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United States Environmental Protection Agency

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Greening America's Capitals

Brittingham - Triangle Green Project

MADISON, WISCONSIN

Office of Sustainable Communities
Smart Growth Program

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GREENING AMERICA'S CAPITALS

Greening America's Capitals is a U.S. Environmental Protection Agency (EPA) program to help state capitals develop an implementable vision of distinctive, environmentally friendly neighborhoods that incorporate innovative green infrastructure strategies. In collaboration with the U.S. Department of Housing and Urban Development (HUD) and the U.S. Department of Transportation (DOT) through the Partnership for Sustainable Communities, EPA provides design assistance to help support sustainable communities that protect the environment, economy, and public health and to inspire state leaders to expand this work elsewhere. Greening America's Capitals will help communities consider ways to incorporate sustainable design strategies into their planning and development to create and enhance interesting, distinctive neighborhoods that have multiple social, economic, and environmental benefits.

Madison, Wisconsin, was chosen in 2013 as one of four state capital cities to receive this assistance, along with Lansing, Michigan; Montpelier, Vermont; and Olympia, Washington.

More information about Greening America's Capitals is at www.epa.gov/smartgrowth/greencapitals.htm.

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Executive Summary

The city of Madison, Wisconsin, selected the Triangle neighborhood and Brittingham Park for a project examining potential design improvements that make the neighborhood and park more accessible to pedestrians and cyclists and clean the stormwater runoff before it reaches Lake Monona through the use of more plants and trees. The Monona Bay neighborhood, adjoining Brittingham Park, was also part of the initial site assessment. The project area was chosen because of its close proximity to downtown, a major university, jobs, public transit, and a lakefront park, as well as its diverse population and potential municipal-institutional partnerships. The area faces several challenges such as busy roadways, wide and unsafe pedestrian crossings, immigrant and disabled populations, lack of visual connection to the surrounding neighborhood and downtown, and environmental and water quality issues of Monona Bay. The city requested help from the U.S. Environmental Protection Agency's (EPA) Greening America's Capitals Program to explore design solutions that could help protect water quality while improving quality of life and bringing other community benefits.

In September 2014, the EPA project team held a three-day workshop in the project area to engage stakeholders, residents, and business owners. During the workshop, the project team developed multiple design options for five focus areas within the larger project area.

The design options meet the community's goals of making it easier for people of all abilities to get around within the neighborhood as well as reach other parts of the city. They also provide strategies to improve water quality in Monona Bay by capturing and cleansing stormwater while creating a distinctive and memorable entry to the neighborhood. The design options support the community and city staff's efforts to provide more recreational activities such as community gatherings and boat rentals. These options are summarized as follows:

1) East Campus Mall Extension: To create the lake-to-lake connection and enhance the visual organization of the Triangle neighborhood, the team's design reconfigured the parking lot and green space to create a defined central open space along with a wide pedestrian way connecting the existing campus mall to the north with Brittingham Park to the south.

2) West Washington Avenue: To improve pedestrian safety, the team's design used of bump-outs and midblock crossings to create safe pedestrian crossings and pedestrian and bicycle paths to enhance the multimodal aspect of West Washington.

3) Intersection of West Washington and South Park Street: To create a defined gateway and improve pedestrian safety at this intersection, the team's design modified the intersection to safely safely combine pedestrian, bicycle, and vehicular traffic while providing space for green infrastructure and public art.

4) Intersection of West Washington and Regent Street: To create a defined gateway into the capitol district and enhance pedestrian safety at this large intersection, the team's design used of a roundabout to slow traffic down and lessen the distance pedestrians must to travel to cross the road.

5) Brittingham Bath House / Beach Area: To maximize the opportunity this area has to further rejuvenate positive activities within the lake and neighborhood, the team's design would rebuild the bath house to include many sustainable features along with programming features, such as heated outdoor spaces and concessions, that could extend the public use of this facility into the winter.

The report concludes with near-, mid-, and long-term actions that could catalyze improvements, as well as potential funding sources for implementation.

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Introduction

Madison, Wisconsin's Triangle neighborhood is an ethnically and culturally diverse community near Lake Monona. In the 1960s, an urban renewal project razed a traditional, ethnically and culturally diverse neighborhood and replaced it with public housing buildings (one- and two-story townhomes and a high-rise apartment building) and parking lots that left little open space. The residents are mostly lower income. A hospital, office building, and small grocery store are located on the western edge of the neighborhood.

The Triangle neighborhood looks and feels like an isolated island surrounded on all sides—South Park Street to the west, Regent Street to the north, and West Washington Avenue to the southeast—by high-volume streets that act as barriers to the neighborhood. The crossings at the three major intersections are very wide, with long distances through vehicular traffic that pedestrians must cross. These long distances make for difficult and unsafe crossings, especially for the disabled, elderly, and those with children. Currently, the only way for Triangle neighborhood residents to get to Brittingham Park safely is a narrow pedestrian bridge that is not accessible per the standards outlined in the Americans with Disabilities Act (ADA). The neighborhood has only a few small, disparate, open spaces tucked between buildings, roads, and parking lots. Brittingham Park is an attractive but underused park along Lake Monona. The city recently reopened a park shelter that rents boats and installed community gardens for residents of the Triangle neighborhood. Despite these efforts, the park is still not well integrated into neighborhood residents' lives.

The city requested assistance from the U.S. Environmental Protection Agency's (EPA) Greening America's Capitals Program to help develop ideas to improve the Triangle neighborhood and Brittingham Park. EPA provided technical assistance through a team of consultants: Vireo and Toole Design Group, Inc. The project team made an initial visit to Madison to meet with city staff and local stakeholders and collect data on the neighborhood and surrounding areas. The team then organized a three-day design workshop where a set of design options were created for the Triangle neighborhood and Brittingham Park. City staff intends to use these options to spur further planning for the Triangle neighborhood and Brittingham Park. The options are primarily rooted in two design strategies: complete streets and green infrastructure.

- Complete streets are streets designed to be safe and comfortable for everyone—drivers, pedestrians, bicyclists, and transit users. A complete street allows people of all ages and abilities to use streets safely by creating pleasant sidewalks and safe crossings while accommodating all types of transportation, including transit and bicycling.
- Green infrastructure includes a range of natural and built approaches, such as rain gardens, bioswales, and permeable paving, that mimic natural systems by capturing and cleaning stormwater and letting it infiltrate on site rather than directed into the storm sewer system and ultimately water bodies such as Lake Monona. Green infrastructure solutions can add greenery to streets, parking lots, and other paved areas, making them more appealing.[1]

Prior to the workshop, city of Madison staff did extensive outreach to residents to get their opinions on what the project's goals should be. Several themes emerged in the more than 400 responses city staff received:

- Improve the pedestrian crossings at major intersections and the East Campus Mall so residents can get to places outside the neighborhood.
- Improve the water quality of Monona Bay to make it safer for swimming, fishing, and boating.
- Improve pedestrian and bicycle connections within the neighborhood and to the rest of the city.
- Provide more playgrounds, gathering spaces (incorporating barbeque pits), and community gardens.

1 For more information on green infrastructure, visit EPA's green infrastructure website: www.epa.gov/greeninfrastructure.

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FIGURE 1

The project area is close to several significant community features, such as the state capitol and the University of Wisconsin-Madison, as well as many parks and trails.

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In addition, the city staff's goals included:

- Explore how to connect the existing East Campus Mall path through the Triangle neighborhood to complete the pedestrian and bicycle link between Madison's two lakes.
- Protect water quality and reduce localized flooding with green infrastructure.
- Continue to revitalize Brittingham Park to make it a destination for all residents and visitors.

The design options illustrate how complete streets and green infrastructure strategies, such as improved sidewalks, enhanced bike facilities, narrower traffic lanes, better road crossings, native plantings, permeable pavements, and rain gardens, could be used in the five focus areas. These strategies can be used to help meet the goals of city staff identified at the beginning of the project, which include (excerpt from the city's proposal to the EPA):

- Enhance connections to adjacent areas to allow residents to be "full city users."
- Create safe, comfortable, and walkable streets and walkways within the neighborhood.
- Integrate Brittingham Park, Brittingham Beach, the Monona Bay shoreline, and the natural environment into the fabric of the neighborhood.
- Create neighborhood gathering places of a variety of sizes and activity levels. These could include the integration of community gardens.
- Incorporate public art into placemaking, sustainability measures, and neighborhood identity.
- Establish a comprehensive approach to green design.

The focus areas, indicated in Figure 1, include:

1 | EAST CAMPUS MALL EXTENSION

Currently, the East Campus Mall is the primary north-south pedestrian connection in the University of Wisconsin campus, extending from Lake Mendota in the north to approximately Regent Street in the south (the northern boundary of the Triangle neighborhood). Extending the East Campus Mall south through the project area would create a direct lake-to-lake pedestrian and bicycle connection. In addition to the new connection between the two lakes, Triangle neighborhood residents would have easier access to the university's resources.

