

John Nolen Drive Corridor Master Plan Collaborative

Note: The original version of this document was created in June 2011. It has been modified and expanded a number of times as new redevelopment projects have been approved and constructed along the John Nolen Drive corridor. This document provides ideas and inspiration to form a collaborative process to create a unified master plan for the entire John Nolen Drive corridor. The City, the County, and the State of Wisconsin must work together in creating a vision for the future of this grand gateway to Madison. They need to get started on this task and the more other entities and the general public are brought in to help with the visioning process the better the outcome could be.

Where to Start

Create a partnership between the City of Madison, Dane County, University of Wisconsin, State of Wisconsin, and the private sector to develop and execute a long range master plan for the entire John Nolen Drive Corridor that enhances the corridor as Madison's premier entrance and multimodal transportation corridor. This partnership would have the overall goal of transforming the John Nolen Drive Corridor into a major multi-modal transportation hub with direct access to a vibrant discovery complex and exhibition grounds co-existing with extensive parklands and conservation areas.

JND-Blair-Wilson-Willy Street Intersection

This intersection is perhaps the most complicated confluence of multiple transportation corridors in the City of Madison. Alternative visions for a long term solution to the transportation conflicts in this area must be studied and a final vision chosen sooner rather than later as there is no simple, low cost solution to these conflicts. The longer we wait, the harder it will become to work around the new development on nearby properties that is being planned now and expected in the future.

The selected vision should grade separate the major ped-bike crossings in the area. Also important would be the creation of additional greenspace in this area. A concept that involves burying some or all of the roadway areas in a tunnel would free up the largest area for potential additional greenspace and parkland. But this idea would be costly and difficult to accomplish so other alternative concepts must be studied before a final plan is chosen. A good number of private parcels of land in this area are underutilized so the vision for this area should try to include concepts that involve the redevelopment of some of those parcels.

Law Park Aquatic Center Concept

- Is a surface parking lot, boat house and marina the best possible land use for this area?
- Should the Frank Lloyd Wright boathouse be built here or design and build a new multi-use structure that incorporates a land bridge and possibly some underground parking in the design? Perhaps both ideas can be combined.
- With proposed land bridges for easy access by foot from nearby parking areas no surface parking areas should be located in this lakeshore park.
- Any buildings here must be designed with multi-use capability.
- Any plan needs to avoid excessive infill of Lake Monona.
- Any marina at this location would need adequate protection from prevailing winds. High waves in windy weather could damage boats and dock structure. A breakwater structure at this location could be damaged by ice in the winter if not properly designed.
- The Machinery Row buildings could somehow be incorporated into a larger public/private partnership on this Lake Monona shoreline area.

Monona Terrace Area

- Investigate the potential to construct a rail station adjacent to or near Monona Terrace to serve as a multi-modal transportation hub for downtown Madison. This station would be designed for future light rail and inter-city rail between Madison and Milwaukee. Identify properties necessary for implementation of this plan and preserve them for future use.
- Ped/bike conflicts will increase here as ped/bike trail use increases in future however, the existing dock line prevents widening of ped/bike corridor. At some point in the future, perhaps timed when the Monona Terrace breakwater needs to be reconstructed due to long term maintenance issues, the ped-bike path can be widened with legislature approval to modify the dock line location.

Law Park and the Causeway

This area needs to become much more ped/bike friendly. Grade separation of ped-bike crossings and greenspace improvements need to be part of the vision for this area. Below are some things to consider. Also, in the appendix of this document is a more detailed description of concepts to create grade separation of the ped-bike paths along the John Nolen Drive Corridor. Look for the

Southwestern Law Park Ped-Bike Underpass Concept in the appendix.

- The ped/bike trail needs to be widened to at least 15 feet wide but preferably 20 feet or more along the entire John Nolen Drive corridor. Along part of the corridor it might be best to separate pedestrians from bikes with lane markings or separate paths. Speed differences between pedestrians, leisure bikers and high speed bikers make this heavily used ped-bike trail dangerous at times. The portion of the ped/bike trail over the causeway currently has pavement in poor condition and needs to be resurfaced in the near future so why not include plans to widen it. A newly rip-rapped shoreline on the causeway would help stabilize the shoreline and create a few more feet of width that would accommodate a wider ped/bike trail. A negligible widening of the causeway for a wider ped/bike trail is necessary to handle the ever increasing traffic of the popular Capital City Trail.

Note: The ped/bike trail along the lakeshore on the UW campus is 18 feet wide.

