### Begin detail design and construction of the Children of the Sun Trail now

One possible good faith gesture to build community buy-in is to build the associated Children of the Sun Trail before the highway. Building the trail, which is planned for at-grade construction and would also be highly compatible with a surface-boulevard US 395, is unlikely to represent a significant early outlay or significantly interfere with highway construction.

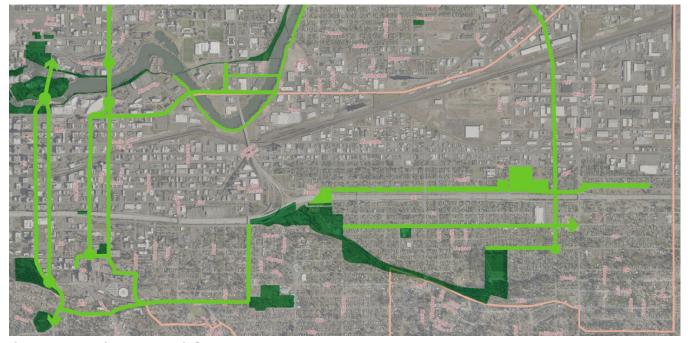
## Program underutilized open spaces with a year-round community activity calendar

Activating spaces under highways is a challenge, but initiating events that gather people below it may get the public used to the idea of US 395 as a welcoming public space.

#### **OPEN SPACE AND GREEN INFRASTRUCTURE**

# Connect a network of parks and trails to form an open space system and a recreation loop

Spokane has an extensive system of trails and more are planned. This network could be seamlessly linked to the city's open space and parks system, both current and forthcoming, to form a recreation loop throughout the city.



Open space network connecting parks for recreation

The Children of the Sun Trail, planned adjacent to US 395, could be the north-south connector on the eastern edge of the connected recreation loop. Future trail systems planned just north of I-90 near 2nd Avenue could connect to the Children of the Sun Trail to the east and Liberty Park in the center.

# Incorporate enhanced programming for all ages and include educational, historic, and cultural civic art features throughout the neighborhood

Programming should celebrate the community's heritage and diversity. Moreover, the green spaces afforded by the lid could be made usable with ball fields and playgrounds to serve as a destination for both sides of the highway and a nexus for the city's extensive trail system.



Urban trees, green roofs, and vegetation can help manage stormwater, reduce the urban heat island effect, deflect solar radiation, release moisture into the atmosphere, and provide recreation amenities. The incorporation of green infrastructure, such as bioswales, rain gardens, and filtration beds, can help the City manage stormwater runoff and adapt to changing climate conditions.

#### SAFETY AND ACCESSIBILITY

Improve the comfort and safety along existing accessible routes for all mobility options throughout the neighborhood

For example, include more and shorter crosswalks, increased lighting, and other security measures.

#### Give all citizens access to multi-modal transportation and information

To improve routing and rideshare possibilities, integrate public transit agencies into neighborhood planning and design strategies. It is important to note that this is only part of the overall mobility answer, but it is an important one and is not currently part of the conversation. As the City continues to explore High Performance Transit routes, these concerns will become increasingly salient.





#### **LESSONS LEARNED**

As the first of four visioning workshops, Spokane set the tone for the Every Place Counts Design Challenge. The primary lessons learned in Spokane concerned engagement, planning, and responsiveness—and held great value for the other three Design Challenge cities, as well as for other communities undertaking public engagement campaigns around major infrastructure projects.

#### Honor What Was Said In the Room

While I-90 through Spokane poses a significant barrier to connectivity, the majority of stakeholders chose to focus on the incoming US 395 North Spokane Corridor and how its design might hinder or improve connectivity in the East Central neighborhood and those impacted neighborhoods to the north.

Furthermore, though big ideas for the future of I-90 were discussed and presented, stakeholders had expressed reservations about the feasibility of some of these ideas by the end of day two. These discussions were articulated through a series of exercises that informed the development of the project vision statement and guiding themes.

While physically located within the same room, the design team worked independently from these exercises to prepare visualizations of possible design solutions and assemble the final presentation. Hearing about ideas that were no longer a priority in the final presentation made some stakeholders feel that they were not heard. The concurrent tracks did not inform one another to the degree required to align the work of both groups.

Finding opportunities for feedback loops at regular intervals throughout the workshop would better integrate the outcomes of workshop exercises with the work of the design team. Furthermore, a project liaison, charged with tracking both groups, could help ensure that outcomes of discussions with the public inform the work of the design team. Before presenting final visuals and recommendations to the public at the workshop conclusion, the liaison should review to ensure the public feedback was heard and incorporated.

#### Don't Settle for (Or Accept) Old Plans and Approaches

Well before the start of the Every Place Counts Design Challenge, WSDOT and the City of Spokane proved that they were not willing to settle for old plans and old modes of thinking. They had already re-evaluated the original plans and reduced the footprint of the US 395 North Spokane Corridor. And because five miles of the freeway have yet to be finished and plans for how the freeway connects to I-90 are still under development, stakeholders were willing to envision further changes.

If not for the Every Place Counts Design Challenge, the idea of evolving the unbuilt five miles of US 395 into a context-sensitive urban boulevard might never have been proposed. While stakeholder consensus did not coalesce around this concept—as conditions were not right to have a fully in-depth conversation—a public conversation can continue that might ultimately influence the final design of US 395 and the future of I-90 in a positive way.







#### **NEXT STEPS**

The Every Place Counts Design Challenge visioning workshops were only two days long and were intended to start the discussion on reconnecting neighborhoods. The items listed below are neither comprehensive nor listed by priority, but rather are provided to further the conversation. Spokane could consider these strategies to achieve improved neighborhood connectivity along I-90 and the connection of US 395 in the East Central Neighborhood:

#### **NEAR-TERM**

- Establish a partnership between Spokane (Planning, Economic Development, Public Works, and Transportation Departments), and WSDOT to explore:
  - o Maintaining state designation for US 395;
  - o Improving connectivity across I-90 with new bridges, lid parks, and highway caps;
  - Possibly reimagining the final leg of US 395 as a multi-lane surface boulevard or other alternative to the raised, limited access US 395 plan.
- Organize a follow-up workshop, jointly sponsored by the City and WSDOT, to investigate alternatives to the raised, limited-access US 395 plan.
- Host regular meetings to update community stakeholders and gather feedback.
- Form a multi-agency alliance including state, city, and, county officials to act as the decision-making body for North Spokane Corridor decisions.
- Consider a tactical installation in the underutilized space beneath I-90 to demonstrate progress and spur local buy-in, coinciding with a citywide cycling event, farmer's market, or craft fair.
- Pilot a temporary road diet and street conversion using paint, planters, and temporary construction, possibly during off-peak hours or along limited street sections.
- Engage public transit agencies to improve routing, explore rideshare options, and contribute to street conversion plans and streetscape designs.
- Investigate funding opportunities for construction and maintenance of new capital projects and features, including Fixing America's Surface Transportation (FAST), AARP Livable Communities, local Safe Routes to School program, and the Trust for Public Land.

#### MID-TERM

- Improve streetscape elements (tree-planting and lighting), bike lanes, and on-street parking throughout downtown Spokane to enhance connectivity across the wider street network.
- Install new permanent lighting, art, and signage along crossings over and under I-90.
- Update zoning codes to require pedestrian-friendly new buildings and additions through form-based codes or land-use guidelines.
- Break ground on the Children of the Sun Trail and link to the existing Spokane trail network.

#### LONG-TERM

In addition to the recommendations above, a number of suggestions presented to Design Challenge participants came directly from the design team's expertise and their review of the study area, though not directly from stakeholder conversations. These included suggestions for improved connectivity on a wider scale than the immediate project scope of the Every Place Design Challenge. Spokane could consider one or all of the following recommendations in the long-term. If the City, with their partners, decides to pursue the ideas below, it is important to convene stakeholder groups and build off the Design Challenge results, as many of these projects require multi-year planning processes and major infrastructure investments:

- One-way to two-way street conversion.
- Constructing the final leg of US 395 as a multi-lane surface boulevard or other feasible alternative to limited access facility.
- A lid or cap connecting Liberty Park across I-90.

#### One-way to two-way street conversion

In addition to featuring severed connections due to the construction of I-90, Spokane's street grid suffers from reduced connectivity downtown because of a large number of one-way streets. If key high-capacity roads are restored to two-way traffic, the number of north-south connections across I-90 would increase significantly.

Moreover, the Every Place Counts design team suggested that employing roundabouts at key intersections would allow traffic to move uninterrupted along



Two-way conversion streets

corridors while still providing choice of direction. Experts suggested that fewer stops at major intersections could please motorists while safer speeds and crossing distances would improve walkability.

Proposed two-way and complete street conversions included:

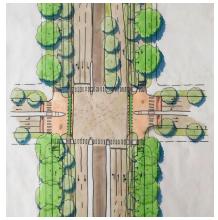
- 1. Stevens Street and Washington Street
- 2. Brown Street and Division Street
- 3. Division Street and Ruby Street (north of river)
- 4. Thor Street and Freya Street

## Investigate redesign of the unbuilt portion of US 395 as an at-grade multiway boulevard

Instead of a limited access freeway, US 395 /North Spokane Corridor could be built as a context-sensitive urban surface street. Many cities across the country have embraced the use of multiway boulevards for handling high-capacity urban traffic while creating an active, comfortable, and connected public realm.

# Investigate a partial lid or cap over depressed areas of the highway to increase north/south connectivity (multi-use for commercial/residential options)

As mentioned, one way to achieve greater connectivity would be to construct a lid over I-90 at Liberty Park, reclaiming open space and providing a number of additional safe, attractive, and comfortable crossings for pedestrians, bikes, and disabled users over I-90.



At-grade multiway boulevard concept

The Every Place Counts design team explored one lid concept as a demonstration exercise. A tree-lined green lid would actively connect the natural Ben Burr trail south of the highway to the larger Centennial trails in the north. Linking those greenways would ensure greater connectivity and safety, as trail users would not be required to cross moving traffic near the highway, and contribute to neighborhood health and quality of life.



Liberty Park cap concept

In exploring a lid over I-90, Spokane and WSDOT must balance adding green space and improving street connectivity. Streets across an I-90 lid would connect north and south. The best candidate streets for reconnection are Perry, Helena, and Madelia, though feasibility would be based on topography, cost, final design, and other factors to connect each street.

Finally, a highway cap is a creative way to meet multiple community goals as well as reclaim a portion of public space once thought lost to history—Liberty Park. If a lid moves forward and the final design of I-90's connection to US 395 does not use the currently vacant land adjacent to I-90, this land, which runs parallel to 2nd Avenue, could be used as another trail or greenway that ultimately connects to the highway lid.