2 | WEST WASHINGTON AVENUE

West Washington Avenue leads directly to the state capitol and is a four-lane divided street that carries over 20,000 cars per day. While it has had some improvements, such as bike lanes, it is still a major barrier between Brittingham Park and the population of the Triangle neighborhood. Triangle neighborhood residents voiced the need for more street-level crossings beyond the existing, outdated pedestrian overpass (Figure 2). Design options include creating two additional at-grade crossings spaced at a relatively similar distance to crossings found in the surrounding neighborhoods.

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3 | INTERSECTION OF WEST WASHINGTON AVENUE AND SOUTH PARK STREET

Madison residents consider the intersection of South Park Street and West Washington Avenue to be the gateway to downtown and the state capitol. The intersection is difficult for pedestrians and cyclists to cross because of its size and configuration. Design options explore how this intersection could be made safer for pedestrians and cyclists and could create a welcoming gateway to the downtown and state capitol.

4 | INTERSECTION OF WEST WASHINGTON AVENUE AND REGENT STREET

The intersection of Regent Street and West Washington Avenue is another important gateway to the state capitol, as well as to the university. Design options explored how to make the crossing safer for pedestrians and bicyclists, as well as replacing impervious surfaces with attractive landscaping that could absorb stormwater runoff.

5 | BRITTINGHAM BATH HOUSE AND BEACH AREA

Although it is visible across Monona Bay from John Nolen Drive, this focus area is in a relatively remote part of the park. It has a park shelter that was recently converted to a small business renting small, non-motorized boats and an underused swimming beach. Design options for this location could enhance current revitalization efforts and make the area more attractive for year-round activity.

FIGURE 2
The existing pedestrian bridge is underused for several reasons: it is not ADA accessible, it becomes dangerous during icy or slippery conditions, and it does not connect to sidewalks and trails on the park side.

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Workshop Description

As part of the Greening America's Capitals Program, the design team, EPA, and city staff organized a three-day design workshop. This intensive event brought together the public, stakeholders, subject matter experts such as public health officials, and various city departments to discuss opportunities, constraints, and ideas to develop design options that address the community's wants and needs.

During the initial site visit, the design team met with various city and neighborhood stakeholders and held a visioning session to elaborate everyone's hopes and desires for the neighborhood. Based on this visioning session, the dominant points of discussion focused on elements of transportation, environmental sustainability, quality of life, and institutional and commercial interests.

Three public meetings were held—one on the first evening of the workshop, one working session/open house on the second day, and one on the final day. The public involvement activities allowed the design team and city staff to revisit and refine the initial project goals. Participants in the meetings generally agreed with the initial project goals but added to them the following:

- Make road crossings safer for everyone, especially the elderly, young, and disabled.
- Ensure that people with disabilities can easily access Brittingham Park and its recreational uses.
- Provide shelters at bus stops to protect transit riders from the elements.
- Ensure that additional bicycle traffic through the neighborhood (as a result of extending the East Campus Mall) does not put elderly, disabled, and young people at risk.
- Provide programs and facilities so the park can be more used in the winter.
- Consider how Triangle neighborhood residents could help maintain any new planting beds and rain gardens (in addition to community gardening plots) to help keep maintenance costs low.

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FIGURE 3
During the three-day workshop, the design team prepared, reviewed, and revised design option sketches based on participants' input.

FIGURE 4
Design options were discussed with neighborhood residents and other members of the public, including members of the local Hmong community, in three public meetings held during the workshop.

FIGURE 5
Throughout the process, stakeholders, including city staff, worked with the design team to craft design options.

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Project Area Assessment

The project area includes the Triangle neighborhood, part of the Monona Bay neighborhood, and Brittingham Park. The neighborhoods and park are on the western edge of downtown Madison, directly south of the University of Wisconsin, and near several health care facilities, such as Meriter Hospital and University of Wisconsin Health.

The Triangle neighborhood has a variety of rent-subsidized housing, medical office buildings, and a small Asian grocery store. Many of the housing units in the neighborhood are occupied by a wide variety of immigrant populations, seniors, and those with some form of disability. The subsidized housing is managed by the Community Development Authority or The Bayview Foundation, a private nonprofit corporation.

The project area has approximately 1,045 residents, of which 50 percent are identified as a racial minority, according to the 2010 census. The median household income for neighborhood residents is $12,276, compared to $52,550 for the city, and 37 percent of households do not own a car. According to the Community Development Authority, 87 percent of residents in the neighborhood live with some sort of disability.

Residents in the Triangle neighborhood, as with other low-income neighborhoods where residents rely on walking to get around, are particularly susceptible to the effects of climate change. A 2002 Climate Protection Plan prepared for the city of Madison notes that Wisconsin's climate is projected to change significantly. Based on projections, by 2100, temperatures in Wisconsin could increase by about 4 degrees Fahrenheit. The plan states, "Small changes in temperature like this can dramatically alter the climate...Precipitation is predicted to increase by 15-20%. The frequency of extreme hot days in summer is expected to increase along with the general warming trend. Higher temperatures and increased frequency of heat waves could increase the number of heat-related deaths and the incidence of heat-related illnesses. Wisconsin, with its irregular, intense heat waves, seems somewhat susceptible… We can already see possible impacts of warming in Madison, including Lake Mendota freezing later and for shorter periods than in the past." [2]

The project area's assets include its sense of community, proximity to amenities, and existing transportation networks. Its challenges include environmental degradation, historical disinvestment, mobility, and accessibility.

2 Somers, Jane. "Climate Protection Plan." City of Madison Engineering Divison. 2002. Page 9.

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ASSETS

Sense of community

Residents see their neighborhood as very tight-knit, and they value and celebrate diversity. Within the Bayview housing development, there are over a dozen different immigrant populations, with Hmong being the most prevalent.

Proximity to amenities

Residents appreciate the close proximity to downtown, University of Wisconsin, Brittingham Park, and other cultural destinations. Many of these destinations are within walking distance, although currently the walk is difficult because of the busy streets surrounding the neighborhood. The neighborhood has one store, Asian Midway Foods (Figure 7), and across Regent Street is a retail strip center that houses a variety of businesses, including a Panera Bread, a FedEx Print and Shipping Center, and a credit union, to name a few.

Existing transportation networks

The Triangle neighborhood sits along a major public transit route, with several bus stops on West Washington Avenue. Madison has an extensive network of bicycle routes, with a major route passing through Brittingham Park that extends to downtown and to the south and west. This route connects to other regional routes.

FIGURE 6
Two Triangle neighborhood residents enjoying a day in Brittingham Park, catching butterflies, visiting the garden, and walking on trails around Monona Bay.

FIGURE 7
Asian Midway Foods, the only grocery store in the Triangle neighborhood, is a key business with healthy food choices within walking distance of much of the neighborhood.

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FIGURE 8
Some of the most important components for the neighborhood include the Metro stops along West Washington, which are used by many residents as the primary mode of transportation.

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CHALLENGES

Environmental degradation

Madison's growth pattern has significantly affected the ecological health of the two lakes. Historically, Monona Bay was a low marsh/wetland that was dredged as the city grew. While this neighborhood has not experienced the localized flooding that other parts of the city have, the runoff, which is full of pollutants, including phosphorus and road salts, make the bay's water too dirty for recreation. A significant amount of land drains into the bay (Figure 11), including roads and parking lots, which contributes to its degradation.

Mobility and accessibility

Although the neighborhood is centrally located, it is not easy to get into and out of, especially for people with disabilities, because of the high traffic volume on the surrounding streets. The pedestrian bridge that connects the Triangle neighborhood with the park is not ADA-accessible and is seldom used, leaving many to negotiate the street traffic rather than climb the overpass to reach the park.

FIGURE 9
View of Parkside Apartments demonstrating a typical arrangement of housing within the Triangle neighborhood, which focuses front doors inward towards the parking lot.

FIGURE 10
Historic neighborhood homes were replaced with taller buildings in the 1960s.