- The three bridges on the causeway must be modified to widen the ped/bike lanes over the bridges.
- Wherever possible, maintain the shoreline as a rip-rapped lakeshore with a wide grass area between the shoreline rip-rap and the ped/bike trail. all new rip-rap should consist of glacial cobbles and boulders instead of quarried limestone to create a natural looking and esthetically pleasing shoreline between the lake and the ped/bike trail. A small amount of additional infill of Lake Monona may be required in some areas to accommodate a wider ped/bike trail.
- The North Shore ped/bike trail should be grade separated to travel under the railroad tracks and John Nolen Drive to connect to the Capitol City Trail. The railroad tracks would need to be raised approximately 4 feet at the grade separation and gradually slope each way along the right-of-way back to the existing elevation. At Broom Street the rail elevation would be about 3 feet higher than the existing elevation. John Nolen Drive would have to be raised about 7 feet at the grade separation and gradually slope each way back to the existing elevation.
- The switch for the two railroads northeast of Bloom Street should be relocated southwest of Bloom Street so that there is only one set of tracks that crosses Broom Street. The location of the tracks on both railroad right-of-ways will have to be adjusted to maintain an appropriate track curve radius for both rail corridors.

Overview Park (new lakeshore area purchased by Madison in 1996 and currently considered part of Olin Park)

- Restrict landscaping and development so as to preserve and enhance approach view of Isthmus.
- Pedestrian only near lake.
- Any future structures should be built away from lakeshore.
- Protect and restore glacial hill on property as a natural area.

Medical Society Property

- The city should obtain first rights to purchase property and work with State Medical Society to find a suitable alternate location for their offices.
- Initially use existing building as temporary Madison Discovery Center and public lakeshore access point.
- Long term goal to dismantle and recycle existing structure and restore glacial hill contours to original.
- Preserve this property for future public use. This lakeshore area would be suitable for a new multi-function public building with lakeshore access. The new building should be set back from the lake with the restored glacial hill buffering it from the lakeshore. Depending on the design and the size of the building, this lakeshore property could be home to a Madison Visitor Center; a museum; reservable reception space; boat house with canoe and kayak rental, ped/bike trail rest stop with restrooms and food service and much more. The lower levels of the building in the vicinity of the existing Wisconsin Medical Society parking lot could incorporate some or all of the parking needed.

East Lakeside Residential Area (East of John Nolen Drive)

The vision for this isolated small residential area needs to be better defined by the city.

- Preserve the existing residential area and allow the private owners to build whatever the zoning of the area allows in the future?

OR

- Consider alternative concept plans for future use of this area which could include public lakeshore access through the area and perhaps rezone the properties for a public multi-use building with museum/visitor center/recreational rental/food service activities. Relocating Olin Park Beach to this shoreline area would provide a far better beach experience as it would be further from the boat launch area and has a natural sandy bottom that only gradually deepens as you move away from shore. The shoreline in this location can be restored to a sandy beach shoreline for the relocated beach.

The southern shoreline of Devil's Lake was once dotted with many private cabins on land parcels rented from the state with 99 year leases. The city should research how the State of Wisconsin slowly acquired all the many private properties along the south shoreline of Devils Lake and gradually removed all structures and other private property amenities to recreate a public shoreline with only a road and a ped/bike path along the lakeshore in this area. I believe Madison should start a similar process here.

Note: Some thought has already been put into this concept for these privately held lakeshore properties. See Map Note 26 in the adopted Madison Comprehensive Plan 2006....**Map Note 26:** *"Given the natural beauty of this area and its prominent location on Lake Monona, alternative development with park and open space uses should be considered for these lands over the long term. Until a future opportunity arises to convert this area to public park and open space use, the existing office and residential uses are recommended to continue, but the existing uses should not be expanded or the lands redeveloped with more intensive developments."* (Map Notes can be found in Volume 2, Chapter 2, starting on Page 2-157. Map Note #26 is on Page 2-163)

Southern John Nolen Drive Corridor Commercial Property - Future Potential Ideas

- The properties along Sayle Street are underutilized. Redevelop the VFW property with a multi-story apartment/condo/office/retail building on VFW property. Perhaps incorporate VFW in portion of

new building. Relocate Madison Traffic Engineering and build a multi-story apartment/condo/office/retail structure on that parcel. These parcels on Sayle Street could support six to eight story buildings with parking underneath on the lower levels. The water table in this area would limit underground parking to one basement level but the rear portions of the first floor could be devoted to parking. Upper floors of these buildings would have fantastic views of Lake Monona and the city skyline.

