BRIDGING I-95: CONNECTING THE COMMUNITY

CAP FEASIBILITY STUDY | Draft Final Report December 2022

DRAFT

Contents

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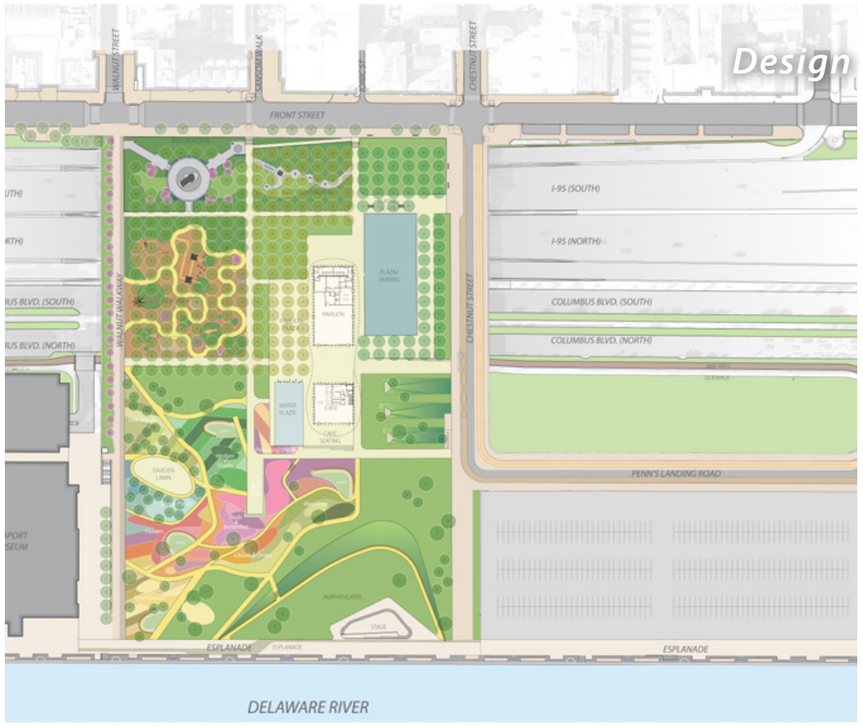

ADVISORY COMMITTEE

- **U.S. Senator** Thomas Carper
- **U.S. Senator** Chris Coons
- **U.S. Representative** Lisa Blunt Rochester
- **FHWA**
- **State Senators:** Sarah McBride, Elizabeth Lockman, Darius Brown
- **State Representatives:** Rep. Charles "Bud" Freel, Nnamdi Chukwuocha, Sherry Dorsey Walker
- **Delaware Transit Corporation (DTC)**
- **New Castle County**
- **City Council members:** Michelle Harlee 4th, Bregetta Fields 5th, Nathan Field 8th
- **Neighborhood Planning Council: 4th, 5th, 8th**
- **Downtown Visions**
- **United Neighbors**
- **Westside Grows Together**
- **Latin American Community Center**
- **Bike Delaware**
- **West Center City Neighborhood Associations**
- **Westside Neighborhood Coalition**
- **Cool Spring/Tilton Park Neighborhood Coalition**
- **Trinity Vicinity Neighborhood Association**
- **Trinity Episcopal Church**
- **Hilltop Lutheran Church**

PROJECT TEAM

WILMAPCO

DelDOT/DTC

City of Wilmington Administration

Advisory Committee Letter of Support

The Advisory Committee guided WILMAPCO and the consultant team toward a consensus concept, hybridizing broad design approaches with specific and broad community input in the public process. Our committee members brought individual representative's expertise and input to bear, shaping the overall concept, determined feasibility, and developed a deeper understanding of each participant's organizational stance on the project. This committee affirms to move forward with the project as it progresses from the endorsed feasibility study toward design and implementation, continuing our guidance and constructive participation on the Bridging I-95: Connecting Communities Project.

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Feasibility Study Scope

This feasibility study sets forth a concept **vision for the future of a public space over I-95 in Wilmington**. Paired with traffic analysis, Planning and Environmental Linkages (PEL) information, and structural analysis, this report aims to **establish the viability** of a cap park in the study area as well as share a plan **shaped by the community**. This feasibility study is the first step in the process of bringing an idea to life, and will be followed by further in-depth studies, analysis, design development, and exploration of potential funding.

I-95 FEASIBILITY STUDY

Overview

Introduction

The Bridging I-95 Cap Feasibility Study seeks to envision the future of a public space over Interstate 95 between North Jackson and North Adams Streets and Delaware Ave and W 6th Street.

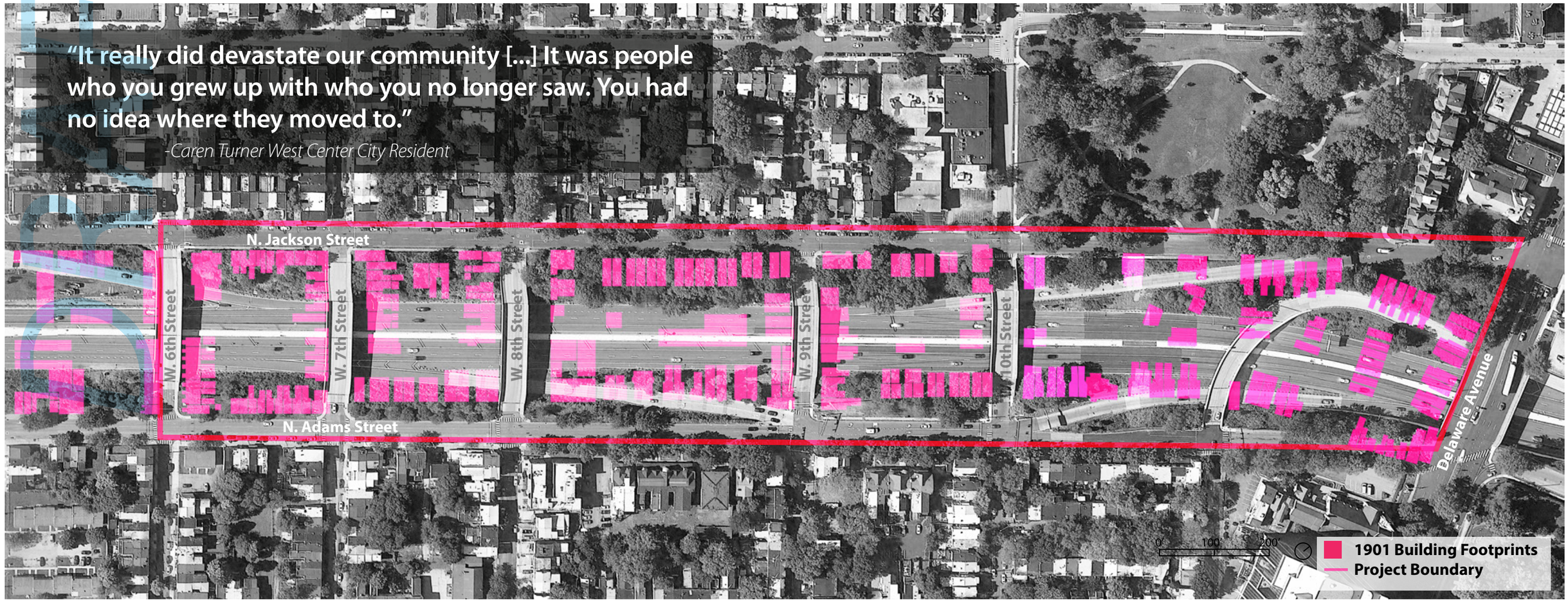
In the 1960s Interstate 95 was constructed through downtown Wilmington, dividing a once cohesive neighborhood fabric. The City of Wilmington, DelDOT, and WILMAPCO set out to repair this division by capping over I-95 and adding a public amenity to the neighborhoods.

In 2021 The City of Wilmington, DelDOT, and WILMAPCO engaged with Hargreaves Jones to study the feasibility of a park over present-day air space over I-95 in downtown Wilmington, Delaware. The planning process, which kicked off in August 2021 and spanned the subsequent 16 months, produced a vision for the future that is not only feasible, but developed in collaboration with and supported by the community. The project team worked closely with members of the public, as well as an advisory committee, to collaboratively design the proposed public space, ensuring that the very communities that would live adjacent to the cap park could see their own preferences and recommendations reflected in the proposed plan.

Introduction

For generations, the West Center City, Trinity Vicinity, Hilltop and Hedgeville were seamlessly connected by a residential-scale, neighborhood fabric. The construction of I-95 not only removed the connection of these neighborhoods, it also changed the scale of buildings and programs adjacent and ultimately had a significant negative impact on the land value and quality of life in the neighborhoods, contributing to a decline in economic vitality for the area. The addition of I-95 through downtown increased traffic on North Jackson and Adams Streets, converting one-quiet neighborhood streets into busy connectors to I-95. What resulted were dangerous and unpleasant pedestrian conditions for community members connecting across the I-95 trench.

The affected neighborhoods were largely composed of middle class white families (80%) at that time with 23% being foreign born, similar to the City as a whole. Over time, the changes to Wilmington's overall racial composition were amplified by the construction I-95 through these neighborhoods. Today, the area consists of a population that is 79% African American and minority, with the residents mainly considered as low income families.



Community Advocacy

Building on the community work of West Side Grows United Neighbors program, the cap vision builds on years of dreaming, collaborating, and advocacy.

The feasibility study builds off of the work done by West Side Grows Together United Neighbors, a nonprofit program that has advocated for recognition of the impact I-95's construction has had on the adjacent communities. The United Neighbors program has called for change over the I-95 corridor though public programs and activities, as well as mural painting events on the bridges over the highway. The feasibility study is the fist step toward realizing the community's ideas for a shared green space near Wilmington's downtown area. Throughout the planning process, the project team recognized the importance of the opportunity at hand, and the need for a community-driven ideation process.

THIS IS AN OPPORTUNITY

Reconnect the neighborhoods divided by the construction of I-95 by working with the community and key stakeholders to **re-imagine the future of the Jackson-Adams Corridor** between the Delaware Avenue Bridge and the 6th Street Bridge.

THIS IS A COLLABORATION

Build on community efforts by engaging local leaders, community groups, stakeholders, and neighbors. Through workshops, surveys, and collective visioning this plan will represent the **ideas and aspirations of those who know the needs of the community best**.

WEST SIDE GROWS UNITED NEIGHBORS

Feasibility Study Goals

The feasibility study established four primary goals, as well as three 'givens', outlined below. The project goals are what helped shaped the plan, while the "givens" are commitments to the community that the proposed cap will not require commercial or residential relocation, significantly impact the Level of Service (LOS) for cars traveling though the project area, and that there will be no significant reconfiguration to the Interstate.

Reconnect the neighborhoods divided by the construction of I-95 within the Jackson-Adams Corridor between the Delaware Avenue Bridge and the 6th Street Bridge.

Support neighborhood character, cohesion, and pride.

Provide equitable, safe, and connected access for pedestrians and people riding bicycles and using all modes of transportation.

Create inclusive, welcoming, vibrant public urban outdoor experiences through public realm & landscape amenities for residents of the adjacent neighborhoods.

GIVENS

- **No commercial or residential relocations.**
- **Maintain an acceptable level of traffic flow through the project area balanced with a safe pedestrian oriented environment.**
- **No significant reconfiguration of I-95.**

Existing Conditions

The study area is topographically complex, creating both constraints and design opportunities

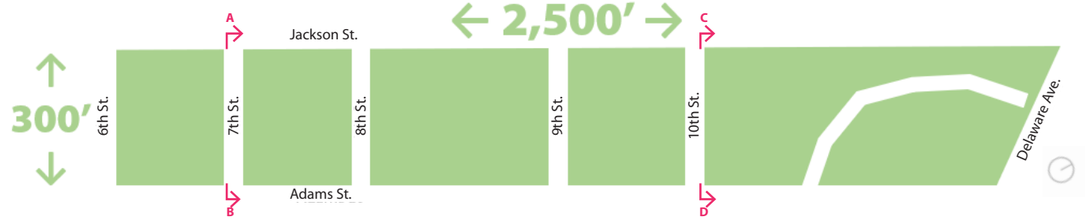
Today, N. Jackson Street sits higher than North Adams, with the highest point at the Jackson/Delaware intersection and the lowest at the Adams/W 6th street intersection. The existing site's topographical variation creates opportunities for utilizing the existing elevation changes between Jackson and Adams streets to create new views and a varied experience throughout the proposed park. The corridor, like much of Wilmington, has significant tree canopy, creating an experience that is unique among urban areas. The initial study area included 12 acres of present-day airspace, and assumed all cross streets would remain open. Any closure of cross-streets would increase the overall park acreage.

The W. 7th Street Bridge looking East at Adams

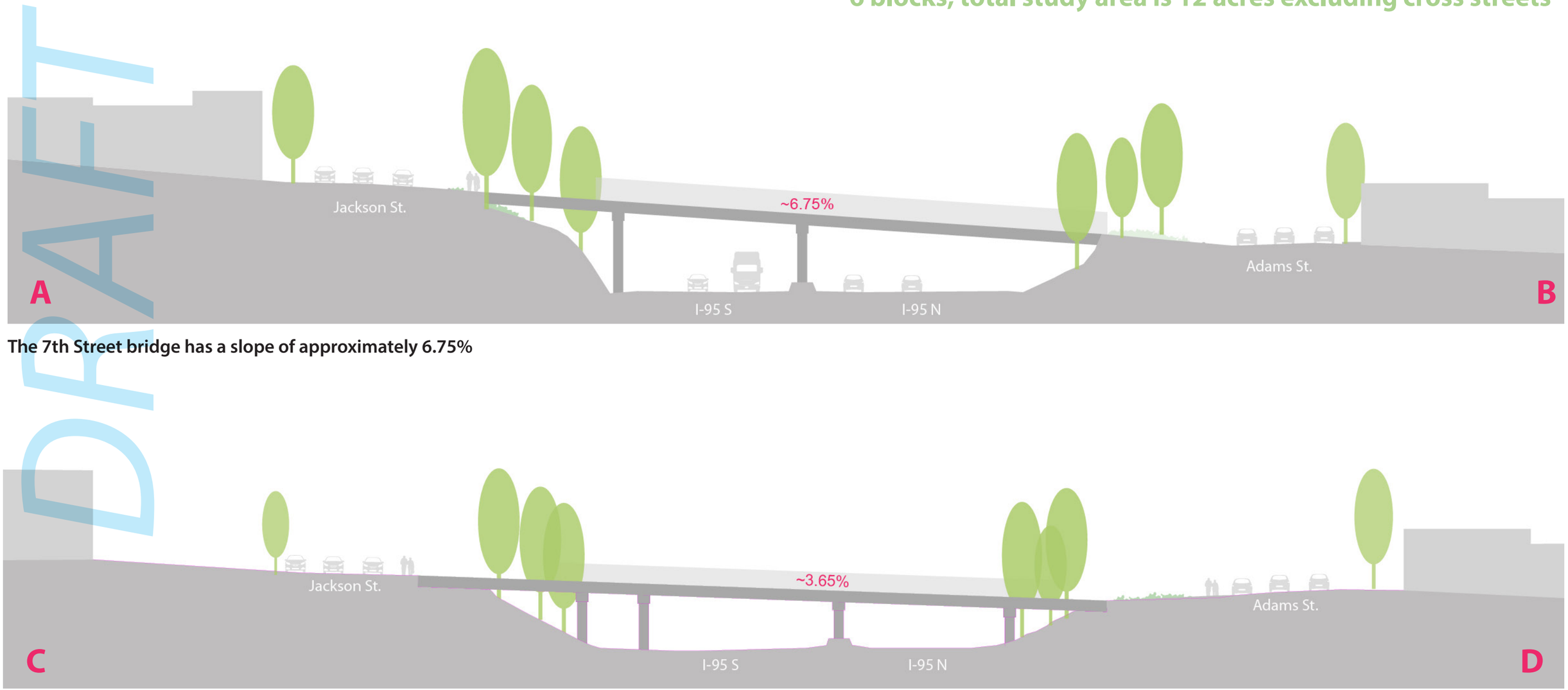
I-95 from the 9th Street off ramp

I-95 from North Adams

Existing Conditions



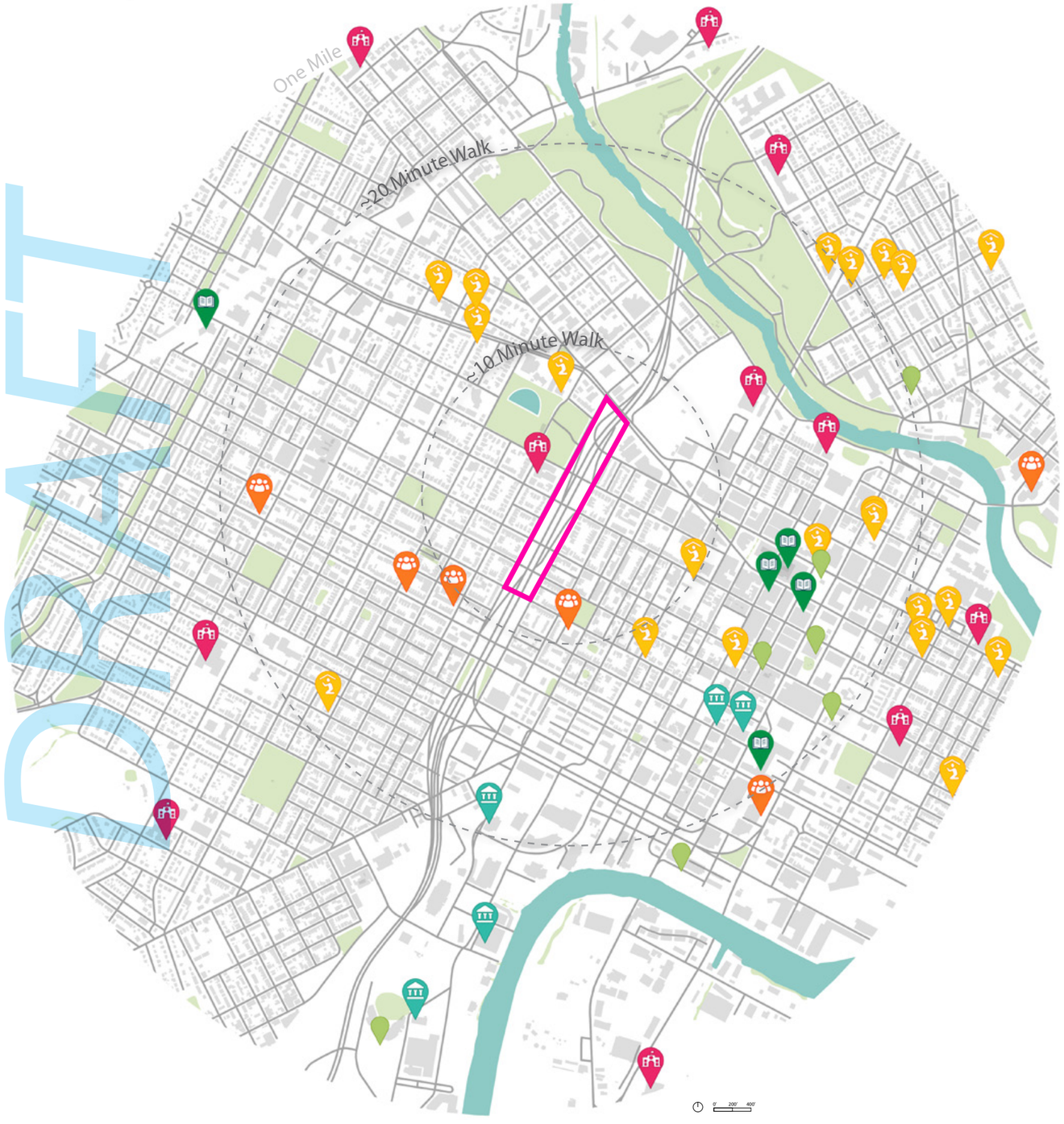
6 blocks; total study area is 12 acres excluding cross streets



The 7th Street bridge has a slope of approximately 6.75%

The 10th Street bridge is more level, and has a slope of approximately 3.65%

Existing Conditions - Community Anchors



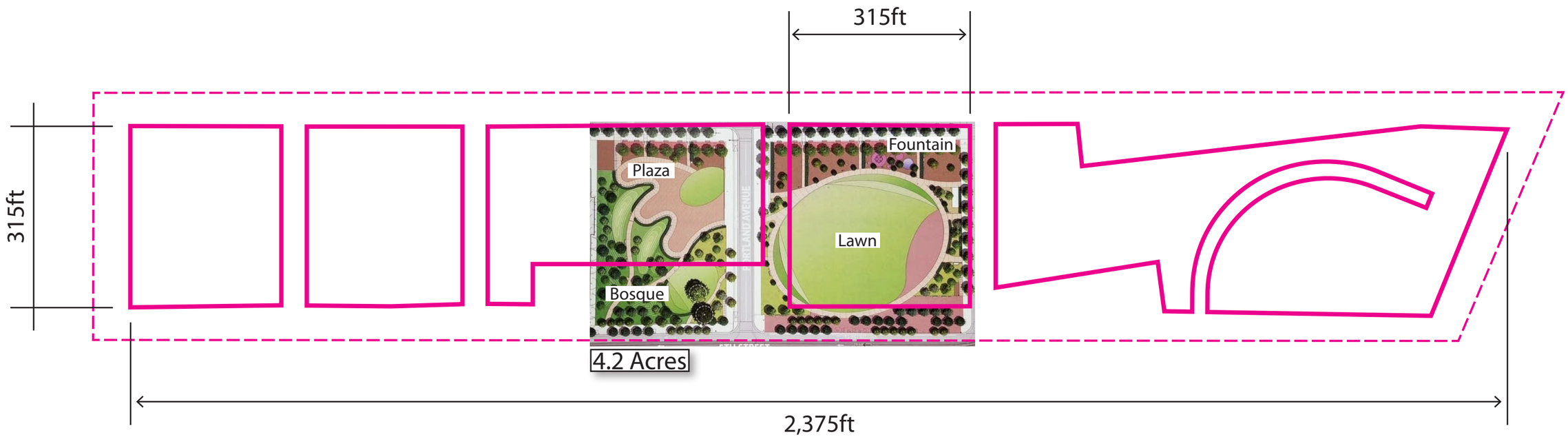
Within One Mile Of The Project Site:

- **5** Museums
- **5** Libraries
- **11** Schools
- **20+** Places Of Worship
- **4+** Community Centers
- **7+** Landmarks
- **~10** Parks

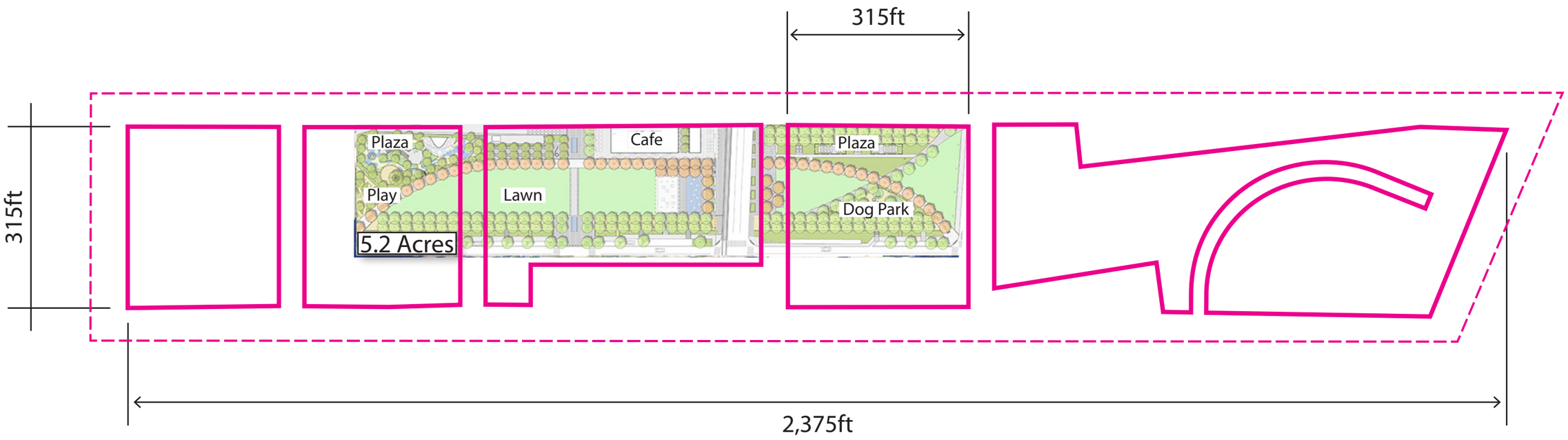
I-95 FEASIBILITY STUDY

Scale Comparisons

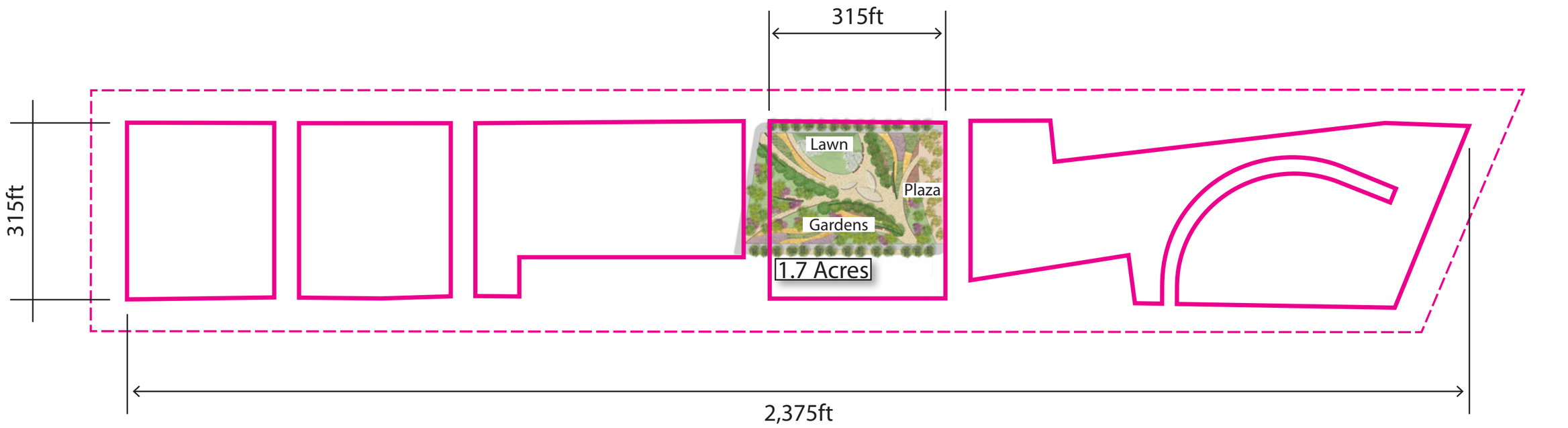
SCALE COMPARISONS | The Commons, Minneapolis, MN



SCALE COMPARISONS | Klyde Warren Park, Dallas, TX



SCALE COMPARISONS | Civic Park, Dallas, TX



I-95 FEASIBILITY STUDY

Public Process

Public Process

The vision for the future cap was drafted in collaboration with the community

Over the course of 16 months, the plan was guided by the community's desired connections, preferred programs, design feedback, and visions for Wilmington's connected future. Community preferences were collected through in person and virtual workshops, a survey, and ongoing comment collection. Each workshop built upon the last, prompting the community to respond to updates, ask questions, and ultimately select concepts to move to the next round of ideation. What results is a plan in which the community can see their efforts reflected back in the design, programs, and recommendations of the draft concept.

Let's make a vision for the future of I-95

When I picture the future of this place, I envision...

When picturing the future of this place, the community envisions ***a place for everyone*** *that is* ***safe, walkable****, and* ***colorful****. This includes* ***well-lit, well-maintained programmed areas*** *that prioritize* ***sustainability, native plantings****, places for families and community members to* ***play*** *and* ***exercise*** *comfortably, and that* ***celebrates the history of the neighborhoods****.*

A vision for the future, collaboratively drafted at Workshop 01 and 01B

Community Workshop #1 + #1B: Program Feedback (November 2021-January 2022)

The community-selected programs shaped the proposed draft design

During two advisory committee meetings and two public workshops (one in person, one virtual), members of the public were asked to vote on their preferred programs for a future cap space. Participants were given a designated number of "I support this" and "this does not belong here" votes for each category to encourage decision-making on programs. The community was largely in consensus over which programs belonged in a future park, and showed a desire for flexible lawn spaces, pedestrian plazas, play, accessibility improvements, public art, traffic calming and more. Participants were less supportive of retail, parking, ride/scooter share, and general commercial development on the cap. See the appendix for more detailed outcomes of each workshop and survey results.

Program selection and mapping desired connections at Workshop 01 in November 2021.

Community Workshop #1 + #1B: Program Feedback (November 2021-January 2022)

Trees

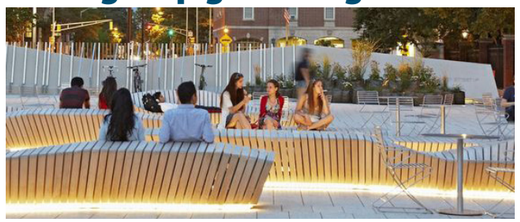
Pedestrian-only zones

Community gardens

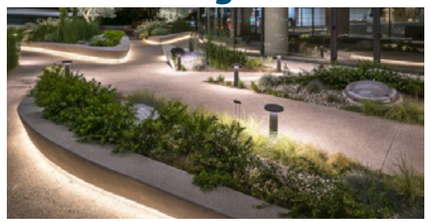
Shade

Multi-function landscape

Small group gathering



Embedded Lights:

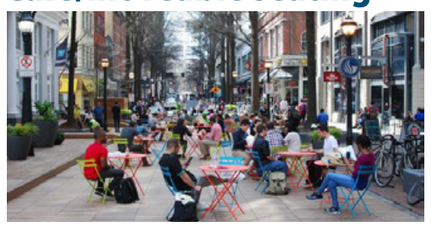


Pollinator gardens

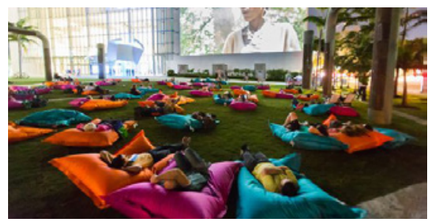
Traffic calming

Performance venue

Cafe/moveable seating

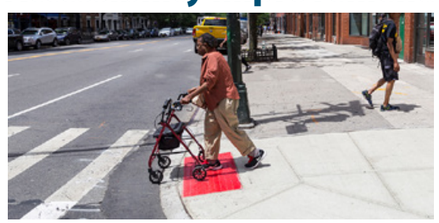


Flexible lawn



Protected bike lane

Accessibility Improvements



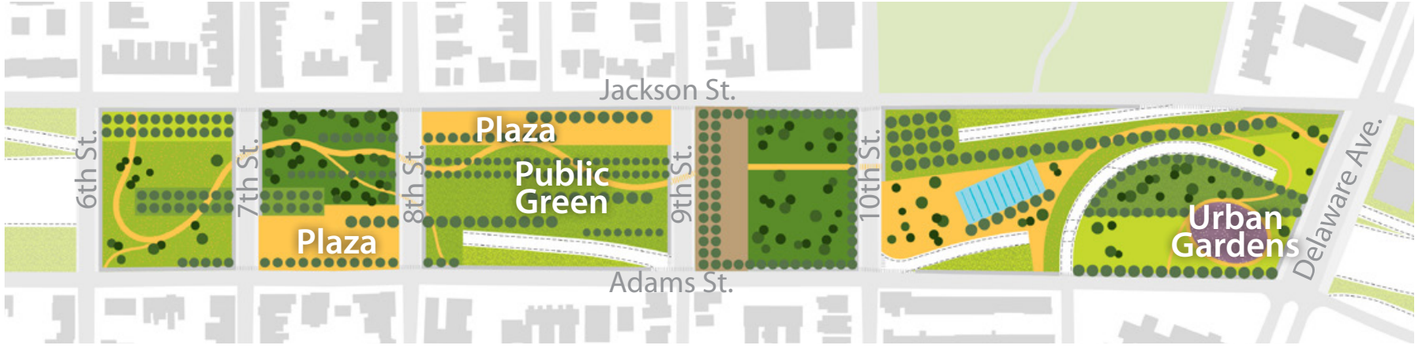
Playground

Desired program outcomes from Workshops 01 and 01B (virtual), and Advisory Committee Meeting 1

Community Workshop #2: Three Initial Ideas (April 2022)

Community members commented on the three initial ideas, preferring the concept that proposed closing streets to create a more contiguous park experience

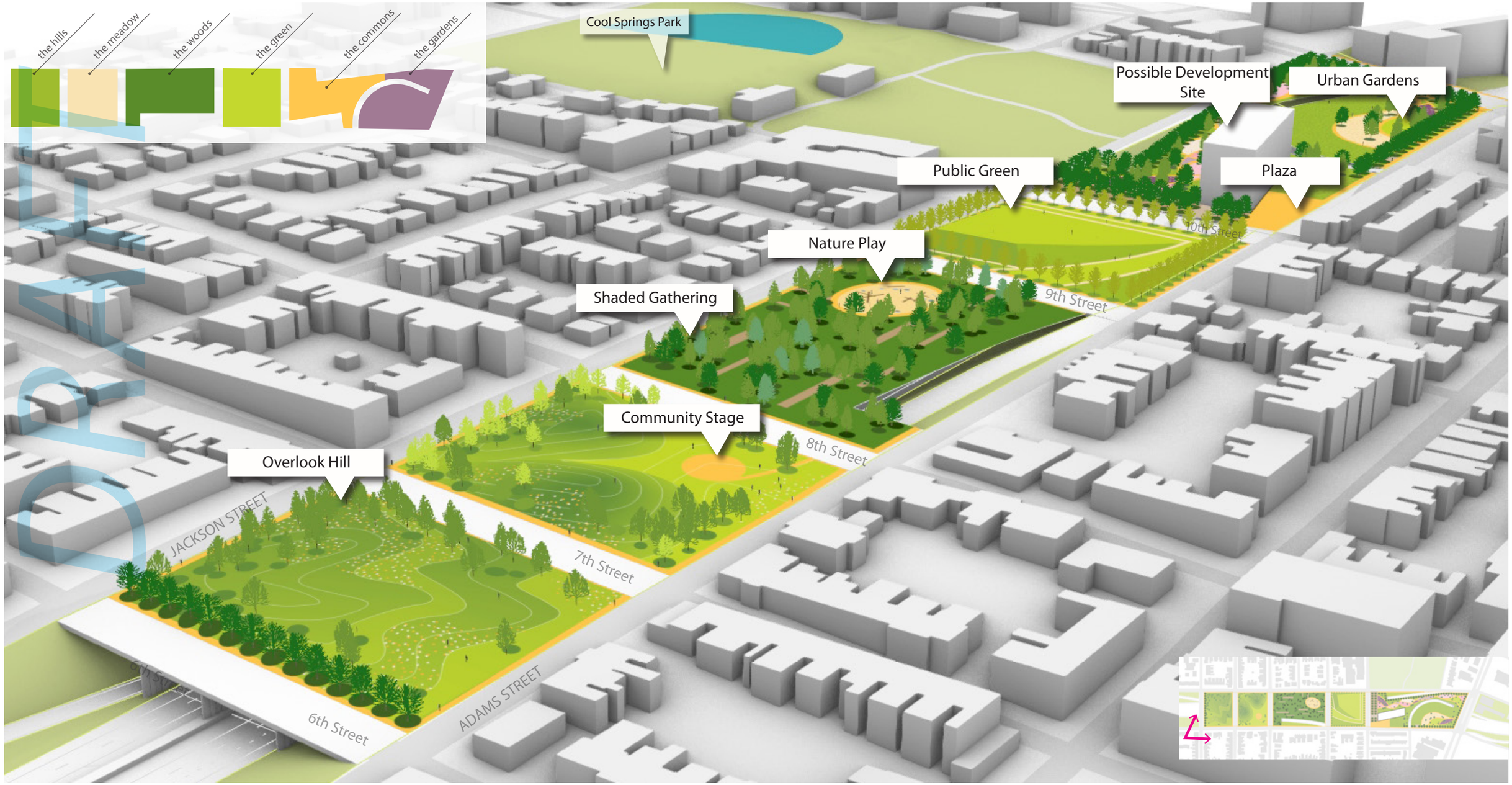
In April 2022, community members came together to comment on the three initial ideas presented. this was the first time high-level concepts had been made public. The community commented on the design, programs, and elements of the three initial ideas: Outdoor Rooms, Greenway, and The Commons. Ultimately, the community showed a preference for Greenway, which proposed closing two bridges over the Interstate to create a more contiguous public green space. There was strong community preference for capping all available space and requested that the 6th/7th Street span be included in the final concept.



Members of the public comment on three 'Early Ideas' in April 2022

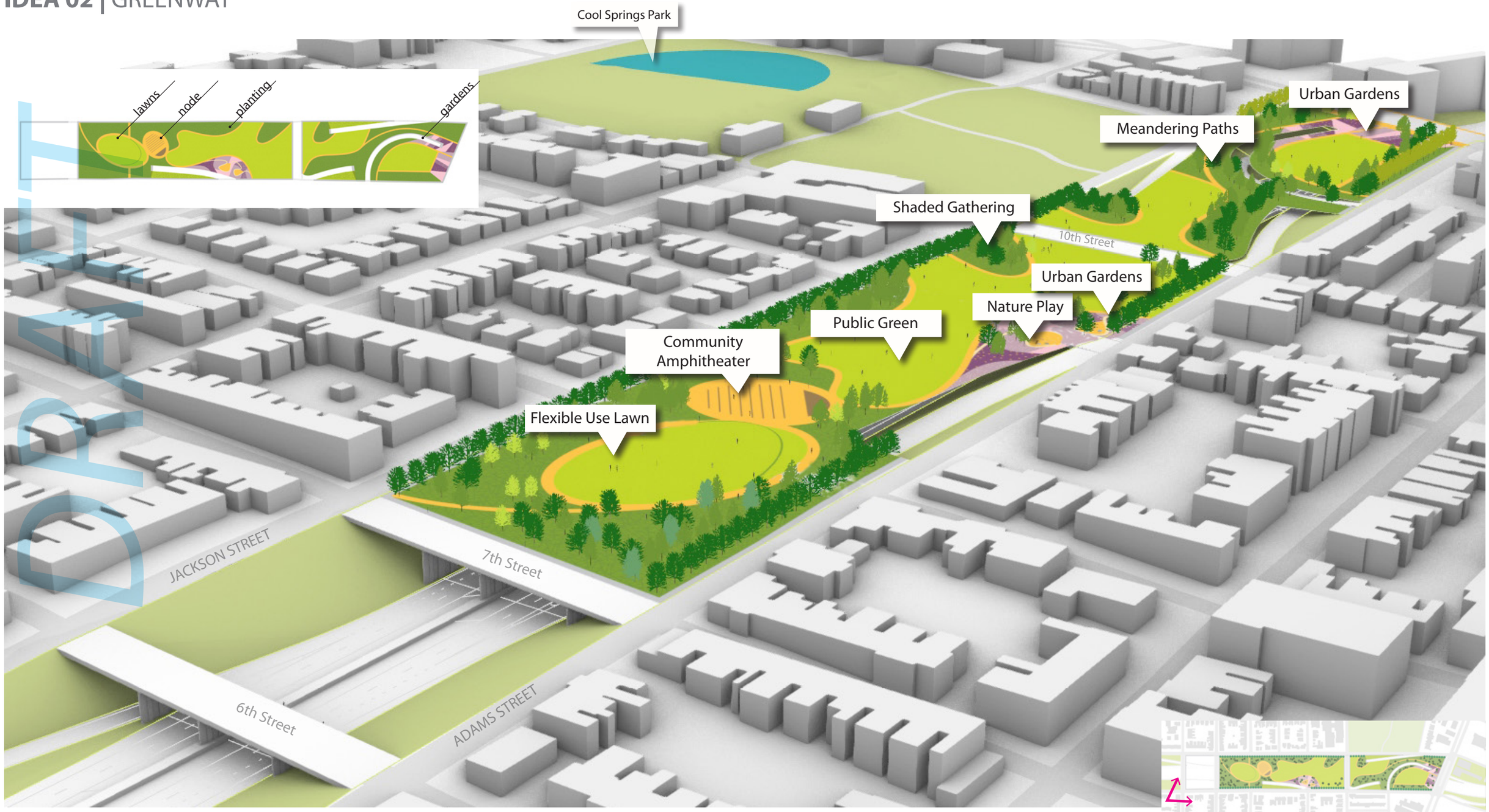
Community Workshop #2: Three Initial Ideas (April 2022)

IDEA 01 | OUTDOOR ROOMS



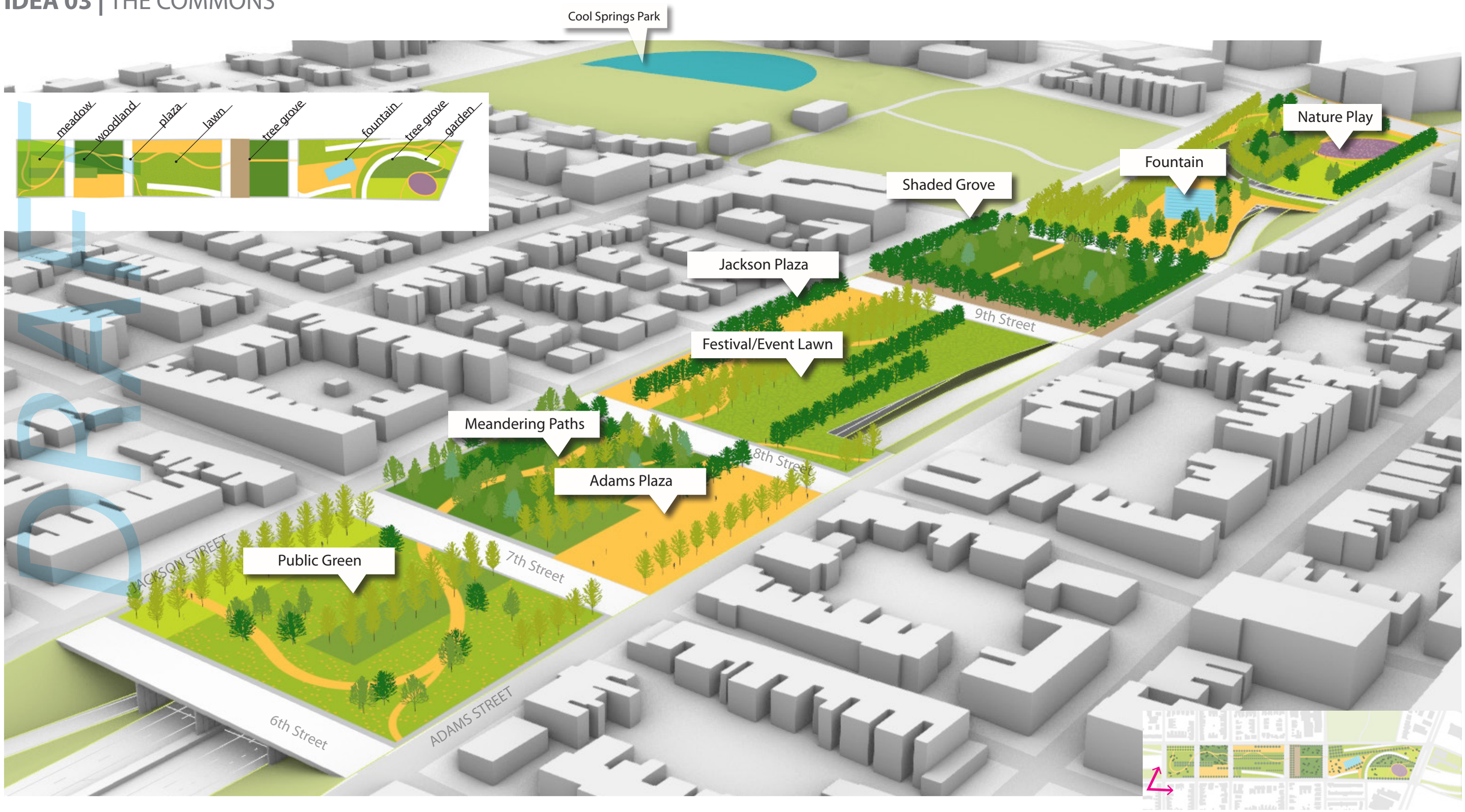
Community Workshop #2: Three Initial Ideas (April 2022)

IDEA 02 | GREENWAY



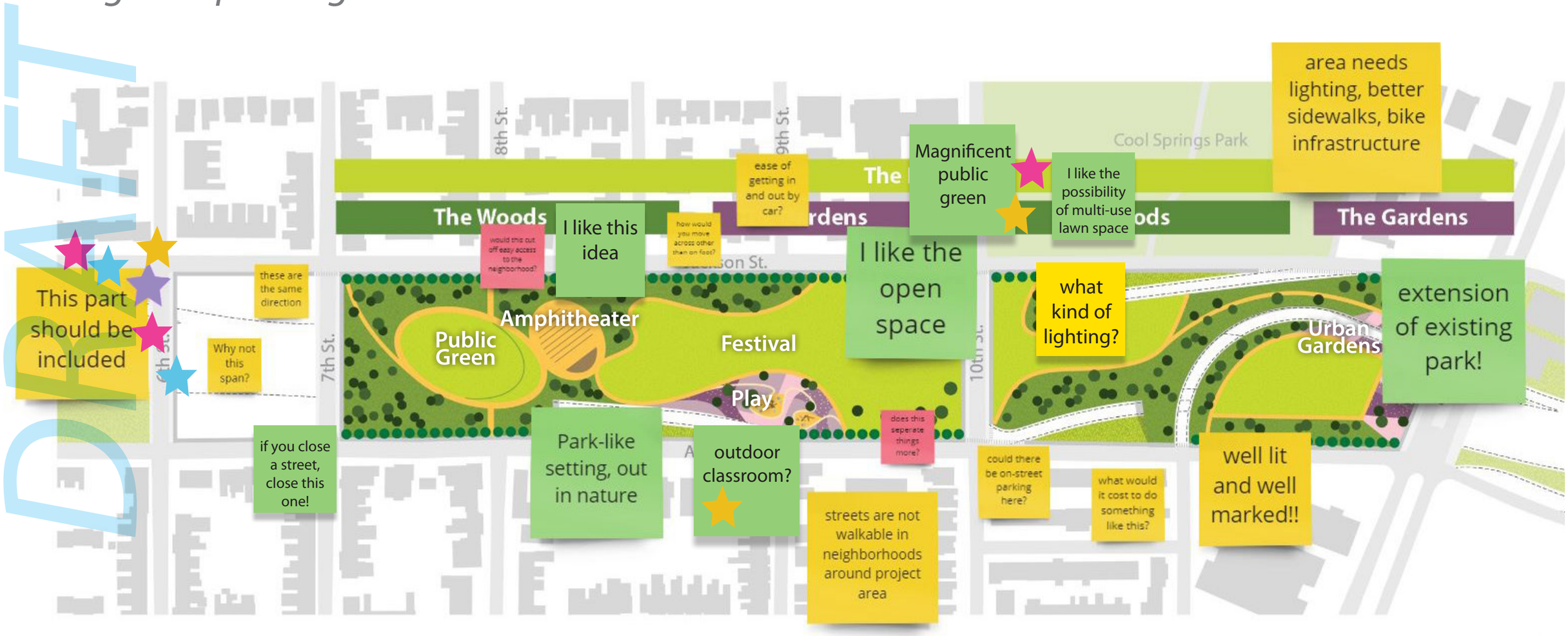
Community Workshop #2: Three Initial Ideas (April 2022)

IDEA 03 | THE COMMONS



Early Approach 2: Greenway

a contiguous public green



= *I AGREE WITH THIS COMMENT*

Feedback on Early Idea "Greenway"

Community Workshop #3: Concept Development (September 2022)

Members of the public select final programs and design elements for the preferred plan direction

Members of the public reconvened in September 2022 to comment on the three new iterations of Greenway. Each draft concept closed two bridges (7th and 9th streets), creating more contiguous public space. Concepts varied in their play and plaza locations, whether or not they included a development space, as well as varied garden formality and size. One concept included a community amphitheater, which was popular among workshop participants.