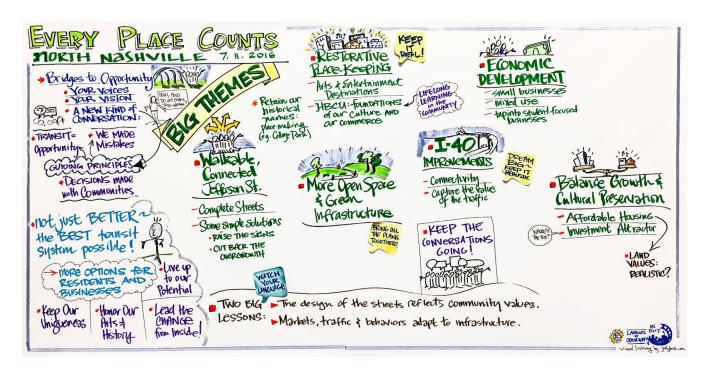
### THREE: NASHVILLE, TENNESSEE

#### **ISSUES AND GOALS**

The Metropolitan Government of Nashville and Davidson County (Metro) applied for the Every Place Counts Design Challenge to explore reconnecting and revitalizing the neighborhoods surrounding I-40 near Jefferson Street. The City's goal was to build consensus among decision-making officials and neighborhood leaders, open lines of communications, and generate design strategies for mitigating the impact of transportation infrastructure.

In the 1960s, the construction of I-40 displaced 1,400 North Nashvillians, mostly African-Americans, and bisected several historically significant business districts and neighborhoods like Elizabeth Park, Fisk, and Meharry. The construction of I-40 significantly impacted the Jefferson Street corridor, which runs parallel to I-40 for several blocks. Jefferson Street connects those historic neighborhoods and serves as a center for the African American community in Nashville. Three of the city's historically black colleges and universities—Fisk University, Tennessee State University, and Meharry Medical College—are all located along or near Jefferson Street, as are many of the oldest black church congregations in the city.

The plan for the Every Place Counts Design Challenge's two-day visioning workshop in Nashville was to engage with community residents, business owners, and neighborhood institutions through well-established community partnership networks in order to generate design strategies and explore implementation funds to improve neighborhood connectivity. The community looked to Every Place Counts for help with the following:



#### Improve Connectivity along Jefferson Street

Metro Planning and the local community both recognize the need to improve connectivity to Jefferson Street. The city's 2015 NashvilleNext General Plan identifies significant walking and biking projects—originally components of the Gateway to Heritage Walking Improvements project.

#### Plan for Aging Infrastructure

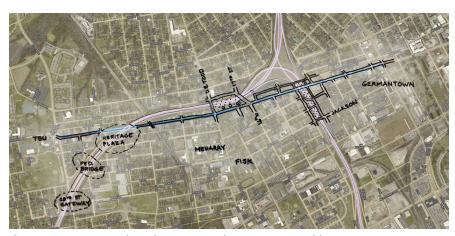
While Jefferson Street and D.B. Todd Boulevard bridges are not yet structurally deficient, they continue to age. The community sees their replacement as an opportunity to reconnect bifurcated neighborhoods and expand access to social and economic resources.

#### Connect to Past Work and Ongoing Efforts

The Gateway to Heritage Project improved the area near the 28th Avenue and Jefferson Street interchange. Further improvements that build upon this initial work might include partial capping and bike/pedestrian overpasses or underpasses.

#### Explore a Partial Cap of the Highway

A large-scale intervention like a partial cap—explored in the Nashville Civic Design Center's Shaping the Healthy Community—could create new developable land, improve parking, and support affordable housing for parcels rendered undevelopable by the highway. A smaller-scale intervention may also have profound impacts, such as a "quick-build" project for immediate improvements to conditions on the existing bridge deck.



Strategic interventions where the most immediate impact is possible

#### **EXISTING CONDITIONS**

Despite decades of disinvestment, Jefferson Street features strong educational institutions, a tight-knit community, and a well-organized business alliance: the Jefferson Street United Merchants Partnership (JUMP). Through the Gateway to Heritage project, the community has secured funding to enhance Jefferson Street, the Interstate overpasses, and the 28th Avenue interchange. The project, which includes a public plaza, honors the area's history and has successfully improved the overpass and interchange at 28th Avenue.

The Jefferson Street bridge over I-40, built in 1967, carries approximately 14,000 vehicles per day. In 2013 it was rated in good condition, but narrow, cracked sidewalks and wide travel lanes create an unsafe environment for pedestrians and cyclists. The D.B. Todd Boulevard Bridge, which carries 10,000 vehicles per day and was also built in 1967, is considered functionally obsolete.

Currently, Nashville is experiencing a boom in both private development and public investment, even in neighborhoods that have historically seen limited activity. At the same time, the City has invested in multi-modal improvements such as bike lanes, pedestrian facilities, and streetscapes in several neighborhoods. The Every Place Counts Design Challenge aimed to leverage those investments to improve the quality of life for current residents in North Nashville.





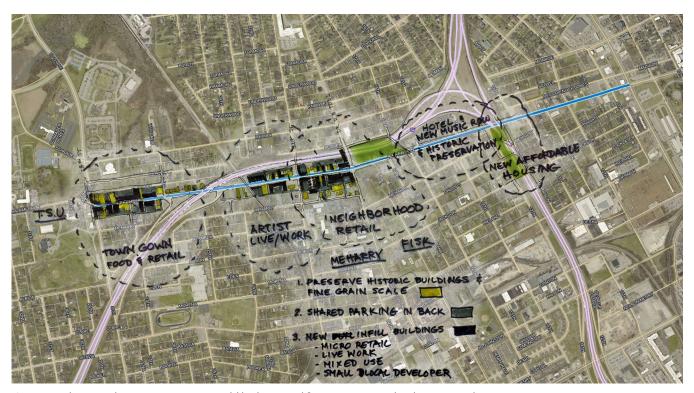


#### **DISCUSSION**

The Every Place Counts Design Challenge workshop focused on improving connectivity along the Jefferson Street corridor, restoring Jefferson Street as the cultural center of North Nashville, and empowering the community to guide future change along Jefferson Street. As the conversation progressed over the two-day workshop, many stakeholders agreed:

- Jefferson Street should remain the main corridor that connects North Nashville's minority neighborhoods,
- The ongoing and successful "Gateway to Heritage" project could be expanded, and
- The two I-40 overpasses at Jefferson Street and Dr. D.B. Todd Boulevard could be replaced with alternatives that improve pedestrian access and increase neighborhood connectivity.

In order to organize these community-generated ideas, the design team took a strategic intervention approach—pinpointing areas along Jefferson Street and I-40 where transportation or design interventions would have the most immediate impact.



Activity node areas where existing activity could be leveraged for new activities, development, and strategic interventions.

#### STAKEHOLDER INPUT

Over two days, the design team led a public engagement process with stakeholders and residents to reimagine the Jefferson Street Corridor and North Nashville's relationship to I-40. Participants considered options for new bridges and possible highways caps, as well as design and policy strategies for revitalizing Jefferson Street. Stakeholders widely expressed a desire to see that new development and infrastructure reflects the history of the community. Housing affordability, health, art, entertainment, and cultural heritage also received significant discussion.

Together, the participants crafted a vision for North Nashville and identified four themes to be explored by the Every Place Counts Design Challenge team.



A vibrant revitalized neighborhood with diverse housing options that welcomes new infill development while protecting current residents, supports local businesses and institutions while encouraging new investment, and celebrates local history and culture while harnessing new energy and opportunities in North Nashville.







# **DESIGN AND POLICY STRATEGIES**

The Every Place Counts Design Challenge visioning workshop engaged neighborhood leaders and residents to envision a connected, revitalized Jefferson Street/I-40 corridor. The policy and design recommendations developed reflect these discussions and are informed by best practices from around the country.

#### **INTERSTATE 40 (I-40)**

- Explore an Interstate cap or lid to provide public green space and connectivity.
- Examine existing conditions for pedestrians, cyclists, and drivers as well as the quality of the street environment for residences and businesses.

## Jefferson Street to Jackson Cap

A cap over I-65 could better connect the west and east sides of North Nashville with Jefferson Street serving as the anchor. The "Jefferson to Jackson" Cap concept shows how a cap over I-65 could be lined with shallow mixed-use buildings, built on the cap itself, to create a continuous street wall of buildings along Jefferson Street and effectively screen the highway behind. This concept has proven successful in other North American cities, most notably in Columbus, Ohio across I-670.



Possible Jefferson Street to Jackson cap

A wide highway cap could also reconnect streets such as Phillips Street, Meharry Boulevard, and Jackson Street, significantly increasing connectivity across I-40. In this scenario, the physical and visual barrier of the depressed highway would be replaced by an active green space that serves as a gateway honoring the arts and cultural heritage of the community. Moreover, timing is important: eventually, the Jefferson Street overpass will need to be replaced. A cap could be considered as one alternative for replacement.





Existing Jefferson Street bridge over 1-40

Possible Jefferson Street cap with mixed-use buildings

## 16th Street Cap

Much like the Jefferson to Jackson Cap concept, a highway cap spanning I-40 between 16th Street and Dr. D.B. Todd Boulevard would effectively re-stitch the neighborhoods north and south of I-40 and act as a gateway for Fisk University. Neither 16th Street nor 17th Street connects north and south because of the presence of I-40. With a cap, one or both of these streets could connect once again, partially repairing the street network.

Because of the existing historic and culturally significant businesses in this portion of the corridor, the cap could be utilized for open space and active park use. The east end of the cap could run from 16th Street to the south to 17th Street to the north to reconnect the historic street grid.

As with the Jefferson Street overpass, the Dr. D.B. Todd overpass will eventually need to be replaced. A cap could be considered as one alternative for replacement.



Alameda Street wide greenway

#### 28th Street Gateway

The 28th Street Gateway concept attempts to improve north-south connectivity in two important ways. Residents were concerned about the narrow space afforded to sidewalks, the difficulties crossing the street, the unpleasant look of the highway, and the high traffic.

First, at 28th Street where I-40 is elevated, the adjacent streets and on-ramps would be retrofitted with roundabouts to improve vehicle circulation, reduce speeds, and improve pedestrian safety. This idea, suggested by the Every Place Counts Design Challenge team, is new to the Nashville area but was warmly accepted by the community members involved in the discussions. Further discussion and feasibility testing will be essential.

Second, the existing pedestrian bridge over Alameda Street would be enhanced with a wide, elevated greenway—connecting existing walking and biking trails across I-40. This wider, greener pedestrian connection would likely increase mobility and walkability. This bridge could serve as a gateway feature over to the park space and provide easy access for pedestrians and bicycles to cross the highway.

# WALKABLE AND CONNECTED JEFFERSON STREET

- Perform an inventory and assessment of the corridor to identify key areas
  of improvement and opportunity to make the Jefferson Street Corridor
  friendly and accessible for all ages and abilities.
- Provide additional multi-modal transit options along the Jefferson Street Corridor to promote walkability and improved connectivity.
- Design and provide infrastructure for all while also meeting the needs of the residents.

## Jefferson Street Existing Conditions

Existing conditions along Jefferson Street include few to no street trees shading the sidewalk and shielding pedestrians from traffic.

## Jefferson Street Buffer Concept

This buffer concept removes the center turn lane from Jefferson Street and incorporates street trees in an "extended" sidewalk concept, protecting pedestrians from traffic. In this design, traffic would move more slowly on the two-lane Jefferson Street. At appropriately slow speeds, bikes could comfortably share the street with cars. (Note: The current sidewalk along Jefferson Street is too narrow to incorporate street trees without significant expansion.)

## Jefferson Street Parking Concept

Like the buffer concept above, this parking concept removes the center turn lane from Jefferson Street and incorporates street trees. However, the trees are placed in green "bulb-outs" that extend from the sidewalk. Parallel parking is accommodated between the trees.



