APPENDIX J

City of Madison Coordination

East Washington and Stoughton Road Ratings and Preferences

City of Madison Staff Discussion Points 3/8/23

Note that the following paragraphs are informal comments from a staff review. We have not brought any of these alternatives or our preferences before the mayor's management team. But, we are forwarding them to you in that they may be helpful in your continued alternative development.

| | Staff Informal Rating | |
|-----|--------------------------|--|
| Alt | (1 poor-10 good) | Comment |
| 1 | 4 | Probably bring forward as low build? |
| 2a | No | |
| 2b | 5 | |
| 2c | 3 | |
| 2d | 5 | |
| 2e | No | |
| 2f | 6 | Shows promise. Could a jug handle concept also be explored? |
| 3 | 3.5 | |
| 4 | 2 | |
| 5 | 3.5 | May need to bring one of these forward to display impacts. Staff do not prefer these |
| 6 | 3.5 | alternatives. |
| 7 | 5 | |
| 8 | 6 | Shows promise |
| 9 | 6.5 | Shows promise |

Note that in all of these, the neighborhood plan expresses a desire to maintain a crossing of East Washington of Schmedeman across East Washington – which may or may not be possible based on the grades and alternative

Traditional Intersection Rating 4

- Is the horizontal curve necessary could a deflection be used instead?
- Could a 35 mph or less design speed be used through intersection? Anyone going through the intersection at 45 mph is going too fast. This alignment might encourage that.
- Is the SB triple left needed, NB triple right? WB triple left? The extra time for Ped clearances resulting from extra width may negate benefit.
- Closing MacArthur will be difficult. Could it be right in right out? Hoover (residential) probably is not a reasonable alternative for commercial access.
- Could Rowland Ave remain right in right out?
- Driveways probably don't all need to be closed. They exist now as right in right out without causing operational problems, with little record of crashes (check)
- Are all the channelized rights needed?

2a. Quadrant Intersection Northeast Quadrant 1 No

Prefer this not be moved forward

- 2b. Quadrant Intersection Northeast Quadrant 2 Rating 5
- Could Section AA be a 2-lane local road? Or a 3 lane with 1 NB and 2 SB

- Can MacArthur stay open as Right in Right out
- Relocation of Kleins will be opposed by many
- Do all driveways need to be eliminated?
- 2c. Quadrant Intersection Southeast Quadrant 1 Rating 4
 - Could median on north approach be narrowed?
 - South approach also?
 - Could the intersection have a deflection rather than the horizontal curve?
- 2d. Quadrant Intersection Southeast Quadrant 2 Rating 5
 - Same comments as above
- 2e. Quadrant Intersection Northwest Quadrant Rating 0

No

- 2f. Quadrant Intersection Southwest Quadrant Rating 6
 - Similar comments as above, in narrowing medians.
 - Could the quadrant geometry be modified to be less impactful?
 - Is there value in exploring a traditional jug handle in this quadrant?
- 3. Displaced Left Turn (Continuous Flow) Rating 3.5
 - Could be confusing for ped and bike. Don't want multiphase ped crossings.
 - Is there a more compact way to handle NB to EB and SB to WB slip lanes?
 - Is it possible to pull back the cross walks to reduce length and increase directness (pull stop bars back)?
- 4. Tight Diamond Interchange Rating 2
 - Stoughton Rd probably does not need 3 thru lanes to carry less than 1000 vph if there are no signals.
 - NB ramp terminal seems too big (too many lanes) and SB on-ramp also has too many lanes?
 - Our internal modeling suggest this may not perform well
 - No providing access to Anderson is a significant problem (from East Washington)
 - Driveway closures on East Washington probably not necessary (even the FDM access management policy says more) - otherwise these properties are all relocations, and this becomes a series of vacant blocks.
- 5. Single Point Urban Interchange Rating 3.5
 - Same cons as the diamond option
 - Pedestrian crossing issues
 - The SW quadrant frontage Rd is an overkill and creates land waste
 - Too many lanes NB off and SB off
 - Quite a bit of relocations in NE quadrant

- 6. Diverging Diamond Interchange Rating 3.5
 - Could the number of lanes in the core be reduced? Could through movement be 2 lanes due to efficiency?
 - Can ramp geometry be tucked in a bit tighter to reduce impacts?
- 7. US 151 Overpass with Roundabout Rating 5
 - Ped crossings a problem.
 - Could NB to EB slip lane be removed?
 - Could SB to WB slip lane be removed?
 - Maybe could you explore if all slip lanes be removed? They all add ped crossings
- 8. Grade Separated Roundabout Rating 6
 - East Washington is below
 - This alternative seems less impactful
 - Ped bike crossings need to be thought through. Could they be improved?
 - Can slip ramps be removed? They all create additional ped crossings
- 9. Grade Separated SquareAbout Rating 6.5
 - Interesting concept, somewhat like a couplet.
 - Peds only have to deal with turning movement volumes instead of mainline volumes which is good
 - Something similar in Turkey https://goo.gl/maps/2pggWNN6GJ1fupMY6
 - Investigate if only 2 lanes needed in the squareabout since volumes are so low.
 - Would be interesting to see the traffic modeling for this.
 - Can slip lanes be removed?
 - Maybe investigate if all the right turns happen below? That could significantly reduce ped crossing conflicts
 - Investigate using only 1 NB lane on SE corner and remove one NBLT lane between the signals between SE and NE signals.



Office of the Mayor

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July 28, 2023

Dan Schave Jeff Berens WisDOT SW Region 2101 Wright St Madison WI 53704

Re: WisDOT North Stoughton Road Preliminary Concepts

Attached please find staff comments and recommendations regarding alternatives the North Stoughton Road project. They have been endorsed by Madison's Transportation Commission. I support these recommendations and want to highlight the importance of key objectives for the City, which include:

- The southern portion of this project is not on the periphery, but within the heart of the
 city crossing one of Madison's most important corridors. It is critical that improvements
 be human scaled and designed in ways that do not divide our community further.
- Madison has recently implemented Transit Oriented Development overlay zoning on East Washington Ave. in an effort to spur dense, active, and urban land uses that decrease VMT and create places people want to be. East Washington Ave has seen considerable redevelopment, with the section near Stoughton Rd poised for future investment. It is important that the Stoughton Road project support this transition rather than hinder it.
- Existing and future land uses along East Washington Ave will support community
 members without access to motor vehicles, as well as those who chose to use active
 transportation options. It is imperative that all intersection concepts be designed to
 support users of all ages and abilities. A young student, a mobility challenged person, or
 a visually disabled person should all be able to comfortably navigate intersections safely.
 Everyone should experience the 151/51 intersection as a place that is not just safe but
 also desirable to navigate.

July 28, 2023 Page 2

Overall, the City wants to prioritize creating vibrant places that are welcoming to and created for people (as opposed to vehicles). The design of this project will have a very significant impact on our efforts to do so, and I sincerely hope that impact will be positive, although the current alternatives would generally be negative or at best neutral. East Washington Ave. is one of the most important transportation and economic corridors in our city. I hope you can improve the design options available before advancing this project, as it is imperative that we build future infrastructure in a way that supports housing and economic development, rather than in a way that devastates and divides businesses and neighborhoods.

We look forward to continuing our partnership with the Department.

Sincerely,

Satya Rhodes-Conway

Mayor

Madison, Wisconsin

Cc: Secretary Craig Thompson

Department of Transportation



Thomas Lynch, PE, PTOE, PTP, AICP, Director of Transportation

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July 21, 2023, Revised July 28, 2023

Subject: Staff Comments on North Stoughton Rd Design Alternatives, version 3. With Transportation

Commission Comments

Background

The Wisconsin Department of Transportation (WisDOT) is performing a corridor study of North Stoughton Road, from

Highway 30 north to the US 51 interchange with I-39/90/94. WisDOT plans to release an environmental document in the spring of 2024, with the project appearing before the State's Transportation Projects Commission for enumeration (funding) in late 2024.

Stoughton Road is very highway oriented, and is one of the most hazardous streets in Madison. It is fully within the jurisdiction of WisDOT, and does not have connecting highway status. Conversely, East Washington Ave. which connects with Stoughton Rd, has shared jurisdiction and is of vital interest to the City. Madison has implemented Transit Oriented Development overlay zoning on top of East Washington Ave. in an effort to spur dense, active, and urban land uses that decrease VMT and create places people want to be. East Washington Ave has seen considerable redevelopment, with the section near Stoughton Rd poised for future investment. It is important that the Stoughton Road project support this transition rather than hinder it.