- Explore the conversion of the existing newer storage building along Wingra Creek into bicycle/canoe/kayak rental facility and dedicate the surrounding light pole storage yard lands to parkland to enhance the Wingra Creek ped/bike corridor in this area.
- Create a new off road ped/bike corridor starting at Lakeside Street that runs between the rail corridor and Sayle Street which would cross over Wingra Creek and continue through the commercial properties south of Wingra Creek as a new public easement through that area when that area is master planned for future redevelopment. The elevation of Olin Avenue in this vicinity could be raised enough to create an underpass to extend this new ped/bike corridor onto the Alliant Energy Center campus. In conjunction with this new ped/bike corridor, the railroad grade at Wingra Creek could be raised about a foot and the two ped/bike trails on each side of Wingra Creek can be widened as an enhanced underpass to connect to the Capital City Trail and Olin-Turville Park. This widened underpass under the rail corridor and John Nolen Drive would be a better alternative than the land bridge that was proposed over the rail corridor and John Nolen Drive in the Nolen Centennial Project. The land bridge concept would be a tall and imposing mass on the skyline that would adversely affect Olin Turville Park by infringing on the level open space and parking areas in the park along that area of the park on John Nolen Drive.
- In raising the elevation of Olin Avenue to accommodate the proposed ped/bike underpass between the AEC campus and the Wingra Creek ped/bike trail, the redevelopment plans for the properties long the 100 and 200 blocks of East Olin Avenue could include tiered topography in the landscaping that could keep the new ped/bike corridor separated from other vehicle traffic within the redeveloped area leading to two levels of parking beneath the new structures on these properties. Again, the water table in this area would limit underground parking to one basement level but portions of the first and second floors could be devoted to parking. Both the first floors and second floors of the buildings could include retail/restaurant venues as well as other commercial space with pedestrian access from the new ped/bike corridor.
- Develop the flatiron shaped property at 610 John Nolen Drive as multi-purpose public/private structure housing a proposed Madison Discovery Center which could be connected to a multimodal transit station on the adjoining property (660 John Nolen Drive). The Madison Discovery Center would be a visitor center, museum and interactive education center on multiple floors with areas devoted to Madison history, culture, geology, ecology and environmental awareness.
 - Relocate the MMSD sewage pumping station on the property to the northwest corner of the property.
 - Design a multi-story building as high as 10 to 12 floors with parking on lower two levels.
 - A new ped/bike trail traverses third floor roof of structure to cross John Nolen Drive.
 - Top levels of structure would have panoramic views of Madison skyline.
 - Incorporate solar and wind power in mechanical interface of structure.
 - Incorporate a visible rain water collection system with kinetic sculptures at outflows to adjacent wetlands.

Note: Perhaps this was a good idea but implementation has been blocked. The city recently allowed a 4 story 110 room motel to be constructed on this property. Perhaps the property could be put into a much higher use than this in the future.

- Re-purpose the property at 660 John Nolen Drive and incorporate the existing office building into the design of new larger structure that would become a multimodal transit station with offices on the upper floors. This building would also have parking on the lowest two floors.
- Sheridan Hotel could be connected to the proposed transit station and its north parking lot would become a two story parking ramp with office or other uses above a portion of it.
- Make the rear boundary of these properties as/more esthetically attractive than the existing frontage along John Nolen Drive.
- Relocate ped/bike path so it is sited along the railroad corridor on the West side of the tracks. Ped/bike path would be constructed on a slightly elevated terrace with an attractive guardrail to discourage pedestrian crossing of rail corridor. The new ped/bike path would be 15 to 20 feet wide to provide capacity for projected increased use of this ped/bike corridor.
- Bury the electric transmission line along rail corridor.
- Create a design concept that incorporates all the commercial properties south of the Sheridan Hotel into one unified plan with multi-use, multi-story buildings. The lowest two floors of this complex would be parking. The tallest structures would be placed mostly at the southern end of the area next to the beltline where soil conditions are slightly better. If some parts of the structures could be designed with a maximum of 15 to 18 stories, panoramic views of the Madison skyline would be possible on the upper floors. These taller structures along the beltline and John Nolen Drive in this area will help to lower the noise level of traffic on the Turville Bay side of the properties.

Note: Perhaps this was a good idea but implementation has been blocked. The city has recently allowed a 4 story office/residential building to be built at 900 John Nolen Drive. An office building was also allowed to be built at 828 John Nolen Drive. With their proximity to the Alliant Energy Center all the properties in this area could have been incorporated into a grander vision for this area that meshed with a chosen vision for the future of the Alliant Energy Center complex. The Alliant Energy Center has just started its visioning process to create a new master plan for the facility that will attempt to incorporate nearby properties into a larger vision for the future for this area. It is Madison and Dane County's loss that some of the owners these properties have all ready commenced on a vision of their own.

Olin-Turville Park Master Plan

Madison needs to have a new master planning process that seeks to protect the unique glacial landscape and native plant and animal habitats of Olin-Turville Park while improving the capability for more park users to enjoy this popular lakeshore parkland area.

- Create special restrictions to future development in both parks.
- Respect the unique glacial topography in both parks. Restrict additional leveling of the topography and converting vegetated areas to hardscape surfaces.
- Explore concepts for construction of a new multi-use pavilion/shelter with 12 month use capability at the site of the former [Olin Auditorium in Olin Park](#). A round structure that emulates the original historical auditorium's design could be a nice addition to the park. The new structure would fit nicely in the footprint of the old auditorium on the Olin Park hill.
- Designate Turville Park as a special conservation park with heightened protection and restoration of native plant communities.
- Form joint project with the help of Olbrich Gardens, the UW Arboretum and citizen volunteers to transform portions of Turville Park back to an open oak savanna and maintain other areas in the park as special plant habitats that are maintained by citizen volunteers.
- Restore wetland areas in Turville Park between the old Lakeside Street ROW and the railroad corridor.
- Restore wetland area in Olin Park adjacent to Wingra Creek.