#### **OPEN SPACE AND GREEN INFRASTRUCTURE**

- Prioritize outcomes across planning efforts by collaborating with the Metropolitan Government of Nashville and Davidson County to achieve design consensus.
- Identify funding and other key resources for projects that require creative financing and/or traditional funding channels.
- Develop an implementation strategy that promotes a comprehensive planning process for community programming and supports maintenance effort.
- Connect to existing open spaces nearby—college campuses and Hadley

  Park

# Incorporate enhanced programming for all ages and include educational, historic, and cultural civic art features throughout the neighborhood

Programming should celebrate Jefferson Street's heritage and diversity. Moreover, new green spaces should be usable for recreation and accessible for residents on both sides of the Interstate.

# Layer the functions of air and water quality, wildlife corridors, and tree canopy coverage through streets and open spaces

Urban trees, green roofs, and vegetation can help manage stormwater, reduce the urban heat island effect, deflect solar radiation, release moisture into the atmosphere, and provide recreation amenities. The incorporation of green infrastructure, such as bioswales, rain gardens, and filtration beds, can help the City manage stormwater runoff and adapt to changing climate conditions.



Open space network and institutions

#### ART AND ENTERTAINMENT

- Build upon North Nashville's rich arts and entertainment heritage.
- Create connectivity and sense of place through transformed highway tunnels and bridges.
- Foster an alliance between anchoring institutions and community leaders, particularly around arts-related programs (i.e. Arts Task Force with Norf Art Collective leading)

Jefferson Street has played a significant role in the history of Nashville. Historically the concentration of black-owned music and dance halls, performance venues, and recording studios along the corridor shaped "Music City." While not as evident today, many arts and culture programs operate along Jefferson Street annually, including the Tennessee State University (TSU) African Street Festival, TSU Homecoming, the Fisk Spring Arts Festival, the Jazz and Blues Festival, and the Jefferson Street Art Crawl. Stakeholders, many of them young artists and graduates from Meharry College, Fisk University, and TSU, expressed a need to create an Art Task Force to help guide future discussions around revitalizing this historically significant neighborhood.



Neighborhood retail with music hall anchor concept along Jefferson Street



28th Street urban round-abouts

## Gateway to Heritage Interchanges

On the southwest corner of the Jefferson Street Corridor lies the first stage of the Gateway to Heritage project, a public space with distinct paving and landscaping, colorful murals, and metal pillars including pictures and histories of important figures from the area. The project sits under the elevated I-40 overpass and honors the community's heritage thanks to excellent work by the National Endowment for the Arts.

The proposed Gateway to Heritage Interchange Concept would replace current on- and off-ramp configurations with urban roundabouts, slowing traffic and creating a more inviting pedestrian experience around the Gateway to Heritage site. In addition to those improvements, the City could consider expanded parking for drivers who want to stop and admire the project.

A couple of roundabouts would reintegrate Morena Street into the street network and would give Albion Street a direct connection to the on-ramp. The roundabout would also provide direct access to Hadley Park. The roundabout at Jefferson Street could help narrow the amount of roadway below the highway and allow more space for on-street parking, plus a plaza space to enhance existing park space. It will also create a gateway into Tennessee State University.

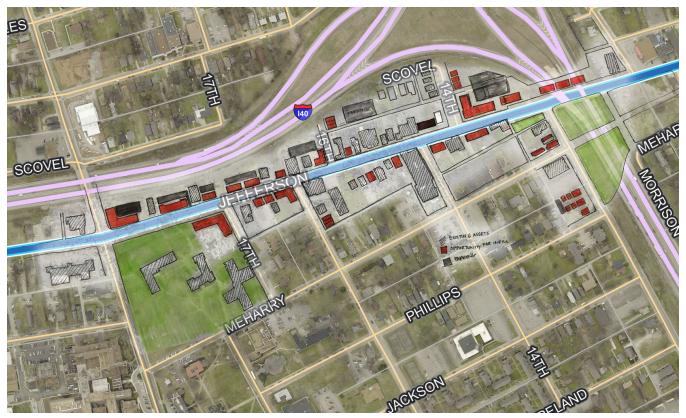
On the east end of the corridor, a horizontal gateway can be applied to the pavement at the intersection of Jefferson Street and Rosa Parks Boulevard. This intersection should celebrate the heritage of the corridor and express the sense of arrival to Jefferson Street.

Another gateway at the intersection of Jefferson Street and 9th Street could be vertical and span across Jefferson Street. This would begin the Jefferson Street redesign treatment with the road diet and edge enhancements.

#### **ECONOMIC DEVELOPMENT**

- Organize an umbrella organization that represents diverse stakeholders (i.e. residents, business owners, universities) to support equitable mixeduse development and small business success.
- Incorporate an additional layer of easily implementable land use policies and design standards within the North Nashville Community Plan and the Jefferson Street Redevelopment District that further captures the vision, culture, and character of the Jefferson Street corridors.

Though changing policies and design standards is a complex process, the intent is to focus on low-hanging fruit that can be implemented in the short term without exhaustive studies.



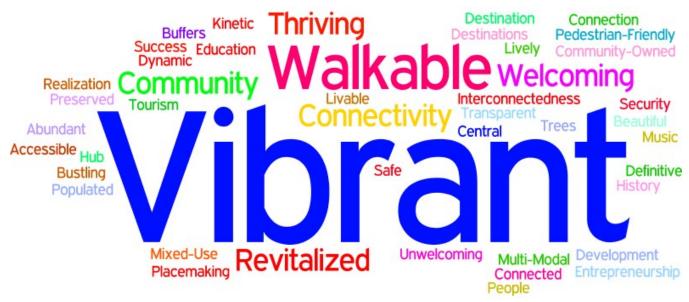
Jefferson Street infill and redevelopment

#### **AFFORDABILITY**

- Establish stronger links between the universities and the community to address student housing options.
- Identify residential areas and "sacred" spaces for protection and encourage resident engagement in community decision-making.

Central to empowering cities and towns is helping citizens and residents engage in transparent planning and development processes. It is no longer enough to create vibrant, prosperous neighborhoods if that prosperity unintentionally displaces or disadvantages existing residents.

Fear of the loss of affordability influenced a great deal of the conversation in North Nashville. As new investment moves into the Jefferson Street corridor, long-time residents are concerned that rising costs will push them out. There are a number of ways that Nashville and neighborhood institutions can ensure housing remains affordable, even as the corridor redevelops.

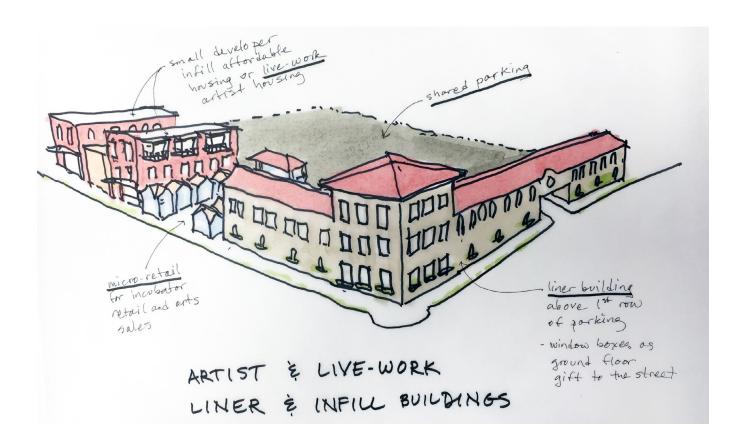


Participants were asked for "One Word" to describe the vision for the neighborhood

# **Liner Buildings Concept**

Liner buildings are thin buildings that line the edge of a street and provide a consistent built edge. Liner buildings are suggested here to fill in the vacant parcels along Jefferson Street and screen parking behind. Buildings pulled up to the street provide a more consistent pedestrian environment, increasing rates of walking.

Empty spaces where buildings once stood on Jefferson Street create "missing teeth" that degrade the public realm and hinder efforts to increase biking and walking. The design team developed a legible map outlining opportunities for infill that would help fill in the gaps. It is important that the design of the new infill fit the character of the neighborhood. The plan could be developed further, and consulted with existing City projects such as the Community Character Manual.



# **LESSONS LEARNED**

## Respect Local Cultural Heritage and Traditions

As Secretary Foxx has stated, the construction of the Interstate Highway System disrupted many thriving minority neighborhoods with rich traditions and histories. The story rings true in North Nashville.

Residents and stakeholders, many of them graduates of nearby colleges, came out in large numbers to the Every Place Counts Design Challenge visioning workshop to express that arts, culture, and tradition matter on Jefferson Street. This group of passionate participants crafted a vision statement specific to this reality. It reads, "Build upon and continue the rich culture of arts and entertainment along Jefferson Street and the surrounding community."

Both the city representatives and local residents were vocal about the need to honor this vision. Accordingly, the design team spent considerable time incorporating art into the strategies presented (e.g. adding to the Gateway to Heritage with an artsfocused Gateway at Rosa Parks and using a music hall to anchor new infill along Jefferson Street).

## Involve All Affected Stakeholders from Concept to Implementation

At the workshop's final presentation, illustrative renderings and suggestions were presented for achieving this long-term vision for Jefferson Street. Many in attendance who had not participated in the workshop pushed back against the suggestions. Since they had not been at the table in the early discussions due to the design challenge's compressed timeline, they did not trust the resulting ideas and suggestions affecting their property.

Nashville has a strong community planning history that has built trust among residents that neighborhood concerns will be heard, but implementation has not always followed past planning efforts. Moving forward, every attempt should be made to engage the entire community and establish expectations about the results. A local coalition of participants should be included in all phases of the workshop process, including the development of vision statements, theme guidance, prioritization of potential ideas, and implementation.

## Consider Fiscal Realities While Considering Innovative Solutions

The Tennessee Department of Transportation carries no transportation debt. Tennessee DOT (TDOT) operates on a "pay as you go" basis. This model forces tough decisions to be made. Major new investments, such as highways caps, can significantly increase the upfront and lifetime costs of a project.

# **NEXT STEPS**

The Every Place Counts Design Challenge visioning workshops were only two days long and were intended to start the discussion on reconnecting neighborhoods. The items listed below are neither comprehensive nor listed in priority order, but rather are provided to further the conversation and discussion. The Metropolitan Government of Nashville and Davidson County (Metro) could consider the following strategies for achieving better connectivity and revitalization along Jefferson Street and I-40:

#### **NEAR-TERM**

- Reconvene Metro, TDOT, and FHWA officials for a continued discussion on the proposed strategies.
- Host a follow-up workshop to identify additional redevelopment sites and opportunities to link educational institutions.
- Build on existing partnerships to include representation from TDOT, Nashville-Davidson County, local businesses, artists, and neighborhood residents to champion projects, oversee the Gateway to Heritage program, and advise on neighborhood character. Consider working with the New Level Community Development Corporation (CDC).
- Establish a partnership between TDOT, Nashville-Davidson County, FHWA, the Nashville Area MPO, MTA, and RTA to explore bridge replacement designs and options for capping I-40. This partnership should engage with the proposed redevelopment committee/CDC.