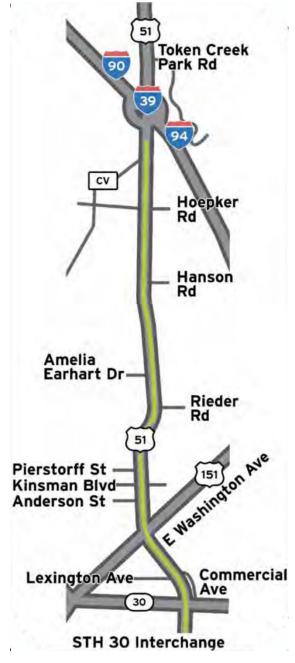
Consequently, the Stoughton Road project presents both opportunities and risks for the City. The following bullets provide general goals for intersections along the corridor.

General Intersection Comments (North to South)

Hoepker Rd – Hoepker Road provides access to businesses in this area and is a key route between Madison's northside and Madison's northeast side/Sun Prairie, and may be the site of a future interchange with I-39/90/94. Consequently, alternatives with full access to all movements on Stoughton Road are recommended.

Hanson Rd – Hanson Road provides access to businesses in the City's Center for Industry & Commerce, is as a primary entrance to the American Center. Metro Transit's satellite facility is also on Hanson Rd, and will be used to house electric BRT buses. Therefore, staff recommends intersection alternatives that preserve all movements.

Amelia Earhart Dr – Amelia Earhart Dr is used as a primary entrance to commercial air functions. The preservation of all intersection movements is recommended.



Rieder Road – Rieder Rd is already access restricted, with the Westbound to Southbound movement prohibited. Staff recommends preservation of all remaining movements.

Pierstorff St, Kinsman Blvd, and Anderson St – These streets all serve the Madison College area. At least one of the Pierstorff and Kinsman Blvd intersections should maintain all movements. Anderson St is used by Bus Rapid Transit to cross to Mendota St. Without this cross access, BRT would need to be rerouted. Preservation of this movement is critical. Staff encourage interaction with Madison College and the Air National Guard regarding their access needs.

East Washington Ave – This intersection is very important to the future urban nature of East Washington Ave, and is addressed in the Hawthorne Truax Plan. Staff recommendations regarding the alternatives are discussed in more detail within this memo.

Lexington Ave – This intersection provides an important entrance to discount shopping, a neighborhood, and several city facilities. It also discussed in more detail within this memo.

Highway 30 Interchange – This existing interchange is the beginning of an expressway section of US 51 that spans south of the project through the Milwaukee St and Cottage Grove Rd interchanges. The interchange functions reasonably well and staff are unsure if further improvements are needed.

East Washington Ave Intersection

Stoughton Road is a highway and it would require considerable disinvestment, such as removal of the Milwaukee St and Cottage Grove Road interchanges, to make it a street. While north-south bicycle and pedestrian access is important, it is not as important as the need for pedestrian and bicycle access in the east-west direction. Conversely, East Washington Ave is a street with driveways and side streets directly adjacent to the Stoughton Road intersection. It is important that the "street" characteristic of East Washington Ave be preserved in concepts and alternatives. If extra mobility is provided to address capacity considerations, it should be provided in the north south direction. It is also acknowledged that while Stoughton Road is a highway, the adjacent at-grade intersections of Lexington Ave and Anderson Street will pose problems with safety and speed.

WisDOT will have their "design vehicle" for all of these concepts. Madison views the vulnerable user as the "design vehicle" for how appropriate each concept is in this context. Those traveling via motor vehicle typically have much shorter trip duration as those traveling by transit or other modes. They also have the added protection of their vehicle when in a crash. It is important for the visually impaired, children on bicycles, those with mobility challenges be able to safely navigate the intersection with a minimum of delay.

The Hawthorne Truax Plan provides goals for the Stoughton Road/East Washington Ave intersection. They include the following:

- 3. Work with Wisconsin DOT to ensure the future form of the Hwy 51 corridor aligns with the City's vision for transportation and land use. The design should address the following concerns:
 - Utilize post-pandemic travel forecasts to avoid over-building and adding excess capacity.
 - The design should be a human-scaled <u>urban connection that minimizes pedestrian crossing distances</u> and motor vehicle speeds.
 - Ensure the intersection designs are <u>comfortable</u>, <u>safe and convenient for bikes and pedestrians</u>. Particular needs are at East Washington Avenue, Lexington Avenue, and Anderson Street.
 - The design should <u>not further divide communities</u> and should maintain a strong visual connection across the
 corridor. If grade separation is needed, East Washington Avenue should remain at its current elevation and Hwy
 51 should be sunk below.
 - Maintain local street connections and property access from East Washington. If the design removes access from
 Hwy 51 for properties between East Washington Avenue and Anderson/Mendota Streets, add a local street
 between Mendota Street and East Washington Avenue to facilitate redevelopment on a connected street network.
 - The design should <u>support existing and future redevelopment</u> by limiting right-of-way expansion. If additional right-of-way is needed, the City should work with the WisDOT to acquire surplus parcel remnants and facilitate redevelopment through a request for proposal process.

As mentioned previously, the City of Madison has implemented a Transit Oriented Design Overlay along East Washington Ave. in an effort to focus dense mixed use developments along the East Washington Ave corridor. Redevelopment along the East Washington corridor has already considerably augmented both housing and employment opportunities. This portion of East Washington Ave is poised for redevelopment and alternative concepts should not preclude future opportunities.

WisDOT has developed numerous concepts for this intersection.

The following questions were developed to evaluate the concepts based on the Hawthorne Truax Plan:

- 1. Does the concept provide a human scaled urban connection?
- 2. Does the concept provide an urban connection that provides comfortable, safe, and convenient pedestrian bicycle connections? This includes:
 - a. Minimize pedestrian crossing distances.
 - b. Provide direct, easy to follow pedestrian paths
 - c. Provide direct, easy to follow bicycle paths.
- 3. Does the concept minimize the loss of street access on East Washington Ave?
- 4. Does the concept minimize the loss of business and residential access?
- 5. Does the concept minimize relocations of important neighborhood businesses/destinations? Does it foster active land uses along East Washington Ave?

Concept 1

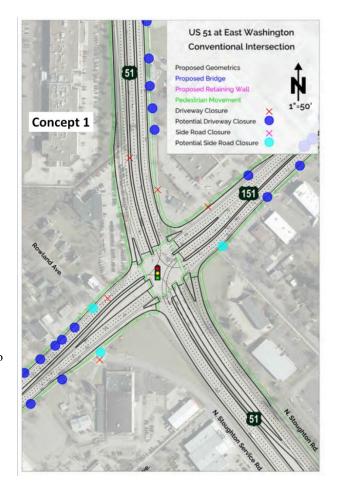
Concept 1 is the only at-grade conventional intersection that uses signals. It expands the intersection, mostly by adding channelization and islands. The lane configurations remain similar to what exists today. Regarding satisfying City objectives:

1. Provide a human scale intersection?

The existing Stoughton Rd and East Washington Ave intersection is poor with long crossing distances for pedestrians and bicycles. The proposed concept is similar to what exists with similar numbers of lanes. While poor, Concept 1's at-grade crossing is perhaps better and more urban than many of the concepts that have been presented.

- 2. Provide a safe comfortable urban intersection?
 - a. Minimize pedestrian crossing distances.
 - b. Provide direct pedestrian paths
 - c. Provide direct bicycle paths.

This concept has relatively straight forward pedestrian and bicycle paths. Crossing distances are slightly longer due to increased island size. With the high volumes on both East Washington Ave and Stoughton Rd, it is important that pedestrians are able to cross each approach in a single phase, without having to use an island as a refuge. We encourage WisDOT to reconsider the need for the SBRT and EBRT slip lanes at East Washington & Stoughton Road. These slip lanes add complexity and delay to the pedestrian crossing.



We also encourage WisDOT to maintain some type of access between the North Stoughton Service Road and East Washington Ave.

3. Minimize the loss of street access?

The concept has up to three potential side road closures due to policy reasons. Because this access loss is policy rather than a geometric necessity, and these side road access have existed for decades as right-in/right-out driveways, staff recommend that these accesses be preserved.

4. Does the concept minimize the loss of business and residential access?

US 51 at East Washington

This concept has numerous <u>potential</u> access removals, again for policy reasons rather than geometric. The loss of these access points would result in numerous relocations and require that land remain vacant for lack of access. As with street access, staff recommend that these accesses be preserved as right-in/right-out.

5. Does the alternative minimize relocations of important neighborhood businesses/destinations? Does it foster active land uses?

As mentioned, if potential access closures occur it would result in numerous relocations. Staff recommend these accesses be preserved. This would allow both preservation of uses and future redevelopment in most quadrants of the intersection.