The community provides feedback on three draft concepts, September 2022

CONCEPT A

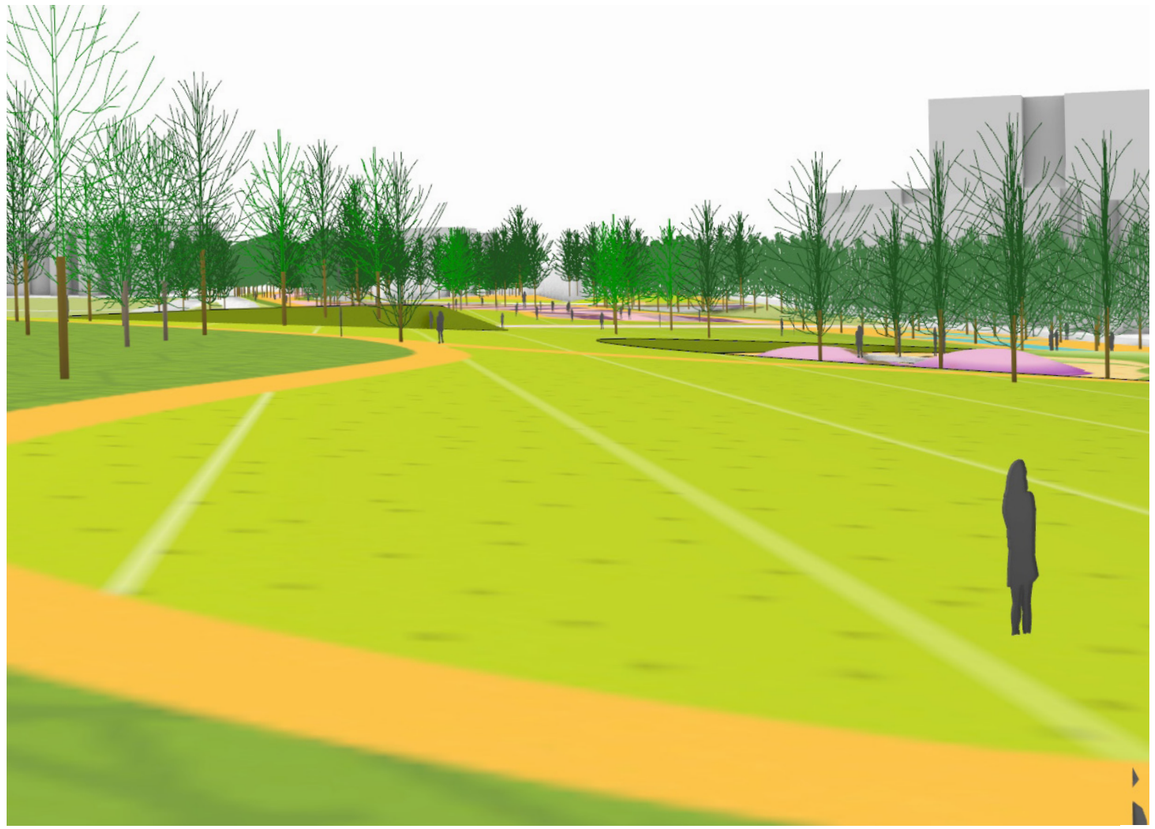
CONCEPT B

CONCEPT B1

CONCEPT A | GREENWAY + DEVELOPMENT

CONCEPT A | GREENWAY + DEVELOPMENT

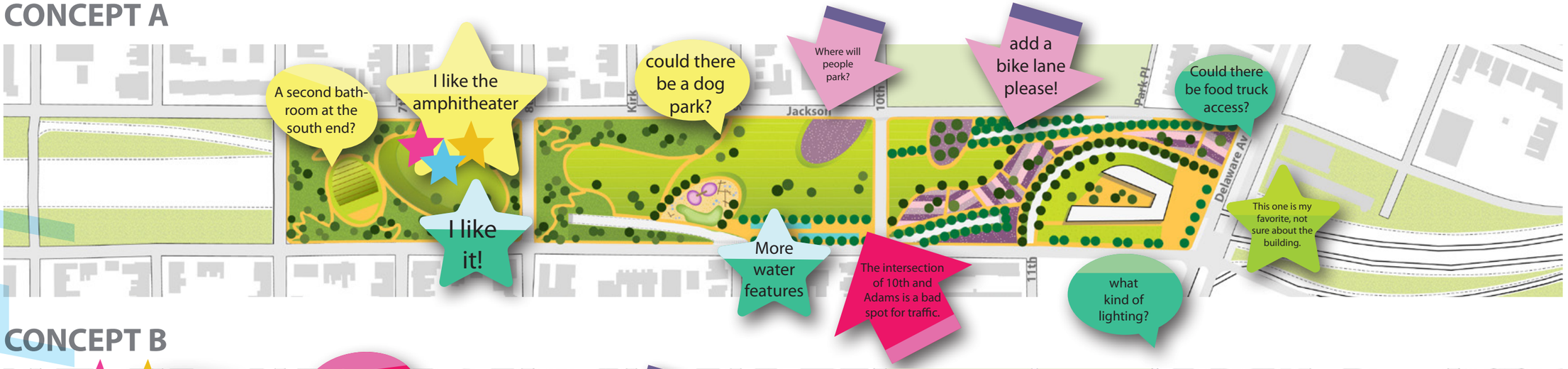
View 01: Shaded Park Setting Looking South



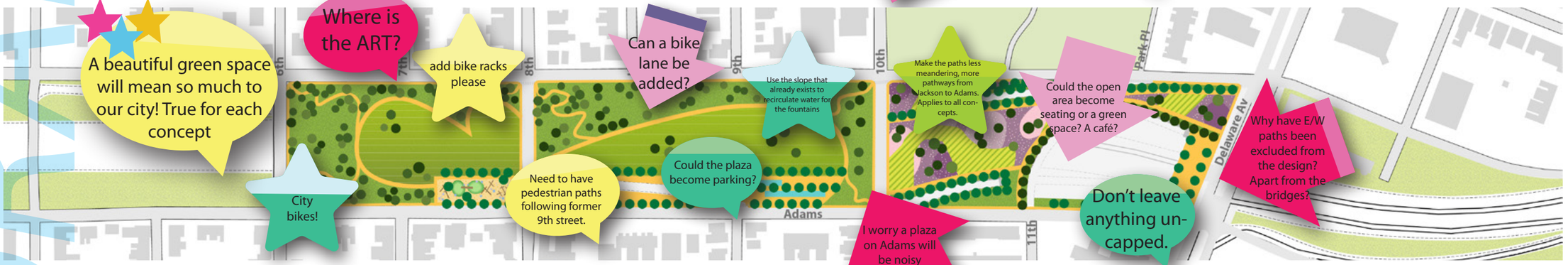
View 02: Public Green, Play, and Gardens looking North

Community Workshop #3: Concept Development (September 2022)

CONCEPT A



CONCEPT B



CONCEPT B1

Public feedback on three concepts

ADDITIONAL COMMENTS

- Concerns with **development**
- Locate convenient **restrooms**
- **Pedestrian and bike connections**
- Propose **pedestrian-friendly** street connections
- Investigate **traffic calming** on N. Jackson and N. Adams streets
- **Dog park** desired
- **Community amphitheater** good, concern with major performance venue

Key takeaways from Workshop #3, September 2022

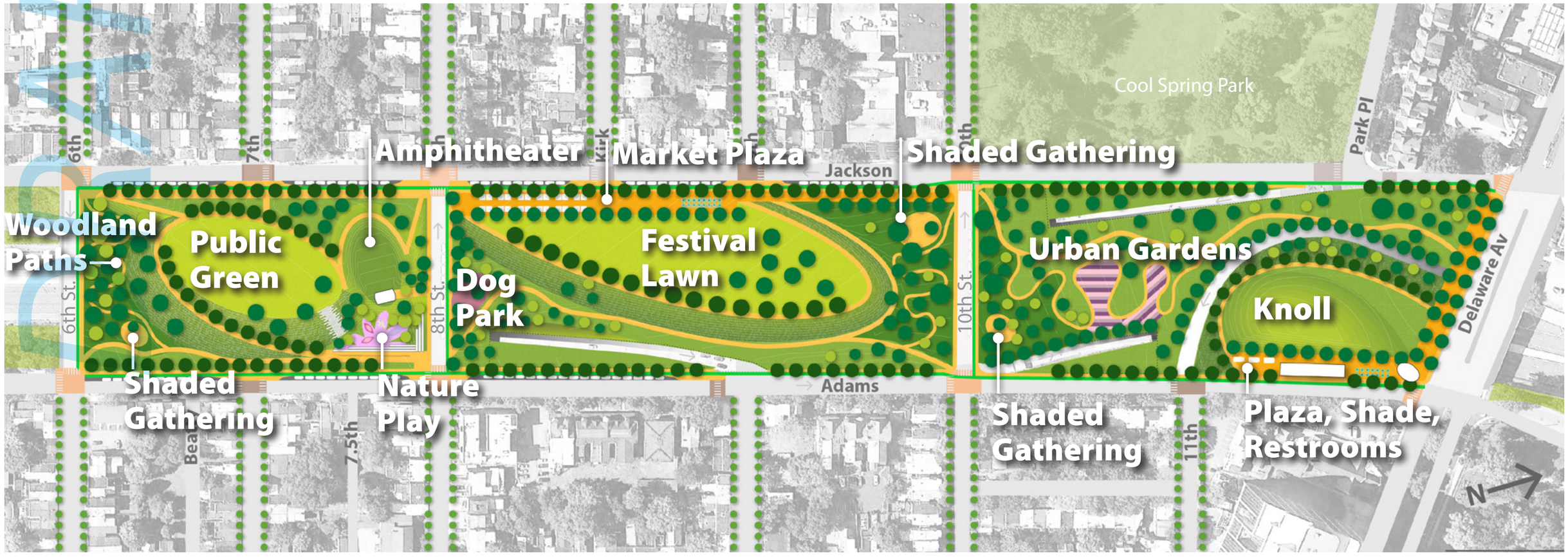
I-95 FEASIBILITY STUDY

Updated Concept

Design Concept

The future cap park provides amenities to the neighborhood as well as ecological services to the city

The final proposed draft concept pulls together the community program and design preferences into a cohesive, 15 acre vision for the future of a public park over I-95. The proposed park includes a public green, community amphitheater, nature play, gardens and shaded gathering woven into meandering woodland paths, dog play, activated plazas, and topographical changes to further emphasize the already impressive views to Downtown Wilmington and the surrounding neighborhoods. The proposed park also enhances pedestrian safety by suggesting traffic calming measures for N. Jackson and Adams Streets, as well as on the 8th and 10th street bridges. A new pedestrian plaza on Delaware Ave supports safer pedestrian connections and provides space for amenities such as food trucks. The numerous plazas provide opportunities for public art, pop-up markets, informal gathering, and rest. All together, the cap would increase area softscape by approximately over 12 acres, and add over 500 trees. This would not only improve the experience of the neighborhoods it will also contribute positively to stormwater management, reducing urban heat island effect, and providing habitat and other critical ecosystem services to the city. The plan is phaseable, and could be implemented over time, span by span, as funding becomes available.



The final proposed concept for the feasibility study includes programs desired by the community, bike connections, and traffic calming

Community-Selected Programs in the Draft Final Concept


TREES


COMMUNITY PERFORMANCE


PEDESTRIAN ONLY ZONES


ACCESSIBILITY IMPROVEMENTS


BIKE INFRASTRUCTURE


POLLINATOR GARDENS

TRAFFIC CALMING


FLEXIBLE USE LAWN


PLAYGROUND


PUBLIC ART


DOG PARK

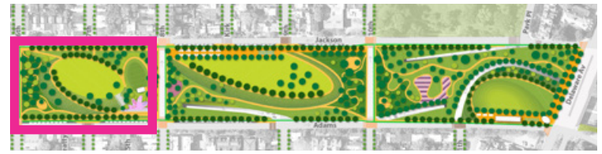

SMALL GROUP GATHERING

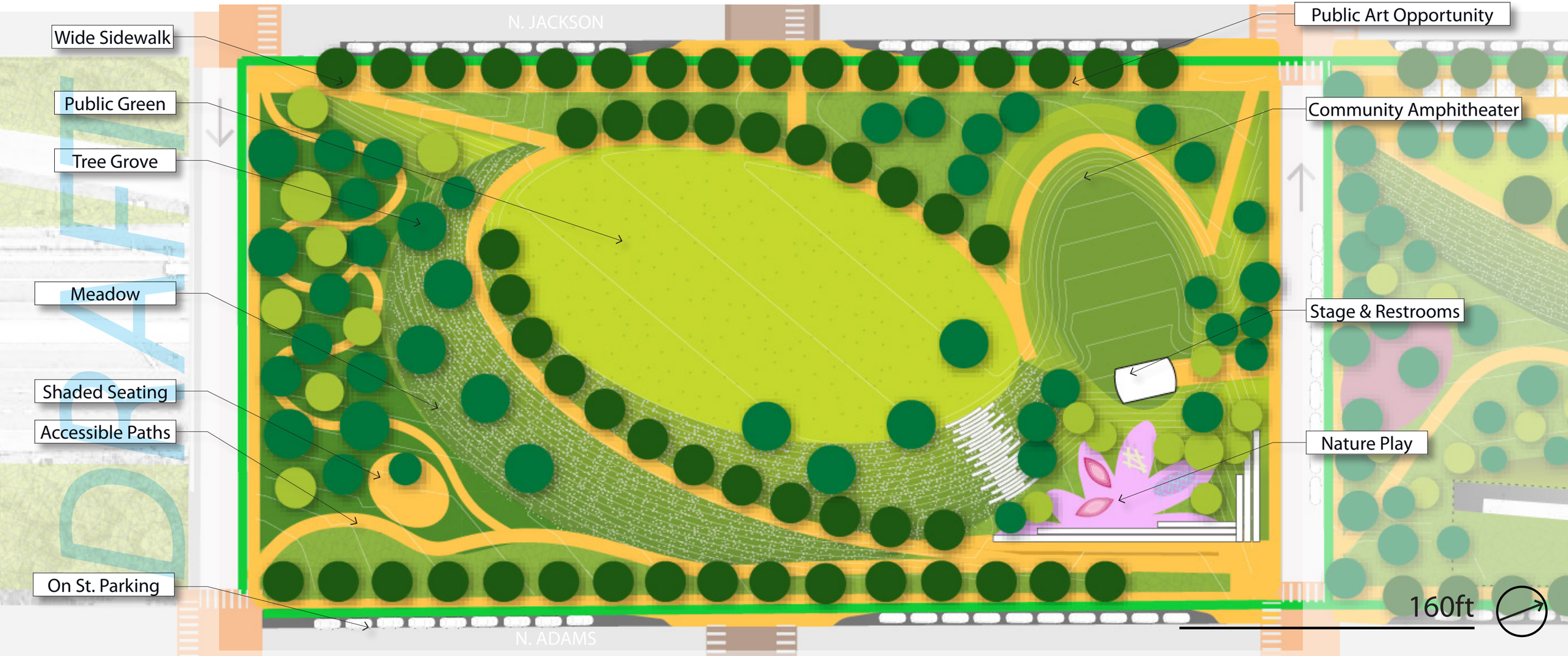

COMMUNITY GARDENS


CAFE/MOVEABLE SEATING

Programs selected by the community in the proposed plan

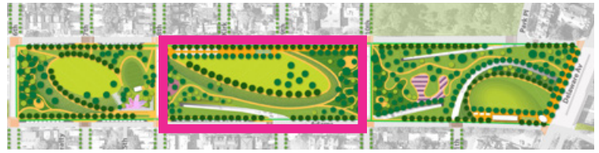
Design Concept





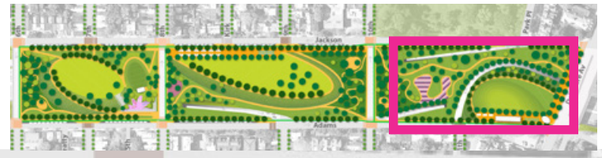
The southern-most portion of the proposed cap park features meandering, accessible public paths through a loose woodland tree canopy. Views to downtown can be seen from both the public green and the community amphitheater, which is suitable for small group gatherings and afternoon performances. The nature play is situated near the stage and restroom of the amphitheater, while enhanced traffic calming measures and street parking on Adams slows traffic and makes safer pedestrian connection between the neighborhoods and the park.

Design Concept



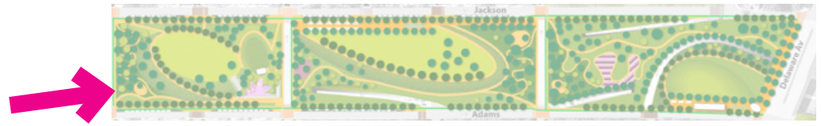
The central span of the proposed cap features a festival lawn, market plaza for pop up events, interactive water feature, dog park, and shaded seating. The plazas are also opportunities to showcase public art throughout the park. The off ramp from I95 to Adams St is screened by a subtle land form and planting, allowing park visitors to look from the festival lawn to downtown with uninterrupted greenery.

Design Concept



The northernmost span, from W. 10th St. to Delaware Ave is activated by civic spaces and more passive nature and landscape destinations. Winding garden paths bring visitors from 10th street toward Delaware, where plazas with shade, food trucks, and park support anchor the site at the intersection of Adams and Delaware. The Knoll allows visitors to get a new view of the park and the city, and creates a signature gathering space at the northern end of the cap.

Design Concept



Looking North-West toward Cool Spring

Design Concept

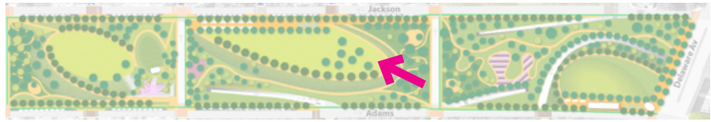
Shaded Park Setting Looking North at Adams

Design Concept

Design Concept

Shaded Park Setting Looking North at Downtown

Design Concept



Festival Lawn Looking South

Design Concept

Looking South Over Delaware Ave

I-95 FEASIBILITY STUDY

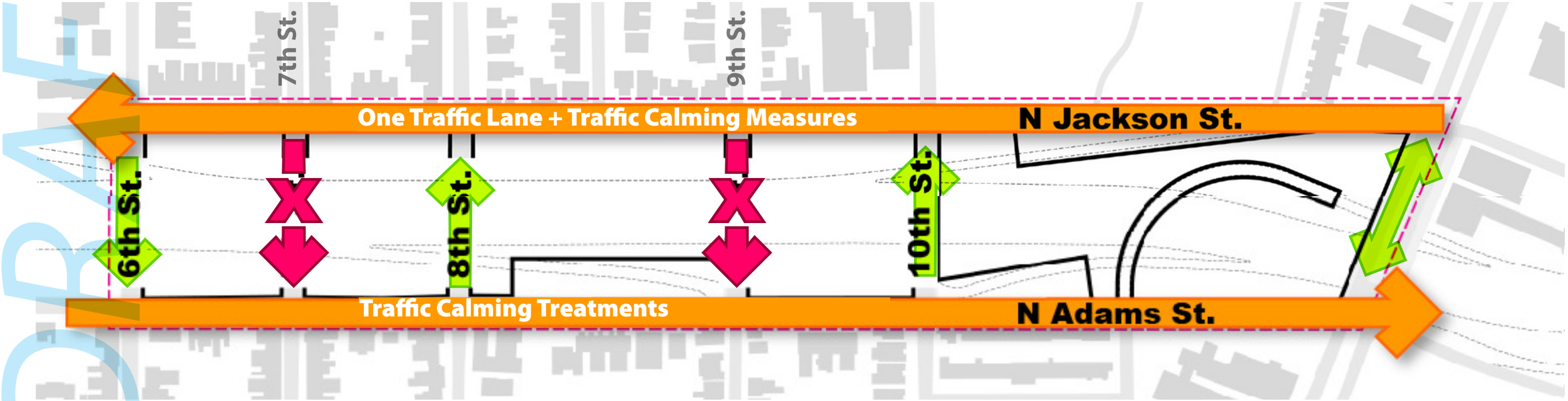
Circulation

+ Traffic Impacts
+ Road Diet / Traffic Calming
+ Parking
+ Bikes

September 2022 Traffic Analysis: Street Closure Feasibility

Closing two bridges over I-95 within the project site and adding traffic calming measures will not have adverse impacts on traffic flow

Traffic analysis found minimal impact to Level of Service if N. Jackson Street were reduced to one drive lane. Reducing N Jackson to one lane and adding traffic calming measures reduces speed of south-bound traffic near Cool Spring Park, William Lewis Elementary, adjacent residences, and the proposed cap. The study proposes similar traffic calming treatments on N Adams St. Based on preliminary analysis, with minimal impacts to Level of Service with the addition of traffic calming measures, however a more detailed analysis is still necessary. Traffic analysis confirmed that minor signal timing modifications would mitigate any impact to level of service if any two bridges were closed (W 7th St. and W 9th St. shown below). Wilmington emergency response services participated in this planning and does not anticipate a negative impact on response times if two bridges in the project area are closed to vehicular traffic.



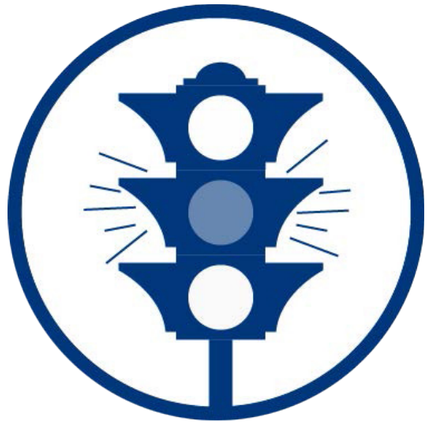
Traffic Calming - FHWA Methods

Bicycle Lanes

Leading Pedestrian Interval

Crosswalk Visibility Enhancements

Walkways *[On the I-95 Side]*



Yellow Change Intervals

Lighting

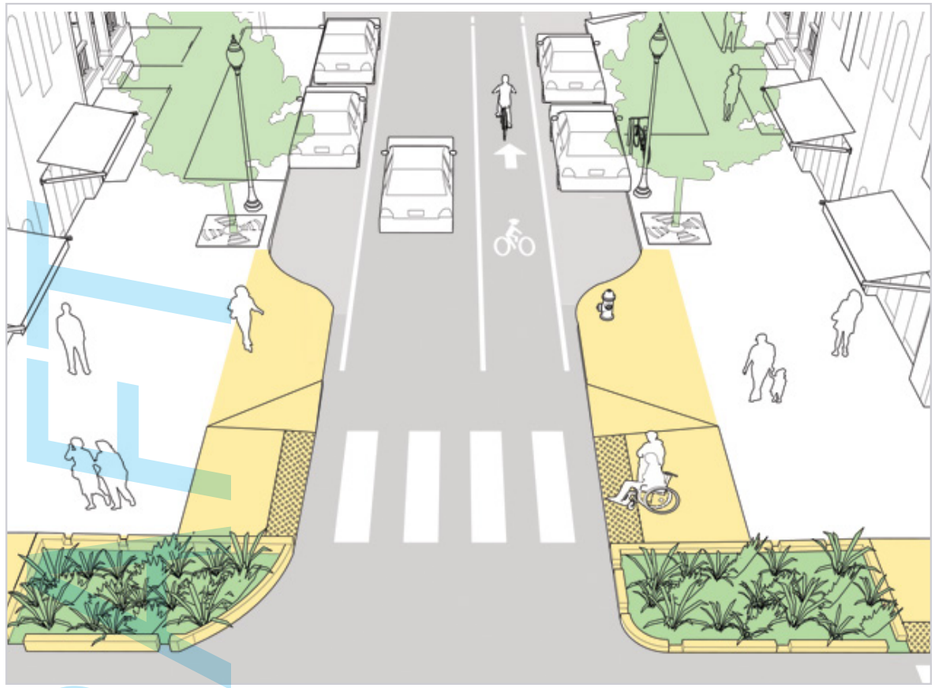
Road Diets (Roadway Configuration)

Speed Safety Cameras

Road Safety Audit

All Images: FHWA

Traffic Calming: Road Diet (North Jackson / North Adams)



Bump Outs

Narrowing Streets

Raised Intersections

On Street Parking

Chicanes

All Images: National Association of City Transportation Officials

Traffic Calming: Bike Infrastructure

Raised Bike Lane

Bollards

Traffic Calming: Raised Intersection in Wilmington

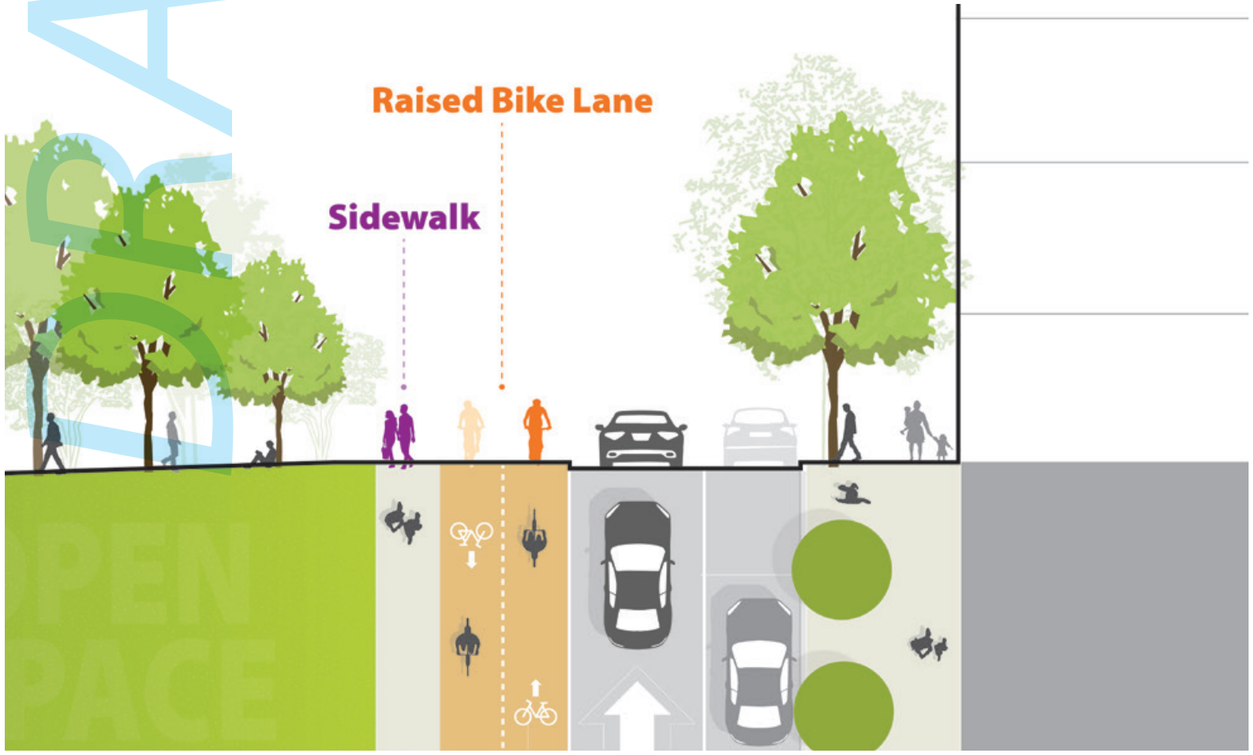
Raised cross walk in Wilmington

Road Diet on North Adams/North Jackson

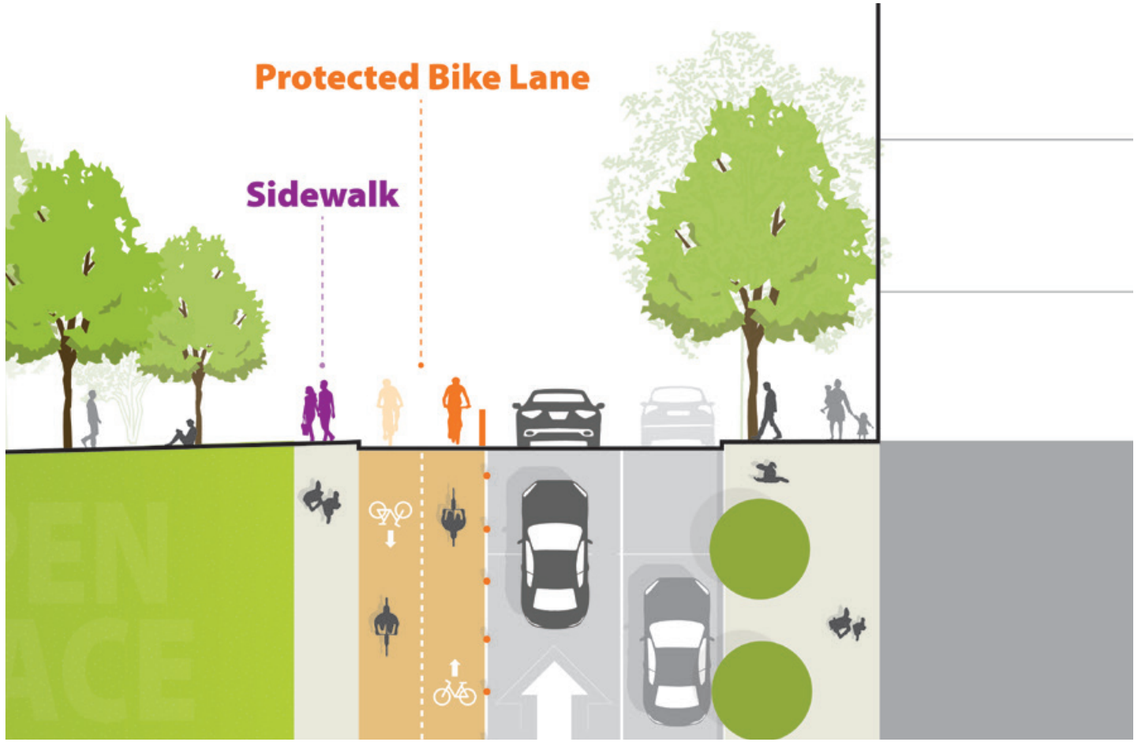
Traffic calming and bike infrastructure methods can be phased in over time, as the cap is built.

Today, both North Jackson and North Adams are busy streets used to access I-95. Both streets are three lanes: two for travel and one for street parking. Community members have reported high speeds from cars traveling on Jackson and Adams due to their wide lanes, straight sight lines, and, on Jackson, downward slope. Shown here are conceptual sections that transition both Jackson and Adams to more pedestrian and bike friendly streets with bike lanes, improved sidewalks, and traffic calming measures.

Street condition with raised bike lane in park: one travel lane, two street parking lanes.



Street condition with raised bike lane: one travel lane, one parking lane.



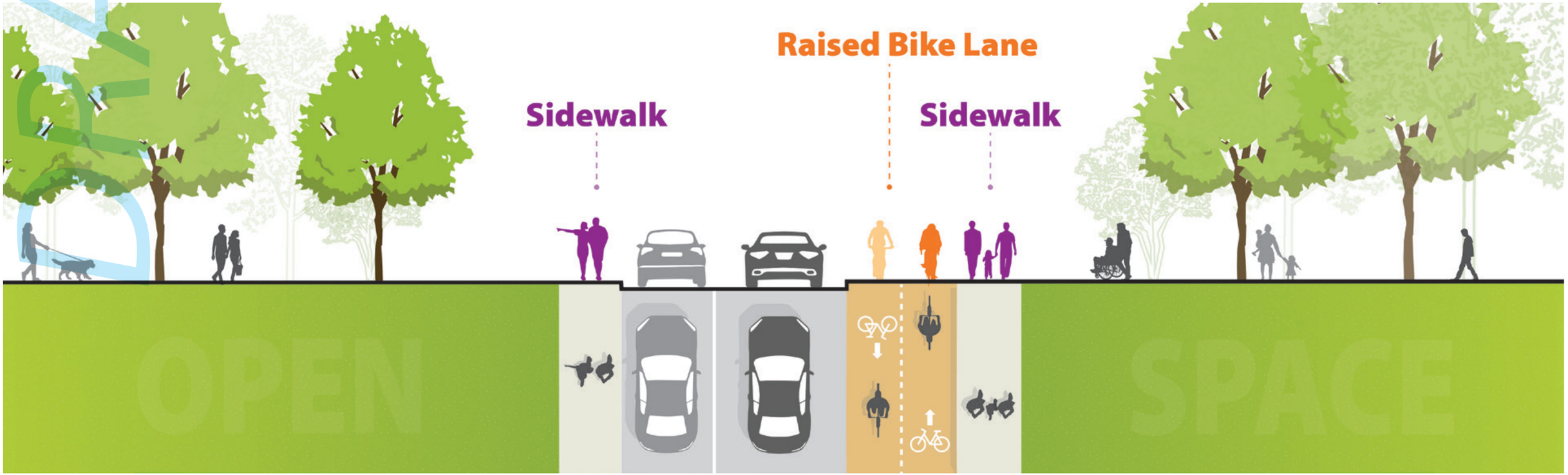
Street condition with bike lane: one travel lane, one parking lane.

Road Diet on Cross Streets (6th, 8th, 10th)

Cross streets connect pedestrians, bicyclists, and cars East-West across the cap

The cross streets that remain open in the plan (6th, 8th, and 10th streets) connect neighborhoods east-west across I-95 through the cap. Within the project site, streets that remain open to vehicles will receive bike lane and pedestrian improvement treatments to ensure they are functional multi-modal connections for all users.

6th Street condition: one travel lane, one parking lane

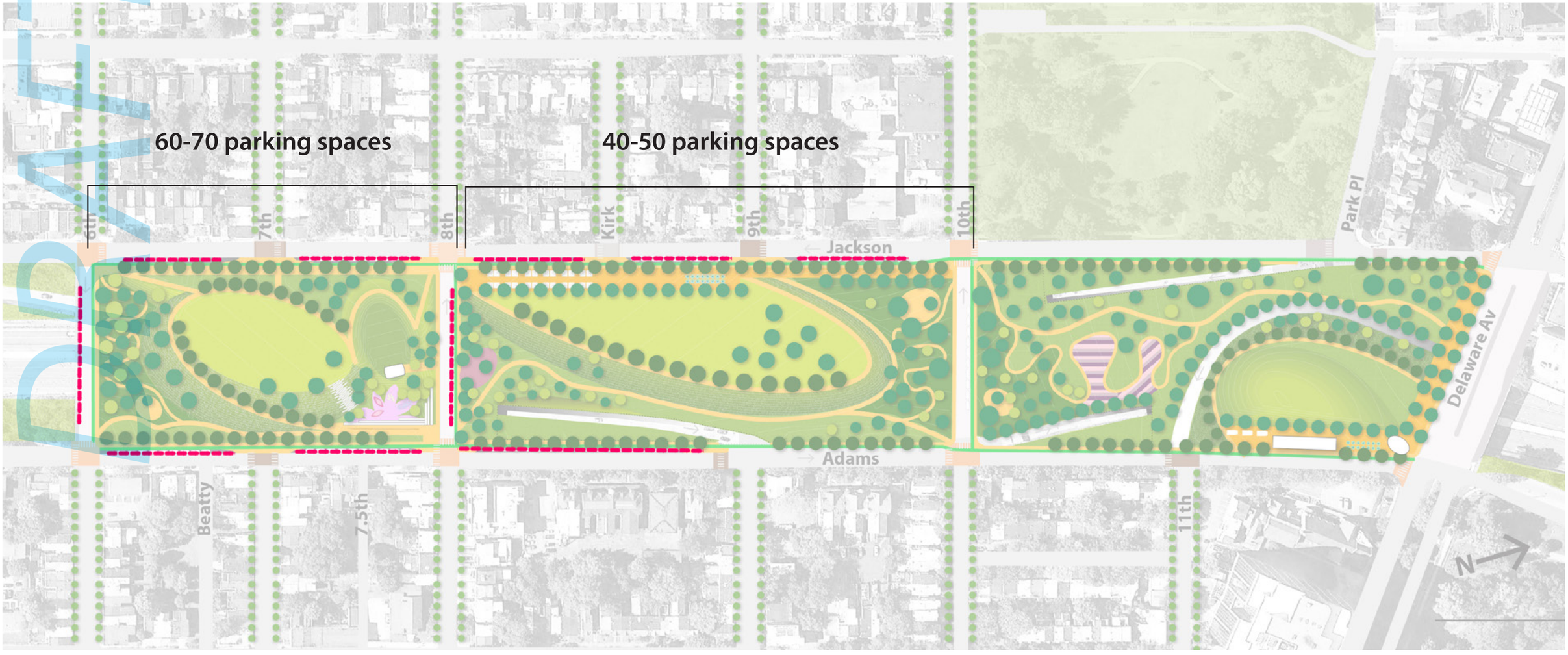


W. 8th and 10th Street conditions: one travel lane, one parking lane.

Parking

The study area and proposed public space over I-95 could reasonably accommodate +100 new parking spaces

Adding sufficient parking on the cap-side of the proposed park on both North Adams and North Jackson streets is feasible. The addition of spaces adjacent to the cap park would be suitable for daily, non-event visits to the park. Narrowing both Jackson and Adams streets and designating new on-street parking creates +100 new parking spaces, depending on how far north on-street parking is proposed within the study area. A detailed parking study is needed to determine event parking scenarios.



I-95 FEASIBILITY STUDY

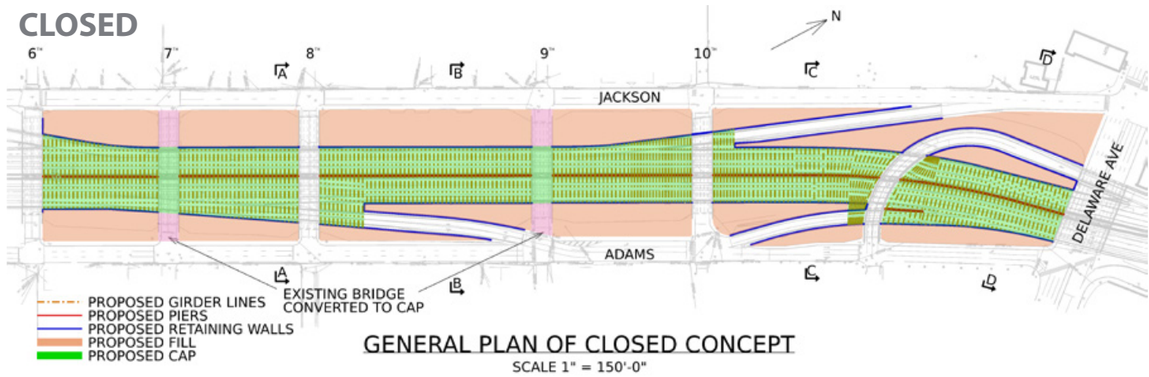
Structural

Cap Structural Considerations

Two methods of constructing the deck structure were explored

The project team explored two options for constructing the deck: a "closed" scenario and "open" scenario. The Closed option, shown right, establishes more filled area, or terra firma, resulting in less of the park is on a cap structure. The Open option maintains the current I-95 driving experience, filling only to the edge of existing piers. Neither the "closed" or "open" option will reduce the existing lane layout on I-95.

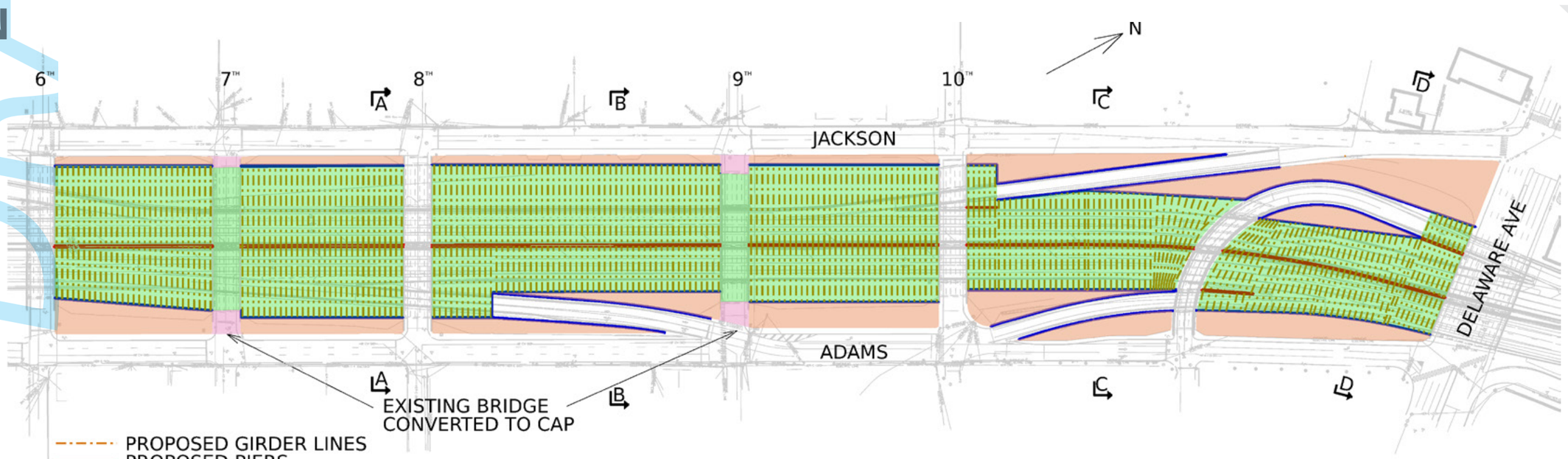
CLOSED



GENERAL PLAN OF CLOSED CONCEPT

SCALE 1" = 150'-0"

OPEN

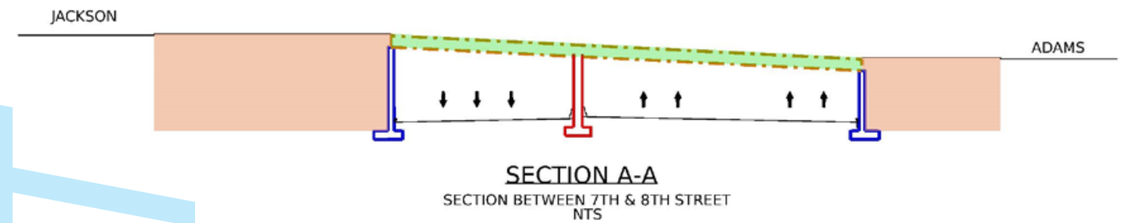


GENERAL PLAN OF OPEN CONCEPT

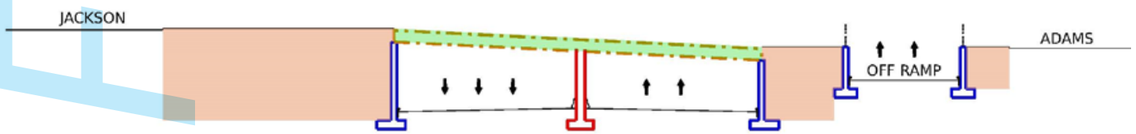
SCALE 1" = 150'-0"

Cap Structural Considerations

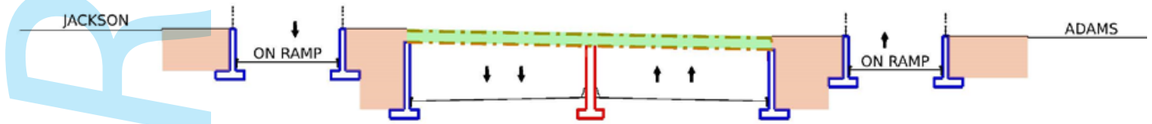
CLOSED



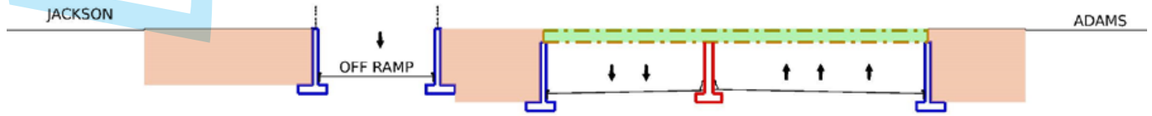
SECTION A-A
SECTION BETWEEN 7TH & 8TH STREET
NTS



SECTION B-B
SECTION BETWEEN 8TH & 9TH STREET
NTS

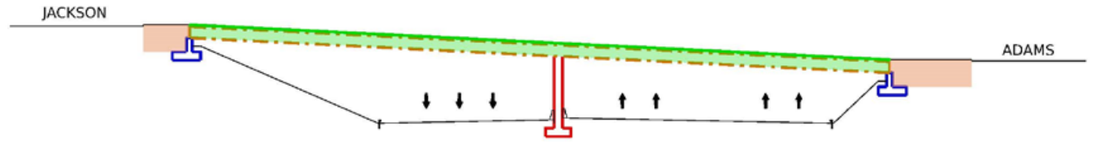


SECTION C-C
SECTION BETWEEN 10TH & 11TH STREET
NTS

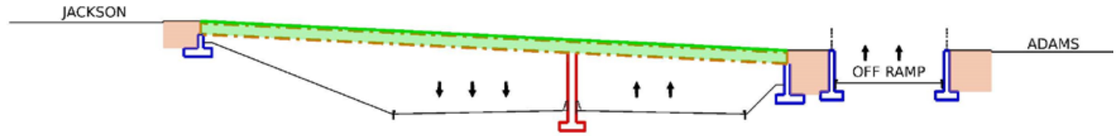


SECTION D-D
SECTION BETWEEN 11TH STREET & DELAWARE AVENUE
NTS

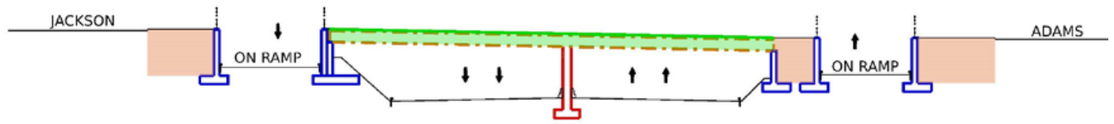
OPEN



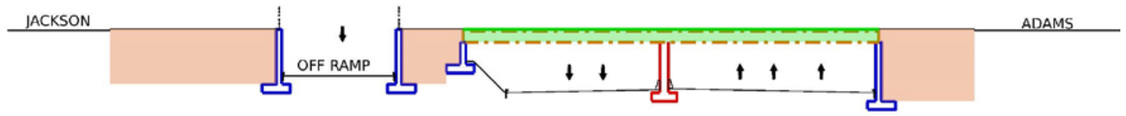
SECTION A-A
SECTION BETWEEN 7TH & 8TH STREET
NTS



SECTION B-B
SECTION BETWEEN 8TH & 9TH STREET
NTS



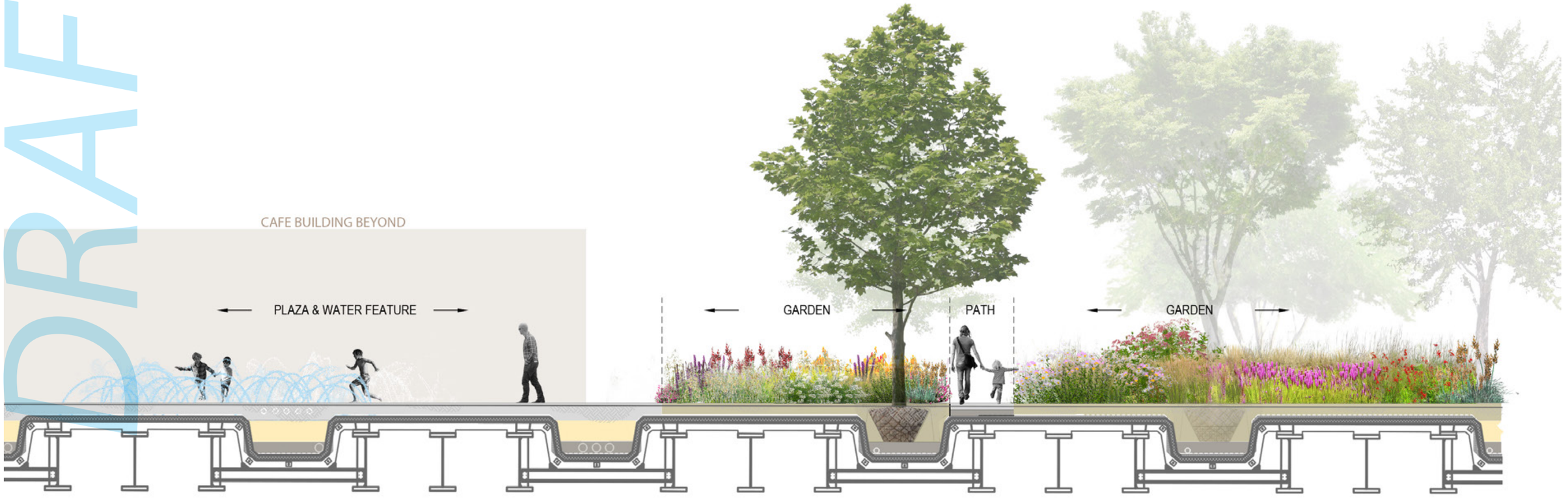
SECTION C-C
SECTION BETWEEN 10TH & 11TH STREET
NTS



SECTION D-D
SECTION BETWEEN 11TH STREET & DELAWARE AVENUE
NTS

Concept sections illustrate two methods for creating a cap: "closed" where the space between Adams/Jackson and I95 is filled, and "open", where it is not.