#### **MID-TERM**

- Work with TDOT to explore a lid or cap over I-40 and study the feasibility of both highway cap concepts:
  - o "Jefferson to Jackson" Cap
  - o "16th Street" Cap with liner buildings
- Perform an assessment of the Jefferson Street corridor to identify areas for improvement, infill development sites, and opportunities for familyfriendly amenities.
- Study the redesign alternatives for Jefferson Street, including parking and buffer concepts.
- Test a "road diet" for Jefferson Street, bringing it down to two lanes along one or two blocks in order to help prove the concept and build consensus.
- Stimulate commercial activity along Jefferson Street through tactics like micro-retail, liner buildings, and event programming. Identify

- opportunities for future mixed-income residential development including missing middle housing types.
- Plan for an anchor institution, such as a new Music Hall, and new retail development along Jefferson Street that honors the heritage of the community.
- Continue to advocate for equitable mixed-use development in the wake of Nashville's 2016 inclusionary housing legislation.
- Incorporate green infrastructure and accessibility into future design efforts and road maintenance along Jefferson Street.
- Work with the Norf Arts Collective to create a task force that acts as an alliance between anchoring institutions and the community—particularly around possible arts-related programs and events like a book festival or art incubator. Engage this Arts Task Force in creative placemaking projects along the Jefferson Street Corridor and in future improvements to the Gateway to Heritage project.
- Encourage Jefferson Street United Merchants Partnership (JUMP), and Fisk, Meharry, and Tennessee State universities to participate in building greater community connectivity—including expanded student housing options in the Jefferson Street Corridor.
- Explore funding opportunities for green infrastructure and open space at the state, local, not-for-profit, and private levels.
- Identify funding opportunities for construction and maintenance of all new projects

#### LONG-TERM

- Continue to engage North Nashville stakeholders to finalize interstate cap designs.
- · Continue to advocate for equitable mixed-use development.
- Update land use policy and design standards within the North Nashville
  Community Plan and the Jefferson Street Redevelopment District to
  capture the vision, culture, and character of the Jefferson Street corridor.
  Incorporate these updates into the neighborhood's community design
  standards.
- Install a new Jefferson Street streetscape and plant trees (use the parking concept, buffer concept, or another design).

# FOUR: PHILADELPHIA, PENNSYLVANIA

# **ISSUES AND GOALS**

The City of Philadelphia sought the help of the Every Place Counts Design Challenge to produce an aspirational vision for reconnecting neighborhoods and institutions along the Vine Street Expressway (I-676). The City convened elected leaders, transportation officials, local stakeholders, and community leaders from nearby neighborhoods to engage and build community consensus.

The Vine Street Expressway (I-676) is a six-lane below-grade Interstate flanked by service roads cutting across Philadelphia's City Center. Combined, the expressway and its frontage roads encompass 13 lanes of traffic. The expressway runs 2.2 miles through the city and is spanned by 13 bridges.

Completed in the early 1990s, the Vine Street Expressway included many innovative highway design features and met all the mitigation commitments for the project. However, it bisected several neighborhoods and impaired the ability to strengthen community connections along the corridor. The areas affected by the expressway include the Drexel University College of Medicine, Hahnemann University Hospital, the neighborhoods of Chinatown and Callowhill, and the nearby Pennsylvania Convention Center.



Aerial view of Philadephia's study area

With the assistance of the design team, officials and stakeholders gathered for two days to brainstorm creative and practical solutions to reconnect the most affected neighborhoods and institutions along the expressway, and to explore the following:

#### **Mending Divided Communities**

For years, noise, speed, and safety concerns along the expressway have led to a desire to make the expressway "disappear." During the Design Challenge, many stakeholders expressed a preference for a full cap of I-676 that would mend the trench separating north and south. There was also a wide understanding that the cost and complexity of building a full cap would likely make the project infeasible.

However, through the two days of brainstorming, participants developed solutions that could achieve neighborhood connectivity goals without fully capping the Vine Street Expressway. The solutions included roadway treatments and policy changes that could precede a partial cap of key sections of the expressway. These short-term solutions would be prioritized by their feasibility and positive impact on the surrounding communities.

#### Thinking Creatively About the Future & Phasing

Throughout the Design Challenge process, stakeholders and facilitators sought creative design solutions that could be implemented in a phased manner and continually refined through community engagement. A phased approach would allow for designs that reflect community vision, while providing immediate benefits to existing residents and users. The City requested a roadmap for this engagement process and for the continued support of key community stakeholders, as well as peer governmental agencies.

### **Connecting to Ongoing Efforts**

The lessons learned in the Every Place Counts Design Challenge visioning workshop are immediately relevant to existing efforts along the corridor. This includes an ongoing visioning process led by the Philadelphia Chinatown Development Corporation (PCDC) as well as a recent award by the Pennsylvania Horticultural Society (PHS) of a Neighborhood Placemaker Grant for redesigning the existing 10th Street Plaza. Findings from the workshop need to coordinate with other planning efforts occurring in the community, including the proposed Rail Park, DVRPC's Plan "Renewing Race Street", and the PHS plan for redeveloping Monument Plaza just east of the study area.

# **EXISTING CONDITIONS**

Unlike the other three Every Place Counts communities, which explored urban expressways built in the 1950s and 1960s, Philadelphia's Vine Street Expressway was constructed in the early 1990s and currently does not suffer significant structural problems. At the time of its completion in 1991, the expressway's landscape design and use of some impact mitigations were considered progressive. Despite these mitigations, the expressway remains a barrier to redevelopment and livability. Community revitalization efforts over the past several decades have improved some community connections, such as at 10th Street in Chinatown, but many intersections remain inhospitable or dangerous for pedestrians and cyclists.

The visioning workshop focused on a seven-block area from Broad Street to 7th Street—the most urban and dense of the four selected Every Place Counts communities. The sunken expressway divides several neighborhoods to the north and south, which were the focus of the workshop.

The first focus area is the Callowhill neighborhood, a historically light manufacturing and industrial district on the north side of the expressway along the western portion of the study area. While many vacant parcels and buildings exist from this industrial past, there are signs of significant redevelopment occurring, including the planned Rail Park and other mixed-use entertainment and residential projects.

The second focus area is the Chinatown neighborhood. Located on both sides of the expressway, the Chinatown neighborhood is a cohesive and well-established community of 8,000 residents bordered on the west by the Pennsylvania Convention Center, on the south by a major shopping mall at Market Street East, and on the east by Independence Mall. This community has been engaged in the transportation planning conversation since the first proposals for the Vine Street Expressway in the early 1960s, forming a strong community advocacy network between local schools, merchants, and community development organizations. The Chinatown community continues to advocate for and implement projects that mitigate the impacts of the expressway.

Finally, to the west, closest to Broad Street, there are three major institutions: Drexel University College of Medicine, Hahnemann University Hospital, the Pennsylvania Convention Center, and Roman Catholic High School. The intersections of Broad Street and Vine Street (local) are used by large numbers of pedestrians, including students, doctors, staff, and conventioneers traveling between buildings on both sides of the expressway.









The 2014 Average Daily Traffic (ADT) of the Vine Street Expressway (I-676) was 106,363 vehicles, 6-percent of which is trucks. The right-of-way of I-676 ranges from 98 to 250 feet. Some below-ground portions of I-676 in Center City are covered—most notably under Benjamin Franklin Parkway, to the west of the project site. Each side of the sunken expressway is flanked by 2-lane access roads—Vine Street local eastbound and westbound—as well as onramps to I-676 between 6th and 7th Street to the east and at 15th Street in the west. Traffic speeds on Vine Street local are often above the posted speed limit of 25 mph or 15 mph in school zones and can create uncomfortable and dangerous conditions for pedestrians.

Due to the relatively recent construction of this part of the highway, there are no significant known structural deficiencies within the project limits. In 2009, the Pennsylvania Department of Transportation (PennDOT) replaced deteriorated concrete along the older segment of I-676 outside of the study area, and in April 2015, a four-year project began to replace bridges over the expressway between 18th and 22nd Streets. Raised planters line the expressway; however, maintenance is an on-going challenge.

When the completed Vine Street Expressway opened in 1991, engineers anticipated that 30-minute peak-hour trips from river to river would be reduced to a few minutes. However, the expressway was adversely affected by conditions at both ends: At its western terminus by the narrow interchange with I-76 and to the east by peak-hour back-ups on I-95 and the Benjamin Franklin Bridge. Extensive delays often result.



Existing built environment

Current access to green space or open space in the study area is limited. The on-ramps to the expressway, along with the local road network, limit access to the nearest public green space, Franklin Square, which is located at 7th and Vine Streets. Directly to the east of Franklin Square is Monument Plaza; a large public space which is almost entirely cut off from its surroundings by I-676, 6th Street, and access ramps to the Benjamin Franklin Bridge.

The Reading Viaduct is an above-grade rail track that cuts through the Callowhill and Chinatown neighborhoods north of the expressway. It is currently under consideration for conversion to an elevated linear park similar to New York City's High Line. Monument Plaza is also currently under study by PHS to increase accessibility and connectivity to the surrounding neighborhoods and institutions.



Word Cloud of current conditions



Word Cloud of the vision for the future

# DISCUSSION

Over two days, the design team led an extensive public engagement process with key stakeholders and members of the public to reimagine the Vine Street Expressway to reconnect the affected neighborhoods on both sides. Stakeholders were encouraged to think broadly and boldly when identifying the barriers and opportunities to implementing new ideas. The merits and challenges of freeway caps were discussed during the workshop. A full cap running the length of the study area was considered infeasible as the project would then be considered a tunnel, which would mean heightened technical requirements to achieve air quality standards and life safety measures.

#### STAKEHOLDER INPUT

Through significant outreach by the City of Philadelphia and the Philadelphia Chinatown Development Corporation, a diverse group of stakeholders experienced the corridor first hand with a walking tour. They were engaged in a wide-range of conversations with city and state traffic and planning officials, including engineers from the original planning effort, long-time community residents, advocacy groups, developers, and institutional representatives.

#### **Draft Vision Statement**

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



Graphic recording of the Philadelphia public meeting

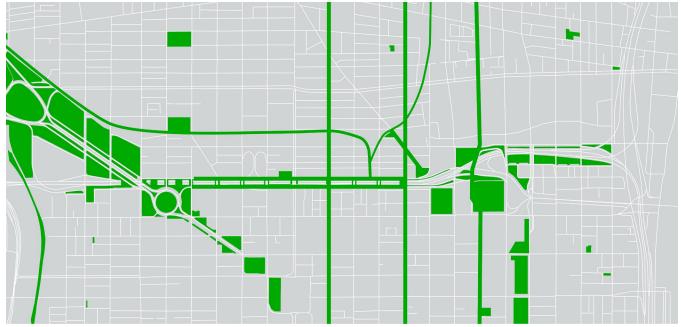
# **DESIGN AND POLICY STRATEGIES**

In order to achieve the goals of connectivity and additional green space that a full cap could provide, the design team proposed a series of connected "partial caps," each no more than 790 feet in length. Such partial caps would require less infrastructure and have a significantly lower cost than "full caps" or tunnels. Moreover, stakeholders embraced a widened focus beyond transportation to include public health, sustainability, economic development, and public safety goals. The two-day design session resulted in three priority areas:

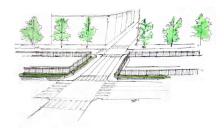
# INCORPORATE GREEN INFRASTRUCTURE, OPEN SPACE AND LANDSCAPE THROUGHOUT THE COMMUNITY

- Develop an inclusive community green plan that incorporates an engagement process and connects existing and future green space—e.g. The Rail Park and Philadelphia Horticultural Society Monument Plaza Plan.
- Identify a process for securing funding opportunities for green infrastructure and open space from state, local, and private sources.