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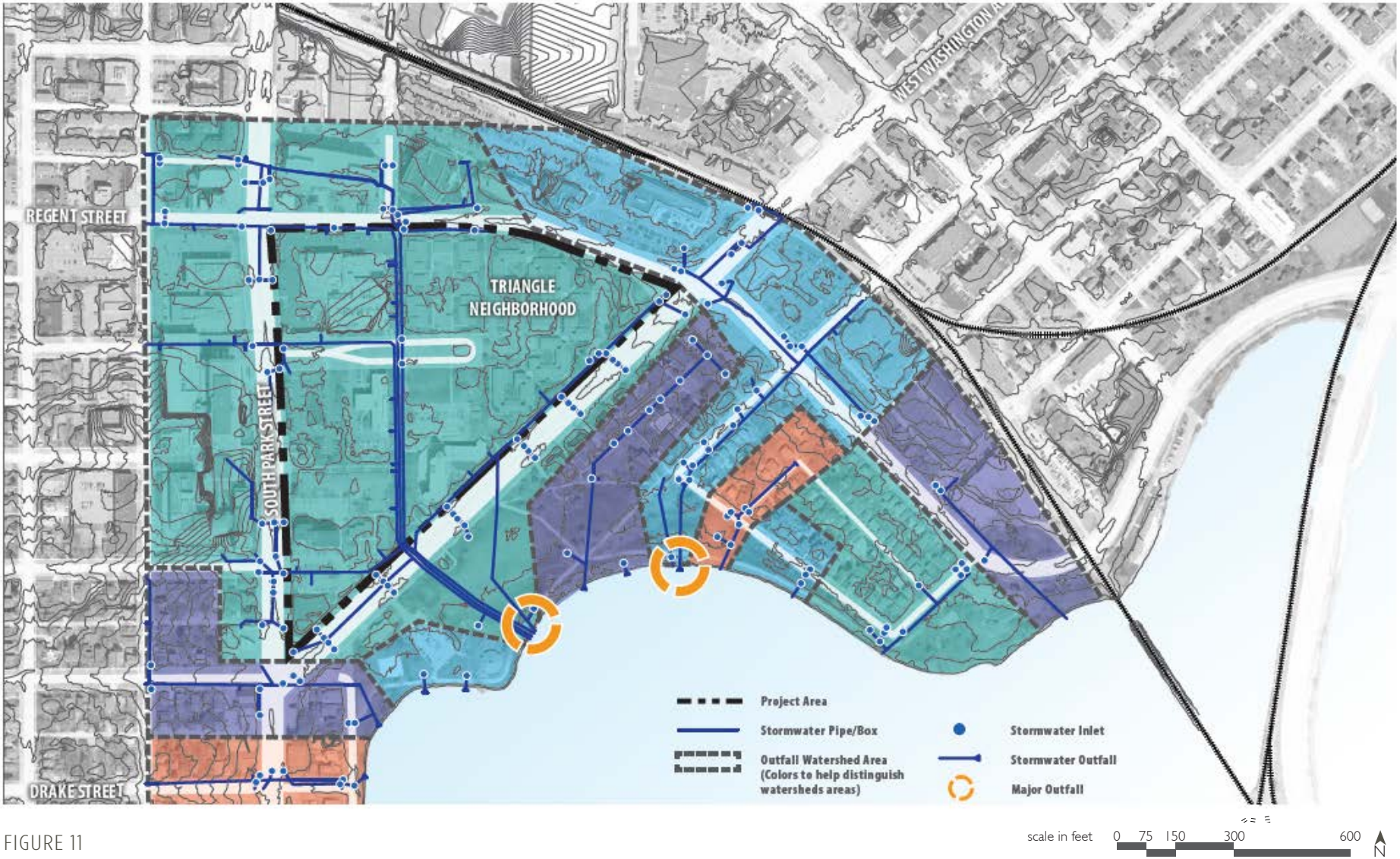

FIGURE 11
This map shows the Triangle neighborhood's stormwater infrastructure. The neighborhood drains into the lake from one outfall located next to the park shelter in Brittingham Park.

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Design Options

The design options respond to the project goals and the project area's challenges and assets. The city of Madison wants to use green infrastructure and complete streets to initiate the planning process in the underserved Triangle neighborhood. The focus areas were selected to improve existing conditions of the neighborhood and to help reconnect the fragmented neighborhood with the surrounding community.

Getting around inside the neighborhood and to other areas of the city is the Triangle neighborhood residents' most pressing concern. Many residents are immigrants, seniors, and people with varying degrees of disability, many of whom do not have vehicles and get around by walking, biking, and public transportation.

The design options show how implementing green infrastructure and complete streets could improve residents' transportation options. Traffic calming, rain gardens, and safer streets and pedestrian crossings can make it easier for residents to move around the neighborhood and the surrounding community. Green infrastructure features can capture and clean stormwater, improving the quality of the water flowing into Monona Bay. Green infrastructure elements can also help cool ambient air temperatures, which can help keep streets more comfortable on hot days, and handle increased runoff from the heavier rainfalls that are expected to happen more frequently as the climate changes.

FIGURE 12 FOCUS AREAS:

1. East Campus Mall Extension
2. West Washington Avenue
3. Intersection of West Washington Avenue and South Park Street
4. Intersection of West Washington Avenue and Regent Street
5. Brittingham Bath House and Beach Area

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Focus Area 1

EAST CAMPUS MALL EXTENSION

Goals achieved with design option

- Enhance connections to adjacent areas to allow residents to be "full city users."
- Create safe, comfortable, and walkable streets and walkways within the neighborhood.
- Create neighborhood gathering places of a variety of sizes and activity levels.
- Incorporate public art into placemaking, sustainability measures, and neighborhood identity.
- Establish a comprehensive approach to green design.

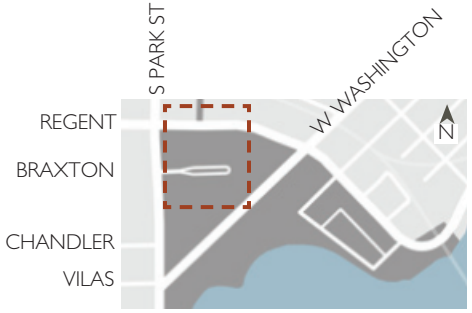
The design option reconfigures the existing green space and parking lots to create a larger, central green space while keeping the same number of parking spaces (Figure 13). It also enhances the existing development, provides a natural sense of wayfinding (by providing a clearly identifiable neighborhood center), and improves neighborhood identity. Extending the mall and installing a safer, signalized crossing at Regent Street would make it easier for residents to get to employment and education opportunities on the other side of Regent Street. The signalized crossings could be similar to those found in other locations along the East Campus Mall. Because the mall alignment falls along the main stormwater drainage path and the location of the storm inlets,

LEGEND

View location *(Figures 14 and 15)*

Section location *(Figure 16)*

1. Central green
2. Bioswale
3. Signalized crossing at Regent Street
4. Relocated playground
5. Expanded community gardens
6. Landscape buffer/bioswale
7. Parking around central green



PLAN KEY

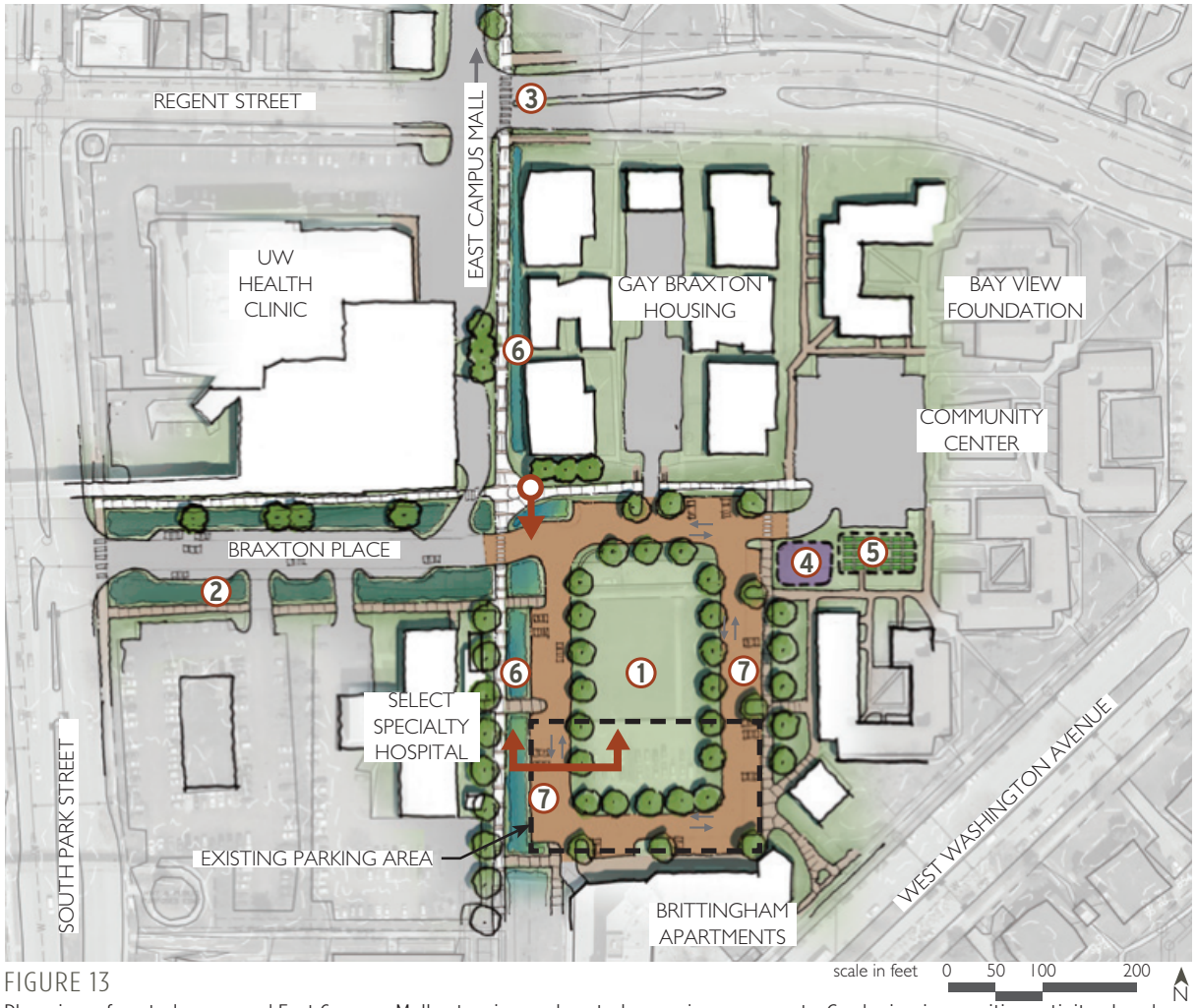


FIGURE 13

Plan view of central green and East Campus Mall extension and central green improvements. Gardening is a positive activity already happening in the neighborhood, and could be expanded near the new play equipment to accommodate additional plots for residents.

