



Greening America's Cities: A Capital Idea

Presenters

Clark Wilson, EPA

Mayor Mark Stodola, Little Rock, AR

Mayor Harvey Johnson, Jackson, MS

Caran Curry, Little Rock, AR

Clare Watson, Montgomery, AL





Program Background

- Established in 2010.
- Focuses on capitals to create projects that illustrate what a sustainable community can look like and that are highly visible and replicable.
- Focuses on smaller “ecodistricts” (neighborhood, intersection, plaza, etc.) and solutions that can be implemented.



Project Process

- Letters sent to mayors
- Selection by multi-agency review panel
- Create scope of work from city's proposal
- Hire design teams (small businesses)
- Charrette with stakeholders
- Final design report to the city
- Implementation...we hope



Capital Cities

2010

Boston, MA

Hartford, CT

Charleston, WV

Little Rock, AR

Jefferson City, MO

2011

Washington, DC

Lincoln, NB

Montgomery, AL

Jackson, MS

Phoenix, AZ

2012

Helena, MT

Frankfort, KY

Indianapolis, IN

Baton Rouge, LA

Des Moines, IA

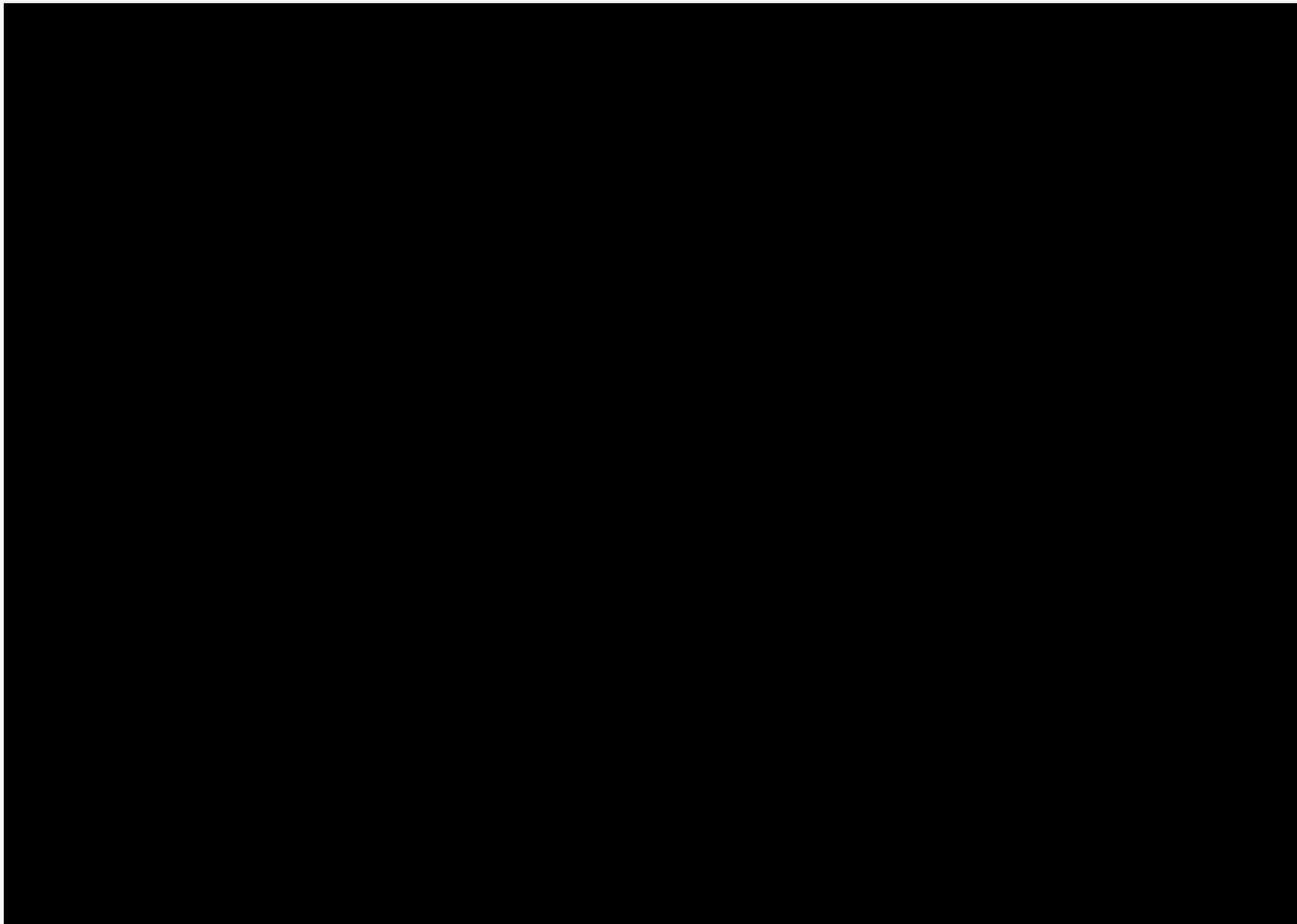
www.epa.gov/smartgrowth/greencapitals.htm



Boston, MA

City Hall Plaza

Utile





Hartford, CT

Capitol Avenue

Nelson Byrd Woltz





Charleston, WV

Slack Plaza

Origin4Design





Little Rock

Main Street

Nelson Byrd Woltz





Jefferson City, MO

Wears Creek

BNIM/Spectrum





Washington, D.C.

Anacostia Metro Station Area

Parker Rodriquez/ZGF





Montgomery, AL

Selma to Montgomery National Historic Trail

2D Studio

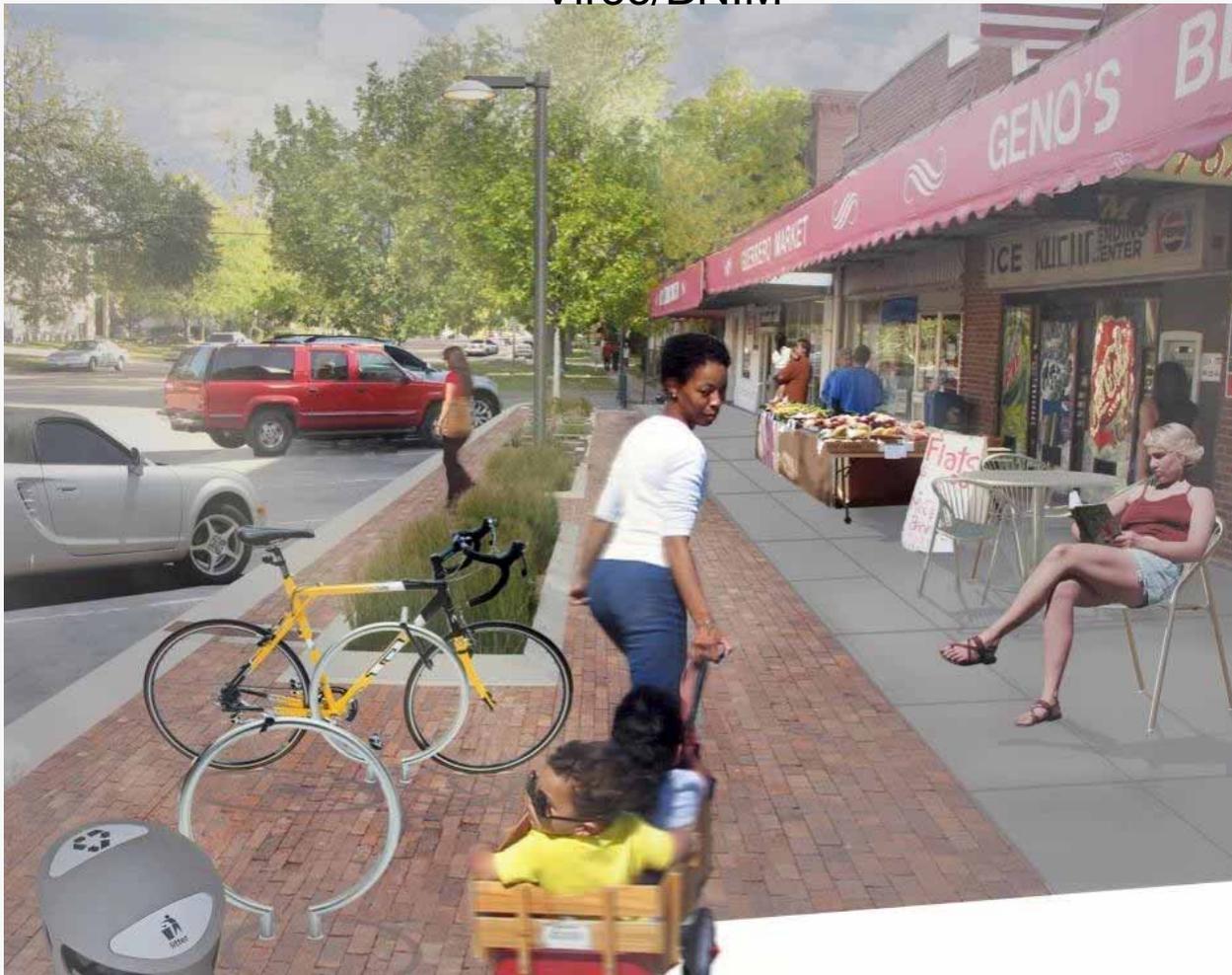




Lincoln, NE

South Capitol Area

Vireo/BNIM





Jackson, MS

Congress Street

Jeffrey Carbo Landscape Architects





Phoenix, AZ

Lower Grand Avenue

PLAN*et





2012 Cities

Frankfort, KY

Des Moines, IA

Baton Rouge, LA

Helena, MT

Indianapolis, IN



GREENING AMERICA'S CAPITALS

LITTLE ROCK, ARKANSAS



NELSON
BYRD
WOLTZ
LANDSCAPE
ARCHITECTS

CREATIVE CORRIDOR

A Main Street Revitalization



University of Arkansas Community Design Center + Marlon Blackwell Architect
for
The City of Little Rock