Cap Structural Considerations



Conceptual cap structure design. Deeper trenches allow for larger plantings, such as trees, over the structure.

I-95 FEASIBILITY STUDY

Conclusion

Conclusion

Guided by the community's vision, the proposed cap park unites the neighborhoods divided by the construction of I-95. The future park is a place to celebrate history, while looking to Wilmington's future

The new cap over I-95 in Wilmington will become a world class, civic park while establishing a community-oriented space for life in the surrounding neighborhoods to unfold. The cap park, spanning approximately 15 acres over the interstate, provides a wide range of programs from festival and small performance space, to small group gathering, cafe amenities, play, gardens, and pop up market space.

Guided by the public's vision for the future space, the park will stitch together the communities divided by the construction of I-95 and provide new life to an area that is today dominated by cars. The sloping topography of the cap park utilizes the existing elevation change between North Jackson and North Adams streets to showcase views of Downtown Wilmington while simultaneously forming distinct destinations within the park.

The result of the 16-month feasibility study process is a vision for the future that creates an amenity for the neighborhoods in Wilmington. It is a place to gather, to celebrate, and to connect. It will be an active, year-round hub of Wilmington life that will serve generations of residents and visitors alike.

I-95 FEASIBILITY STUDY

Appendix

I-95 FEASIBILITY STUDY

Magnitude of Cost

Magnitude of Cost

The Wilmington I-95 Cap Feasibility Study is primarily focused on translating community input into a physically plausible concept capable of construction. This study determined the parameters of the project, including the gross area of 15-acres, arrayed across six city blocks.

This feasibility study is the first in a series of increasingly detailed technical studies and design documentation phases to bring greater clarity, features, and implementation into focus. Referencing similar deck parks over federal and state highways points the way toward identifying a likely range for projecting a magnitude of cost. By using these four projects as a basis of comparison, the estimated order of magnitude cost can be calculated on a cost per acre (in 2022 dollars) for the Wilmington concept, set within a range, modified to address the nuances of conditions specific to each phase. The three-part phasing is presented as an option if necessary to adjust to a funding stream likely to involve federal, state, local and other sources.

PROJECT NAME	CITY, STATE	HIGHWAY	ACREAGE	COST (Design and Construction) **(2022 Dollars)**	COST/ACREAGE	YEAR	NOTES
Klyde Warren Park	Dallas, TX	TX 366	5.2	$182M	$35M/ac	2012	One of the best known deck parks, includes an 11,000sf restaurant and upscale bar
Klyde Warren Park Phase 2.0	Dallas, TX	TX 366	1.7	$57M	$33M/ac	2024	Second phase includes a 24,000sf reception and event space on two levels, and an additional 37,000sf lawn, all on two adjacent blocks west of the phase 1.
Southern Gateway Park	Dallas, TX	I-35	5	$172M	$34M/ac	2024	First phase well under construction; Aimed at community healing of an underserved community
Park at Penn's Landing	Philadelphia, PA	I-95	12	$350M	$29M/ac	2025	A phased project with 5.2-acres over the interstate and the balance over substantial waterfront fill, including a skating rink, cafe, and restaurant
Wilmington, DE I-95 Park Phase 01	**Wilmington, DE**	**I-95**	**4.6**	**$93M-$105M**	**+$21.9 to 24.7M/ac**	**2027**	**Phase 01: between W. 6th Street and W. 8th Street**
Wilmington, DE I-95 Park Phase 02	**Wilmington, DE**	**I-95**	**5.7**	**$117M-$132M**	**+$20.5 to 23.1M/ac**		**Phase 02: between W. 8th Street and W. 10th Street**
Wilmington, DE I-95 Park Phase 03	**Wilmington, DE**	**I-95**	**5.2**	**$140M-$158M**	**+$26.8 to 30.3M/ac**		**Phase 03: between W. 10th Street and Delaware Ave**

Implementation

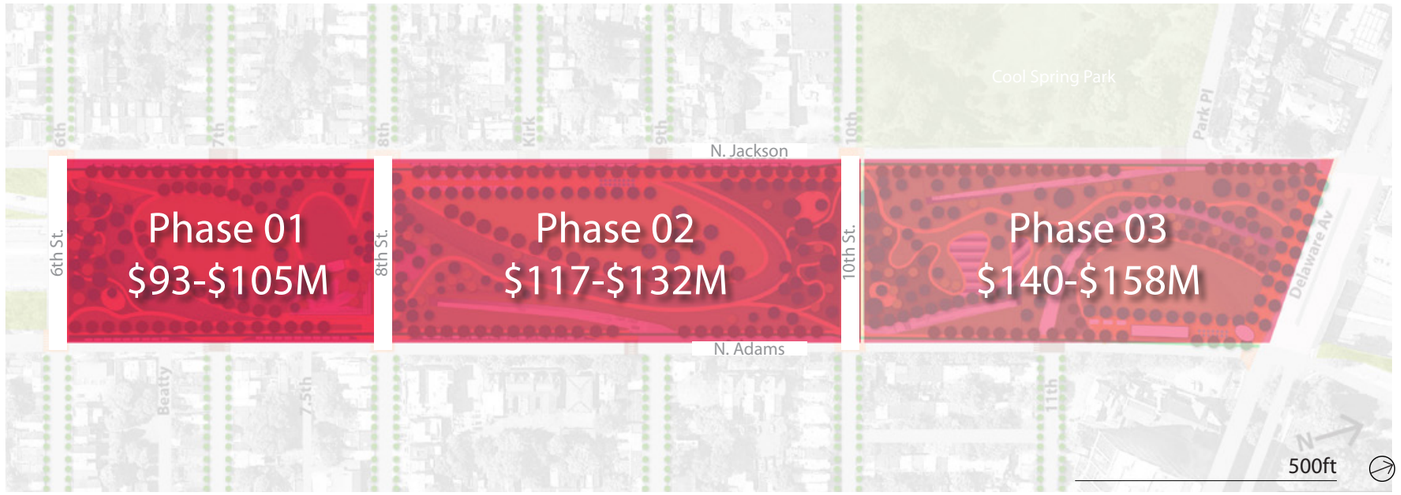
The project phasing responds to community input and Advisory Committee guidance to commence implementation at 6th Street, moving northward to Delaware Avenue, acknowledging that the neighborhoods closest to 6th Street have the most to gain from this new public realm.

The graphic below illustrates a preliminary phasing strategy of constructing the project between 6th and 8th as the first phase, and second phase from 8th to 10th streets. This follows the logic that 6th, 8th and 10th streets remain open throughout the construction effort, with primary activities occurring between them. The final northernmost phase is between 10th and Delaware Avenue, including two existing ramps, and the 11th Street flyover offramp to Downtown.

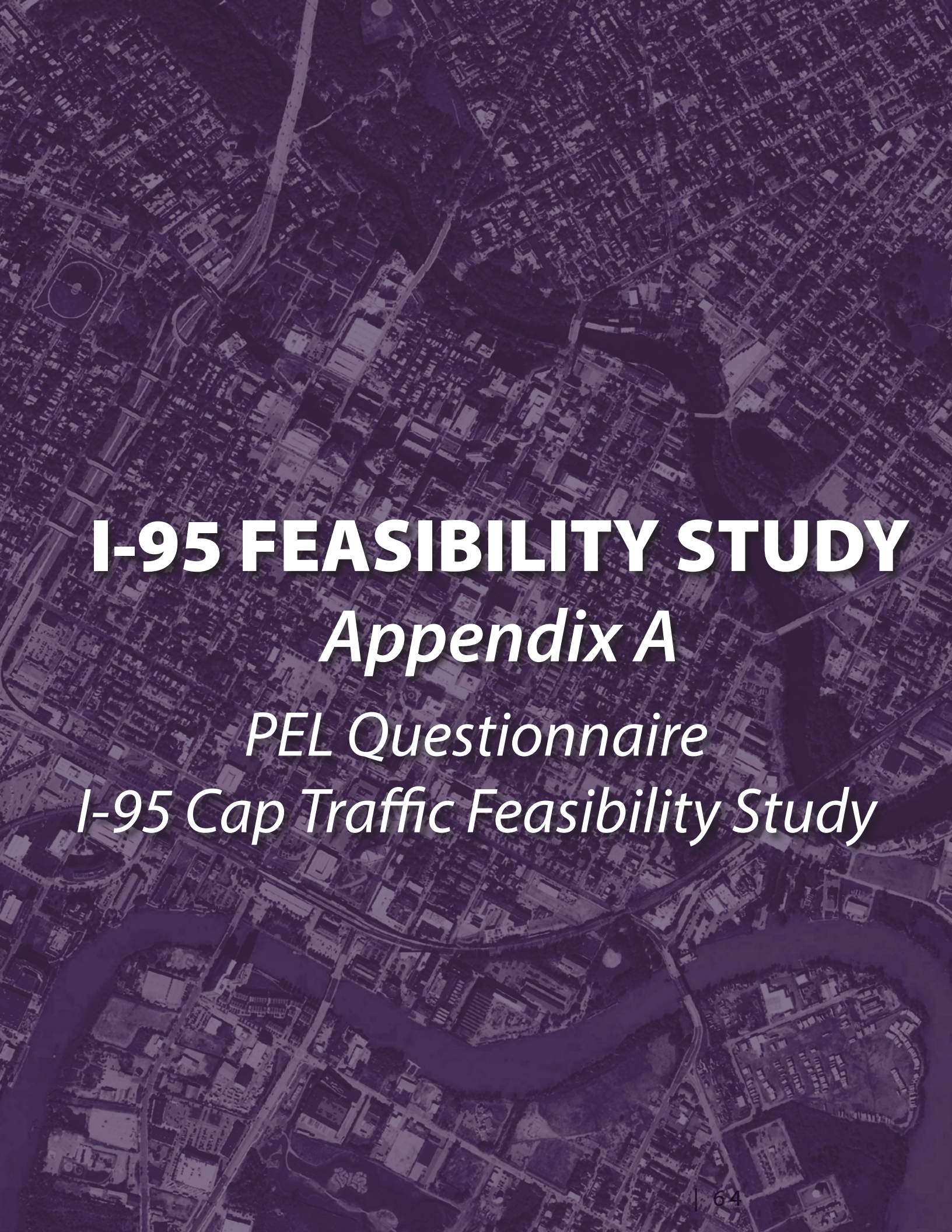
The two remaining vehicular bridges through the project sites create logical phasing boundaries for cap implementation. The community expressed a strong desire for park amenities at the southern (plan-left) portion of the site, shown in red. The first phase may be the least expensive due to the lower complexity, having no on- or off-ramps. This southernmost cap would provide much-needed green space and park amenities for the surrounding community. Following phase one, the plan proposes moving north, next completing the middle portion of the cap, from W 8th street to W 10th street, followed by the final portion of the cap from W 10th street to Delaware Ave.

The topographic grade change from N. Jackson down to N. Adams is initially steep at the south end, gradually flattening out as it approaches Delaware Avenue, so that each portion of the structural system is uniquely configured to immediate conditions rather than a simple replication of a standard detail. The narrow corridor between Jackson and Adams is a logistical constraint for construction activities, however the recent completion of the I-95 Restore the Corridor effort proves it is feasible to undergo construction with limited impact on the interstate driving experience. The existing geological conditions are also a consideration therefore any cap design would aim to minimize adjustment of the area geology by utilizing abutments adjacent to the rock faces when possible. The structural system includes two primary options: steel versus concrete, and "open" versus "closed" structural system, described in greater detail within this document appendix.

Crucial to long-term success of the park is budgeting for ongoing operations and maintenance. Organizational commitment to operations and maintenance of the park once capital spending is completed ensures the park remains a community amenity for generations to come with the flexibility to adapt to changing programming needs.



Proposed phasing for the project

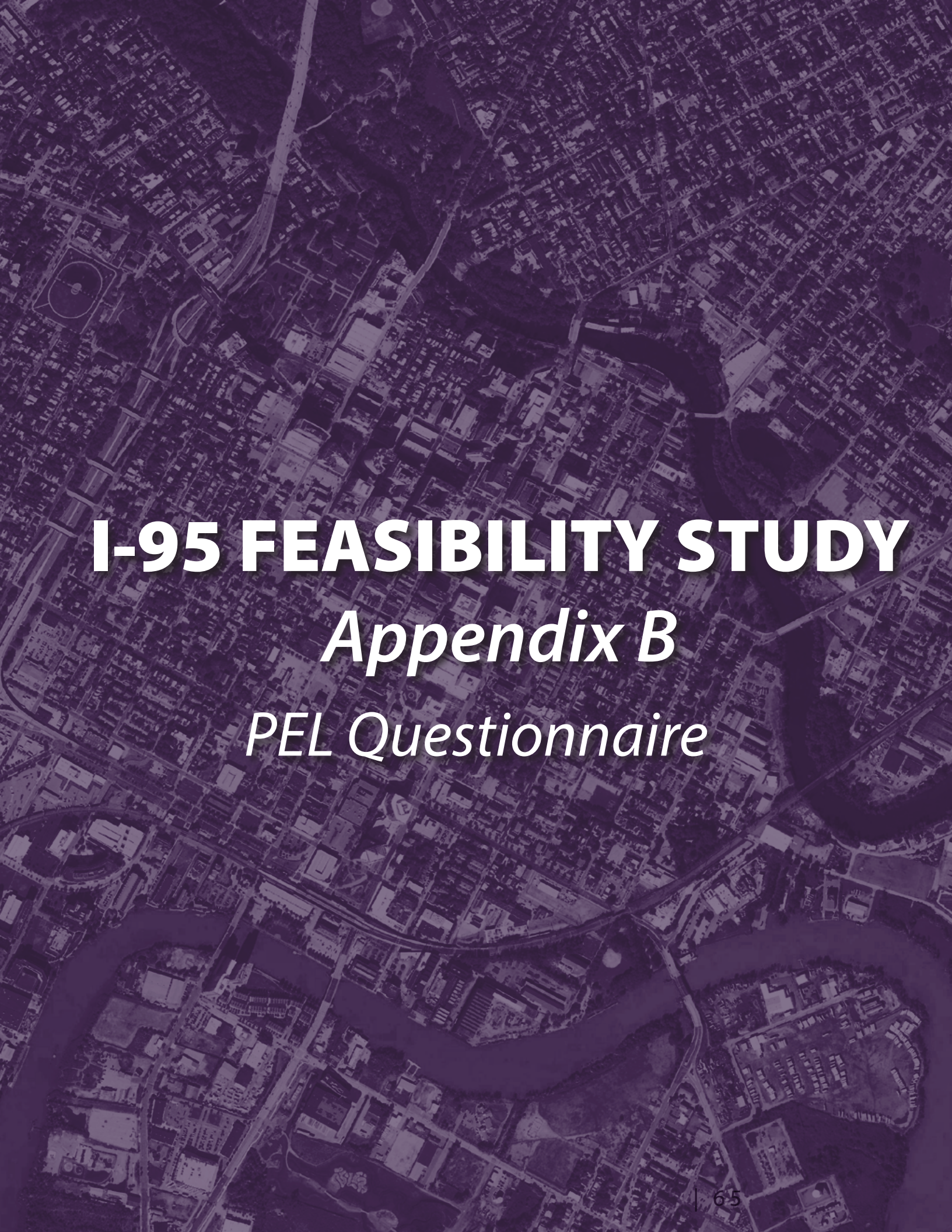


I-95 FEASIBILITY STUDY

Appendix A

PEL Questionnaire

I-95 Cap Traffic Feasibility Study



I-95 FEASIBILITY STUDY

Appendix B

PEL Questionnaire

I-95 FEASIBILITY STUDY

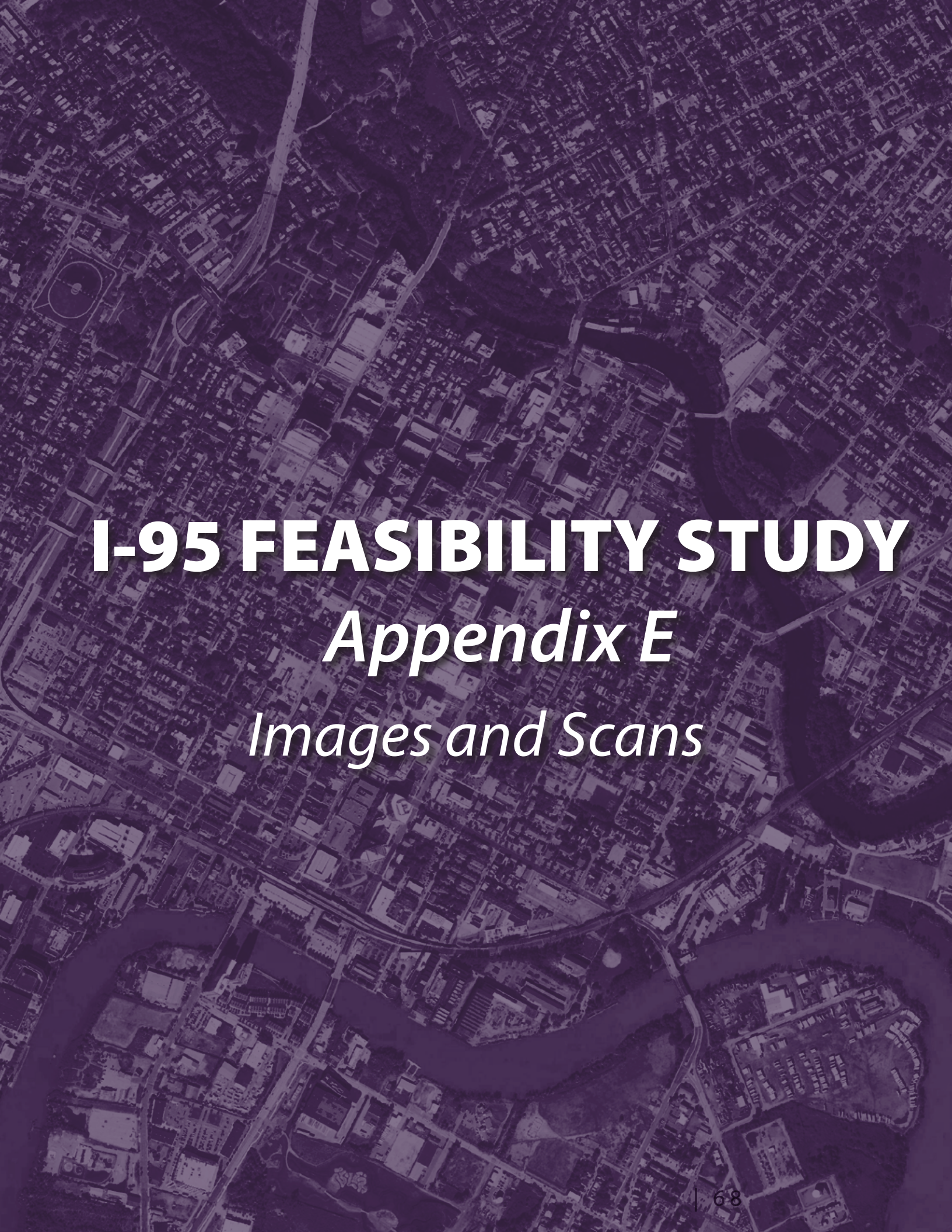
Appendix C

Community Engagement Summaries

I-95 FEASIBILITY STUDY

Appendix D

Community Workshop & Advisory Committee Meeting Notes



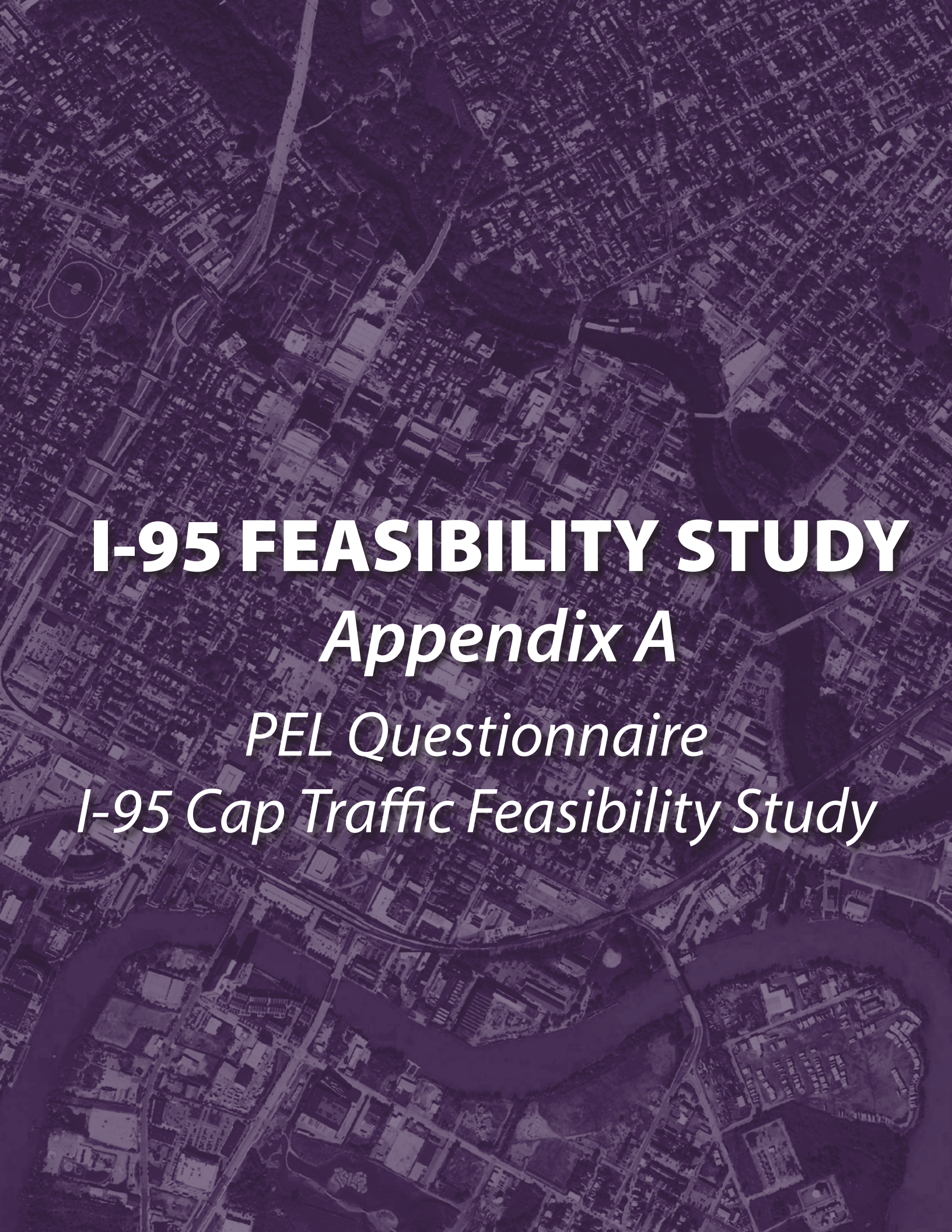
I-95 FEASIBILITY STUDY

Appendix E

Images and Scans

I-95 FEASIBILITY STUDY

Appendix



I-95 FEASIBILITY STUDY

Appendix A

PEL Questionnaire

I-95 Cap Traffic Feasibility Study

PEL Questionnaire Appendix A:
I-95 Cap Traffic Feasibility Study

Technical Memorandum

TO:	Mark Luszcz and Dave Gula
DATE:	December 6, 2022
FROM:	Joanne Arellano
PROJECT:	I-95 Cap
	JMT Job No. 21-02937-205
SUBJECT:	Traffic Feasibility Study
CC:	Peter Haag, Kirt Rieder, Dave DuPlessis, Angie Hernandez, Mir Wahed, Angela Garland

This memorandum was developed to address a request from DelDOT to determine the traffic impacts associated with potential design options for the I-95 Cap. Specifically, DelDOT requested that JMT identify the traffic impacts associated with:

- Closing two of the bridges that cross over I-95 in the project area and redirecting the traffic to the adjacent system. The bridge closure locations would be closed to vehicular traffic but would provide signalized pedestrian crossings at the N. Jackson Street and N. Adams Street intersections.
- Reducing N. Jackson Street and N. Adams Street from two travel lanes to one travel lane.

Based on the traffic assessment it was determined that the closure of any combination of two bridges would have minimal impacts to the study area. Specifically, with traffic redistributed due to closing two bridges, the intersections within the study area would maintain acceptable levels of service (LOS). There would be impacts to corridor travel times due to longer queue lengths at some intersections which could be managed with signal timing modifications along N. Jackson Street and N. Adams Street. With signal timing adjustments, most queue lengths could clear in one signal cycle. Furthermore, the study intersections maintained acceptable LOS and had minimal impacts to travel times with the reduction of N. Jackson Street, from south of W. 6th Street to north of W. 10th Street, from two travel lanes to one travel lane.

The volume data provided was gathered in May 2022 during a stage of the I-95 Restore the Corridor Wilmington Project which has the M.L.K Jr. Boulevard ramps closed and detours traffic towards N. Adams Street to access northbound I-95. As such, the traffic volumes utilized for this analysis along N. Adams Street may be higher than typical conditions. It is recommended that new traffic volume data be collected along N. Adams Street upon completion of the I-95 Restore the Corridor Wilmington Project and traffic patterns in the area have returned to more typical, non-construction, conditions.

Based on a review of historical count data and nearby traffic patterns, it was determined that an analysis with N. Adams Street through traffic volumes reduced by 25% would emulate typical traffic volumes. With the 25% volume reduction and only one travel lane along N. Adams Street from south of W. 6th Street to W. 8th Street, the N. Adams Street corridor would operate at acceptable LOS with minimal changes to travel times. Furthermore, longer queue lengths as a result of the lane reduction could be managed with signal timing modifications along N. Adams Street as most queue lengths could clear in one signal cycle. An additional evaluation, based on the new traffic data, should be conducted to determine if the lane reduction along N. Adams Street could be extended to W. 9th Street.

The following paragraphs provide additional details regarding the methodology utilized for this traffic assessment.

Background and Volume Development

The I-95 Cap Study is determining the feasibility of capping a portion of I-95 in the area of Delaware Avenue to 6th Street, in Wilmington, to mitigate the separation created by the initial highway construction, increase interconnectivity within the city, and create more community space. As a part of this effort, the feasibility of closing two of the bridges that span over I-95 to vehicle traffic, but maintaining pedestrian access, was evaluated. The study area and direction of traffic along the one-way streets can be seen in Figure 1.

In order to perform the analysis, existing weekday traffic volumes were provided by WILMAPCO dated May 2022. The following scenarios were evaluated:

Figure 1 – Study Area Overview

- Scenario 1
  - W. 7th Street and W. 8th street bridges closed to vehicular traffic but would provide pedestrian access via a signalized pedestrian crossing.
  - W. 7th Street traffic redistributed to continue south on N. Jackson Street, east on W. 6th street and north on N. Adams Street.
  - W. 8th Street traffic redistributed to continue north on N. Adams Street, west on W. 10th Street, and south on N. Jackson Street.
- Scenario 2
  - W. 7th Street and W. 9th Street bridges closed to vehicular traffic but would provide pedestrian access via a signalized pedestrian crossing.
  - W. 7th Street and W. 9th Street traffic redistributed to continue south on N. Jackson Street, east on W. 6th street and north on N. Adams Street.
- An additional evaluation was conducted with the reduction of N. Jackson Street and N. Adams Street from two travel lanes to one travel lane.
  - The lane reduction along N. Jackson Street was considered starting north of W. 10th Street and ending south of W. 6th Street.
  - The lane reduction along N. Adams Street was considered starting south of W. 6th Street and ending at W. 8th Street. The lane reduction was assumed to end at W. 8th Street due to the locations of the I-95 on/off ramps at the W. 9th Street and W. 10th Street intersections.
- Appendix A contains volume diagrams for the study area under the evaluated scenarios.

It should be noted that the volume data provided was gathered during a stage of the I-95 Restore the Corridor Wilmington Project which has the M.L.K Jr. Boulevard ramps closed and detours traffic towards N. Adams Street. As such, the traffic volumes utilized for this analysis may be higher than typical conditions. Based on a review of historical count data and nearby traffic patterns, it was determined that an additional analysis with N. Adams Street traffic volumes reduced by 25% would emulate typical traffic volumes. As such, an additional scenario was conducted with N. Adams Street traffic through volumes reduced by 25%.

Capacity Analysis

Synchro 11/SimTraffic software was utilized to determine the LOS of the study intersections as well as the queue lengths and travel times along N. Adams Street and N. Jackson Street from W. 6th Street to W. 10th Street. Appendix B contains the results tables.

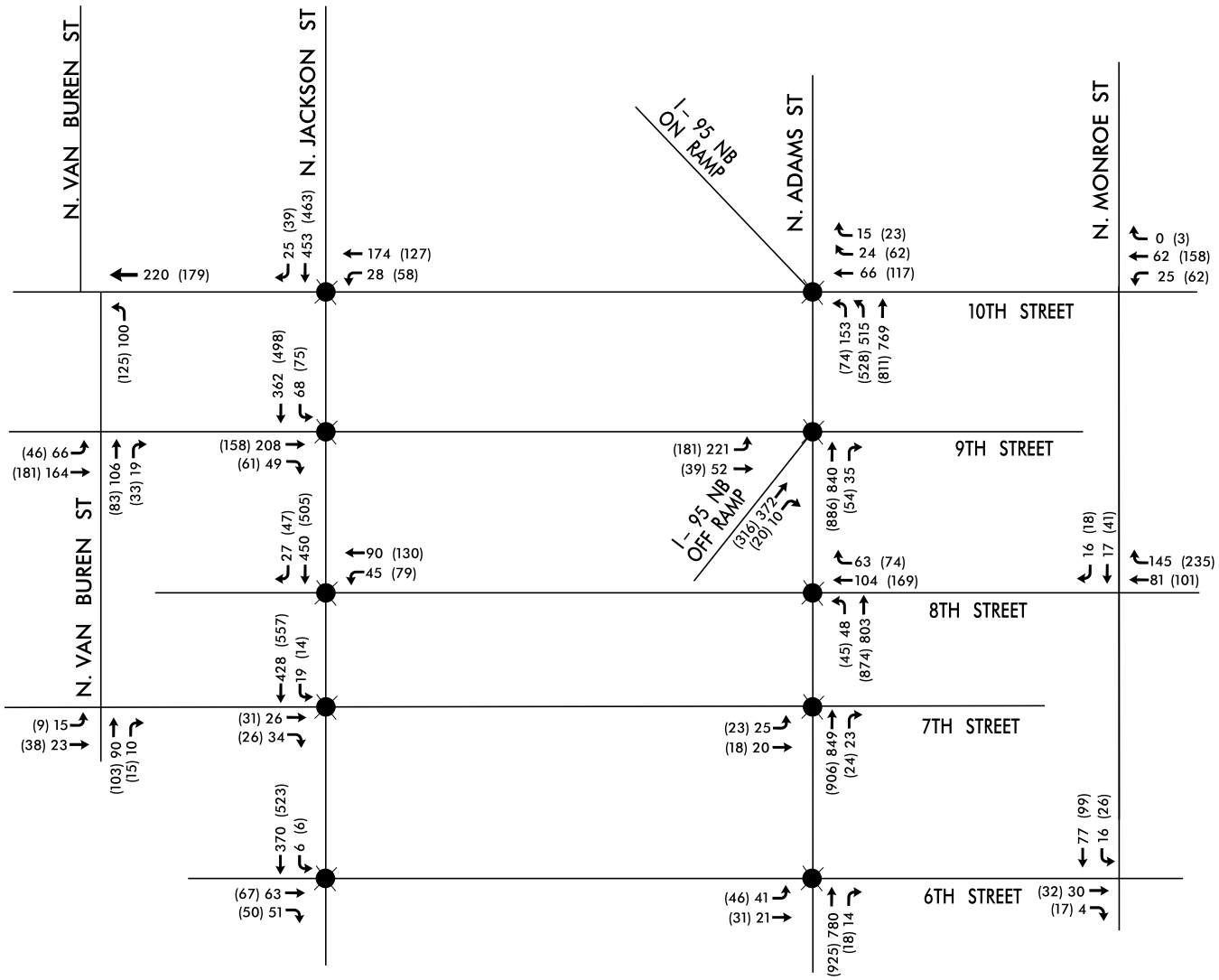
The LOS/delay results indicate that the study intersections under the scenarios with two bridge closures and a lane reduction along N. Jackson Street would operate at acceptable LOS C or better. There would be impacts to corridor travel times due to longer queue lengths at some intersections which could be managed with signal timing modifications along N. Jackson Street and N. Adams Street. With signal timing adjustments, most queue lengths could clear in one signal cycle. It should be noted that the bridge closure locations would be closed to vehicular traffic but would provide signalized pedestrian crossings at the N. Jackson Street and N. Adams Street intersections.

There would be LOS/delay deficiencies, extensive queue lengths, and increases to travel time under the scenario with the N. Adams Street lane reduction. However, with a 25% reduction of through traffic along N. Adams Street, the corridor would operate at acceptable LOS D or better, queue lengths could be managed with signal timing adjustments, and travel times increases would be minimal. To validate the impacts along N. Adams Street with a lane reduction, it is recommended that new traffic volume data be collected along N. Adams Street upon completion of the I-95 Restore the Corridor Wilmington Project and traffic patterns in the area have returned to more typical, non-construction conditions. An additional evaluation, based on the new traffic data, should be conducted to determine if the lane reduction along N. Adams Street could be extended to W. 9th Street.

APPENDIX A

Volume Diagrams

Existing Volumes Without I–95 Cap



LEGEND

XX (XX) AM (PM) PEAK HOUR TRAFFIC VOLUMES

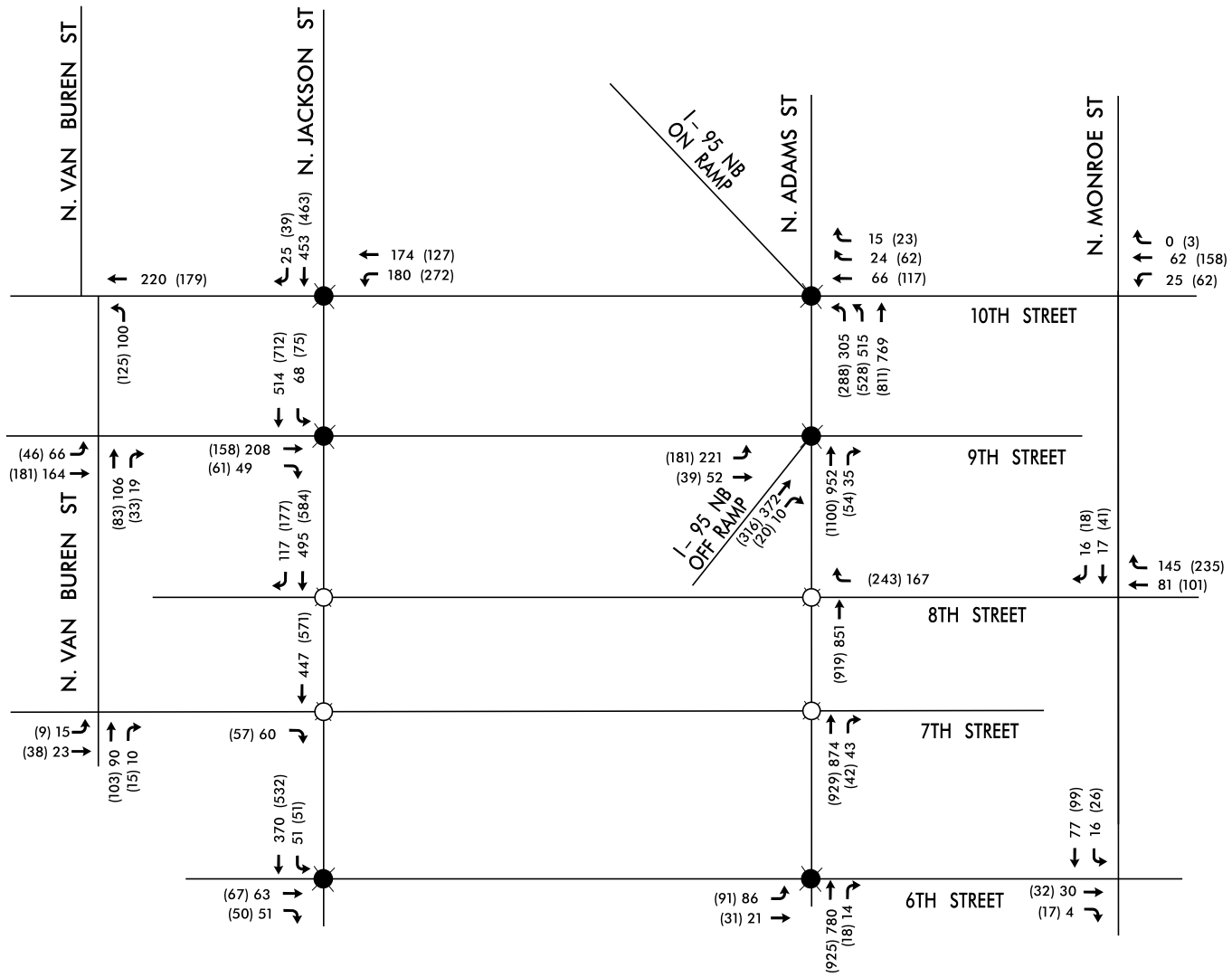
EXISTING ROADWAY

SIGNALIZED INTERSECTION

I–95 CAP TRAFFIC FEASIBILITY STUDY
2022 VOLUMES –
NO BUILD

N.T.S	FIGURE 1	DECEMBER 2022

Existing Volumes With I–95 Cap



NOTE: BUILD SCENARIO ASSUMES W 7TH ST & W 8TH ST BRIDGES CLOSED TO VEHICULAR TRAFFIC

LEGEND

XX (XX) AM (PM) PEAK HOUR TRAFFIC VOLUMES

EXISTING ROADWAY

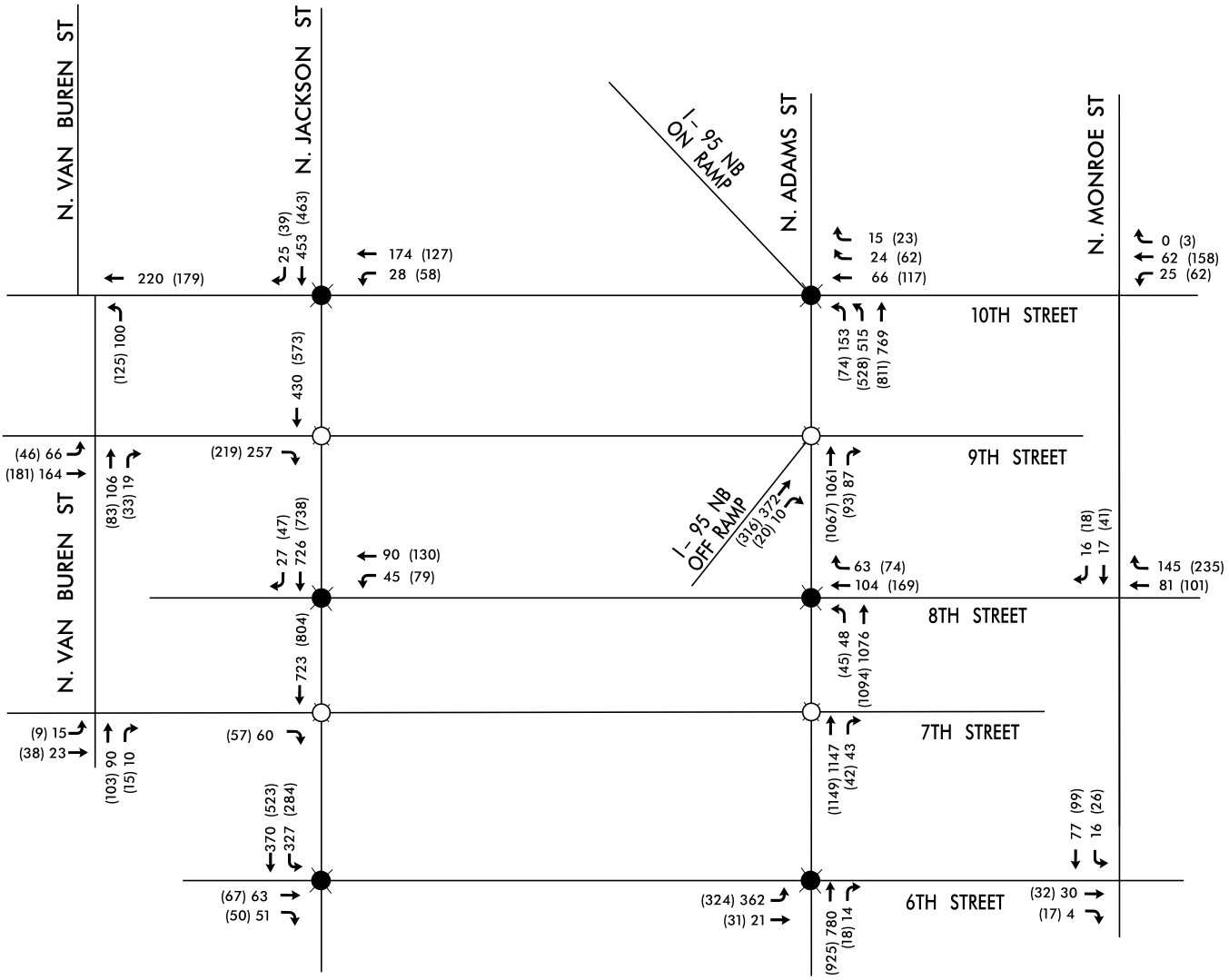
SIGNALIZED INTERSECTION

BRIDGE CLOSED TO VEHICLES

I–95 CAP TRAFFIC FEASIBILITY STUDY
2022 VOLUMES –
BUILD

N.T.S	FIGURE 2	DECEMBER 2022

Existing Volumes With I–95 Cap



NOTE: BUILD SCENARIO ASSUMES W 7TH ST & W 9TH ST BRIDGES CLOSED TO VEHICULAR TRAFFIC

LEGEND

XX (XX) AM (PM) PEAK HOUR TRAFFIC VOLUMES

EXISTING ROADWAY

SIGNALIZED INTERSECTION

BRIDGE CLOSED TO VEHICLES

I–95 CAP TRAFFIC FEASIBILITY STUDY
2022 VOLUMES –
BUILD

N.T.S	FIGURE 3	DECEMBER 2022

APPENDIX B

Synchro Analysis Results Tables

Table 1: LOS (Delay) Results - W. 7th Street & W. 8th Street Bridge Closures

Corridor	Intersection	Cycle Length (sec)	AM 2022 No Build		AM 2022 Build		AM 2022 Build - N. Jackson St. One Lane Roadway		AM 2022 Build -N. Jackson St. & N. Adams St. One Lane Roadways		AM 2022 Build -N. Jackson St. & N. Adams St. One Lane Roadways (25% Reduction)	
			LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)
N. Jackson Street	W. 10th Street	90	B	13.7	B	16.3	B	18.7	B	18.3	B	18.3
	W. 9th Street	90	B	19.0	B	15.4	B	18.7	B	19.1	B	18.8
	W. 8th Street	90	A	6.9	A	9.3	A	5.9	A	6	A	6.0
	W. 7th Street	90	A	9.2	A	2.0	A	1.2	A	2.1	A	1.3
	W. 6th Street	90	A	6.8	A	8.2	A	5.8	A	5.9	A	5.8
N. Adams Street	W. 10th Street	90	A	9.3	B	15.2	A	7.6	A	7.7	A	8.8
	W. 9th Street	90	C	33.6	C	34.3	C	28.2	C	29.2	C	26.1
	W. 8th Street	90	A	7.4	B	10.3	A	4.1	A	7.2	A	3.5
	W. 7th Street	90	A	8.8	A	4.8	A	3.1	B	12.7	A	6.2
	W. 6th Street	90	B	12.6	B	13.5	B	13.9	C	29.8	B	18.8

Notes:
1. Build scenario assumes a Cap that would close the bridge along W. 7th Street and W. 8th Street between N. Jackson Street and N. Adams Street.
2. The build scenario assumes that there are two lanes for through movements along N. Jackson Street and N. Adams Street.
3. The build scenario with N. Adams Street as a one lane roadway assumes one lane for through movements south of W. 8th Street.

Table 2: 95th Percentile Critical Queue Results - W. 7th Street & W. 8th Street Bridge Closures

Corridor	Intersection	Lane	AM 2022 No Build	AM 2022 Build	AM 2022 Build - N. Jackson St. One Lane Roadway	AM 2022 Build -N. Jackson St. & N. Adams St. One Lane Roadways	AM 2022 Build -N. Jackson St. & N. Adams St. One Lane Roadways (25% Reduction)
			Queue Length (feet)	Queue Length (feet)	Queue Length (feet)	Queue Length (feet)	Queue Length (feet)
N. Jackson Street	W. 10th Street	WBL	51	170	156	182	161
		WBT	140	157	157	153	175
		SBT	144	138	222	224	211
	W. 9th Street	EBT	201	189	181	197	190
		SBL	160	133	268	267	270
	W. 8th Street	WBL	54	0	0	0	0
		WBT	61	0	0	0	0
		SBT	68	157	119	131	146
	W. 7th Street	EBT	72	53	58	58	59
		SBT	87	36	35	72	28
	W. 6th Street	EBT	106	104	105	102	110
		SBT	58	49	66	74	71
N. Adams Street	W. 10th Street	WBT	118	129	120	116	126
		NBL	327	350	359	363	331
		NBT	172	136	176	172	131
	W. 9th Street	EBL	199	212	228	211	204
		EBT	87	89	66	86	88
		NBT	390	290	384	380	231
		NBR	411	286	395	395	232
	W. 8th Street	WBT	137	104	109	108	93
		NBT	169	20	63	153	27
	W. 7th Street	NBT	157	80	84	191	135
	W. 6th Street	EBL	74	73	79	79	71
		EBT	55	34	33	35	33
		NBT	204	217	220	288	370
I-95 Off Ramp	W. 9th Street	NBL	139	144	138	144	154
		NBT	163	155	152	159	149

Notes:
1. 95th Percentile Queue Length Results are from SimTraffic software and based on an average of five simulation runs.

Table 3: Travel Time Results - W. 7th Street & W. 8th Street Bridge Closures

Corridor	Intersection	AM 2022 No Build	AM 2022 Build	AM 2022 Build - N. Jackson St. One Lane Roadway	AM 2022 Build -N. Jackson St. & N. Adams St. One Lane Roadways	AM 2022 Build -N. Jackson St. & N. Adams St. One Lane Roadways (25% Reduction)
		Travel Time (Seconds)	Travel Time (Seconds)	Travel Time (Seconds)	Travel Time (Seconds)	Travel Time (Seconds)
N. Jackson Street	From W. 10th Street to W. 6th Street	81.9	75.2	80.0	80.3	79.3
N. Adams Street	From W. 6th Street to W. 10th Street	118.0	96.8	111.9	132.8	110.3

Notes:
1. Travel time results are from SimTraffic software and based on an average of five simulation runs.

Table 4: LOS (Delay) Results - W. 7th Street & W. 8th Street Bridge Closures

Corridor	Intersection	Cycle Length (sec)	PM 2022 No Build		PM 2022 Build		PM 2022 Build - N. Jackson St. One Lane Roadway		PM 2022 Build - N. Jackson St. & N. Adams St. One Lane Roadways		PM 2022 Build - N. Jackson St. & N. Adams St. One Lane Roadways (25% Reduction)	
			LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)
N. Jackson Street	W. 10th Street	90	B	14.8	B	18.4	C	20.4	B	19.7	B	19.6
	W. 9th Street	90	B	14.5	B	13.2	B	19.1	B	18.6	B	19.0
	W. 8th Street	90	A	8.0	C	20.6	A	4.0	A	4.1	A	4.0
	W. 7th Street	90	A	6.9	A	1.1	A	5.0	A	2.6	A	2.2
	W. 6th Street	90	A	8.7	A	9.3	A	6.1	A	6.0	A	6.2
N. Adams Street	W. 10th Street	90	B	12.4	B	12.0	B	10.7	B	10.5	B	12.7
	W. 9th Street	90	C	21.3	C	30.6	C	30.6	C	32.1	C	24.2
	W. 8th Street	90	A	8.7	B	10.3	A	7.1	B	13.7	A	8.0
	W. 7th Street	90	A	8.1	A	2.9	A	2.9	B	11.1	A	5.7
	W. 6th Street	90	B	13.0	B	13.1	B	13.4	C	31.7	B	19.7

Notes:
1. Build scenario assumes a Cap that would close the bridge along W. 7th Street and W. 8th Street between N. Jackson Street and N. Adams Street
2. The build scenario assumes that there are two lanes for through movements along N. Jackson Street and N. Adams Street.
3. The build scenario with N. Adams Street as a one lane roadway assumes one lane for through movements south of W. 8th Street.