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bioswales and rain gardens can be incorporated to capture and treat stormwater before it gets into the sewer system and, ultimately, Lake Monona.

Residents of apartments along the potential mall extension are concerned about privacy. A landscape buffer could help screen apartment windows to give privacy to those living next to the path. A landscape buffer is a strip of plantings that are tall enough to obscure views of the windows beyond, but not tall enough to create a hiding place. In addition to the landscape buffer, enhanced signs and lighting will help delineate the open space. Residents were also concerned about how fast bicyclists might go along the path and the potential risk to pedestrians.

FIGURE 14
Existing view looking south to Brittingham Apartments from Braxton Place. Currently, finding one's way around the neighborhood is difficult because walkways have few signs and poor connections.

FIGURE 15
Design option view looking south to Brittingham Apartments from Braxton Place. The design adds a bioswale next to the path and signs that guide people through the area. The open play field creates a better defined open space for the residents while preserving many of the large trees. Additional signs could be incorporated to create clear connections through the neighborhood.

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Initially, the path can be a small pedestrian walk that restricts bicycle traffic to minimize conflicts. But, over time, the Community Development Authority intends to redevelop and improve the housing in the neighborhood. When the buildings are reconfigured, the mall extension could be widened to at least 12 feet wide, which will help accommodate both pedestrian and bicycle traffic safely.

Figure 16 shows a cross section through the East Campus Mall and community green space that uses green infrastructure to create a defined and attractive edge for the central green space. In addition to maintaining a strong edge for vehicular traffic and parking, the bioswale would create a visual buffer to help separate the neighborhood activities within the central green space from the bicycle traffic that might use the mall. The width of the East Campus Mall is also critical (at least 12 feet wide) to give users enough room to avoid any conflicts between bicyclists and elderly or disabled residents using the path. Lighting such as pedestrian-scale pole lights would enhance safety and security along the path. Permeable pavement could be used in parking and driving lanes to reduce ponding, absorb and filter stormwater, and add aesthetic elements. Preserving the existing mature tree canopy would shade the East Campus Mall extension.

FIGURE 16
Section of the design concept showing bioswales at the central green next to parking paved with permeable pavement. The bioswale would protect water quality and provide a buffer between people using the mall to get to the lakes and the residents using the central green space.

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Focus Area 2

WEST WASHINGTON AVENUE

Goals achieved with design Option:

- Enhance connections to adjacent areas to allow residents to be "full city users."
- Create safe, comfortable, and walkable streets and walkways within the neighborhood.
- Establish a comprehensive approach to green design.

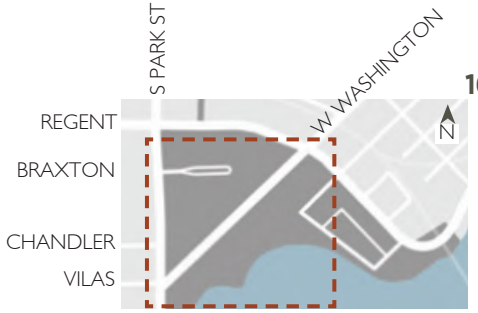
The design option for this focus area makes the crossing of West Washington Avenue safer for bicyclists, pedestrians, drivers, and transit users. The existing bike lane would be removed and replaced by a separated bike path that reduces conflicts between bicyclists and cars.

The underused, existing pedestrian bridge would remain, but enhanced crossings at-grade would be added, as was desired by residents in the workshop. The design concept creates two midblock crossings, which both calms traffic and gives pedestrians a refuge island as they cross this wide road. At each of the bump-outs, a covered bus shelter could protect transit users from the elements. Along the parking areas and in the refuge islands at the midblock crossings, pervious pavers could capture and treat stormwater.

LEGEND

- Midblock crossing location
- Bus stop location
- View location *(Figures 18 and 19)*
- Section location *(Figures 20, 21, and 22)*

1. Parking and farmer's market
2. Park shelter
3. Existing pedestrian bridge



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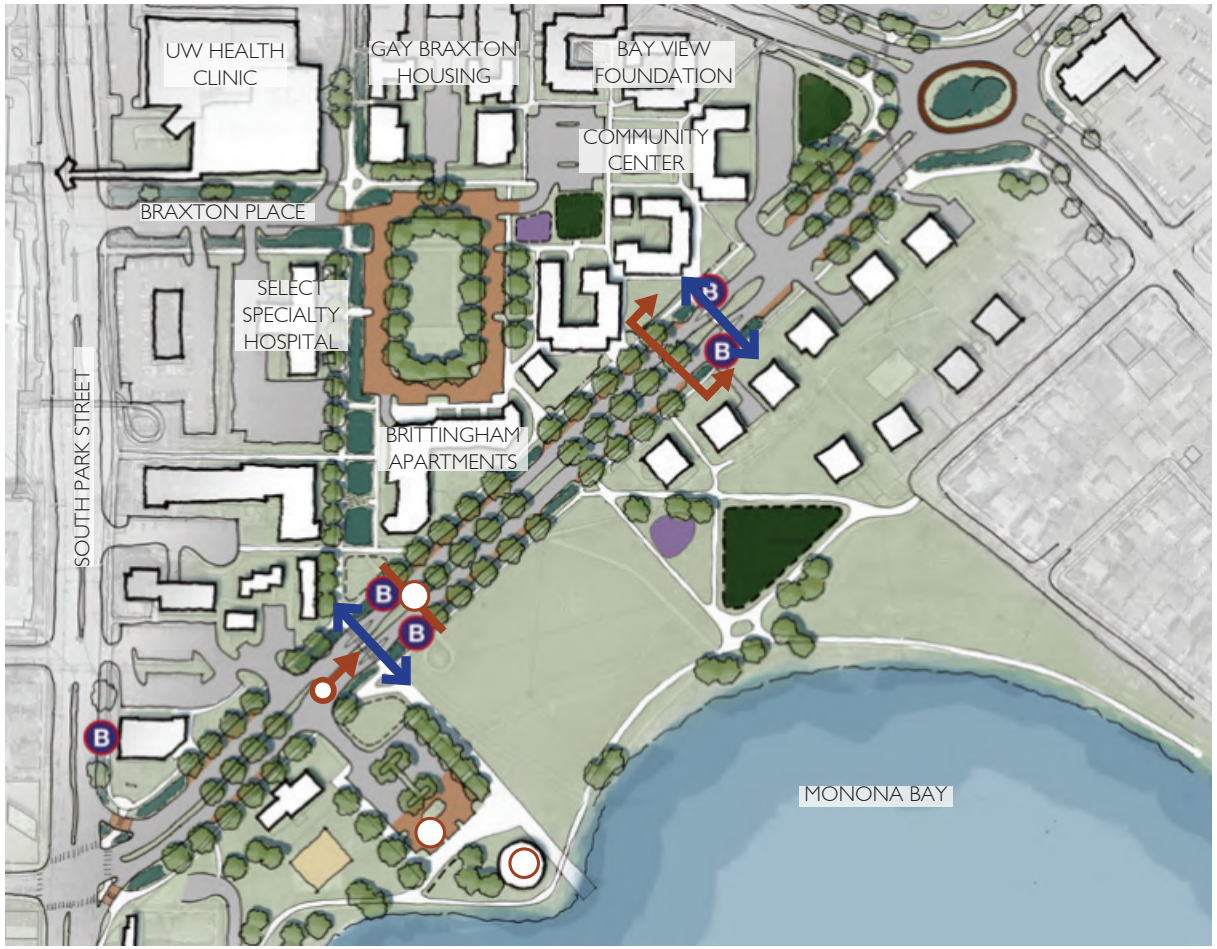

FIGURE 17
Design option for West Washington Avenue.

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FIGURE 18
Existing view looking northeast along West Washington Avenue toward the capitol building. As noted at the workshop, crossing West Washington Avenue at grade is unsafe, and the street currently has no identified pedestrian crossing.