Southern John Nolen Corridor Transportation Interface

Automobile

Goal: Utilize the over 6000 parking spaces in this area more effectively by linking them to a multi-modal transportation hub with direct connections to Madison's Isthmus and the University of Wisconsin Campus. This proposed transportation hub would serve to buffer the expected increase in automobile congestion in downtown Madison in the future.

- Reduce footprint of surface parking lots along John Nolen Drive Corridor by Incorporating parking into lower levels of future buildings in this area.
- Study traffic flow along John Nolen corridor and look for ways to improve access to and from parking areas.
- Extend the southern end of the John Nolen Drive access road through a new underpass beneath the beltline to connect it with Nob Hill Road on the south side of the beltline.

Pedestrian/Bike

Goal: Create a more esthetically pleasing ped/bike corridor designed to handle increased ped/bike traffic and connect to all the nearby destinations safely. Use the historic 1911 John Nolen Plan as a concept but design the corridor with the future in mind.

- Construct a new ped/bike path overpass across the railroad and John Nolen Drive connecting properties on both sides of John Nolen Drive with an esthetically pleasing elevated ped/bike crossing. The most ideal location for this crossing would be in the vicinity of 610 - 660 John Nolen Drive
- Relocate Capital City Trail ped/bike path so it is sited along the railroad corridor on the West side of the tracks. The ped/bike path would be 15 to 20 feet wide and constructed on a raised terrace with an attractive chest high fence to discourage pedestrian crossing of rail corridor.
- Create large ped/bike roundabouts at key locations to manage future ped/bike traffic where ped/bike trails meet.
- Transform the Turville Bay area into a boardwalk like ped/bike experience along the rail corridor.
- Create grade separated overpass for the Lake Monona ped/bike path at intersection of Beltline and the railroad corridor to connect with the remainder of the lake loop ped-bike route. This would be advantageous once the rail corridor becomes more heavily used as a transit route connecting Madison with McFarland and Stoughton.
- Limit the number of events that are allowed to use the public ped/bike corridors in this entire area for activities like run/walks and bike races. These events are becoming annoyingly common and impinge on the use of these trails by the general public.

Rail Corridor

Goal: Utilize rail corridor as part of a multi-modal transportation network designed to buffer increasing transportation congestion associated with expected population growth in Madison and Dane County.

- Create rail station near location of proposed Madison Discovery Center. This proposed rail station would be located on the land parcels north of the Sheridan Hotel. The existing triangular building could be incorporated into the design of the rail station complex.
- Create an initial 3 or 4 station triangular rail transit system connecting the John Nolen Drive Corridor with Downtown Madison and the University of Wisconsin.
- Plan for future extension of this rail transit system to McFarland, Middleton, East Madison, and beyond.

Multi-modal Transportation Hub Concept 1

Keep present at grade rail crossing at John Nolen/Olin Avenue intersection.

Construct rail station along existing rail corridor just north of Sheridan Hotel. A ped/bike bridge connects the rail station with the Alliant Energy Center across John Nolen Drive.

See the appendix for more details of this concept.

Multi-modal Transportation Hub Concept 2

Create a grade separated rail crossing at John Nolen/Olin Avenue intersection.

Slightly lower the railroad track elevation and raise John Nolen Drive to go over the rail corridor. Olin Avenue would also be raised to meet JND at this intersection. The entire road intersection would be grade separated from the rail corridor to eliminate existing conflicts at this intersection. This would also allow for a new spur track on the rail corridor that would turn to the west and onto the Alliant Energy Center complex. A rail station would be constructed between the exhibition hall and the coliseum. The new rail corridor would continue west from the new rail station and finally turn to the north as it connects with the other rail corridor to the west of the Alliant Energy Center.

See the appendix for more details of this concept.

Alliant Energy Center

- Create a master plan for this complex that utilizes the property better and ties it with the proposed Madison Discovery Center and rail station.
- Design and build an additional large multi-story discovery complex along John Nolen Drive that is linked to the proposed Madison Discovery Center with an enclosed overpass and to the Coliseum and adjacent parking areas with enclosed walkways. This new building would be the Wisconsin Discovery Center, a new interactive multi-function museum and exhibition space containing both permanent and traveling exhibits.
 - Incorporate solar and wind power in mechanical interface of this new building.
 - Incorporate a visible rain water collection system with kinetic sculptures at outflows to adjacent wetlands.
- Reduce the parking footprint by incorporating parking in lower levels of future buildings.
- Incorporate solar and wind power in all future buildings.
- Design and construct all future buildings with multi-function capabilities built into the design.
- Replace existing animal barns with larger multi-function structures.
Note: Construction of new multi-function pavilions to replace the multiple barns began in Spring 2014 and are now a welcome addition to the AEC Campus.

Privately owned land parcels located south of the Alliant Energy Center along the beltline

Re-purpose most of these properties over time to compliment the Alliant Energy Center complex. All of these properties are suitable for large multi-story buildings, some would have panoramic views of the Madison skyline. Sandstone and limestone bedrock close to the existing ground surface in this area would support tall structures without the need for expensive piles. New structures in this area could contain commercial or retail on lower floors and offices or condos on upper floors. Though it would require extensive removal of bedrock, large parking areas could be constructed in the below ground portions of the structures. The land in most of this area is high above the water table so groundwater would not be a problem.