Table 5: 95th Percentile Critical Queue Results - W. 7th Street & W. 8th Street Bridge Closures

Corridor	Intersection	Lane	PM 2022 No Build	PM 2022 Build	PM 2022 Build - N. Jackson St. One Lane Roadway	PM 2022 Build - N. Jackson St. & N. Adams St. One Lane Roadways	PM 2022 Build - N. Jackson St. & N. Adams St. One Lane Roadways (25% Reduction)
			Queue Length (feet)	Queue Length (feet)	Queue Length (feet)	Queue Length (feet)	Queue Length (feet)
N. Jackson Street	W. 10th Street	WBL	85	243	244	261	259
		WBT	139	129	136	114	122
		SBT	146	127	223	206	221
	W. 9th Street	EBT	193	173	175	189	179
		SBL	158	154	324	343	334
	W. 8th Street	WBL	90	0	0	0	0
		WBT	110	0	0	0	0
		SBT	118	277	126	143	129
	W. 7th Street	EBT	79	54	58	59	60
		SBT	116	23	139	62	36
	W. 6th Street	EBT	98	105	106	103	108
		SBT	81	141	89	70	69
N. Adams Street	W. 10th Street	WBT	205	211	206	183	193
		NBL	281	364	358	356	365
		NBT	174	170	164	180	149
	W. 9th Street	EBL	187	180	198	185	169
		EBT	76	68	70	49	45
		NBT	260	460	491	455	239
		NBR	308	475	499	461	229
	W. 8th Street	WBT	185	162	350	187	125
		NBT	156	253	269	280	27
	W. 7th Street	NBT	155	157	84	217	138
	W. 6th Street	EBL	72	96	76	113	99
		EBT	62	53	41	61	57
		NBT	228	251	237	249	352
I-95 Off Ramp	W. 9th Street	NBL	123	123	148	122	163
		NBT	165	146	162	142	157

Notes:
1. 95th Percentile Queue Length Results are from SimTraffic software and based on an average of five simulation runs.

Table 6: Travel Time Results - W. 7th Street & W. 8th Street Bridge Closures

Corridor	Intersection	PM 2022 No Build	PM 2022 Build	PM 2022 Build - N. Jackson St. One Lane Roadway	PM 2022 Build - N. Jackson St. & N. Adams St. One Lane Roadways	PM 2022 Build - N. Jackson St. & N. Adams St. One Lane Roadways (25% Reduction)
		Travel Time (Seconds)	Travel Time (Seconds)	Travel Time (Seconds)	Travel Time (Seconds)	Travel Time (Seconds)
N. Jackson Street	From W. 10th Street to W. 6th Street	90.1	100.4	87.1	83.7	82.9
N. Adams Street	From W. 6th Street to W. 10th Street	107.7	165.8	141.3	220.8	109.6

Notes:
1. Travel time results are from SimTraffic software and based on an average of five simulation runs.

Table 7: LOS (Delay) Results - W. 7th Street & W. 9th Street Bridge Closures

Corridor	Intersection	Cycle Length (sec)	AM 2022 No Build		AM 2022 Build		AM 2022 Build - N. Jackson St. One Lane Roadway		AM 2022 Build -N. Jackson St. & N. Adams St. One Lane Roadways		AM 2022 Build -N. Jackson St. & N. Adams St. One Lane Roadways (25% Reduction)	
			LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)
N. Jackson Street	W. 10th Street	90	B	13.7	B	13.7	B	16.8	B	16.5	B	16.9
	W. 9th Street	90	B	19.0	A	7.9	B	15.6	A	3.8	A	3.8
	W. 8th Street	90	A	6.9	B	10.8	B	17.5	B	15.5	B	15.5
	W. 7th Street	90	A	9.2	A	1.8	A	4.8	A	4.3	A	4.3
	W. 6th Street	90	A	6.8	B	12.4	A	8.4	A	5.9	A	5.9
N. Adams Street	W. 10th Street	90	A	9.3	B	12.3	B	12.2	A	6.3	A	7.1
	W. 9th Street	90	C	33.6	B	19.0	B	19.0	B	13.9	B	13.1
	W. 8th Street	90	A	7.4	A	4.4	A	4.4	D	52.3	B	11.0
	W. 7th Street	90	A	8.8	A	8.4	A	8.9	F	97.1	C	23.1
	W. 6th Street	90	B	12.6	C	25.2	C	25.7	E	64.0	C	28.3

Notes:
1. Build scenario assumes a Cap that would close the bridge along W. 7th Street and W. 9th Street between N. Jackson Street and N. Adams Street.
2. The build scenario assumes that there are two lanes for through movements along N. Jackson Street and N. Adams Street.
3. The build scenario with N. Adams Street as a one lane roadway assumes one lane for through movements south of W. 8th Street.

Table 8: 95th Percentile Critical Queue Results - W. 7th Street & W. 9th Street Bridge Closures

Corridor	Intersection	Lane	AM 2022 No Build	AM 2022 Build	AM 2022 Build - N. Jackson St. One Lane Roadway	AM 2022 Build -N. Jackson St. & N. Adams St. One Lane Roadways	AM 2022 Build -N. Jackson St. & N. Adams St. One Lane Roadways (25% Reduction)
			Queue Length (feet)	Queue Length (feet)	Queue Length (feet)	Queue Length (feet)	Queue Length (feet)
N. Jackson Street	W. 10th Street	WBL	51	54	49	45	56
		WBT	140	142	138	140	140
		SBT	144	156	410	414	215
	W. 9th Street	EBT	201	89	140	162	130
		SBL	160	164	308	312	70
	W. 8th Street	WBL	54	75	83	81	80
		WBT	61	116	119	115	122
		SBT	68	134	342	542	212
	W. 7th Street	EBT	72	58	104	146	72
		SBT	87	70	181	362	104
	W. 6th Street	EBT	106	107	160	329	169
		SBT	58	150	233	344	120
N. Adams Street	W. 10th Street	WBT	118	117	119	128	120
		NBL	327	324	295	200	226
		NBT	172	143	115	97	85
	W. 9th Street	NBT	390	497	503	284	213
		NBR	411	506	511	333	235
	W. 8th Street	WBT	137	158	153	158	150
		NBT	169	317	333	169	144
	W. 7th Street	NBT	157	218	229	250	279
	W. 6th Street	EBL	74	302	317	328	334
		EBT	55	301	46	45	50
		NBT	204	216	249	271	288
I-95 Off Ramp	W. 9th Street	NBL	139	113	101	101	106
		NBT	163	137	125	122	118

Notes:
1. 95th Percentile Queue Length Results are from SimTraffic software and based on an average of five simulation runs.

Table 9: Travel Time Results - W. 7th Street & W. 9th Street Bridge Closures

Corridor	Intersection	AM 2022 No Build	AM 2022 Build	AM 2022 Build - N. Jackson St. One Lane Roadway	AM 2022 Build -N. Jackson St. & N. Adams St. One Lane Roadways	AM 2022 Build -N. Jackson St. & N. Adams St. One Lane Roadways (25% Reduction)
		Travel Time (Seconds)	Travel Time (Seconds)	Travel Time (Seconds)	Travel Time (Seconds)	Travel Time (Seconds)
N. Jackson Street	From W. 10th Street to W. 6th Street	80.9	83.6	150.4	216.4	76.7
N. Adams Street	From W. 6th Street to W. 10th Street	118.1	148.7	146.5	274.7	102.7

Notes:
1. Travel time results are from SimTraffic software and based on an average of five simulation runs.

Table 10: LOS (Delay) Results - W. 7th Street & W. 9th Street Bridge Closures

Corridor	Intersection	Cycle Length (sec)	PM 2022 No Build		PM 2022 Build		PM 2022 Build - N. Jackson St. One Lane Roadway		PM 2022 Build - N. Jackson St. & N. Adams St. One Lane Roadways		PM 2022 Build - N. Jackson St. & N. Adams St. One Lane Roadways (25% Reduction)	
			LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)
N. Jackson Street	W. 10th Street	90	B	14.8	B	13.6	B	18.1	B	14.8	B	15.1
	W. 9th Street	90	B	14.5	C	22.2	B	10.2	B	10.1	B	10.1
	W. 8th Street	90	A	8.0	C	24.3	B	14.5	B	14.1	B	14.0
	W. 7th Street	90	A	6.9	C	24.6	B	10.4	A	8.7	A	8.7
	W. 6th Street	90	A	8.7	A	8.0	A	7.7	A	8.9	A	8.9
N. Adams Street	W. 10th Street	90	B	12.4	B	12.2	A	7.9	B	11.4	B	12.0
	W. 9th Street	90	C	21.3	C	24.6	C	25.4	C	24.1	C	21.5
	W. 8th Street	90	A	8.7	A	7.6	A	7.0	D	49.5	B	11.8
	W. 7th Street	90	A	8.1	A	6.4	A	7.0	E	69.7	B	19.7
	W. 6th Street	90	B	13.0	C	23.4	C	23.2	D	45.5	D	39.7

Notes:
1. Build scenario assumes a Cap that would close the bridge along W. 7th Street and W. 9th Street between N. Jackson Street and N. Adams Street.
2. The build scenario assumes that there are two lanes for through movements along N. Jackson Street and N. Adams Street.
3. The build scenario with N. Adams Street as a one lane roadway assumes one lane for through movements south of W. 8th Street.

Table 11: 95th Percentile Critical Queue Results - W. 7th Street & W. 9th Street Bridge Closures

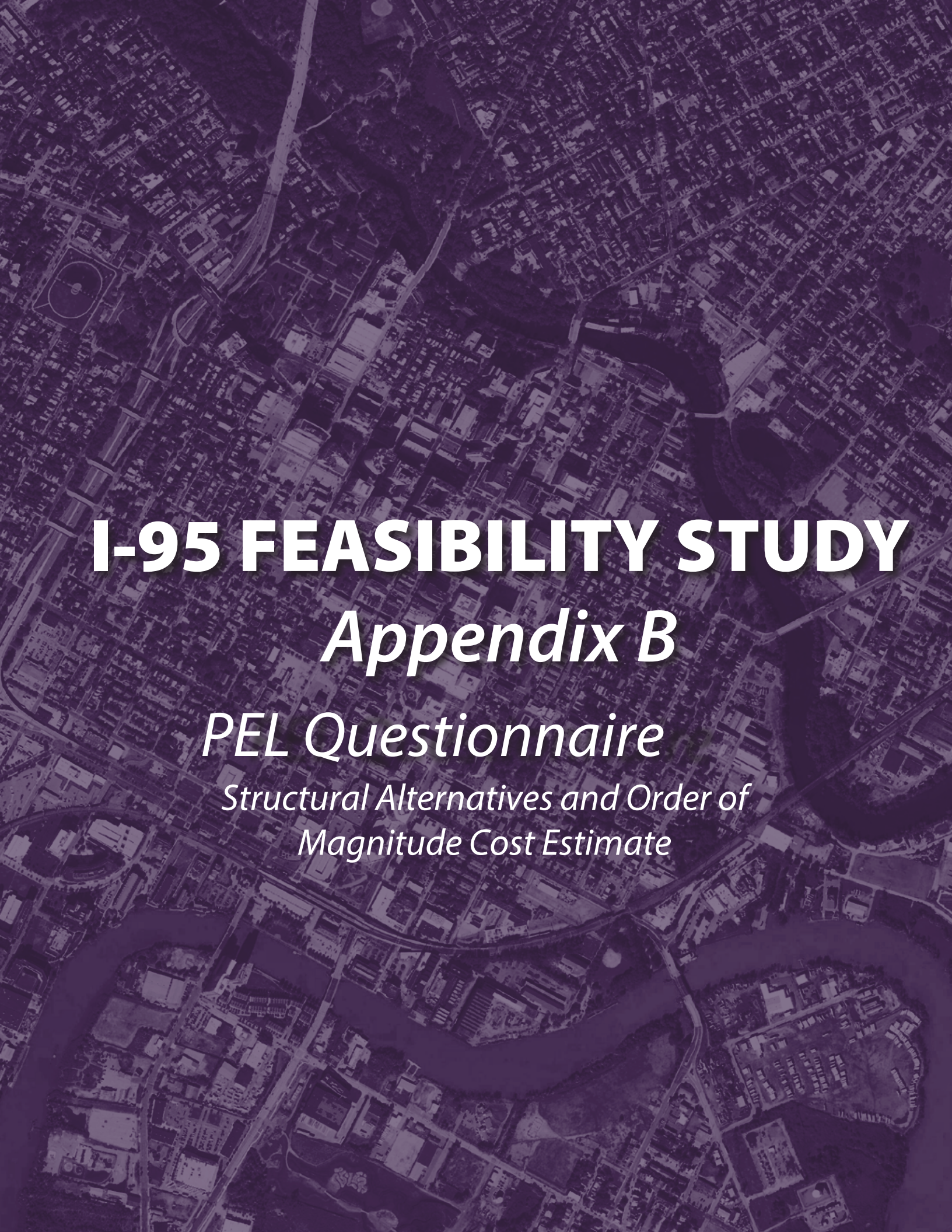
Corridor	Intersection	Lane	PM 2022 No Build	PM 2022 Build	PM 2022 Build - N. Jackson St. One Lane Roadway	PM 2022 Build - N. Jackson St. & N. Adams St. One Lane Roadways	PM 2022 Build - N. Jackson St. & N. Adams St. One Lane Roadways (25% Reduction)
			Queue Length (feet)	Queue Length (feet)	Queue Length (feet)	Queue Length (feet)	Queue Length (feet)
N. Jackson Street	W. 10th Street	WBL	85	78	163	94	76
		WBT	139	122	131	125	150
		SBT	146	177	550	694	226
	W. 9th Street	EBT	193	110	180	200	125
		SBL	158	274	345	414	253
	W. 8th Street	WBL	90	68	122	119	97
		WBT	110	59	150	144	144
		SBT	118	370	452	597	228
	W. 7th Street	EBT	79	140	100	200	73
		SBT	116	295	281	127	139
	W. 6th Street	EBT	98	208	209	352	163
		SBT	81	237	272	340	158
N. Adams Street	W. 10th Street	WBT	205	190	201	350	207
		NBL	281	271	258	245	258
		NBT	174	132	136	153	143
	W. 9th Street	NBT	260	502	489	349	175
		NBR	308	490	490	363	214
	W. 8th Street	WBT	185	263	256	193	174
		NBT	156	392	402	106	59
	W. 7th Street	NBT	155	283	302	253	274
	W. 6th Street	EBL	72	345	356	327	325
		EBT	62	55	54	58	53
		NBT	228	257	271	246	274
I-95 Off Ramp	W. 9th Street	NBL	123	150	140	140	138
		NBT	165	175	181	164	158

Notes:
1. 95th Percentile Queue Length Results are from SimTraffic software and based on an average of five simulation runs.

Table 12: Travel Time Results - W. 7th Street & W. 9th Street Bridge Closures

Corridor	Intersection	PM 2022 No Build	PM 2022 Build	PM 2022 Build - N. Jackson St. One Lane Roadway	PM 2022 Build - N. Jackson St. & N. Adams St. One Lane Roadways	PM 2022 Build - N. Jackson St. & N. Adams St. One Lane Roadways (25% Reduction)
		Travel Time (Seconds)	Travel Time (Seconds)	Travel Time (Seconds)	Travel Time (Seconds)	Travel Time (Seconds)
N. Jackson Street	From W. 10th Street to W. 6th Street	90.1	181.7	222.0	333.1	88.0
N. Adams Street	From W. 6th Street to W. 10th Street	107.7	184.3	210.2	226.6	105.1

Notes:
1. Travel time results are from SimTraffic software and based on an average of five simulation runs.



I-95 FEASIBILITY STUDY

Appendix B

PEL Questionnaire

Structural Alternatives and Order of Magnitude Cost Estimate

PEL Questionnaire Appendix B:
Structural Alternatives and Order of Magnitude Cost Estimate

The following feasibility estimates are based solely on the estimated order of magnitude cost estimate of structures associated with the project. These estimates include demolition of existing structures, maintenance of traffic during construction, cost of new substructure and superstructure bridges, and contingency to include the unknown cost of ventilation and/or fire suppression systems. These estimates do not include the cost of any soil on top of structures, landscaping, paving/paver systems, or plant-life. These estimates do not include any modifications/improvements of the intersections of surrounding local routes or the underpass interstate highway. These estimates do not include the cost of signage, lighting, drainage systems, or pavement markings.

COST SUMMARY OF ALTERNATES

ALTERNATES	SOUTHERN COST	MIDDLE COST	NORTHERN COST	TOTAL COST
STEEL, OPEN BRIDGE	**$76,000,000**	**$98,000,000**	**$84,000,000**	**$258,000,000**
STEEL, CLOSED BRIDGE	**$63,000,000**	**$80,000,000**	**$86,000,000**	**$229,000,000**
CONCRETE, OPEN BRIDGE	**$55,000,000**	**$69,000,000**	**$65,000,000**	**$189,000,000**
CONCRETE, CLOSED BRIDGE	**$54,000,000**	**$68,000,000**	**$70,000,000**	**$192,000,000**

COST SUMMARY (STEEL, OPEN BRIDGE)

ITEM TITLE	UNIT	UNIT PRICE	SOUTHERN COST	MIDDLE COST	NORTHERN COST
ROCK EXCAVATION FOR STRUCTURES AND TRENCHES	CY	$200	5,500	10,000	9,400
BACKFILL	CY	$45	8,700	12,200	36,700
REMOVAL OF STRUCTURES AND OBSTRUCTIONS	LS	$1	498,000	524,100	0
SHORING	LS	$1	920,000	1,340,000	1,460,000
PORTLAND CEMENT CONCRETE MASONRY, ABUTMENT FOOTING, CLASS A	CY	$800	1,200	1,700	1,900
PORTLAND CEMENT CONCRETE MASONRY, ABUTMENT ABOVE FOOTING, CLASS A	CY	$1,000	1,300	1,900	4,400
PORTLAND CEMENT CONCRETE MASONRY, PIER ABOVE FOOTING, CLASS A	CY	$1,200	900	1,200	1,300
PORTLAND CEMENT CONCRETE MASONRY, PARAPET, CLASS A	CY	$1,200	100	100	200
PORTLAND CEMENT CONCRETE MASONRY, PIER FOOTING, CLASS B	CY	$800	1,300	1,600	1,700
PORTLAND CEMENT CONCRETE MASONRY, SUPERSTRUCTURE, CLASS D	CY	$1,200	4,100	5,200	3,600
BAR REINFORCEMENT, EPOXY COATED	LB	$2	1,548,100	2,012,400	2,014,700
EPOXY CONCRETE SEALER	SF	$10	11,800	17,100	15,500
SILICONE-BASED ACRYLIC CONCRETE SEALER	SF	$8	30,000	36,300	58,600
HIGH MOLECULAR WEIGHT METHACRYLATE CONCRETE SEALER	SF	$5	142,900	179,800	124,200
STEEL STRUCTURES (UNPAINTED) (STRAIGHT)	LB	$3	10,525,700	13,081,800	-
STEEL STRUCTURES (UNPAINTED) (CURVED)	LB	$5	-	-	5,649,200
PRESTRESSED CONCRETE BEAM 64" DEEP	LF	$525	-	-	-
PRESTRESSED CONCRETE BEAM 48" DEEP	LF	$450	-	-	-
PRESTRESSED CONCRETE BEAM 40" DEEP	LF	$425	-	-	-
DISC BEARINGS	EA	$3,000	144	208	186
PREFABRICATED EXPANSION JOINT SYSTEM, 4"	LF	$500	1,200	1,700	1,600
RETAINING WALL > 15'	LF	$600	0	250	900
RETAINING WALL < 15'	LF	$300	0	350	1,000
		STRUCTURE SUBTOTAL COST	$48,720,275	$62,609,600	$53,606,025
		15% MAINTENANCE OF TRAFFIC	$7,308,041	$9,391,440	$8,040,904
		SUBTOTAL COST	$56,028,316	$72,001,040	$61,646,929
		35% CONTINGENCY	$19,609,911	$25,200,364	$21,576,425
		TOTAL COST	**$76,000,000**	**$98,000,000**	**$84,000,000**
		COST/SF	$532	$545	$676

COST SUMMARY (STEEL, CLOSED BRIDGE)

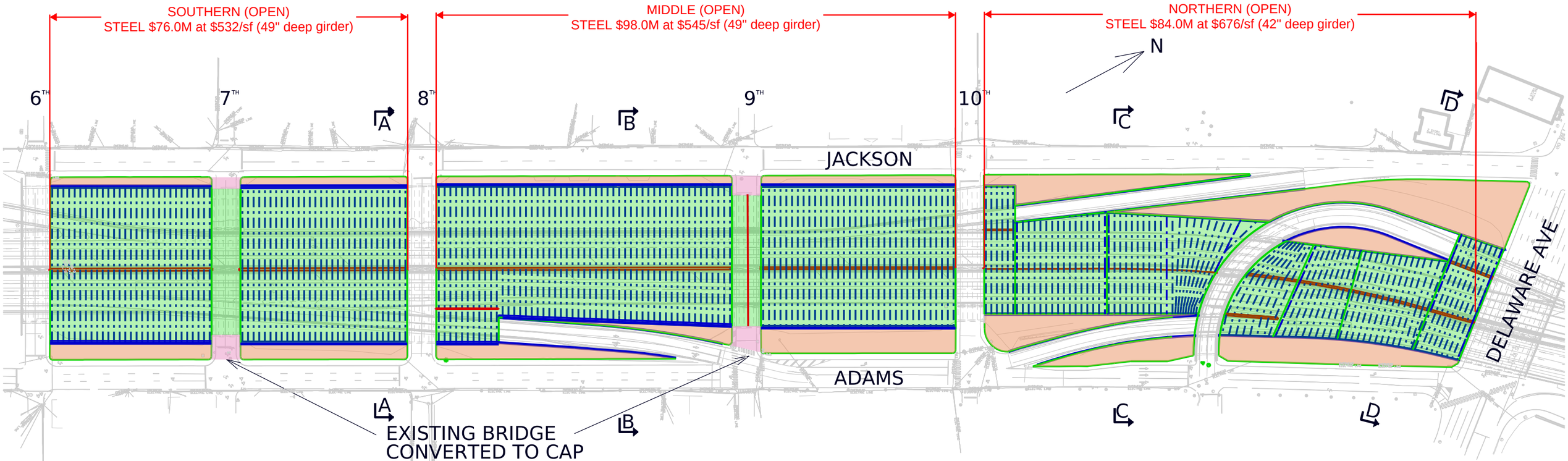
ITEM TITLE	UNIT	UNIT PRICE	SOUTHERN COST	MIDDLE COST	NORTHERN COST
ROCK EXCAVATION FOR STRUCTURES AND TRENCHES	CY	$200	20,900	28,600	24,300
BACKFILL	CY	$45	64,200	75,500	59,500
REMOVAL OF STRUCTURES AND OBSTRUCTIONS	LS	$1	498,000	524,100	0
SHORING	LS	$1	1,840,000	2,830,000	2,540,000
PORTLAND CEMENT CONCRETE MASONRY, ABUTMENT FOOTING, CLASS A	CY	$800	2,600	3,300	2,600
PORTLAND CEMENT CONCRETE MASONRY, ABUTMENT ABOVE FOOTING, CLASS A	CY	$1,000	5,800	7,400	5,900
PORTLAND CEMENT CONCRETE MASONRY, PIER ABOVE FOOTING, CLASS A	CY	$1,200	900	1,300	1,100
PORTLAND CEMENT CONCRETE MASONRY, PARAPET, CLASS A	CY	$1,200	100	100	200
PORTLAND CEMENT CONCRETE MASONRY, PIER FOOTING, CLASS B	CY	$800	1,300	1,800	1,500
PORTLAND CEMENT CONCRETE MASONRY, SUPERSTRUCTURE, CLASS D	CY	$1,200	2,800	3,300	3,000
BAR REINFORCEMENT, EPOXY COATED	LB	$2	1,976,800	2,466,000	2,119,100
EPOXY CONCRETE SEALER	SF	$10	11,100	16,600	14,900
SILICONE-BASED ACRYLIC CONCRETE SEALER	SF	$8	63,000	71,600	62,500
HIGH MOLECULAR WEIGHT METHACRYLATE CONCRETE SEALER	SF	$5	96,400	115,500	104,900
STEEL STRUCTURES (UNPAINTED) (STRAIGHT)	LB	$3	3,979,300	4,743,600	-
STEEL STRUCTURES (UNPAINTED) (CURVED)	LB	$5	-	-	4,661,000
PRESTRESSED CONCRETE BEAM 64" DEEP	LF	$525	-	-	-
PRESTRESSED CONCRETE BEAM 48" DEEP	LF	$450	-	-	-
PRESTRESSED CONCRETE BEAM 40" DEEP	LF	$425	-	-	-
DISC BEARINGS	EA	$3,000	144	208	186
PREFABRICATED EXPANSION JOINT SYSTEM, 4"	LF	$500	1,200	1,700	1,600
RETAINING WALL > 15'	LF	$600	0	250	1,000
RETAINING WALL < 15'	LF	$300	0	350	1,100
		STRUCTURE SUBTOTAL COST	$40,413,300	$51,183,200	$54,892,425
		15% MAINTENANCE OF TRAFFIC	$6,061,995	$7,677,480	$8,233,864
		SUBTOTAL COST	$46,475,295	$58,860,680	$63,126,289
		35% CONTINGENCY	$16,266,353	$20,601,238	$22,094,201
		TOTAL COST	**$63,000,000**	**$80,000,000**	**$86,000,000**
		COST/SF	$654	$693	$820

COST SUMMARY (CONCRETE, OPEN BRIDGE)

ITEM TITLE	UNIT	UNIT PRICE	SOUTHERN COST	MIDDLE COST	NORTHERN COST
ROCK EXCAVATION FOR STRUCTURES AND TRENCHES	CY	$200	11,500	16,100	9,400
BACKFILL	CY	$45	13,200	16,500	36,800
REMOVAL OF STRUCTURES AND OBSTRUCTIONS	LS	$1	498,000	524,100	-
SHORING	LS	$1	2,760,000	4,000,000	1,540,000
PORTLAND CEMENT CONCRETE MASONRY, ABUTMENT FOOTING, CLASS A	CY	$800	1,200	1,700	1,900
PORTLAND CEMENT CONCRETE MASONRY, ABUTMENT ABOVE FOOTING, CLASS A	CY	$1,000	1,400	1,900	4,500
PORTLAND CEMENT CONCRETE MASONRY, PIER ABOVE FOOTING, CLASS A	CY	$1,200	11,500	3,400	1,300
PORTLAND CEMENT CONCRETE MASONRY, PARAPET, CLASS A	CY	$1,200	100	100	200
PORTLAND CEMENT CONCRETE MASONRY, PIER FOOTING, CLASS B	CY	$800	3,600	4,700	1,700
PORTLAND CEMENT CONCRETE MASONRY, SUPERSTRUCTURE, CLASS D	CY	$1,200	4,100	5,100	3,600
BAR REINFORCEMENT, EPOXY COATED	LB	$2	1,950,900	2,536,600	2,021,400
EPOXY CONCRETE SEALER	SF	$10	18,400	24,500	15,200
SILICONE-BASED ACRYLIC CONCRETE SEALER	SF	$8	11,500	85,900	59,000
HIGH MOLECULAR WEIGHT METHACRYLATE CONCRETE SEALER	SF	$5	142,900	179,800	124,200
STEEL STRUCTURES (UNPAINTED) (STRAIGHT)	LB	$3	-	-	-
STEEL STRUCTURES (UNPAINTED) (CURVED)	LB	$5	-	-	1,766,600
PRESTRESSED CONCRETE BEAM 64" DEEP	LF	$525	18,160	-	-
PRESTRESSED CONCRETE BEAM 48" DEEP	LF	$450	-	22,770	-
PRESTRESSED CONCRETE BEAM 40" DEEP	LF	$425	-	-	16,774
DISC BEARINGS	EA	$3,000	144	208	228
PREFABRICATED EXPANSION JOINT SYSTEM, 4"	LF	$500	1,200	1,700	1,600
RETAINING WALL > 15'	LF	$600	0	250	900
RETAINING WALL < 15'	LF	$300	0	350	1,000
		STRUCTURE SUBTOTAL COST	$34,843,367	$44,072,453	$41,644,557
		15% MAINTENANCE OF TRAFFIC	$5,226,505	$6,610,868	$6,246,684
		SUBTOTAL COST	$40,069,872	$50,683,320	$47,891,241
		35% CONTINGENCY	$14,024,455	$17,739,162	$16,761,934
		TOTAL COST	**$55,000,000**	**$69,000,000**	**$65,000,000**
		COST/SF	$385	$384	$523

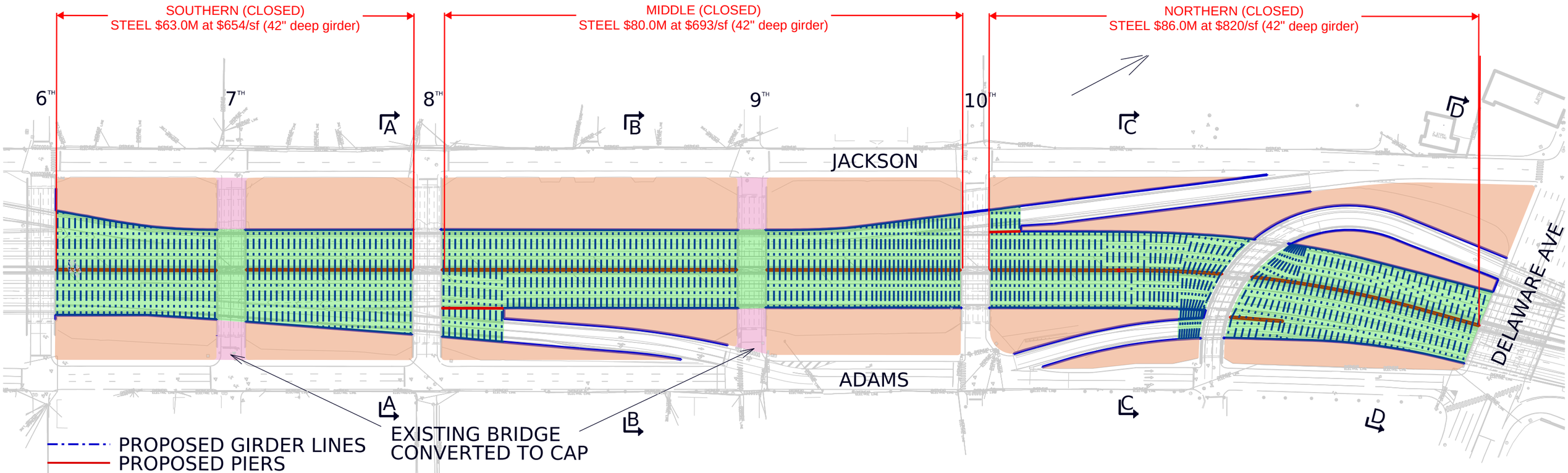
COST SUMMARY (CONCRETE, CLOSED BRIDGE)

ITEM TITLE	UNIT	UNIT PRICE	SOUTHERN COST	MIDDLE COST	NORTHERN COST
ROCK EXCAVATION FOR STRUCTURES AND TRENCHES	CY	$200	20,200	28,400	24,500
BACKFILL	CY	$45	62,100	74,700	59,800
REMOVAL OF STRUCTURES AND OBSTRUCTIONS	LS	$1	498,000	524,100	0
SHORING	LS	$1	1,840,000	2,830,000	2,620,000
PORTLAND CEMENT CONCRETE MASONRY, ABUTMENT FOOTING, CLASS A	CY	$800	2,500	3,200	2,600
PORTLAND CEMENT CONCRETE MASONRY, ABUTMENT ABOVE FOOTING, CLASS A	CY	$1,000	5,600	7,300	6,000
PORTLAND CEMENT CONCRETE MASONRY, PIER ABOVE FOOTING, CLASS A	CY	$1,200	900	1,300	1,200
PORTLAND CEMENT CONCRETE MASONRY, PARAPET, CLASS A	CY	$1,200	100	100	200
PORTLAND CEMENT CONCRETE MASONRY, PIER FOOTING, CLASS B	CY	$800	1,200	1,800	1,600
PORTLAND CEMENT CONCRETE MASONRY, SUPERSTRUCTURE, CLASS D	CY	$1,200	2,800	3,300	3,000
BAR REINFORCEMENT, EPOXY COATED	LB	$2	1,916,100	2,440,000	2,125,600
EPOXY CONCRETE SEALER	SF	$10	13,200	17,400	14,900
SILICONE-BASED ACRYLIC CONCRETE SEALER	SF	$8	59,600	70,700	64,600
HIGH MOLECULAR WEIGHT METHACRYLATE CONCRETE SEALER	SF	$5	96,400	115,500	104,900
STEEL STRUCTURES (UNPAINTED) (STRAIGHT)	LB	$3	-	-	-
STEEL STRUCTURES (UNPAINTED) (CURVED)	LB	$5	-	-	1,500,900
PRESTRESSED CONCRETE BEAM 64" DEEP	LF	$525	12,321	-	-
PRESTRESSED CONCRETE BEAM 48" DEEP	LF	$450	-	14,733	-
PRESTRESSED CONCRETE BEAM 40" DEEP	LF	$425	-	-	12,531
DISC BEARINGS	EA	$3,000	144	208	228
PREFABRICATED EXPANSION JOINT SYSTEM, 4"	LF	$500	1,200	1,700	1,600
RETAINING WALL > 15'	LF	$600	0	250	1,000
RETAINING WALL < 15'	LF	$300	0	350	1,100
		STRUCTURE SUBTOTAL COST	$34,237,227	$43,281,482	$45,005,299
		15% MAINTENANCE OF TRAFFIC	$5,135,584	$6,492,222	$6,750,795
		SUBTOTAL COST	$39,372,811	$49,773,704	$51,756,094
		35% CONTINGENCY	$13,780,484	$17,420,796	$18,114,633
		TOTAL COST	**$54,000,000**	**$68,000,000**	**$70,000,000**
		COST/SF	$560	$589	$667



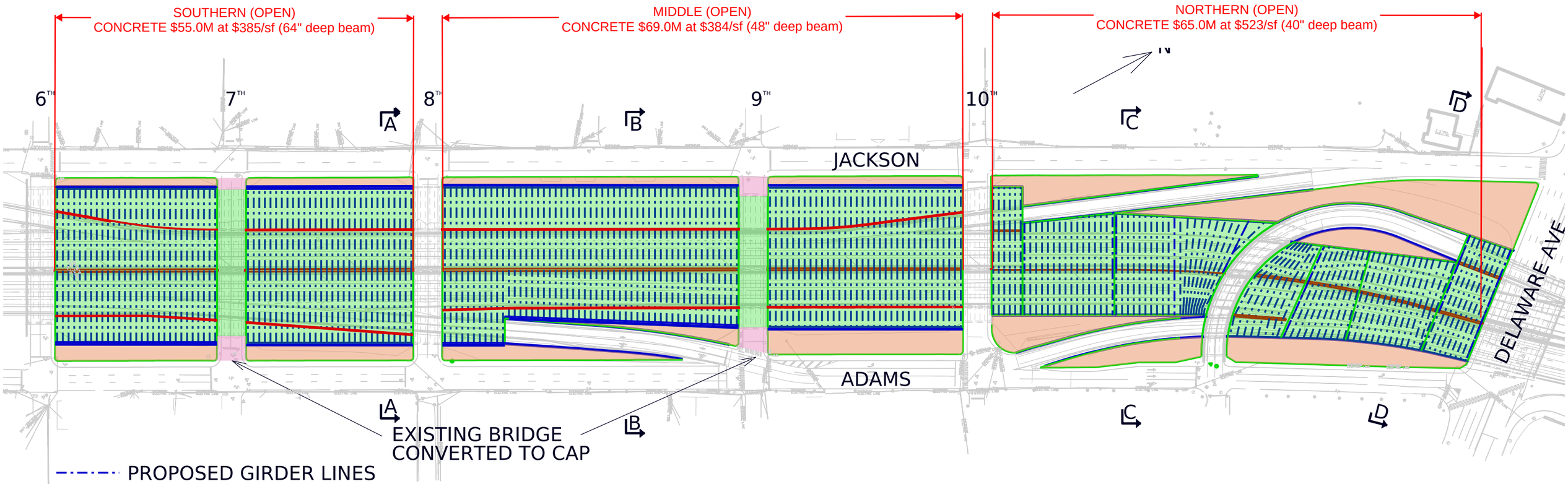
GENERAL PLAN OF OPEN CONCEPT

SCALE 1" = 150'-0"



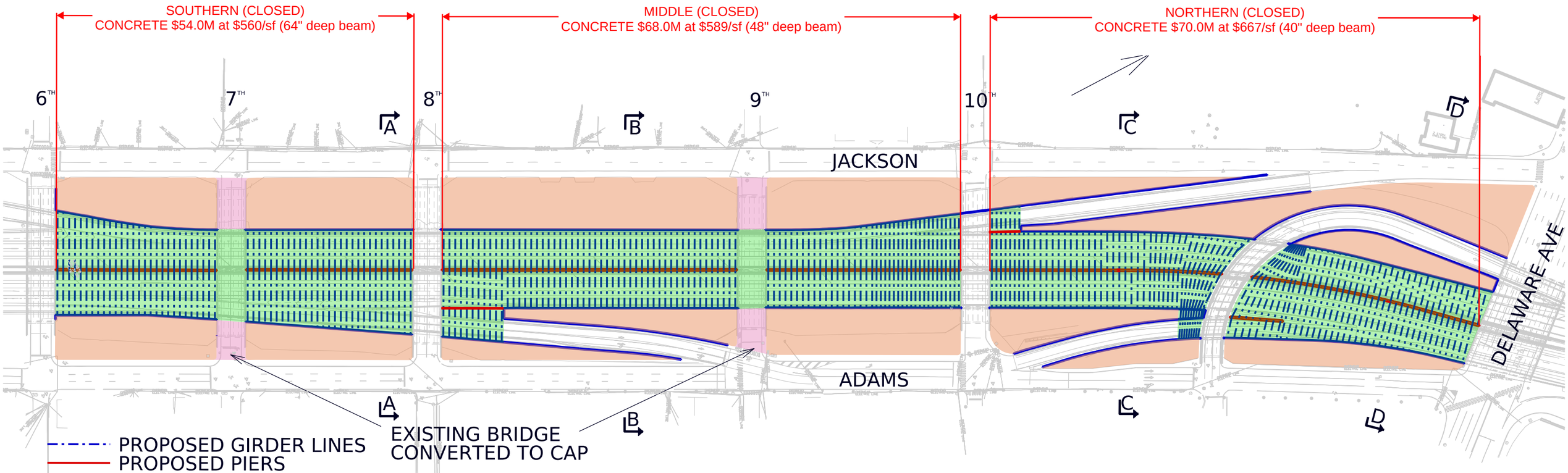
GENERAL PLAN OF CLOSED CONCEPT

SCALE 1" = 150'-0"



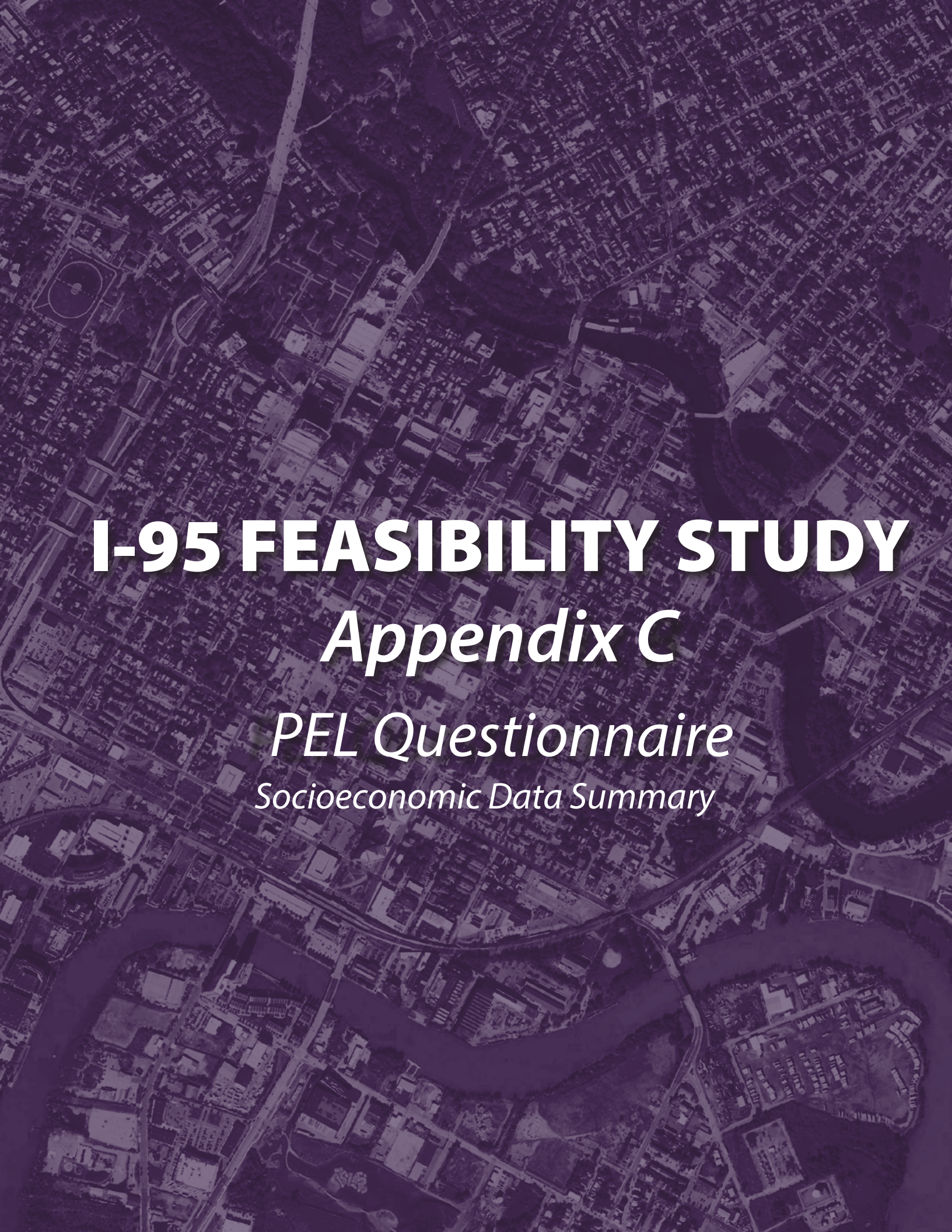
GENERAL PLAN OF OPEN CONCEPT

SCALE 1" = 150'-0"



GENERAL PLAN OF CLOSED CONCEPT

SCALE 1" = 150'-0"



I-95 FEASIBILITY STUDY

Appendix C

PEL Questionnaire

Socioeconomic Data Summary

PEL Questionnaire Appendix C:
Socioeconomic Data Summary

Socioeconomic Data Summary

Socioeconomic data for the project area were pulled using census tract-level data. The most recent data were used for each socioeconomic indicator. The project limits touch census tracts 11, 15, 16, 21, 22, and 28 in New Castle County, Delaware (Figure 1).

The project is located in an area bound by North Jackson Street to the west, West Sixth Street to the south, North Adams Street to the east, and Delaware Avenue to the north in Wilmington, Delaware, just west of downtown. The project limits include the rights of way for all streets listed above, excluding Delaware Avenue, and including the I-95 right of way and the Sixth, Seventh, Eighth, Ninth, and 10th Street bridges. The data pulled include general population, demographics, environmental justice, limited English proficiency, and access to personal vehicle data.

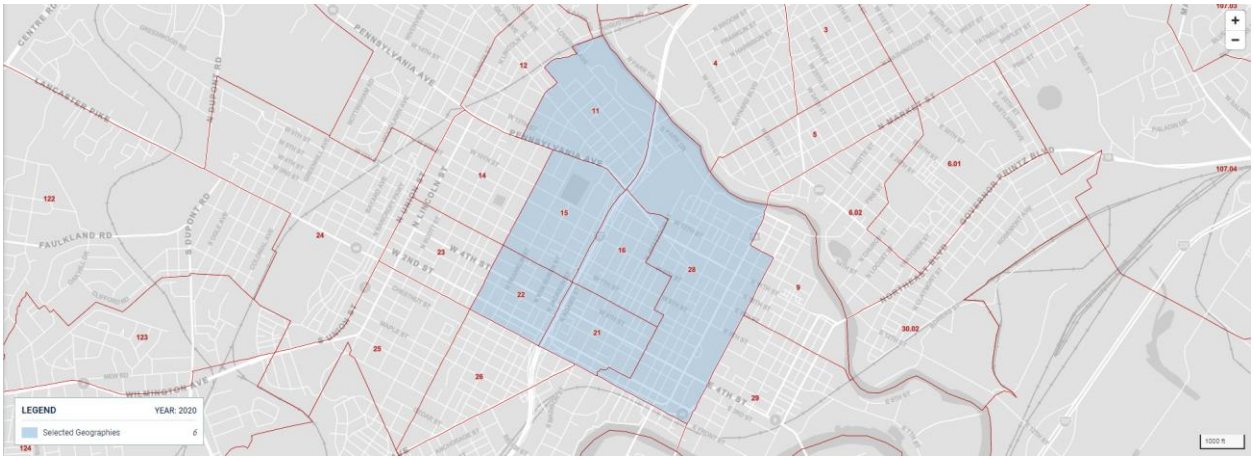


Figure 1: Census Tracts 11, 15, 16, 21, 22, and 28 in New Castle County, Delaware from https://data.census.gov/cedsci/map?vintage=2020

Overview

The census blocks surrounding the study area include several Environmental Justice populations: 67.9% of the population are people of color, 29.1% live under the poverty line, 14.8% have not completed high school, and 26.7% do not have access to a personal vehicle. Most residents speak English well (96.2%), but of those who do not, almost all of them speak Spanish as a first language (94.6%).

General Population, Economics, and Housing Data

These data were pulled from the 2020 census and 2020 American Community Survey (ACS) 5-year estimates for census tracts 11, 15, 16, 21, 22, and 28. The data include values and ranges of values for information such as the median age, median household income, number of persons per household, occupation of housing units, and percentage of population born outside of the United States:

- The median age ranges from 31.9 years old in Census Tract 22 to 38.1 years old in Census Tract 11 (S0101).

- The median household income ranges from $19,464 in Census Tract 21 to $53,789 in Census Tract 11 (S1901).
- The average household size ranges from 1.34 in Census Tract 11 to 3.78 in Census Tract 22 (S1101).
- 86.7% of households are occupied (H1).
- 8.6% of the population was born outside of the United States (B05002).