CREATIVE CORRIDOR INITIATIVES Stakeholder Participation

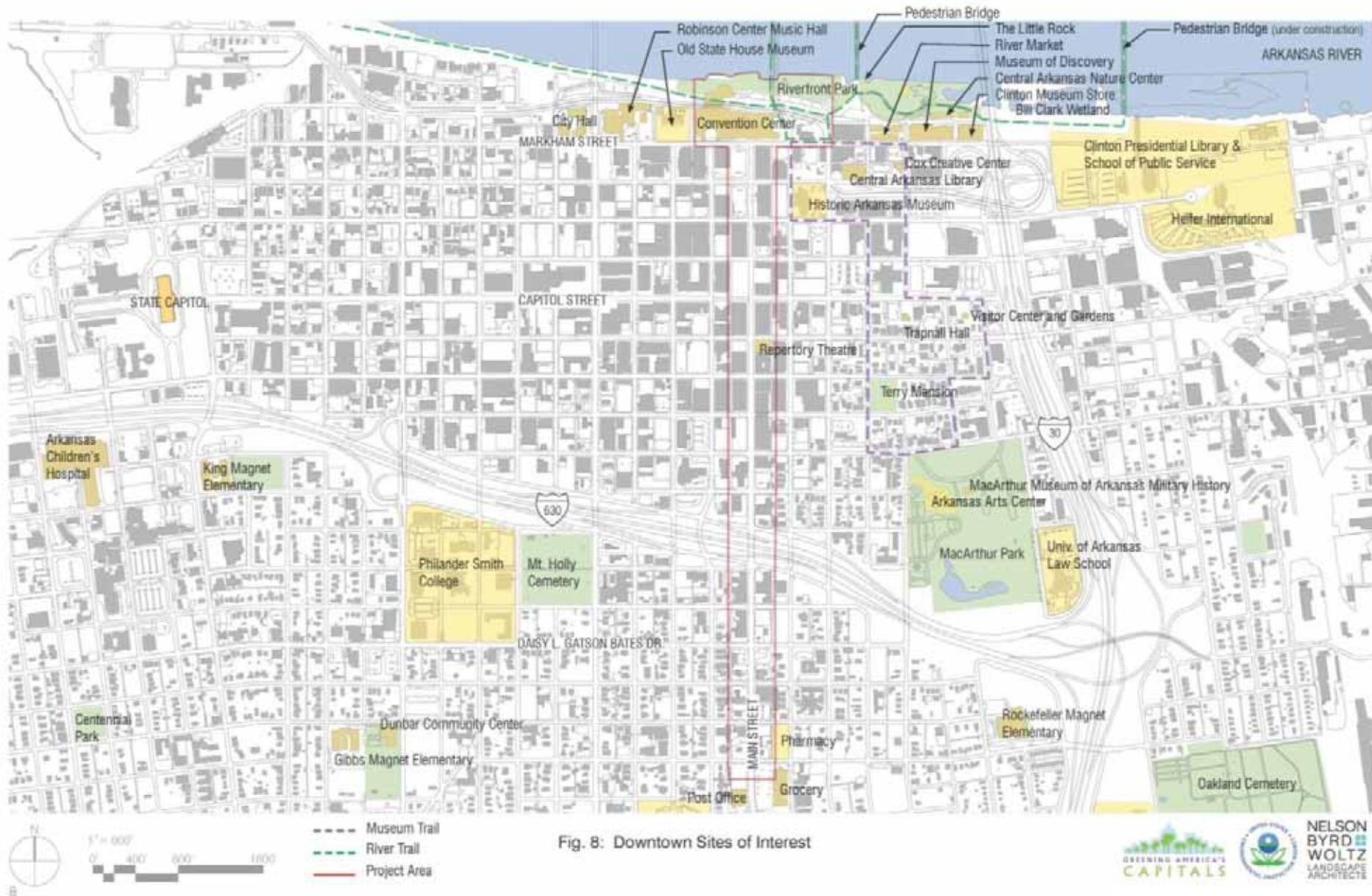


NEA OUR TOWN GRANT

A National Endowment for the Arts creative placemaking initiative







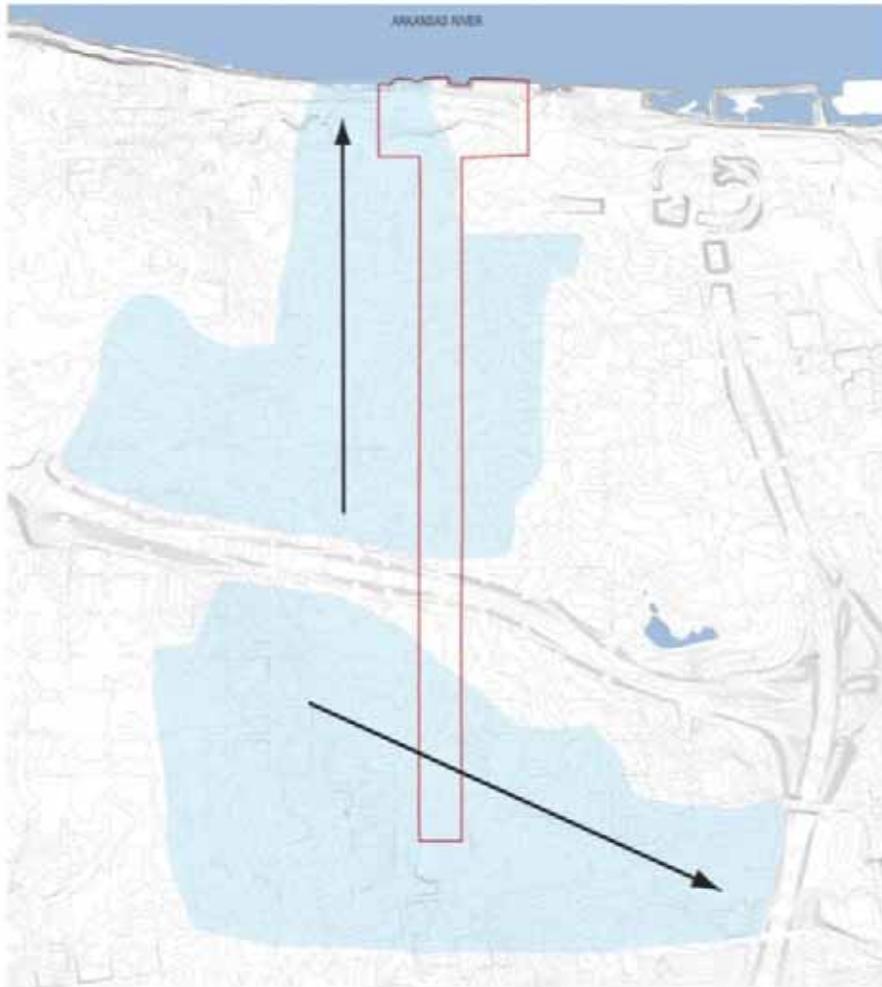


Fig. 12 Existing Watersheds

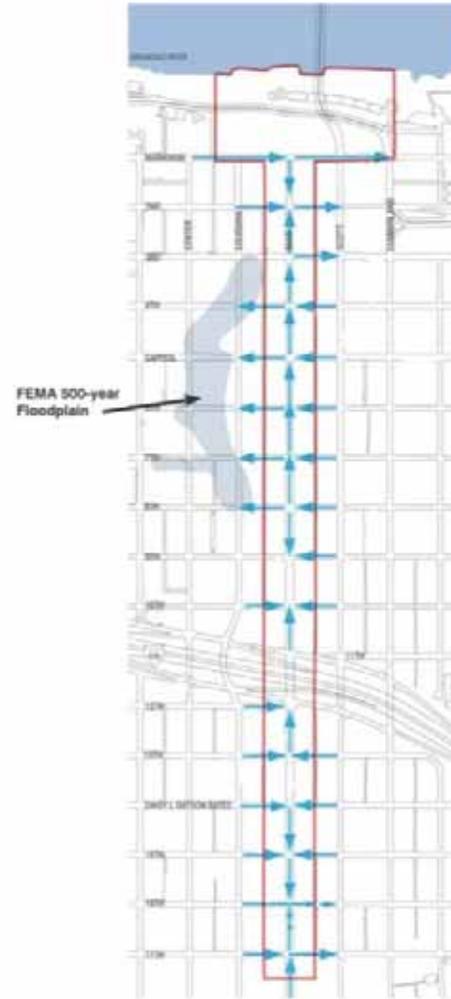


Fig. 13 Street Flow

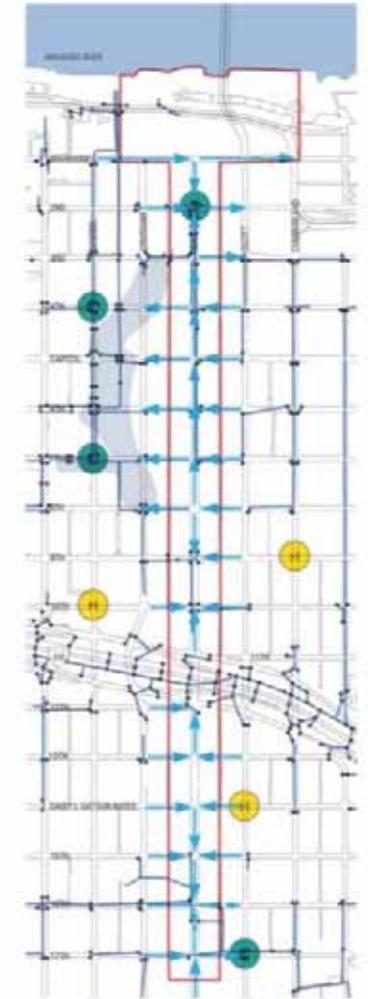


Fig. 14 Stormwater Flows

● High point
● Low point

Stormwater Flows

Fig. 12 illustrates how the project area is part of two separate watersheds, one of which drains directly to the Arkansas River. Fig. 13 shows that Main Street is outside of the 500-year floodplain. Fig. 14 shows that mains north of the highway flow directly to the Arkansas River, while mains in SOMA first flow south.





Fig. 15 Buildings



Fig. 16 Streets

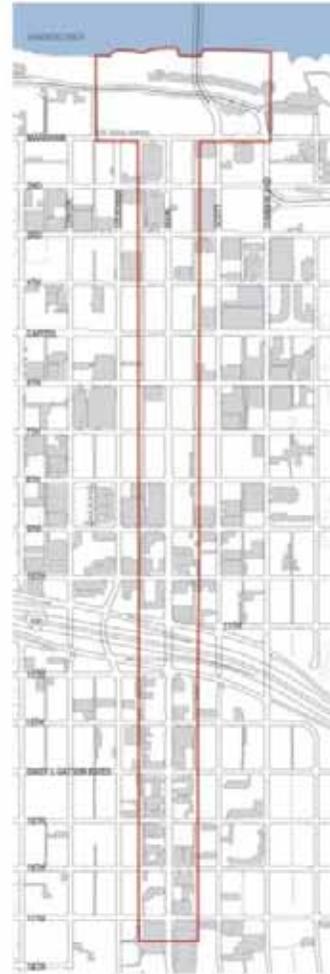


Fig. 17 Parking Lots



Fig. 18 All Impervious Surfaces



12

Impervious Surfaces

Multiple sources of hardscape—including buildings, streets and parking lots—contribute to the project area being heavily impervious (or impenetrable) to rainfall.