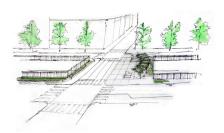
Streets and green space, including potential increase in open space and greens streets





- Study underutilized parcels along both sides of the Vine Street corridor for mixed-use, housing, and community facility development potential.
- Conduct a comprehensive parking assessment and forecast.

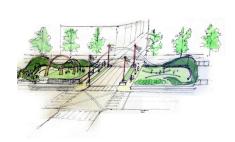
The Vine Street Corridor is important to Philadelphia's future. Redevelopment and mitigation of the expressway offers the opportunity to improve the quality of life for the thousands of area neighbors, as well as connect the community to the economic momentum found in nearby Center City.



#### ENHANCE SAFE CONNECTIONS AND MOBILITY FOR ALL

- Identify corridors for complete streets treatment, including the feasibility of reconfiguring lane assignments on Vine Street local.
- Connect the area's many modes of transportation (bus, rail, bikeshare)
  with an improved pedestrian realm, especially along the Vine Street local
  roads flanking the expressway.
- Design and implement streetscape improvements and artistic neighborhood gateways, including increasing landscaping, lighting, and wayfinding, and integrating more benches and parklets.
- Investigate bike/pedestrian connections between the proposed Rail Park and surrounding neighborhoods.
- Seek to increase pedestrian and bicyclist comfort and safety when considering new design elements (see FHWA's Separated Bike Lane Planning and Design Guide)







Bicycle network

## Reimagine Vine Street

Further analyze whether Vine Street local, on each side of the Vine Street Expressway, can be redesigned with different lane configurations, looking at both short-term and long-term strategies for improvements. Such a redesign for Vine Street local may include removing a travel lane, shifting parallel on-street parking over, narrowing the on-street parking lane, and adding a bike facility. Investigating the removal of strategic on-street parking spaces would allow for bulb-outs with street trees and landscape plantings. Bulb-outs would reduce crossing distances and create a more comfortable pedestrian environment. Street trees, lighting, and street furniture could enhance the sidewalk edge by creating shade and reducing traffic noise. The long-term design could include building a shared use path, which allows for both bicycle and pedestrian access.

## Safe Pedestrian Access to Franklin Square

The Vine Street Expressway currently restricts access to the area's only public green space, Franklin Square. Recent investment in Franklin Square, one of the city's five original squares, has increased pedestrian and bicycling traffic. However, it is surrounded by access roads for I-676, I-95, and the Ben Franklin Bridge. Safe pedestrian access to the park is a major problem, especially for seniors and children, who are Franklin Square's most frequent users. A long-term vision may include a new pedestrian bridge across the expressway to connect to the terminus of the Ridge Avenue streetscape and over to Franklin Square Park.



Sketch of a green street on Ridge Avenue at Wood Street, looking toward Callowhill St.



Existing Vine Street



Vine Street with floating parking



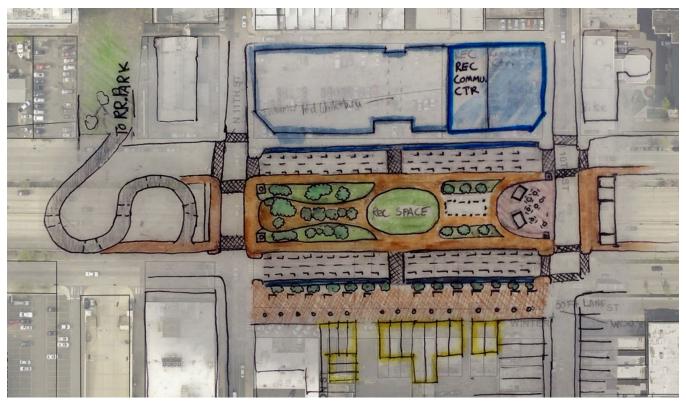
Vine Street with separated bicycle lane



Vine Street with Bus Rapid Transit

# I-676/Vine Street Expressway Mitigation and Connectivity

To mitigate the Vine Street Expressway and reconnect communities on either side, a priority for consideration would be the feasibility of a partial cap at a key intersection or between two of the existing street crossings. Participants in the design session identified key locations to be between N. 10th and N. 11th Street or N. 11th and N. 12th Streets. This partial cap could provide a foundation for needed open space, which was identified by participants as a key goal to knit together neighborhoods on each side of the expressway. Future mixed-use development could provide street frontages that relate to the neighborhood, and where appropriate, provide connections to the proposed Rail Park. Alternately, bridges over the expressway could be widened to create an "enhanced bridge" that would allow for either mixed-use development facing the street or space for a plaza or open space. The design team explored additional concepts such as a series of linked partial caps of the expressway, which would include voids to allow for natural ventilation and daylighting of the expressway underneath. Such designs should seek to minimize highway noise through landscaping or integrated sound walls.



Building footprints and open spaces

## 7th Street Crossing

Communities along the Vine Street Expressway are affected not only by the presence of the depressed Interstate but also by numerous freeway access ramps, particularly at the eastern portion of the study area where I-676 links with the Benjamin Franklin Bridge. These ramps divide the community and contribute to public safety concerns due to the dark and unsightly passages below. The underpass of the expressway at 7th Street was cited as a priority for improvement. To improve and maximize use of these spaces, and others like it, a variety of creative ideas were suggested—including lighting, art, and active uses. Case studies from cities nationwide should be further explored to provide a sense of possibility.



Linked partial cap concept

## **Connected Alley Network**

The communities along the Vine Street Expressway contain a connected network of alleyways and narrow streets. These corridors are often neglected and contribute to the perception of insecurity and public safety fears. To improve neglected conditions, a "connected alley" program was suggested in order to showcase innovative green infrastructure, stormwater management, urban heat reduction, and energy conservation. Chicago's successful green alley program was highlighted as a model, along with the local Asian Arts Initiative Pearl Street Project.







Images from Asian Arts Initative Pearl Street Project. Images from Asian Arts Initative.

# **LESSONS LEARNED**

## Engage the Right Stakeholders to Achieve Stated Goals

Future workshops should provide adequate time to properly organize and identify the essential participants required to address stated project desires and outcomes. Every means possible should be taken to invite those with required expertise, actively encourage their attendance, and make sure they contribute meaningfully to the outcomes. Additionally, the two-day format limited the opportunity for a more iterative design process that allowed stakeholder involvement to evolve. As an example, City and PennDOT transportation officials were able to speak to traffic safety implications of the proposed interventions, but the discussion would have been more nuanced with additional involvement by public health professionals working to improve physical activity opportunities or air quality.

#### Success Depends On the Details

A big idea, such as the construction of partial highway caps, is typically not successful if implemented by itself. Engaged stakeholders, such as the Philadelphia Chinatown Development Corporation, offer knowledge and focus to hone in on details that could make a large project succeed or fall flat. A successful revitalization and reknitting of the I-676 corridor will need to involve local players who can identify the important details, work through complicated design and funding challenges, and develop a long-term vision to shepherd towards completion.



Sites for potential infill growth and new development

# **NEXT STEPS**

The Every Place Counts Design Challenge visioning workshops were only two days long and were intended to start the discussion on reconnecting neighborhoods. The items listed below are neither comprehensive nor listed in priority order but rather are provided to further the conversation and discussion. Philadelphia may consider and prioritize any of the following strategies for reconnecting neighborhoods and institutions along the Vine Street Expressway (I-676):

#### **NEAR-TERM**

- Develop a community green plan connecting existing and future green space, including the Rail Park and Pennsylvania Horticultural Society (PHS) Monument Plan.
- Explore funding opportunities for green infrastructure and open space at the state, local, not-for-profit, and private levels.
- Enhance crosswalks at existing pedestrian crossings on Vine Street local.
- Implement traffic calming techniques and speed limit signs, especially around North 8th Street.
- Determine bike and pedestrian counts around school routes and opportunities for safer crossings.
- Study examples of creative use of underutilized space under highway overpasses for application around North 7th Street and North 8th Street.
- Investigate forming a Connected Alley Task Force to transform the existing neglected alley network into a showcase of innovative green infrastructure.

#### **MID-TERM**

- Study underutilized parcels along Vine Street for mixed-use development potential; connect efforts to a Parking Demand Management program.
- Initiate a Vine Street local lane reconfiguration alternatives study to determine feasibility and impacts. Depending on the feasibility, investigate the use of temporary landscaping, wayfinding, benches, line striping, and parklets to pilot the reduction of lanes.
- Begin a design process for lane reconfiguration and separated bike lane concepts.
  - A buffered bikeway could be put in place in the short-term with paint and temporary bollards and evolve into a separated bike lane in the longer term.

- Study the feasibility of a bike/pedestrian bridge or connection between Vine Street to the proposed Rail Park.
- Initiate a feasibility study and partial design for partial highway cap or enhanced bridge, including identifying funding sources.
- Work with PennDOT and community stakeholders to develop enhanced bridge concepts at 10th Street that honor the cultural heritage and needs of the neighborhood.

## LONG-TERM

- Finalize the design for a bike/pedestrian bridge to connect neighborhoods to the Rail Park, once complete.
- Develop designs for a cap or partial caps and seek construction funding.
- Begin implementation of community green space enhancements identified in the Green Space Plan.

# FIVE: MINNEAPOLIS-ST. PAUL, MINNESOTA

# **ISSUES AND GOALS**

Hennepin and Ramsey counties jointly hosted the Every Place Counts Design Challenge to address the negative impacts of I-94 on two Minneapolis/Saint Paul neighborhoods. The counties' goal was to demonstrate their commitment to connectivity, inclusivity, and positive community engagement to a diverse audience of local residents and stakeholders.

I-94 connects Minneapolis and Saint Paul and runs through several historic communities. Since the introduction of the interstate in the 1960s, these communities have suffered impaired opportunity and mobility. Divided physically, socially, and culturally, the communities of Rondo and Prospect Park were the primary focus areas for this project.

The Rondo neighborhood is a historically African American community adjacent to downtown Saint Paul. The construction of I-94 in the 1960s removed many African American owned businesses and demolished hundreds of stable single-family homes. The bifurcated community has not regained the cultural and economic vitality that existed prior to the introduction of the highway.

Sitting adjacent to the University of Minnesota's campus, Minneapolis's Prospect Park is cut off from the Mississippi River by I-94. Unlike Rondo, Prospect Park residents of the 1960s advocated for the expressway, in order to provide greater access to job centers. Today the neighborhood suffers from uninviting bridge crossings over the freeway and a lack of connection to riverfront green spaces.



Existing 1-94

Ramsey County (which includes Saint Paul) and Hennepin County (which includes Minneapolis) jointly sought the assistance of the Every Place Counts Design Challenge to develop a model of regional design and engagement to guide future corridor planning efforts. With a focus on two neighborhoods, leaders sought to explore the following:

#### **Long-Term Corridor Planning**

While the long-term scope of the project includes the entire corridor, the process must begin at a local scale, providing community partners, local governments, and state and federal agencies the opportunity to develop context-sensitive design solutions that incorporate the input of those impacted by the corridor. The neighborhoods were selected to encourage the two communities to reimagine transportation projects that may ultimately serve as pilot projects for further planning.