Environmental Justice (EJ) Community Status
These data were pulled mainly from the 2020 American Community Survey (ACS) 5-year estimates for census tracts 11, 15, 16, 21, 22, and 28 and include information such as the percentage of the population who are people of color, below poverty level, limited English-speaking, or who have less than a high school education:

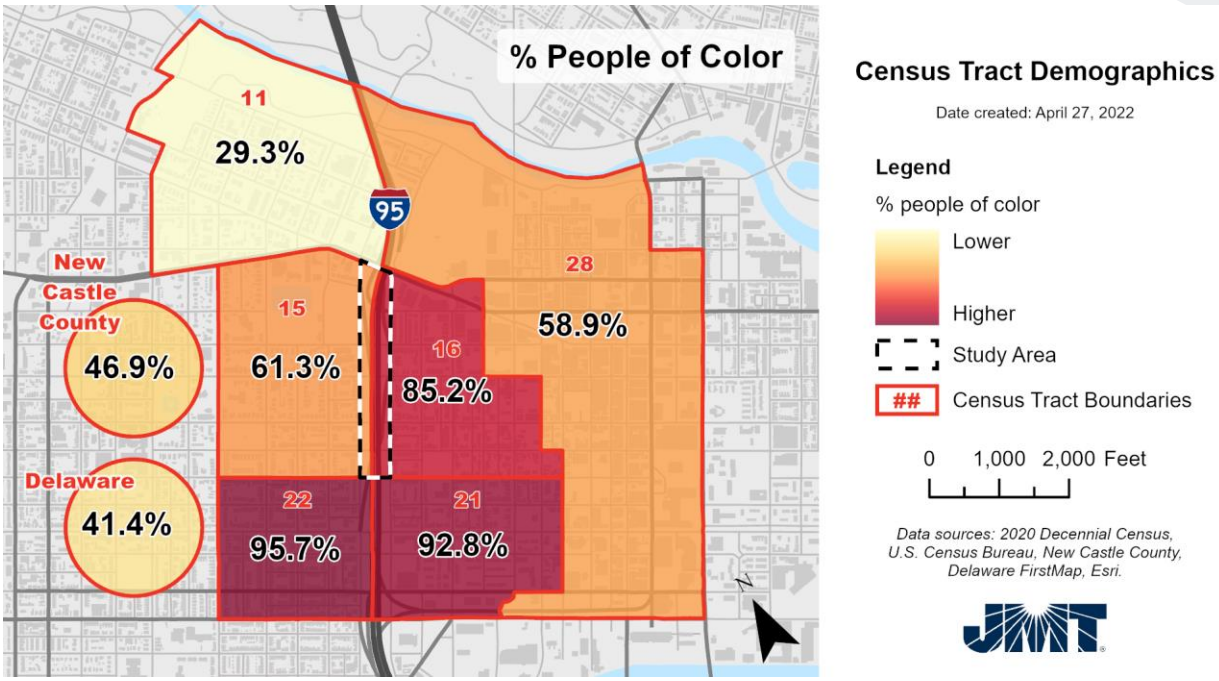
- 67.9% of the population is a person of color (P2).
- 29.1% of the population is below poverty level (S1701).
- 2.7% of households are limited English-speaking households (S1602).
- 14.8% of population 25 years and over with less than a high school education (S1501).

Limited English Proficiency (LEP)
These data were pulled from the 2020 American Community Survey (ACS) 5-year estimates, Table S1601, for census tracts 11, 15, 16, 21, 22, and 28. These data indicate that 3.8% of adults have limited English proficiency (LEP), that is, who speak English less than “very well.” Of those adults with LEP, 94.6% speak Spanish and 5.4% speak other languages.

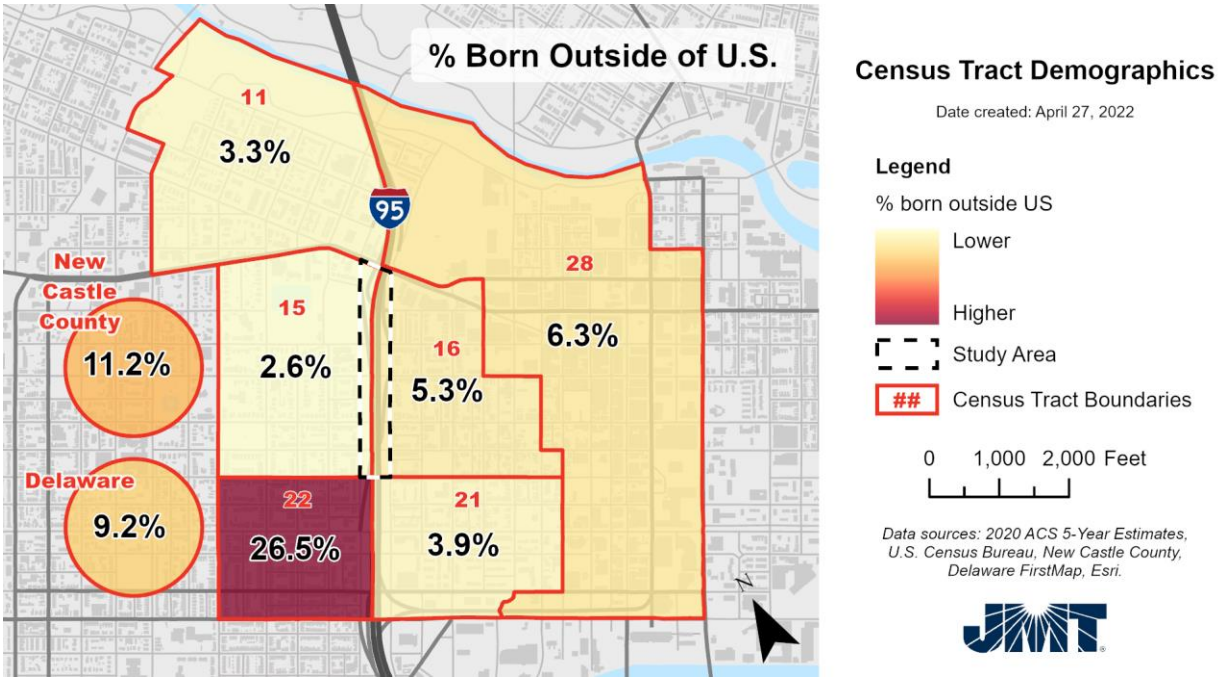
Personal Vehicle Access
These data were pulled from the 2020 American Community Survey (ACS) 5-year estimates, Table S2504, for census tracts 11, 15, 16, 21, 22, and 28. These data indicate that 26.7% of households have no access to a personal vehicle.

Schools
There is one school adjacent to the project area: William Lewis Elementary School, located at 920 N Van Buren St.

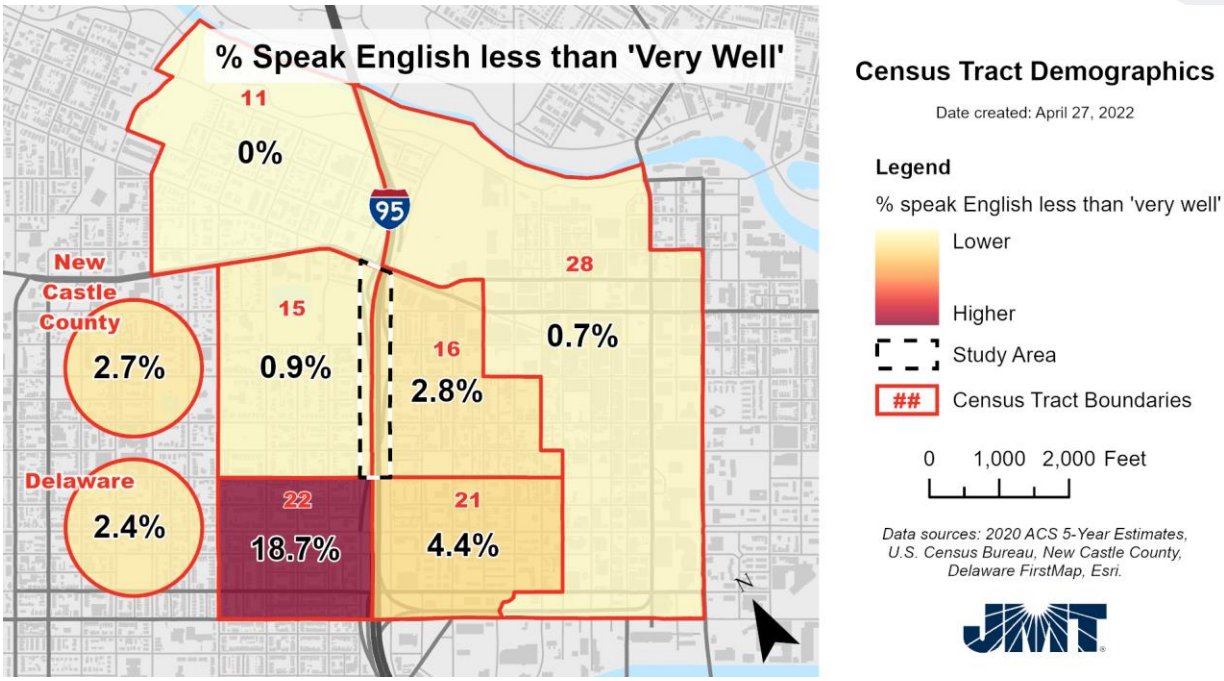
Places of Worship
There is one place of worship adjacent to the project area: Trinity Episcopal Parish, located at 1108 N Adams St.



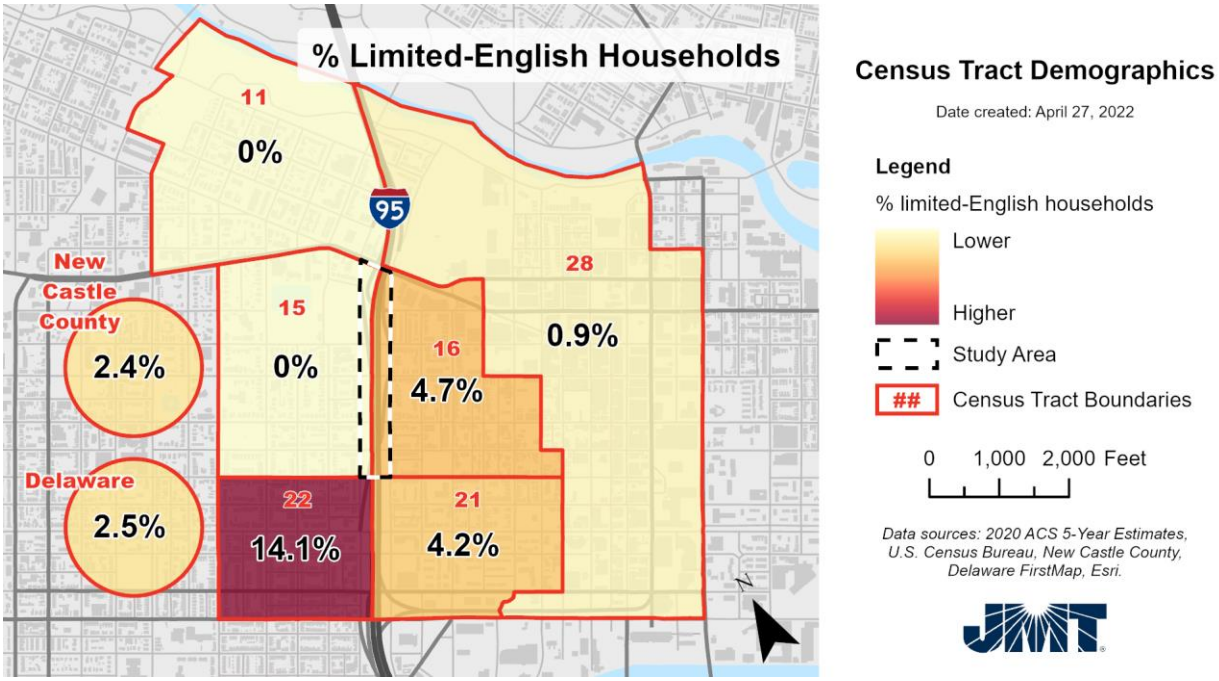
The map above shows the percentage of the total population who do not identify as non-Hispanic white. The data for this map come from the 2020 Decennial Census.



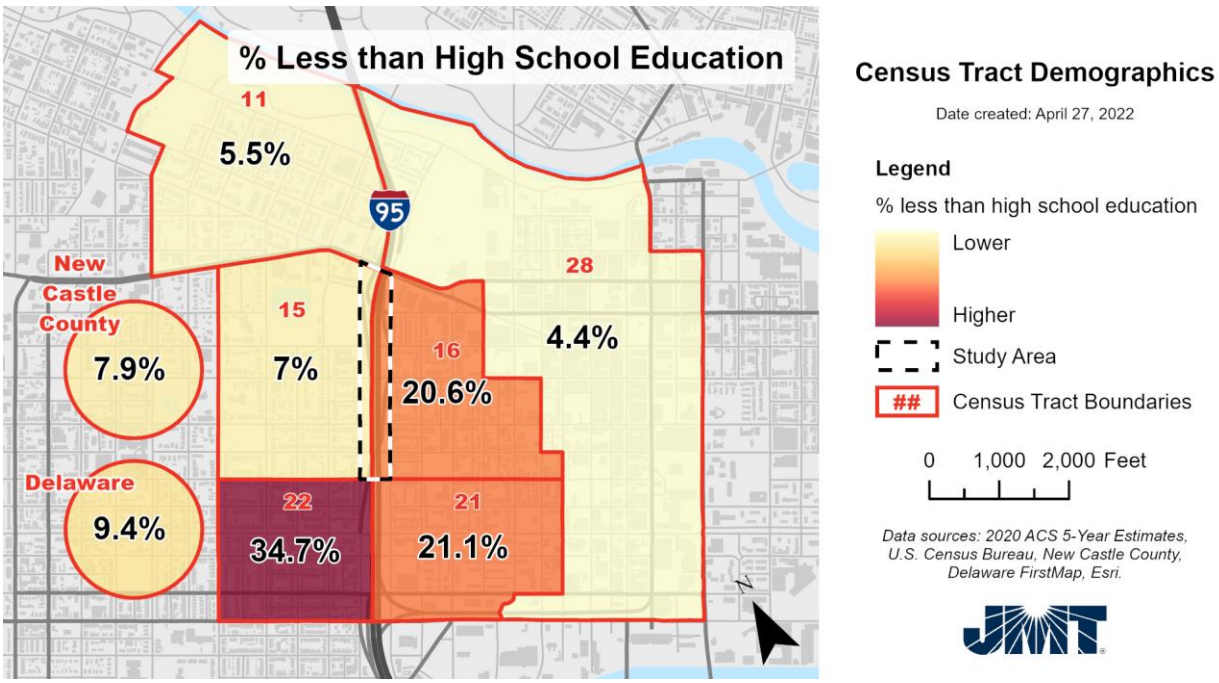
The map above shows the percentage of the total population who were born outside of the United States. The data for this map come from the 2020 ACS 5-Year Estimates, 2016-2020.



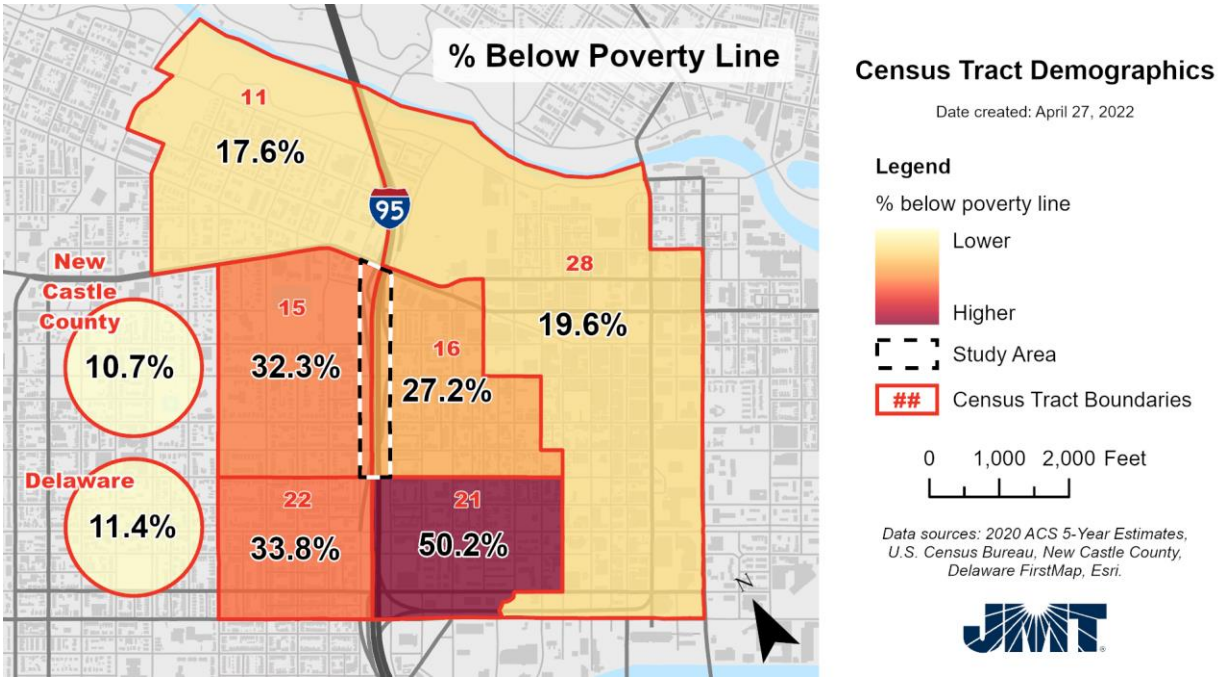
The map above shows the percentage of the total population who speak English less than “very well.” The data for this map come from the 2020 ACS 5-Year Estimates, 2016-2020.



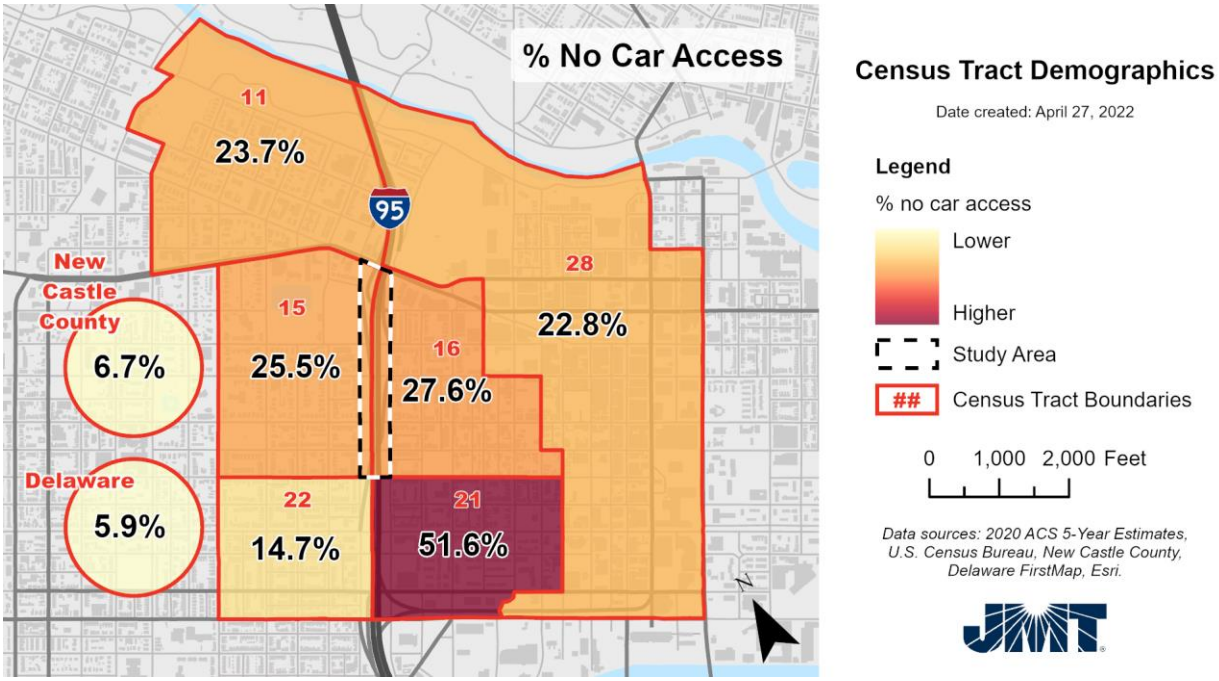
The map above shows the percentage of households where no member 14 years old or older speaks only English or speaks another language and speaks English “very well.” “In other words, all members 14 years old or over have at least some difficulty with English,” according to the Census Bureau. The data for this map come from the 2020 ACS 5-Year Estimates, 2016-2020.



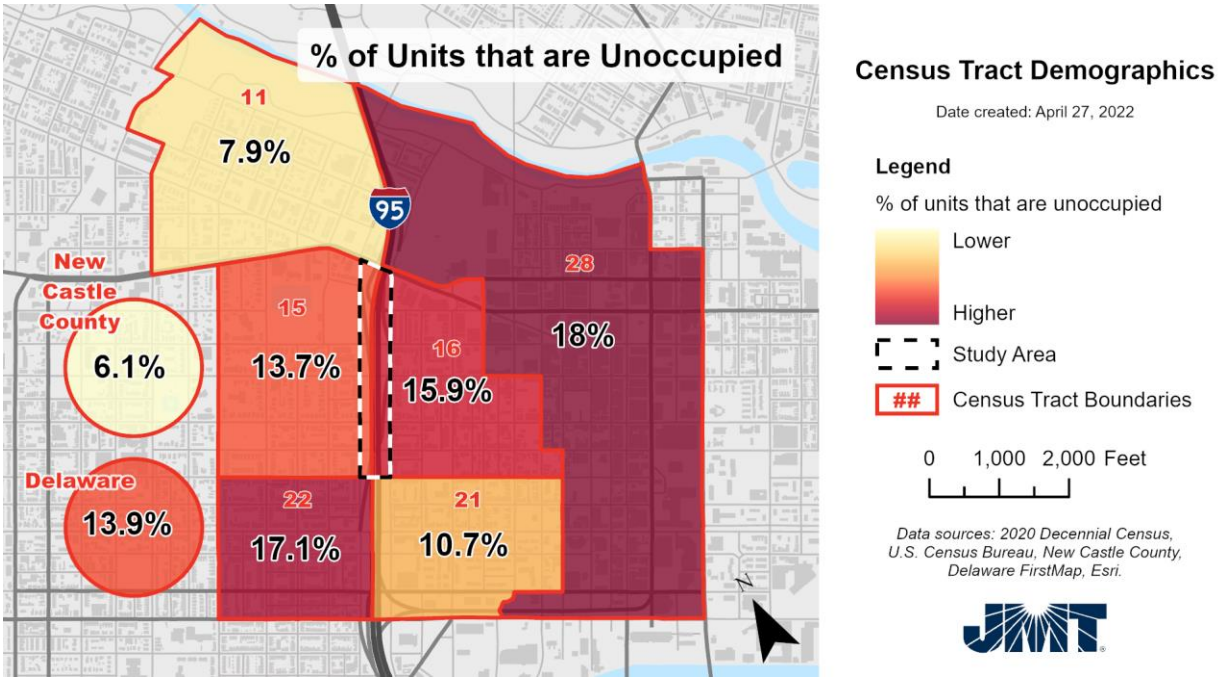
The map above shows the percentage of the population aged 25 and older who completed less than a high school education or equivalent. The data for this map come from the 2020 ACS 5-Year Estimates, 2016-2020.



The map above shows the percentage of the total population whose income falls below the poverty line. The data for this map come from the 2020 ACS 5-Year Estimates, 2016-2020.



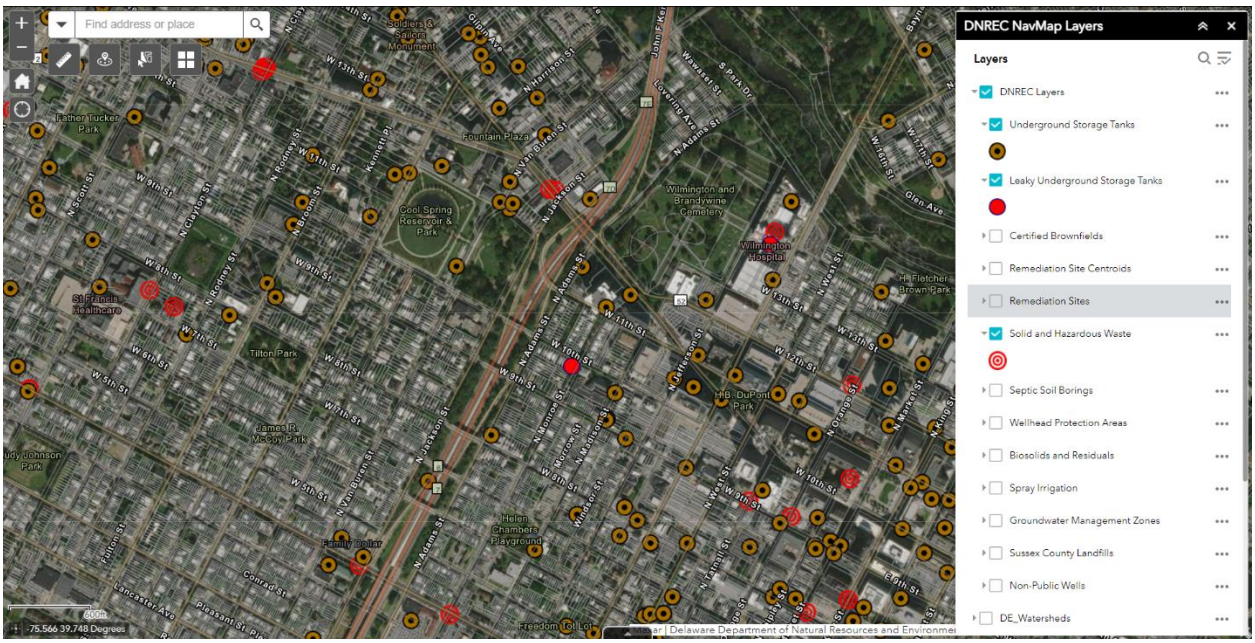
The map above shows the percentage of the households with no access to a car. The data for this map come from the 2020 ACS 5-Year Estimates, 2016-2020.



The map above shows the percentage of housing units that are unoccupied. The data for this map come from the 2020 Decennial Census.

PEL Questionnaire Appendix D: Hazardous Materials Summary

DNREC Hazardous Materials Map



Hazardous Material Sites Adjacent to I-95 Project Area							
Site Name	**Site Type**	**Program/Site ID**	**LUST Project Name**	**LUST Project Number**	**LUST Project Status**	**Substance**	**Program**
Trinity Episcopal Church	Underground Storage Tank	3-001363	N/A	N/A	N/A	N/A	N/A
DOT Residential Adam Street	Underground Storage Tank	3-001860	N/A	N/A	N/A	N/A	N/A
Del DOT Right of Way I95 @ North Jackson	Underground Storage Tank	3-003462	N/A	N/A	N/A	N/A	N/A
Del DOT Right of Way I95 @ North Jackson	Leaky Underground Storage Tank	3-003462	I-95 South Bound Ramp	N2012072	Inactive	Unknown	N/A
CVS Pharmacy #0088	Solid and Hazardous Waste	DEN201200013	N/A	N/A	N/A	N/A	Hazardous Waste Generator
Shell Oil Company	Solid and Hazardous Waste	DED984071829	N/A	N/A	N/A	N/A	Hazardous Waste Generator

PEL Questionnaire
Reconnecting the Community: I-95 Cap Feasibility Study

1. Background:

a. Who is the sponsor of the PEL study? (State DOT, Local Agency, Other)

The PEL study sponsor is the Wilmington Area Planning Council (WILMAPCO).

b. What is the name of the PEL study document and other identifying project information (e.g., sub-account or STIP numbers, long-range plan, or transportation improvement program years)?

The name of the PEL study document is Bridging I-95: Connecting the Community Cap Feasibility Study. The project was identified as the I-95 Cap Feasibility Study and was programmed in the WILMAPCO fiscal year (FY) 2022 Unified Planning Work Program (UPWP).

c. Who was included on the study team (Name and title of agency representatives, consultants, etc.)?

The study team consisted of WILMAPCO staff and consultant support from HargreavesJones and Johnson, Mirmiran & Thompson (JMT).

WILMAPCO Staff:
- Tigist Zegeye – Executive Director, WILMAPCO
- Dave Gula – Principal Planner, WILMAPCO
- Randi Novakoff – Outreach Manager, WILMAPCO

HargreavesJones Staff:
- Mary Margaret Jones, RLA, FASLA, FAAR – President & CEO, HargreavesJones
- Kirt Rieder, ASLA, RLA, – Principal, HargreavesJones
- Aubrey Tyler – Senior Designer, HargreavesJones

JMT Staff:
- Dave DuPlessis, PE – Senior Vice President, JMT
- Corey Hull, PE – Vice President, JMT
- Joanne Arellano, PE, PTOE, PTP – Associate Vice President, JMT
- Angie Hernandez, AICP – Senior Associate, JMT
- Cameron Carley – Transportation Planner, JMT

The advisory committee for the project is broader, including neighborhood/civic organizations, community and advocacy groups, churches, local, state and federal agencies; and city, state and US elected officials. The advisory committee consists of the following members:

- Tigist Zegeye – Executive Director, Wilmington Area Planning Council (WILMAPCO)
- Dave Gula – Principal Planner, Wilmington Area Planning Council (WILMAPCO)
- Shante Hastings – Deputy Secretary and Chief Engineer, Delaware Department of Transportation (DelDOT)
- David Edgell – Director, Delaware Office of State Planning Coordination (OSCP)
- John Rago – Deputy Chief of Staff for Policy and Communications, City of Wilmington Mayor's Office
- John Sisson – Chief Executive Officer, Delaware Transit Corporation (DTC)
- Matt Meyer – County Executive, New Castle County
- Aundrea Almond – Chief of Staff, New Castle County
- Bonnie Wu – Regional Director, Office of U.S. Sen. Tom Carper
- Andrew Dinsmore – Projects Manager, Office of U.S. Sen. Chris Coons
- Betsey Coulbourn – State Director, Office of Lisa Blunt Rochester
- Lindsay Donnellon – Planning Specialist, Federal Highway Administration (FHWA)
- Sen. Sarah McBride – Delaware State Senator, 1st District
- Sen. Darius Brown – Delaware State Senator, 2nd District
- Sen. Elizabeth Lockman – Delaware State Senator, 3rd District
- Rep. Gerald Brady – Delaware State Representative, 4th District
- Rep. Nnamdi Chukwuocha – Delaware State Representative, 1st District
- Rep. Sherry Dorsey Walker – Delaware State Representative, 3rd District
- Michelle Harlee – Wilmington City Council, 4th District
- Bregetta Fields – Wilmington City Council, 5th District
- Yolanda McCoy – Wilmington City Council, 6th District
- Nathan Field – Wilmington City Council, 8th District
- David Ross – 4th District Neighborhood Planning Council/Trinity Vicinity Neighborhood Association
- Jerome Brown – 5th District Neighborhood Planning Council
- Bishop Doris Redding – 6th District Neighborhood Planning Council
- Harold Schneikert – 8th District Neighborhood Planning Council
- Martin Hageman – Executive Director, Downtown Visions
- Caren Turner – United Neighbors/West Center City Neighborhood Association
- Sarah Lester – President & Chief Executive Officer, West Side Grows Together
- Laura Adarve – Director of Prevention and Advocacy, Latin American Community Center
- James Wilson – Executive Director, Bike Delaware
- Loretta Harper-Brown – Executive Director, BlindSight Delaware
- Nathan Durant – Cool Spring/Tilton Neighborhood Association
- Cindy Gibbs – Westside Neighborhood Coalition
- Brandon Furrowh – Deputy Director, Hilltop Lutheran Neighborhood Center
- Rev. Patty Downing – Rector, Trinity Episcopal Church
- Cassandra T. Marshall – Quaker Hill Neighborhood Association

d. Provide a description of the existing transportation facility within the corridor, including project limits, modes, functional classification, number of lanes, shoulder width, access control and type of surrounding environment (urban vs. rural, residential vs. commercial, etc.)

This study focuses on an area bound by the rights-of-way of N. Jackson Street and N. Adams Street between W. 6th Street and Delaware Avenue, including I-95 and all bridges over it. Within this area, I-95 is currently a below-grade, urban Interstate highway with two travel lanes in each direction. N. Jackson and N. Adams streets are one-way, mixed-use urban streets, which function as southbound and northbound service drives, respectively, along the freeway, each including 2 travel lanes and 1 parking lane. Also within this area are several existing bridges carrying 2 one-way travel lanes each, for the following roads: West Seventh Street (eastbound), West Eighth Street (westbound), West Ninth Street (eastbound), West 10th Street (westbound), and the Exit 7A ramp (southbound I-95 to eastbound 11th Street).

Historical Context: This alignment of I-95 through Wilmington was known as the Adams-Jackson Corridor during the planning phase for I-95 during the 1950s.

e. Provide a brief chronology of the planning activities (PEL study) including the year(s) the studies were completed.

***Downtown Development District Plan (2016)*:**

The Downtown Development District Plan established a downtown development district (DDD) for downtown Wilmington. In Delaware, DDDs are areas designated by the state where private construction projects can receive grants up to 20% of their capital construction costs, as well as other local government incentives. This plan delineated the boundaries of the DDD, which abuts the study area of this project on Adams Street, between 4th and 9th Streets.

***Moving Us Forward: City of Wilmington Bike Plan (2019)*:**

Moving Us Forward: City of Wilmington Bike Plan was developed concurrently with the Wilmington 2028: A Comprehensive Plan for Our City and Communities document. Moving Us Forward builds upon the 2008 Wilmington Bicycle Plan, with three goals:

- Develop a coordinated and safe citywide bike route network.
- Educate and advocate to provide safer biking conditions for all; and
- Facilitate access to biking.

The plan accomplishes these goals by analyzing existing conditions, proposing different types of bike facilities, visualizing facility concepts, articulating policy recommendations, and proposing implementation progress measures.

Moving Us Forward identifies separated pathways, bike lanes, and protected bike lanes that are currently planned for or proposed within this study's area. Separated pathways are planned for along N. Jackson Street from 10th Street to 8th Street and N. Adams Street from 6th Street to 8th Street. Bike lanes are planned for the bridges over I-95 on 6th, 7th, 8th, 9th, and 10th Streets. Protected bike lanes are proposed for the Delaware Avenue bridge over I-95. Although the types of facilities identified for each of these locations are specified, the plan notes that these identified locations should not be construed as "recommending against alternate routes or higher-quality facilities." Additionally, Delaware Avenue (including over I-95) was the third-most mentioned location where survey respondents said that bike infrastructure would be beneficial.

***Wilmington 2028: A Comprehensive Plan for Our City and Communities (2020)*:**

Wilmington 2028 is the update to the City of Wilmington's former 2009 Citywide Comprehensive Plan. The new plan provides important demographic and socioeconomic data to help inform for whom the I-95 cap project might serve. The plan specifically identifies equity, health, sustainability, resilience, and safety as the guiding principles that animate the plan. Maps created for the plan give extra context to the area surrounding I-95 in Wilmington.

Bridging I-95: Connecting the Community Cap Feasibility Study (2021 – 2023)

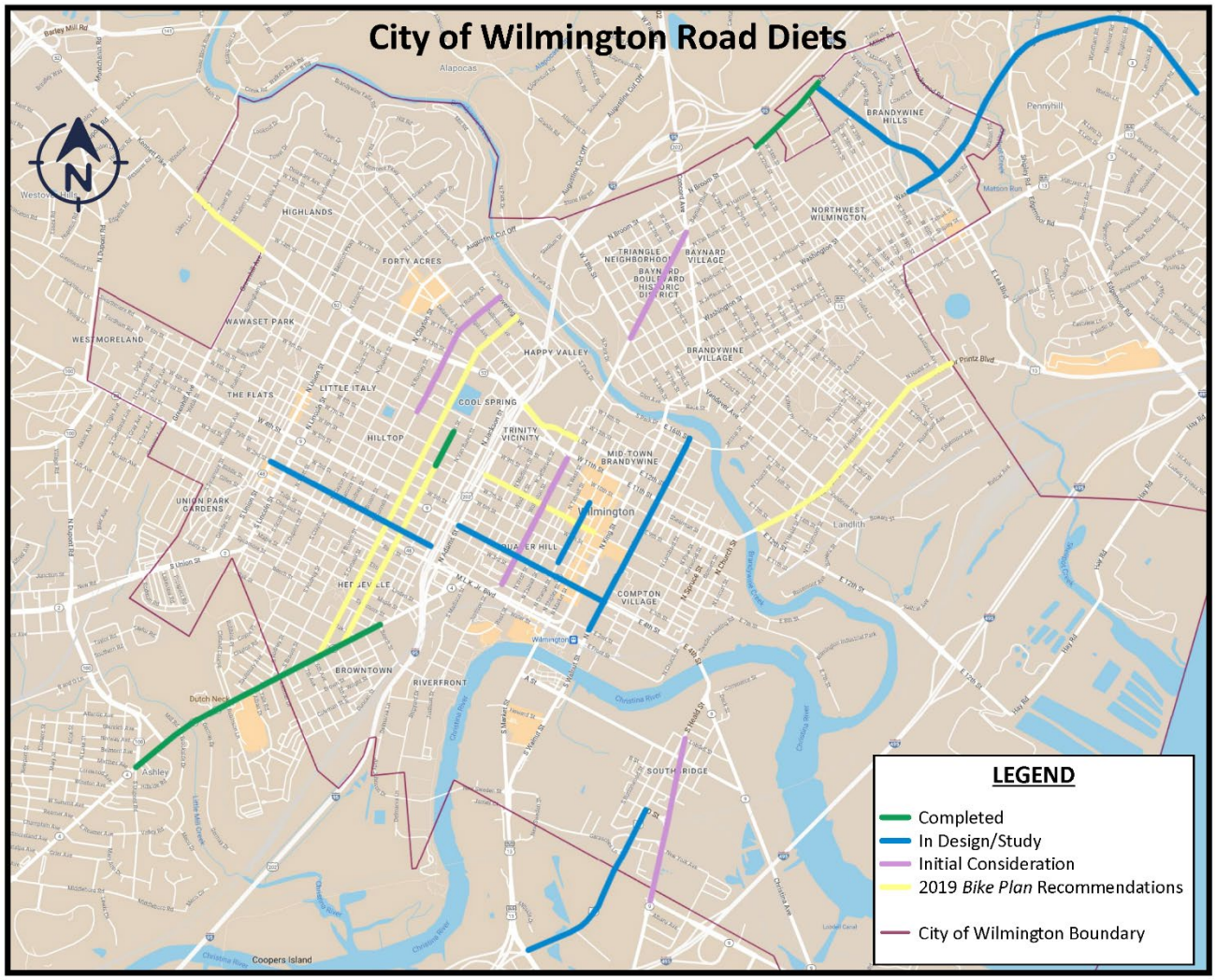
The Bridging I-95: Connecting the Community Cap Feasibility Study (PEL study) was initiated in 2021 with the draft being completed in 2022 and anticipated to be finalized and adopted in the beginning of 2023. This study resulted in a concept for a cap structure over I-95 and explored potential uses such as new public spaces and transportation facilities. The concept has been vetted with the community and stakeholders through an intensive public outreach process. The final report summarizes all aspects of the study, including the Planning and Environmental Linkages (PEL) checklist and supporting document needed for the project to be eligible for local, state, and federal funding.

f. Are there recent, current, or near future planning studies or projects in the vicinity? What is the relationship of this project to those studies/projects?

- **I-95 Restore the Corridor Wilmington** - Restore the Corridor Wilmington is a significant DelDOT transportation project along the I-95 corridor in Wilmington that will make the repairs needed to extend the bridges' service life and avoid major and costly rehabilitation work for a minimum of 30 years. Planned construction includes the repair of 19 bridges, I-95 pavement, and ramps within the project limits. Major construction on I-95 began in February 2021. The Restore the Corridor Project includes project improvements to several ramps and bridges within this study area.
- **4th Street, Walnut Street to Adams Street** - The DelDOT led 4th Street project includes improvements to the operation and safety aspects of the corridor to address needed improvements for pedestrians, bicyclists, and transit users. The project is currently in the design phase and is planned to be constructed in 2025. The 4th

Street project relates to this project in their connection point at 4th Street and Adams. The overall design of that intersection should be considerate of both project objectives with an effort to create a cohesive multimodal transportation network. Although the projects do directly touch, they are associated by Adams Street.

- **City of Wilmington Road Diets** – The City of Wilmington provided a map of road diets that were recently complete, in design/study, or in initial consideration. This information was provided in April 2022. The map is shown in the image below. The 4th Street project (described in above bullet) is shown on the map as are other streets that are being considered for road diets.



2. Methodology used:

a. What was the scope of the PEL study and the reason for completing it?

The Bridging I-95: Connecting the Community CAP Feasibility Study (PEL study) was conducted by WILMAPCO in partnership with the City of Wilmington, and DelDOT to address this historic inequity created by I-95 in the City of Wilmington, DE. The scope includes a study to determine the feasibility of capping one or more sections of I-95 between the Delaware Avenue bridge to the north and the 6th Street bridge to the south through public space improvements. A key component of completing this PEL study was to provide information that would support the funding for further study, NEPA review, design, and construction.

The scope of this PEL study included:

- Community Visioning - Community workshops, online engagement and surveying, walking tours, listening sessions, and other community meetings. There was also stakeholder outreach through Advisory Committee meetings. The visioning was done to provide opportunity for the communities in the project area to directly engage in the project and incorporate their thoughts, ideas, concerns, and needs into the project.
- Defining Assumptions and Creating Initial Concepts for Analysis – Development of a purpose and need statement, project goals and objectives, and initial concepts for review. This was done to develop concepts for the cap structure uses, explore the character and program of the proposed cap public spaces as well as relationships to adjacent communities, surrounding transportation connectivity, and structural considerations and feasibility review.
- Assessing Feasibility of Concepts – The conceptual alternatives were assessed on how well they meet the project's purpose and need, project goals, and objectives. This task included traffic studies and analysis as well as structural feasibility studies.
- Final Design Concept – The study resulted in identification of a final design concept for the public space on top of the cap structure. It also includes an order of magnitude cost estimate for the project.

b. Did you use NEPA-like language? Why or why not?

This study was primarily focused on the public space on top of the future cap structural and a feasibility analysis to determine feasibility of such a project. While some NEPA-like language was used to streamline the NEPA process for future transportation projects regarding the I-95 cap, there will still be many studies needed to advance this project.

c. What were the actual terms used and how did you define them? (Provide examples or list)

Purpose and Need Statement – describes the underlying need to be met and the other factors relevant to the assessment of a range of alternatives.

Alternative – A reasonable range of solutions to address the identified problems and satisfy the stated project purpose and need.

d. How do you see these terms being used in NEPA documents?

These terms will be used in NEPA document in a similar fashion to how they were used in the PEL study.

e. What were the key steps and coordination points in the PEL decision-making process? Who were the decision-makers and who else participated in those key steps? For example, for the corridor vision, the decision was made by state DOT and the local agency, with buy-in from FHWA, the USACE, and USFWS and other resource/regulatory agencies.

This planning study has been an open and collaborative process engaging with stakeholder agencies and community members throughout the decision-making process. The project visioning was an interactive process where the community at large and the advisory committee helped develop and formalize the project vision, the purpose and need statement, and the alternatives.

The study team met with the advisory committee regarding the following topics on:

- September 30, 2021
  - Study overview, approach, scope, and schedule
  - Preliminary transportation analysis mapping and current corridor conditions
  - Public visioning strategy and public outreach plans
- March 8, 2022
  - Public visioning results summary
  - Project goals
  - Project purpose and need
  - Preliminary alternatives for consideration
  - Outreach strategy for April 19, 2022 public workshop.
- September 6, 2022
  - Summary of public input following public workshop #2
  - Design considerations and concept alternative updates
- November 15, 2022
  - Overview of public process
  - Updated final design concept alternative for the public space on to of the future cap.

- Design concept typical sections of transportation and streetscape improvements and traffic calming considerations for the streets surrounding the future public space on the cap.
- Traffic analysis findings of potential bridge closures.
- Structural considerations and initial feasibility findings.

There was also direct coordination with partner agencies on key project considerations as follows:

- Potential Bridge Closures and Traffic Analysis
  - The Project Team met with representatives from the City of Wilmington, DelDOT, and the Wilmington Fire Department to discuss the potential to close bridges to vehicles and discuss traffic analysis that should be done to understand feasibility and fatal flaws. Based on the traffic assessment it was determined that the closure of any combination of two bridges would have minimal impacts to the study area.

- Structural Feasibility
  - The Project Team met with representatives from DelDOT to discuss the study team's approach to determining the structural feasibility of a capped structure above I-95 within the project area which is between Delaware Avenue and 6th Street. It was determined that JMT would develop a preliminary beam design and spacing in-order to develop a magnitude of cost for the structure to be included in this study.

f. How should the PEL information be presented in NEPA?

The PEL information should be presented in NEPA as preliminary planning efforts focused on determining a community vision for the future public space and an initial feasibility assessment to determine if the project is feasible for implementation. The environmental overview including in this PEL Questionaire can provide the basis for environmental scoping. The other previously mentioned terms in this PEL study can also be used in NEPA documents in the same way as they were used in the PEL study.

3. Agency coordination:

a. **Provide a synopsis of coordination with Federal, tribal, state and local environmental, regulatory and resource agencies. Describe their level of participation and how you coordinated with them.**
Coordination meetings with the advisory committee and partner agencies, as summarized in Section 2. E of this PEL Questionnaire, were held ensuring coordination with various state and local agencies.

b. **What transportation agencies (e.g. for adjacent jurisdictions) did you coordinate with or were involved during the PEL study?**
There were several agency-specific coordination meetings and regular email communications throughout the study with DelDOT and the City of Wilmington (as addressed in Section 2. E of this PEL Questionaire) to discuss varies items including project goals, development of the purpose and need statement, and alternatives considered.

c. **What steps will need to be taken with each agency during NEPA scoping?**
Future steps will need to focus on final determination of study area and additional transportation and structural analysis, public and agency engagement, environmental concerns, long-term mainteance requirements, ownership, management, and park and open space programming for the new public spaces. During NEPA scoping, the coordination that was started during this PEL study should continue with the advisory committee. Agencies should be invited to contribute to any modifications to the final purpose and need statement. This task includes identifying and describing the needs of the individual agencies now and in future scenarios, and how the project can contribute to meeting those needs. Following that, agencies should be invited to participate in contributing to further developing the recommended alternative identified in the PEL study and participate in validating the data analysis regarding transportation and environmental concerns in the area.

Additional coordination with regulatory agencies as the project progresses during NEPA scoping should also include:

- US Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) Database review to obtain an official species list and evaluate potential impacts on resources managed by USFWS.
- An Environmental Review of the project should be requested from Delaware Department of Natural Resources and Environmental Control (DNREC) Species Conservation and Research Program (SCRP).
- Delaware State Parks should be engaged in future discussion on long term ownership and management of this new cap space.
- Federal Highways Administration (FHWA) should be engaged in future discussions regarding fire suppression, ventilation, and other safety and operational considerations for the future cap structure.

4. Public coordination:

a. Provide a synopsis of your coordination efforts with the public and stakeholders.

Four public workshops were held for this project, as follows:

- Public Workshop 1 and 1B (Virtual) (November 17, 2021 & January 12, 2022)
  - Study overview, approach, scope, and schedule
  - Preliminary transportation analysis mapping and current corridor conditions understanding
  - Public visioning of initial alternatives
- Public Workshop 2 (April 19, 2022)
  - Public visioning results summary
  - Project goals
  - Project purpose and need
  - Preliminary alternatives for consideration
- Public Workshop 3 (September 6, 2022)
  - Thee early concept ideas for public review
  - Community Engagement Updates
  - Traffic analysis outcomes
  - Discussion
- Public Workshop 4 (November 17, 2022)
  - Overview of public process
  - Updated final design concept alternative for the public space on top of the future cap.
  - Design concept typical sections of transportation and streetscape improvements and traffic calming considerations for the streets surrounding the future public space on the cap.
  - Traffic analysis findings of potential bridge closures.
  - Structural considerations and initial feasibility findings.

Postcards and posters were distributed prior to the meetings to residents and business owners in the vicinity. Public engagement advertisements and materials had information in English and Spanish regarding the meeting and the project. The project website (http://www.wilmapco.org/i95cap/) was created at the start of the project and updated throughout the project duration with project information as the project progressed. The website included presentation materials and announcements about upcoming engagement events and opportunities, ways to sign up for project infomration, and contact information for the project team. The webpage also housed online engagement activities that were left live for a minimum of two weeks following the public meetings. The public meetings were recorded and displayed on the project website for public viewing after the live meetings.

WILMAPCO additionally coordinated regarding this study with the public and stakeholders through various other meetings including:

- Wilmington Initiatives Partners Meetings – Regular project updates at monthly meetings
- Bridging I-95: Connecting the Community presentation to Westminster Presbyterian Environmental Justice Group was held on December 9, 2021
- Imagining a Cap Park Over I-95, UD LARC 350 on December 15, 2021
- WILMAPCO Council presentation on January 13, 2022
- WILMAPCO Technical Advisory Committee presentation on January 20, 2022
- WILMAPCO Non-Motorized Transportation Working Group presentation on February 1, 2022
- WILMAPCO Public Advisory Committee presentation on February 7, 2022

Additional coordination with project stakeholders on the advisory committee was also conducted as described above in Section 2. E.