Fig. 19 Existing Parks and Trees



Fig. 20 Add Green Alleys



Fig. 21 Add Pervious Parking Lots with Landscape Islands



Fig. 22 Add Green Roofs



13

Greening Strategies

There are diverse ways to add pervious surfaces, including switching to permeable paving surfaces in alleys and parking lots, adding landscape beds, and creating green roofs.



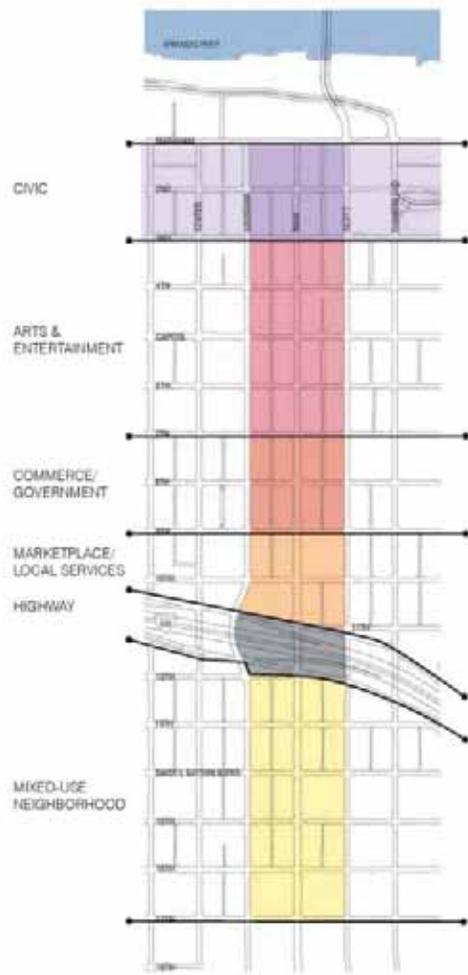


Fig. 23 Potential Use Precincts



Fig. 24 Nodes and Pedestrian Connections

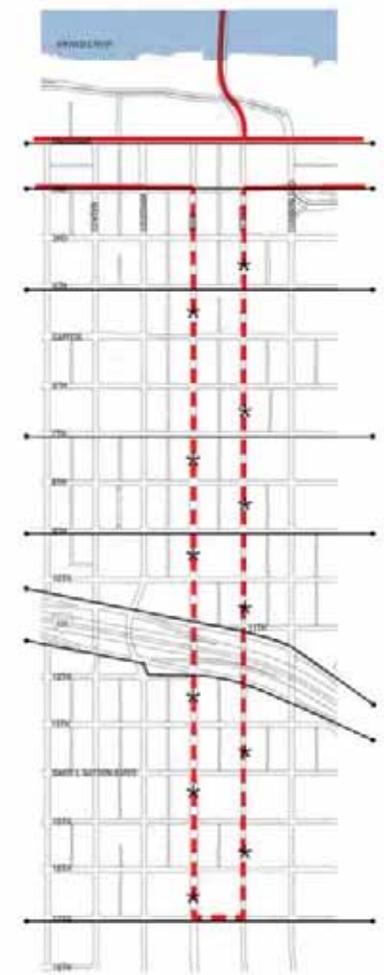


Fig. 25 City-Proposed Trolley Route and Stops



Districts and Connections

Potential zones of use, based on existing building occupancies and desires expressed in the workshops. Increased use of each zone would be bolstered by existing nodes and pedestrian connections, and a current proposal to extend the trolley route along Main Street.



MAIN STREET STRATEGIES

CONNECT RIVERMARKET, DOWNTOWN + SOMA

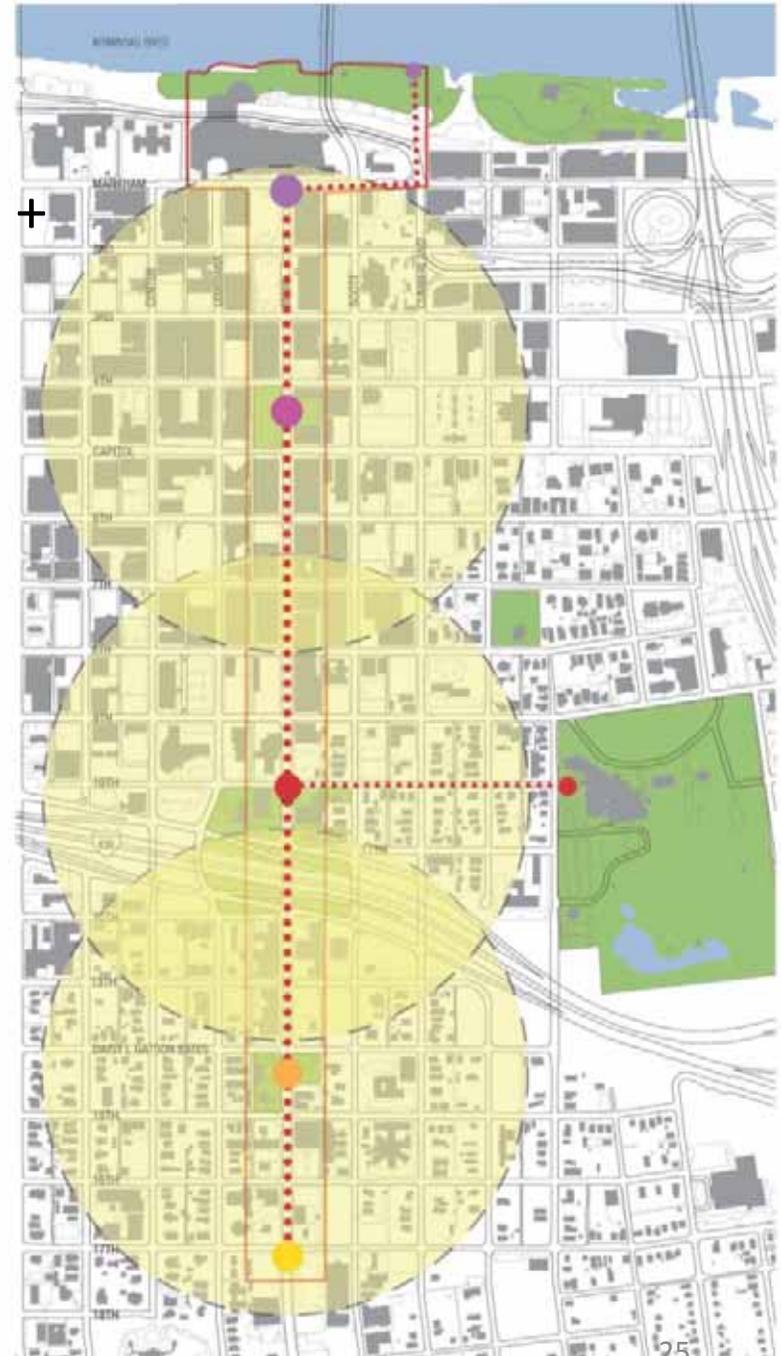
- New attractions center on nodes 5 minute walks apart
- A common identity for entire length of Main Street

GREEN STREETS

- Rain gardens with native plantings
- Street trees (urban-tolerant, native, provide shade)
- Green roofs
- Downspouts linked to rain gardens
- Porous parking

PEDESTRIAN, BIKE AND TRANSIT EXPERIENCE

- Reduced ambient air temperature through use of rain gardens and street trees.
- New crosswalks.
- A shaded sidewalk on the I-630 overpass.
- A bike route on a parallel street (to be determined) and more bike racks on Main Street.
- An expanded trolley route along Main Street.



1

SOMA NEIGHBORHOOD PARK

- lunch and evening crowds
- local point for SOMA/local Little Rock
- synergy/demonstration with Nursery
- "oasis"
- build on existing sculpture garden
- green alley

2

COMMUNITY MARKET INTERCHANGE

- orchards on interchange slopes
- nursery/handyman marketplace
- residential infill
- support local goods and services

STREETSCAPE

- increased tree cover
- stormwater solutions
- native plantings
- energy efficient lighting
- signage/branding

3

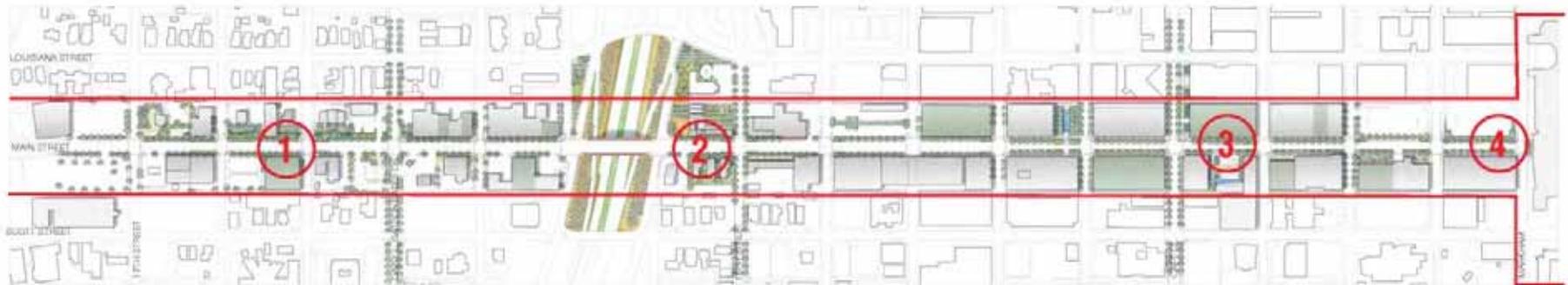
ARTS PARK

- lunch and evening crowds
- special events (plays, movies)
- local point for Downtown
- water feature
- more intensive hardscape & plantings
- green alley

4

CONVENTION CENTER GATEWAY

- anchor River end of Main St.
- potential sculpture site
- sustainable stormwater demonstration site
- green alley



B

NEW CROSSWALKS

To be a true heart of the city, Main Street needs to be easy for all users to access and must feel comfortable and safe for pedestrians of all ages and abilities. New or improved crosswalks are an integral part of this effort, particularly in the SOMA neighborhood where the street is wider and traffic moves faster. Crosswalks with longer crossing times, embedded lights, reflective striping, and vocal countdowns are safer for tourists, families, differently-abled pedestrians, and other users.

Giving a consistent design to new and existing crosswalks all along Main Street, including SOMA, can help create a consistent sense of place and identity. These designs also enhance visibility. See the Indianapolis Cultural Trail on page 36 for an example of how this has worked in another city.

NEW BUILDINGS

New buildings that are built up to the sidewalk and face Main Street are already being built in the SOMA neighborhood. Wherever feasible, new buildings could have minimal setbacks and parking in the rear to allow gardens and civic space along the street, which would create a better environment for walking and biking. On parcels with existing buildings with larger setbacks, a rain garden could be built to collect and treat the runoff from the entire lot (see Street Section D on page 22).



