FINAL REPORT

EXECUTIVE SUMMARY:

REPORT OF THE SOUTH CAPITOL DISTRICT PLANNING COMMITTEE

DRAFT 3 (Final): August 8, 2014

SOUTH CAPITOL TRANSIT ORIENTED DEVELOPMENT (TOD) DISTRICT PLANNING STUDY

Prepared for:

CITY OF MADISON, WI

Executive Summary Prepared by:

City of Madison, Planning Division and

Kimley-Horn and Associates, Inc. This Executive Summary provides an overview of the evaluation, findings and recommendations found in the South Capitol Transit Oriented Development (TOD) District Planning Study Final Report.

Introduction: Work of the South Capitol District Planning Committee

The City of Madison commenced the South Capitol TOD District Planning Study in the spring of 2013. A consultant team consisting of Kimley-Horn and Associates, Inc., Urban Assets, Potter Lawson, and Ken Saiki Design was engaged to support the process. The study was directed by a Project Management Team (PMT) of City Staff from a variety of City agencies – including the Planning Division, Traffic Engineering, City Engineering, Parks, and Metro Transit.

The South Capitol District Planning Committee provided oversight and policy guidance for the project. The Committee's charge included evaluation of a variety of transit-oriented development and transportation planning initiatives. The Committee's evaluation built upon the adopted City of Madison Downtown Plan recommendations). The planning included site evaluations for an intermodal transit center (ITC). The Committee also evaluated bicycle, pedestrian and roadway facilities in the South Capitol TOD district – including lakeshore bicycle/pedestrian path alternatives, pedestrian crossings of John Nolen Drive (to access Law Park and Lake Monona), intersection improvements (at John Nolen/Williamson, John Nolen/Broom and John Nolen/North Shore) and potential modifications to Wilson Street.

Throughout the planning process, the South Capitol District Planning Committee provided oversight of the study process, and also facilitated the study's citizen and stakeholder participation process. After reviewing the evaluation and recommendations of the consultant team (as detailed in the subsequent chapters of this report), reviewing the relevant issues with City staff, and carefully considering citizen and stakeholder input, the Committee now provides its recommendations to the Mayor and the Common Council on the consultant's report and any follow up actions that may be needed. This Executive Summary will serve as the report of the South Capitol District Planning Committee.

These actions may include:

- Further detailed study and planning for the recommended intermodal transit center site;
- Engineering analysis of a Wilson Street concept plan;
- Implementation of lakeshore bicycle/pedestrian path enhancements;

- Feasibility analysis of the identified bridge concepts (with potential for further evaluation as part of a future Law Park Master Plan process);

- Next steps for implementing key intersection recommendations; and,

- Inclusion of specific recommendations for further analysis in the Sustainable Madison Transportation Master Plan.

Intermodal Transit Center (ITC)

Intermodal Transit Terminal: Challenges/Criteria for Evaluation

Specific ITC sites were evaluated by the Committee using criteria developed by the Committee and the consultant team, with input from the public. Site selection criteria included:

- Location of the site/proximity to intercity transit ridership market
- Accessibility (for transit vehicles, autos, taxi service, bicycles, pedestrians, etc.)
- Size and configuration of site
- Context and urban design considerations
- Cost of the development

- Potential for economic development around the ITC

Intermodal Transit Terminal Recommendations

After a detailed evaluation of three potential sites in the South Capitol District Planning area, the Committee recommends the parcel at the corner of North Bedford and West Mifflin Streets (parcel B) on the West Washington Avenue and North Bedford Street site as the preferred location for the ITC in the South Capitol District planning area (see Figure 1).



Figure 1: West Washington Avenue and North Bedford Street Site Parcels

It is further recommended that the design concept shown in Figure 2 (below) be pursued at this location. This includes a five bus bay terminal with saw-tooth configuration for bus staging, entry from West Mifflin Street and exit onto North Bedford Street, and enhanced pedestrian connections to West Washington Avenue.