Willow Island

- Limit the number and size of amplified events allowed each season. Loud events should not be allowed to affect quality of life for nearby residential areas. Strict noise limits must be set and enforced for the Willow Island area as well as the entire AEC campus.

- Better control of noise emanating from area during amplified events. Limit the number of large performance stages that can be used at any event to one large stage. Allow only one amplified performance to occur at any time. Two or more bands playing at one time is annoying even to event participants and is just terrible noise to the residential neighbors surrounding the AEC campus.
- Do not allow construction of a permanent stage or outdoor amphitheater in this location due to the close proximity of residential neighborhoods. This is not a suitable location to try to emulate Milwaukee's Summerfest grounds.

Goodman Pool

Isn't this a nice location for Madison's first pool!

Quann Park

- Landscape park perimeter with tree plantings and prairie plantings.
- Transform portions of the park with prairie plantings.
- Strictly limit how many times a year the dog park can be closed for overflow use by the Alliant Energy Center. Each year the dog park is being closed more often than in past years due to overflow use by AEC. An acceptable upper limit of this use of Quann park by AEC must be established and enforced.

Appendix

Proposed Collaborative Partners

State of Wisconsin

Dane County

City of Madison

UW Arboretum

UW History and Wisconsin Historical Society

UW Geoscience

UW Civil Engineering

UW School of Business

UW Environmental Studies (Nelson Institute for Environmental Studies)

UW Horticulture

UW Botany

UW Zoology

UW Limnology

UW Native American Studies

UW Urban and Regional Planning

Olbrich gardens

Citizen volunteers

City/County/State Businesses and Private Sector Institutions

Urban Planning Firms

Architecture Firms

Engineering Firms

Landscape Architecture Firms

John Nolen Drive Corridor Property Owners

Residents of Residential Neighborhoods along the John Nolen Drive Corridor.

More Details for Concepts mentioned in the Main Document

Multi-modal Transportation Hub Concept 1

Keep present at grade rail crossing at John Nolen/Olin Avenue intersection.

Construct rail station on existing rail corridor just north of Sheridan Hotel. A ped/bike bridge connects the rail station with the Alliant Energy Center across John Nolen Drive. The AEC grounds along John Nolen Drive should become the location for a large multi-use building that could contain a Wisconsin Discovery Center Museum, Madison area visitor center, restaurants, retail, and offices. It would be connected with two level ped/bike bridge over John Nolen Drive to a light rail/commuter rail station on the east side of John Nolen drive just north of the Sheridan Hotel. The lower level of the ped/bike bridge would be enclosed and for pedestrian use only. The upper level would be an open ped/bike crossing over John Nolen Drive that would go over the rail station and ramp down to connect to the Capitol City Trail on the west side of the rail corridor. The Capitol City Trail would be relocated to travel along the west side of the rail corridor behind the Sheridan Hotel and other commercial properties. This would provide a much more esthetically pleasing ped/bike trail that would have nice views of Turville Bay and eliminate the troublesome intersection crossing at John Nolen Drive and Rimrock Road.