D

BRIDGE ENHANCEMENTS

Currently, crossing the I-630 overpass is unpleasant for pedestrians and creates a significant barrier between SOMA and the downtown. Adding a shade canopy to the overpass could greatly improve the pedestrian experience. The shade canopy could incorporate solar panels to power street or pedestrian lighting and could include public art.

HIGHWAY PLANTINGS

The highway embankments along I-630 could be used to make a notable statement about Little Rock's new initiatives. Planting the embankments with American crabapple trees would create an instant identity for an area that is the gateway to Main Street from the freeway.



E

GREEN ALLEYS

Alleys can be good locations to begin to incorporate green infrastructure techniques because they generally have less car and truck traffic and therefore are simpler sites for piloting green infrastructure approaches.

All the strategies that can be used on streets, such as green roofs, downspouts into rain gardens, permeable pavers, or murals, can also be used in alleys. These improvements have the potential to activate otherwise forgotten parts of the public right of way in Little Rock.

Chicago's Green Alley Program provides a useful example for how this strategy worked in another city. See Green Alley Handbook http://www.cityofchicago.org/city/en/depts/cdot/provdrs/alleys/svcs/green_alleys.html.



F

STREETSIDE RAIN GARDEN

The rain gardens along Main Street would detain and filter stormwater runoff before the water flows into the eventual stormwater outfall into the Arkansas River. Slowing down the water and allowing it to infiltrate into the ground would mean the city would not need to expand drainage pipes along Main Street. The rain gardens would also provide more greenery on the street and could include educational signs about how runoff from buildings and streets affects natural water systems. The rain gardens could be planted with native plants, such as the *Eupatorium maculatum* (Joe-Pye Weed), *Camassia leichlinii* (Camas Flower) and *Juncus effusus* (Soft Rush) shown in Figure 43, that are well adapted to urban conditions and fluctuations in water levels. They are also attractive in multiple seasons and easy to maintain.

TROLLEY

Expanding the existing trolley route to Main Street is another way to create a pedestrian-friendly Main Street that also helps the city meet its environmental goals. It gives people choices besides driving, and links walkable destinations with public transit.





DOWNSPOUT RAIN GARDEN

Runoff from the roofs of Main Street buildings could be directly connected to rain gardens on the street through downspouts. If attractively designed, the downspouts could be public art. These artistic downspouts would create a dramatic visible sign to visitors and residents about the presence of water in the city and how it is managed from roofs to streets.

GREEN ROOFS

Green roofs are important in retaining and detaining stormwater, reducing the ambient air temperature (or urban heat island effect) in the City, and reducing the heating and cooling needs of a building. Over time, buildings on Main Street could be retrofitted to include green roofs using lightweight, drought-tolerant plants such as sedums and grasses. Green roofs are environmentally beneficial for the reasons listed above, however, even the most minimal green roofs will have some impact. Each structure and roof would need to be evaluated and the expense of retrofitting or engineering for a new green roof weighed against the environmental benefit.

PERMEABLE PAVERS

Permeable pavers could provide structured surfaces for on-street parking, let stormwater percolate into the ground and into nearby rain gardens, and make the street more attractive.





CAFE SPACE

Main Street could offer shaded, outdoor seating near the new businesses that are scheduled to be completed in the near future. Providing new, shaded cafe seating would build off of and encourage the emerging arts and entertainment establishments in the downtown and encourage pedestrian activity from the River Market district up Main Street.

BIKE RACKS

Adding bike racks in addition to the expanded trolley line and pedestrian amenities would create more options for active transportation, which could have public health benefits for people who choose to walk and ride bikes. In addition, new bike racks and pedestrian amenities could create more activity for businesses and destinations along Main Street.





GREENING PARKING AREAS

Parking lots along Main Street present good opportunities to use green infrastructure techniques to capture and filter stormwater runoff and provide a more appealing environment for pedestrians.

Rain gardens and bioswales (long, linear rain gardens) between the sidewalk and parking lot (as shown on the left of Figure 50) could be lushly planted, shading pedestrians and cars and reducing the heat island effect by lowering the ambient air temperature.



CREATIVE CORRIDOR

A Main Street Revitalization



University of Arkansas Community Design Center + Marlon Blackwell Architect
for
The City of Little Rock



1906



1955

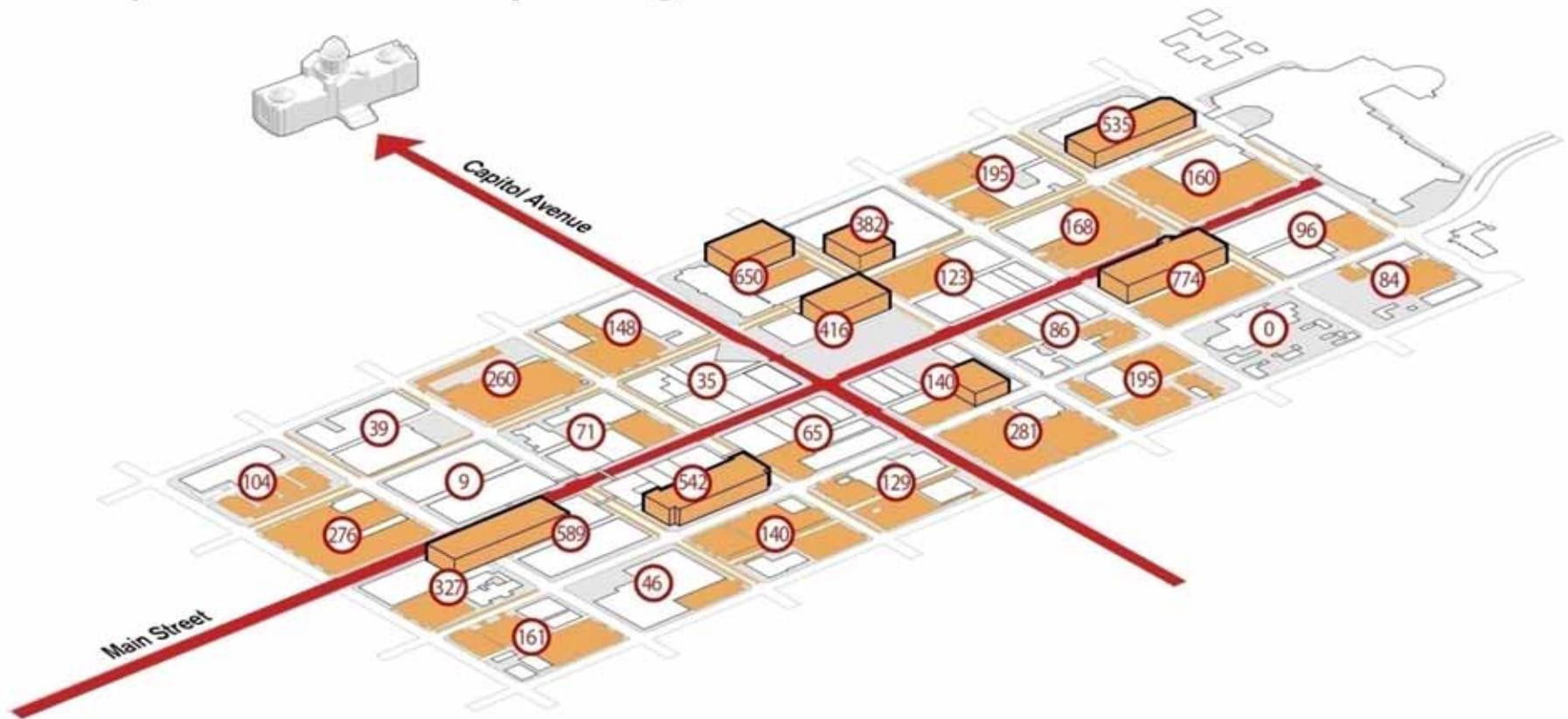


2011



Parking is now the city's single largest land use.

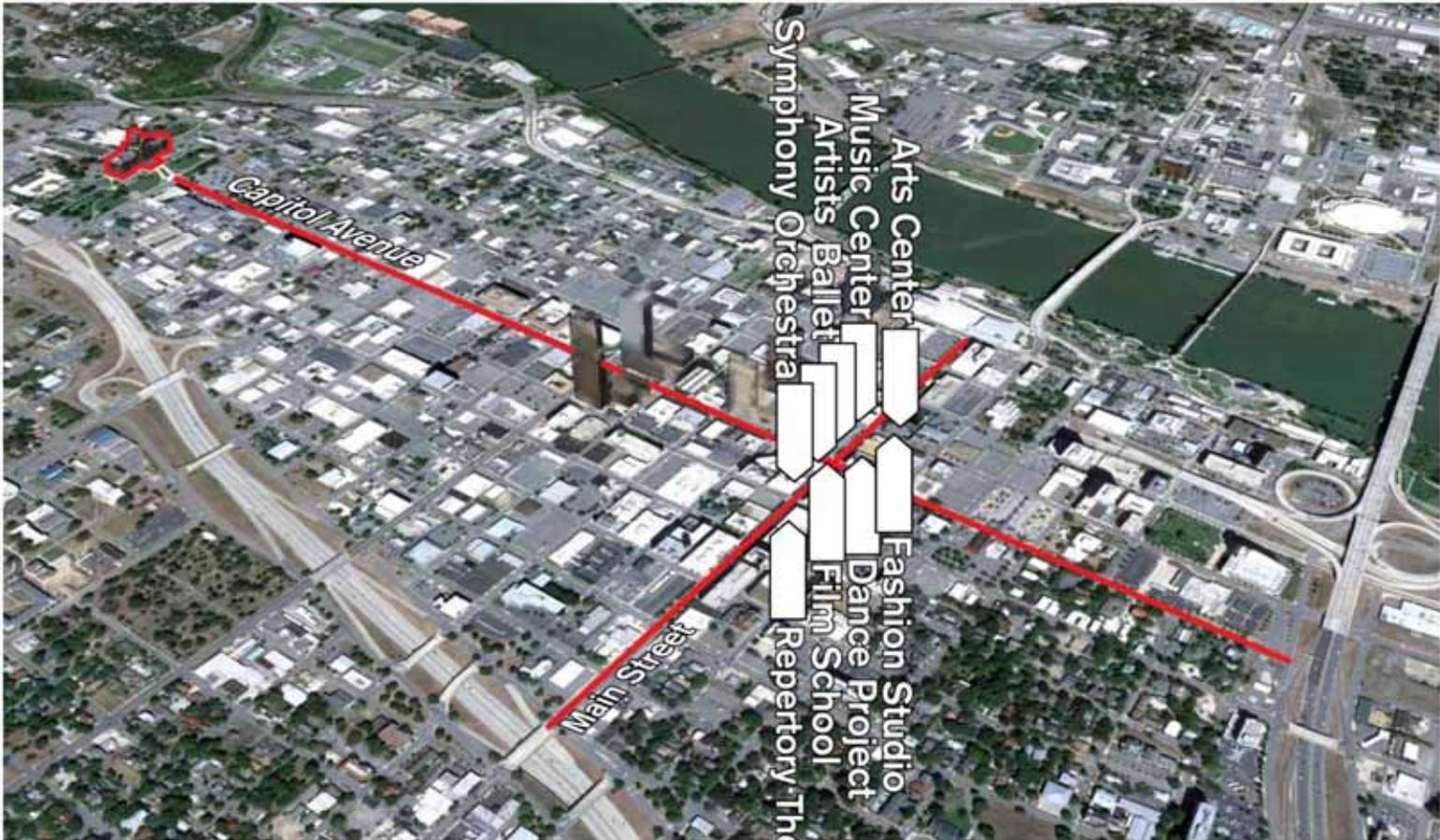
A quick note about parking...