Figure 2: Recommended ITC Design Concept

The West Washington Avenue and North Bedford Street location scored highest of all the areas that were evaluated in the South Capitol District planning area. That area was recommended by the Committee primarily for the following reasons:

- Proximity to riders (near the UW-Madison campus), and therefore the willingness of bus services to use ITC site/facility; closeness to former Badger Bus depot (which functioned adequately for a number of years)

- Amenities for passengers in area
- Functionality of bus access, arrival, loading, and departure
- Functionality of passenger arrival, drop-off, and pick-up
- Consistency with the Downtown Plan and economic development goals for the area
- Public/private development partnership opportunity
- General acceptance of the preliminary concept by neighborhood residents

The Committee also recommended that a number of site issues be addressed in further design refinements for the site, including:

- Accessibility to Metro Bus routes
- Traffic and other impacts to surrounding neighborhood
- Connectivity to adjacent sites/user destinations
- Placemaking opportunities
- Future connections to rail corridor

- Accessibility and functionality (to facilities like the Kohl Center)

A rendering of the ITC building and potential streetscape amenities is shown below in Figure 3.



Figure 3: ITC Design Concept Looking South on Bedford Street (ITC on the right)

The Committee urges the City to work toward an ITC development at the North Bedford/West Mifflin site, and feels that this is the best ITC location within sites the South Capitol District planning area. However, should a project not be feasible at this location, the Committee is not opposed to other potential ITC sites outside of the South Capitol District planning area. Should the City decide to consider sites outside of the South Capitol District planning area, the Committee recommends that the site amenities and design issues (such as accessibility to Metro Bus routes, traffic and other impacts to surrounding neighborhood, connectivity to adjacent sites/user destinations, placemaking opportunities, etc.) be considered in future ITC design refinements.

Wilson Street

Wilson Street: Existing Conditions/Challenges and Evaluation of Design Alternatives

Existing conditions along Wilson Street from King Street to Hamilton Street show potential for multimodal and placemaking improvements. As a one-way street with no existing bicycle facilities, Wilson Street is frequently used by bicyclists riding in the street in the direction opposite the one-way motor vehicles or on sidewalks to move in the northeast direction. This creates bicycle-motorized vehicle and bicycle-pedestrian conflicts. In addition, Wilson Street is located on a hill. The corridor runs uphill and downhill such that the elevation generally peaks at Martin Luther King Boulevard. This leads to safety concerns associated with the speed of bicyclists moving downhill and the difficulty of bicyclists moving uphill. Existing sidewalks in the corridor have minimal streetscaping and aesthetic improvements, and the Downtown Plan identifies parcels for redevelopment along Wilson Street.

Motorized vehicles experience access and parking challenges along Wilson Street. Many of the residential towers and office buildings have parking garages that access onto Wilson Street. Many of the commercial buildings, including the Hilton hotel, have no rear loading area so deliveries are made from Wilson Street. Furthermore, there is a desire for on-street parking for commercial patrons and visitors to the residential uses. Lack of signage for all modes within Wilson Street creates problems for wayfinding and proper use of designated facilities.

Prior to developing design concepts for Wilson Street, the following guiding principles were established for the corridor by the consultant team with input from the Project Management Team (PMT) and the Committee:

- Provide bicycle facilities in both directions
- Enhance streetscaping and urban design elements
- Maintain greenspace on curb terraces
- Improve wayfinding with directional signage
- Complement potential redevelopment opportunities

The South Capitol TOD District Planning Study evaluated alternatives to improve the safety, function, and quality of the Wilson Street corridor. Through a public process that engaged members of the South Capitol District Planning Committee, City Staff, and members of the general public, one-way and two-way alternatives, redevelopment opportunities, and various bicycle, pedestrian, wayfinding, and streetscape improvement strategies were proposed and evaluated.

Wilson Street Recommendations

After careful evaluation of numerous alternatives, **the South Capitol District Planning Committee does not unanimously recommend an alternative for the Wilson Street corridor**. The Committee acknowledges the fact that some of the corridor design options help to advance many of the project goals, but that there are significant trade-offs and/or negative impacts associated with them. Members of the public, business owners and area residents are also split on the issue. Please see Chapter 2 for a complete description and evaluation of the Wilson Street concepts.

For example, **many Committee members recommend that Wilson Street remain a one-way facility** and the cross-section be modified to include an eastbound contra-flow bike lane, westbound bike sharrows, and improved streetscaping, with parking preserved on the north side of Wilson Street, as shown in Figure 4 below.

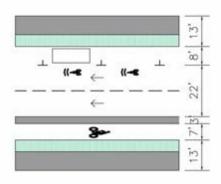


Figure 4: One-Way, Contra-Flow Cycle Track with Sharrow and Parking on One Side

The one-way Wilson Street context plan provides for bicycle travel in both directions (by including the eastbound contraflow bike lane and westbound bike sharrows). The one-way concept also includes a recommendation for improved streetscaping. Parking remains on one side, but a significant trade-off with this concept is the loss of 32 parking spaces and five loading zones on the south side of Wilson Street. Many residents and business owners value parking on both sides of the street and expressed concerns about loading zones (particularly the need to cross the street for some loading activities). The City Parking Utility also places high value on public on-street parking spaces.