Concept 2

Concept 2 creates a <u>quadrant intersection</u>, where left turns at the East Washington Ave and Stoughton Rd are relocated to adjacent intersections about 500 feet from the main intersection. This increases the capacity of the intersection without requiring a grade separation. The adjacent graphic illustrates left turn movements that reduce the number of signal phases that need to occur. Sometimes there are non-compliance issues with the left turn prohibition. An example of a quadrant interchange exists in <u>Huntersville North Carolina</u>.

1. Provide a human scale intersection?

This concept, while adding one intersection to East Washington, reduces the size of the Stoughton Road/East Washington Ave intersection and keeps all movements at one level.

- 2. Provide a safe comfortable urban intersection?
 - a. Minimize pedestrian crossing distances.
 - b. Provide direct pedestrian paths
 - c. Provide direct bicycle paths.

This concept has relatively straightforward pedestrian and bicycle paths. Crossing distances could be shorter due to reduced number of lanes that need to be crossed. We would encourage WisDOT to narrow the very large median islands that increase crossing distances and clearance times. While another intersection is added, the signal timing for both intersections would be more straightforward with fewer turning phases. As mentioned previously, with the high volumes on both East Washington Ave and Stoughton Rd, it is important that pedestrians are able to cross each approach in a single phase, without having to use an island as a refuge.

3. Minimize the loss of street access?

The concept has up to two potential side road closures due to

policy reasons, and a realignment of the North Stoughton Rd Service Road. Because this access loss is policy rather than a geometric necessity, and these side road access have existed for decades as right-in/right-out driveways, staff recommend that these accesses be preserved. Staff also recommend access be allow on Prairie Ave, so that parcel would be available for redevelopment.





4. Does the concept minimize the loss of business and residential access?

This concept has numerous <u>potential</u> access removals, again for policy reasons rather than geometric. As with the previous alternative, staff recommend that these accesses be preserved as right-in/right-out as they have currently existed for decades. It is important for access to be preserved on Prairie Ave so that land parcels on both sides are able to host active land uses.

5. Does the alternative minimize relocations of important neighborhood businesses/destinations? Does it foster active land uses?

As mentioned, if potential access closures occur it would result in numerous relocations. Staff recommend these accesses be preserved as right-in right-out. It is likely portions of the shopping mall in the southwest quadrant could be relocated. It is important that this parcel maintain active uses through the preservation of some type of access. Because this intersection type does not have grade differentials that mandate access closure, there may be more opportunity for active land uses adjacent to the corridor.

Concept 3

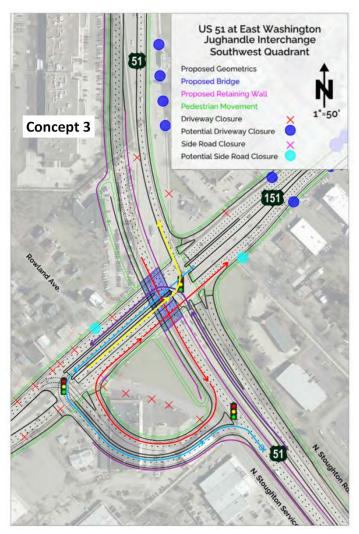
Concept 3 creates an eschelon (or partial jughandle) intersection where the southbound through movement is elevated and removed from the intersection. The intersection of Junction Road with Mineral Point Road (shown) is a good example of an eschelon intersection in the Madison area.

1. Provide a human scale intersection?

While grade separating one movement, this jughandle still incorporates signals in the northbound, southbound, eastbound and westbound directions. It adds intersection capacity without introducing a freeway interchange. This helps preserve urban speeds, and probably would not encourage speeding between up and downstream signalized intersections.

- 2. Provide a safe comfortable urban intersection?
 - a. Minimize pedestrian crossing distances.
 - b. Provide direct pedestrian paths
 - c. Provide direct bicycle paths.

This concept reduces the number of lanes a pedestrian has to cross in the east-west direction by half, and eliminates many of the conflicting left turns from the signal timing. East-West pedestrian and bicycle routing is straightforward and direct. Extra efforts





are needed to provide pedestrian/bicycle connectivity in the north-south direction on the west side of the intersection. This includes, but is not limited to a signalized crossing on the west side of the jug handle intersection with East Washington. This was accomplished at Junction Rd/Mineral Point Rd through a spiraled path grade separation. The City of Madison recommends improving bike connectivity from neighborhoods south of East Washington to destinations and the Madison bike network north of East Washington.

3. Minimize the loss of street access?

The concept has up to two potential side road closures due to policy reasons. Again, staff recommends maintaining these sideroad access points as right-in/right-out.

4. Does the concept minimize the loss of business and residential access?

This concept has numerous confirmed access removals. Some of these access removals are necessary due to grade changes, and the southwest quadrant ramp construction. Madison requests WisDOT re-evaluate the listed access removals in the westbound East Washington direction to see if all are necessary. These confirmed access removals would create a strip of relocations, and the ensuing vacant undevelopable land, that is not beneficial.

5. Does the alternative minimize relocations of important neighborhood businesses/destinations? Does it foster active land uses.

The access closures in the northeast quadrant would relocate Walgreens, an important area business. Since the grade separated lanes are in the southbound direction, there should be no additional grade challenges with providing access to Walgreens. Measures should be taken to preserve this access and business. Similarly, westbound East Washington Ave would have all accesses removed – resulting in a strip of relocations and corresponding vacant undevelopable land. Yet, there appears to be no great profile differential on East Washington Ave that would mandate these access closures. Staff recommend these accesses be preserved as right-in right-out to the extent possible. The southwest quandrant would be relocated, and there are no alternatives to this relocation. Yet, with the preservation of access, the northeast and southeast quadrants could remain active land uses. The southbound horizontal curve is designed so that it could relocate 3571 Stoughton Road. This building should be preserved.

US 51 at East Washington Single Point Urban Interchange

(US 151 Over)

Proposed Geometrics Proposed Bridge

Driveway Closure

Side Road Closure

Potential Driveway Closu

Potential Side Road Cl

Concept 4

Concept 4 creates a Single Point Urban Interchange (SPUI) where all ramp movements are bent to a single intersection, rather than two intersections as is typical with a traditional diamond interchange. With this alternative, the through movements run north south on US 51 – the dominant direction, and East Washington Ave experiences signal controlled ramp terminal intersection. The east approach has a grade separated pedestrian/bike crossing traveling northsouth. The Madison area has a SPUI at the Verona Road/Beltline interchange, shown in the adjacent figure. Madison has had challenges with interchanges followed with at-grade or signalized intersections, such as with Aberg Ave and Schlemgen. This alternative would create a similar situation with Stoughton Road and the East Washington Ave interchange and the Anderson St signalized intersection.

1. Provide a Human Scale Intersection?

This concept is one of the more impactful concepts. It constructs a freeway interchange between two signalized intersections, which will likely create speeding problems in the urban street section to the north. Examples of where isolated interchanges pose similar challenges exist at Aberg and the at-grade intersections north of this interchange.

- Provide a safe comfortable urban intersection?
 - Minimize pedestrian crossing distances.
 - Provide direct pedestrian paths
 - Provide direct bicycle paths.

This concept technically reduces the number of lanes a pedestrian has to cross in the east-west direction, but there are multiple islands a pedestrian would have to travel through. Single Point Interchanges are very poor for crossings in the grade separated direction because there are no traffic gaps in the turning or through movements. Consequently, this movement must be handled through a

grade separated



Concept 4

pedestrian crossing. At the Verona Road Interchange, this is handled with a tunnel on the south approach. At the US 51/East Washington interchange, pedestrian crossing would be accommodated on the east approach through a spiraled ramp. No accommodations would be provided on the west approach. There is concern that some pedestrians would cross at-grade in the north-south direction to avoid the indirection of the pedestrian bridge on the east approach, and the total lack of north-south pedestrian accommodations on the west approach. Madison has had poor compliance/usage of the pedestrian bridge similar to this proposal crossing East Washington Ave at Marquette

St.

Pedestrian crossings in the East – West direction would be broken into 4 separate crossings which would add substantial signal delay to the pedestrian crossing. Vulnerable users, such as the visually challenged or young bike riders, would have difficulty traveling through the interchange. The pedestrian crossings of some slip lanes shown may pose a hazard as people crossing on foot often disobey pedestrian signals when the crossing distance is short and delay high.

3. Minimize the loss of street access?

The concept has up to two potential side road closures due to policy reasons. Again, staff recommends maintaining these sideroad access points as right-in/right-out.