#### Improve Multimodal Connectivity/Prospect Park Trail

The Prospect Park Trail project is finalizing the acquisition of the abandoned railroad track. The project is regarded as highly important by the City of Minneapolis and local partners. Moreover, the project submitted a capital budget request and is part of Minneapolis's Comprehensive Plan. Given that the design for the site has not been completed, the Design Challenge will help the community think through the details of multimodal connectivity.



Expanded bridge concept with planting areas and small retail spaces shown

# **EXISTING CONDITIONS**

More than a half-century after its construction, I-94 serves a vital transportation purpose for the people of Minnesota. With 150,000 to 170,000 vehicles per day, 80-plus miles of paved lanes, 145 bridges, 56 pedestrian crossings, 26 bicycle facilities, and proximity to the new Central Corridor light-rail line, the I-94 corridor is a hub of interconnectivity between cities, regions, neighborhoods, businesses, residents, and employers.

However, after decades of use I-94 is aging and experiences heavy congestion. Improvements are needed to not only repair the highway and restore mobility but to also restore the sense of community and belonging once enjoyed by residents and stakeholders along the corridor.

The Rondo and Prospect Park neighborhoods were selected as catalytic nodes most in need of redevelopment. Residents and local officials want to improve mobility and physical and social connections within each neighborhood and to the I-94 corridor. A longer-term goal is to improve community connectivity along the entire corridor between downtown Saint Paul and Minneapolis while providing better links to the Mississippi River and other regional amenities.

The first focus area, the Dale Street interchange and bridge over I-94 in Saint Paul, is functionally obsolete. The existing bridge lacks adequate pedestrian and bike facilities as well as adequate accommodations for turning vehicles. The Dale Street project has close to \$7 million allocated to tackle safety and operational issues, and reconstruction is scheduled to begin in 2018. It is identified as a priority in Saint Paul's Comprehensive Plan.

Additional attention was given to the Victoria Street bridge, just five blocks to the west of Dale Street, as a potential gateway to the neighborhood.

The second focus area, the Prospect Park Trail project, involves the acquisition of an abandoned railroad corridor between Franklin Avenue SE and 27th Avenue SE and the construction of a multi-use trail. The Trail is shown in the 2011 Bicycle Master Plan as a connector between Prospect Park and the University of Minnesota. It crosses I-94 in Prospect Park near the banks of the Mississippi River. A connection to the Midtown Greenway could be made if additional railway easements were acquired.









# DISCUSSION

Minneapolis/Saint Paul was the only Every Place Counts Design Challenge study area to feature multiple nodes and the only challenge to involve multiple jurisdictions. Design and policy options for mitigating the highway's impacts and improving connectivity, generated through the multi-day session, were presented to local stakeholders.

#### STAKEHOLDER INPUT

The design team led a public engagement process with key stakeholders and members of the public to reimagine I-94 through Prospect Park and Rondo. Participating stakeholders were encouraged to think broadly and boldly while identifying the barriers and opportunities to implementing new ideas for community connectivity and highway mitigation.

#### **Draft Vision Statement**

Use active community engagement to reimagine and reconnect communities over, on, and around I-94 investments to create equitable outcomes, multimodal systems, vibrant, and livable places that support prosperity and cultural inclusion.



# **DESIGN AND POLICY STRATEGIES**

Strategies and design options discussed during the visioning workshop included complete streets principles, freeway caps at key locations across 1-94, and a multimodal trail network. A series of placemaking strategies were also suggested that could tie the investments together.

#### **COMMUNITY ENGAGEMENT**

#### Rondo Neighborhood Improved Street Network and Options for Crossing I-94

A variety of concepts were explored for the Dale Street interchange bridge that balance improved pedestrian facilities with the need to accommodate turning vehicles. Ideas include two ten-foot-wide sidewalks, two six-foot-wide shoulders, two through lanes in each direction, and a left-turn lane at each ramp to I-94.

Alternative design suggestions for the Dale Street bridge include the creation of a gateway plaza in the middle portion of the Interstate and a full cap from Grotto to Chatsworth Streets that would include vehicular and pedestrian access at Grotto, Victoria, and Chatsworth Streets.

#### Dale Street Road Diet/Streetscape

To spur economic development and make walking and bicycling easier, a makeover of Dale Street was suggested. Specific elements are on-street parking, separated bike lanes, tree-lined medians, and streetscape enhancements. To achieve desired economic development goals, existing surface parking lots along Dale Street were identified as ripe for new mixed-use development.

#### Victoria Street Highway Lid Concept

A highway lid at Victoria Street, which is located five blocks to the west of Dale Street, is essential to meeting connectivity goals. A structural lid in this location could include a series of thin liner buildings along both sides of the bridge structure to form a market-like facility spanning the Interstate. Buildings are suggested here to connect across the highway, drive economic development, provide a more consistent pedestrian environment, and increase walkability.

Additional suggestions include a gateway to Rondo and a series of lid structures from Grotto to Chatsworth Streets. The lid design should also accommodate cultural and historical elements to act as a gateway and public space for the Rondo neighborhood.



Victoria Street highway lid concept





#### NEIGHBORHOOD CONNECTIONS ACROSS THE MISSISSIPPI RIVER

#### Franklin Street Roundabout

To overcome the lack of a human scale in the streets and bridges through Prospect Park, the design team suggested a roundabout at Franklin Avenue and East River Parkway. The traffic volumes and speed suggest that a roundabout would be a viable solution for this intersection and would provide easier flow and access for cars and safer crossings for bikes and pedestrians. It also would act as a gateway into Prospect Park.

## A Connected Prospect Park Trail

To better connect the communities to green space, designers verified the importance of the "Prospect Park Trail" and suggested transforming the existing railway bridge over I-94 at 27th Avenue SE to connect to the shores of the Mississippi River and beyond. The space between 27th Avenue and the bridge can be enhanced with landscape and trailhead amenities.

To complete the proposed connected trail network, convert the existing rail bridge at Prospect Park to a bike/pedestrian facility. This project will connect to the existing and proposed trails on the north side of the river and within Prospect Park to the Midtown Greenway and trail network on the south side of the river. To connect these two proposed rail bridge crossings, a shared-use path is needed parallel to the rail line along Ayd Mill Road.

The combination of general design and policy recommendations that follow are considered crucial to ensuring the success of the ideas listed. The suggestions build upon the five values and themes defined by workshop participants.





Possible rail trail running parallel to Ayd Mill Road

#### **COMMUNITY ENGAGEMENT**

- Establish a working group of organizations to continue the conversation.
   Coordinate with well-seated area resources such as the Central Corridor Funders Collaborative (CCFC), University of Minnesota consortium, and District Councils Collaborative.
- Generate a community/public engagement plan to include all stakeholders and perspectives.
- Develop outreach and engagement tools for specific partnerships.

#### **PLACEMAKING**

- Study and coordinate existing land uses, businesses, parks, and schools to identify neighborhood nodes.
- Actively engage community members with pilot programs and exercises such as tactical urbanism.

#### **MULTI-MODAL SYSTEMS**

- Establish multimodal priority in specific locations—balance access and mobility.
- Investigate best practices for mode metrics like performance indicators.

## **CULTURAL INCLUSION**

- Incorporate public art into all infrastructure projects for each jurisdiction.
- Pursue funding opportunities for cultural inclusion as a percentage of infrastructure costs.



The existing rail bridge at Prospect Park converted to a bike/pedestrian facility

# **EQUITABLE INVESTMENTS**

- Conduct a health impact assessment in the targeted areas (See Federal Highway's guidance on Health in Transporation Planning).
- Use the Equitable Development Principles & Scorecard, created by Twin Cities leadership, as a starting point for solving disparities such as economic development for neighborhood specific priorities.







Possible phasing for expanded bicycle recreation/transportation network

### **LESSONS LEARNED**

#### **Adversity Builds Community**

The loss of hundreds of homes in Rondo and access to the river in Prospect Park are both real and have created lasting impacts. However, such hardships also bring communities together. They provide the common impetus for neighbors to rally around and communicate to city and/or other officials. Building consensus must include engaging the community leaders that emerge from this process.

#### Acknowledging Communities Were Damaged Can Strengthen Consensus

State and Local officials acknowledged again the importance of recognizing their mistakes of the past and the public apology that was made to communities in 2015. Communities have a long memory, and they can often distrust current elected officials based on the actions of their predecessors. Where leaders are able to recognize the negative consequences of past decisions, a better foundation is laid for building consensus and moving forward. In contrast, failing to take the opportunity to acknowledge the direct and cumulative negative impacts of urban highways can perpetuate a lack of trust and introduce general suspicion into the process. A genuine recognition of a community's concerns and history can go a long way toward building bridges to the future.



Expanded park area as a connection across the I-94

#### Multiple Study Areas Make For Complicated Work

The Minneapolis/Saint Paul visioning workshop was unique within Every Place Counts Design Challenge for targeting two separate study areas—one in Hennepin County and one in Ramsey County. Both were selected with the goal of improving mobility and connections, both physically and socially, within the two neighborhoods as wells as to other communities along I-94.

However, the culture, history, and character of the two focus areas complicated the creation of a single unified vision for connectivity across the study areas. The disparate ideas proposed would improve connections within each neighborhood but are likely to field different perspectives on how each area is best connected to and serviced by the broader I-94 corridor.

Given the scope of the study area and the distance between the project sites, more time would have proved useful to connect the ideas that emerged to one another and for stakeholders to coalesce around a common vision. Expansive study areas with more than one site for analysis might be avoided when planning a two-day visioning workshop.

Nevertheless, a series of strong ideas emerged to help reconnect the neighborhoods of Rondo and Prospect Park. Minneapolis and Saint Paul have an opportunity to build upon the concepts that emerged from the workshop to alleviate problems in an aging interstate corridor.



Multiple study areas



Prospect Park trail bridge



Victoria Street Market cap

### **NEXT STEPS**

The Every Place Counts Design Challenge visioning workshops were only two days long and were intended to start the discussion on reconnecting neighborhoods. The items listed below are neither comprehensive nor listed in priority order but rather are provided to further the conversation. Minneapolis, Saint Paul, Hennepin County, Ramsey County, and MnDOT should consider the following strategies for addressing the negative impacts of I-94 on Rondo and Prospect Park:

#### **NEAR-TERM**

- Continue to refine connectivity strategies for I-94 in partnership with Minneapolis, Saint Paul, Hennepin County, Ramsey County, and MnDOT.
- Organize follow-up community meetings to engage a larger network of stakeholders on the suggestions and built support for the concepts outlined in the plan.
- Establish a working group of agencies and organizations to continue interactive conversations. Continue coordination with Central Corridor Funders Collaborative and the University of Minnesota consortium.
- Consider field-testing complete streets design elements along Dale Street. This can help provide feedback on workable strategies and build consensus on final design concepts. The short-term conversion plan could be implemented with paint, planters, and other minimal permanent construction.
- Commence an economic development plan/study for the vacant and underutilized properties along Dale Street.
- Study options to connect the "Prospect Park Trail" to the Mississippi River
  and beyond using the existing railway bridge over the Interstate. Explore
  funding opportunities for green infrastructure and open space at the
  state, local, non-profit, and private levels.
- Develop outreach and engagement tools to enhance strategic partnerships. These partnerships can assist in identifying and securing funding opportunities that promote cultural inclusion and support construction and maintenance of all new projects.