Should the one-way concept be pursued, a new detailed parking plan will need to be developed for the north side of the street, in order to accommodate on-street public parking and safe and functional loading zones. City Traffic Engineering staff prefer the one-way option for reasons of traffic circulation, intersection operations, improved pedestrian crossings at intersections, and the ability to accommodate planned future development along the corridor (such as Judge Doyle Square) and the additional parking associated with it.

However, **other members of the Committee strongly prefer a two-way option**, primarily due to the fact that it can also provide for bicycle travel in both directions, but with bicycles traveling with the direction of auto traffic. This option can also provide for improved wayfinding.

The two-way options, however, raised a number of traffic circulation and vehicle loading concerns (along the corridor and at intersections) among Traffic Engineering staff and the consultant team. The two-way options increase the complexity of crossing the street for pedestrians, would necessitate the removal of the existing pedestrian bump-outs at Martin Luther King Jr. Boulevard, and would create a need to reconstruct the Wilson/Hamilton Street intersection. The two-way options also would negatively impact the operation of the entrance/exits to the public parking component of the Judge Doyle Square project (which will house approximately 1,000 parking spaces). In addition, the two-way options have the potential to create the loss of green space on curb terraces and/or on-street parking on one side (depending on which two-way design is selected).

Two of the two-way Wilson Street options are shown below, in Figures 5 and 6.

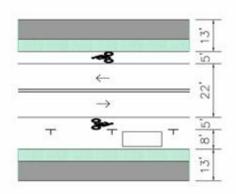


Figure 5: Bike Lanes on Both Sides and Parking on One Side

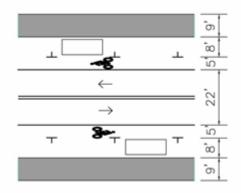


Figure 6: Bike Lanes with Parking on Both Sides and No Green Space

Should either the one-way or two-way Wilson Street options be pursued, the Committee strongly recommends that further refinements of the corridor include improvements to the streetscape and pedestrian environment. Such improvements may include, but are not limited to trees and plantings, enhanced terrace greenspace, street furniture, decorative lighting, and undergrounding of utilities.

West Gateway Intersections

West Gateway Intersections: Existing Conditions/Challenges

The West Gateway intersections are located along John Nolen Drive at North Shore Drive and at Broom Street to the west of Monona Terrace. For bicyclists and pedestrians approaching Downtown Madison on the Capital City Trail from the west, the first at-grade crossing of John Nolen Drive is at North Shore Drive, followed shortly by a crossing that provides more direct access into Downtown at Broom Street. Both intersections experience high levels of motor vehicle traffic and lack wayfinding signage for bicyclists and pedestrians.

- North Shore Drive and John Nolen Drive

At this crossing, limited storage for waiting bicyclists and pedestrians causes spillback into the path. This results in bicycle and pedestrian conflicts on the path. The existing crossing is a two-stage crossing with one small island on the northwest side of John Nolen Drive. This configuration results in pedestrian, bicycle and motor vehicle conflicts as the island is often overcrowded.

- Broom Street and John Nolen Drive

At Broom Street and John Nolen Drive, the existing crossing is a three-stage crossing with two small islands. A small landing area to the south of John Nolen Drive causes bicycle and pedestrian spillback onto the Capital City Trail. This, along with limited storage on islands, creates conflicts between pedestrians and bicyclists as well as motor vehicles. The multiple-stage crossing also results in long crossing times for pedestrians and bicyclists.

West Gateway Intersections: Recommendations

The intersection at North Shore Drive and John Nolen Drive is recommended to be reconfigured with a "super crossing" that provides dedicated directional bicycle lanes and a shared pedestrian lane for crossing John Nolen Drive. It is further recommended that bicycle and pedestrian queuing areas be expanded on both sides of John Nolen Drive and signage be improved to enhance wayfinding and etiquette.

The intersection at Broom Street and John Nolen Drive is recommended to also be reconfigured with a "super crossing" that provides dedicated directional bicycle lanes and a shared pedestrian lane for crossing John Nolen Drive as shown in Figures 7 and 8. Expanded bicycle and pedestrian queuing areas on both sides of John Nolen Drive also are recommended. Proposed improvements include a cycle track connection to Wilson Street from John Nolen Drive (along the east side of Broom Street) and a bicycle lane on the East Side of Broom Street from Wilson Street to Doty Street. Improved signage is recommended to enhance wayfinding and etiquette.