5. Purpose and Need for the PEL study:

a. **What was the scope of the PEL study and the reason for completing it?**
The scope of this PEL study and the reason for completing it is listed in in Section 2. A of this PEL Questionnaire.

b. **Provide the purpose and need statement, or the corridor vision and transportation goals and objectives to realize that vision.**

Goals:

- **Reconnect** the neighborhoods divided by the construction of I-95 along the Jackson and Adams Street corridors and between the Delaware Avenue Bridge and the 6th Street Bridge.
- **Enhance** the character and pride of surrounding neighborhoods while providing opportunities to connect and unite neighborhoods.
- **Provide** equitable, safe, and connected access for pedestrians, cyclists and all modes of transportation.
- **Create** inclusive, welcoming and vibrant urban outdoor experiences for adjacent neighborhood residents through the creative use of publicly accessible open spaces such as streets, parks, squares, plazas, as well as landscape amenities.
- **Ensure** that there are no commercial or residential relocations.
- **Ensure** that there is no significant reconfiguration of I-95.
- **Increase** pedestrian safety.

Purpose: The purpose of this project is to restore connectivity between the neighborhoods adjacent to I-95 through inclusive, vibrant public realm and landscape amenities that celebrate neighborhood histories and provide equitable and safe access through a comfortable, safe, and connected multimodal network.

Need: This project is needed to rebuild the social fabric and connectivity of separated communities and repair the physical changes caused by the 1960's construction of I-95 which severely harmed the cohesion among communities and created uncomfortable and unsafe walking, biking and traveling due to inadequate multimodal access among neighborhoods.

Community Connectivity Through Inclusive, Welcoming, Vibrant Public Urban Outdoor Experiences

The construction of I-95 in Wilmington, Delaware, in the late 1950s to early 1960s caused the deconstruction and removal of approximately 12 acres of homes, businesses, places of worship, and neighborhood streets within the project area.
As a result, minimal connectivity remains between West Center City and West Side neighborhoods due to the physical divide created by I-95.

Based on the National Recreation and Park Association (NRPA) *2022 NRPA Agency Performance Review*, the benchmark average of park land per 1,000 residents for a jurisdiction with a population between 50,000 to 99,999 residents *(Wilmington has a population of approximately 70,898, 2020 Census data)* is between 4.7 acres of park land to 15.9 acres. The lower quartile of the range is 4.6 acres, with 9.2 as the median quartile, and 15.9 as the upper quartile. The communities within this study area are generally at or below the lower quartile, with immediately adjacent neighborhoods having less than five acres of park space per 1,000 residents.

Neighborhoods near the southern end of the project limits have even less access with most residents only having access to one acre or less of parkland per 1,000 residents. Helen Chambers Playground is the closest park to the southeastern side of this study area, with approximately 1.7 acres of parkland. The park features park benches, playground equipment, a half basketball court, a grass field, and a splash pad. Helen Chambers Playground primarily serves residents living within walking distance of the park in the surrounding neighborhood.

Conversely, Cool Spring Park is located towards the northwestern side of this study area and includes approximately 14.5 acres of parkland. The park features park benches, playground equipment, grassy open space, an open pond, and a fountain. While Cool Spring Park is large enough to serve more than the just adjacent neighbors, getting to the park from neighborhoods not directly surrounding the park is a challenge due to the missing sidewalks, existing sidewalk accessibility deficiencies, lack of crosswalks and protected pedestrian crossings, and lack of bicycle facilities. This leaves many people that do not live directly adjacent to Cool Spring Park either not utilizing the park or relying on personal vehicle trips to visit the park even though it is within walking distance of their homes.

While Helen Chambers Playground and Cool Spring Park vary in size and amenities, they also differ demographically in who they serve in the surrounding neighborhoods. The chart below compares the demographic characteristics of the residents that live in the neighborhoods surrounding each park. This data is based on the EPA's EJScreen data.

Demographic Characteristic	Helen Chambers Playground	Cool Spring Park
over 64 years old	12%	53%
under 5 years old	3%	0%
less than a high school education	21%	7%
linguistically isolated	8%	6%
low-income	71%	26%
people of color	95%	18%

Equitable, Safe, and Connected Multimodal Access and Connectivity
What was once a dense urban grid of five blocks of well-connected multimodal streets is now five blocks of airspace above I-95 containing five bridges with narrow sidewalks and no dedicated bicycle facilities to bridge the gap between the West Center City and West Side neighborhoods.

The five bridges in combination with Delaware Avenue and four I-95 exit and entrance ramps funnel vehicles into and exiting the highway, creating high traffic volumes during peak periods and high vehicle speeds on North Adams and North Jackson Streets. This creates friction between local and through traffic which contributes to crashes and challenges multimodal connectivity. This results in perceived uncomfortable, and at times unsafe conditions for people walking, biking, and driving conditions. Street and pedestrian lighting is inadequate throughout the project area which makes traveling the area at night uncomfortable and inconvenient for all modes of travel.

- **Walking -** While there are some sidewalks in the project area, much of the pedestrian infrastructure has accessibility issues that do not comply with the Americans with Disabilities Act (ADA) standards, missing links in the sidewalk network, non-compliant sections of sidewalk, curb ramps, vertical elevation differences, driveways, and curb barriers. There are also missing and faded crosswalks, and unsignalized and perceived uncomfortable pedestrian crossings.

  According to the recent City of Wilmington Pedestrian Safety Study conducted in January 2021, Jackson Street is the 11th worst street for pedestrian crashes in all of Wilmington

  There were three recorded pedestrian crashes in the study area according to the most recently available 3-year crash data (2017 – 2019). The crashes occurred in March 2017, November 2017, and December 2018, all of which resulted in personal injury and occurred at intersections. Two occurred at night and the other in the daylight. Two of the crashes were hit-and-runs. Two were caused by drivers failing to yield the right of way and the other by the driver making an improper turn.

- **Biking –** Currently, there is no infrastructure dedicated to bicycles within the project area. Throughout the corridor, those that ride bicycles must share the road with cars, walk their bicycles along sidewalks, and park their bikes against trees and street furniture as there is no safe or secure parking for bicycles, further discouraging many from biking through the area.

  According to DelDOT's Level of Traffic Stress Data (LTS) the five of the six bridges within the study area (6th Street, 7th Street, 8th Street, 9th Street, and 10th Street) have a level 1 LTS, which is considered "safe for children" due to the number of lanes, relatively low vehicle volumes, and posted speed limit. However, there are no dedicated facilities on the bridges leaving most people feeling uncomfortable biking in the lanes. There are also no facilities along Jackson Street, Adams Street, or Delaware Avenue which creates missing links in the biking system. Jackson Street has a level 3 LTS, which is tolerated by "most mainstream adults", while Adams Street and Delaware Avenue have a level 4 LTS, which is only tolerated by "strong and fearless riders". The difference between the LTS on Jackson Street, Adams Street,

and Delaware Avenue is mainly the vehicle volumes (and number of lanes on Delaware Avenue).

While no facilities have yet been constructed within the study area (the area between Adams Street, Delaware Avenue, Jackson Street, and 6th Street), the City of Wilmington Bike Plan proposes various locations of future bike facilities and street connections to serve as a guide for future project development. The Bike Plan proposes bike connections to the County on Delaware Avenue and plans for bike lanes across the bridges on 10th Street, 9th Street, 8th Street, 7th Street, and 6th Street within the project area. It also plans for bike friendly streets on 10th Street and 9th Street running east to west outside the project area, a bike lane on 8th street towards the east with a bike friendly street planned towards the west. It also plans for a separated pathway along Adams Street from 8th Street south towards Maryland Avenue and a separated pathway along Jackson Street from 10th Street to 8th Street.

- **Transit -** The existing transit network consists of a single bus line running along 8th and 9th streets in a loop. Transit stops along this route are marked strictly by blade signs and lack any infrastructure designed to keep passengers comfortable while waiting for the bus.

- **Motor Vehicles –** Adams and Jackson Streets are both classified as minor arterials functioning as one-way pairs along I-95. Adams Street is a one-way northbound street with a speed limit of 25 mph, an annual average daily traffic volume of 3,589 vehicles (2020 ADDT), two-travel lanes, and a parking lane along the eastside of the street. Jackson Street is a one-way southbound street with a speed limit of 30 mph (except in the area between Cool Spring Park and 10th Street which functions as a school zone when children are present with a reduced speed of 20 mph), two-travel lanes and a parking lane along the west-side of the street. Walking and biking along Adams Street are perceived as stressful in part due to the excessive vehicle speeds and higher vehicle volumes. Walking and biking along Jackson Street are also stressful due to the lower vehicle volumes that allow for higher vehicle speeds in the absence of traffic congestion.

  Five of the six bridges within the study area (6th Street, 7th Street, 8th Street, 9th Street, and 10th Street) are classified as local roads, with a 25-mph speed limit, and each carrying less than 1,000 vehicle trips per day (2020 AADT). The 10th Street bridge also functions as a school zone when children are present with a reduced speed of 20 mph. Each of the bridges has two one-way travel lanes and sidewalks along each side with continuous, solid, high barrier walls along the outer bridge edges. There is no separation or buffer between the sidewalks and the travel lanes creating an uncomfortable and confined walking area. There are no dedicated bicycle facilities across the bridges and no shared lane markings or other signage indicating that vehicles must share travel lanes with people riding bicycles. The northernmost bridge, located at Delaware Avenue, is classified as a principal arterial with a 25-mph speed limit, carrying approximately 16,000 vehicle trips per day (2020 AADT). While most of the bridges have relatively low vehicle volumes, the Delaware Avenue bridge has significant volumes creating an even more uncomfortable environment for people biking and walking in this area.

Public comment has noted the pedestrian environment near Delaware Avenue between Jackson and Adams feels very uncomfortable and unsafe, leading to many people avoiding traveling through this area as a pedestrian or on bicycle whenever possible.

There are also three highway ramps within the study area that connect to I-95. The I-95 northbound off-ramp at 9th Street has an AM peak volume of approximately 1,300 vehicles and a PM peak volume of 860 vehicles. The I-95 northbound on-ramp at 10th Street has an AM peak volume of 400 vehicles and a PM peak volume of 600 vehicles. The I-95 southbound on-ramp at Jackson Street has an AM peak volume of 850 vehicles and a PM peak volume of 900 vehicles.

There were 246 recorded motor vehicle crashes in the study area according to the most recently available 3-year crash data (2017 – 2019). Of the 246 crashes, 143 (58%) either occurred at an intersection or were intersection related. Sixty-five (26%) of the 246 crashes resulted in personal injury. Various causes were recorded as reasons for the crashes, with the top three causes as disregarding traffic signals, driver inattention, and driving in a careless or reckless manner.

c. **What steps will need to be taken during the NEPA process to make this a project-level purpose and need statement?**
   A scoping exercise should be used to determine if this PEL Study purpose and need statement remains valid as a project-level purpose and need statement during any future NEPA phases.

6. Range of Alternatives

Planning teams need to be cautious during the alternative screen process; alternative screening should focus on purpose and need/corridor vision, fatal flaw analysis, and possibly mode selection. This may help minimize problems during discussions with resource agencies. Alternatives that have fatal flaws or do not meet the purpose and need/corridor vision will not be considered reasonable alternatives, even if they reduce impacts to a particular resource. Detail the range of alternatives considered, screening criteria, and screening process, including:

a. **What types of alternatives were looked at? (Provide a one or two sentence summary and reference document.)**
   The alternatives explored for the cap as well as the transportation concepts for the surrounding streets is located in the feasibility study report, beginning on page 23. Various traffic alternatives were also explored to determine the traffic impacts associated with potential design options for the I-95 Cap. The traffic study is in PEL Questionaire Appendix A: I-95 Cap Traffic Feasibility Study. Structural alternatives were explored to understand feasible structure types and layout that will meet the safety, required vertical and horizontal roadway clearances, and environmental and load carrying capacity requirements for the project. The structural alternatives are in PEL Questionnaire Appendix B: Structural Alternatives and Order of Magnitude Cost Estimate.

b. How did you select the screening criteria and screening process?
Detailed screening criterion was not established as part of the alternatives screening process for the various alternatives described above. Instead, the screening effort focused on feasibility and information/priorities gathered during public and stakeholder engagement and coordination.

c. For alternative(s) that were screened out, briefly summarize the reasons for eliminating the alternative(s). (During the initial screenings, this generally will focus on fatal flaws.)
Not applicable.

d. Which alternatives should be brought forward into NEPA and why?
The final design concept alternative for the public space on top of the future cap located in the feasibility study report, beginning on page 33, the closure of any combination of two bridges over I-95 within the project area (as described in PEL Questionaire Appendix A: I-95 Cap Traffic Feasibility Study), and the structural alternatives (as described in PEL Questionnaire Appendix B: Structural Alternatives and Order of Magnitude Cost Estimate) should all be brought forward into future NEPA phases for additional study and consideration.

e. Did the public, stakeholders, and agencies have an opportunity to comment during this process?
The public stakeholders, and agencies provided feedback via virtual meetings, one-on-one interactions with the study team, online through the project webpage, comment forms, via email, or over the phone. The following public outreach activities provided the public multiple ways of participating in the study:

- E-Mail, Mailing List, and Contact Database: The study team developed a contact database to include individuals who wanted to stay informed about the study. The database incorporated contact lists collected during the previous studies. The database allowed the study team to communicate directly with the public, including sending notifications of the public open houses.
- Project Web Page: WILMAPCO hosted a dedicated web page on its website to provide updated information about the study, promote engagement, ability to request Spanish interpretation, and to enable ongoing communication. The web page http://www.wilmapco.org/i95cap/ included study information, presentation materials, meeting summaries, and meeting announcements. The web page enabled the public to sign up for the study's mailing list and to submit comments as the study progressed. The webpage also contained contact information for the public to be able to speak directly with the WILMAPCO Outreach Manager and the study team.
- Public Outreach and Engagement: WILMAPCO distributed public workshops announcements in print and digital formats. Meeting announcements and information about how to give input into the project were distributed throughout the area to businesses and residents via a partnership with members of the advisory committee. This information was distributed in both English and Spanish.

- Social Media Outreach: WILMPACO and their planning partners used Facebook and Instagram to communicate announcements about the study and to publicize public meetings and public input opportunities.
- Points of Contact: Stakeholders or members of the public were directed to contact Dave Gula, WILMAPCO Project Manager, with comments or questions throughout the duration of the study.

Throughout the study, the stakeholder and public had ongoing, accessible, and distinct opportunities to participate and provide input to inform the study. Over the course of the study, members of the public took part in the surveys or submitted comments that were reviewed and taken into consideration. An overview of the public engagement process can be found on page19 of the feasibility study; more detailed outcomes can be found in section c of the appendix and includes a summary of the comments submitted by members of the public during this study.

In addition to the ongoing public engagement the advisory committee was asked for feedback as the project progressed and specifically asked to review and comment on the project's purpose and need, and the alternatives explored.

f. Were there unresolved issues with the public, stakeholders, and/or agencies?There were several unresolved items that were not able to be included within the scope of this study that should be further explored with the public, stakeholders, and other agency partners. Those items include:

- **Temporary Traffic Calming and Roadway Closures**
  - During this study the idea for temporary traffic calming and/or roadway closures of one or more of the bridges over I-95 was discussed by the public as well as the city and DelDOT. This idea should further be explored to determine what quick turn-around improvements could be made to increase connectivity for the communities through this area. These improvements could include closing one or more of the bridges to motor vehicle traffic but leaving the facility available for pedestrian and bicycle use. They could also include traffic calming improvements such as curb extensions, improved crosswalks, bicycle friendly street designs, or other considerations along streets within the project area to improve access and connectivity.
- **Transportation/Traffic Studies to evaluate**
  - Removing I-95 ramps in the northern piece of the project area to simplify construction and create a more connected cap structure for programming and uses of the facility.
  - Determine if N. Adams Street could operate with a lane reduction when traffic volumes are more typical. This study evaluated existing traffic volumes but the volumes utilized were collected while the I-95 Restore the Corridor Wilmington viaduct project was in progress with detours through the project area. Further study should be completed after the I-95 viaduct project is complete and detours have been removed to obtain traffic volumes along N. Adams Street during typical conditions.

  - Traffic signal and turn lane modifications as a result of rerouted traffic due to bridge closures as well as lane reductions along N. Jackson Street and N. Adams Street. The traffic feasibility study evaluated from W. 6th Street to W. 10th Street. In order to determine more specific traffic signal and turn lane modifications, a further evaluation should be performed encompassing a larger study area, such as from M.L.K. Jr. Boulevard to Delaware Avenue.
  - Pedestrian facilities at locations where bridges are closed to vehicular traffic. An assessment should be performed determining the required pedestrian facilities/treatments (such as HAWK signals, signalized pedestrian crossings, RRFB, raised crossings, etc.) at the vehicular bridge closure locations at the N. Jackson Street and N. Adams Street intersections.
  - Low stress bicycle infrastructure that should be incorporated into the project. Specifically further exploration of protected bicycle lanes, pathways, bike friendly street design elements and traffic calming, and bike parking.
  - Transit routes, bus stops, and other transit amenities should also be further explored within the proejct area.
- **Ventilation and Fire Suppression Requirements**
  - This study did not evaluate ventilation or fire suppression requirements of the cap. Further study is needed to identify these requirements.
- **Structural Studies and Analysis to further evaluate**
  - Structural alternatives specifically design criteria, loading requirements, maintenance and inspection requirements, and to develop a more detailed structural concept.
- **Utilities Studies**
  - There is a variety of utilities infrastucture within the proejct areas with multiple utility owners. Further studies should be completed to evaluate utility requirements and to better understand utility impacts.
- **Right-of-Way Studies**
  - Right-of-way studies should be completed to evaluate right-of-way impacts, focusing on minimizing impacts to private property.
- **Ownership of the future cap**
  - There are no agreements that identify the long-term ownership of the infrastucture or amenities that could be placed on top of the cap. Agreements should be made to identify ownership of both the structure and the amenities on top of the structure.
- **Maintenance Requirements and Funding**
  - The maintenance requirements are not well defined and there is currently no long-term maintenance funding source identified to maintain any portion of the cap structure. Further study is needed to evaluate and identify potential maintenance requirements and funding sources.
- **Market and Economic Studies to determine**
  - Economic feasibility to advance this project forward should be further explored. The cost to implement a project of this scale should be further analyzed to determine the economic feasibility and the economic impacts that the proejct

would have on the surrounding communities, the City of Wilmington, the region, and the state of Delaware.

- **Land Use and Zoning**
  - The land use and zoning of this area should be further explored to better understand the impacts that the creation of this large new public space would have on this area. Any changes to land use and zoning should be reflected in local planning documents as this project advances.
- **Environmental Analysis**
  - A comprehensive environmental analysis should be included as part of future project efforts. This should include but not be limited to:
    - climate resiliency
    - air quality
    - water quality
    - noise
    - soils and geology
    - wildlife/threatened and endangered species
- **Public Involvement**
  - Additional public involvement will be required as the project progresses in future phases.

7. Planning Assumptions and Analytical Methods:

a. What is the forecast year used in the PEL study?

This study did not include travel forecasting, this study only included existing traffic volume data.

b. What method was used for forecasting traffic volumes?

As previously stated, this study did not include travel forecasting.

c. Are the planning assumptions and the corridor vision/purpose and need statement consistent with each other and with the long-range transportation plan? Are the assumptions still valid?
The study vision and purpose and need statement are consistent with each other. However, this project is not currently included in the long-rang transportation plans as this was the first study completed for this project purpose.

d. What were the future year policy and/or data assumptions used in the transportation planning process related to land use, economic development, transportation costs, and network expansion?
Future uses, policies, and assumptions related to land use, economic development, transportation costs, and network expansion were not included in this study.

8. Environmental Resources (Wetlands, Cultural, Etc.) Reviewed:

For each resource or group of resources reviewed, provide the following:

a. In the PEL study, at what level of detail was the resource reviewed and what was the method of review?

Each resource, identified in **Table 1: Resources Reviewed in PEL Study** below, was reviewed at a planning-level screening using available online information and GIS mapping. It is important to note that this planning-level screening does not examine the full range of environmental and social issues, which will be addressed during NEPA review. More information regarding the socioeconomic data reviewed as part of this study is in PEL Questionaire Appendix C: Socioeconomic Data Summary.

Information was compiled and mapped using readily available data from Delaware FirstMap using GIS visualization. The GIS data was reviewed at multiple scales to see where each resource was present either in the study area or adjacent to it. The resources for which there was no publicly available GIS data were reviewed using agency-specific map viewers (such as the EPA's tool for viewing brownfields).

b. Is this resource present in the area and what is the existing environmental condition for this resource?

Table 1: Resources Reviewed in PEL Study summarizes the resources that were reviewed as part of this PEL study. As illustrated in the table the only resource (that was evaluated in this study) that is anticipated to have potential impacts is hazardous materials. More information regarding the hazardous materials reviewed as part of this study is in PEL Questionaire Appendix D: Hazardous Materials Summary.

Table 1: Resources Reviewed in PEL Study	
Hazardous Materials	**Affected Environment:** According to DNREC NavMap, there are two solid and/or hazardous waste sites located near the intersection of North Jackson Street and Delaware Avenue. There are also three underground storage tanks, one of which is identified as a leaky underground storage tank, on properties adjacent to the study area. **Next Steps/Mitigation Strategies:** Contamination from hazardous materials is most likely to be encountered during ground-disturbing activities in areas near properties with potential or recognized environmental conditions (hazardous materials). During the design process, the information concerning these properties can be used to identify avoidance options, if possible, and to assist with the development of materials management and worker health and safety

	plans. An asbestos-containing materials survey is required for all structures to be demolished as part of this project and must be completed as part of the CDPHE demolition permit. Additionally, a lead-based paint survey and regulated materials clearance survey are recommended for all structures to be demolished as part of this project.
Water Resources	There are no surface water resources within or adjacent to the project area, per Delaware FirstMap data.
Climate Vulnerability	No portion of the project is located in an area inundated by sea level rise from 1 to 7 feet, per Delaware FirstMap data.
Floodplains	Located in an area of minimal flood hazard and not located within 100-year or 500-year floodplain, per FEMA.
Wetlands	According to Delaware FirstMap data, there are no wetlands within or adjacent to the project area.
Forests	According to Delaware FirstMap data, there are three small areas depicted as “unknown”-type forests within the project area, all between Eighth and 10th streets. Three other small areas of “unknown”-type forests are in Cool Spring Park, adjacent to the project area.
Brownfields	According to EPA’s Cleanups In My Community Map, there are no brownfield sites within or adjacent to the project area. However, according to DNREC NavMap, there is a state-funded brownfield site, adjacent to the project area, bounded by Delaware Avenue, North Jackson Street, North Van Buren Street, and Gilpin Avenue (Delaware Avenue and Van Buren Street, site ID: DE-1419) listed as a Site Investigation and Restoration Section (SIRS) project. The project is listed as open.
Historic Resources	According to Delaware FirstMap data, there are two historic districts adjacent to the project area: Cool Spring Park Historic District to the west and Shipley Run Historic District to the east. Additionally, all buildings along Jackson Street from 701 N Jackson St to Delaware Avenue and all buildings along Adams Street from 7 1/2 Street to Delaware Avenue are designated as historic places. According to Delaware’s Cultural and Historical Resources Information System (CHRIS), there are three National Register-listed sites adjacent to the project area: Cool Spring Park Historic District to the west, Shipley Run Historic District to the east, and Trinity Episcopal Church (1108 N Adams St) to the east. Additionally, there are no known archaeological sites.
Properties Acquired for Right-of-Way and Displacements	The project is located within the existing right of way and no displacement will be necessary.

Archeological Sites	According to Delaware's Cultural and Historical Resources Information System (CHRIS), there are no archeological sites within or adjacent to the project area.
Population Demographics	The census blocks surrounding the study area include several Environmental Justice populations: 67.9% of the population are people of color, 29.1% live under the poverty line, 14.8% have not completed high school, and 26.7% do not have access to a personal vehicle. Most residents speak English well (96.2%), but of those who do not, almost all of them speak Spanish as a first language (94.6%). **General Population, Economics, and Housing Data** These data were pulled from the 2020 census and 2020 American Community Survey (ACS) 5-year estimates for census tracts 11, 15, 16, 21, 22, and 28. The data include values and ranges of values for information such as the median age, median household income, number of persons per household, occupation of housing units, and percentage of population born outside of the United States: • The median age ranges from 31.9 years old in Census Tract 22 to 38.1 years old in Census Tract 11 (S0101). • The median household income ranges from $19,464 in Census Tract 21 to $53,789 in Census Tract 11 (S1901). • The average household size ranges from 1.34 in Census Tract 11 to 3.78 in Census Tract 22 (S1101). • 86.7% of households are occupied (H1). • 8.6% of the population was born outside of the United States (B05002). **Environmental Justice (EJ) Community Status** These data were pulled mainly from the 2020 American Community Survey (ACS) 5-year estimates for census tracts 11, 15, 16, 21, 22, and 28 and include information such as the percentage of the population who are people of color, below poverty level, limited English-speaking, or who have less than a high school education: • 67.9% of the population is a person of color (P2). • 29.1% of the population is below poverty level (S1701). • 2.7% of households are limited English-speaking households (S1602). • 14.8% of population 25 years and over with less than a high school education (S1501). **Limited English Proficiency (LEP)**

	These data were pulled from the 2020 American Community Survey (ACS) 5-year estimates, Table S1601, for census tracts 11, 15, 16, 21, 22, and 28. These data indicate that 3.8% of adults have limited English proficiency (LEP), that is, who speak English less than "very well." Of those adults with LEP, 94.6% speak Spanish and 5.4% speak other languages. **Personal Vehicle Access** These data were pulled from the 2020 American Community Survey (ACS) 5-year estimates, Table S2504, for census tracts 11, 15, 16, 21, 22, and 28. These data indicate that 26.7% of households have no access to a personal vehicle.
Community Centers	**Schools** There is one school adjacent to the project area: William Lewis Elementary School, located at 920 N Van Buren St. **Places of Worship** There is one place of worship adjacent to the project area: Trinity Episcopal Parish, located at 1108 N Adams St.

c. What are the issues that need to be considered during NEPA, including potential resource impacts and potential mitigation requirements (if known)?

If changes are made to the project or study areas during future NEPA phases, a reassessment of climate vulnerability should be undertaken. Updated socio-economic data should also be collected and local communities engaged in future NEPA phases. With more detailed planning, potential impacts will be evaluated to identify whether the future project has the potential to cause adverse effects to these populations and households.

Issues related to stormwater management are likely to shape the design of alternatives during future NEPA phases. Depending on the sensitivity of the water resources, minimizing adverse effects could require stormwater treatment measures. Detention and treatment of stormwater runoff will be addressed in more detail during future NEPA phases.

A modification to study area limits in future NEPA phases may require a reassessment of whether chronic environmental deficiencies are present.

d. How will the planning data provided need to be supplemented during NEPA?

The resource planning-level screening for this study was conducted by performing a desktop survey (no field confirmation), referencing available agency electronic files, and utilizing existing GIS base mapping data. Therefore, most of the resources will require additional assessment that will require a field verification of the existing conditions within

the corridor as well as further agency coordination. Also, depending on the timeframe of any future NEPA process, some resources could require additional assessment due to new regulations, additional federally listed endangered/threatened species, etc. This information can be used as the starting point to advance this project into future phases.

9. Environmental Resources List:

Please list the environmental resources you are aware of that were not reviewed in the PEL study and why. Indicate whether or not they will need to be reviewed in NEPA and explain why.

The following resources were not evaluated as part of this PEL Study as they were not included as part of the consultant scope of work:

- Air quality
- Water quality
- Noise
- Soils and geology
- Wildlife/Threatened and Endangered Species

Additional environmental analysis for these above-mentioned resources should be included as part of future NEPA analysis and documentation.

10. Cumulative Impacts

Were cumulative impacts considered in the PEL study? If yes, provide the information or reference where the analysis can be found.

No cumulative impacts were considered in this PEL study.

11. Mitigation Strategies

Describe any mitigation strategies discussed at the planning level that should be analyzed during NEPA.

Please refer to **Table 1: Resources Reviewed in PEL Study** above.

12. Information for NEPA

What needs to be done during NEPA to make information from the PEL study available to the agencies and the public? Are there PEL study products which can be used or provided to agencies or the public during the NEPA scoping process?

The final study report including this questionnaire and supporting appendices will be available on the WILMAPCO project website for public viewing at the conclusion of this study. The final report will be shared with all the agencies that participated in the project management committee upon conclusion of the study. The final report and supporting study documentation,

which will be included as appendices to the report, can be used during the future studies and NEPA scoping processes.

13. Issues for Future

Are there any other issues a future project team should be aware of?
Examples: Controversy, utility problems, access or ROW issues, encroachments into ROW, problematic land owners and/or groups, contact information for stakeholders, special or unique resources in the area, etc.

There are no other known issues that the future project team should be aware of that is not already listed in this PEL Questionaire.

I-95 FEASIBILITY STUDY

Appendix D

Community Engagement Summaries

I-95 Cap Feasibility Study Community Workshop #1 / #1B Summary

OVERVIEW

On November 17th and January 12th members of the community were invited to listen to a presentation about the future of a public space over I95 in Wilmington. Both the in person and virtual workshops began with a presentation on the project context, scope, and relevant precedent projects by Hargreaves Jones. Attendees asked questions, made comments as well as participated in workshop exercises, and voted on a variety of possible programs for the future space.

KEY THEMES

The following key themes emerged from the first phase of community workshops through discussion and program preferencing exercises. More detailed meeting notes from both workshops can be found in the appendix.

The first community workshop indicated enthusiasm from the public about a potential public space bridging I-95 between Jackson and Adams Streets. The workshops identified and discussed questions and concerns related to the construction, programming, and ongoing maintenance of a new public space.

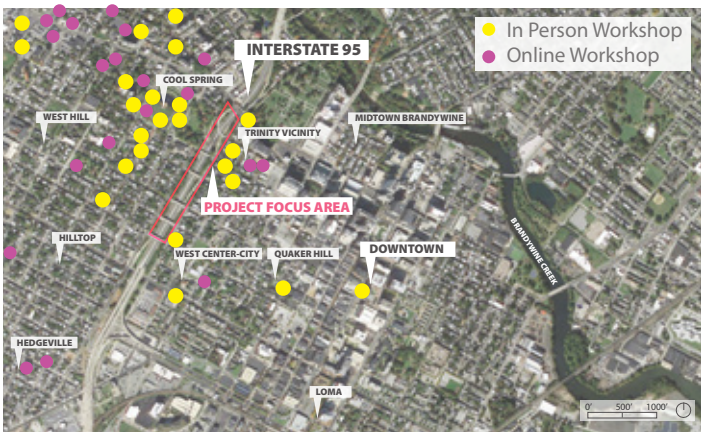
Workshop participants were supportive of the concept of re-connecting communities separated by the construction of I-95. Community members wanted to better understand the process of getting a project of this scale funded, and whether or not it would ultimately impact local taxes. Other themes that emerged during the question and answer session included the following:

- Long-term care and maintenance of current and future public spaces elsewhere in Wilmington
- Designing with stormwater in mind
- Ensuring that potential displacement of people who are un-housed is considered in the planning process
- The public space should be designed with local users in mind, especially given the study area's proximity to schools and playgrounds

COMMUNITY WORKSHOP HIGHLIGHTS

Community Workshop #1 was the first opportunity for members of the general public to learn about the project scope and offer guidance about the future of a public space between Jackson and Adams over I-95. In total, 99 community members participated in the two events.

52 Attendees to the In Person Workshop
47 Attendees to the Virtual Workshop
743 Individual Program Preference Responses
152 Survey responses collected



Workshop attendee neighborhood representation

Outcome of the prompt "When I picture the future of this place, I envision..."

When picturing the future of this place, the community envisions ***a place for everyone*** *that is* ***safe, walkable,*** *and* ***colorful.*** *This includes* ***well-lit, well-maintained programmed areas*** *that prioritize* ***sustainability, native plantings,*** *places for families and community members to* ***play*** *and* ***exercise*** *comfortably, and that* ***celebrates the history of the neighborhoods.***

Where do you walk or bike? Where **would you walk or bike**, if you could?

Desired connections to and within the project study area

DESIRED CONNECTIONS

Most workshop attendees who participated in the above mapping exercise are biking along 9th and 10th streets, as well as along Delaware Avenue. Workshop participants desire to bike diagonally across the study area from the intersection of W 8th Street and N. Jackson Street to the intersection of W 10th Street and N. Adams Street.

Other notable desired connections include:

- Across the 10th Avenue bridge;
- Diagonally between 8th Street and the Brandywine Cemetery
- Along W. 6th Street to Jackson
- From Cool Springs Park to N. Adams parallel to the flyover

Most respondents indicated existing streets and avenues as places they would like to walk or bike in the future, suggesting opportunities for right-of-way and streetscape in the project area and larger neighborhoods.

Attendees participate in exercises (photo: project team)

CURRENT CONDITIONS

Attendees wrote about the study area as it is today. Attendees had the opportunity to write about what is currently working, as well as what could use improvement. Below is a selection of comments and ideas that came from the exercise:

What IS Working?

- Beautiful local artwork
- Strong diversity
- Local gardens
- Good local businesses
- Involved communities, leaders, and politicians

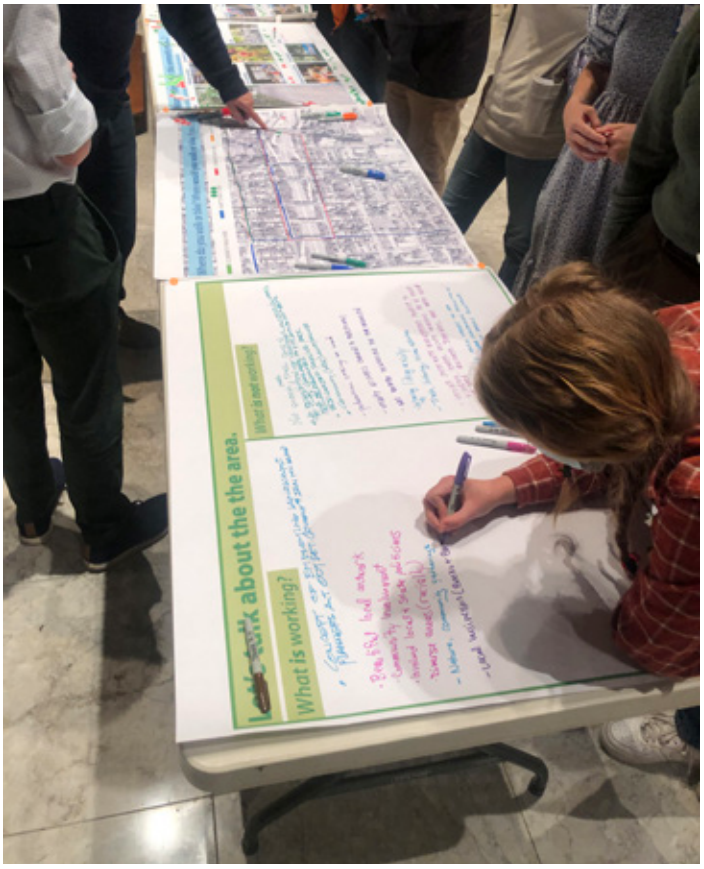
What is NOT working?

- Not enough public trash cans
- Cars have more access and right of way than pedestrians
- Lack of lighting
- Poorly managed stormwater
- Loitering and crime
- Not enough bike-able and walkable connections
- Cool Springs park is not finished
- Public transit
- Not enough resources for the un-housed

PROGRAM PREFERENCING

Attendees placed stickers either in-favor or not-in-favor across four categories of program including Nature and Environment, Health and Wellness, Mobility, and Community Program. In-person and virtual workshop participants held similar program preferences.

Generally, there was high interest in more trees, multi-function landscapes, pedestrian only zones, and art and sculpture. Items with nearly equal 'favored' to 'not favored' votes included scooter share, sport courts, and dog play. Participants discouraged more parking, ride-share pickup points, or car sharing was needed in this area. The word cloud to the right illustrates the results. Larger text indicates a higher response rate for that program option. The most favored programs were pedestrian only zones, restrooms, and more trees. The least-favored was parking.



Attendees participate in exercises (photo: project team)

Program preference outcomes from Community Workshop #1

SURVEY OUTCOMES

Generally, survey outcomes supported those of both the Advisory Committee and the community workshops.

What are the top three OPPORTUNITIES?

- Green space
- More bike routes
- Creating Unity
- Connecting pedestrian access
- Beautifying the neighborhood

What are the top three CHALLENGES?

- Funding
- Construction disruption
- Changing traffic patterns
- Maintaining a new space

PROGRAM PREFERENCING

Respondents had the opportunity to rank program preferences across four categories: Community Program, Health and Wellness, Nature and Environment, and Mobility.

Similar to workshop participants, respondents had a high interest in more trees, multi-function landscapes, pedestrian only zones, and art and sculpture. Survey respondents were additionally interested in contemplative space, running loops, and exercise stations. A cafe and public restrooms continued to be popular across all groups.

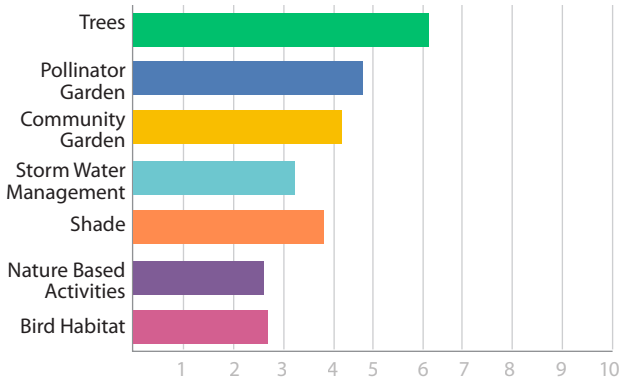
GENERAL COMMENTS:

"A park with trees and a community garden. It's so visible and so impactful. Create a sense of place, something we can be proud of, and something we can actually use! It should be pedestrian and bike traffic only. No cars, there's enough space for cars already (way too much)!"

"Well-lit area not just with street lights but also with landscaping lights. That would be great to show off the gardens and trees at night."

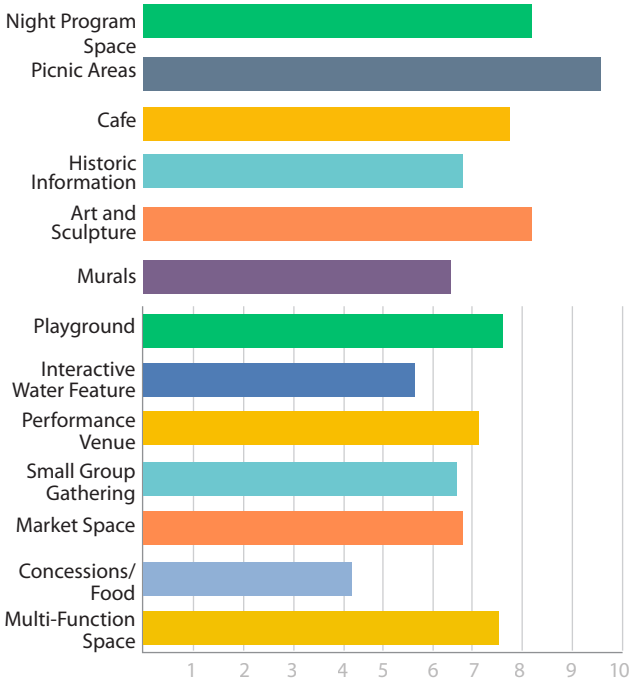
"anything that allows Wilmington to be safe, walkable and livable is a worthwhile investment."

Please rank which of the following nature/ environmental things are most needed in this area.

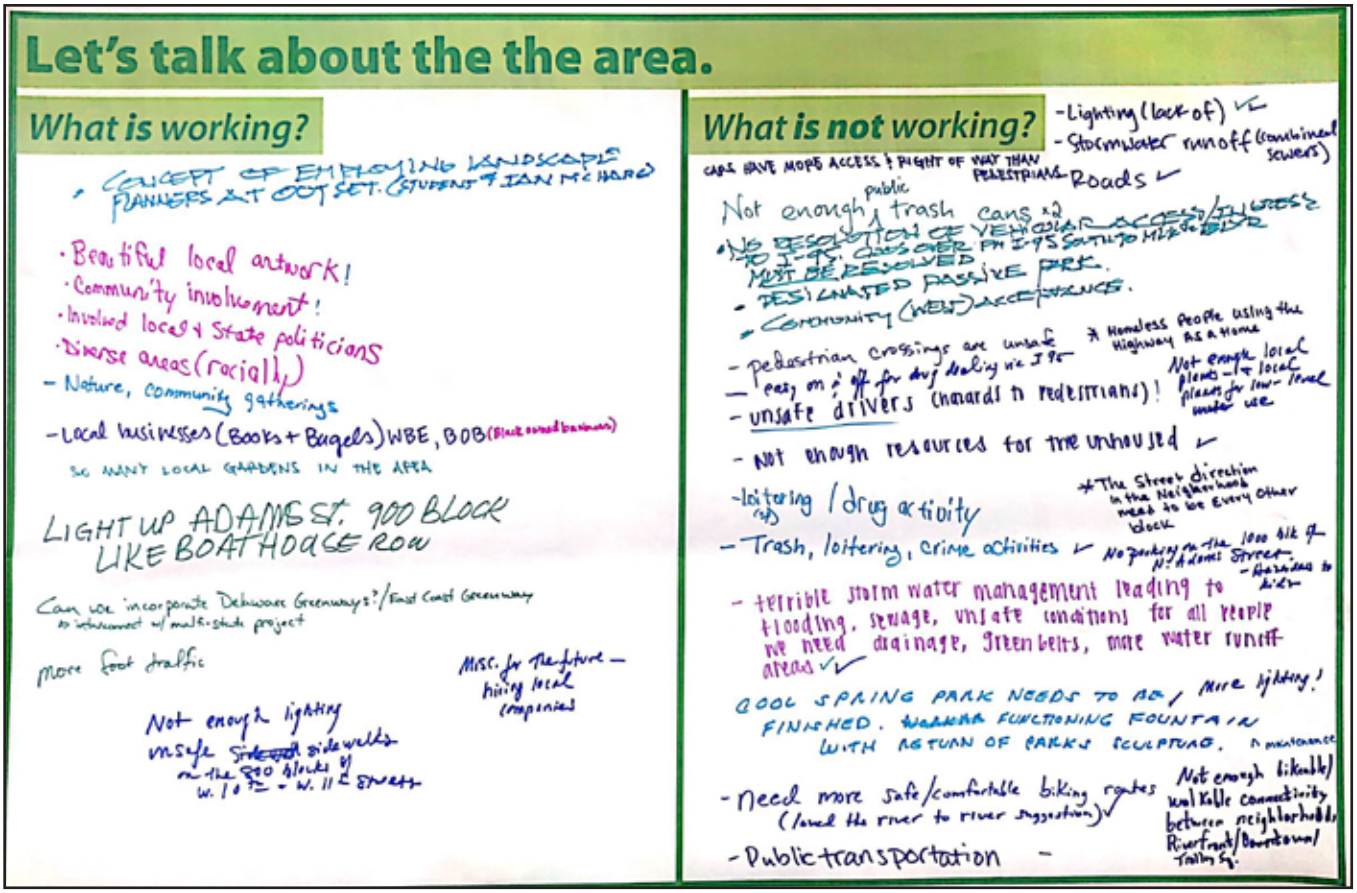


Survey Program Preference Responses

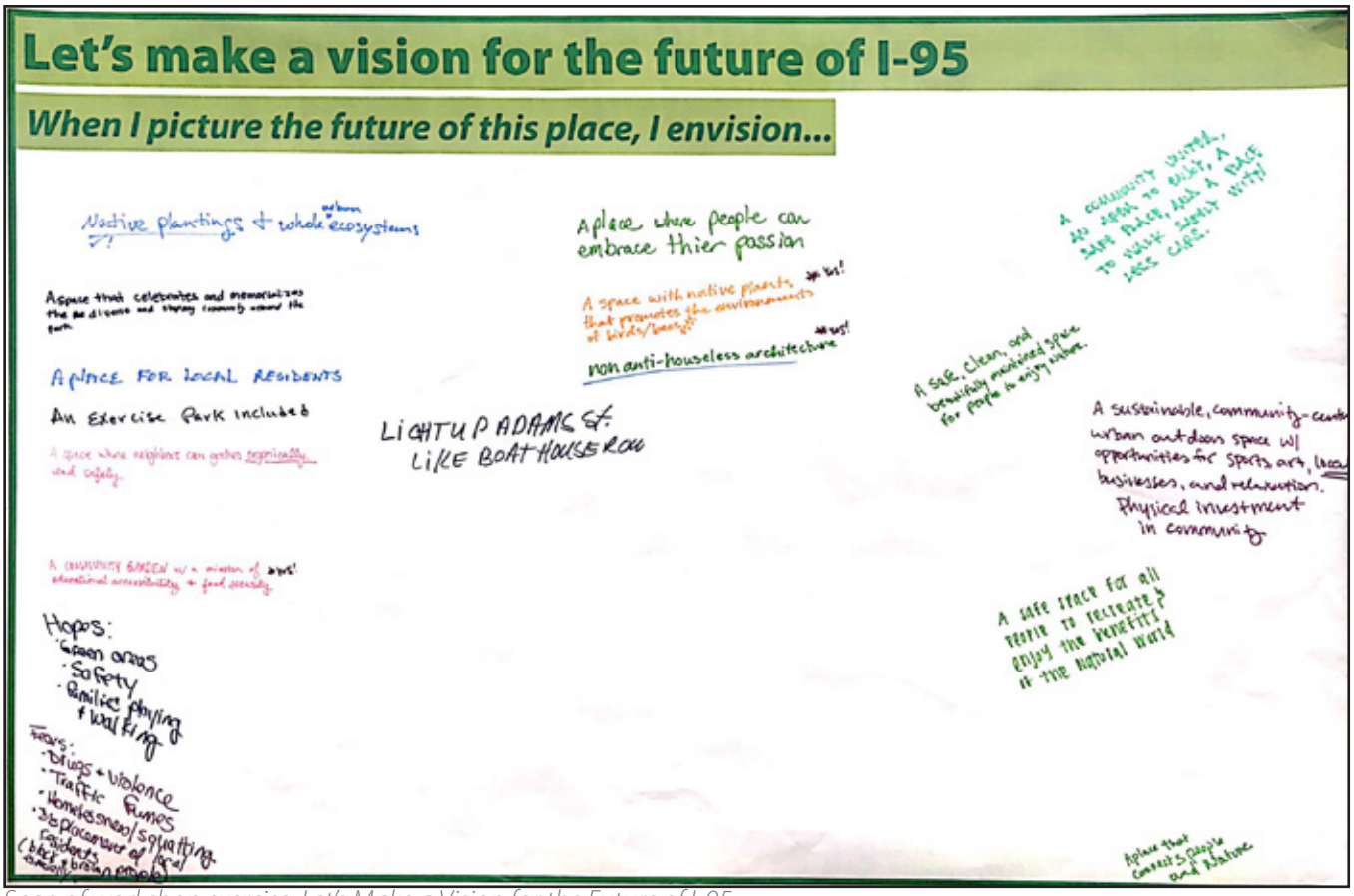
Please rank which community programs you think are most needed for this area (1 most, 10 least).