**there are 7,226 spaces
within walking distance of the
Main Street Creative Corridor!**



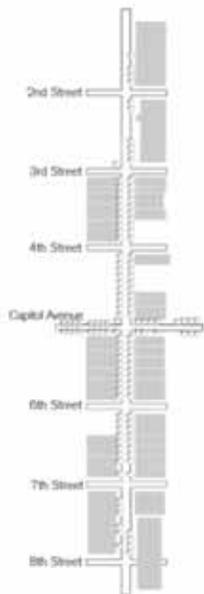
And closing the street to traffic for pedestrian use exclusively is not the answer either—never close a street.



Aggregated Creative Corridor

Given the new mix of uses dominated by the cultural arts and residential, Main Street must be livable after work hours—24/7.

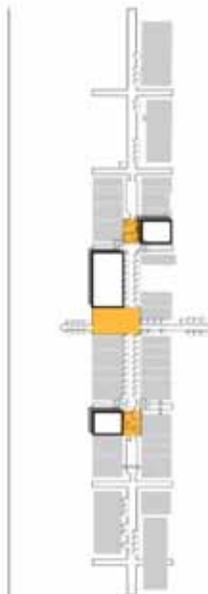




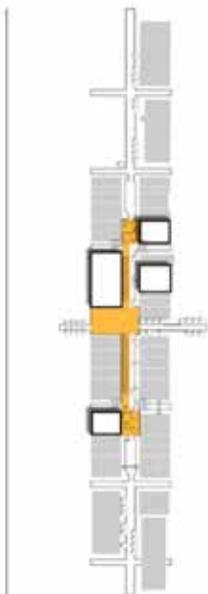
existing



1 create gateways...



2 develop a center...

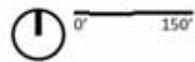


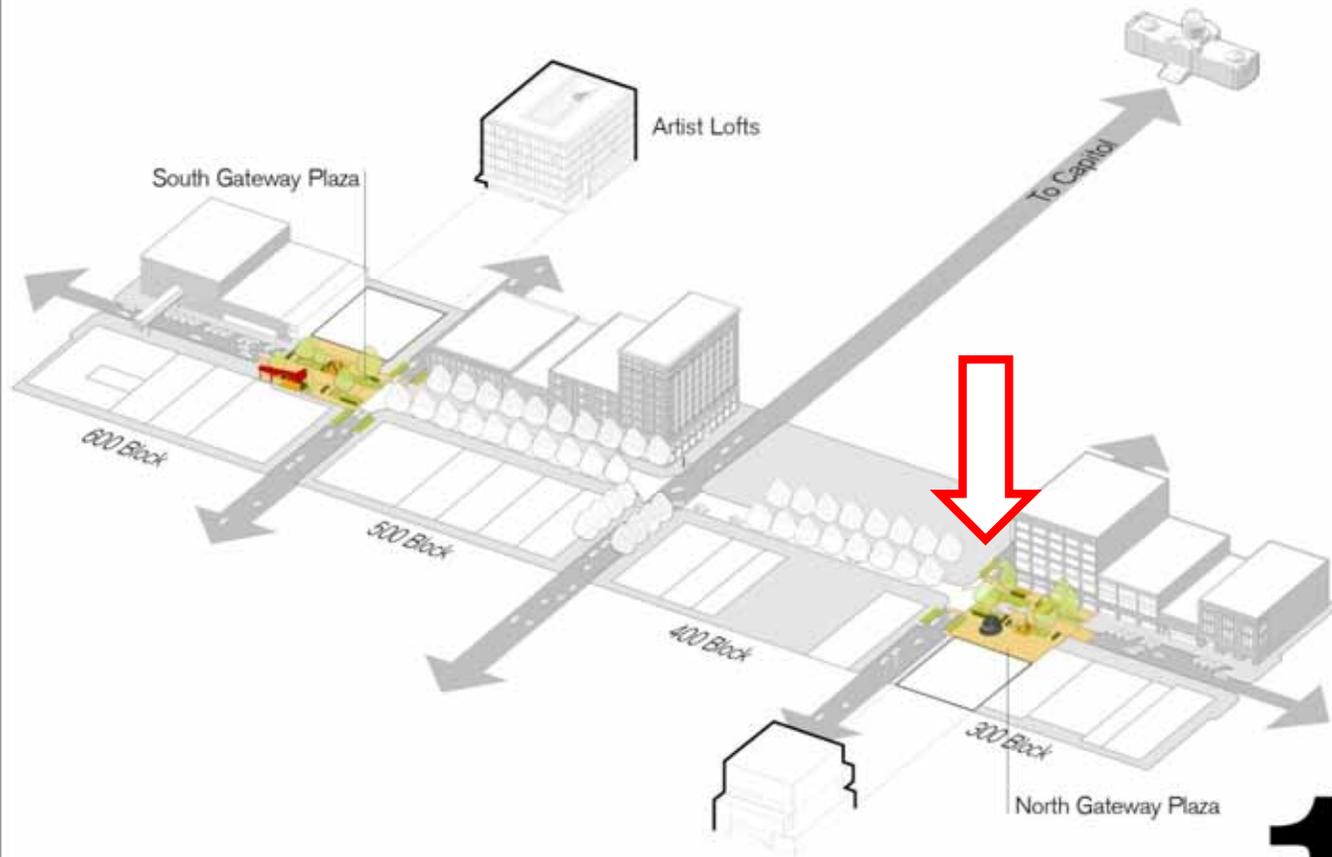
3 thicken the edge...



4 create a transit district!

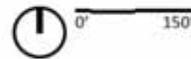
Creative Corridor Phasing Strategy





Create Gateways

The first step to defining the Main Street Creative Corridor will be the establishment of the two urban thresholds as pedestrian tables.





North Gateway Plaza

- 1 Rain gardens
- 2 Plaza seating
- 3 Street light garden
- 4 Public art pad
- 5 Continuous pedestrian table
- 6 Green wall
- 7 Urban staircase
- 8 Urban patio
- 9 Back-in parking
- 10 Proposed transit system
- 11 KATV museum

Choke the street and make a pedestrian table!