Figure 7: Broom Street and John Nolen Drive Intersection (Looking North from Lake Monona)



Figure 8: North Shore Drive and John Nolen Drive Intersection and Broom Street and John Nolen Drive Intersection (Looking North from Lake Monona)

The West Gateway design concepts shown above in Figure 7 and Figure 8 are recommended to advance for further study and implementation. These recommendations have been made after careful consideration of stakeholder, public and City staff feedback. However, significant design issues and traffic impacts raised by City Traffic Engineering staff will need to be addressed as the concepts are further refined, including:

- Auto traffic impacts of shortening/eliminating the Broom Street left-turn lane and narrowing other lanes
- Auto traffic impacts of queuing associated with left turns from Broom Street onto John Nolen Drive
- Ensuring pedestrian crossing ability in all directions/quadrants of the intersections
- Potential expensive relocation of utilities at North Shore Drive and John Nolen Drive
- Reduction of the turn radius for northbound Broom Street onto Wilson Street
- Reduced auto traffic capacity for southbound right turns from North Shore Drive to John Nolen Drive
- Detailed bicycle traffic circulation along Broom Street north of Wilson Street

East Gateway Intersection

East Gateway Intersection: Existing Conditions/Challenges

The East Gateway intersection is a multi-legged intersection that acts as the convergence point for four roadways - John Nolen Drive, Wilson Street, Blair Street, and Williamson Street. The intersection is complicated by the railroad that runs through the intersection, the driveways that are within the functional area of the intersection, and the Capital City Trail that crosses the east side of the intersection. The East Gateway experiences high levels of motor vehicle, bicycle, and pedestrian traffic and lacks wayfinding signage for bicyclists and pedestrians. Conflict points between the railroad, bicyclists, pedestrians, and motorized vehicles - traveling through the intersection and into driveways - create a variety of issues at the East Gateway intersection.

Due to the complexity of issues at the East Gateway, the consultant team proposed a series of design concepts for the intersection. Concepts were developed at an internal design workshop that took into consideration feedback from City Staff, the South Capitol District Planning Committee, area stakeholders, neighborhood groups and the public. Four preliminary concepts were proposed, presented to the public at the September 2013

Workshop and evaluated by the Committee. These options included a John Nolen Drive tunnel, a roundabout, an elevated "Hovenring" and a Hancock Intersection option. For a variety of reasons (which are fully described in Chapter 3), only the Hancock Intersection option was advanced by the Committee for further study.

The Hancock concept included the creation of a new at-grade intersection at John Nolen Drive and Hancock Street and eliminated the Wilson Street connection to John Nolen Drive, Blair Street, or Williamson Street. Four alternatives of the Hancock intersection that maintained the existing lakeshore were developed, with each including slight variations on vehicular circulation and access, bike/ped crossing treatments and driveway locations. The specific design components of the various Hancock alternatives are described in more detail in Chapter 3.

East Gateway Recommendations

After careful evaluation of numerous alternatives, **the South Capitol District Planning Committee does not unanimously recommended an alternative for the East Gateway intersection**. Members of the public, business owners and area residents have also expressed mixed feelings on the various alternatives. However, the Committee acknowledges the fact that some individual design components from the various options were shown to have some potential to meet the goals of the project, and these are listed below (beginning on page 11).

The East Gateway design concept shown in Figure 9, below, includes some design elements that the Committee recommends for further study potential and implementation. Figure 9 also includes some design elements considered early in the study (marked with an "x") that the Committee does not recommend advancing (as described on page 13, below).

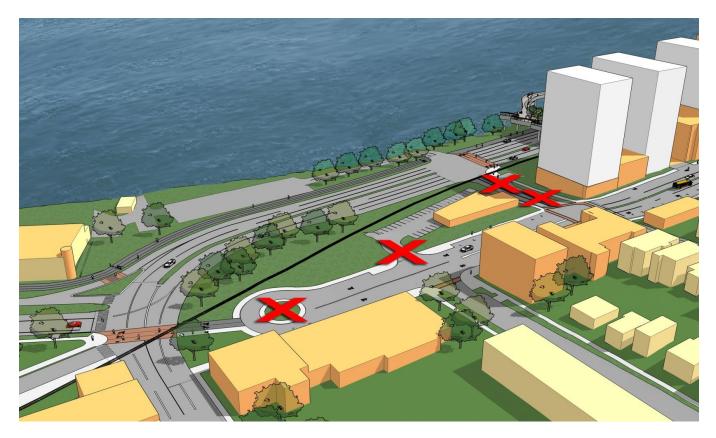


Figure 9: East Gateway Design Concept (Entire Concept NOT Recommended)