Survey Program Preference Responses

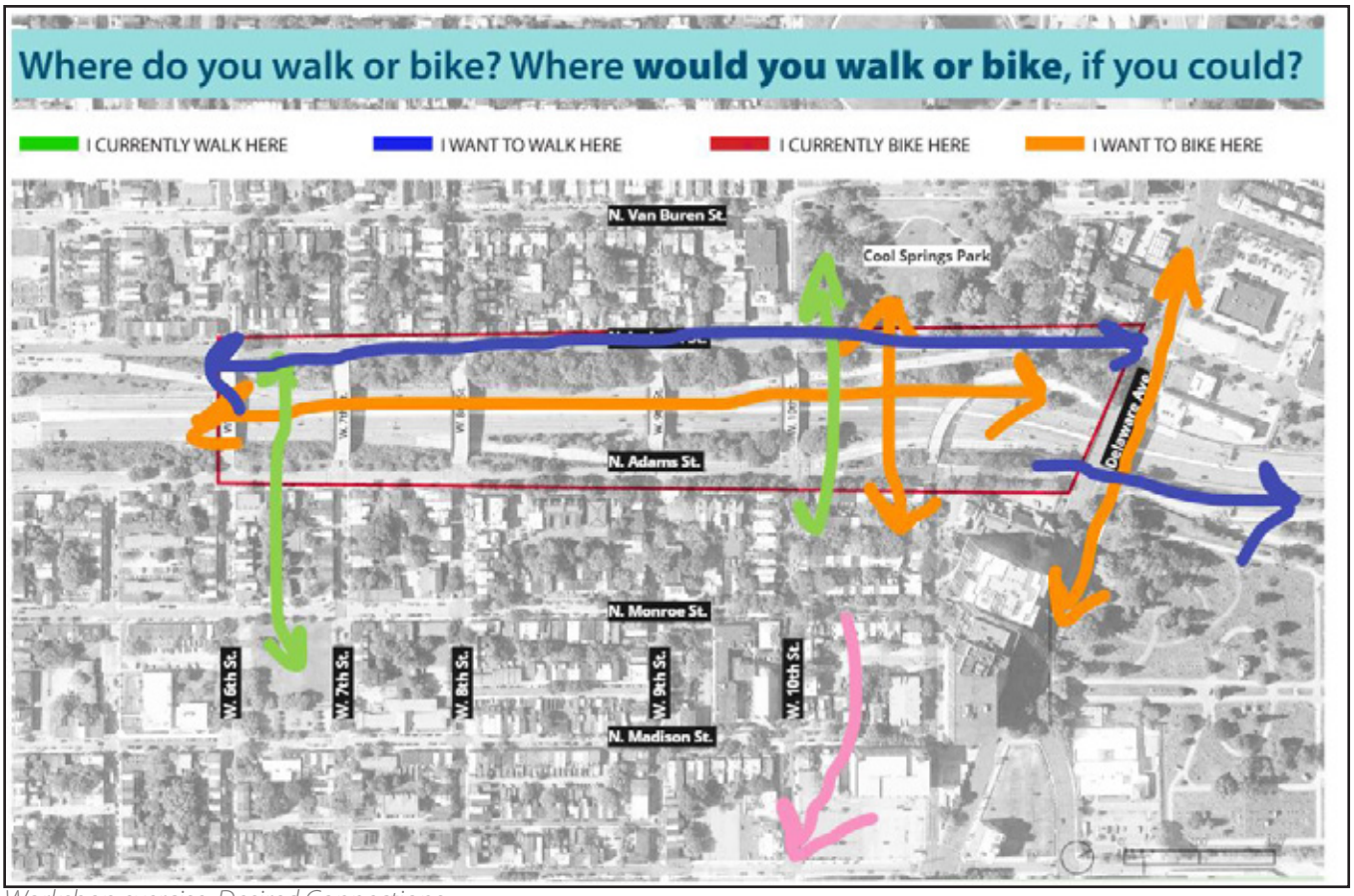


Scan of workshop exercise: Let's talk about the area.



Scan of workshop exercise: Let's Make a Vision for the Future of I-95

Workshop exercise: Let's Make a Vision for the Future of I95



Workshop exercise: Desired Connections

I-95 Cap Feasibility Study Community Workshop #2 -#4 Summary

OVERVIEW

On April 19th members of the public gathered to see three draft concept ideas. The three ideas varied significantly in their geometry and connectivity, but were similar in the programs proposed. Members of the public had time to ask questions and make comments on the three ideas. In September 2022, the project team returned to Wilmington to present three draft concepts, developed from the preferences and comments of the public workshop in April 2022. In November the project team presented the draft final concept, which was met with broad support from the community.

KEY THEMES

The following key themes emerged from the second and third community workshops. More detailed meeting notes from both workshops can be found in the appendix.

The second community workshop established a clear community preference for capping all of the available space over I95. There were preferences for the concept that showed the potential closure of bridges across I95 to facilitate better pedestrian connection and more expansive green spaces for Wilmington.

Traffic analysis showed that any two bridges across I95 could be closed within the study area without impacting the level of service (or, manageable with signal timing changes). After careful exploration of options, the project team returned to the public with three iterations of the community-preferred plan from the second workshop (Greenway). Each concept supported the program the community requested at previous workshops.

Workshop participants were supportive of the three draft concepts and requested that additional programs be considered including:

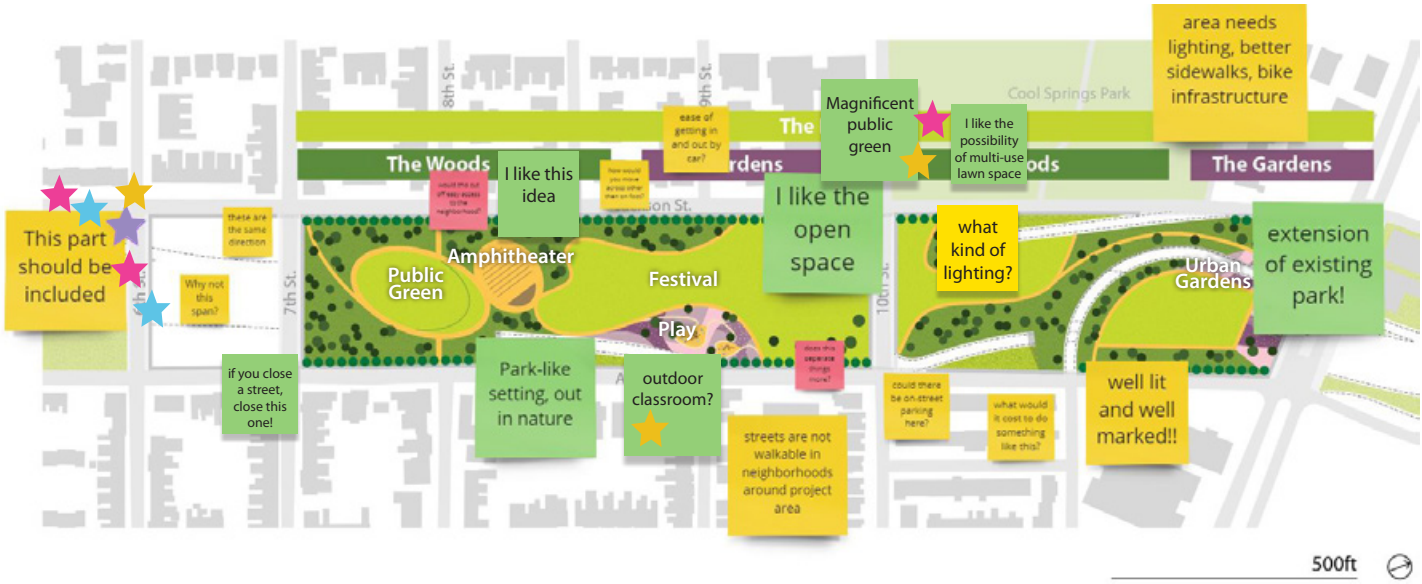
- Concerns with development
- Locate convenient restrooms
- Pedestrian and bike connections

COMMUNITY WORKSHOP HIGHLIGHTS

Community Workshops 2 and 3 were opportunities for community members to continue to comment on and shape the design for the proposed cap over I95. Together, the two workshops hosted over 80 members of the public and collected detailed comments on the proposed plans.

- Propose pedestrian-friendly street connections
- Investigate traffic calming on n. Jackson and n. Adams streets
- Dog park desired
- Community amphitheater good, concern with major performance venue

Workshop participants comment on one of the three early ideas: "Outdoor Rooms" April 2022



Community and advisory committee comments on "greenway"

WORKSHOP #2 APRIL 2022

Many attendees of the second workshop preferred the "Greenway" concept, as it provided continuous space in the proposed park that was uninterrupted by streets. Many comments requested to include the 6th-7th street span in the concept. Possible bridge closures, maintaining adequate car access, emergency response times were also discussed. See the appendix for detailed comments from Workshop #2.

WORKSHOP #3 SEPTEMBER 2022

The community provided detailed comments to the three iterations of Greenway presented at Workshop #3.

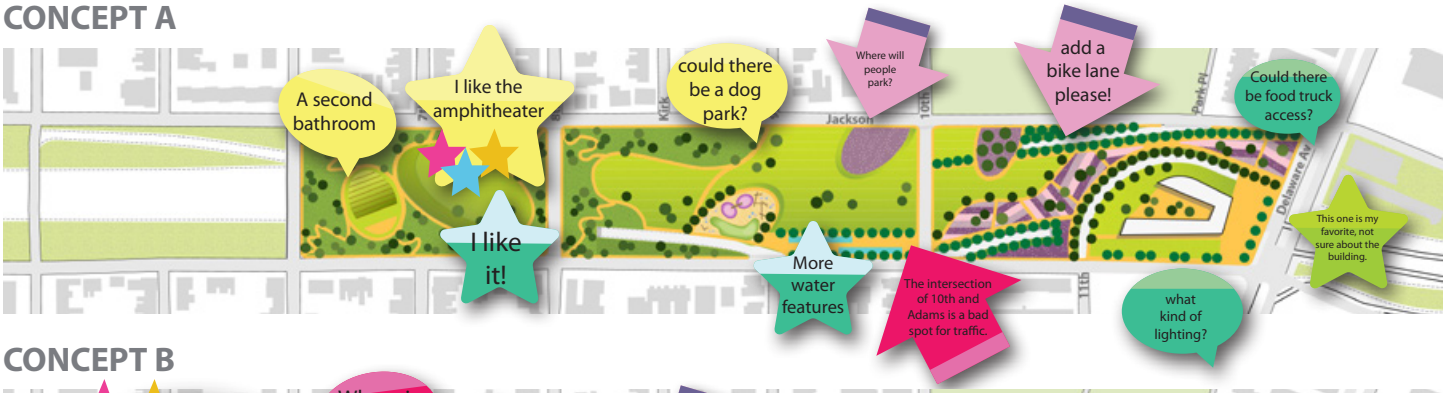
A handful of themes emerged across all concepts:

- The idea of a large open park was supported,
- Restrooms at both ends of the park, and if just one, at the south end,
- The addition of E/W walking paths over the cap,
- Common features across any concept included positive reception to water features, gardens, and nature play,
- More specificity on bike infrastructure,
- Answers to questions about where visitors would park their cars.

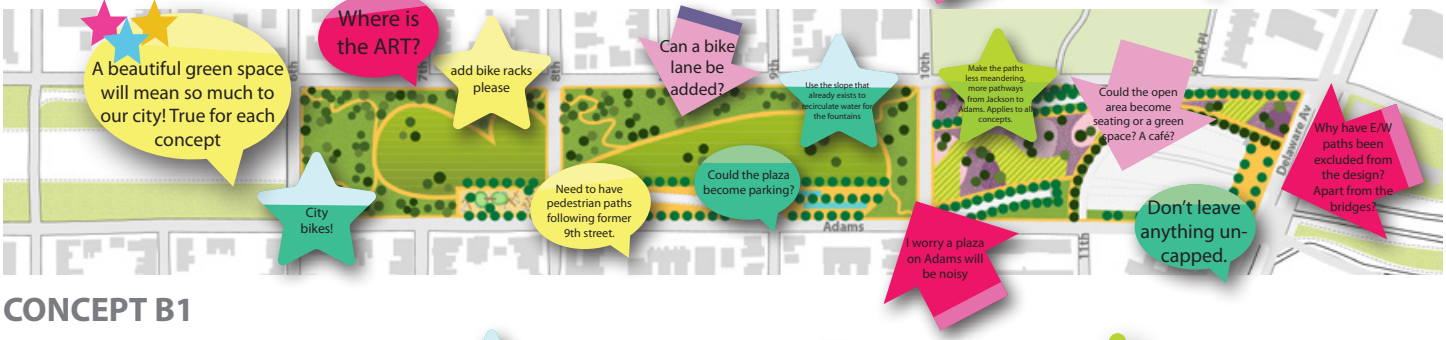
Workshop #3 attendees comment on the three concepts.

Workshop attendees liked the location of play and plazas on this concept, but wanted to add the amphitheater from

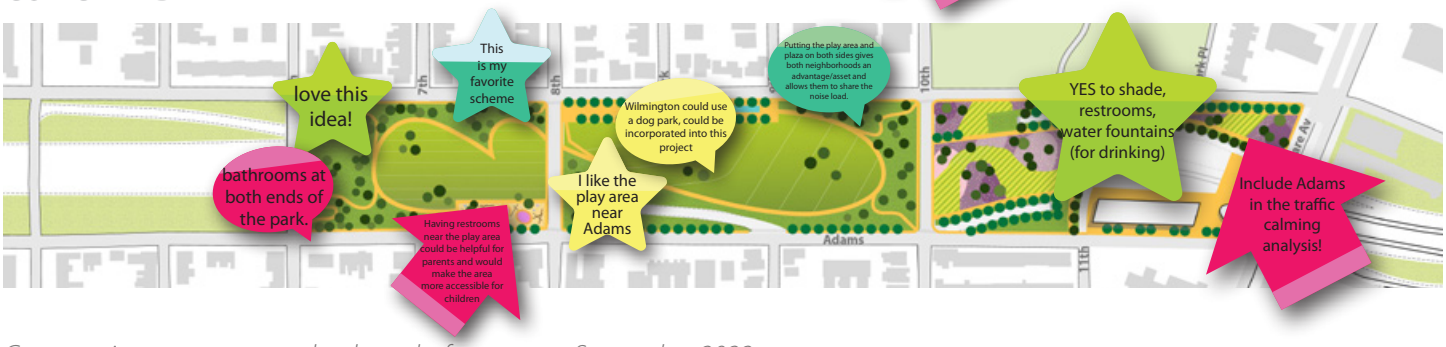
CONCEPT A



CONCEPT B



CONCEPT B1



Community comments on the three draft concepts, September 2022

Rendering from Workshop #4 November 2022

Rendering from Workshop #4 November 2022

FINAL COMMUNITY EVENT

In November 2022, the project team presented work to date to the public including design considerations, the public engagement process, and the final draft concept. The public asked questions and commented on the final design presentations. Attendees were supportive of the final draft concept design. Questions about the draft final report included topics such as parking, stormwater management, phasing, planting, unions and possible partnerships with local and state organizations as the project moves into future phases of study.

I-95 FEASIBILITY STUDY

Appendix D

Community Workshop & Advisory Committee Meeting Notes

Notes

Event Date:	Event:	Event Time:	Event Location:
17 November 2021	Community Workshop #1	6-8pm	Trinity Episcopal Parish
Project:	**Project Number:**	**Prepared By:**	
I-95 Cap Feasibility Study	WIL 2101	Aubrey Tyler	

MEETING OVERVIEW

Members of the community were invited to listen to a presentation by the project team as well as participate in a discussion and workshop exercises about the future of a public space between Jackson and Adams streets over Interstate 95. The workshop began with a presentation on the project context, scope, and relevant precedent projects by Hargreaves Jones. Members of the community had time to ask questions or make comments as well as vote on possible programs for the future space.

Attendance:
52 community members from around Wilmington attended this in-person workshop

ACTION ITEMS

- Project team will create a diagram that zooms out to Christiana River and possibly the Delaware River, to illustrate how a pedestrian/cycle connection could be established between the Brandywine & Christiana along I-95, to MLK Blvd over to the Jack A Markell Trail & Christiana River Trail.

Project Team:
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Kirt Rieder, HJ
Aubrey Tyler, HJ

PROJECT KEY POINTS

- No residents will be displaced, moved, or otherwise impacted by the I-95 Cap Feasibility Study, nor will there be recommendations in the final study or design that would suggest this. The project boundary is between Jackson and Adams Street and the 6th Street bridge to Delaware Avenue. There may be ROW improvements to travel lanes, pedestrian pavements, and intersections recommended as a part of the study.

- I-95 will not be re-routed, permanently closed, or significantly reconfigured to accommodate the Cap proposal. Any lane disruption during future construction will be addressed through standard construction phasing documentation as determined by final design to keep I-95 functional.

- The study area totals 12 acres gross between 6th Street and Delaware Ave and between Jackson and Adams Streets that may be considered for modification. The final project area may be a smaller area than the overall 12 acres.

Distribution:
WILMAPCO
HJ
JMT

DISCUSSION TOPICS

The following topics were discussed during the Question and Answer portion of the workshop.

<u>Design Considerations</u>

- How can the slope be used as an advantage in the design process?
- This place should be designed using native plants to support pollinators

<u>Budget</u>

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- Who is going to pay to maintain this open space?
- Will the tax paying public see taxes raised to pay for this?
- Which agency is responsible for the construction and operation budgets?

Un-housed/Homeless

- Will it impact the un-housed and those that live under the current bridges?
- Will there be a pre-construction effort to relocate this population of un-housed?

Lighting

- The architecture of the flanking houses is so rich, there should be a plan to illuminate these houses, like Boathouse Row in Philly.
- Did project budget for fixing up adjacent facades on private property?
- Can grants be used, outside of DelDOT funding to fix up homes along the corridor?

Tree Warden

- Concerns about trees impacting the quality of sidewalks in Wilmington should involve Herb White (Hwwhite@wilmingtonde.gov)

Air Quality

- With vehicles moving from internal combustion engines (ICE) to electric motors, it is plausible that the air contamination with pollutants will be greatly reduced in future years. However, rubber particulates would continue to be airborne

Attract the Locals & Children

- Not only is there a school across the street, but there is also a pre-school a few blocks to the west
- Make sure that this project attracts the locals, not just regional tourism.
- This public space should be one infused with local character.
- Will local businesses be impacted by this park?

Connections

- This park can create opportunities to connect East and West.
- This place can connect the two historic rivers (Christiana River and Brandywine Creek)

Maintenance + Upkeep

- Who will maintain this place for years to come?
- Wilmington already has a problem with trash

Stormwater

- During rain events, local residences flood

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Listed below are the outcomes of the workshop activities, including desired connections, visions, and top programs community members favored, as well as those that were not as favored.

Desired connections included:

1. Across each existing bridge over I-95 within the project site (6th to 10th);
2. Diagonally between 8th street and the Brandywine Cemetery
3. From Cool Springs Park to N. Adams Street

Currently, most are biking along 9th and 10th streets, as well as along Delaware Avenue. Workshop participants desired to bike diagonally across the study area from the intersection of W 8th Street and N. Jackson Street to the intersection of W 10th Street and N. Adams Street.

What IS Working?

1. Beautiful local artwork
2. Strong diversity
3. Local gardens
4. Good local businesses (Example: Books and Bagels)
5. Involved communities, leaders, and politicians

What is NOT working?

1. Not enough public trash cans
2. Cars have more access and right of way than pedestrians
3. Lack of lighting
4. Poorly managed stormwater
5. Loitering and crime
6. Not enough bikeable and walkable connections
7. Cool springs park is not finished
8. Public transit
9. Not enough resources for the un-housed

When picturing the future of this place, the community envisions a place for everyone that is safe, walkable, and colorful. This includes well-lit, programmed areas that prioritize sustainability and native plantings, places for families to play and exercise, and that celebrates the history of the neighborhoods.

Key takeaways of the exercise include:

1. High interest in more trees, multi-function landscapes, pedestrian only zones, and art and sculpture.
2. Items with nearly equal favored and not favored votes included scooter share, sport courts, and dog play.
3. Community members did not feel more parking, ride-share pickup points, or car sharing was needed in this community.

Nature + Environment

Favored:
Trees
Pollinator Gardens
Shade

Not favored:
City Watching

Health + Wellness

Favored:
Fitness Class Space
Running Loops
Contemplative Space

Not favored:
Sport Courts
Places to Sunbathe

Community Program:

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Favored:	*Not favored:*
Restrooms	*Retail*
Multi-function Landscape	*Concessions*
Public Restroom	
Art and Sculpture	

Mobility + Transit

Favored:	*Not favored:*
Pedestrian Only Zone	*Car Share*
Traffic Calming	*On-Street Parking*
Protected Bike Lane	*Ride-share pickup point*

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Notes

Event Date:	Event:	Event Time:	Event Location:
12 January 2022	Community Workshop #1B (Virtual)	5:30-7pm	Zoom
Project:	**Project Number:**	**Prepared By:**	
I-95 Cap Feasibility Study	WIL 2101	Aubrey Tyler	

MEETING OVERVIEW

Members of the community were invited to a virtual presentation by the project team as well as participate in a discussion and workshop breakout rooms about the future of a public space over Interstate 95. The workshop began with a presentation on the project context, scope, and relevant precedent projects by Hargreaves Jones. Members of the community had time to ask questions or make comments.

Attendance:
47 community members from around Wilmington attended this virtual workshop

ACTION ITEMS

- Project team will create a diagram that zooms out to Christiana River and possibly the Delaware River, to illustrate how a pedestrian/cycle connection could be established between the Brandywine & Christiana along I-95, to MLK Blvd over to the Jack A Markell Trail & Christiana River Trail.

Project Team:
Tigist Zegeye, WILMAPCO
Dave Gula, WILMAPCO
Randi Novakoff, WILMAPCO
Jake Thompson, WILMAPCO
Toyin Ogunfolaju, Jacobs
Mary Margaret Jones, HJ
Kirt Rieder, HJ
Aubrey Tyler, HJ

PROJECT KEY POINTS

- No residents will be displaced, moved, or otherwise impacted by the I-95 Cap Feasibility Study, nor will there be recommendations in the final study or design that would suggest this. The project boundary is between Jackson and Adams Street and the 6th Street bridge to Delaware Avenue. There may be ROW improvements to travel lanes, pedestrian pavements, and intersections recommended as a part of the study.

- I-95 will not be re-routed, permanently closed, or significantly reconfigured to accommodate the Cap proposal. Any lane disruption during future construction will be addressed through standard construction phasing documentation as determined by final design to keep I-95 functional.

- The study area totals 12 acres gross between 6th Street and Delaware Ave and between Jackson and Adams Streets that may be considered for modification. The final project area may be a smaller area than the overall 12 acres.

Distribution:
WILMAPCO
HJ
JMT

DISCUSSION TOPICS

The following topics were discussed during the Question and Answer portion of the workshop.

<u>Comments by Members of the Community:</u>

<u>Design</u>

- Could I95 into Downtown Wilmington become "I95 Business" to limit the through-traffic continuing on past the city?
- Lack of existing cross walks to get to the project study area makes it difficult to access

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- There is an opportunity to fold ADA requirements into the design as signature elements to make the future public space universally accessible.
- This is an opportunity to connect neighborhoods to Downtown for pedestrians.
- This is an opportunity to bring back what was lost when the highway was built such as shops and cafes.

Budget

- This project will be expensive. What are realistic outcomes of this study?

Maintenance + Upkeep

- Who will maintain this place for years to come?
- Wilmington already has a problem with trash

Listed below are the outcomes of the workshop activities, including desired connections, visions, and top programs community members favored, as well as those that were not as favored.

Desired connections included:

1. Laterally from South to North through the whole study site
2. From Cool Springs Park to N. Adams Street
3. Across W. 7th street from N. Adams Street to N. Jackson St.
4. Both ways across N8th Street adjacent to Cool Springs Park
5. Along N. Van Buren St.

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What IS Working?

1. This is a wonderfully diverse community!
2. Great neighborhoods with people out and about
3. Local gardens
4. Trees
5. Westside Community Organization

What is NOT working?

1. Not enough public trash cans
2. Existing cross walks are not clear; not safe for pedestrians
3. Not enough lighting
4. The neighborhoods are not accessible
5. Lack of bicycle access
6. Aesthetics
7. Noise pollution
8. Bus Shelters

When picturing the future of this place, the community envisions a place with lots of trees, that is programmed for everyone (children, those experiencing homelessness), and provides places to rest and play games. The community envisions a place that sequesters carbon, provides market space, and that provides a range of attractions to visitors and locals.

Key takeaways of the exercise include:

1. High interest in more trees, multi-function landscapes, art and sculpture, interpretation and history, increased wayfinding, café/moveable seating, and lighting.
2. Items with nearly equal favored and not favored votes included scooter share, sport courts, and dog play.

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3. Community members did not feel more parking, ride-share pickup points, or car sharing was needed in this community.

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DRAFT

Notes

Event Date:	Event:	Event Time:	Event Location:
19 April 2022	Community Workshop #2	4pm	Lewis Elementary School
Project:	**Project Number:**	**Prepared By:**	
I-95 Cap Feasibility Study	WIL 2101	Aubrey Tyler	

MEETING OVERVIEW

Dave Gula welcomed community members to the second public meeting of Bridging the Community: I95 CAP Feasibility study. Mary Margaret Jones, Kirt Rieder, and Aubrey Tyler (Hargreaves Jones) presented project work to date including design considerations, community engagement outcomes, and early approaches. Angie Hernandez (JMT) presented the draft Purpose and Need of the project. After the presentation and discussion, members of the community made comments on the draft early approaches (3).

Participants:
Members of the community listened to a presentation by the project team and participated in feedback activities.

Project Team:
Tigist Zegeye, WILMAPCO
Dave Gula, WILMAPCO
Jake Thompson, WILMAPCO
Randi Novakoff, WILMAPCO
John Sisson, DelDOT/DTC
Angie Hernandez, JMT
Dave Duplessis, JMT
Toyin Ogunfolaju, Jacobs
Mary Margaret Jones, HJ
Kirt Rieder, HJ
Aubrey Tyler, HJ

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JMT

DISCUSSION TOPICS

Possible Street Closures:

- Does closing 8th street impact public transit?
- There were questions about how much road traffic is neighborhood traffic vs. a route people use to get out of town.
- "8th and 9th are main connections, no closing streets"
- Recommend closing 7th street for quicker turnarounds/access back to 95

Car Access:

- Could roundabouts be used for traffic?
- Consider making I-95 congruent with I-495 from the PA state line to Newport, DE and rebadge the existing roadway of I-95 local traffic. Painting the interstate shields in the right lanes of the roadways as they have done on PA I-95 N to I-476 N (blue route) will help traffic flow smoothly and safer.

Other:

- Maintaining the exposed rock
- Contracting opportunities for small diverse businesses. Will there be preference given to BIPOC companies when contracts are awarded?
- Free space would create more isolation due to a new lack of transportation access

EARLY APPROACH COMMENTS:

Outdoor Rooms:

- Waterpark and sand?
- Like the idea of a tree house
- The west side feels empty with only hills
- Outdoor classrooms?
- Between 9th and 10th feels a bit empty
- Outdoor fountains
- If you close a street, close 7th!
- Would like food options and a farmers market
- Visitor center
- No for-profit businesses in this space
- Keep the ramps open

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- Can more of the ramps be covered?
- Like the idea of multi-use green space.
- Upgrade pedestrian experience on Delaware Ave

Greenway:

- Traffic speeds are a challenge on Delaware Ave.
- Will the park be open 24/7?
- What kind of lighting will be used?
- Closing 8th might close a transit route
- How much road traffic is neighborhood vs. people leaving the city?
- No closing streets-this is a main connection to east and west (8th and 9th)
- Would like to see the park extended to 6th street.

The Commons:

- Is there an opportunity to connect to Rockford park?
- Like the paths connecting through each span
- Trees block views at 6th street
- There are speed issues on Adams St.
- It is hard to cross both Adams and Jackson
- Solar panels for energy
- Make space for public fitness in the commons
- Connect to Cool Spring Park
- Move the flyover ramp

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Notes

Event Date:	Event:	Event Time:	Event Location:
06 September 2022	Community Workshop #3	6:30pm	William Lewis Elementary School
Project:	**Project Number:**	**Prepared By:**	
I-95 Cap Feasibility Study	WIL 2101	Aubrey Tyler	

MEETING OVERVIEW

Dave Gula welcomed community members to the third public meeting of Bridging the Community: I95 CAP Feasibility study. Mary Margaret Jones (Hargreaves Jones) presented project work to date including design considerations, community engagement updates, and three updated concepts. Joanne Arellano (JMT) presented the outcomes of the traffic analysis study. After the presentation, members of the community asked questions and made comments on the three updated concepts.

CONCEPT COMMENTS SUMMARY:

All Concepts: A handful of themes emerged across all concepts:

- The idea of a large open park was supported,
- Restrooms at both ends of the park, and if just one, at the south end,
- The addition of E/W walking paths over the cap,
- Common features across any concept included positive reception to water features, gardens, and nature play,
- More specificity on bike infrastructure,
- Answers to questions about where visitors would park their cars.

Concept A: Community input supported the idea of amenities in the form of restrooms, a café, and pop-up market space (produce, food trucks, etc). The amphitheater is a popular program proposal, and there are suggestions from the community for potential programming partnerships. Nature play is also a supported idea, and there is interest in adding a dog park to the concept. Community members asked for more water features and liked The Oval public green. There is concern about where visitors would potentially park, and the need for East/West pedestrian paths across the cap.

Concept B: Like Concept A, the community wanted to see more pedestrian paths E/W crossing the cap. Gardens (especially interest in native planting) was supported, as were water features. Community members asked for bike racks, city bikes, and public art. Some community members were concerned about the potential noise of a plaza programming. The community unanimously agreed that there should not be any portion of I-95 left uncapped.

Concept B1: Similar to Concepts A and B, participants wanted to see more direct walking routes to and from downtown across the cap. There is support for urban gardens and nature play, and a suggestion to partner with local outdoor educators to facilitate the creation of nature play. Restrooms are desired near play, and there is interest in shade structures. Community members liked that having play on Adams and a plaza on Jackson gave both neighborhoods an amenity.

Participants:
40 members of the community listened to a presentation by the project team and participated in feedback activities.

Project Team:
Tigist Zegeye, WILMAPCO
Dave Gula, WILMAPCO
Jake Thompson, WILMAPCO
Randi Novakoff, WILMAPCO
John Sisson, DelDOT/DTC
Angie Hernandez, JMT
Dave Duplessis, JMT
Toyin Ogunfolaju, Jacobs
Mary Margaret Jones, HJ
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INDIVIDUAL CONCEPT COMMENTS:

Concept A:

- Where will people park?
- Add a bike lane, please!
- Could there be a dog park?
- Love the idea of a play garden
- The intersection of 10th and Adams is a bad spot for traffic.
- Closing streets will cut the neighborhood off more. Defeats the purpose.
- A second bathroom at the south end?
- Liaison with local music organizations to program the amphitheater.
- I like the amphitheater.**
- Must have streets going into Downton [other than 6th] for the commute.
- This one is my favorite, not sure about the building.
- Trinity church impact? It would be nice to have a place to use as a church plaza.
- Café, restroom, produce sales. Off street parking?
- Can children's theater get involved with the amphitheater?
- Could there be food truck access?
- The bathrooms are not accessible [meaning, less convenient]
- More water features
- Any picnic tables?
- I like it! * ['the Oval' public green]
- Love the interactive water feature, could it be connected to Cool Springs?

Concept B:

- A beautiful green space will mean so much to our city! True for each concept **
- Where is the ART?
- Water features
- City bikes!
- Need to have pedestrian paths following former 9th street.
- Will planting be native? Who will confirm this? Delaware Nature Society? **
- Why have E/W paths been excluded from the design? Apart from the bridges?
- This concept is my least favorite, I like the other two [A and B1] equally.
- Can a bike lane be added?
- Could the plaza become parking?
- Use the slope that already exists to recirculate water for the fountains
- Could the open area become seating or a green space? A café?
- Don't leave anything uncapped.
- I worry a plaza on Adams will be noisy
- I like the water feature/spray park
- Add bike racks please

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- Make the paths less meandering, more pathways from Jackson to Adams. Applies to all concepts.

Concept B1:

- Love the idea!
- This is my favorite scheme.
- Bathrooms at both ends of the park.
- Distance of path from Adams to Jackson does not feel pleasant for pedestrians [particularly desire lines, cross cap]
- Need a pedestrian analysis
- Prefer the plaza on the Jackson side
- Make a cap entertainment area with contained sound, year-round, and temperature controlled.
- All concepts: more shade structures, could be closed in when the trees are bigger
- Fill in all of the cap with green
- Wilmington could use a dog park, could be incorporated into this project *
- I like the play area near Adams
- Putting the play area and plaza on both sides gives both neighborhoods an advantage/asset and allows them to share the noise load.
- The play area being on Adams is isolated from other park activity.
- What does nature play mean?
- Will you team with local outdoor educators? Delaware association for environmental educators?
- YES to shade, restrooms, water fountains (for drinking)
- Having restrooms near the play area could be helpful for parents and would make the area more accessible for children
- Is this space a destination or passthrough or a gateway? These appear to make it a destination. I see it as a beautiful useful pass through, or a gateway to Wilmington and our neighborhoods.

* an asterisks represents a star sticker from another community member on a given comment, meaning they agreed with what was written.

These notes are submitted by Hargreaves Jones. Please contact Hargreaves Jones with any corrections or additions. If no corrections or additions are received within (7) working days of distribution, the content will be assumed to be agreed upon by all parties.

END OF NOTES

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Notes

Event Date:	Event:	Event Time:	Event Location:
17 November 2022	Community Workshop #4	6-7:30pm	Ursuline Academy
Project:	**Project Number:**	**Prepared By:**	
I-95 Cap Feasibility Study	WIL 2101	Aubrey Tyler	

MEETING OVERVIEW

Dave Gula welcomed community members to the fourth and final public meeting of Bridging the Community: I95 CAP Feasibility study. Mary Margaret Jones (Hargreaves Jones) presented project work to date including design considerations, the public engagement process, and the final draft concept. Joanne Arellano (JMT) presented the outcomes of the traffic analysis study and Corey Hull (JMT) presented an overview of the structural analysis considerations. After the presentation, members of the community asked questions and made comments on the final draft concept.

CONCEPT COMMENTS SUMMARY:

Draft Final Concept: A handful of themes emerged across all concepts:

- Broad support for the draft final concept
- Could there be a partnership with outdoor education agencies in Delaware for the development of nature play? Yes, future iterations and in-depth designs for the cap would look to partner with local organizations on relevant topics.
- Final planting recommendations would prioritize ecologically appropriate species in an effort to support habitat and reduce maintenance costs.

Parking and Transit:

- Will there be enough parking? Yes, the plan shows it is feasible to have over 100+ additional paring spaces along the cap, with more available if Jackson and Adams are reduced to one travel lane and one parking lane. Event parking management would be a recommended future study in more detail as the plan progresses.
- The plan will ensure that all access and egress to and from I95 remain safe and practical for cars as well as improve safety for pedestrians and bicyclists around the site.

Phasing and implementation:

- Would it be possible for the final footprint to be smaller if the total project cost became unfeasible? Yes, phasing will be a part of any future recommendations.

Stormwater management and water:

- The final design would include consideration of stormwater management and remediation that is not shown here at the concept feasibility stage. There are bioswales and water courses in the landscape. It is not possible to have a pond on top of the freeway.
- Action item: the project team will add labels showing stormwater management areas

Participants:
xx members of the community listened to a presentation by the project team and participated in feedback activities.

Project Team:
Tigist Zegeye, WILMAPCO
Dave Gula, WILMAPCO
Jake Thompson, WILMAPCO
Randi Novakoff, WILMAPCO
John Sisson, DelDOT/DTC
Angie Hernandez, JMT
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END OF NOTES

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Notes

Event Date:	Event:	Event Time:	Event Location:
02 November 2021	Advisory Committee Meeting #1 B	4pm-6pm	Zoom
Project:	**Project Number:**	**Prepared By:**	
I-95 Cap Feasibility Study	WIL 2101	Aubrey Tyler	

MEETING OVERVIEW

Dave Gula welcomed Advisory Committee members to the virtual version of the October Advisory Committee meeting. Mary Margaret Jones and Aubrey Tyler introduced the project team before presenting the scope, context, history, and preliminary analysis done by the project team for the study. The presentation also included precedents of cap projects in other cities. After the presentation and discussion, the Advisory Committee participated in a series of program preferencing activities and a guided discussion.

ACTION ITEMS

- HJ will add community centers to the landmarks diagram
- Project team will add that there will be translation available for the public meeting on the flyer
- Project team will share flyer with AC

PROJECT KEY POINTS

- No residents will be displaced, moved, or otherwise impacted by the I-95 Cap Feasibility Study, nor will there be recommendations in the final study or design that would suggest this. The project boundary is between Jackson and Adams Street and the 6th Street bridge to Delaware Avenue. There may be ROW improvements to travel lanes, pedestrian pavements, and intersections recommended as a part of the study.

- I-95 will not be re-routed, permanently closed, or significantly reconfigured to accommodate the Cap proposal. Any lane disruption during future construction will be addressed through standard construction phasing documentation as determined by final design to keep I-95 functional.

- The study area totals 12 acres gross between 6th Street and Delaware Ave and between Jackson and Adams Streets that may be considered for modification.

OPPORTUNITIES AND CHALLENGES:
The following items are areas of both opportunity and challenge defined by the advisory committee members present. The committee discussed the possibility of items identified as challenges being opportunities, too.

Challenges:

- Funding
- Upkeep and maintenance
- Grade change (also an opportunity)
- Accessibility

Opportunities:

Participants:

Advisory Committee:
Lindsey Donnellon, Federal Highway Administration
Secretary Majeski, DelDOT
Shante Hastings, DelDOT
Andrew Dinsmore (Senator Chris Coons)
Daykia McKnight-Hunter (State Senator Lockman)
David Edgell, DE Office of State Planning
John Sisson, Delaware Transit Corporation (DTC)
Aundrea Almond, New Castle County
John Rago, Mayor's Office Wilmington, DE
Cassandra Marshall, Quaker Hill Neighborhood Association
James Wilson, Bike Delaware
Hal Schneikert, 8th District NPC
Sarah Lester, WSGT
Laura Adarve, LACC
David Ross, 4th District NPC/Trinity Vicinity Neighborhood Association
Ms. Caren Turner, United Neighbors/West Center City Neighborhood Assoc.

Project Team:
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- Public Restrooms
- Grade change (vantage points, views)
- Accessibility could be a feature
- Designing for seniors/all ages
- Stitching in cool springs park

DISCUSSION THEMES

Programming and Users

- Significant programming is key to the success of this park; could connect to this future space such as the fireworks displays that happen in Wilmington. This future space could host concerts, for example.
- Treating people (and designing with) empathy; no design features that prevent people from sleeping.
- Who is this for? Is it a destination or a local amenity?
- Art is a huge opportunity to engage the community, add color and identity to this area.
- Designing structured activities for youth; create a place where kids can come and learn. Universal access for kids including activities and play. Interactive and educational features (for example: giant keyboard). Rodney Square water feature has been popular.
- People should be able to be tranquil and admire where they are. This place should bring joy.
- "As much green space as possible to help our neighbors come together again"
- Provide a clear view of the sky where visitors can see sunrise and sunset.
- This could be a great "welcome to Wilmington" opportunity. Currently there is nothing 'cool' to draw you in.
- Rocks that reference the blasting that occurred to create the highway could be a distinct feature and offer sense of place.
- Lighting, something distinct could offer neighborhood character
- Lots of discussion on the importance of a public lawn or open space for flexible programming (perhaps this could take advantage of the slope).
- Interest in structures on the site including food and public restrooms. Ultimately people need to use the space. "Everyday people doing everyday things"
- Space for teens to come, perhaps a small stage, somewhere with a cool background.
- Constructive outlet for graffiti?

Areas of Interest

- Interest in addressing the southern end (6th street) of the study area
- Could this place help create a link to the riverfront parks by serving as a component to connect the Brandywine River and its parks to the Christina Riverfront area
- 2nd and 4th street need some love.
- 6th street to MLK was mentioned as a possible future study.

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- Future study opportunity: extending green areas along Adams and Jackson Streets from DE Ave to 6th, potentially all the way down to 4th

Parking

- Without engineering around cars, still need to consider that some people will drive here
- There are garages in proximity to the study area
- "Design for the traffic patterns you want"

Key desired connections called out by the Advisory Committee include connections from or along:

- Across every existing bridge within the project site and Delaware Ave
- Along Delaware Ave
- From trinity episcopal to the cemetery to Brandywine.

Listed below are the top programs Advisory Committee members agreed were necessary, and those voted as not needed. Key takeaways of the exercise include:

- High interest from Advisory Committee members in multi-function landscapes, lighting, flexible lawns as well as age-specific programming.
- Advisory Committee members also showed interest in space for dogs and areas that can be converted to markets on weekends
- Advisory Committee members did not feel that retail was appropriate for this site given the proximity to other shopping in the area.

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Notes

Event Date:	Event:	Event Time:	Event Location:
08 March 2022	Advisory Committee Meeting #2	4pm	Zoom
Project:	**Project Number:**	**Prepared By:**	
I-95 Cap Feasibility Study	WIL 2101	Aubrey Tyler	

MEETING OVERVIEW

Dave Gula welcomed Advisory Committee members to the second meeting of Bridging the Community: I95 CAP Feasibility study. Mary Margaret Jones, Kirt Rieder, and Aubrey Tyler (Hargreaves Jones) Project work to date including design considerations, community engagement outcomes, and early approaches. Angie Hernandez (JMT) presented the draft Purpose and Need of the project.

ACTION ITEMS

- Project team will provide a link to the presentation to Advisory Committee members.
- Project team to collect precedents of traffic calming methods
- Advisory Committee to brainstorm best methods for targeted community engagement.

DISCUSSION TOPICS

Possible Street Closures:

- 8th street goes to the hospital – is this a primary emergency access route?
- 6th and 7th are in the same direction across I95.

Car Access:

- Would closing 8th street block off car access to downtown?
- Concern about a potential park making movement for drivers less convenient.
- What would potential parallel look like along Jackson and/or Adams on the I95 side of the street?

Early Approaches

- How will traffic calming be addressed in each approach?
- Mid-block crossings are a concern and to be avoided in the approaches.
- Open lawn space is popular in Approach 02: Greenway.
- Why is the 6th-7th street span not developed in the Greenway approach?
- Like the mission of uniting the city. Could focus on lower streets be more considered? Focus could be lower near 6th and 7th.
- Each Early Approach would significantly increase the amount of local park space.
- What would phasing look like for these approaches?
- Is it possible to get a sense of soft costs for the concepts?
- How can streets be designed flexibly?

Participants:
Mike Maggitti
Wanda Elder
Mary Roth
Harold Schneikert
Lindsay Donnellon
Andrew Dinsmore
Cianna Green
David Edgell
Cassandra Marshall
Wanda Elder
Sarah Lester
Thomas Natoli
Laura Adarve
Ms. Caren Turner
Shante Hastings
Rep. Sherry Dorsey Walker

Project Team:
Tigist Zegeye, WILMAPCO
Dave Gula, WILMAPCO
Jake Thompson, WILMAPCO
Randi Novakoff, WILMAPCO
John Sisson, DelDOT/DTC
Angie Hernandez, JMT
Dave Duplessis, JMT
Toyin Ogunfolaju, Jacobs
Mary Margaret Jones, HJ
Kirt Rieder, HJ
Aubrey Tyler, HJ

Distribution:
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HJ
JMT

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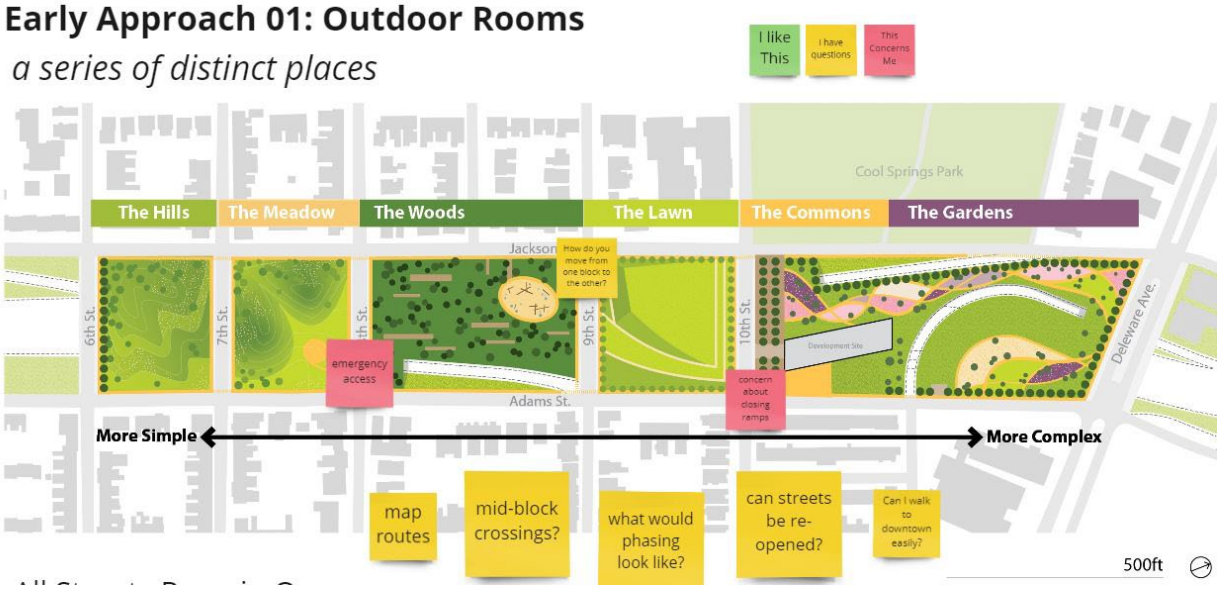
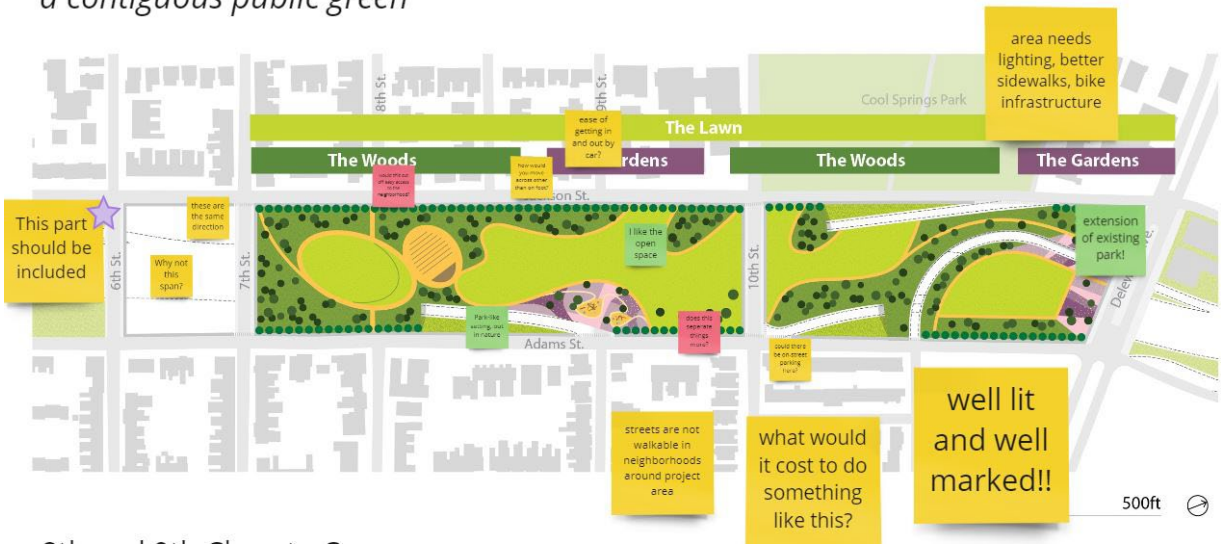
Early Approach 01: Outdoor Rooms

a series of distinct places



Early Approach 02: Greenway

a contiguous public green



Early Approach 03: The Commons

a cohesive civic space

Notes

Event Date:	Event:	Event Time:	Event Location:
06 September 2022	Advisory Committee Meeting #3	4:30pm	William Lewis Elementary
Project: I-95 Cap Feasibility Study	Project Number: WIL 2101	Prepared By: Aubrey Tyler	

MEETING OVERVIEW

Wilmapco welcomed Advisory Committee members to the third meeting of Bridging the Community: I95 CAP Feasibility study. Hargreaves Jones presented project work to date including design considerations, community engagement updates, and three concept updates since the last meeting. JMT presented the outcomes of the traffic analysis study.

ACTION ITEMS

- Include another run of the traffic analysis model that considers N. Adams Street

DISCUSSION TOPICS

Possible Street Closures:

- Closing 10th street is less advantageous, because of daily William Lewis Elementary dropoff & collection of children
- Emergency vehicle response time would not be impacted by any bridge closures in the project site, per Fire Marshal
- How would closing 7th and 9th streets impact the volume of vehicles on 6th street?
- Bridges that would be closed for the future cap should be temporarily closed with cones in the short term, to test the impact and begin the process of modifying how the community navigates.

Jackson Lane Reduction and Traffic Calming:

- Adams should be given the same consideration as Jackson. It is inequitable that only one would be considered for traffic calming measures.
- The more easily achievable aspects of the design proposals (traffic calming measures on Jackson and Adams) should be implemented in the short term before cap planning is completed.
- Designated bike lanes are needed. Bike infrastructure outside the project area is not in the scope of this feasibility study, but recommendations will be made for the cap, Jackson, and Adams that will set a precedent for the surrounding area.