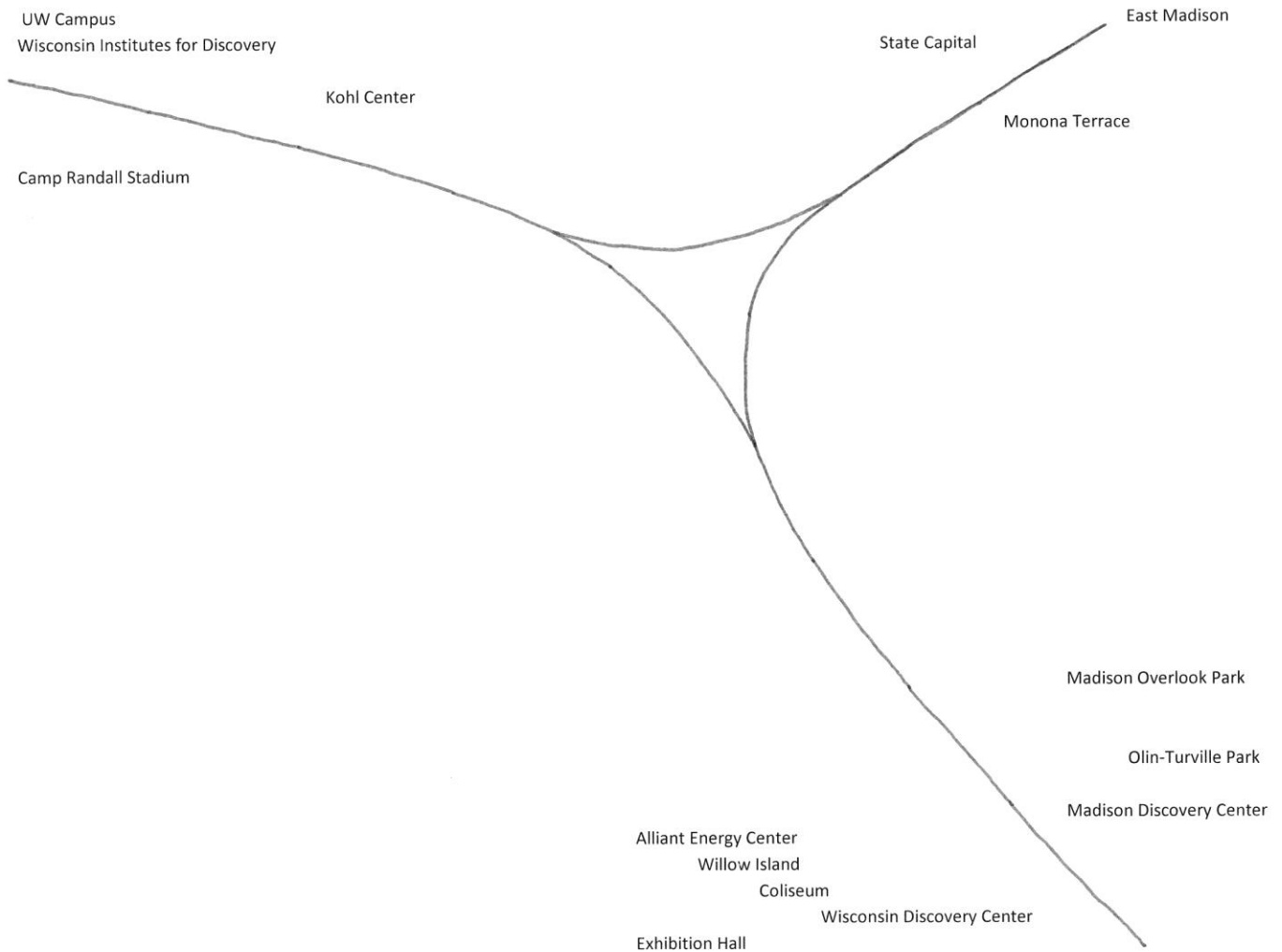
Multi-modal Transportation Hub Concept 2

Create a grade separated rail crossing at John Nolen/Olin Avenue intersection.

Slightly lower the railroad track elevation and raise John Nolen Drive to go over the existing rail corridor. Olin Avenue would also be raised to meet JND at this intersection. Create a spur off the existing railroad track that turns onto the Alliant Energy Center complex between the front parking area and John Nolen Drive and continues to turn to the west passing the AEC electronic sign and then running along the north side of the main entrance road through the center of the AEC complex and then turning to the north to connect with the other railroad corridor. This new rail connection would run level at an elevation just above the water table through most of the AEC grounds until it starts turning north at the west side of the AEC complex. It will then gradually gain elevation to meet the other rail corridor elevation. The front parking area would become a multi-level parking area and the main entrance road would be reconstructed to ramp up further east than it currently does so the automobile traffic can pass over the new rail corridor. At numerous locations there would be land bridges connecting both sides of the AEC complex over the new rail corridor. A multi-modal rail station would be constructed on the AEC complex at the most appropriate location along this new rail corridor depending on the configuration and location of the proposed new structures on the AEC complex.

This concept would eliminate the conflicts associated with the railroad corridor crossing through this busy highway intersection. There are times when a long freight train backs up north bound traffic onto the beltline creating a dangerous situation that often results in multiple rear end collisions. Should the rail corridor become a light rail/commuter corridor, a grade separated crossing would also be beneficial here.

Triangular Rail Corridor Concept



With this initial small triangular rail corridor a single light rail train could repetitively traverse the entire corridor and as ridership grows more trains could be added. With time as the system becomes more popular, it can be expanded south to McFarland; west to Middleton; east to the east town area; and north to the Dane County Airport. Strategically placed side tracks along the corridor could be utilized to lessen conflicts with freight trains that also travel on these rail corridors.

Southwestern Law Park Ped-Bike Underpass Concept

This is a proposed radical redesign of the John Nolen Drive corridor on the southwestern end of Law Park to create ped/bike underpasses to enable the safe and esthetically pleasing crossing of the railroad and highway corridors in this area.

Underpass Concept A

Reconstruct John Nolen Drive in the vicinity of North Shore Drive and Broom Street to allow for a ped/bike underpass to be constructed between the Capital City Trail and the parkland area just west of Broom Street. This would require raising the elevation of the roadway approximately 6 to 7 feet.

Reconstruct both railroad corridors in this area by reconfiguring the trackage so that the two rail corridors meet at a new switch location between North Shore Drive and Broom Street. The publicly owned east-west rail corridor would follow a new railroad right of way just north of North Shore Drive to reconnect with the existing corridor just east of Bedford Street. The Union Pacific track could be moved slightly to the west in this area to allow JND to be shifted slightly away from the existing lakeshore in this area. Both railroads would also be raised approximately 4 feet in elevation to allow for the various ped/bike paths to travel under the tracks as underpasses in this vicinity.