The South Capitol District Planning Committee recommends the following individual design elements, included as parts of in the Hancock Intersection alternative, be advanced for further evaluation and refinement:

NORTH SIDE OF INTERSECTION

- Provide a pedestrian/bicycle "super-crossing", with two-way bicycle lanes and separated pedestrian space across John Nolen Drive at Williamson Street. This crossing would connect East Wilson Street with Williamson Street and the railroad corridor bicycle path.

City of Madison Traffic Engineering Division and Planning Division have identified a number of concerns with this concept.

A "super crossing" at this location may require the closure of East Wilson Street behind the Gateway mall property. Future design of such a crossing must consider how this crossing would be accessed by bicyclists and pedestrians. With the "super crossing" concept as currently proposed (with no cul-de-sac, per Committee recommendations), eastbound bicyclists have no safe or efficient way of accessing the proposed crossing. Another potential design issue pertains to federal requirements for "super crossing" while the super crossing is provided a green signal. This requirement will require either 1) the elimination of the Williamson Street eastbound right turn, or 2) changes to the intersection signals (which will increase delay for all users of the intersection – including pedestrians, bicyclists and motorists. Given the severe operational and delay problems this concept would cause, it is not recommended by staff from the City Traffic Engineering Division.

However, if this concept were to be recommended by the Common Council, a change of this scope would require extensive pavement work, as well as extensive underground, track and curb work. If this modification is implemented it should be done in conjunction with a larger intersection reconstruction project.

- Eliminate small segment of Wilson Street in front of Hotel Ruby Marie (to create pedestrian, greenspace and/or "super crossing" landing area (where former street right-of-way existed).

City Traffic Engineering staff believe that the elimination of this segment of Wilson is feasible. A change of this scope would require extensive curb, underground and railroad signal reconstruction work (in order to accommodate required vehicle turning movements). If this modification is implemented it should be done in conjunction with a larger intersection reconstruction project.

- Modify the driveway access (East Wilson Street) to Gateway shopping center off Blair Street; remove the auto parking spaces and create a two-way extension of the Capital City Path to Blair Street, and if possible, to the bike box (located on the east side of the intersection, inbound lanes of Williamson Street).

City Traffic Engineering and Planning Division believe that this modification is feasible, but this concept would have some minor parking impacts to the Gateway property.

MACHINERY ROW AREA

- Relocate access/driveways to Machinery Row across from Hancock Street, or a new driveway location to west.

City Traffic Engineering staff believe that this modification is feasible, but a new signalized intersection (partial) would need to be created to facilitate access to the new driveway. This concept would also have impacts on Law Park and would require extensive street reconstruction and electrical work. If this modification is implemented it should be done in conjunction with a larger intersection reconstruction project.

- Square up the right turn onto Williamson Street off of John Nolen Drive (i.e., eliminate the channelized right turn lane).

City Traffic Engineering staff have indicated that this change would have significant and severe impacts on pedestrians and cyclists crossing between Machinery Row and the Capital City Path. Consider that today this right turning traffic does not move in conflict with any of the N-S ped and bike movements. By eliminating the right turn lane and island, now pedestrians and cyclist are moving together and cross in direct conflict with the heavy right turning motor-vehicle traffic from John Nolen Dr to Williamson St. Severe safety and operational impacts are expected with this concept and not recommended by Staff.

- or, Maintain the channelized right turn onto Williamson Street off of John Nolen Drive, expand/enlarge the adjacent pedestrian island, and provide a raised crosswalk between Machinery Row and the pedestrian island (expanded island provides more space for pedestrian and bicycle queuing).

City Traffic Engineering and Planning Division believe that this recommendation appears feasible, and has been supported by Staff from inception. The channelized right turn lane helps with traffic flow to the east and provides a refuge island for pedestrians. However, due to the extensive pavement, curb, electrical, underground, and railroad track work that would be required, it would best be part of a larger intersection reconstruction project. If this modification is implemented it should be done in conjunction with a larger intersection reconstruction project.

LEFT TURN MOVEMENTS

- Create channelized turn lanes for autos turning left off John Nolen west onto Wilson Street, and autos turning left off Blair Street onto Williamson Street (with appropriate vehicle storage).