FIGURE 19
Design option view looking northeast along West Washington Avenue toward the capitol building. The midblock crossing creates a safe refuge for pedestrians in the central median, as well as the pedestrian refuge island added in the laneways in each direction. A covered bus stop shelters transit users. Clearly delineating paths for cyclists and pedestrians will help limit conflict between them. Enhanced landscaping in these areas will help create the perception of comfort for pedestrians and improve the visual aesthetics of the road.

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LEGEND

1. Bus shelter
2. Bike path
3. Pervious pavers for parking area
4. Bollard
5. Detectable warning pavers
6. Landscape area

PLAN KEY

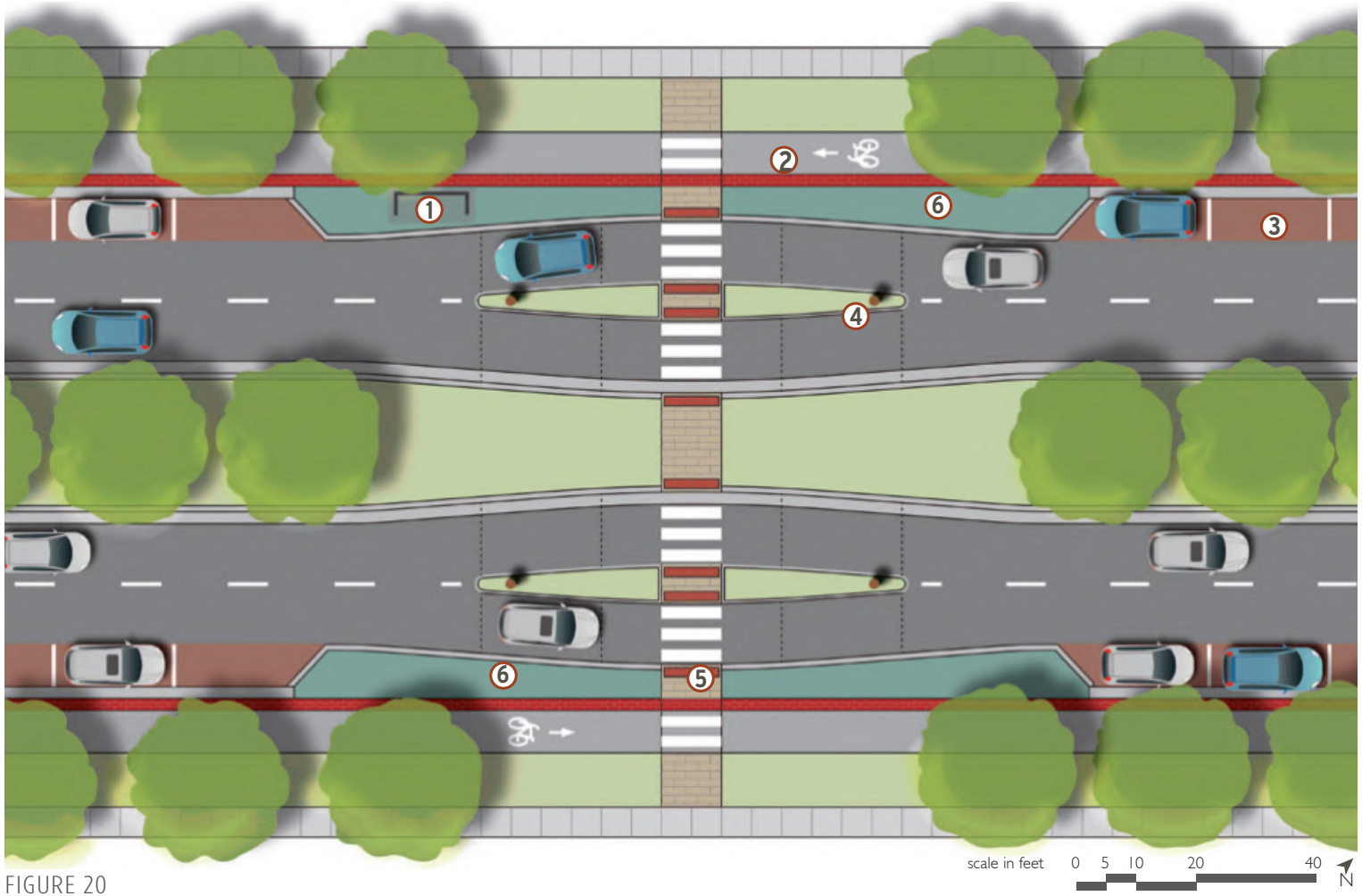

FIGURE 20

Enlarged view of the West Washington Avenue midblock crossing and refuge islands. Bollards at the nose of the islands further help protect pedestrians and give snow plows a landmark to avoid during plowing. Detectable warning pavers are a textured pavement letting pedestrians with visual or other disabilities know they are entering the roadway.

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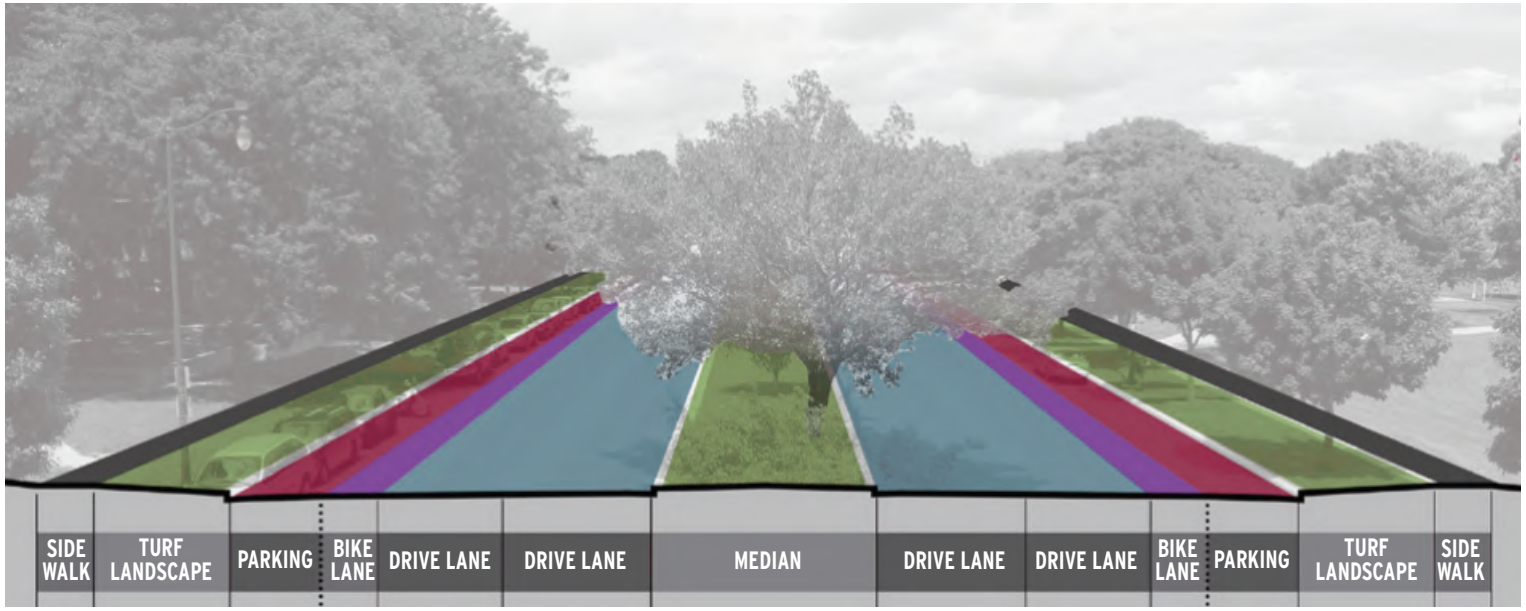

FIGURE 21
Existing section of West Washington Avenue looking northeast.