#### MID-TERM

- After careful and thoughtful study, consider testing an expanded bike network using a temporary demarcation for proposed bike lanes along key streets.
- Further study the proposed Victoria Street lid to include market-like liner buildings to connect across the highway.

- Further study a roundabout at Franklin Avenue and East River Parkway.
- Further explore with appropriate transportation agencies the various connectivity options along I-94, including the proposed gateway to Rondo and a series of lids from Grotto to Chatsworth Streets.
  - Engage community members with pilot programs and exercises to signal progress and spur momentum. Such temporary installations could coincide with a larger event, such as a farmer's market, Parking Day, Open Streets event, or similar activity.
  - o Stabilizing commercial properties as well as residential properties in the affected neighborhood.

#### LONG-TERM

- Implement one-way to two-way street conversions around Dale Street interchange in partnership with appropriate agencies.
- Formalize streetscape elements (tree-planting and lighting), bike lanes, and on-street parking.
- Update local zoning codes to require street-oriented buildings by use
  of a Form Based Code or changes to the land development and zoning
  regulations. Every new building and addition should contribute to a
  pedestrian-friendly environment.
- Construct Victoria Street land bridge and market-like liner buildings.
- Construct a gateway to Rondo and a series of land bridges from Grotto to Chatsworth Streets.
- Connect the Prospect Park Trail to the Mississippi River and beyond using the existing railway bridge over the Interstate.



Expanded park cap over 1-94

# SIX: CASE STUDIES

# **ALTERNATIVES PROJECT STUDY (I-375)**

Location: Detroit, Michigan Status/Phase: Analysis Ongoing

Interstate Highway 375 (I-375), opened in 1964, is a one-mile urban freeway stub that connects I-75 to Jefferson Avenue across Downtown Detroit. The 350 foot-wide below-grade highway is spanned by five bridges carrying city streets. The corridor is in need of major reconstruction and maintenance.

Two historic African-American neighborhoods (Black Bottom and Paradise Valley) were destroyed in its construction. The highway separates important Detroit neighborhoods, including Greektown and Bricktown to the west from Lafayette Park and Eastern Market on the east.

The pace of development and revitalization in Downtown Detroit has accelerated, and to match this progress consideration is being given to improving the area's existing transportation infrastructure. The Michigan Department of Transportation (MDOT), Detroit Riverfront Conservancy (DRFC), and the Detroit Downtown Development Authority (DDA) formed an alliance to explore how to improve the current configuration of I-375 to better meet the needs of the city's new Downtown and East Riverfront—and those that live, work, and play there now and in the foreseeable future.

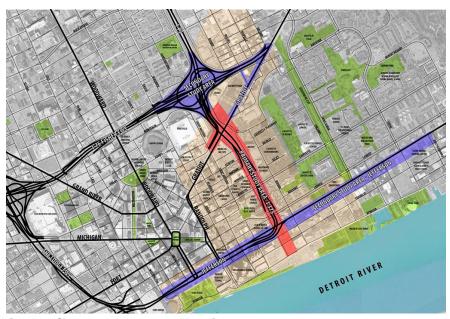


Diagram of Interstate connections in Metro Detroit

The I-375 Alternatives Study investigates several options, including whether to change I-375 to a boulevard. Despite the City's bankruptcy, downtown Detroit is experiencing a development boom. There has been an influx of residents and commercial activity to the city's Midtown neighborhood, along with the introduction of the M-1 light rail along Woodward Avenue and development along the RiverWalk and Rivertown-Warehouse District.

The results of technical analyses, input from an advisory committee, public feedback, and recommendations from a public agency-led technical committee guided the development of the six alternatives. The study determined that proposals for transitioning the freeway to a surface boulevard offer the greatest medium to high potential economic outcomes.

Before moving forward with design and construction, and once funding is identified, much of the analysis of the I-375 Alternatives Study will be used to inform the environmental review process under the National Environmental Policy Act.

The project follows the lead of several other cities throughout the US investigating the potential alternate uses and alignments for urban freeways through existing downtowns.



Aerial view of Detroit

# SOUTH BRONX/SHERIDAN EXPRESSWAY (I-895)

Location: New York, New York

Status/Phase: Implementation Ongoing

Built in 1963, the Arthur V. Sheridan Expressway (I-895) connects I-278 with I-95. The expressway cuts through four diverse and complex community districts, two of which saw a two-thirds population decrease, and cut off access to the Bronx River. The New York State Department of Transportation (NYSDOT) is considering the concept of de-designation of the Sheridan Expressway to advance plans for replacing the freeway with a surface street. U.S. DOT awarded New York City Department of Transportation (NYCDOT) a \$1.5 million TIGER Planning Grant to study this project.

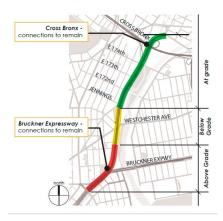
The Sheridan carries 35,000 vehicles per day between Bruckner Expressway and Westchester Avenue. Less traffic travels on the Sheridan than many of the nearby major thoroughfares such as the Bruckner Expressway which carries 117,000 vehicles per day.

In 1997, NYSDOT proposed a \$245 million project to reconstruct and extend the expressway. The Southern Bronx River Watershed Alliance (SBRWA) was established in opposition. Their vision calls for replacing the freeway with a surface street, improving street connectivity, and reclaiming 28 acres of land for development and open space along the waterfront. In addition, the SBRWA is calling to build ramps off the Bruckner Expressway so that trucks may access the Hunts Point Terminal Markets without driving through the community.

To ensure that the land use and transportation benefits of freeway removal were fully explored, New York City began the Sheridan-Hunts Point Land Use and Transportation Study of the Sheridan corridor in 2011. At this time, the City is looking into making modifications to the existing expressway to transform it into a boulevard. While the City has not yet made an official decision, the SBRWA is working to ensure that local stakeholders and community residents are involved with in process and that the Community Plan becomes a reality.

In March of 2016, the state granted the Sheridan Expressway Removal project \$97 million. The actual plan for the project remains in production by NYSDOT, and the timeline for the implementation of that plan remains unclear. A recent press release announced \$159 million for phase one and \$129 million for phase two of the rehabilitation of the Bruckner Expressway viaduct, a portion of which may go, advocates hope, to building the off-ramps that will provide trucks a direct route from the highway to the Hunts Point market. The full cost of those ramps exceeds the allocation in the budget, but \$2 million has been set aside to study their feasibility.

#### Sheridan Expressway









# THE LIVABLE CLAIBORNE COMMUNITIES PLANNING STUDY (I-10)

Location: New Orleans, Louisiana Status/Phase: Study Completed

Claiborne Expressway, I-10, is an elevated highway built over North Claiborne Avenue in New Orleans. Intended to improve access to the Central Business District, it has bisected the town and impacted the structure, character, and vitality of many surrounding neighborhoods. More than 500 homes were removed to prepare for the highway that opened in 1968, permanently changing the once active green streetscape with concrete. Soon afterward, the business district declined and the quality of life of neighborhood residents dropped as their neighborhood center disintegrated.

Following Hurricane Katrina and the subsequent rebuilding efforts, the call became prominent to rethink the I-10 elevated expressway's role for the North Claiborne Corridor and the City. Although the elevated structure is at or beyond its designed lifespan of 40 years, reviews of the detailed bridge inspection records for structures within the Claiborne Avenue Study Area indicate that they are in satisfactory to good condition. A conservative reading of study area bridges suggests that, if maintained according to past practice, they have remaining service lives that exceed 30 years.

In 2012 the Department of Housing and Urban Development (HUD) and U.S. DOT jointly awarded a \$2 million grant to study removing the Claiborne Expressway, which was built over the main thoroughfare in an African-American neighborhood. The project studied corridor challenges and design opportunities to reunite a physically divided community and create transportation choices; develop neighborhood and economic revitalization strategies; and address stormwater management, subsidence, multi-modal mobility, and urban design. It also analyzed the potential infrastructure investments along the corridor, ensuring that multi-modal transportation options connect new and existing housing developments to jobs, health care, and education and lessen the burden of transportation costs on low-income families.

The study, through an open and public process, identified a set of scenarios combining transportation, revitalization, economic development, and sustainability that can move into the next stage of the project development and be evaluated under NEPA, where the preferred alternative can be identified.

# AUBREY DAVIS PARK, TRAIL, AND LANDSCAPED BRIDGES (1-90)

Location: Mercer Island, Washington

Status/Phase: Completed

The 24-acre lid park on top of Interstate 90 (I-90) through Mercer Island became the world's first example of a recreational park built on top of a freeway. Formerly known as Mercer Island Lid (now named the Aubrey Davis Park), the lid covers a halfmile stretch of I-90. The extensive project provides useful lessons and benchmarks for design, engineering costs, and ongoing operations and management.

The park includes football and soccer fields, three baseball diamonds, two outdoor basketball courts, four tennis courts (that double as informal skate parks), a sheltered picnic area, children's playground, and bicycle facilities. In addition to the park, the "I-90 Trail," a multi-use corridor, runs across the entire island along the entire length of the I-90 frontage. The trail connects nine heavily expanded and landscaped land bridges, each with its own dedicated pedestrian pathway.

The idea for a cap was on the drawing board by 1970, when Mercer Island began seeking ways to mitigate the effects of a mammoth Interstate freeway on the quiet, residential community. The intent was to hide the traffic, muffle the noise and reconnect neighborhoods. Recreation facilities were added to the plan later. The first phases of the park were completed in 1994.



Existing aerial view of 1-90

The idea of capping I-90 was championed by local attorney Jim Ellis, who enlisted the support of Dan Evans, an engineer and at that time state governor, and state Director of Highways George Andrews.

The Mercer Island Lid was followed shortly by a second local example in Seattle, where a lid over I-90 extends westward from the Mount Baker tunnel. The concept's inclusion in the original Environmental Impact Statement protected the project from federal budget cuts during the 1980s. The funding sources from the planning and construction came from a variety of public sources, including bond refinancing, reallocations, and, in-kind contributions.

The state Department of Transportation, with 90 percent funding from the federal government, provided the earth cover and most of the landscaping as part of a \$146 million project that includes the roadway, lid structure, and the ventilation building and equipment.

The lid complex accounted for approximately one-tenth of the total cost of the seven-mile freeway project.



Park space on cap on Mercer Island

## THE CAP AT UNION STATION (I-670)

Location: Columbus, Ohio Status/Phase: Completed

The Cap at Union Station is a \$7.8 million retail development that reconnects downtown Columbus, Ohio, with the Short North arts and entertainment district. Opened in October 2004, the project effectively heals a 40-year scar that was created by the construction of the city's I-670 inner-belt highway. Composed of three separate bridges—one for through-traffic across the highway, and one on either side for the retail structures—the Cap provides 25,496 square feet of leasable space, transforming the void caused by I-670 into a seamless urban streetscape with nine retail shops and restaurants. While other cities like Seattle and Kansas City have erected convention centers over urban highways, the I-670 Cap is one of the first speculative retail projects built over a highway in the United States.