This intersection concept was considered by Wisconsin Department of Transportation during the engineering of the former intercity passenger rail project, and has created concerns for City staff. This concept would require the widening of pavement into the railroad corridor. Additional vehicle storage lanes, while beneficial to motorized traffic, increases the width of street that pedestrians and bicyclists must travel, which could make crossing the street even less comfortable for them. A change of this scope would require extensive redesign of the intersection and would require the cooperation of the private railroad operator (Wisconsin and Southern Railroad). If this modification is implemented it should be done in conjunction with a larger intersection reconstruction project.

- or, <u>Eliminate</u> left turns for autos turning left off John Nolen west onto Wilson Street, and autos turning left off Blair Street onto Williamson Street.

- or, <u>Prohibit</u> such left turning movements for autos during peak travel periods (i.e., morning and afternoon commute periods).

City Traffic Engineering staff have indicated that these traffic restrictions are feasible, but may have negative impacts on the business community in the Marquette Neighborhood. These restrictions may also have the potential to divert traffic through the First Settlement Neighborhood (onto East Main Street).

ADDITIONAL EAST GATEWAY RECOMMENDATIONS

- Install additional signage at the East Gateway intersection to improve wayfinding and etiquette.

- Modify traffic signal timing to provide additional time for pedestrian crossing movements; include pedestrian crossing time countdown information at East Gateway traffic signals.

City Traffic Engineering staff have indicated that traffic signal timing modifications may be feasible, but that the amount of time in a signal cycle is finite. In essence, Traffic Engineering staff caution that increased time for one approach in the intersection will mean that there will be increased wait times for bicyclists, pedestrians and motorists at other approaches.

- Should any of these potential East Gateway intersection design modifications be implemented in conjunction with a larger intersection reconstruction project, the Committee recommends that any such plans be formulated in accordance with the goals and recommended actions contained in the Madison Sustainability Plan.

The Committee does NOT, however, support the following individual components of the Hancock Intersection alternative:

- Termination of Wilson Street, creating a cul-de-sac, is NOT supported (this action would disrupt current traffic patterns and transit routes, which would need to reroute through a new Hancock intersection. It also has the potential to create traffic diversions through area neighborhoods).

- New Hancock intersection at John Nolen Drive is NOT supported (there is a steep grade between Wilson Street and John Nolen Drive, and there would likely be vehicle queuing challenges along Wilson Street; also, a new Hancock railroad grade crossing would require railroad coordination and permitting from the State Office of the Commissioner of Railroads; this action would also require boat launch relocation).

- Elimination of the pedestrian crossing on the south side of the intersection is NOT supported (the Committee supports maintaining pedestrian crossings on all legs of the East Gateway intersection).

The South Capitol District Planning Committee feels that design concepts shown in Figure 7 and Figure 8 (for the West Gateway intersections) and some of the design elements shown in Figure 9 (for the East Gateway intersection) can be helpful in advancing project goals. In addition, these recommended improvements are relatively low in cost and lake impact. However, throughout the planning process, the Committee has seen presentations of higher-cost and impact concepts that have the ability to advance project goals more completely (especially improvements to bicycle and pedestrian travel). These alternative concepts are referenced on page 19, below.

Bridge Connections: Existing Conditions/Challenges

Possible bridge connections between Lake Monona and the Downtown Core have been evaluated and referenced in a number of City plans, including the recently-adopted Madison Downtown Plan. Such connections, however, are complicated by a number of design constraints unique to the area. The South Capitol TOD District is home to many natural and built features—Lake Monona, Monona Terrace, and the nearby State Capitol Building—that are celebrated by Madison residents and visitors alike. It is critical that connection concepts respect and enhance these features.

As such, the following key design considerations and constraints were observed in the planning process.

- Viewshed Preservation: The State Capitol Building rests at a topographic high point between Madison's Lake Mendota and Lake Monona, creating hallmark views characteristic of the Capital city. It is important that bridge structures do not obstruct these viewsheds.

- Monona Terrace Aesthetics: Monona Terrace Community and Convention Center is based on a design by renowned architect Frank Lloyd Wright (as originally designed in 1938). It is important that bridge concepts respect and preserve the curvilinear design of the building and ramp slopes complement the structure.

- Narrow Touchdown Area: The area between John Nolen Drive and Lake Monona is as narrow as 10 to 15 feet in some areas, making it difficult to design bridge touchdown areas.