4. Does the concept minimize the loss of business and residential access?

This concept has numerous confirmed access removals. Some of these access removals are necessary due to grade changes associated with the ramps. It is likely most entities in the northeast quadrant (Walgreens) would need relocation. Additionally, most businesses on the east side of Stoughton Rd and north of East Washington would lose access and be relocations.

For East Washington, Madison requests WisDOT evaluate the potential access removals in the westbound East Washington direction to see if all are necessary. If realized, these access removals would create a strip of relocations, and the ensuing vacant undevelopable land, that is not beneficial.

6. Does the alternative minimize relocations of important neighborhood businesses/destinations? Does it foster active land uses?

Unavoidable access closures in the northeast quadrant would relocate Walgreens, an important area business, and businesses north of Walgreens. Similarly, westbound East Washington Ave would likely have accesses removed because of their proximity to a freeway ramp terminal. This would result in a strip of relocations and corresponding vacant undevelopable land. Staff recommend these accesses be preserved as right-in right-out to the extent possible.

Note: If WisDOT feels that some type of interchange alternative must be brought forward, an alternative to the Single Point Urban Interchange could be a tight diamond interchange with north-south being the dominant direction. Staff had previously provided negative comments to WisDOT regarding a tight diamond, but a tight diamond decreases complexity with pedestrian and bicycle routing.

US 51 at East Washington

151 Overpass with Roundabout

Proposed Geometrics

Proposed Retaining Wal

Potential Driveway Closure

Potential Side Road Clos

Proposed Bridge

Pedestrian Moven Driveway Closure

Side Road Closure

Concept 5

Concept 5 creates a somewhat unconventional grade separated roundabout where East Washington travels over Stoughton Road. An example of this exists, with the grade separation reversed, in Lathan New York. A similar example also exists in the Madison area near the Verona Road frontage roads, although this roundabout carries less traffic without a through movement. The dominant direct is east-west (rather than north-south), which introduces a freeway treatment in an urban freeway. While an intriguing design, this concept functions essentially as a tight diamond interchange with roundabout terminals.

1. Provide a Human Scale Intersection?

This concept is also one of the more impactful concepts. It constructs a somewhat unconventional interchange with the east-west direction being the dominant direction. The interchange is placed between two signalized intersections on East Washington Ave. This introduces a freeway treatment between two urban intersections. This could encourage speeding between signals on East Washington.

- 2. Provide a safe comfortable urban intersection?
 - a. Minimize pedestrian crossing distances.
 - b. Provide direct pedestrian paths
 - c. Provide direct bicycle paths.

Concept 5 has pedestrians and cyclists cross the

intersection at the depressed roundabout level. Pedestrian crossings at roundabouts tend to be indirect, and the roundabout bypass lanes in the intersection accentuate this challenge. North-south crossings would have fewer vehicles and more traffic gaps to cross. East-west pedestrians would have to cross larger traffic volumes without the aid of a traffic signal. Bicycle traffic would have very indirect routing through the interchange unless they chose to take a lane. Because of the bypass lanes, a cyclist would likely need to stop and wait 4 times to travel east-west through the roundabout.

Madison requests WisDOT reconsider the need for slip lanes for the EBRT,



Functionally Concept 5 would operate in a similar manner to the County N interchange in Cottage Grove

SBRT, and WBRT directions. Some may be needed for truck turning radii, but the extent that they can be reduced or eliminated would reduce speeds.

CONCEPTUAL

Concept 5

3. Minimize the loss of street access?

The concept has three confirmed and unavoidable access street closures

4. Does the concept minimize the loss of business and residential access?

This concept has numerous confirmed access removals. Some of these access removals are necessary due to grade changes associated with the ramps. It is likely most entities in the northeast quadrant (Walgreens) would need relocation. Additionally, most properties west of Stoughton Rd and north of East Washington



The grade separated roundabout on the Verona Rd frontage roads provides a similar facility, with much lower traffic volumes

would lose access and be relocations.

For East Washington, Madison requests WisDOT evaluate the potential access removals in the westbound East Washington direction to see if all are necessary. If realized, these access removals would create a strip of relocations, and the ensuing vacant undevelopable land, that is not beneficial.

5. Does the alternative minimize relocations of important neighborhood businesses/destinations? Does it foster active land uses?

Unavoidable access closures in the northeast quadrant would relocate Walgreens, an important area business, and businesses north of Walgreens. Similarly, westbound East Washington Ave would likely have accesses removed because of their proximity to a freeway ramp terminal. This would result in a strip of relocations and corresponding vacant undevelopable land. Staff recommend these accesses be preserved as right-in right-out to the extent possible.

Concept 6

Concept 6 creates an unconventional grade separated roundabout where all turning movements are brought to the top and served with a roundabout, while the East Washington Ave and Stoughton Rd through movements are served with a signalized intersection at a lower level. There is no dominant movement, both Stoughton Road and East Washington Ave would have to travel through a signalized intersection. This is a very creative design, however staff could not find a comparable intersection/interchange anywhere. The signalized intersection may contradict driver expectation since the connection looks like an interchange, yet there are signals for the through movements. Drivers on either East Washington Ave or Stoughton Road would see the off-ramps for the interchange and assume they have uninhibited through right of way through the interchange, when in reality they are subject to a signal. This unconventional design could lead to more crashes.

1. Provide a Human Scale Intersection?

This concept is also one of the more impactful concepts. It constructs a grade separated intersection between two signalized intersections on East Washington Ave. The signal for through movements would be unexpected, yet would be consistent with up and down stream signals on both East Washington and Stoughton Road.

- 2. Provide a safe comfortable urban intersection?
 - a. Minimize pedestrian crossing distances.
 - b. Provide direct pedestrian paths
 - c. Provide direct bicycle paths.

Concept 6 has pedestrians and cyclists cross the intersection at the raised roundabout level. Pedestrian crossings at roundabouts tend to be indirect, and the roundabout bypass lanes in the intersection accentuate this challenge. Because all through movements are removed and depressed, crossing travel volumes for pedestrians and cyclists are much more manageable.

Bicycle traffic would have very indirect routing through the interchange unless they chose to take a lane. Because

of the bypass lanes, a cyclist would likely need to stop and wait 4 times to travel east-west through the roundabout.

3. Minimize the loss of street access?

The concept has three confirmed and unavoidable access street closures. Some type of connection (not shown) would be needed for the Stoughton Rd frontage road.

4. Does the concept minimize the loss of business and residential access?

This concept has numerous confirmed access removals. Some of these access removals are necessary due to grade changes associated with the ramps. It is likely most entities in the northeast quadrant (Walgreens) and northwest quadrant (residences) would need relocation. Additionally, most businesses on the east side of Stoughton Rd and north of East Washington would lose access and be relocations.

If realized, these access removals would create a strip of relocations, and the ensuing vacant undevelopable land, that is not beneficial.

6. Does the alternative minimize relocations of important neighborhood businesses/destinations? Does it foster active land uses?

Unavoidable access closures in the northeast quadrant would relocate Walgreens and businesses north of Walgreens. Similarly, westbound East Washington Ave would likely have accesses removed because of their proximity to a freeway ramp terminal. This would result in a strip of relocations and corresponding vacant undevelopable land. Staff recommend these accesses be preserved as right-in right-out to the extent possible. Grade changes and ramps would prevent access in almost all quadrants, relocating many businesses and preventing new development.

Concept 7

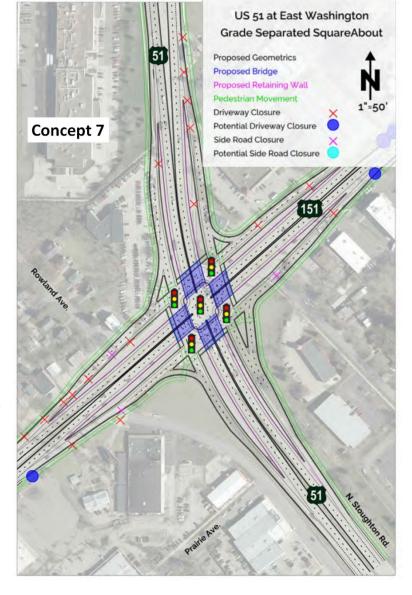
Concept 7 is very similar to Concept 6 in that it takes all turning movements out of the intersection and raises them. Instead of using a roundabout for the turning movements, it uses a tightly spaced couplet with short-cycle signals. Preliminary modeling by Madison staff indicate this couplet would work. An example of this surface couplet concept can be seen at in Turkey, without the grade separated movements. Other examples can be seen at this link.

The benefits and impacts of this concept are very similar to Concept 6, except the signalized intersections for turning movements would provide simpler and more direct routes for pedestrians and bicycles. As mentioned with Concept 6, the signalized intersection for through movements could be unexpected for what appears to be an interchange and lead to more crashes.