The city decided to invest \$1.9 million expanding the bridge by 80 feet. They then gave the site to a developer. Meleca Architects out of Columbus took the bridge and put retail on it, thus reconnecting the Short North neighborhood to downtown, including the City's Conference Center. The Short North is now one of the most vibrant and desirable neighborhoods in all of Columbus, due in large part to the connectivity provided by the retail-lined bridge.

Per research provided by the Urban Land Institute: "Initially conceived in 1996, it took years of effort by municipal and state officials and neighborhood organizations to keep the momentum for the complicated project going. There was no model to follow in the construction of the Cap, but now the developer, city leaders, and even the state's highway engineers believe that the project could easily be replicated in other cities that have had their urban fabric disrupted by highways."



Retail on the bridge over 1-670

### **ADDITIONAL RESOURCES**

#### **US FEDERAL AGENCIES**

Centers for Disease Control

Healthy Communities Program

http://www.cdc.gov/nccdphp/dch/programs/healthycommunitiesprogram/index.htm

#### Department of Housing and Urban Development

Guidelines for Creating Walkable and Bikeable Communities forthcoming

#### **Environmental Protection Agency**

Smart Growth Program

https://www.epa.gov/smartgrowth

#### Federal Highway Administration

Pedestrian and Bicycle Safety Information

http://safety.fhwa.dot.gov/ped\_bike/

**Every Day Counts** 

http://www.fhwa.dot.gov/innovation/everydaycounts/

Environmental Justice/Civil Rights

http://www.fhwa.dot.gov/environxment/environmental\_justice/

#### Federal Transit Administration

Transit Oriented Development (TOD)

https://www.transit.dot.gov/funding/funding-finance-resources/transit-oriented-development/transit-oriented-development

#### National Endowment for the Arts

Creative Placemaking

https://www.arts.gov/publications/creative-placemaking

#### U.S. Department of Transportation

Ladders of Opportunity

https://www.transportation.gov/opportunity

#### NON-GOVERNMENTAL AGENCIES AND NOT-FOR-PROFITS

**Context Sensitive Solutions** 

 $Linking\ Land\ Use\ and\ Transportation\ Through\ Street\ Design$ 

http://contextsensitivesolutions.org

Institute of Transportation Engineers/Congress for the New Urbanism

Designing Walkable Urban Thoroughfares: A Context Sensitive Approach

http://library.ite.org/pub/e1cff43c-2354-d714-51d9-d82b39d4dbad

Congress for the New Urbanism (CNU)
Transportation Resources
 https://www.cnu.org/our-issues/transportation

Smart Growth America

http://www.smartgrowthamerica.org

National Complete Streets Coalition

http://www.smartgrowthamerica.org/complete-streets

Partnership for Sustainable Communities https://www.sustainablecommunities.gov

# EXAMPLE FEDERAL DISCRETIONARY AND PROGRAM FUNDING RESOURCES

TIGER: Transportation Investment Generating Economic Recovery Discretionary Grant Program

FTA: Federal Transit Administration Capital Funds

ATI: Associated Transit Improvement (1% set-aside of FTA)

CMAQ: Congestion Mitigation and Air Quality Improvement Program

HSIP: Highway Safety Improvement Program

NHPP/NHS: National Highway Performance Program / National Highway System

STP: Surface Transportation Program

RTP: Recreational Trails Program

PLAN: Statewide or Metropolitan Planning

402: State and Community Highway Safety Grant Program

FLTTP: Federal Lands and Tribal Transportation Programs (Federal Lands Access Program, Federal Lands Transportation Program, Tribal Transportation Program)

### **GLOSSARY**

#### **Anchor Institution**

Enterprises such as universities, museums, hospitals, or other major employers that are rooted in the local community by mission, invested capital, or relationships to customers, employees, and vendors. As place-based entities that control vast economic, human, intellectual, and institutional resources, anchor institutions have the potential to bring crucial and measurable benefits to local communities.

#### Bifurcated/Bisected Neighborhood

A neighborhood physically divided as the result of large-scale infrastructure investments such as roadways, railways, and/or other development projects.

#### **Bioswale**

An alternative to conventional stormwater discharge, these green landscaping elements remove silt and pollution from surface runoff water. Bioswales naturally absorb or filter stormwater prior to discharge into sewer inlets or surface waters.

#### Cap/Lid

Physical structures created to support additional uses for land already dedicated to transportation facilities and used to improve connections within neighborhoods bifurcated by freeways. Uses can include new parks, buildings, trails, and other amenities where vacant land is scarce and dense development exists adjacent to freeways.

#### Capital Project/Investment

Any task that requires the use of significant monetary investment, both financial and labor, to start and finish—defined by their scale and cost relative to other investments that involve less planning and resources.

#### Connectivity (or permeability)

A transportation network with many short links, numerous intersections, and minimal dead-ends for vehicles, pedestrians, bicyclists, and other modes of transport. As connectivity increases, travel distances decrease and route options increase, allowing more direct travel between destinations, creating a more accessible and resilient transportation and transit system.

#### Federal-Aid Highway Act of 1956

A law signed by President Dwight D. Eisenhower that allocated \$24.8 billion — about \$164 billion in 2016 dollars — to build the initial US Interstate Highway system, with the federal government paying for 90 percent. The act called for uniform Interstate design standards, and a 1966 amendment mandated a minimum width of four lanes.

#### **Functionally Obsolete**

A status used to describe a bridge that is no longer adequate to meet its community's needs. Reasons for this status might include that a bridge no longer has enough lanes to accommodate current demand, or it may not have space for emergency shoulders. Functionally Obsolete does not communicate anything of a structural nature. A Functionally Obsolete bridge may be perfectly safe and structurally sound, but may be the source of congestion or may not have clearance to accommodate oversized vehicles.

#### Gateway

A physical and symbolic element or structure that serves as a place of entry, transition, or means of access. To help implement the design intent of an individual gateway, general design standards are often provided for thoroughfares, frontages, building types, and open spaces.

#### Green Infrastructure

Green infrastructure is defined as natural vegetation and vegetative technologies—like urban forests, greenways, restored and constructed wetlands, green roofs, green walls, bioswales, and more—that provide society with benefits like enhanced livability, improved energy efficiency, improved air and water quality, reduced flooding, and increased recreational opportunities.

#### **Green Roof**

A green roof system is an extension of an existing roof which involves a high-quality waterproofing and a root repellant system, a drainage system, filter cloth, a lightweight growing medium and plants. Green roofs may be modular, with drainage layers, filter cloth, growing media and plants already prepared in movable, often interlocking grids, or they can be loose laid/ built-up where each component of the system may be installed separately. Green roof development involves the creation of "contained" green space on top of a human-made structure. This green space could be below, at or above grade, but in all cases, the plants are not planted in the "ground."

#### Greenway

A greenway is a linear open space established along either a natural corridor, such as a riverfront, stream valley, or ridgeline, or overland along former railroad right-of-way, canals, scenic roads, and/or other routes. Greenways are natural or landscaped courses used by pedestrians and bicyclists that link parks, nature reserves, cultural features, or historic sites with each other and with populated areas.

#### Interstate

The Dwight D. Eisenhower National System of Interstate and Defense Highways is a network of controlled-access highways that forms a part of the National Highway System of the United States. Construction was authorized by the Federal-Aid Highway Act of 1956, and the original portion was completed 35 years later. The network has since been extended and, as of 2014, it had a total length of 47,944 miles.

#### **Liner Building**

Thin buildings that line the edge of a street, plaza, square, or other public space. They can be as little as 8-10 feet deep for retail uses and 12-14 feet deep if they include residential uses. They may be a single story high, or they may be several stories tall.

#### Mixed-use Development

Development projects that include more than one use or purpose within a shared building or area. Projects may include any combination of housing, office, retail, medical, recreational, commercial or industrial components. These projects vary in scale from single buildings occupied by a retail shop on the ground floor with an upstairs apartment to a comprehensive "urban village" development with multiple buildings containing separate but compatible uses such as a retail center, office building and medical clinic located adjacent to a multi-family housing.

#### Multi-modal Transportation

The use of at least two transportation options in any combination for each trip. The most common modes include any combination of driving, public transit, rail, air travel, biking and/or walking.

#### Multi-way Boulevard

Roadways that separate through travel and local access lanes to simultaneously move vehicles while creating a generous pedestrian realm.

#### National Environmental Policy Act (NEPA) of 1969

One of the first laws ever written that establishes the broad national framework for protecting the environment. The policy is designed to assure that all branches of government give proper consideration to the environment prior to undertaking any major federal action that significantly affects the environment. Requirements are invoked when airports, buildings, military complexes, highways, parkland purchases, and other federal activities are proposed.

#### Placemaking

A people-centered approach to the planning, design and management of public spaces. It involves looking at, listening to, and asking questions of the people who live, work and play in a particular space, to discover needs and aspirations. This information is then used to create a common vision for that place. The vision can evolve quickly into an implementation strategy, beginning with small-scale, doable improvements that can immediately bring benefits to public spaces and the people who use them.

#### **Road Diet**

A road diet, also called a lane reduction or road re-channelization, is a technique whereby the number of travel lanes and/or effective width of the road are reduced in order to achieve systemic improvements. One of the most common applications of a road diet is to improve safety or provide space for other modes of access.

#### **Shared Path**

A shared-used path is physically separated from motorized vehicular traffic by an open space or barrier and either within the highway right-of-way or within an independent right-of-way. Shared-used paths may also be used by pedestrians, bicyclists, skaters, wheelchair users, joggers, and other nonmotorized users. These facilities are most commonly designed for two-way travel.

#### Stakeholder

An individual and/or representative of an entity who is affected by, or can affect, a project's outcome. Stakeholders shape projects in the early stages, ensuring resources are available to contribute to project success and provide insight regarding the probable reaction to a project's outcome, which facilitates project adjustments when necessary to win organizational support. The roles of stakeholders change throughout a project life cycle. However, the willingness of stakeholders to perform the activities assigned to them during the project planning process greatly contributes to the success or failure of the project.

#### **State Route**

A road typically maintained and governed by the state, including both nationally numbered highways and un-numbered state highways.

#### Tactical Urbanism

An umbrella term used to describe a collection of low-cost, temporary changes coordinated as appropriate with transportation agencies, to the built environment (typically within city street and public spaces) as a laboratory for small, activist led projects intended to improve neighborhoods and city gathering places. Also known as guerilla urbanism, pop-up urbanism, city repair, or D.I.Y. urbanism.

#### **Urban Heat Island Effect**

A phenomenon in which the concentration of structures and waste heat from human activity results in a slightly warmer envelope of air over urbanized areas when compared to surrounding suburban and rural areas.

#### Walkability

A measure of how friendly an area is to walking, which influences the health, environmental, and economics of community. Factors influencing walkability include the presence or absence of quality of footpaths, sidewalks or other pedestrian rights-of-way, traffic and road conditions, land use patterns, building accessibility, and safety, among others.

#### Wayfinding

Information systems designed to guide people through a physical environment. These systems can enhance a user's navigation and contribute to community character, sense of place, well-being, safety, and security. Visual cues can include maps, directions, and symbols to help guide users to destinations.