- Vertical Clearance: Bridge concepts need to meet vertical clearance standards of 17 feet 4 inches over roadways and 23 feet over railroads.

- Groundwater Elevation: Law Park and John Nolen Drive are constructed on areas of fill material along Lake Monona. As such, groundwater resides at elevations relatively close to grade, making underground connection structures (tunnels and underpasses) more costly to construct.

Three distinct bridge/connection concepts were evaluated for improving bicycle and pedestrian access between Wilson Street and Law Park:

(1) Simple pedestrian/bike connection (defined as "Narrow Bridge" within this planning study report);

(2) An extension of Law Park with plaza-like features (defined as "Wide/Plaza Bridge" within this planning study report); and,

(3) Urban plaza similar to that of Monona Terrace (defined as "Park/Plaza Structure" within this planning study report; see Figures 16, 17 and 18, on pages 20-21).

A complete description of the alternative bridge connection options developed for the South Capitol District Planning Study is included in Chapter 4.

The simple connection bridge, as shown in Figures 12 and 13, below, was evaluated for potential implementation on the east or west sides of Monona Terrace (or both sides). Although the Committee acknowledges the bicycle and pedestrian connectivity improvements those structures would provide, it does NOT recommend advancing those bridge options for further refinement. The primary reasons for not recommending the simple connection bridges are the impacts to the aesthetic and architectural integrity of Monona Terrace and the significant amount of parkland required for spirals and other structures to touch down in Law Park.



Figure 10: Simple Connection Bridge Concept (NOT Recommended)



Figure 11: Simple Connection Bridge Concept (NOT Recommended)

Bridge Connections Recommendations

The South Capitol District Planning Committee recommends that a plaza bridge concept (as shown in Figures 12 and 13) be further evaluated and refined to provide access to Law Park. Further, the Committee recommends that such an evaluation closely coordinate with redevelopment sites along Wilson Street, as such coordination will be critical to the success of this type of amenity.



Figure 12: Plaza Bridge Concept



Figure 13: Plaza Bridge Concept

It is important to note that the concept plaza bridge images developed by the consultant team provide a sense of what can be designed and constructed to address existing connectivity challenges. However, numerous shape and functional elements of these concepts can be considered, and further refinement and creativity are encouraged for future design phases. As the City moves forward, the Committee recommends that the following detailed design elements be further evaluated and vetted with the public before final design concepts are adopted, designed and constructed:

- Architectural facades and shapes (particularly related to Monona Terrace)

- Screens and railings over John Nolen Drive and the railroad
- Functional lighting elements
- Architectural lighting elements
- Inclusion of stairs in addition to spiral ramps for pedestrians
- Inclusion of enclosed stair tower or elevator for users
- Plaza features (café seating areas, seating walls, interactive elements, seasonal plantings, etc.)
- Inclusion of overlooks
- Snow removal storage locations
- Definition of travel routes for bicyclists and pedestrians to minimize conflicts

In addition, the viability and reasonableness of the plaza bridge concept cost should be considered in light of the potential preclusive effect of that cost on other possible larger-scale subsequent projects – projects that may provide more comprehensive solutions and more thoroughly meet project goals.

The South Capitol District Planning Committee feels that the bridge connection concepts shown in Figures 10, 11 12 and 13 can be helpful in advancing project goals. In addition, these recommended improvements are relatively low in cost and lake impact. However, throughout the planning process, the Committee has seen presentations of higher-cost and impact concepts that have the ability to advance project goals more completely (especially improvements to bicycle/pedestrian travel and enhancement of Law Park). These alternative concepts are referenced on page 19, below.

Paths and Parks

Paths and Parks: Existing Conditions/Challenges

Currently, the Lake Monona/Law Park multi-use path (Capital City Trail) is frequently used by commuters, residents and visitors. This trail experiences periods of heavy use, as well, during special events and other peak-use times. A number of design issues were considered throughout the planning process, in an effort to improve the functionality of the path and improve the experience of those using Law Park. These issues included the following:

- Pedestrian/bicycle conflicts
- Pedestrian/bicycle/fisherman conflicts
- Lack of access to Law Park from Wilson Street and the Downtown core
- Limited path lighting
- Lack of bicycle parking along the path
- Limited access to facilities for waterskiing, rowing, and other groups who use the lake

Paths and Parks Recommendations

It is recommended that separation of modes be pursued for the Capitol City Trail between the East and West Gateway intersections (North Shore and Broom). This includes an exclusive pedestrian path, with possible green space between it and the bicycle path.