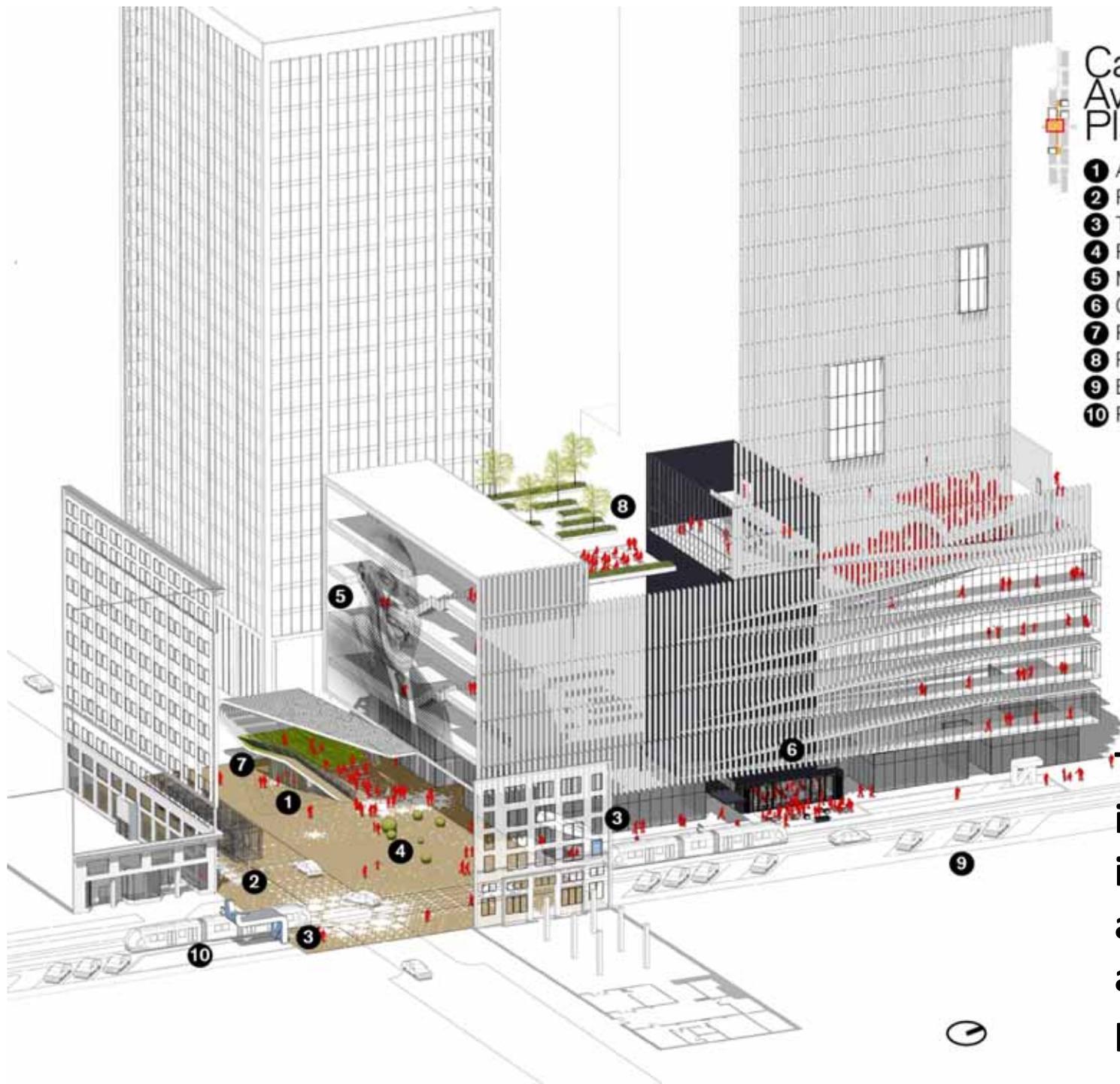




after





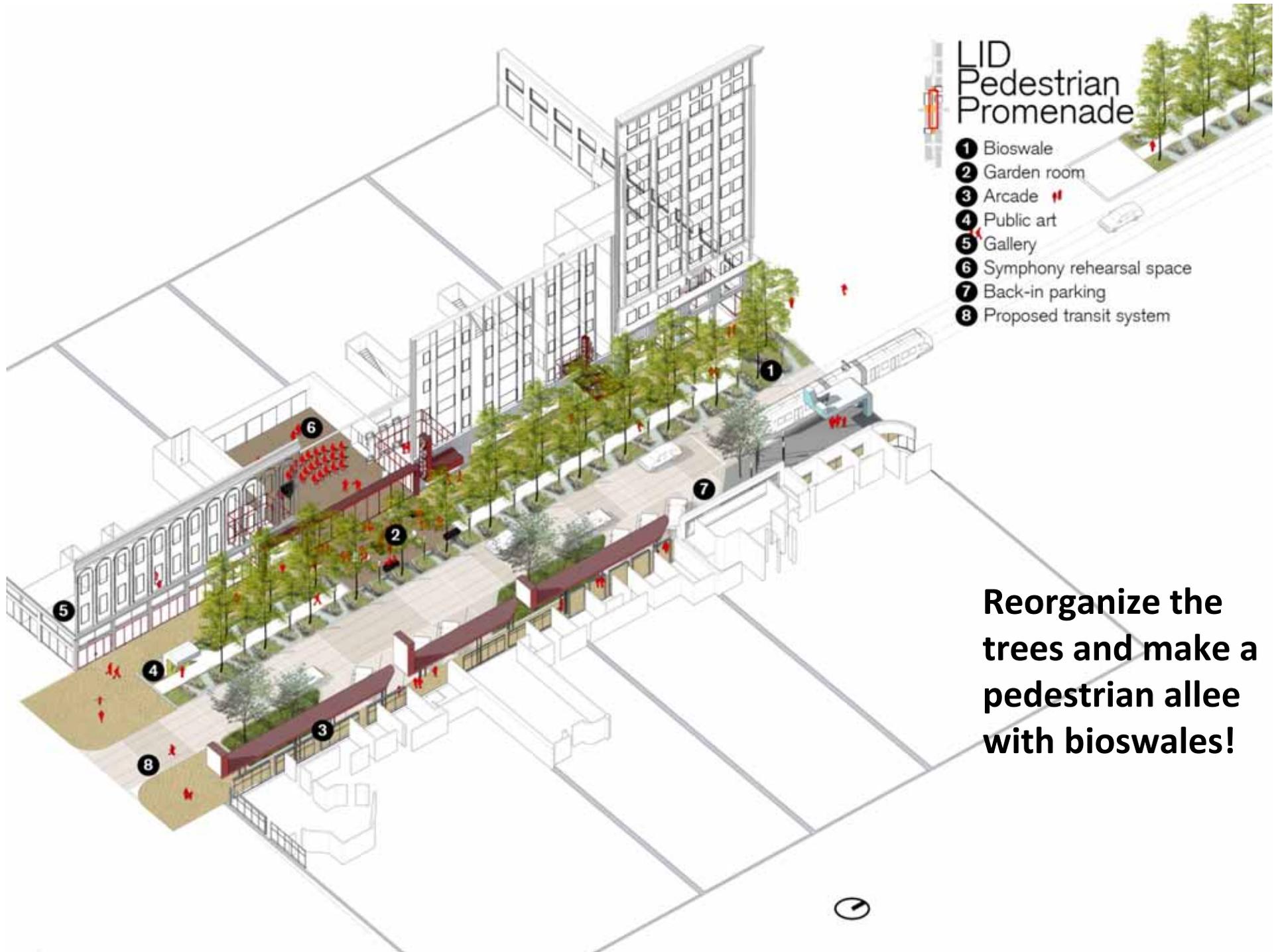


Capitol Avenue Plaza

- 1 Amphitheater
- 2 Plaza pavilion
- 3 Transit stations
- 4 Public art
- 5 Movie screen
- 6 Cafe
- 7 Plaza club
- 8 Roof garden
- 9 Back-in parking
- 10 Proposed transit system

Take an important intersection and make it an event plaza!

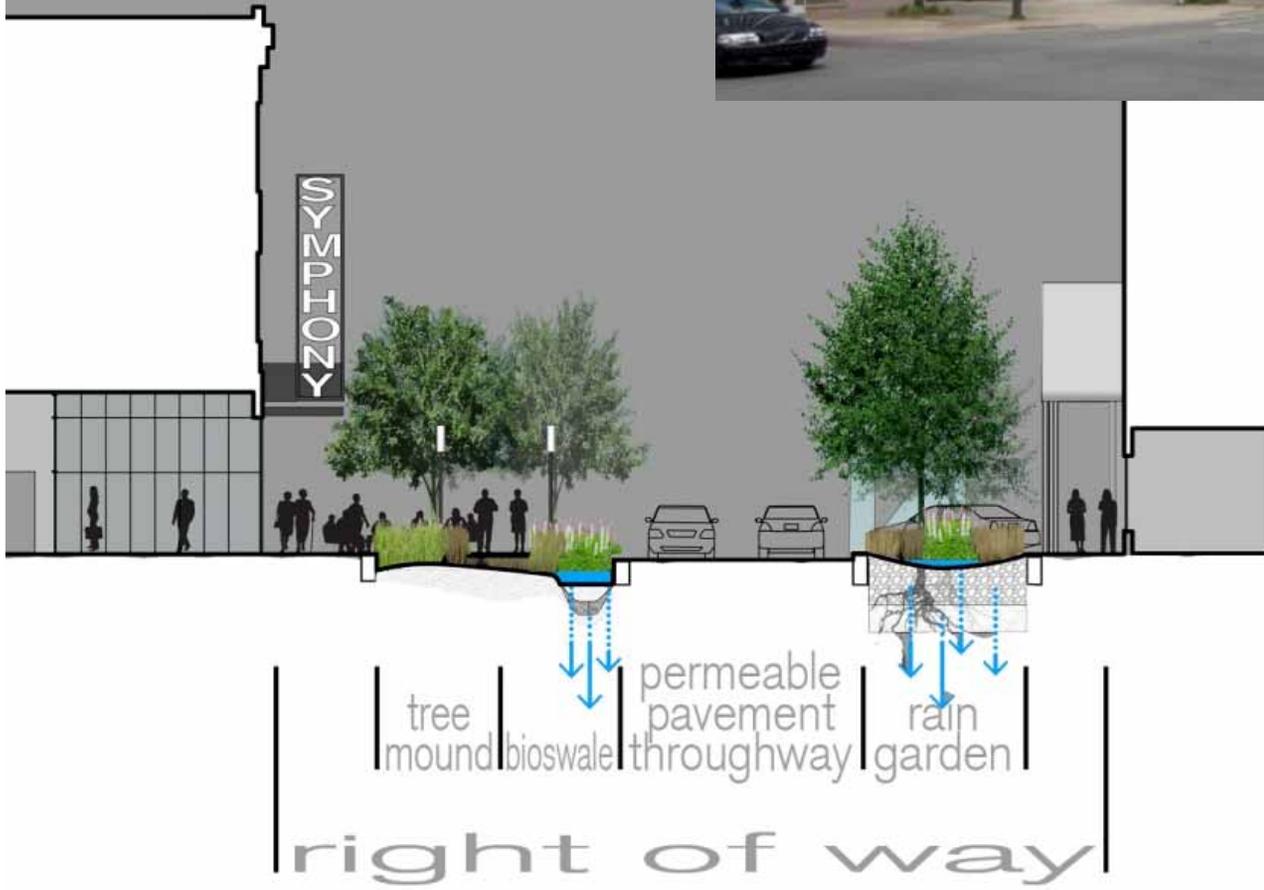




LID Pedestrian Promenade

- 1 Bioswale
- 2 Garden room
- 3 Arcade
- 4 Public art
- 5 Gallery
- 6 Symphony rehearsal space
- 7 Back-in parking
- 8 Proposed transit system

Reorganize the trees and make a pedestrian alley with bioswales!