1. Provide a Human Scale Intersection?

This concept is also one of the more impactful concepts. It constructs a grade separated intersection between two signalized intersections on East Washington Ave. As mentioned, the signal for through movements would be unexpected, yet would be consistent with up and down stream signals on both East Washington and Stoughton Road.

- 2. Provide a safe comfortable urban intersection?
 - a. Minimize pedestrian crossing distances.
 - b. Provide direct pedestrian paths
 - c. Provide direct bicycle paths.



Concept 7 has pedestrians and cyclists cross the intersection at the raised mini couplet level. The crossings are direct and straight forward, and the short-cycle signal timing would not create a lot of delay. Generally pedestrian crossing with this concept are better than those for Concept 6.

Because all through movements are removed and depressed, crossing travel volumes for pedestrians and cyclists are much more manageable.

3. Minimize the loss of street access?

The concept has three confirmed and unavoidable access street closures. Some type of connection (not shown) would be needed for the Stoughton Rd frontage road.

4. Does the concept minimize the loss of business and residential access?

This concept has numerous confirmed access removals. Many of these access removals are necessary due to grade changes associated with the ramps. It is likely most entities in the northeast quadrant (Walgreens) and northwest quadrant (residences) would need relocation. Additionally, most businesses on the east side of Stoughton Rd and north of East Washington would lose access and be relocations.

If realized, these access removals would create a strip of relocations, and the ensuing vacant undevelopable land, that is not beneficial.

5. Does the alternative minimize relocations of important neighborhood businesses/destinations? Does it foster active land uses?

Unavoidable access closures in the northeast quadrant would relocate Walgreens and businesses north of Walgreens. Similarly, westbound East Washington Ave would likely have accesses removed because of their proximity to a freeway ramp terminal. This would result in a strip of relocations and corresponding vacant undevelopable land. Staff recommend these accesses be preserved as right-in right-out to the extent possible. Grade changes and ramps would prevent access in almost all quadrants, relocating many businesses and preventing new development.

| Concept | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|----------------|----------|-----------------|------|------------------------------------|--|--|
| | At-grade | Quadrant | Jughandle SW | SPUI | Grade Sep Roundabout EW over | Grade Sep Roundabout Turning mymts over | Grade Sep Square Turning mvmts over |
| Human Scale | | | | | | | |
| Intersection? | | | | | | | |
| Comfortable, Safe, C | Convenient Ped | /Bike | | | | | |
| Crossing distances | | | | | | | |
| • Directness | | | | | | | |
| Crossing Volumes | | | | | | | |
| Maintain local street connections | | | | | | | |
| Support existing and future redevelopment | | | | | | | |
| Minimize loss of business access | | | | | | | |
| Minimize relocations | | | | | | | |
| Lower vehicle speeds | | | | | | | |
| Driver Expectation Safety | | | | | | | |
| Further Investigation? | Yes | Yes | Yes | | | | Possibly |

Staff Recommendation of Stoughton Rd/East Washington Ave Concepts Warranting Further Study

Finding acceptable alternatives is challenging. Stoughton Road has expressway characteristics that put the road between a freeway and a highway. Conversely, East Washington Ave is an urban street and should be maintain this character, with direct and straightforward pedestrian and bicycle connections.

As mentioned, Madison is focusing efforts on East Washington to create greater densities, more transit oriented development, and more supporting uses. Just one block away a large housing development being constructed, and more will follow. A human scale East Washington Ave is imperative.

If WisDOT requires the investigation of some type of intersection expansion, staff recommend the following intersections be considered for further study.

Investigation Recommended

Maintaining existing conditions, or even reducing approach width, should be a consideration within the alternatives. Some of the I-39/90/94 alternatives remove up to 30,000 vpd from the East Washington Ave intersection. With a significant volume reduction such as this, a standard at-grade intersection could be sufficient. If WisDOT modeled this

intersection with the I-39/90/94 Alt 5 diverted forecast volumes, a smaller intersection could be sufficient.

Concept 1 - At Grade Intersection. While crossing distances are long, this is one of the few intersections that does not involve a grade separation and provides appropriate scale. Crossings are straight forward in all four quadrants

Concept 2 – Quadrant Intersection – Also a creative intersection design that does not require a grade separation. While introducing another intersection, the actual crossing distance at East Washington Ave/Stoughton Rd is reduced. And pedestrian conflicts with left turn conflicts are removed. Non-compliance with left turn prohibitions could be a problem.

Concept 3 – Jug Handle Intersection. Initially this concept seems impactful. Yet on further evaluation, most pedestrian crossings are short, direct, with less conflicting traffic volume. Impacts are constrained primarily to one quadrant. And both East Washington Ave and Stoughton Rd maintain one signal through the intersection – helping to keep speeds moderate. All pedestrian crossings are straightforward. Staff do recommend a north-south crosswalk be included at the west ramp of the jug-handle to accommodate pedestrian/bicycle movements not using the grade separated

Neutral

Concept 7 – Grade Separated Square-about. This concept has a few advantages, including straight forward and short pedestrian crossing distances and reduced conflicting traffic volumes. However there are also drawbacks. The signal for through movements on both Stoughton Road and East Washington Ave is unconventional for what otherwise would look like a traditional interchange. Drivers on either East Washington Ave or Stoughton Road would see the off-ramps for the interchange and assume they have uninhibited through right of way through the interchange, when in reality they are subject to a signal. This could increase crashes. Additionally, it is unclear how cyclists would be routed through the ramp areas on each approach. Ramps associated with the concept would eliminate access in all four quadrants – limiting active land uses.

Dismissal Recommendation

Drawbacks of the other concepts that led to non-recommendation to bring forward include the following:

Concept 4 – Single Point Urban Interchange – This interchange is impactful as it introduces a freeway interchange. The Single Point Urban Interchange design has poor east-west pedestrian/bike routing and challenging north-south pedestrian/bike routing. It poses some of the greatest challenges to the vulnerable user of all the concepts being considered. A visually challenged, or school age student, would have substantial difficulty navigating the interchange. In its current form it is not all ages and abilities.

Concept 5 – Grade Separated Roundabout Interchange – This interchange is also impactful as it introduces a freeway interchange, with full access removals along the ramps. The roundabout configuration would be particularly challenging for pedestrians and cyclists in the east-west direction, in that they would have to cross over 60,000 vpd of Stoughton Rd volumes waiting for traffic gaps within the roundabout.

Concept 6 – Grade Separated Roundabout for Turning Movements – This interchange has the same drawbacks as Concept 7 with the unconventional signal for through movements on East Washington and Stoughton Road. Yet it also has the challenges and indirection that roundabouts pose for pedestrians and cyclists. Access closures required by the ramps would also limit active land uses in all four quadrants.

Lexington/Commercial Stoughton Road Intersection

This intersection is directly adjacent to the signalized Highway 30 ramps and a crossing of a WSOR rail line that would be used for future passenger rail if implemented. Amtrak has indicated that a grade separation of the WSOR line would be advantageous.

Pre 1990 this intersection was grade separated, but a reconstruction in the 1990s converted it to an at-grade intersection. Neighborhoods lie to the west of the intersection, while Walmart, a small neighborhood, and city services such as yard waste drop off lie to the east.

WisDOT has developed four concepts for this intersection.

Concept 1- maintains the current at-grade intersection. It realigns the west Stoughton Road Frontage Road intersection to provide slightly more vehicle storage. Concept 1 also provides pedestrian accommodations through the intersection.

The realignment of the North Stoughton Service road provides very modest throat distance improvements for the impacts generated. Staff recommend revising this portion of the alternative.



Concept 2 – creates a jug-handle in the northwest and southeast quadrants, with traffic accessing Lexington and Commercial Ave through right-in/right-out entrances on both north and southbound Stoughton Rd. Traffic crossing Stoughton Road is handled by a street traveling under Stoughton Road and adjacent to the WSOR railway. Pedestrians and cyclist would cross Stoughton Rd via this street connection. This provides a better and less stressful bicycle and pedestrian crossing than what currently exists. Concept 2 grade separates Stoughton Road from a possible future passenger rail line.

Concept 3 creates a jug-handle in the northwest and northeast quadrants. Traffic would access Lexington and Commercial Ave via a signalized intersection north of the current crossings. Traffic from Lexington to Commercial Ave would travel on a street connection under Stoughton Rd and adjacent to the WSOR railway. Pedestrians and cyclists would cross Stoughton Rd via this street connection. This provides a better and less stressful bicycle and pedestrian crossing than what currently exists. Concept 3 grade separates Stoughton Road from a possible future passenger rail line.