The parks and paths design concept shown in Figures 14 and 15 is recommended to advance for further design and implementation. Recommendations for both the near- and long-term horizons have been made, consistent with the design objectives for the South Capitol District paths and parks. Near-term (five years or less) recommendations for this concept include seeking separation of modes between the East and West Gateway intersections.



Figure 14: View of proposed Capital City Trail looking east toward Monona Terrace

It is recommended that the pedestrian path meander along the Lake Monona waterfront and that the bicycle path remain close to John Nolen Drive. If a physical separation of a bicycle and pedestrian path be deemed infeasible, a simple separator concept could be developed and implemented.

The preferred design concept would consist of a pedestrian path and a separate bicycle path. However, the specific widths of the bicycle path and pedestrian path should be carefully refined in future design phases, and designed to widths that integrate appropriately with Law Park (considering future green space needs, tree and lake impacts, and future Law Park uses). A pedestrian path separated from bicyclists, with possible green space, would provide an improved experience for both mode users, and can be achieved through the use of visual or physical separators. Other enhancements to the pedestrian experience, such as park furniture or other seating options, should also be implemented.



Figure 15: View of proposed Capital City Trail looking west.

New signage should be installed to enhance user wayfinding and etiquette along the trails and within Law Park. In addition, a removable pier should be provided for the fishermen at Monona Terrace so that fishermen do not block the pedestrian path, although some Committee members did not agree with this concept. In the longterm, it is recommended that lake edge modifications be further considered to enhance the design concepts. Further evaluation of the existing trees in Law Park should be conducted, in order to determine if there are impacts of the location of the pedestrian trail. Should further evaluation show undesirable tree impacts (or other design problems) for relocating the pedestrian path closer to the water, it is recommended that the simple separator concept be implemented.

Alternatives Design Visions for the Law Park Corridor

Throughout the course of the South Capitol District Planning Committee's work, the Committee has entertained a number of alternative design concepts, as presented by local planners and architects from the Madison area. These ideas have been wide ranging - and have included intermodal transit terminal designs and locations, alternative East and West Gateway intersection improvements, bridge connections of Wilson Street to Lake Monona, as well as grand improvements to Law Park. Furthermore, these concepts have ranged in cost and impacts to the Lake Monona shoreline.

These options include a Law Park Vision proposed by the Madison Downtown Design Professionals (see Figure 16), as well as an idea proposed by Madison architect Kenton Peters called Monona Terrace Concourse (see Figure 17). A third design option, developed by landscape architect and SCTOD project team member Ken Saiki, was also reviewed by the Committee (see Figure 18).



Figure 16: Madison Downtown Design Professionals Law Park Vision



Figure 17: Kenton Peters' Monona Terrace Concourse Concept

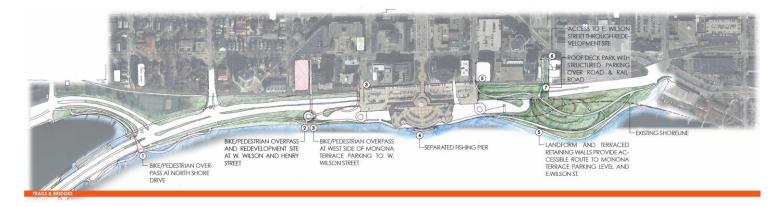


Figure 18: Ken Saiki Law Park Improvement Design

A fourth conceptual option was focused on the West Gateway intersections. This concept, submitted by Ron Shutvet and shown in Figure 19, would create grade-separated bicycle and pedestrian crossings of John Nolen Drive.



Figure 19: Southwestern Law Park Bicycle-Pedestrian Underpass Concept (Ron Shutvet)

The Committee has been intrigued by many of these concepts and their potential ability to advance project goals - particularly the enhancement of Law Park and the potential to improve bicycle and pedestrian travel in the area. However, the Committee has asked the consultant team to focus its conceptual planning efforts on relatively lower-cost options throughout the SCTOD planning area, and those options that do not add fill or require structure into the lake. For example, in the East and West Gateway areas, the Committee has focused primarily on at-grade intersection treatments, and have not advanced grade-separated (i.e., bridge) options.

Although the Committee believes that these options do indeed have merit and can help to advance the goals of the SCTOD project, they also felt that the consultant resources for the planning study would be best utilized developing conceptual options that are lower-impact and have not already been developed by other parties. However, should future refinements of any of the Law Park, East Gateway or West Gateway options be pursued, the Committee recommends that various design elements of these alternative visions be considered (as specific components of those designs).