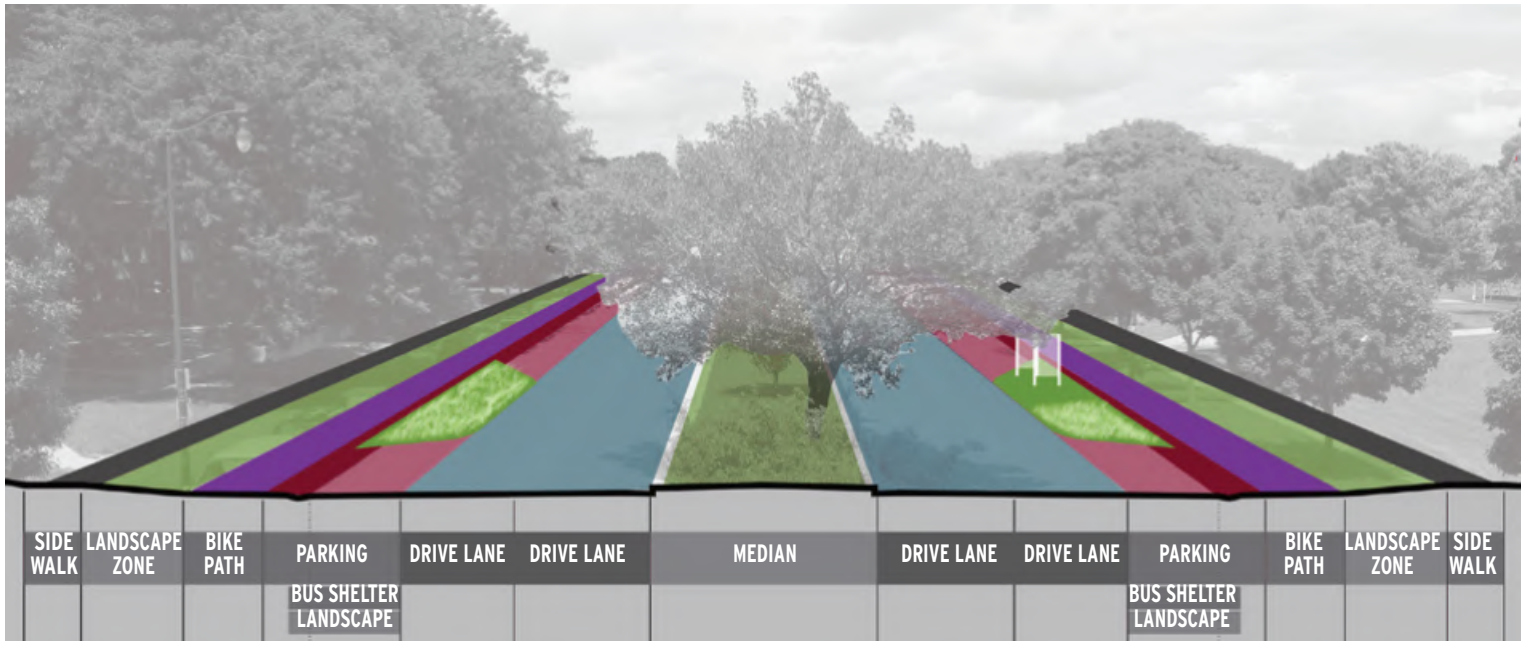

FIGURE 22
Section of design option showing of West Washington Avenue looking northeast.

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Focus Area 3

INTERSECTION OF WEST WASHINGTON AVENUE AND S PARK STREET

Goals achieved with design Option:

- Enhance connections to adjacent areas to allow residents to be "full city users."
- Create safe, comfortable, and walkable streets and walkways within the neighborhood.
- Incorporate public art into placemaking, sustainability measures, and neighborhood identity.
- Establish a comprehensive approach to green design.

The design option for this intersection improves safety for bicyclists and creates spaces for green infrastructure and public art. At the intersection, the bike lane divides; one transitions into the vehicular traffic, and the other transitions into the sidewalk. This allows experienced riders to safely become part of the vehicular traffic as they head north or south on Park Street. Less-experienced riders could choose to stay on the sidewalk and cross the intersection with pedestrians. Reducing the width of the southbound, right-turn lane from West Washington Avenue onto South Park Street and enlarging the pedestrian refuge island creates more green space. The enlarged pedestrian refuge would make the crossing safer, letting people feel more confident about crossing into and out of the Triangle neighborhood as well as providing a space for public art or green infrastructure. For vehicular movement, the northernmost westbound land on West Washington Avenue is a through-lane to accommodate westbound traffic.

LEGEND

- View location *(Figures 24 and 25)*
1. Public art opportunity
2. Bioswale/landscape area
3. Raised crosswalk with colored pavement
4. Bike path

PLAN KEY

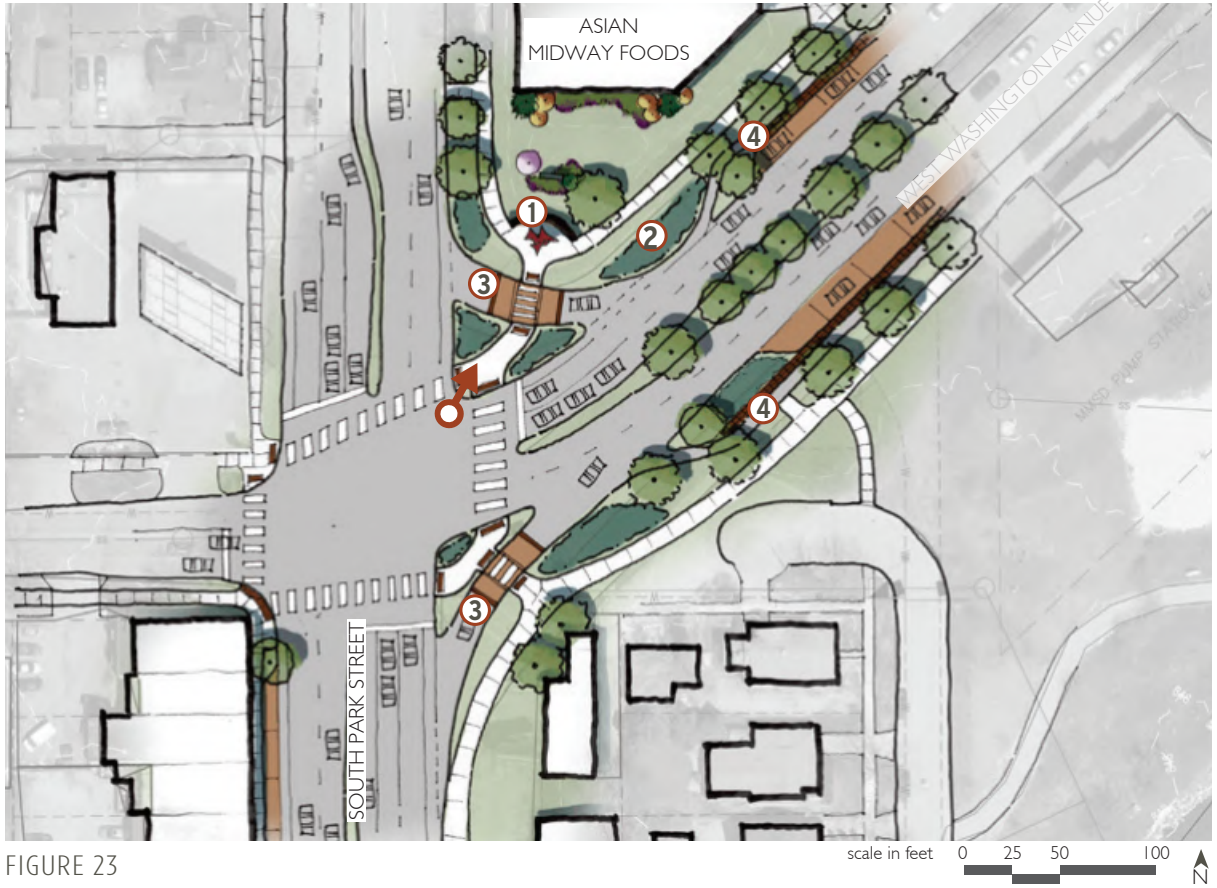

FIGURE 23
Design concept for the intersection of West Washington Avenue and South Park Street.

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FIGURE 24
Existing view looking northeast along West Washington Avenue from South Park Street toward the capitol building. Currently, pedestrian crosswalks are not visible to turning cars.

FIGURE 25
View of design option looking northeast along West Washington Avenue from South Park Street toward the capitol building. Bump-outs and landscaping help delineate the bike lanes and provide a safer crossing for pedestrians. Public art could help make this intersection a gateway into the capitol.

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Focus Area 4

INTERSECTION OF WEST WASHINGTON AVENUE AND REGENT STREET

Goals achieved with design Option:

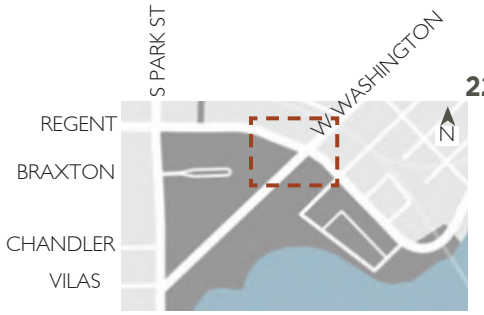
- Enhance connections to adjacent areas to allow residents to be "full city users."
- Create safe, comfortable, and walkable streets and walkways within the neighborhood.
- Incorporate public art into placemaking, sustainability measures, and neighborhood identity.
- Establish a comprehensive approach to green design.

The design option for this focus area incorporates a roundabout into the intersection of West Washington Avenue and Regent/Proudfit streets. In a roundabout, pedestrian crossings are made easier because a pedestrian need only watch for traffic coming from one direction at a time because there are pedestrian islands separating travel lanes on each approach. Traffic speed going through the roundabout is slow, which creates a less intimidating environment for pedestrians as well. The elimination of turn lanes leading up to the roundabout narrows the crossing distances and creates space for other uses, including landscaping that can capture stormwater runoff. These landscaped areas can also be places to store the snow that is plowed off the streets in the winter. The roundabout also provides a visual gateway to the capitol to the north. The bike lanes transition from the drive lane to the separated path along West Washington.

LEGEND

View location *(Figures 27 and 28)*

1. Community gardens
2. Bioswale/landscape area
3. Low stone wall
4. Public art opportunity
5. Permeable paver edge



PLAN KEY

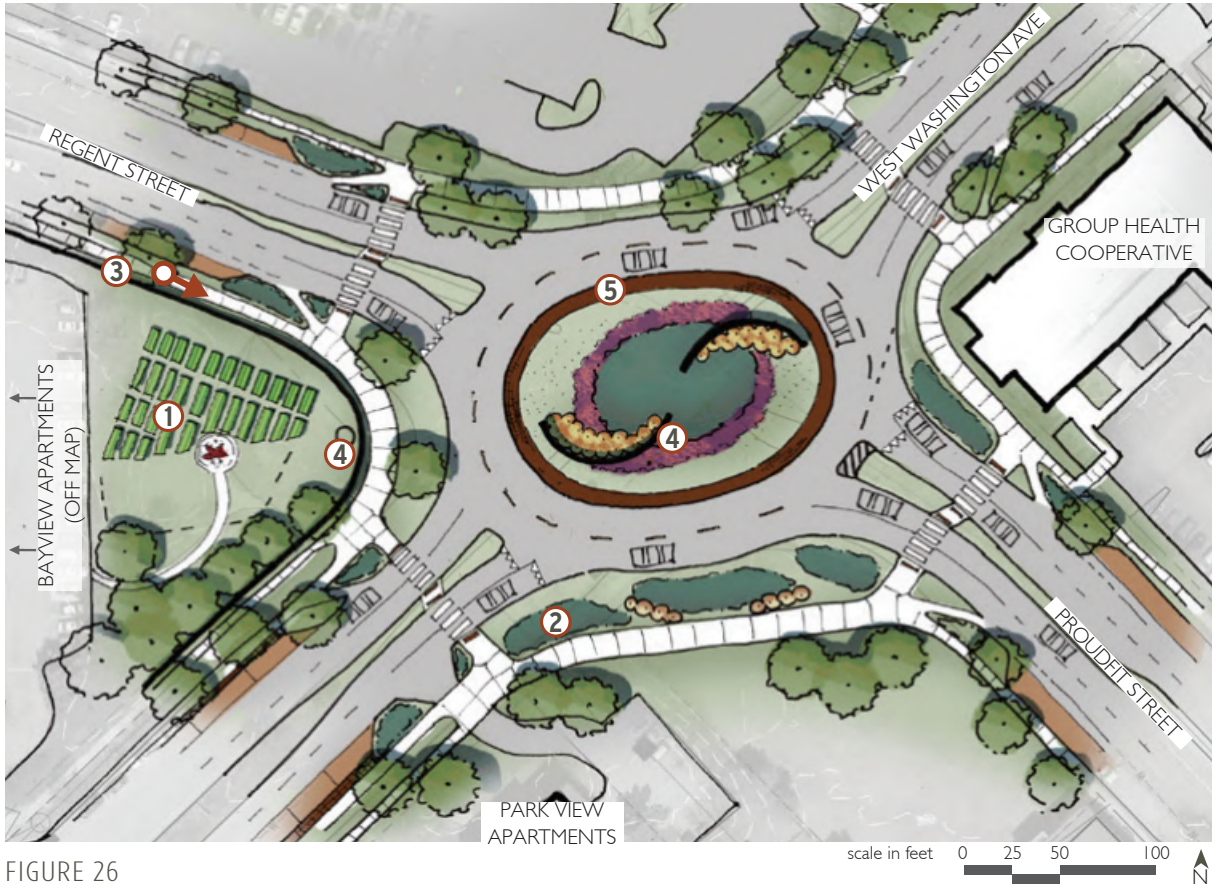


FIGURE 26
Design option of the intersection of West Washington Avenue and Regent/Proudfit streets.

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Around the perimeter of the roundabout could be a 5- to 10-foot-wide strip of permeable pavers. This strip of pavers can be used to capture stormwater, but more importantly, during snow removal, the snow can be piled onto the strip, and as it melts, salt-laden water is cleaned as it soaks through the pavers. On the corner next to the Bayview Apartments, a portion of the existing landscaping would be converted to community gardens to fulfill residents' desire for more gardening plots. Replacing the existing chain-link fence at this corner with a small stone wall would be more attractive and would address residents' concern about children's safety next to a busy road, especially if garden plots are added to the corner.

FIGURE 27
Existing view looking east along Regent Street to the intersection of West Washington Avenue and Regent/Proudfit streets. Navigating this heavily travelled, wide intersection as a pedestrian, bicyclist, or driver is difficult and unsafe, particularly for disabled residents.

FIGURE 28
Design option view looking east along Regent Street to the intersection of West Washington Avenue and Regent/Proudfit streets. The community garden and stone wall can create a sense of community. The roundabout could provide a visual gateway to the capitol while capturing and treating stormwater runoff.

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Focus Area 5

BRITTINGHAM BATH HOUSE AND BEACH AREA

Goals achieved with design Option:

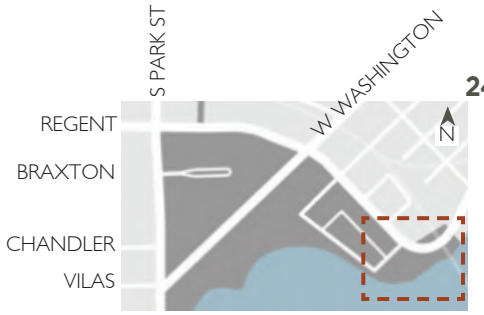
- Create safe, comfortable, and walkable streets and walkways within the neighborhood.
- Integrate Brittingham Park, Brittingham Beach, the Monona Bay shoreline, and the natural environment into the fabric of the neighborhood.
- Create neighborhood gathering places of a variety of sizes and activity levels.
- Establish a comprehensive approach to green design.

The design option for this focus area shows how redevelopment of the area around the old bath house could incorporate environmentally sustainable practices, such as a photovoltaic system to supply power for heat and hot water. Adding environmentally friendly features would help bolster the recent progress in turning the bath house into a neighborhood amenity. Currently, the facility closes during the winter despite neighborhood residents' desire to have year-round activity. The bath house could be renovated and programmed to facilitate winter uses, which might include an expanded gathering space with warming elements (which could be a simple fire ring or gas heaters with seating around), concessions for ice fishers, or other activities such as ice skating. In addition to the enhanced winter programming, the deck could be expanded with additional seating, and the accessible

LEGEND

View location *(Figures 30 and 31)*

1. Renovated bath house
2. Bioswale
3. Gathering area
4. Accessible boat dock
5. Boat storage
6. Expanded deck area
7. Trail crossing



PLAN KEY

FIGURE 29
Design option of new park amenities and structures, including rain gardens, safer crossing of Proudfit Street, more seating at the water's edge, and a warming feature.

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boat dock (which is a part of the Brittingham Park Master Plan) could be built at this location to expand the users who can take advantage of the boating activities. Finally, building off of the existing rain gardens and bioswales that have educational signage, the environmentally sustainable features built into the new bath house could demonstrate and educate people about the importance and benefits of green infrastructure as well as improve perceptions of the neighborhood and park.

FIGURE 30
Existing view looking northeast to the Brittingham bath house and beach. Recent programming and activities in the area have made this area of the park feel safer, which is encouraging more use of the park.

FIGURE 31
Design option view looking northeast to the Brittingham bath house and beach. Creating warming spots (such as outdoor gas heaters with seating) and winter concessions such as ice-fishing supplies or ice skating rentals could encourage year-round activity. The renovated bath house could include environmentally sustainable features such as photovoltaics and recycled materials.

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Next Steps, Key Partners, and Potential Funding Sources

INTRODUCTION

The design options presented in this report can spur further interest and investment in the Triangle neighborhood and Brittingham Park and catalyze future improvements. This section discusses potential near-, mid-, and long-term steps, key community partners, and funding sources identified and discussed during the design workshop that can help the city of Madison achieve its goals.

SHORT-TERM ACTIONS

Short-term steps (one to two years) include activities that could continue to involve the neighborhood residents and partners, surrounding institutions, and the city.

- Begin the process of including street crossings in the capital plan, undertake a traffic analysis, and reach out to residents to identify locations.
- Involve Triangle and Monona Bay neighborhood residents when programming and designing future improvements to Brittingham Park. Many of the residents consider Brittingham Park to be their community park and could help with basic maintenance.
- Translate online registration forms for picnic shelter rental into additional languages (Spanish and Hmong were specifically mentioned in the workshop) to encourage Triangle neighborhood residents to use the park facilities more often.
- Continue to improve access to the park's recreational amenities for people with disabilities.
- Explore options for continuing the farmers market and operating it for three seasons of the year.
- Consider adding public art in Brittingham Park to raise awareness of and celebrate the diverse cultures in surrounding neighborhoods.
- Expand the Brittingham Gardens in the park. Because of the popularity of the existing gardens, the Parks Division could reach out to current gardeners and non-gardeners and explore feasible expansion plans that would serve the gardeners but not restrict other recreational uses in the park. One suggestion for improvements to the existing gardens was to put some of the beds into raised planters so that gardeners with disabilities could more easily access the plots.
- Construct mid block crossings on West Washington Avenue for better access to transit stops and Brittingham Park.
- Develop design plans and budgets for pedestrian and bicycle access to Regent Street at the East Campus Mall extension.
- Establish budgets for design and engineering for the major improvements, including West Washington and the east and west gateway intersections. These improvements could include the mid block crossings along West Washington Avenue, the roundabout at West Washington Avenue and Regent Street, and pedestrian improvements at West Washington Avenue and South Park Street.