Concept 4 constructs a partial cloverleaf interchange in the northwest and northeast quadrants. Traffic would access Stoughton Road through freeflowing ramps. Lexington Ave would access Commercial Ave through a street connection under Stoughton Road. Pedestrians and cyclists would also travel across Stoughton Road on this connecting street. Stoughton Road would be grade separated over a potential future passenger rail line with a separate bridge.

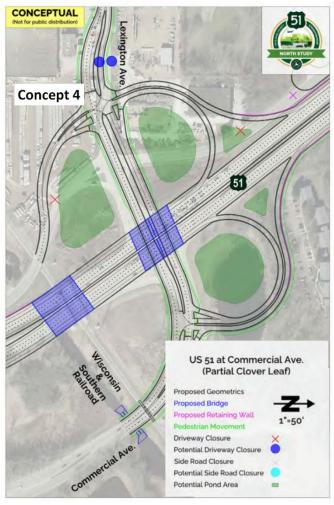
Staff Recommendations

Concept 4 places a freeflowing interchange ramps just 0.3 miles from the signalized Highway 30 ramp terminals, and 0.4 miles the signalized East Washington Ave intersection. The freeflowing ramps are contrary to the intersection control both up and down stream and could lead to higher speeds and more severe crashes. Concept 4 also requires two bridges and has greater right of way impacts. Therefore Concept 4 is not recommended.

Concepts 2 and 3 both provide a grade separated WSOR crossing, and therefore could provide benefits if passenger rail is brought to the Madison area. These alternatives also provide a less stressful crossing for pedestrians and cyclists. Staff have no strong preference between concepts.

General Bicycle and Pedestrian Staff Comments

Generally, all intersections should comply with "All Ages and Abilities" criteria. As mentioned, protecting and accommodating the vulnerable user is a community value.



Other opportunities staff previously asked that WisDOT consider include:

- 1. Is there an opportunity to install a grade separated ped/bike crossing of Stoughton Road south of Highway 30, that would connect the Marsh Shared Use path with the Autumn Ridge Trail?
- 2. Since there is already a grade separation at Highway 30, could a north-south shared use path be installed on the west side of Stoughton Rd that connects the Marsh Path with Commercial Ave/N Stoughton Road Service Road.
- 3. Could space be reallocated along Commercial Ave/N Stoughton Road Service Road to provide a protected pedestrian/bicycle facility running north south on the west side of Stoughton Road.
- 4. Better, safer crossing of Lexington Ave/Commercial Ave is necessary, along with protected facilities to Walmart/Nakoosa Trail. This request/consideration seems to be included in the concepts WisDOT provided.
- 5. Is there a way to connect Mac Arthur Road area with Commercial Ave to provide access to Walmart?
- 6. A protected shared use path along Stoughton Road on the east side from East Washington Ave all the way to Anderson/County CV (north of Hoepker) could provide substantial value. We recognize that Dane County Airport has expressed reservations regarding constructing a multi-use path within Runway Protection Zones (RPZ) on Stoughton Rd. Staff question why providing travel accommodations for 15,000 motor vehicles per day is considered a compatible land use, yet providing travel accommodations for 300 to 500 bicycles per day is considered an incompatible land use in the RPZ. This seems inconsistent on US DOT's recent focus on climate and active transportation.
- 7. While perhaps this is part of the Interstate project, a pedestrian overpass of I-94 at Anderson Road (south of Token Creek Park) would provide connectivity to Token Creek Park and Sun Prairie.

8. Generally lower posted speeds on Stoughton Rd at any location that has an at-grade crossing used by pedestrians.

Comments from Madison's Transportation Commission¹

The following bullets summarize and paraphrase comments made by Madison's Transportation Commission at their meeting on July 26, 2023

East Washington Ave./Stoughton Rd Intersection

- The concepts appear to address motor vehicle objectives first, and then address pedestrian and bicycle deficiencies second. Could an alternative be developed that switches the priority? This would entail analyzing an alternative that reduces the number of lanes on each intersection approach.
- Commission members generally favored Concepts 1, 2 and 3, and are less interested in grade separated alternatives.
- Commission members wanted to preserve driveway access to limit the resulting relocations and ensuing vacant parcels.
- One commission member stated that there were environmental justice populations in the northwest quadrant that need to access services/retail in the northeast quadrant. Therefore, it is important to improve the pedestrian crossing on the north approach, and not cause it to get worse.
- One attending Alder stated that the north-south crossing on the east approach was important for the Mayfair
 Park neighborhood (southeast quadrant) as they access businesses as well as the new Imagination Center on the
 north side and northeast quadrant of East Washington Ave.

Lexington/Commercial/Stoughton Rd Intersection

- Improving the pedestrian crossing of Stoughton Rd needs to be addressed.
- Commission members generally favored Concept 2.
- Commission members did not support Concept 4 as it builds a higher speed connection to Stoughton Road.

¹ Appointed by the Mayor and confirmed by the council. See MGO 33.56

Department of Transportation



Thomas Lynch, PE, PTOE, PTP, AICP, Director of Transportation

Madison Municipal Building 215 Martin Luther King Jr Blvd Suite 109 P.O. Box 2986 Madison, Wisconsin 53701-2986

Phone: (608) 266-4761 Fax: (608) 267-1158

January 18, 2024

Subject: WisDOT

North Stoughton Road Project City of Madison Staff Comments

The paragraphs below reflect the views of City of Madison staff regarding the elimination of alternatives for the North Stoughton Road project.

At East Washington Ave - City staff are OK with the elimination of Quadrant intersection from further evaluation.

All East Washington Ave alternatives – generally staff are not in agreement with the access removals. We understand the need to eliminate access where geometry/grades prevent an access from remaining. However, we disagree with access points being removed solely for WisDOT policy reasons. Many of these access points have functioned satisfactorily for decades as right in/right out and could continue to do so in the future with these alternatives. When an access is removed, not only does it usually result in a relocation - but it also usually prevents redevelopment of the parcel. It forces assemblage of properties as a prerequisite for redevelopment. The parcels in the quadrants of this intersection are near transit and could support a considerable amount of housing and other development. They have high value in meeting our housing goals and it would be extremely unfortunate if they became undevelopable vacant parcels.

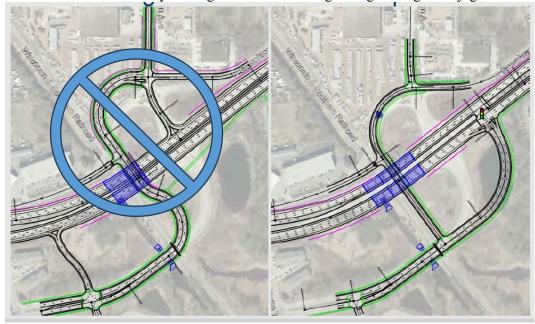


| | Driveway Closures (Definite) | Driveway Closure (Likely) | Driveway Closure (Potential, but unlikely) | Total (All Driveway Categories) | Side Road Closures | Relocations |
|---|---------------------------------|------------------------------|---|------------------------------------|--------------------|-------------|
| Conventional Intersection | 14 | 5 | 9 | 28 | 0 | 9 |
| Quadrant Intersection (SW quadrant) | 27 | 6 | 8 | 41 | 3.5 | 19 |
| Jug Handle (SW quadrant) | 24 | 2 | 8 | 34 | 3 | 15 |
| Tight Diamond Interchange | 23 | 4 | 5 | 32 | 3 | 20 |

At Highway 30, City staff agree with elimination of tunnel addressing NB weave onto west bound Hwy 30. We have felt this was a rather drastic measure for a common problem.



At Commercial Ave - City staff agree with eliminating the right in/right out jug handle from consideration.



At Hanson Road, City staff are OK with removing the SB restricted access alternative from consideration.



Dan Schrum

From: Berens, Jeff - DOT <Jeff.Berens@dot.wi.gov>

Sent: Thursday, February 29, 2024 9:57 AM **To:** Dan Schrum; zfreeman@kapurinc.com

Cc: Howe, Michelle - DOT; Bennett, Nicholas; Joel Brown

Subject: FW: East Washington Ave/Stoughton Rd Diamond Interchange dismissal

FYI

From: Lynch, Thomas <TLynch@cityofmadison.com>

Sent: Thursday, February 29, 2024 9:52 AM **To:** Berens, Jeff - DOT <Jeff.Berens@dot.wi.gov>

Cc: Tao, Yang <YTao@cityofmadison.com>; Petykowski, Christopher <CPetykowski@cityofmadison.com>; Wolfe, James <JWolfe@cityofmadison.com>; Lynch,

Thomas <TLynch@cityofmadison.com>; Sanon, Reuben A <RSanon@cityofmadison.com>

Subject: East Washington Ave/Stoughton Rd Diamond Interchange dismissal

CAUTION: This email originated from outside the organization.