North Shore Drive would also be raised approximately 6 feet in elevation as it approaches to connect with JND. This would allow the North Shore ped/bike path to be relocated as it approaches JND to travel through a new underpass under North Shore Drive. It would continue under the relocated publicly owned railroad tracks and connect to a new ped/bike path along the former publicly owned rail corridor. This new ped/bike path would connect the Cannonball ped/bike path with the Wilson Street ped/bike corridor. Broom Street would be reconstructed approximately 5 feet higher to allow for an underpass where the new ped/bike corridor crosses Broom Street.

The new ped/bike underpass that would connect the Capitol City Trail with the new ped/bike path along the old Union Pacific rail corridor could be constructed as a bridge similar to the East Washington Avenue bridge over the Yahara River. During construction a portion of the fill that was placed in this area years ago to fill in Lake Monona and create JND would be removed to create a small lagoon between the existing Lake Monona shoreline and the original Lake Monona shoreline that existed along the old Chicago and Northwestern Railroad before that railroad corridor was originally constructed in 1864. This railroad corridor became publicly owned by the Wisconsin River Trail Transit Commission in 1980.

The new lagoon would reclaim this filled area of Lake Monona to be part of a state of the art storm water treatment facility for the storm water entering the lake from multiple storm water outflows that exist in the area. The debris and sediment collection areas for the storm water would be designed to be cloaked with landscaping features to make the storm water outflows look more like natural springs and streams. Four or more vertical axis windmills could be constructed along the lakeshore in this vicinity to generate electricity to power a lake water pumping facility that would circulate fresh lake water through the lagoon area. Depending on the amount of wind power available at any time, the fresh lake water would appear as springs at the disguised storm water outflows and, when there is enough wind to power it, a spray fountain in the lagoon that varies in height depending on the power produced by the windmills.

The existing parkland, consisting of a dog park, a basketball court and 4 tennis courts, could be reconfigured to contain some of the same park elements or reconfigured for other uses. The tennis courts and basketball court often sit idle. The dog park is little used during the day Monday through Friday but can become heavily used on weekday evenings and on weekends. In fact, this dog park can become crowded with too many dogs at times and the grass there has a very hard time recovering from this periodic heavy use. In the spring and fall this dog park becomes a mud hole whenever the ground is wet and it is above freezing. Perhaps the area could be reconfigured to create a larger dog park and eliminate or reduce the number of tennis courts.

Benefits of the proposed extensive reconstruction of this transportation corridor

- All ped/bike path crossings would be grade separated from the roads and rail corridors in this area. This would allow the ped/bike traffic to travel unimpeded through the area.

- The new ped/bike path along the old publicly owned rail corridor would connect multiple nearby ped/bike paths to the Wilson Street ped/bike corridor with mostly off road paths and a grade separated crossing of Broom Street.
- Because all the roads in this area would become grade separated from pedestrian and bike traffic the vehicular traffic flow through the area would be greatly improved. The reduced idling times for traffic stopped at the lights would translate into improved air quality in this area.
- The proposed state of the art storm water treatment system would greatly benefit Lake Monona and could become a self guided educational walkway tour area to educate the public on the city's efforts to improve storm water quality.
- The proposed vertical axis wind powered generators would be part of this "Sustainable Future" walkway by showing how the wind can be harnessed to work for us in helping to improve our lake water quality.
- The combining of the two rail corridors and moving the switch area to the west of Broom Street would clean up the present configuration with two sets of tracks crossing Broom Street at the intersection with John Nolen Drive. With only one set of tracks the intersection would be easier to navigate for traffic traveling on Broom Street.



Underpass Concept A

This is the full proposed concept described above.

Alternative Underpass Concept B

This is a scaled down version of the concept reducing the size of the main ped/bike underpass under John Nolen Drive. Both railroad corridors would remain where they are presently located however the Union Pacific rail corridor would be raised in grade to allow for the Ped/bike underpass under both John Nolen Drive and the railroad tracks. The publicly owned railroad corridor would have to be raised slightly but not as much as it would in Option A. The new ped/bike connection in the triangular parkland area would terminate at Broom Street. The storm water treatment system could still be constructed but it would have to run in a smaller channel with the ped/bike underpass. Although this concept would cost less than Option A, the rail corridors would continue to box in the parkland in the area and would make it impossible to create grade separation for a ped/bike path across Broom Street to South Hamilton Street.



Alternative Underpass Concept B

Alternatives to a ped/bike underpass concept

Build ped/bike overpasses for this entire area

This would require multiple bridges that would have to be constructed more than 23 feet over the railroad corridors to achieve the clearance required by Federal Law. At least two large bridges would have to be constructed with very long approaches at each end to gradually transition back to the existing path elevation. A third bridge would be required to achieve ped/bike path separation over Broom Street. However there is no room for a third bridge over Broom Street with the existing publicly owned rail corridor trackage location.