MID-TERM ACTIONS

Mid-term (three to five years) actions include opportunities, built on the successes of the short-term steps, to invest in design and planning that can set the stage for larger infrastructure and transportation investments.

- Develop design and engineering plans for intersection modifications for improved pedestrian and bicycle access in two locations: West Washington Avenue and Regent/Proudfit streets, and South Park Street and West Washington Avenue.
- Consider a larger redevelopment plan for the Triangle neighborhood, specifically Brittingham Apartments, Karabis Apartments, Parkside Apartments, and Gay Braxton Apartments. The Community Development Authority and Planning Division could lead the plan and partner with Meriter Hospital, University of Wisconsin Health, and the Bayview Foundation. This plan could consider improving the central green space as an organizing element for the neighborhood, extending the East Campus Mall across the neighborhood, and introducing green solutions for stormwater management.

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- Expand the farmers market to possibly include produce grown and sold by the residents of the neighborhood.

LONG-TERM ACTIONS

In the long term (five to 10 years), the city could investigate the construction of larger infrastructure improvements, as well as redeveloping housing in the Triangle neighborhood.

- Incorporate the larger redevelopment plan into the city's comprehensive plan and other relevant city plans.
- Construct intersection modifications for improved pedestrian and bicycle access in two locations: West Washington Avenue and Regent/Proudfit streets, and South Park Street and West Washington Avenue.
- Construct improved pedestrian and bicycle access to Regent Street at the East Campus Mall extension.
- Improve existing housing based upon the larger redevelopment plan, and construct the central green space, the East Campus Mall extension, and green solutions for stormwater management.
- Further study and design the conversion of the bath house in Brittingham Park to allow year-round use.

KEY PARTNERS

In order to help move many of these projects forward to construction, it is vital that the city enlists as many different partners to help garner the necessary funding and community support. The following is a list of partners that could be part of the process as the city progresses with the planning and implementation of improvements in the project area.

Municipal Partners

- *The Department of Planning and Community and Economic Development* works with elected officials, neighborhoods, businesses, and nonprofit groups on quality-of-life issues such as improved water quality and neighborhood accessibility within the city.
- *The Community Development Authority* holds much of the land in the Triangle neighborhood that could be modified to include green solutions and enhanced neighborhood access to economic, cultural, and recreational resources of the city.
- *The Engineering Division* maintains and upgrades utilities and infrastructure and could include improvements such as adding green infrastructure to improve water quality in future stormwater projects in the neighborhood.
- *The Traffic Engineering Division* provides guidance and requirements for transportation improvements within city-owned rights of way and can influence improvements for pedestrian and bicycle access and safety in the neighborhood and along nearby streets.
- *The Parks Division* controls Brittingham Park and its recreational amenities such as the shelter house, sand volleyball, walking and biking trails, places for public art, community gardens, playgrounds, the lake, and the bath house. It has installed several rain gardens, which help protect water quality in Monona Bay.
- *The Police Department* provides social support services to many area residents. The community police officer organizes the residents to operate the community gardens and farmers market in Brittingham Park.
- *Public Health Madison and Dane County* work with the Triangle neighborhood and businesses to "enhance, protect, and promote the health of the environment and the well-being of all people." [3] While not directly affecting built projects, Public Health Madison and Dane County can be a vocal advocate for the residents and could help influence city leadership in favor of projects that can improve public health.
- *The Madison Metropolitan Sewage District* owns and operates the large pump station building in Brittingham Park along West Washington Avenue. It could provide guidance for looking into opportunities, as desired by the city, to better integrate this facility into the park, such as providing shade structures and a covered bus stop.

3 "About Us - Public Health Madison & Dane County" http://www.publichealthmdc.com/about/

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Institutional Partners

- *Meriter Hospital* is a large institution that occupies much of the west side of South Park Street. It provides health care services to many of the Triangle neighborhood residents.
- *University of Wisconsin Health* occupies the northwest corner of the Triangle neighborhood. When it considers improvements to its campus, it could ensure those improvements maintain pedestrian and bicycle access and protect water quality through green infrastructure.
- *University of Wisconsin* is an important partner in the extension of East Campus Mall, stormwater management, and other potential improvements within and adjacent to the project area.

Neighborhood Partners

- *Brittingham and Gay Braxton Apartments* are controlled by the Community Development Authority. Both apartment complexes are designated for residents who are 50 years of age or older and have disabilities. Many of their residents would benefit from improved pedestrian access to the public spaces and surrounding businesses.
- *Karabis and Parkside Apartments* are also Community Development Authority partners and provide affordable homes to Triangle neighborhood residents. Many of their residents would benefit from improved pedestrian access to the public spaces and surrounding businesses.
- *The Bayview Foundation, Inc.* is a 501(c)(3) nonprofit corporation that owns and operates Bayview Townhouses and Bayview International Center for Education and the Arts. It provides many support services and educational and enrichment programs for the residents and operates the Bayview Community Center.
- *Other neighborhood partners* that participated in the Greening America's Capitals project and are important in future planning and implementation efforts include the Monona Bay Neighborhood Association, Friends of Monona Bay, surrounding property owners, service providers, and other community groups and organizations.

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POTENTIAL FUNDING SOURCES

Federal Funding

EPA's Clean Water Act Section 319 grants are directed to demonstration projects that reduce nonpoint source pollution. Green infrastructure elements of the design options can be eligible for funding through this program. For more information go to www.deq.mt.gov/wqinfo/nonpoint/319GrantInfo.mcpx

EPA's Brownfelds Program works to protect the environment, promote partnerships, strengthen the marketplace, and facilitate sustainable reuse. EPA's brownfields grants and technical assistance give communities and other stakeholders resources to prevent, assess, and clean up properties where the potential presence of a hazardous substance may complicate sustainable reuse. Sites within the project area can be eligible for brownfields grants and technical assistance. Visit www.epa.gov/brownfields for more information.

Green Project Reserve, part of EPA's Clean Water State Revolving Fund, is a program that serves as a water quality financing source that helps communities meet the goals of the Clean Water Act. Nonpoint source pollution control and green infrastructure can be eligible for funding through this program. Refer to www.water.epa.gov/grants_funding/cwsrf/cwsrf_index.cfm or www.water.epa.gov/grants_funding/cwsrf/Green-Project-Reserve.cfm for more information.

EPA office of Water has many grants and funding sources for:

Clean Water projects to improve water quality, renew wastewater, and support local economies.

Section106 Water Pollution Control to establish ongoing water pollution control program.

Targeted Watersheds to encourage community-based approaches to protect and restore watersheds. For more information visit www.water.epa.gov/grants_funding

EPA's Urban Waters Small Grants Program funds research, training, and studies that advance the restoration of urban waters by improving water quality through activities supportive of community revitalization and other local priorities. Grants of $40,000 to $60,000 were awarded in 2014. About 19 percent of recent grants have been given to advancing green infrastructure. Visit www.2.epa.gov/urbanwaters/urban-waters-small-grants-fact-sheet for more information.

Section 108 Loan Guarantee Program under the Housing and Urban Development Department (HUD), the Community Development Block Grant (CDBG) Program, provides financing for a range of development-related projects, including public infrastructure. These loans can act as a catalyst for private development. Go to www.hudexchange.info/section-108 for more information.

MAP-21, Moving Ahead for Progress in the 21st Century, under the U.S. Department of Transportation, Federal Highway Administration, also provides funding for pedestrian, bicycle, street, and transit projects. Visit www.fhwa.dot.gov/map21/factsheets/stp.cfm for more information.

Local Funding and Assistance

Capital Area Regional Planning Commission (CARPC)
The commission is the regional planning and area-wide water quality management planning entity for the Dane County region. The commission prepares and adopts a master plan for the region and maintains an area wide water quality management planning process for the region's water resources. CARPC helps promote local, regional, and federal grants, including EPA grants, HUD grants, and state wide financial assistance and business incentive grants. The commission has useful links on its Grant Opportunities Web page at www.capitalarearpc.org/Grant_Opportunities.html.

Madison Area Transportation Planning Board
The Madison Area Transportation Planning Board is the federally designated metropolitan planning organization for the Madison metropolitan area. The organization coordinates planning and transportation efforts in the region and could fund future planning for the Triangle neighborhood. For more information go to www.madisonareampo.org.

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Smart Growth

GREENING AMERICA'S CAPITALS