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Hello Jeff,

The City of Madison agrees with the dismissal of the East Washington Ave/Stoughton Road diamond interchange alterna ve. The right of way impacts of the diamond interchange alterna ve are considerable. Installing a diamond interchange at this loca on also creates an inconsistent facility. Since a full freeway conversion is not being pursued, the Anderson St signalized intersec on would be within 0.1 miles of the nb ramp gore, the Commercial Ave signalized intersec on would be within 0.3 miles of the sb ramp gore, and the Highway 30 signalized intersec on would be within 0.6 miles of the sb ramp gore. This mixing of access types would be confusing and make it difficult to maintain urban speeds at the adjacent signalized intersec ons.

Thank you for the opportunity to comment.

Tom



Tom Lynch PE PTOE PTP AICP (he/his)

Director of Transportation City of Madison Madison Municipal Bldg Suite 109 215 MLK Blvd. Madison, 53703 608 266 6546 office, 608 320 6161 cell

Department of Transportation



Thomas Lynch, PE, PTOE, PTP, AICP, Director of Transportation

Madison Municipal Building 215 Martin Luther King Jr Blvd Suite 109 P.O. Box 2986 Madison, Wisconsin 53701-2986

Phone: (608) 266-4761 Fax: (608) 267-1158

March 29, 2024

Jeff Berens

WisDOT SW Region 101 Wright Street Madison WI 53704

Subject: Preferred Alternative

North Stoughton Road Project

Jeff,

We appreciate the opportunity to be involved in the design development for the North Stoughton Road project. Your team has provided a great deal of openness and an unprecedented level of transparency. We understand that WisDOT is about to select a preferred alternative, and we would like to provide our comments to your team for consideration.

General

- Speed Madison believes speeds greater than 45 mph should be reserved for a fully access controlled facility. Angle crashes at high-speed signal-controlled intersections have much greater probability of severe injury or death. Since a fully access controlled facility is not proposed and would be difficult to achieve, the facility should migrate towards an urban roadway with corridor speeds generally between 35 to 45 mph, with the lower speed limit strongly preferred. 1 Note that speed is unrelated to capacity and both low and high-speed arterials can carry similar amounts of traffic.
- Consistency To the extent possible, Stoughton Road should maintain a facility type for the longest stretch possible. Changing between urban roadway, expressway, freeway, back to expressway or urban roadway leads to confusion and fosters inconsistent speeds and driver behavior. Because of the closely spaced side roads on the northern portion of the corridor,



Figure 1 Corridor Access Spacing

¹ FHWA Principles of Intersection Safety lists three factors to manage intersection crash severity: conflict points, vehicle speed, and collision angle. Reducing corridor speeds addresses one of these factors.

- it is perhaps least suited for freeway types of access treatments. (Fig 1)
- Infrastructure scale Generally, providing access and mobility with less pavement is favored.

Individual Intersections

East Washington and Stoughton Road

For the remaining alternatives, Madison prefers the at-grade intersection alternative over the jug-handle intersection alternative. While providing better ped/bike crossing, the jug-handle only removes 15 to 20 percent of the traffic from the intersection yet requires over 20 driveway closures and 11 relocations. The impacts are large and permanently preclude investment/development of almost 10 acres of land.



Figure 2 Stoughton Road/East Washington Alternatives

Madison requests that the driveway closures be reduced to the extent possible. These driveways have operated as right-in/right-out for decades with little effect on injury crashes. We believe maintaining these driveways does not pose a significant safety risk and will prevent at least 5 relocations.

Stoughton Road and Commercial Ave

Staff support the partial jug handle over the existing conditions alternative. It provides a local road connection across Stoughton Road with an "All Ages and Abilities" crossing for bicycles and pedestrians. The jug handle restores the grade separated crossing of the railroad that existed prior to 1990, aiding in the restoration of passenger rail. If restored, the grade separation would eliminate crossing exposure and substantially decrease crossing risk. Discussions with Amtrak representatives also indicate that they strongly prefer an alternative that includes a grade separation of the railroad.

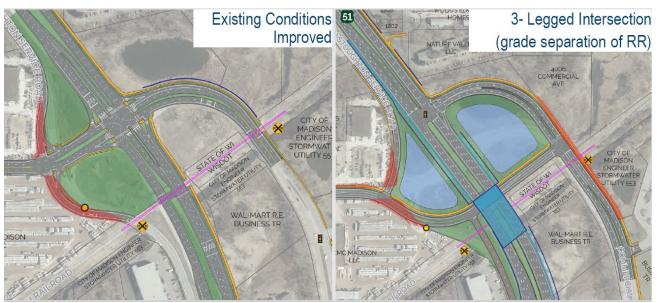


Figure 3 Commercial Avenue Alternatives

Stoughton Road and Highway 30

Madison prefers the conventional diamond interchange over the diverging diamond interchange. While north-south pedestrian/bicycle volumes are not anticipated to be large, the crossings of a diverging diamond are not "All Ages and Abilities". The diverging diamond requires pedestrians and cyclist to cross and walk along the median of the roadway through the interchange. Consequently, the contextual

clues used by the visually impaired do not exist. Also crossing to and walking/biking in the unprotected median would be challenging for younger users. The conventional diamond does not decrease operations significantly and we believe provides a more intuitive and safer facility for vulnerable users.

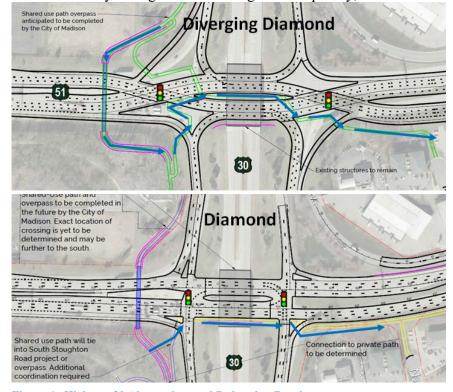


Figure 4 Highway 30 Alternatives and Pedestrian Routing

Thank you for allowing the City of Madison to participate in the project development of North Stoughton Road. We hope you will give our comments and preferences strong consideration as you select a Preferred Alternative.

Sincerely,

Thomas W. Lynch PE PTOE PTP AICP

Director of Transportation, City of Madison

cc:

 $Dan\ Schave-WisDOT\ SW\ Region\ Director$

Satya Rhodes-Conway – Madison Mayor

Shon Barnes - MPD Chief

Chris Carbon - MFD Chief

Jim Wolfe - Madison Engineering

Yang Tao - Madison Traffic Engineering

Dan Schrum

From: Berens, Jeff - DOT <Jeff.Berens@dot.wi.gov>

Sent: Friday, August 9, 2024 10:41 AM

To: Dan Schrum; Rachel Burnham; zfreeman@kapurinc.com; Joel Brown; Paul Chellevold

Subject: FW: North Stoughton Road/East Washington Ave

FYI

From: Lynch, Thomas <TLynch@cityofmadison.com>

Sent: Friday, August 09, 2024 10:34 AM

To: Howe, Michelle - DOT <michelle.howe@dot.wi.gov>; Berens, Jeff - DOT <Jeff.Berens@dot.wi.gov>

Cc: Munger, Sam R. <SMunger@cityofmadison.com>; Sanon, Reuben A <RSanon@cityofmadison.com>; Wolfe, James

<JWolfe@cityofmadison.com>; Petykowski, Christopher <CPetykowski@cityofmadison.com>; Tao, Yang

<YTao@cityofmadison.com>; McAuliffe, Daniel <DMcAuliffe@cityofmadison.com>

Subject: North Stoughton Road/East Washington Ave

CAUTION: This email originated from outside the organization.

Do not click links or open attachments unless you recognize the sender and know the content is safe.

Michelle and Je,

Thank you for the interaction regarding pedestrian facilities at the East Washington Ave and Stoughton Road facility.

We request that WisDOT evaluate and install a grade separated pedestrian bicycle in the North-South direction on the east side on the intersection.

- We believe an overpass is most appropriate, both because o2Utility conflicts and 2br security reasons.
- Our experience has shown that most pedestrians will continue to use the at-grade crossing because on the indirection associated with the overpass, while cyclists are more likely to use the overpass. Consequently, we request that strong well delineated pedestrian crossings also be provided around the intersection with vorable pedestrian signal timing.
- Because the majority ollusers are likely to be cyclists, a straight approach on the southside might create less indirection. Stairs could be installed at the intersection for pedestrians, acknowledging that in the winter they would be chained o .