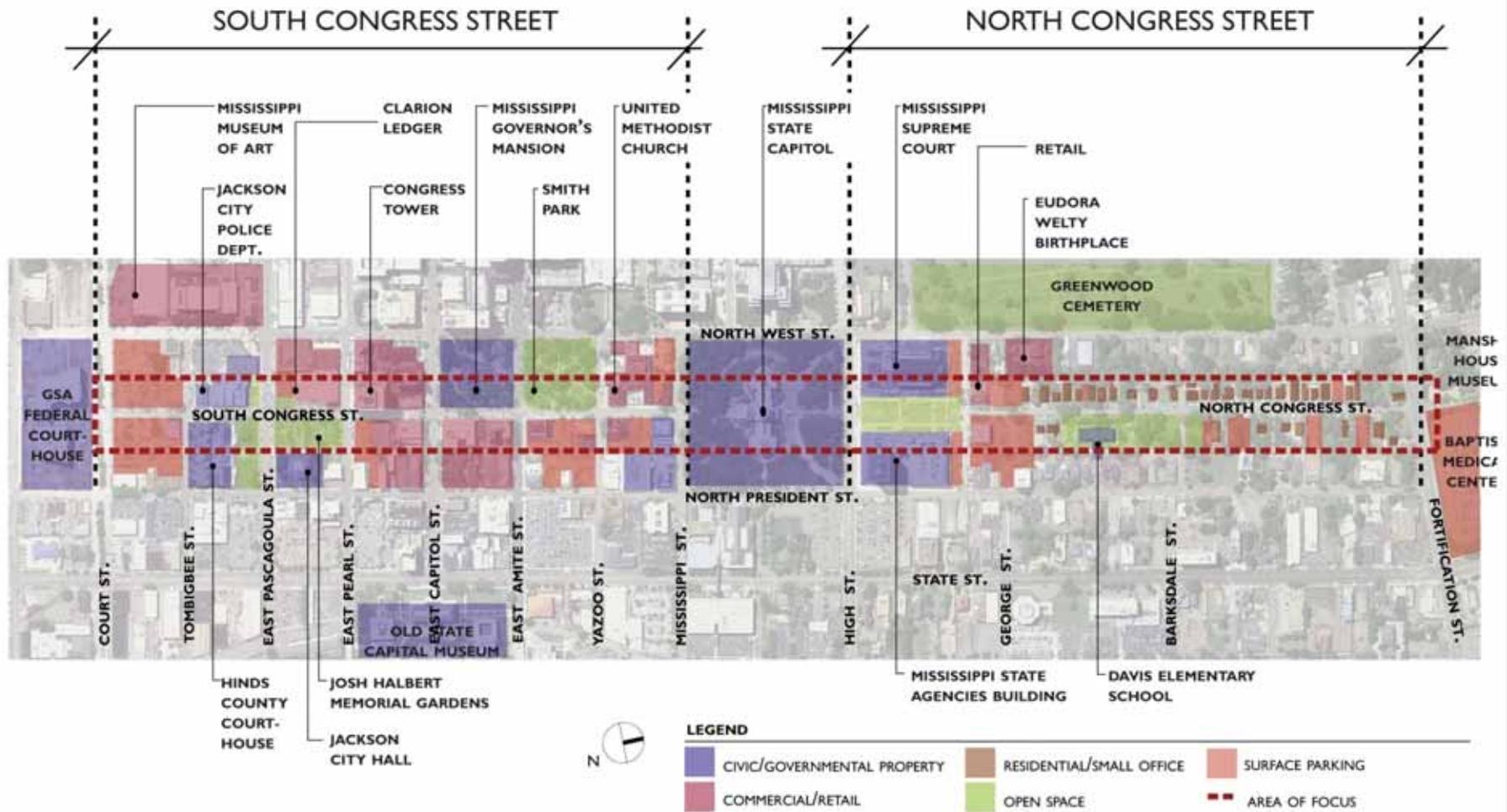


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GREENING CONGRESS STREET
GREENING AMERICA'S CAPITALS
JACKSON, MISSISSIPPI



PROJECT AREA



SOUTH CONGRESS



SMITH PARK



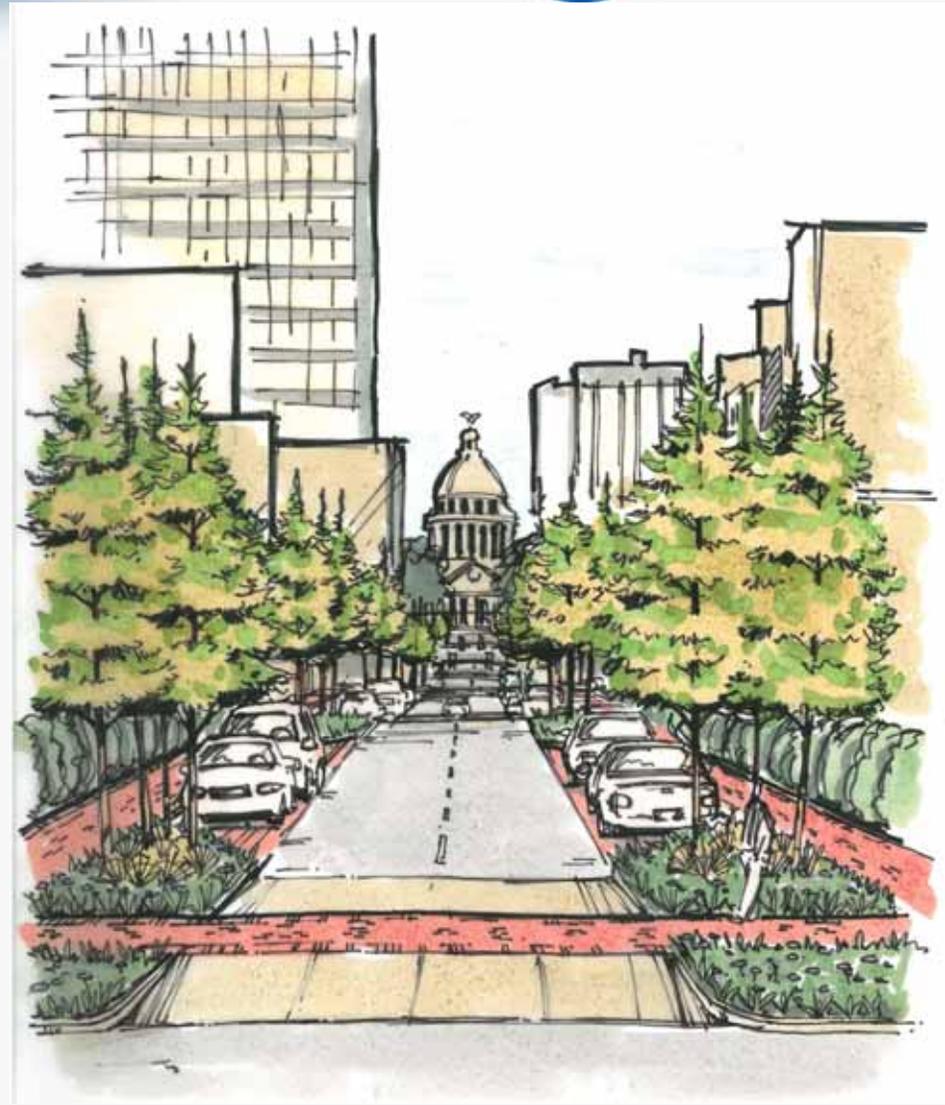
NORTH CONGRESS



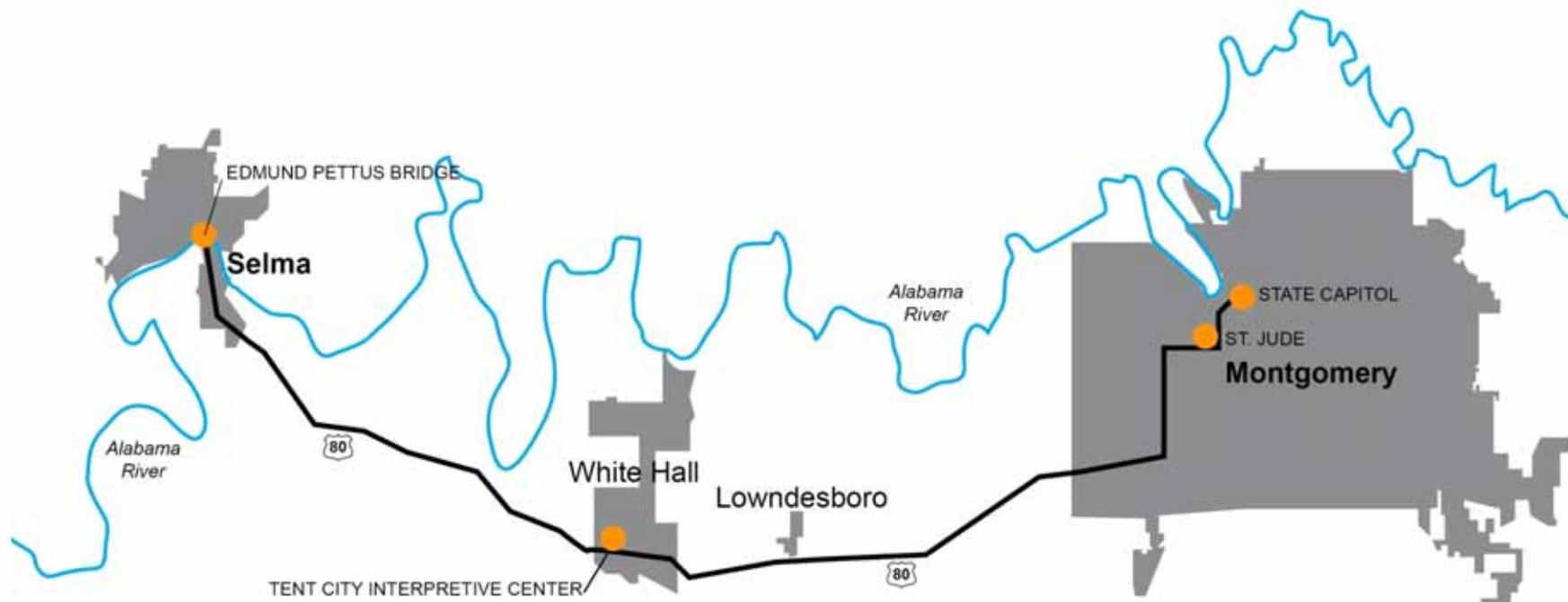
GREENING THE SELMA TO MONTGOMERY TRAIL: RECONNECTING AND REMEMBERING



SOUTH CONGRESS



HISTORIC MARCH ROUTE



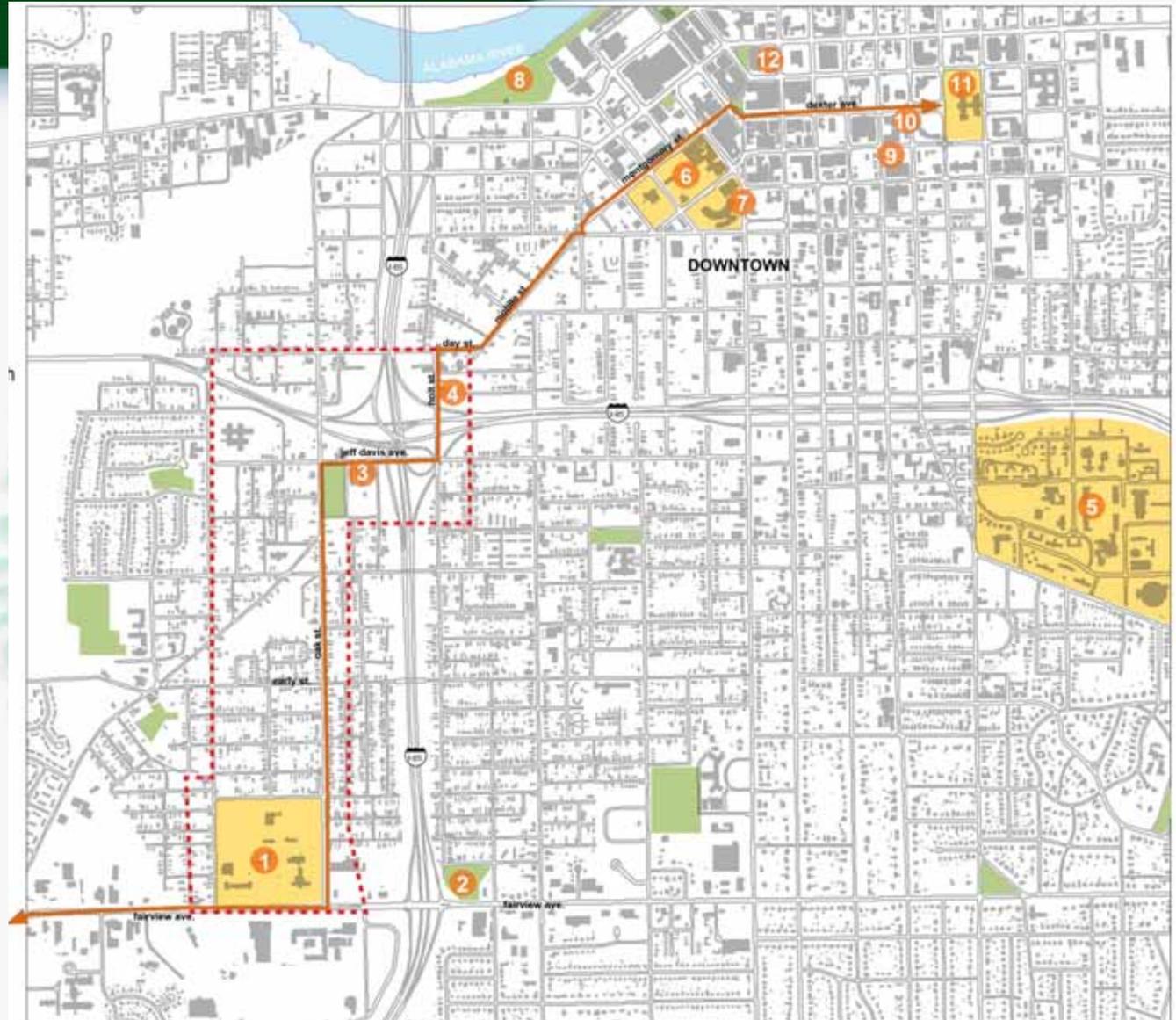
- **54 mile march**
- **Protestors marched 10.8 miles per day**
- **Over 25,000 people participated**