These bridges would block the scenic viewsheds of the Isthmus and Lake Monona for people traveling the corridor and living on properties adjacent to the area. While some may like the views from the perspective of the ped/bike path users, others will be terrified of using the bridges due to their height and due to complications caused by adverse weather conditions including high winds, rain, snow and ice. In other words, bridges would be too scary for some people to use. Therefore, you would still have to provide the at grade crossings at the intersections for people who don't want to use the bridges for whatever reason.

Due to the need to keep these ped/bike paths operational all year long, a large amount of salt would be required during the winter to keep the ramps and bridges safe to use. This salt use would contribute to higher maintenance costs for the bridge structures.

Keep the present at grade situation into the foreseeable future

This would cause the present situation only to get worse. Monies would be spent to maintain a heavily utilized transportation interface in the heart of this city that is liked by no one. Additional development on properties adjacent to this area could keep us from choosing the underpass option in the future.

Other rational for or against the underpass concept

For

Foot powered transportation would for the first time since 1864 be able to access the north shoreline of Lake Monona without having to cross a hazardous railroad and highway corridor at grade.

Against

Ped/bike underpasses are dangerous and people will not use them for fear of being isolated and vulnerable to attack by another person.

For

Madison already has numerous ped/bike underpasses that are heavily used by Madison residents and visitors to the city. There have been no to very few incidences of crime at most of these underpasses. One of the first underpasses to be built was the underpass at Wingra Creek where it travels under John Nolen Drive. This popular ped/bike underpass has been used as part of the route for the bicycle portion of the Ironman Race here in Madison ever since the popular race was first held here. Then there are the underpasses along the new Yahara River Corridor traveling under East Washington Avenue and Johnson Street. Other popular underpasses cross the beltline and Verona Road and the rail corridor near the Kohl Center on the UW Campus. At the end of this document are some links to similar underpasses in Colorado that are well received by the people who live there and use them.

Against

This concept will cost too much.

For

Although a project of this magnitude would be expensive, it would provide a much needed improvement to the quality of life in the heart of Madison. It would help to reconnect downtown Madison with Lake Monona and restore the reasoning behind placing the State Capitol in the Madison area in the first place, the beauty of experiencing the lakes and landscapes that have drawn mankind to this area ever since the last glacier retreated. By comparison, this project would be much less expensive than the proposed massive reconstruction of the Verona Road and Stoughton Road corridors. It would provide a much needed shift from spending most of our transportation tax dollars for the benefit of motorized vehicles to making real improvements to our non-motorized transportation grid.

Against

Attempting to raise the grade of the rail corridors and move the tracks to new alignments would be impossible to do politically and physically.

For

The trackage along these railroad corridors has been altered in the recent and distant past. There was for a time four sets of tracks that traveled along the Law Park area. There were also multiple sets of tracks that were lain across Lake Monona rather than the one set of tracks that travel across the lake now. The multiple tracks were removed as they were no longer needed and the existing single track at Monona Terrace was re-aligned to travel through the area along the best possible route at the time.

There is plenty of room along these rail corridors to raise the grade of the tracks up to 5 feet higher than the present tracks. A grade change of 1% or less can me maintained along the corridor.

Against

Even the higher elevations of 7 feet or less proposed for the road and rail corridors will block the viewsheds in this area.

For

Because most of the private properties facing the lake in the Broom Street area are on land that is at a elevation that is more than 7 feet above the existing corridor elevation the views of the lake from them would be maintained. For travelers in both directions along this corridor and those approaching the area from the southern end of the causeway over Lake Monona, an elevation difference of 7 feet would be barely noticeable and views of the entire city skyline would remain much as they are now. In contrast, a system of ramps and bridges for a ped/bike overpass alternative would completely alter all of the viewsheds in this area no matter which direction you are headed.

Images of some existing ped/bike underpasses in Madison



Wingra Creek ped/bike path at John Nolen Drive



Wingra Creek ped/bike path at John Nolen Drive - Looking South



Wingra Creek ped/bike path at Olin Avenue



Yahara River ped/bike path at East Washington Avenue

For additional historical information about the John Nolen Corridor visit www.olin-turville.org
This website has a timeline of historical events along the John Nolen Drive Corridor as well as links to other websites containing historical data and images of this area.

Below are additional links with information and images of similar ped/bike underpasses that have recently been constructed in Colorado. All of these webpages have multiple pictures of each underpass configuration.

<http://lorisandassociates.com/services/ped-bridges/wonderland-creek-underpass>

<http://lorisandassociates.com/services/ped-bridges/elmers-two-mile-underpass>

<http://lorisandassociates.com/services/ped-bridges/skunk-creek-underpass>

<http://lorisandassociates.com/services/vehicular-bridges/old-wadsworth-bridge>

<http://lorisandassociates.com/services/ped-bridges/van-bibber-underpass>

<http://lorisandassociates.com/services/ped-bridges/u-s-highway-287-underpass>

These conceptual visions for the John Nolen Drive Corridor were created by Ron Shutvet to inspire others to think outside the box and work together to start creating a better long term vision for the future of Madison and Dane County. This revision of the document was created July 28, 2017.