Development:

- "Development" is not the right word for what is being proposed: "community amenities" such as café, community center, restrooms and park support is more accurate. Any building would serve to stitch the cap into the community, keep eyes on the area, and help support the cap operations.
- Parking comes with development if there's a travel destination
- Could this become with a regional destination, with small park support development? It would help serve the larger vision

Participants:

Andrew Dinsmore, U.S. Senator Christopher Coons
Matt Meyer/Aundrea Almond, New Castle County
Nicole Majeski, DelDOT
John Sisson, Delaware Transit Corporation (DTC)
Gregory Patterson, Delaware Office of the Governor
David Edgell, DE Office of State Planning
Sarah Lester, Westside Grows Together
Cassandra T. Marshall, Quaker Hill Neighborhood Association
Adam Crosby, Delaware Greenways
Wanda Elder

Project Team:

Tigist Zegeye, WILMAPCO
Dave Gula, WILMAPCO Randi Novakoff, WILMAPCO
Jake Thompson, WILMAPCO
John Sisson, DelDOT/DTC
Joanne Allellano, JMT
Dave Duplessis, JMT Toyin Ogunfolaju, Jacobs Mary Margaret Jones, HJ Kirt Rieder, HJ
Aubrey Tyler, HJ

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HJ
JMT

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outside the scope of this project to connect to Brandywine & riverfront.
- A structure could be as simple a shade structure. Restrooms need to be tied into other park programs to keep them operational and safe feeling. It is easiest to have well serviced facilities if there is a vendor there to support the facility.

Design Concepts:

- Noise should be a consideration with a proposed performance venue. The amphitheater shown in concept A is proposed to be more of a community-scale gathering place, rather than a fully equipped, market focused concert venue.
- In concepts B and B1, portions of the highway are left uncovered near Delaware Ave, primarily to test a less expensive design, as the portion of cap between 10th and Delaware would be the most difficult and expensive to cap due to the flyover. Feedback to not leave portions uncapped.
- The preferred concept, in the next round of iteration, should show possible phasing.
- Put more emphasis on how safety would be improved with each design concept.
- No midblock crossings will be in the final proposal.
- Sports courts were not a preferred program, from the initial community meetings onward: at the first workshop sports courts were actively voted 'against' as a potential program in the future public realm.
  - There are already courts down on Adams Street near the project site.
- No portion of the park cap shall be used for parking.
- Maintenance is a consideration for any new park. Who will manage and maintain it? The project team will make recommendations about potential operation systems for a future cap and will look to the advisory committee to recommendations.

These notes are submitted by Hargreaves Jones. Please contact Hargreaves Jones with any corrections or additions. If no corrections or additions are received within (7) working days of distribution, the content will be assumed to be agreed upon by all parties.

END OF NOTES

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Notes

Event Date:	Event:	Event Time:	Event Location:
17 November 2022	Advisory Committee Meeting #4	4:00pm	Zoom
Project:	**Project Number:**	**Prepared By:**	
I-95 Cap Feasibility Study	WIL 2101	Aubrey Tyler	

MEETING OVERVIEW

Dave Gula welcomed Advisory Committee members to the fourth and final meeting of Bridging the Community: I95 CAP Feasibility study. Mary Margaret Jones (HJ) presented project work to date, an overview of the public engagement process, and the final draft concept of the proposed public space over I95. Joanne Arellano (JMT) presented the outcomes of the traffic analysis study and Corey Hull presented an overview of the structural analysis to date.

ACTION ITEMS

- HJ to add public art to the proposed programs on the enlargement plans
- HJ to add a slide orienting community members to the renderings
- HJ to add parking labels on the enlargement plans
- HJ will work with the AC to draft a letter of support for the final report

DISCUSSION TOPICS

Overall Concept

- Advisory committee members expressed broad support for the concept presented.
- This is an opportunity for public art as well- could there be a partnership with the Delaware Art Museum.
- This is an opportunity for both sides of the neighborhood. It is exciting to see the idea move forward.
- The structure on Adams across from the parish will have concessions, park support offices, and restrooms. There will be adequate waste receptacles and furniture to support the park and its programs in this area.
- The Knoll will be a great place for folks to gather and take in views and play
- Could the fountain in cool spring be addressed? It is currently not operational because of necessary maintenance.
- This plan has been shared with emergency services to ensure the concept would not interfere with response times or key routes.
- Long term program and maintenance fees, what it looks like, and who is implementing it is a next step for additional studies.

Jackson Lane Reduction and Traffic Calming:

- Interest in continuing momentum and testing some pilot/pop-up traffic calming measures
- Traffic calming and road diets could go in ahead of the cap. It would be a benefit to implement those measures sooner. Could start with tactical urbanism and transition to permeant infrastructure.
- Pedestrian experience on the cross bridges that stay open have been considered. They would get bike lane treatments and possibly a transition to on-street parking as well.

Participants:
John Sisson, Delaware Transit Corporation (DTC)
David Edgell, DE Office of State Planning
Sarah Lester, Westside Grows Together
Cassandra T. Marshall, Quaker Hill Neighborhood Association
Mary Roth
Rep. Sherry Dorsey Walker
Ryan O'Donoghue
Shante Hastings. DelDOT
Daykia Hunter- McKnight
John Rago
Harold Schneikert
Patty Downing
Wanda Elder

Project Team:
Tigist Zegeye, WILMAPCO
Dave Gula, WILMAPCO
Randi Novakoff, WILMAPCO
John Sisson, DelDOT/DTC
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END OF NOTES

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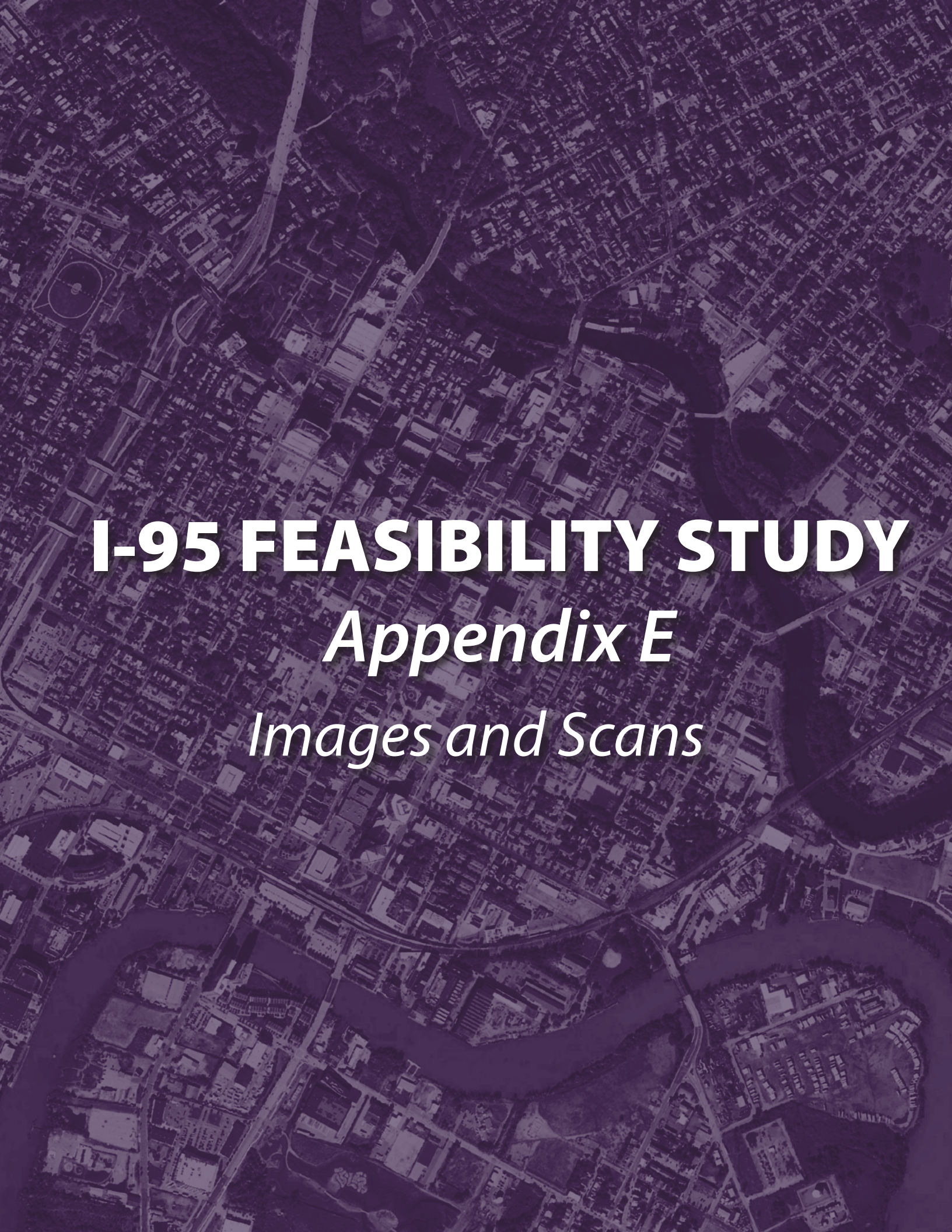
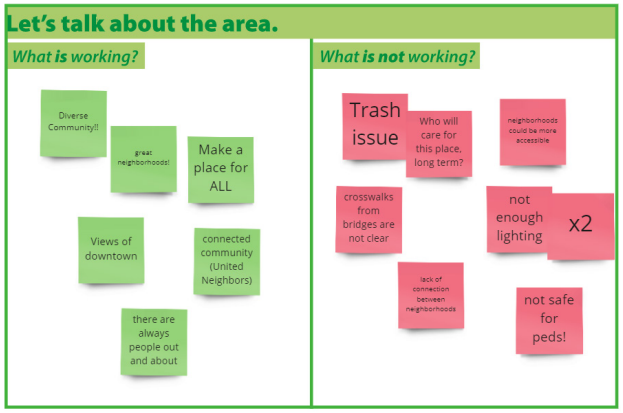


I-95 FEASIBILITY STUDY

Appendix E

Images and Scans

Group 01



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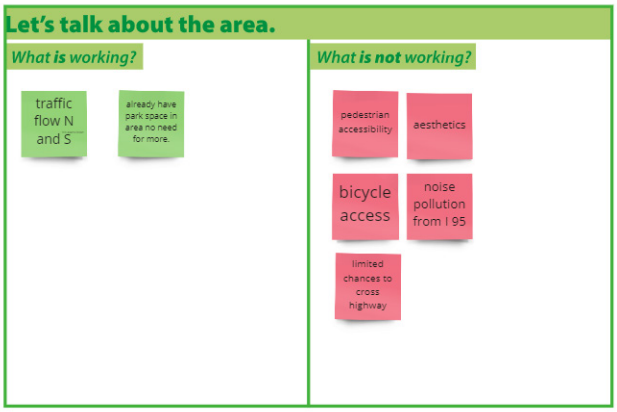

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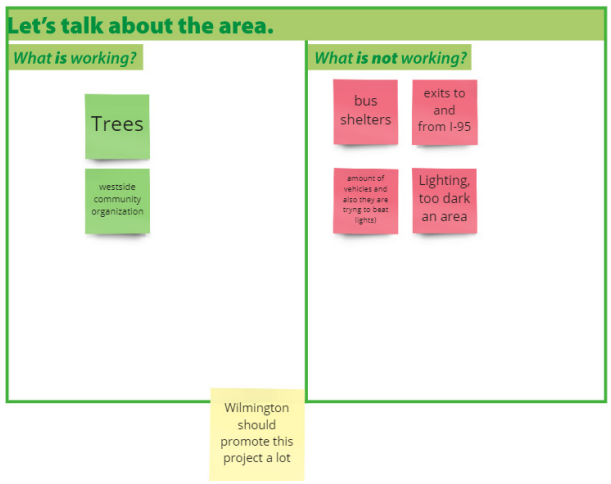
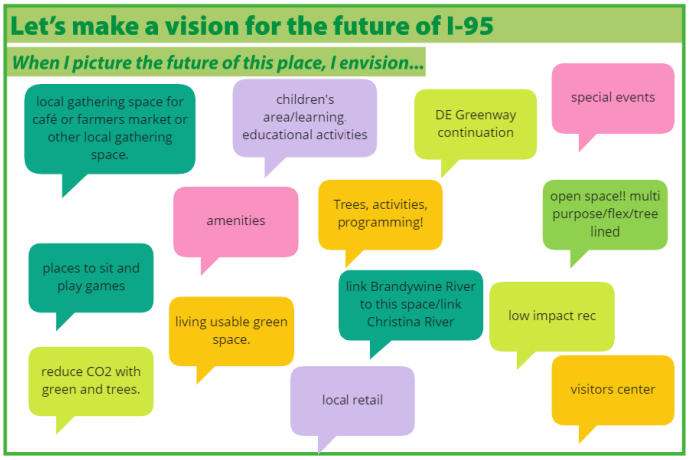


Group 04

Group 01



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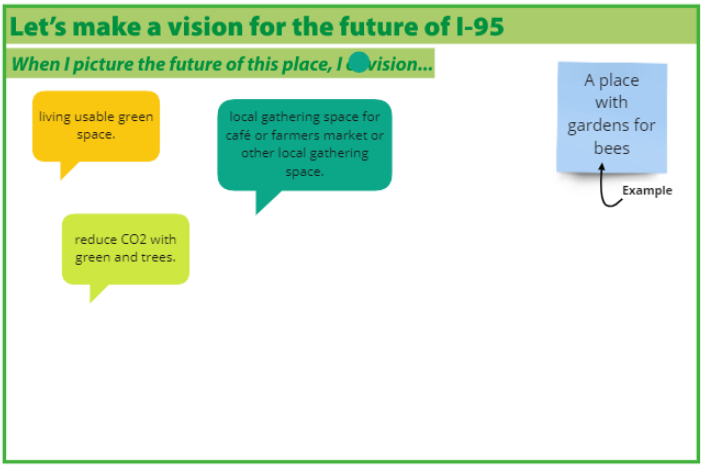

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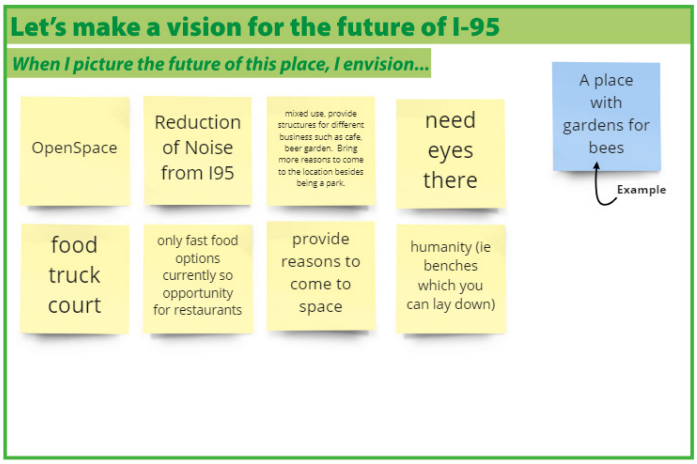
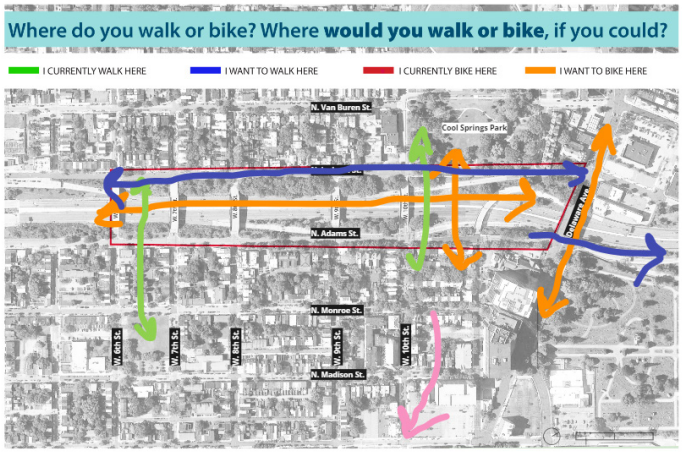
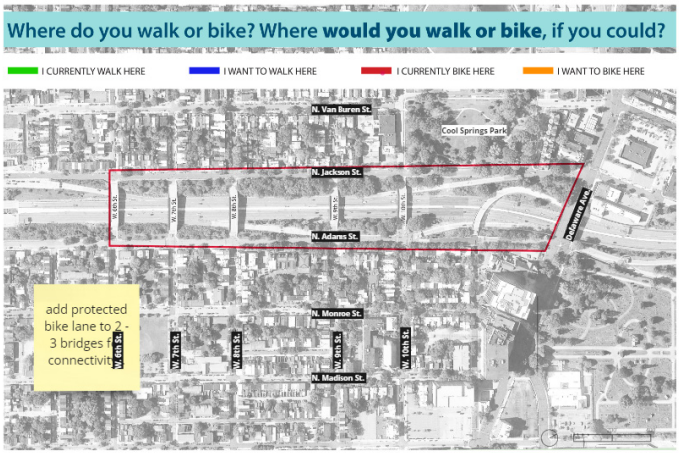


Group 04

Group 01



Group 02



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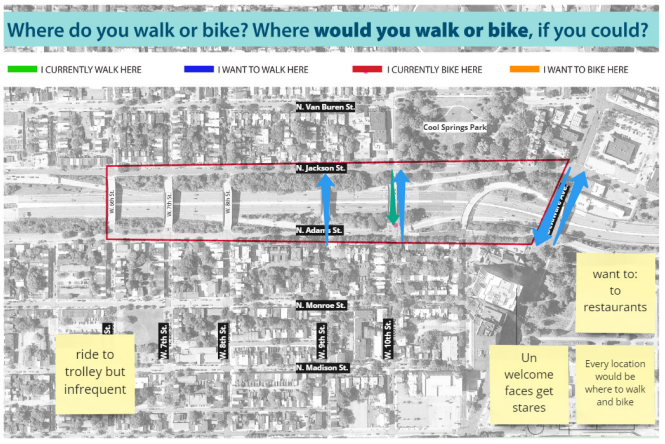

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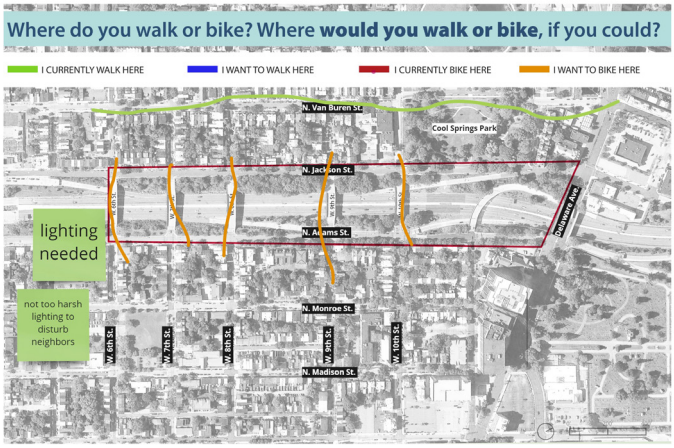


Health + wellness: this community needs...?

Place GREEN stickers for those you agree with, and RED for those you do not agree with

Use GREEN dots for what this community needs (3 per person)

Use RED dots for what this community does not need (3 per person)

- Fitness class space
- Exercise stations
- Running loops
- Bike skills
- Contemplative space
- Places to sunbathe
- Skateboarding
- Flexible lawn
- Dog play
- Sport courts
- Other:

Community program: this community needs...?

Place GREEN stickers for those you agree with, and RED for those you do not agree with

- Retail
- Rentable pavilion
- Public restrooms
- Winter activities
- Covered events venue
- Night events venue
- Multi-function landscape
- Embedded Lights:
- Event Lights:
- Interactive Light Feature:
- Other:

Community program: this community needs...?

Place GREEN stickers for those you agree with, and RED for those you do not agree with

- Night program space
- Picnic space
- Cafe/moveable seating
- Interpretation/history
- Art and sculpture
- Murals and color
- Playground
- Interactive Water Feature
- Performance venue
- Small group gathering
- Market space
- Concessions

Nature/environment: this community needs...?

Place GREEN stickers for those you agree with, and RED for those you do not agree with

- Trees
- Pollinator gardens
- Community gardens
- Stormwater management
- City-watching
- Shade
- Nature-based activities
- Bird habitat
- Other:

Mobility: this community needs...?

Place GREEN stickers for those you agree with, and RED for those you do not agree with

- Wider Sidewalks
- Accessibility Improvements
- Improved Crosswalks
- Scooter Share
- Shared Use Path
- More Crosswalks
- Other:
- Other:
- Other:
- Other:

Mobility: this community needs...?

Place GREEN stickers for those you agree with, and RED for those you do not agree with

- Wayfinding
- Pedestrian-only zones
- Transit stop
- Bike share
- Bike parking
- Protected bike lane
- Traffic calming
- Car share
- On-street parking
- Vehicle pickup points
- Other:

Group 02

Health + wellness: this community needs...?

Place GREEN stickers for those you agree with, and RED for those you do not agree with

Fitness class space | Exercise stations | Running loops | Bike skills

Contemplative space | Places to sunbathe | Skateboarding | Flexible lawn

Dog play | Sport courts | Other:

Use GREEN dots for what this community needs (3 per person)

Use RED dots for what this community does not need (3 per person)

Community program: this community needs...?

Place GREEN stickers for those you agree with, and RED for those you do not agree with

Retail | Rentable pavilion | Public restroom- | Winter activities

Covered events venue | Night events venue | Multi-function landscape

Embedded Lights: | Event Lights: | Interactive Light Feature: | Other:

interactive water features | seating hammocks

Community program: this community needs...?

Place GREEN stickers for those you agree with, and RED for those you do not agree with

Night program space | Picnic space | Cafe/moveable seating | Interpretation/history

Art and sculpture | Murals and color | Playground | Interactive Water Feature

Performance venue | Small group gathering | Market space | Concessions

Nature/environment: this community needs...?

Place GREEN stickers for those you agree with, and RED for those you do not agree with

Trees | Pollinator gardens | Community gardens | Stormwater man_gement

Pollinator Habitat

City-watching | Shade

Nature-based activities | Bird habitat | Other:

Don't forget to take our project s[illegible] after tonight's

Mobility: this community needs...?

Place GREEN stickers for those you agree with, and RED for those you do not agree with

Wider Sidewalks | Accessibility Improvements | Improved Crosswalks

Scooter Share | Shared Use Path | More Crosswalks

Other: | Other: | Other: | Other:

Use GREEN dots for what this community needs (3 per person)

Use RED dots for what this community does not need (3 per person)

Mobility: this community needs...?

Place GREEN stickers for those you agree with, and RED for those you do not agree with

Wayfinding | Pedestrian-only zones | Transit stop

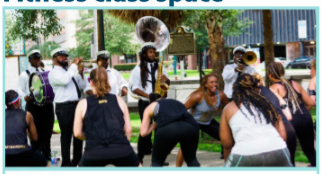
Bike share | Bike parking | Protected bike lane | Traffic calming

Car share | On-street parking | Vehicle pickup points | Other:

Health + wellness: this community needs...?

Place GREEN stickers for those you agree with, and RED for those you do not agree with

Fitness class space



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Exercise stations

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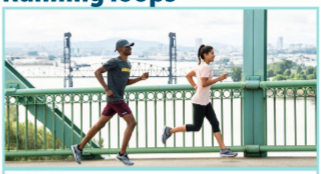
Running loops



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Bike skills

Place stickers here

Contemplative space

Place stickers here

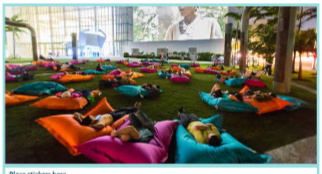
Places to sunbathe

Place stickers here

Skateboarding

Place stickers here

Flexible lawn



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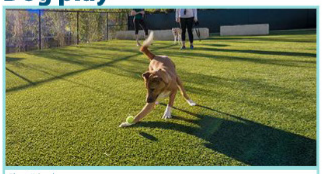
Dog play



Place stickers here

Sport courts

Place stickers here

Other:

park for adults as currently have a park for kids

currently people are afraid of biking due to the amount of traffic density, specifically trucks

Place stickers here

Community program[illegible] unity needs...?

Long press to unlock

Place GREEN stickers for those you agree with, and RED for those you do not agree with

Retail

Place stickers here

Rentable pavilion

Place stickers here

Public restrooms

Place stickers here

Winter activities

Place stickers here

Covered events venue

Place stickers here

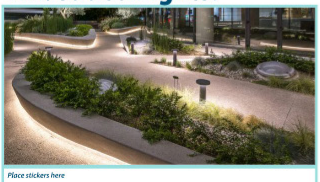
Night events venue

Place stickers here

Multi-function landscape

Place stickers here

Embedded Lights:



Place stickers here

Event Lights:

Place stickers here

Interactive Light Feature:

Place stickers here

Other:

Place stickers here

** Group 03 did not finish the board activities due to time*

Health + wellness: this community needs...?

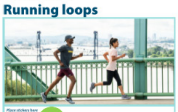
Place GREEN stickers for those you agree with, and RED for those you do not agree with

Fitness class space

Exercise stations

1

Running loops



2

Bike skills

Contemplative space

1

Places to sunbathe

Skateboarding

1

Flexible lawn

2

Dog play

3

Sport courts

Other:

movie night/per formance

Community program: this community needs...?

Place GREEN stickers for those you agree with, and RED for those you do not agree with

Night program space

1

Picnic space

1

Cafe/moveable seating

Interpretation/history

1

Art and sculpture

1

Murals and color

Playground

1

Interactive Water Feature

1

Performance venue

Small group gathering

Market space

Concessions

1 1

Nature/environment: this community needs...?

Place GREEN stickers for those you agree with, and RED for those you do not agree with

Trees

Pollinator gardens

1

Community gardens

1 1

Stormwater management

City-watching

1

Shade

Nature-based activities

Bird habitat

1

Other:

Community program: this community needs...?

Place GREEN stickers for those you agree with, and RED for those you do not agree with

Retail

1 4

Rentable pavilion

1

Public restrooms

2

Winter activities

1

Covered events venue

Night events venue

Multi-function landscape

Embedded Lights:

2

Event Lights:

Interactive Light Feature:

1

Other:

Mobility: this community needs...?

Place GREEN stickers for those you agree with, and RED for those you do not agree with

Wider Sidewalks

1

Accessibility Improvements

3

Improved Crosswalks

Use GREEN dots for what this community needs (3 per person)

Use RED dots for what this community does not need (3 per person)

Scooter Share

1

Shared Use Path

More Crosswalks

Other:

Other:

Other:

Other:

Mobility: this community needs...?

Place GREEN stickers for those you agree with, and RED for those you do not agree with

Wayfinding

2

Pedestrian-only zones

1

Transit stop

1

Bike share

1 1

Bike parking

3

Protected bike lane

3

Traffic calming

1

Car share

2

On-street parking

1

Vehicle pickup points

2

Other:

s for those you agree with, and RED for those you do not agree with

s

Place stickers here

Accessibility Improvements

Place stickers here

Improved Crosswalks

Place stickers here

Shared Use Path

Place stickers here

More Crosswalks

Place stickers here

Other:

Place stickers here

Other:

Place stickers here

Other:

Place stickers here

+ wellness: this community needs...?

s for those you agree with, and RED for those you do not agree with

pace

Exercise stations

Place stickers here

Running loops

Place stickers here

Bike skills

Place stickers here

spaces

Places to sunbathe

Place stickers here

Skateboarding

Place stickers here

Flexible lawn

Place stickers here

Sport courts

Place stickers here

Other:

Climbing wall

Place stickers here

Mobility this community needs...?

Place GREEN stickers for those you agree with, and RED for those you do not agree with

Wayfinding

Place stickers here

Pedestrian-only zones

Place stickers here

Transit stop

Place stickers here

Bike share

ce stickers here

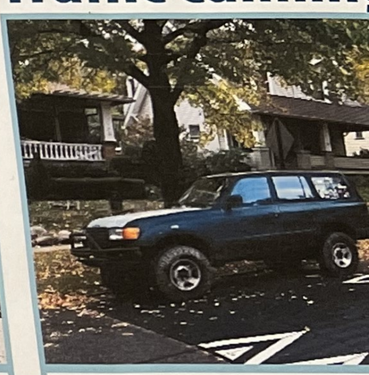
Bike parking

Place stickers here

Protected bike lane

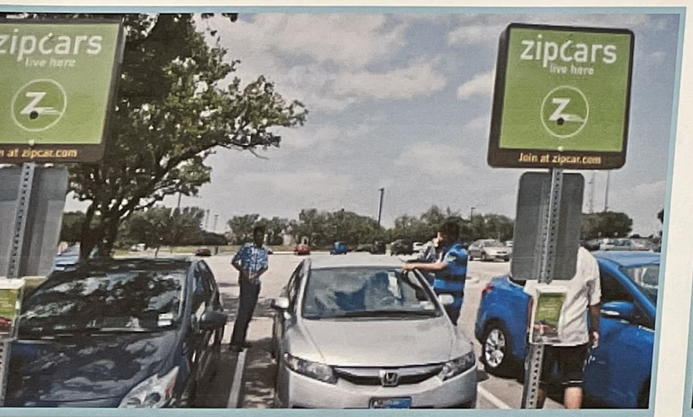
Place stickers here

Traffic calming



Place stickers here

ar share



ere

On-street parking

Place stickers here

Vehicle pickup points

Place stickers here

Other:

- Scooters

Place stickers here

Community program is community needs...?

Place stickers for those you agree with, and RED for those you do not agree with

Retail

Rentable pavilion

Public restrooms

Winter activities

Place stickers here

Multi-function landscape

Place stickers here

Covered events venue

Night events venue

Interactive Water Feature

Art and sculpture

Murals and color

Playground

Performance venue

Small group gathering

Market space

Concessions

Embedded Lights:

Event Lights:

Interactive Light Feature:

Other:

- Cafe/restaurant

Place stickers here

Concept B1: *Dispersed Plazas*

- 7th and 9th Streets are Closed
- Public lawns, plazas on Jackson and Adams, and gardens
- Includes a development site at Adams and Delaware

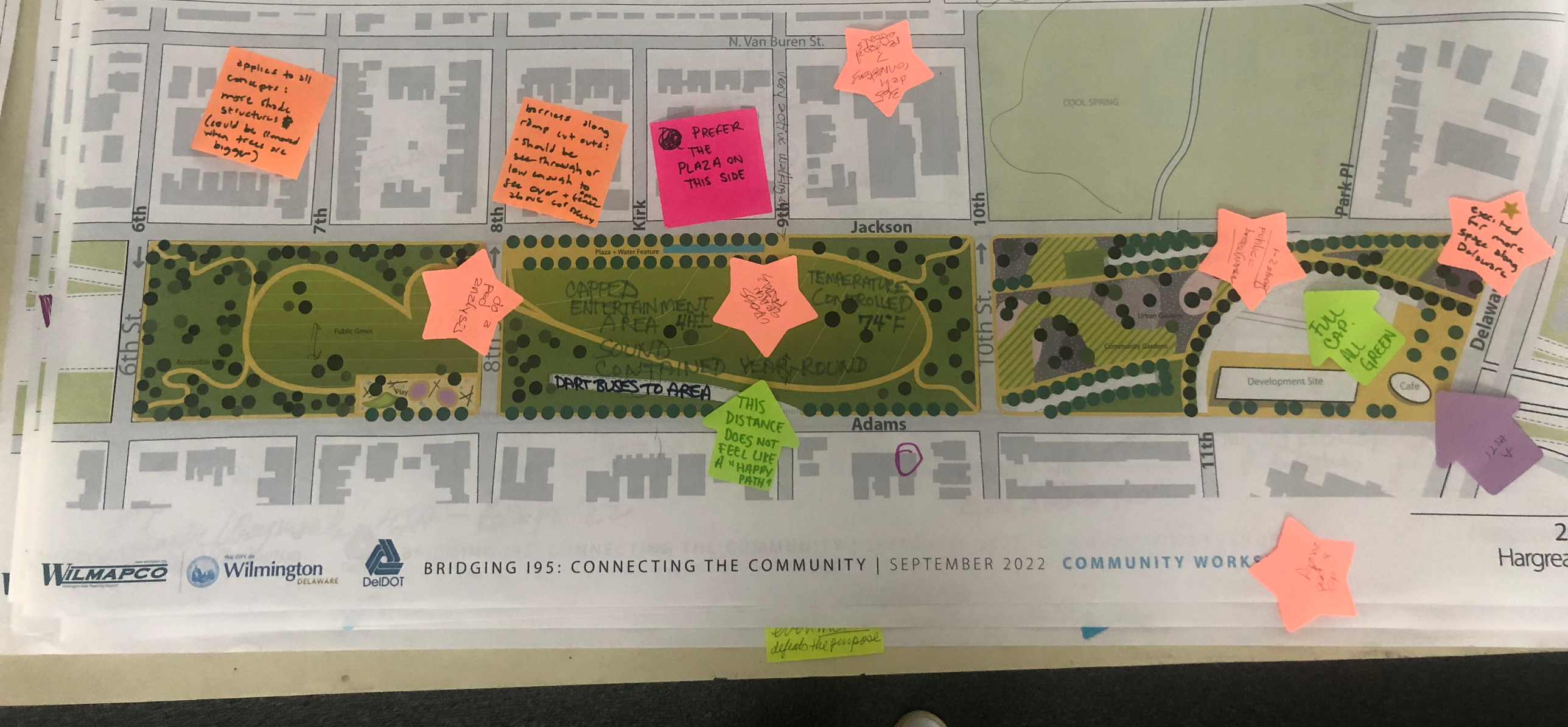
HELP SHAPE THIS IDEA!

I like this

I have questions

This concerns me

See a comment you agree with? Add a ★ !



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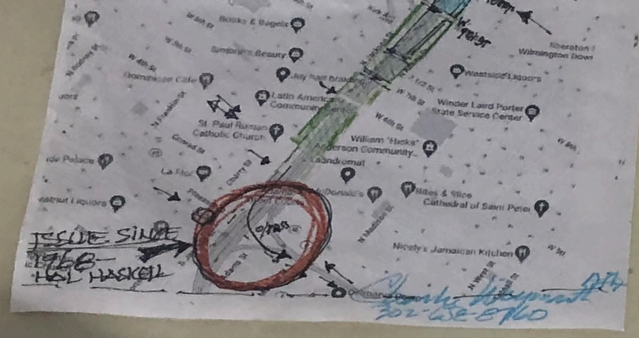

Concept B: *Activated Adams*

- 7th and 9th Streets are Closed
- Public lawns, large plaza on Adams, and gardens
- No development site

HELP SHAPE THIS IDEA!

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N. Van Buren St.

6th

7th

8th

Kirk

10th

Park Pl

6th St.

8th St.

10th St.

Jackson

Adams

11th

Delaware Av

Public Green

Festival

Plaza + Water Feature

Urban Gardens

Community Gardens

Plaza

COOL SPRING

can a bike lane be added?

Use the slope for a naturalistic water feature

WATER FEATURES

Will there be Parking? How will Events Parking work?

could there be a runnig Path

PARKING

Balanced Amount of Real Ruins

? room for short-term Parking along ramps?

WHERE IS THE ART?

church needs green space

OR SEATING + CAFE

nothing UNCAPPED

OPEN CAP HERE MISSES the POTENTIAL FOR A "CANOPY ON THE GREEN" - TRINITY CANOPY

Put Pathway

NO PUBLIC SPACE FOR OWNER

defeats the purpose

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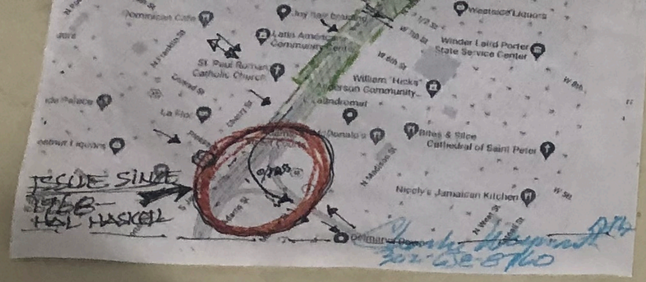
THE CITY OF Wilmington DELAWARE

DelDOT

250

Hargreave



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8th

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10th

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6th St.

8th St.

10th St.

Delaware Av

Public Green

Accessible

Festival

Plaza + Water Feature

Urban Gardens

Community Gardens

Plaza

Adams

11th

A beautiful, green space will mean so much to our city! (True for each concept)

Why have east-west paths been excluded from the design (apart from remaining bridges)?

Lack of pedestrian path following 9th St

CITY BIKES!

will planting be native? who will confirm this? Delaware Nature Society? DCH?

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THE CITY OF Wilmington DELAWARE

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defeats the purpose

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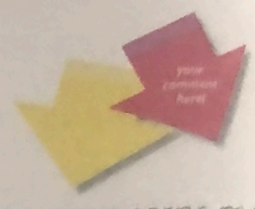

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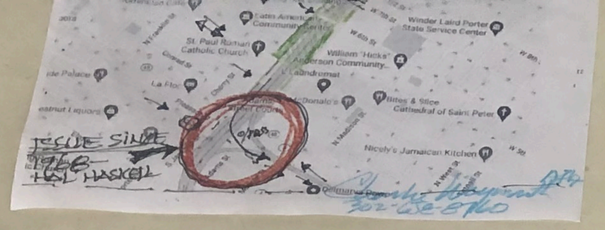

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10th

Clark Pl

6th St

8th St.

Adams

11th

Delaware Av

Public Green

Accessible Path

Play

Plaza + Water Feature

COOL SPRING

Urban Gardens

Community Gardens

Cafe

Turn Lane?

Removes Off-Ramp from plaza

love the idea!! :)

closing more streets will affect neighborhood more

Traffic? How to reduce from 195

MY FAVORITE Scheme

Nothing uncapped

NO!

Like that Play + plaza opposite sides.

BATHROOMS AT THIS END

Bathrooms + community center

defeats the purpose

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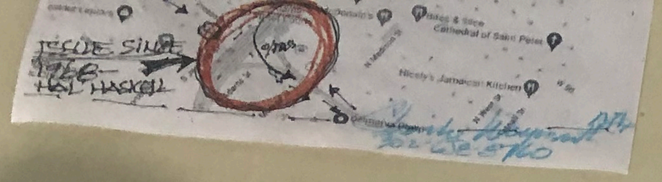

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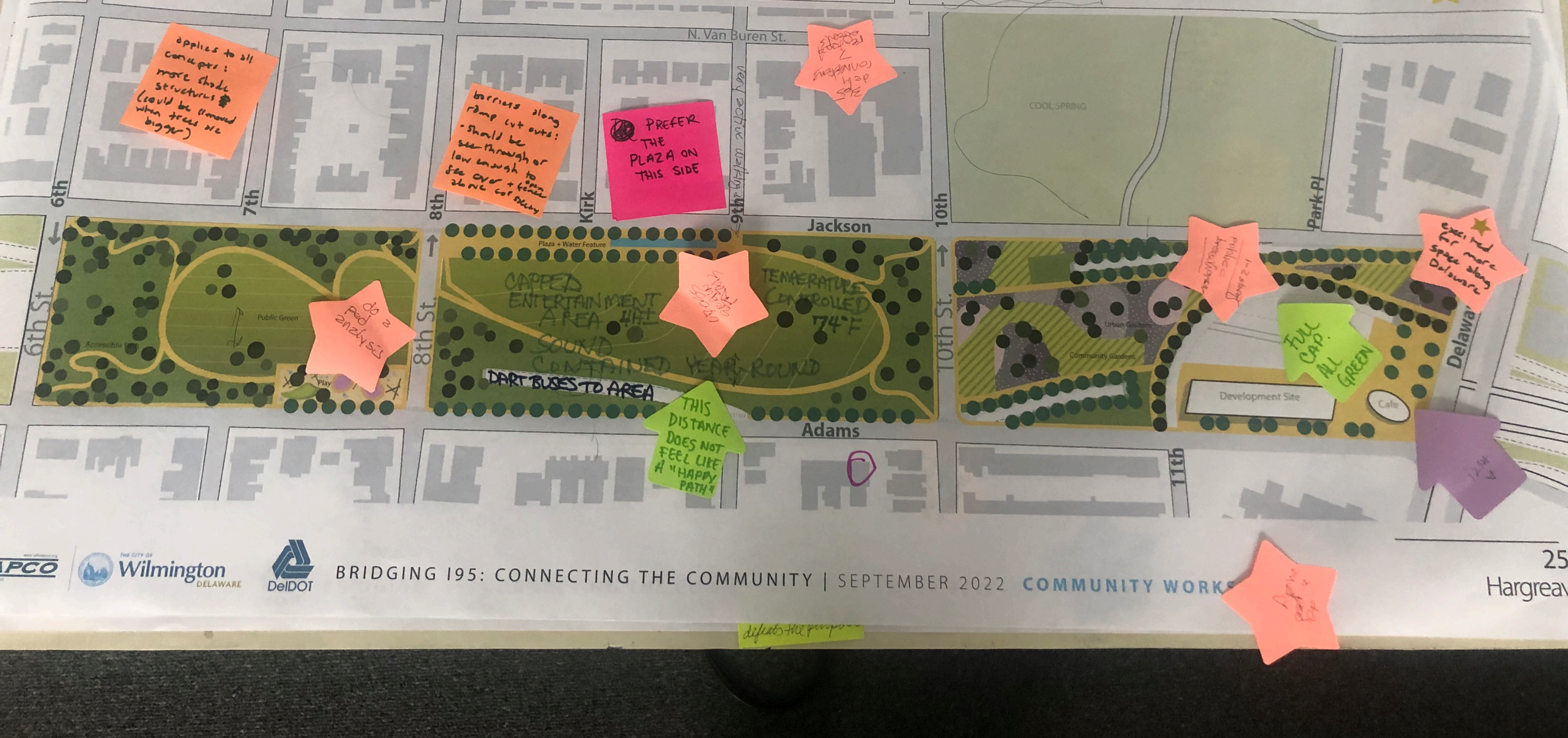

Concept A: *An Active 6th Street Span*

- 7th and 9th Streets are Closed
- Amphitheater, public lawns, plazas, and gardens
- Includes a development site at Adams and Delaware

HELP SHAPE THIS IDEA!

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Charlie Wagamaker AIA — 6 SEPT. '22

MAPCO · Wilmington DELAWARE · DelDOT

250
Hargreave

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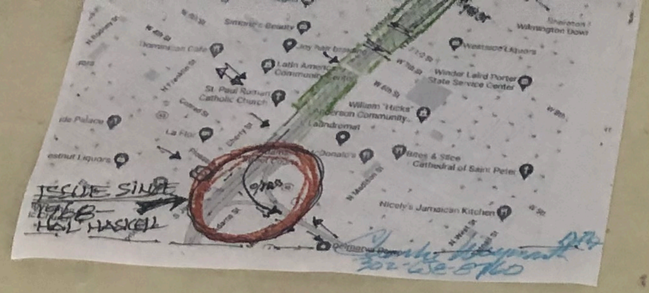
Charlie Wagamate PTA — 6 SEPT. '22

WILMAPCO · Wilmington DELAWARE · DelDOT

HargreavesJones



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What is the time line of when this happens?

HELP SHAPE THIS IDEA!

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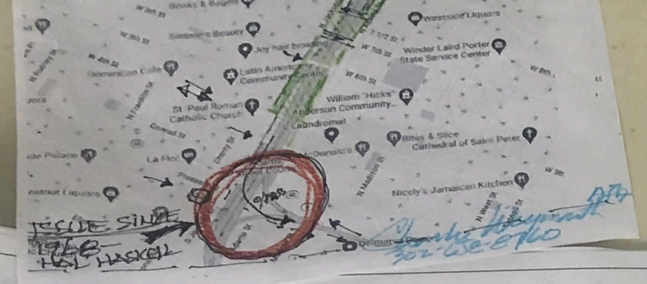

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Delaware Av

Public Green

Amphitheater

Play

Plaza + Water Feature

Urban Gardens

Plaza

Adams

Love the idea of a space like this for outdoor concerts.

love it

Amphitheater Yes!

Parking is already difficult in Trolley - where will people park in the future?

need for pedestrian analysis

make play opposite plaza

I love the interactive water feature. Could it be connected w/ concerts?

Lack of pedestrian path following 9th St

Native Plants

need pedestrian bridge

food truck access?

Any picnic tables?

more water features

bathrooms not accessible

defeats the purpose

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OTHER COMMENTS? WE WANT TO HEAR FROM YOU!

Reconnect the River
Shipley Run

How will the space be maintained?

Yes!!!

- make it dog friendly! * DOG PARK

Parking for all this
no surface parking lots

- Ramp from 6th St Edge to MLK Blvd

- Visitor Center on Park

Local boys & girls club down Jackson demo'd w/ replacement area - we NEED Recreation & safety.

You cannot close 8th, 9th, or any street connecting. They are staple routes in our Community & heritage.

Consider views eastward & southward from Jackson St.

OTHER COMMENTS? WE WANT TO HEAR FROM YOU!

★ You've created a destination, which may be true for certain events. However, most days it will be a pass-thru or a "gateway" either to neighborhoods or city. Therefore, think how people walk to get someplace - we don't wander on meandering paths; we walk to shops or the post office or ~~to~~ visit friends or family. How will we walk through this area? - Probably ~~East~~/West..... we won't meander (much). Give us Paths that connect neighborhoods, not ones that meander ~~N/S~~ North ⟷ South.

I love the concept of softening the urban space with greenery. However, maitenence will be ongoing, from mowing to tree removal. Trash + litter will be an ongoing problem.

★ Is there a worry about homelessness + vagrancy? Cool Springs locks their gates every night, but this project won't be "lockable" If it becomes popular with vagrants + people who appear to be without a home and/or on drugs, regular folks will avoid it and they won't want their kids to be there. Can landscaping design fix this?

If you design amenities such as bathrooms, will there be regular attendants? If you design urban gardens + farm markets + market stalls, do you have an idea that there is a market for them? Have groups like West Side Grows' worked with you to let you know what will have an audience + willing participants?

However, despite all these comments, I believe this is a tremendous concept — Even just as a greening + softening space.

Sally O'Byrne

Closing the streets will cut the neighborhood MORE defeating the whole purpose

PARQ at The Square
Luther Towers II
Gilpin Hall
Ursuline Academy
Dash In
Cool Springs Park
Padua Church
Dupont Street Barbering Co
Padua Academy
University and Whist Club
Holy Trinity Greek Orthodox Church
Hospital
William Lewis Elementary School
Tilton Park
Mealey Funeral Homes
Books & Bagels
Simone's Beauty
Joy hair braiding
Latin American Community Center
Dominican Cafe
St. Paul Roman Catholic Church
William "Hicks" Anderson Community...
Laundromat
Westside Liquors
Winder Laird Porter State Service Center
Bites & Slice
Cathedral of Saint Peter
Nicely's Jamaican Kitchen
La Flor
McDonald's
Adams Street Courts
612 W 11th St
Wilmington
N Harrison St
Pennsylvania Ave
W 10th St
W 9th St
W 8th St
W 6th St
W 5th St
W 4th St
W 7th St
N Broom St
N Rodney St
N Franklin St
N Jackson St
N Adams St
N Madison St
Cherry St
Kirkwood Hwy
Rte 202

WILMINGTON - I-95 CAP
• MURAL SIGNAGE

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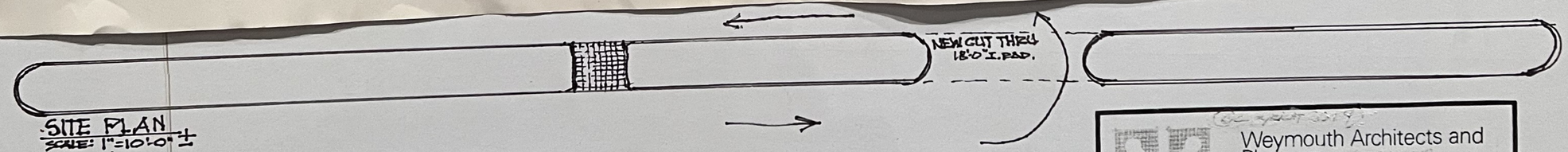
1996

PLAZA OVER I-95 OPEN & LAND SCAPED

TRINITY EPISCOPAL CHURCH

LOOKING NORTH EAST



N.

SITE PLAN
SCALE: 1"=10'-0" ±

Weymouth Architects and Planners
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WILMINGTON, DELAWARE 19806
(302) 658-8760