KEY

Significant sites along the trail ●
Cities and/or townships along the trail ■
Alabama River —
Historic Trail —



PROJECT AREA



Site context and sites of interest.



HISTORIC MARCH ROUTE



- **Substandard residential housing**
- **Vacant lots**
- **Dilapidated and broken retail fabric**
- **Interstate overpass, impediments to trail route**
- **Historic churches, homes, and institutions**

PROJECT FOCUS

To revitalize and restore the Selma to Montgomery National Historic Trail while equally improving the conditions of the surrounding neighborhood



PROJECT PARTNERS

U.S. Department of Environmental Protection Agency

Alabama Department of Environmental Management

2D Studio

NHB Group

City of St. Jude

Auburn University, Landscape Architecture

City of Montgomery



WALKING THE TRAIL AT PROJECT TEAM KICK OFF



LOCAL/STATE/FEDERAL PROJECT TEAM



DESIGN CHARRETTE PROMOTION



Greening the Selma to Montgomery Trail

Reconnecting & Remembering

Greening America's Capitals

DESIGN CHARRETTE

January 31 - February 2, 2012

Schedule details on back | 334-625-2714 or 334-625-2699 | montgomeryal.gov




City of Montgomery



2D
studio



GREENING AMERICA'S CAPITALS DESIGN CHARRETTE

January 31 – February 2, 2012

The City of Montgomery invites you to attend the *Greening the Selma to Montgomery Trail at I-65/I-85 Charrette*. Attached with this email are a schedule of events and other information about this design effort.

FOCUS: Selma to Montgomery National Historic Trail segment from Oak Street/West Fairview Avenue to Holt Street/Day Street intersections.

OUTCOME: Strategic plan to improve the streetscape for walking and biking, include natural solutions to manage stormwater and create better connections between neighborhoods in an area crisscrossed by major highway overpasses.

EVENT SPONSORS:

U.S. Environmental Protection Agency
The City of Montgomery

EVENT FACILITATORS:

2D Studio
NHB Group
Montgomery Planning Department

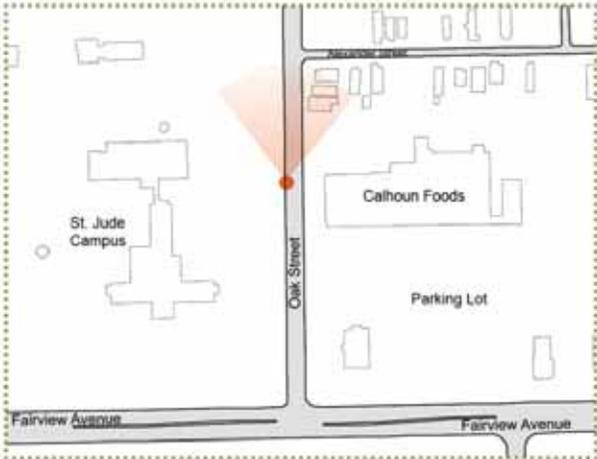
FOR MORE INFORMATION:

334-625-2714 or 334-625-2699
montgomeryal.gov



STAKEHOLDER DISCUSSION





EXISTING



PROPOSED

- **Historic signage**
- **Green infrastructure- stormwater planters**
- **Permeable parking lane**



EXISTING



PROPOSED

- **Sharrow lanes**
- **Infill opportunities**
- **Green infrastructure**
- **Permeable parking lane**
- **Intersection enhancement**



EXISTING



PROPOSED

- **Memorials and historic signage**
- **Public art**
- **Wayfinding devices**
- **Green infrastructure**
- **Green screens**



EXISTING



PROPOSED

- **Lighting to improve safety**
- **Lighting as public art**
- **Lighting to enhance wayfinding devices**

DESIGNS FOR INFILL HOMES



HOUSING INFILL CONCEPTS



EXISTING



PROPOSED

ENVIRONMENTAL PROTECTION

COMMERCIAL INFILL CONCEPTS



EXISTING



PROPOSED





1. Make a Vision and Make it Visual

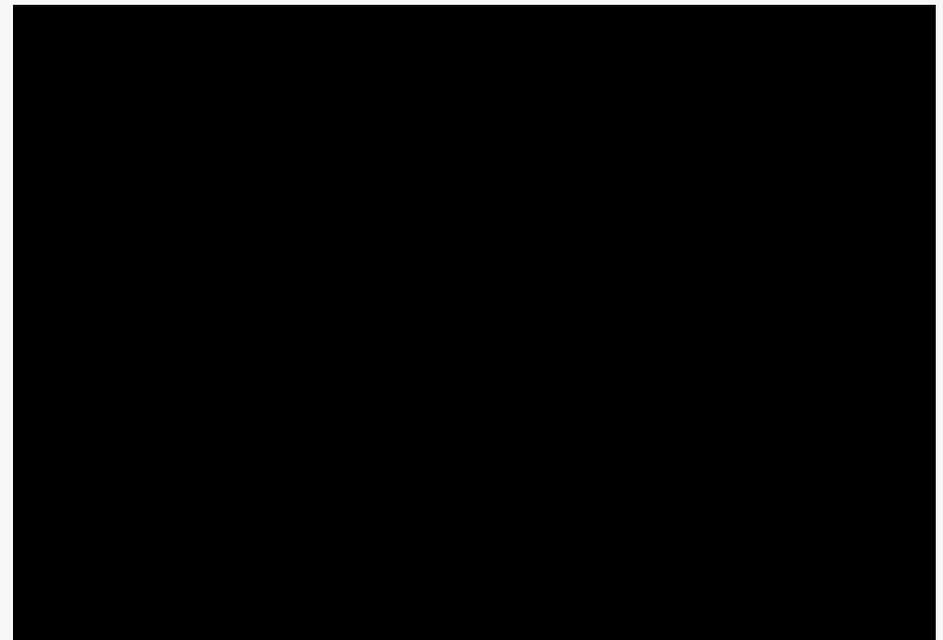
Create visual design options that embody the ideas, values, and goals of different stakeholders and illustrate a common vision toward which the community and decision-makers can work.





2. “Greening” Can Achieve Multiple Goals

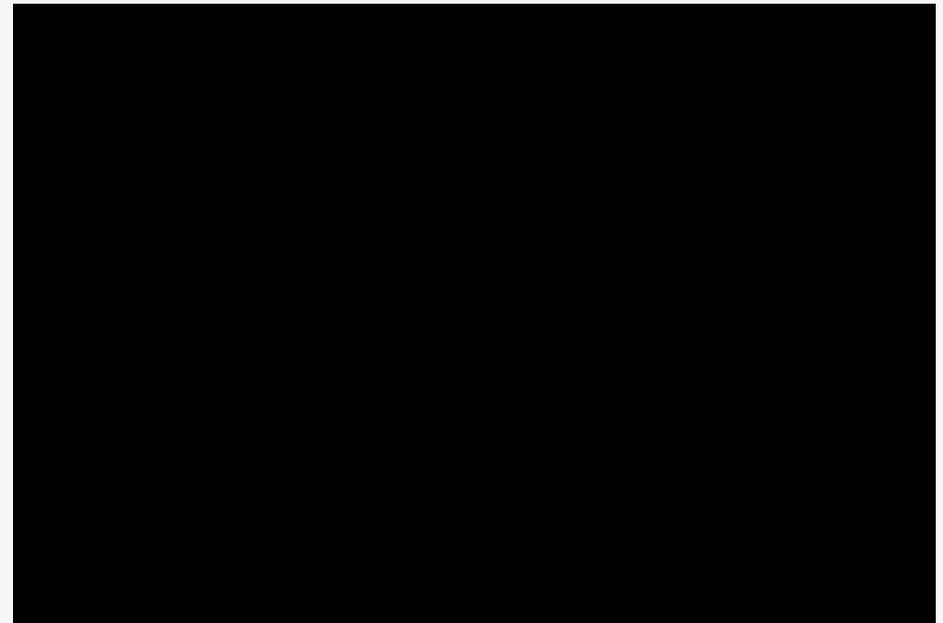
Think beyond the environmental benefits, and remember investments can bolster local economies and provide more choices for moving around.





3. Invest in the Public Spaces You Already Have

Focus on and invest in existing streets, parks, and plazas to revitalize neighborhoods and engage nearby businesses and residents.





4. Connect, Connect, Connect

Connect residents and visitors to natural and cultural amenities through improved access and more transportation options. Also, connect people to natural processes.





5. Funding is About Framing

Increase potential funding options by identifying the multiple goals and the diverse stakeholder groups that improved design and landscaping can benefit.





Results in First Two Years

- **Boston** invested \$100,000 for detailed design and construction drawings.
- **Little Rock** received a \$150,000 grant from NEA, \$900,000 from EPA plus \$675,000 from city for green infrastructure, and \$900,000 from Pulaski County Brownfields Fund.
- **Jefferson City** has held two Annual Wears Creek Clean-Ups.
- **Charleston** received a \$650,000 grant from DOT.
- **Lincoln** to invest \$950,000 of HUD CDBG funds.