We acknowledge that there has been public comment asking for an east-west crossing to Walgreens. This is a need, however we believe a north-south crossing is still most appropriate because:

- Most on the crossing demand occurs mid-block between East Washington and Anderson, between the Truax center and Walgreens. We think it is unlikely that pedestrians will walk 0.1 miles out on their way to use a grade separated crossing. And as noted above, our experience indicates pedestrians are less inclined to use an overpass because on the indirection associated with the ramps.
- There is no public right o2way connecting Straubel St and Graceland Ave to Stoughton Rd. Most travel occurs across a private sidewalk and parking lot. It would be discult to construct a grade separated crossing inline with Straubel St without providing some type o2public right o2way that connects to it.

• The grade separated structure is a 60 year in@rastructure investment. Currently Walgreens provides an extremely important service to the neighborhood, however it is unclear i@the Walgreens will continue over several decades.

Again, thank you for the collaboration that you have fostered with this project.

Tom



Tom Lynch PE PTOE PTP AICP (he/his) Director on Transportation City on Madison

215 MLK Blvd. Madison, 53703 608 266 6546 o団ce, 608 320 6161 cell

Madison Municipal Bldg Suite 109

Department of Transportation



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Phone: (608) 266-4761 Fax: (608) 267-1158

November 15, 2024

Jeff Berens

WisDOT SW Region 101 Wright Street Madison WI 53704

Subject: Community Sensitive Design and Cost Sharing

North Stoughton Road Project

Jeff,

We appreciate the opportunity to be involved the North Stoughton Road project development. The following paragraphs list our preferences for Community Sensitive Design (CSD) features, and cost sharing.

Community Sensitive Design

The City of Madison appreciates the new policy that allows the use of federal funds for CSD treatments and acknowledges the local cost share requirement to construct these treatments. For the Stoughton Road North project, the City of Madison would like CSD treatments on:

- Pedestrian/bicycle grade separation south of Highway 30, on the structure itself and possibly on approaching retaining walls
- If reconstructed, the bridge abutments through the Highway 30 interchange.
- The pedestrian/bicycle grade separation over East Washington Ave. Again on the structure itself and possibly on the approaching retaining walls.
- A potential public are installation in the southeast quadrant of the Stoughton Rd/East Washington Ave intersection. This could also include changing the type of fencing that abuts the right of way in this quadrant.
- Liberal planting of trees.

The city understands that there is a 20 percent cost share and will incorporate these costs in future capital budgets.

Cost Sharing Policy

We'd like to preface this email stating that the City recognizes the importance of financial partnership in bringing quality transportation to our community. And we appreciate the unprecedented coordination WisDOT has performed with both the Interstate and Stoughton Rd projects.

However, we disagree with the current cost share policy that requires local participation for bicycle and pedestrian elements yet does not require local participation for motor vehicle improvements. Supporting all travel modes is integral to WisDOT's mission, the goals of the City of Madison, and the strategies outlined in

the Regional Transportation Plan for the Greater Madison MPO. They are a key part of any transportation corridor and not "extras". Key legislative and policy documents include:

- 23 USC 217(g)(1) states that pedestrians and cyclists shall be given due consideration in the comprehensive transportation plans developed by the State.
- 23 USC 217(g)(2) states that transportation plans and projects shall provide due consideration for both safety and contiguous routes for bicyclists and pedestrians.
- The WisDOT Facilities Development Manual 11-46-1, as well as US DOT guidance states "at a minimum, a presumption of that bicyclists, pedestrians, and persons with disabilities will be accommodated in the design of new and improved transportation facilities. In the planning, design, and operation of transportation facilities, bicyclists, pedestrians, and persons with disabilities should be included as a matter of routine . . . There must be exceptional circumstances for denying bicycle and pedestrian access."
- Federal Highway Administration policy requires the inclusion of bicycle and pedestrian accommodations on all modernization projects (with some exceptions).

Again, Madison is committed to financially partnering with WisDOT in way commensurate with what would normally be expected and appreciates our joint partnership in bringing quality transportation to Wisconsin residents. The current cost-sharing policy directs state and federal funding in a way that disproportionately burdens those who rely on non-automobile travel modes, while disproportionately benefiting those with access to cars. We respectfully request that WisDOT review and revise the cost-sharing policy to ensure it aligns with federal laws—including but not limited to Americans with Disabilities Act and 23 USC 217(g). These changes would promote a balanced approach to transportation funding and the benefits that result from these investments.

Thank you for allowing the City of Madison to participate in the project development of North Stoughton Road and the collaborative approach you have taken with this project.

Sincerely,

Thomas W. Lynch PE PTOE PTP AICP

Director of Transportation, City of Madison

cc:

Michelle Howe – WisDOT SW Region
Dan Schave – WisDOT SW Region Director
Satya Rhodes-Conway – Madison Mayor
Reuben Sanon – Deputy Mayor
Jim Wolfe – Madison Engineering
Yang Tao – Madison Traffic Engineering

Department of Transportation



Thomas Lynch, PE, PTOE, PTP, AICP, Director of Transportation

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Phone: (608) 266-4761 Fax: (608) 267-1158

April 1, 2025

Jeff Berens

WisDOT SW Region 101 Wright Street Madison WI 53704

Subject: North Stoughton Road Environmental Document Comment

Council Resolution 87477 Supporting Access at Schmedeman Ave

Jeff,

Please see the attached Madison Common Council resolution (Legistar 87477) approved March25, 2025 regarding access at Schmedeman Ave. Please accept this as a formal comment on the North Stoughton Road environmental document.

Thank you for allowing the City of Madison to participate in the project development of North Stoughton Road and the collaborative approach you have taken with this project.

Sincerely,

Thomas W. Lynch PE PTOE PTP AICP

Director of Transportation, City of Madison

cc:

Michelle Howe - WisDOT SW Region



City of Madison

City of Madison Madison, WI 53703 www.cityofmadison.com

Signature Copy

Resolution: RES-25-00221

File Number: 87477 Enactment Number: RES-25-00221

Responding to WisDOT recommendation on North Stoughton Road Project regarding Schmedeman Ave (District 12).

WHEREAS; the Wisconsin Department of Transportation (WisDOT) has been conducting a study of the North Stoughton Road corridor and has released a draft of its preferred alternative for public comment; and

WHEREAS; WisDOT has been a good partner by involving City of Madison staff and incorporating many features within the preferred alternative that were requested by the City; and

WHEREAS; WisDOT's draft preferred alternative removes westbound left turn movements from East Washington Avenue (US 151) onto Schmedeman Avenue, as well as east- and westbound left turns from Schmedeman Avenue onto East Washington Avenue, due to projected traffic delay (level of service E and F) at this intersection by 2050; and

WHEREAS; this intersection currently allows for turning movements in all directions, and eliminating the westbound left turn movement would result in significant detours for motorists, requiring an additional mile of travel, a U-turn at Reindahl Avenue, or potentially encouraging illegal use of the eastbound opening; and

WHEREAS; pedestrian crossings-frequently used by students traveling to and from Hawthorne Elementary-currently exist on both the east and west sides of Schmedeman Avenue, where the City recently installed Rectangular Rapid Flashing Beacons (RRFBs) to enhance safety; and

WHEREAS; City staff believe that alternative solutions to the westbound left at Schmedeman are either impractical or pose greater hazards to the traveling public; and

WHEREAS; eliminating the westbound left turn onto Schmedeman Avenue would substantially reduce the accessibility and potential economic value of properties that rely on this movement, hindering future economic development and conflicting with the City's comprehensive and area plans; and

WHEREAS; several left turn movements on East Washington Avenue currently operate at similar levels of service (E and F) today without removal; and

WHEREAS; prioritizing vehicle level of service over safety, connectivity, and economic development goals contradicts the City's long-term planning objectives; and

WHEREAS; the City of Madison has successfully mitigated operational concerns at similar intersections, such as Livingston Street/East Washington Avenue and Hilldale Way/University Avenue by installing partial signals;

NOW THEREFORE BE IT RESOLVED that the City of Madison opposes the elimination of the westbound left turn from East Washington Avenue onto Schmedeman Avenue, as it places an

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undue burden on property owners, hinders future economic development, and creates unintended safety hazards for both drivers and pedestrians; and

BE IT FURTHER RESOLVED that the City of Madison requests that WisDOT retain the westbound left turn from East Washington Avenue onto Schmedeman Avenue within the preferred alternative, retain the existing marked crosswalk and RRFB, with the understanding that future traffic conditions may require partial signalization of the intersection.

3/25/2025COMMON COUNCILAt a meeting of the COMMON COUNCIL on 3/25/2025, a motion was made by Figueroa Cole, seconded by Duncan, that this Resolution be Adopt Unanimously. The motion passed by the following vote: