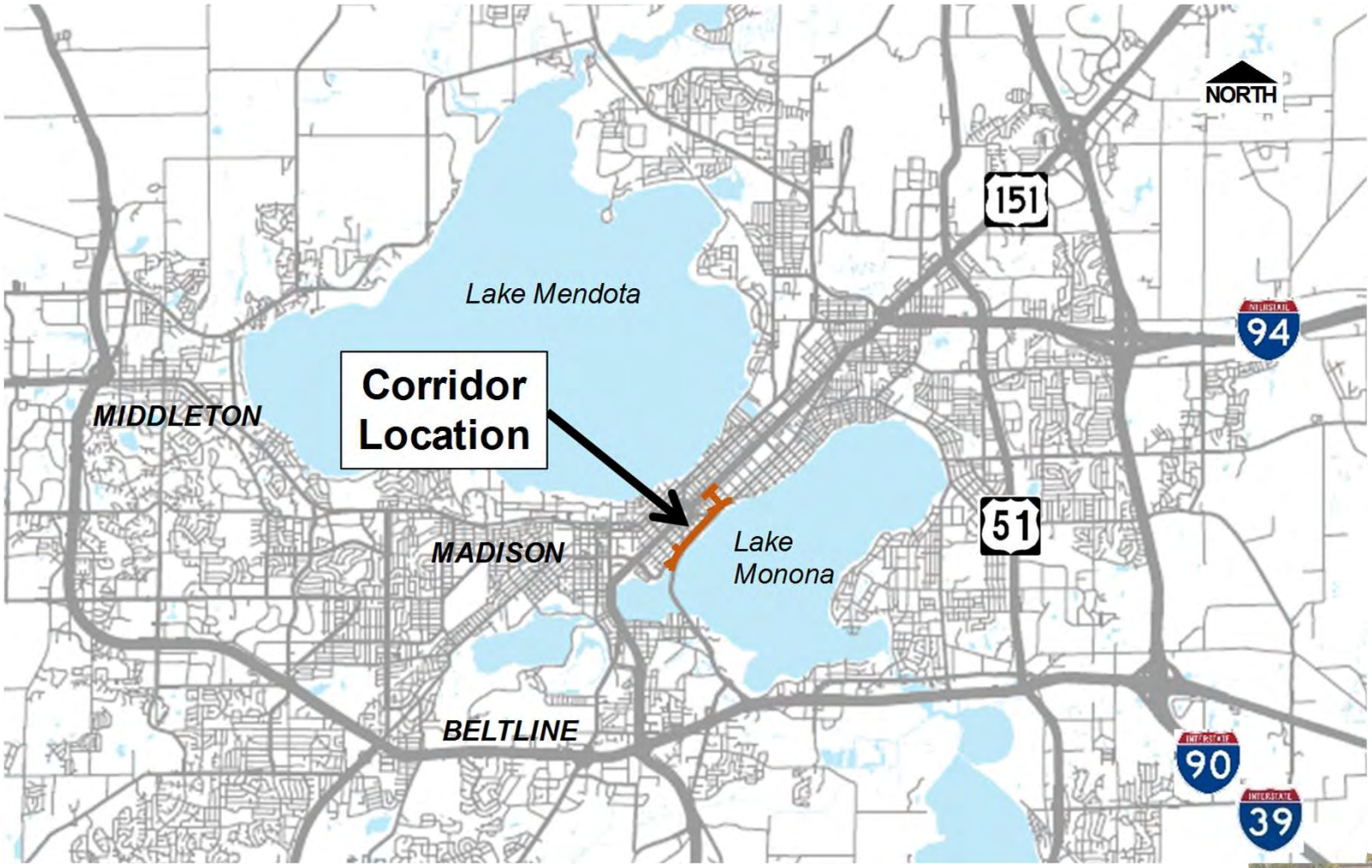

Public Involvement Meeting
August 9th 2017
Google Ear

Presentation Outline:

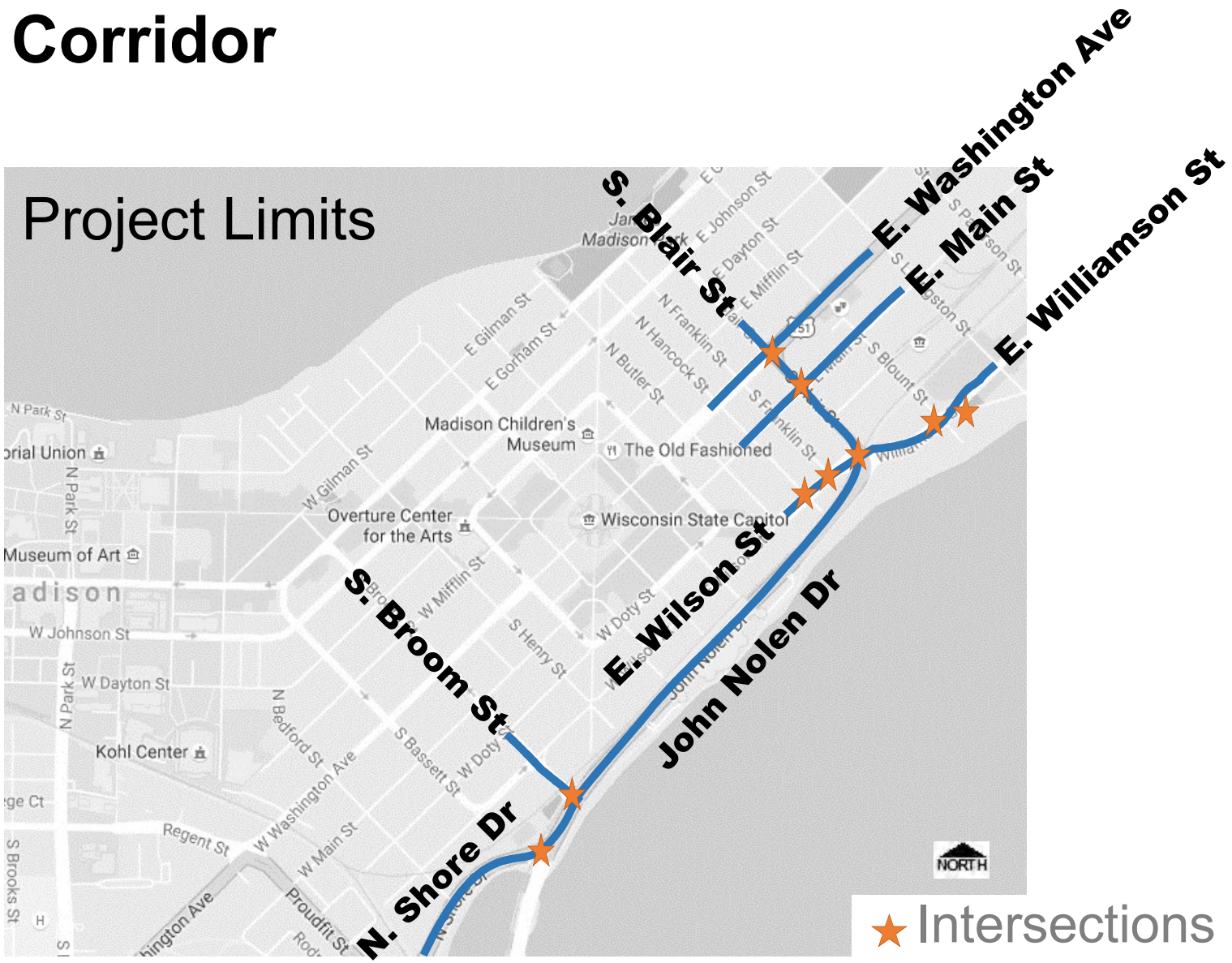
- Study Corridor and Reasons for Study
  - Upcoming Projects
  - Previous Studies and Longer Term Opportunities
- Williamson/Wilson/Blair/John Nolen Drive Intersection area
- John Nolen Drive/North Shore/Broom Street area
- Overview of PIM 3 Exhibits
- Study Schedule

Study Corridor and Reasons for Study

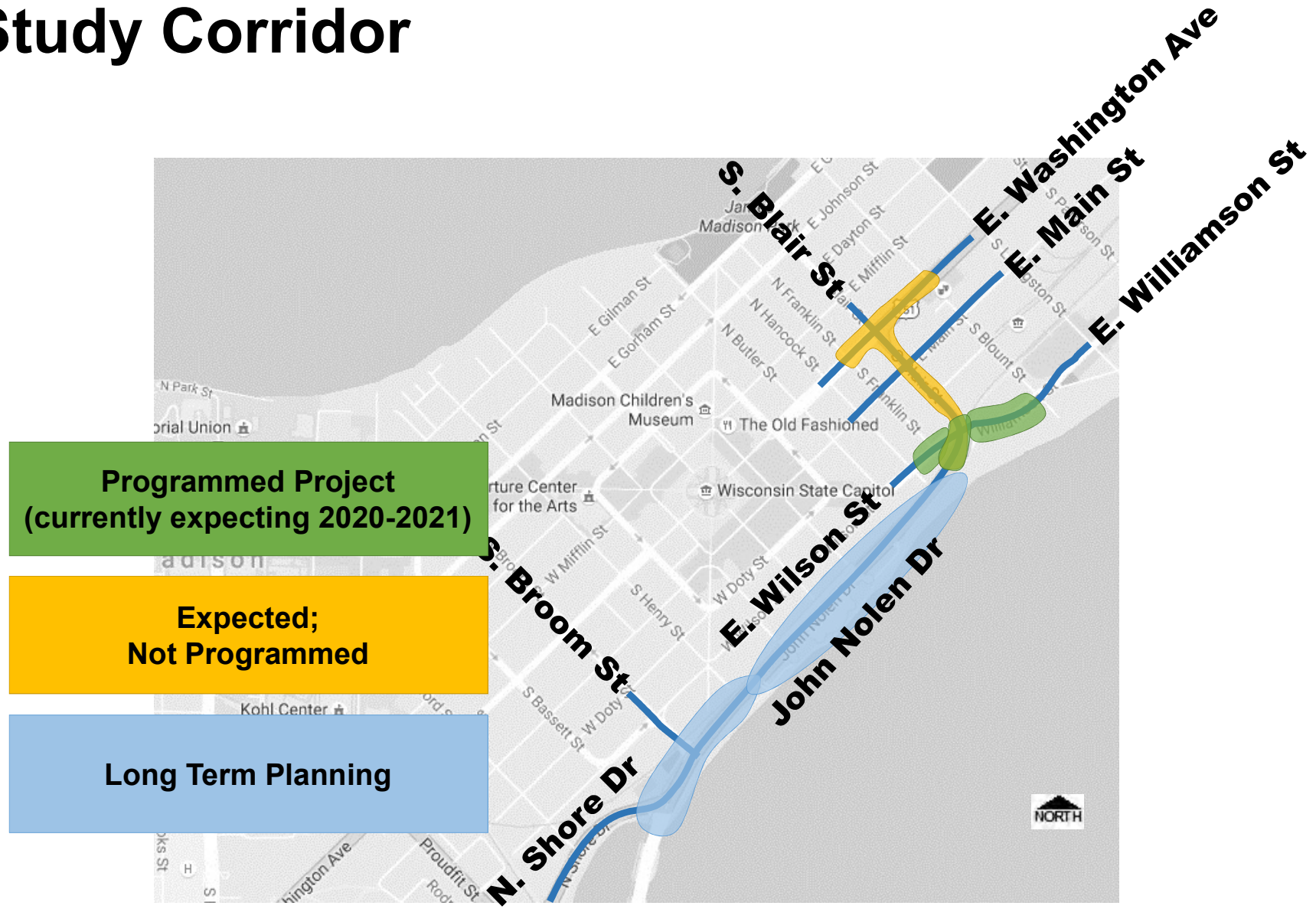
Project Location



Study Corridor



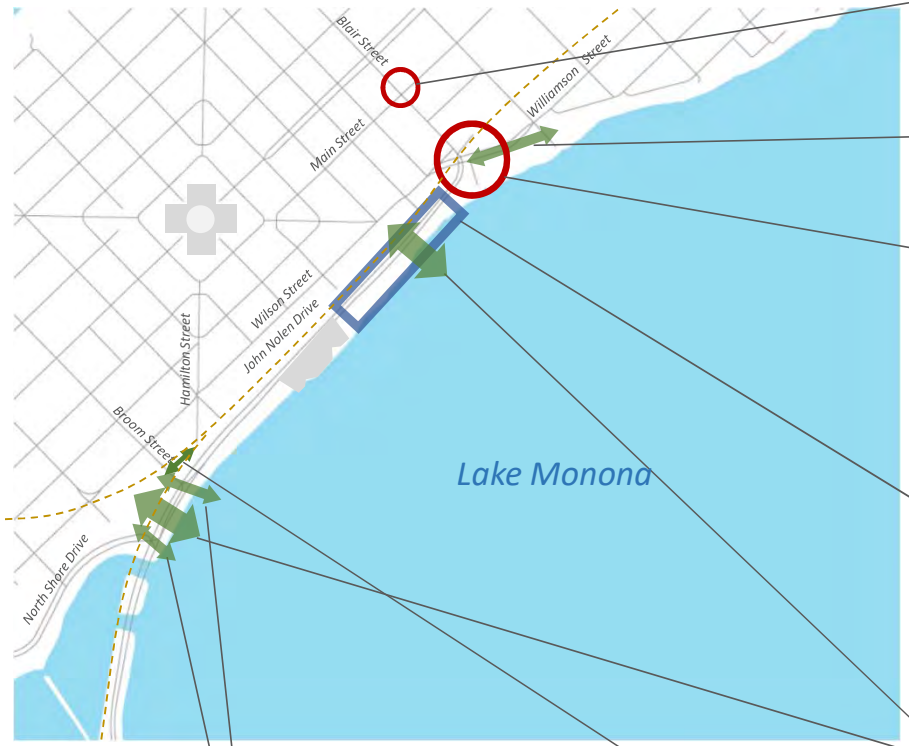
Study Corridor



Study Purpose

1. Develop a near-term solution for the Blair/John Nolen/Williamson Street intersection area that:
   - Can be reasonably funded with federal transportation monies
   - Improves operations and safety for
     - Pedestrians
     - Cyclists
     - Motorists
   - Addresses the poor pavement conditions
2. Evaluate short and long-term options that improve pedestrian and bicycle access to the lakeshore from North Shore Drive to Blair Street
3. Evaluate the viewshed effects of proposals that include a structure over John Nolen Drive

Review of April Public Meeting



Reviewed possible new signal at Main Street.

Reviewed re-allocation of space on Machinery Row cycle track.

Reviewed 5 primary intersection alternatives.

- 3 of them at-grade
- 2 of them with a tunnel
- 2 at-grade intersection alternatives brought forward (Alt 1 and 9)

Performed blocking exercise to determine viewshed effects of structure over John Nolen Drive

Investigated 2 grade separated crossings to provide better bicycle and pedestrian access to the lake.

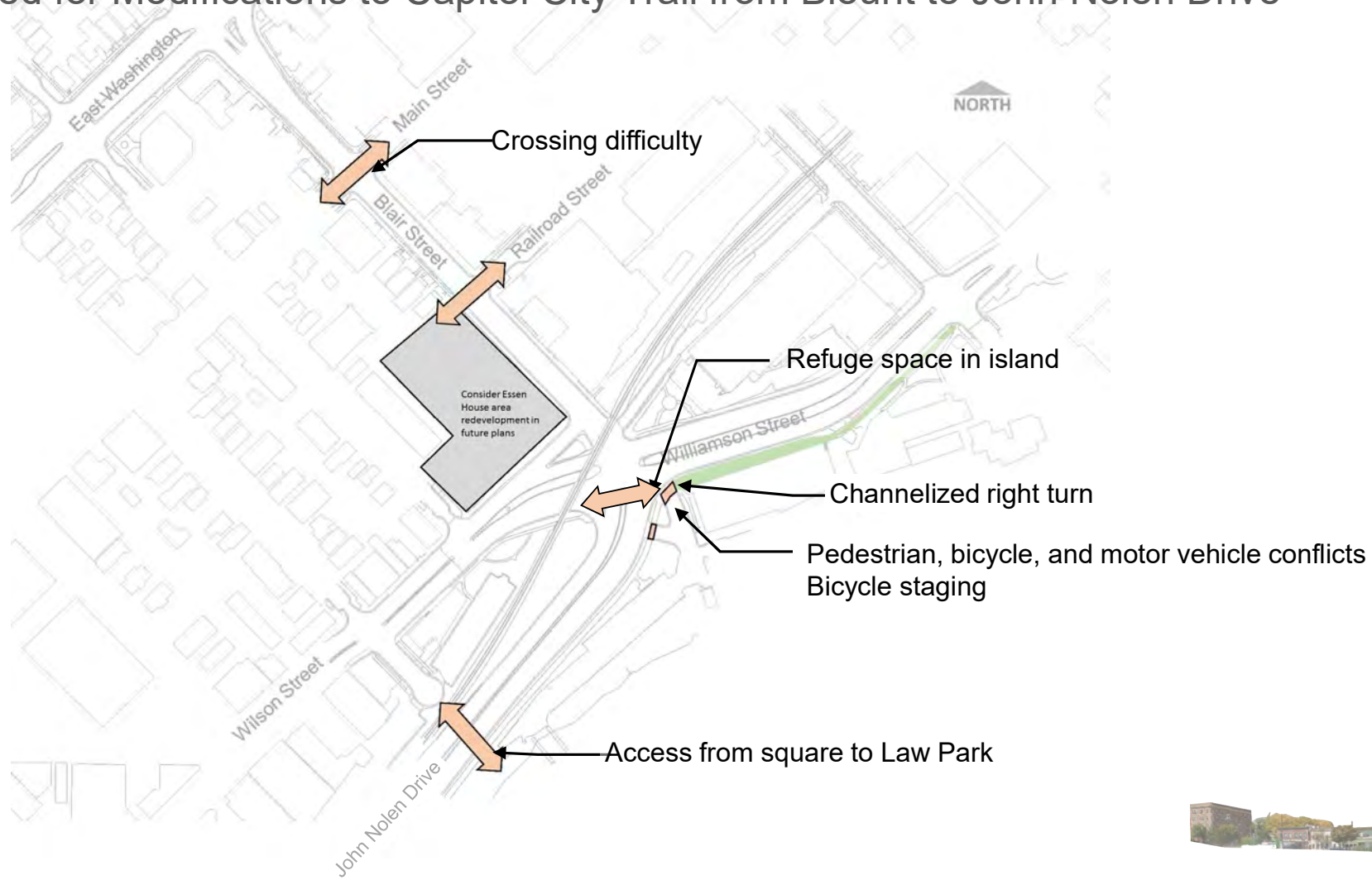
Investigated options to ease pedestrian and bicycle access across John Nolen Drive at North Shore and Broom Street

Investigated path connecting Broom Street with South Hamilton Street

John Nolen/Blair/Wilson/Williamson Area

Blair/Williamson Intersection Expressed Needs

- Barrier Effect of Blair Street and John Nolen Drive for Pedestrians and Bicycles
- Need for Modifications to Capitol City Trail from Blount to John Nolen Drive



Alternatives Brought Forward for Further Evaluation

Alt 1 and Alt 9 Comparison – Review of Concepts

Alt 1: Add NBL, SBL, Cycletrack

Alt 9: One-Way Couplet, Cycletrack

Alt 1 and Alt 9 Comparison – Expressed Needs

Expressed Concern/Evaluation Factor	Alt 1 – Add NBL, SBL	Alt 9 – One-Way Couplet
John Nolen Drive is a barrier for pedestrian/bicycle access to the lake.	• Ped/bike access to lake is enhanced when combined with proposed ped/bike overpass	• Reduced when combined with proposed overpass
Reduce Speeds of Northbound Right-Turns	• Smaller radii on northbound right-turn channelization should reduce right turn travel speeds.	• Providing a dual right turn lane for the northbound to eastbound movement requires larger radii and consequently may increase speeds.
Discourage Use of Williamson Street for Longer Trips	• Use of Williamson Street for longer trips is likely to remain unchanged from current conditions	• Directing all northbound traffic down Williamson Street until Blount Street may conflict with these goals.
Reduce Conflicts at Machinery Row Driveways	• Relocated parking lot access and realigned bike path reduces the number of conflicts at the intersection.	• Relocated parking lot access and realigned bike path reduces the number of conflicts at the intersection.
Provide Off-Path Staging Area for North-South bikes/peds crossing Williamson Street	• Additional staging area provided with the modified northbound right-turn channelization	• Modest staging area may be possible with dual channelized northbound through/right-turn.
Better Delineate Bicycle versus Pedestrian Space along south side of Williamson Street between Blair Street and Jennifer Street	• Reallocation of space along the Machinery Row cycle track provide better delineation, and more room, for pedestrians and bicycles.	• Reallocation of space along the Machinery Row cycle track provide better delineation, and more room, for pedestrians and bicycles.
Relocate Capital City Trail Crossing of Williamson Street from Blair Street to Blount Street	• Achieved with signalized diagonal crossing and cycle track connection along Blount Street. Existing Capital City Trail crossing at Blair Street intersection remains.	• Achieved with signalized diagonal crossing and cycletrack connection along Blount Street. • Existing Capital City Trail crossing at Blair Street is eliminated.
Improve Pedestrian and Bicycle Access Across Blair Street	• Blair Street is easier to cross for pedestrians and bikes if Main Street signal is implemented.	• Blair Street is easier to cross for pedestrians and bikes because Blair Street carries about 50 percent less traffic. One-way operation on Blair Street also provides larger gaps in traffic.

Alt 1 and Alt 9 Comparison – Additional Measures

Evaluation Factor	Alt 1 – Add NBL, SBL	Alt 9 – One-Way Couplet

Accommodations for Pedestrians and Bicycles	• Enhanced accommodations for pedestrians and bicycles through:
	  • Reallocation of space along Machinery Road cycle track
	  • Relocating parking lot driveway to minimize ped/bike/auto conflicts at intersection.
	  • Better delineation of connection of Wilson Street to Capital City Trail for bicycles and pedestrians.
		• One-way Blair Street may allow for more space to be dedicated to terrace, pedestrian, and/or bicycle accommodations.
		• Enhanced accommodations along John Nolen Drive and Williamson Street
		• Increased traffic volumes along Williamson Street between Blair Street and Blount Street.

Transit	• No significant impacts.	• Lower traffic volumes eastbound along East Washington Avenue between Blair Street and Blount Street which carries 9 weekday routes and has a bus stop at the southeast corner at Blount Street. • Higher traffic volumes along eastbound Williamson Street between Blair Street and Blount Street which carries 4 weekday routes. • No significant impacts to current routing.
Motor Vehicles	• Modest improvement to delays and queuing compared to a Do Nothing scenario.	• Lower delay and queuing during the AM peak hour than Alt 1 • Higher delay and queuing during the PM peak hour than Alt 1
Stakeholder and Alder Comments	• Generally positive	• Generally negative
Cost	• $3.4 Million	• $5.5 Million
Additional Considerations	• Reduced crashes with the addition of left-turn bays.	• Reduced crashes with the addition of left-turn bays. • Spreads traffic burden among two streets instead of one. • Perception of encouraging John Nolen Drive northbound/ eastbound traffic to use Williamson Street instead of East Washington Avenue.
Result	**Recommended**	Dismissed

Alt 1 NB and SB Left Turn Lanes

Pedestrian Accommodations

- Maintains existing pedestrian crossings of Williamson, Wilson, and John Nolen Drive.
- Cycle track in front of Machinery Row expanded to separate pedestrian and cyclists.

Bicycle Accommodations

- Maintains existing crossing of Williamson Street.
- Maintains existing cycle track in front of Machinery Row, expanded to separate pedestrians and cyclists.
- Includes signalized diagonal bike crossing and cycle track on Blount Street.

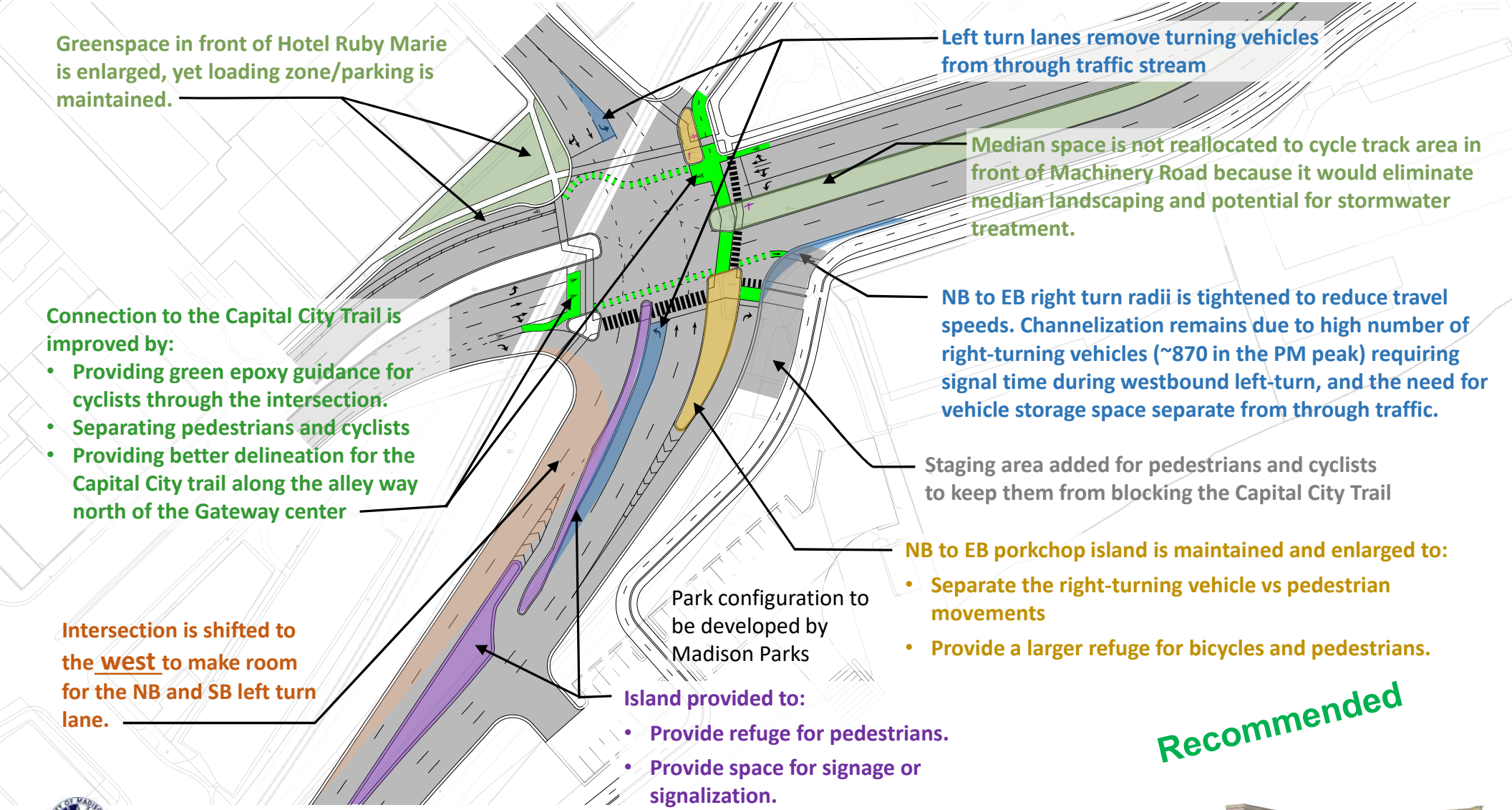
Motor Vehicles

- Improves overall intersection LOS from F to D. Not all congestion and queuing is eliminated.
- Removes NB and SB left turning vehicles on John Nolen Drive and Blair Street from the through travel stream, reducing crashes.
- Relocates and combines Machinery Row/Law Park driveways.

Other

- Enlarges greenspace/terrace space in front of Hotel Ruby Marie.
- Stormwater features to be established during final design.
- Left-in to Machinery Row/Law Park could be signalized.
- Relocates boat launch, final Law Park details TBD.

Alt 1 Revisions Responding to Public Comments



Greenspace in front of Hotel Ruby Marie is enlarged, yet loading zone/parking is maintained.

Left turn lanes remove turning vehicles from through traffic stream

Median space is not reallocated to cycle track area in front of Machinery Road because it would eliminate median landscaping and potential for stormwater treatment.

Connection to the Capital City Trail is improved by:

- Providing green epoxy guidance for cyclists through the intersection.
- Separating pedestrians and cyclists
- Providing better delineation for the Capital City trail along the alley way north of the Gateway center

NB to EB right turn radii is tightened to reduce travel speeds. Channelization remains due to high number of right-turning vehicles (~870 in the PM peak) requiring signal time during westbound left-turn, and the need for vehicle storage space separate from through traffic.

Staging area added for pedestrians and cyclists to keep them from blocking the Capital City Trail

NB to EB porkchop island is maintained and enlarged to:

- Separate the right-turning vehicle vs pedestrian movements
- Provide a larger refuge for bicycles and pedestrians.

Park configuration to be developed by Madison Parks

Intersection is shifted to the west to make room for the NB and SB left turn lane.

Island provided to:

- Provide refuge for pedestrians.
- Provide space for signage or signalization.
- Prevent left turns out of parking lot.

Recommended

Law Park Connection

Pedestrian Bicycle Connection to Law Park

- Rendering is shown Within Design-Level Laser Scan Survey in Realistic Location
- Concept Only, Additional Design Modifications Expected

Broom/North Shore Area

Broom Street

Long term solution
- Reconstruct Broom Street with 10-foot lanes
- Install a 10-foot cycle track on east side.

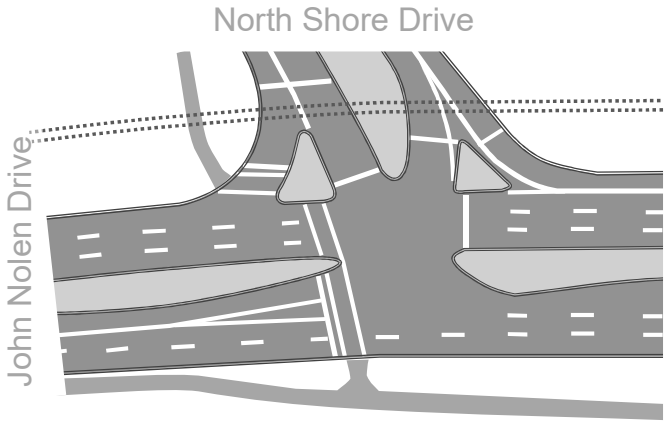
Long term solution
Path connecting Broom Street to Hamilton Street

Short term solution
- Restripe Broom to 10', 10', 12.5', 10', 12.5'
- Place sharrow on 12.5' lanes (SB middle lane, NB outside lane)

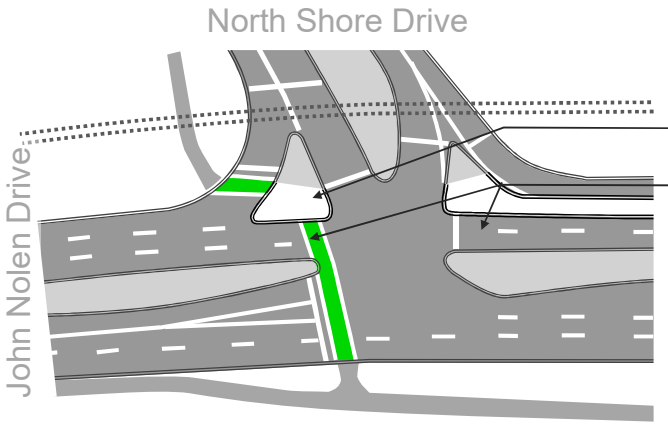
Short term solution
- Ladder cross walk markings

Short term solution
- Colored pavement directing cyclists to island
- Bike box for EB to NB cyclist

North Shore Drive



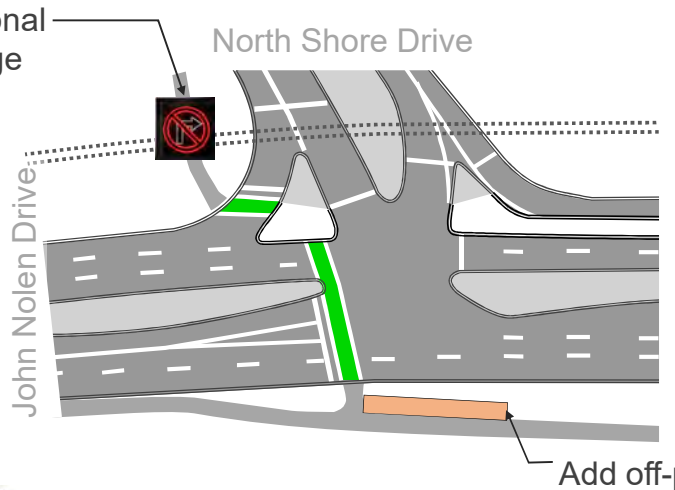
As constructed in 1995



Island enlarged to provide more storage for pedestrians and bicyclists.

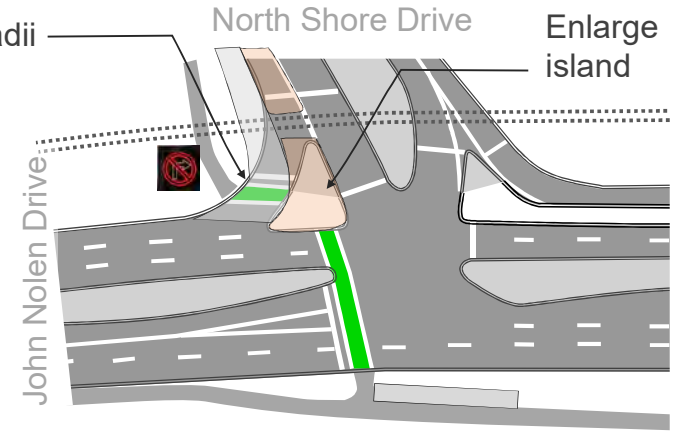
Crossing distance reduced by removing one through lane on westbound John Nolen Drive

2013 Improvements



Short Term Solution

Recommended



Longer Term Option

North Shore and Broom Street Long-Term Bicycle Underpass

Overview of All PIM Exhibits

Study Purpose and Background
- 2 exhibits

Study Purpose

1. Develop a near-term solution for the Blair/John Nolen/Williamson Street intersection area that:
   - Can be reasonably funded with federal transportation monies within the next 5 to 10 years.
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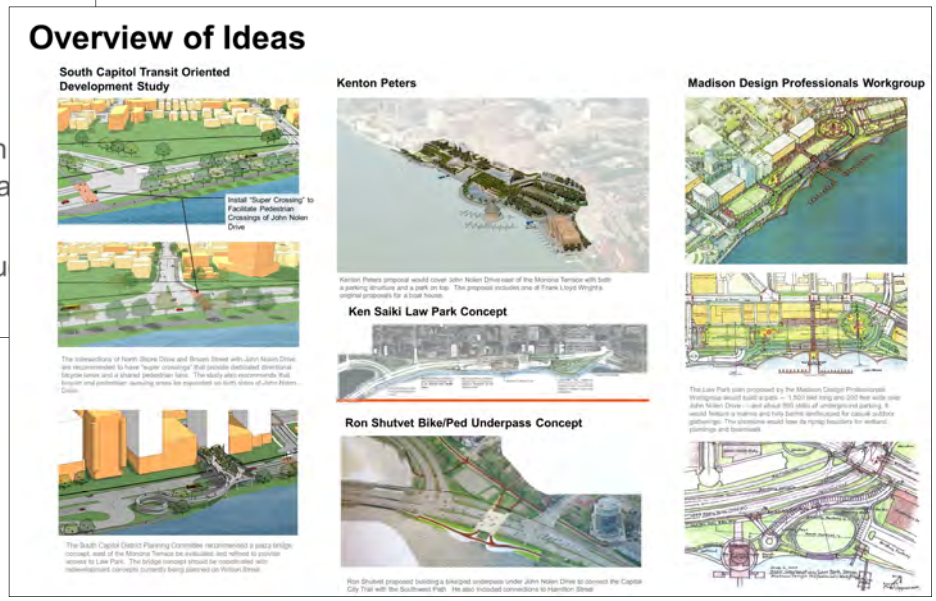
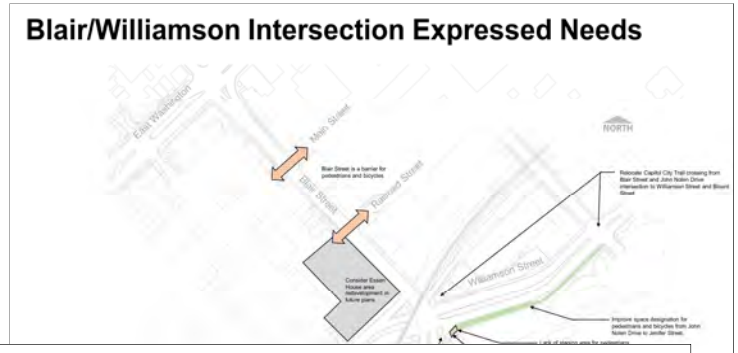
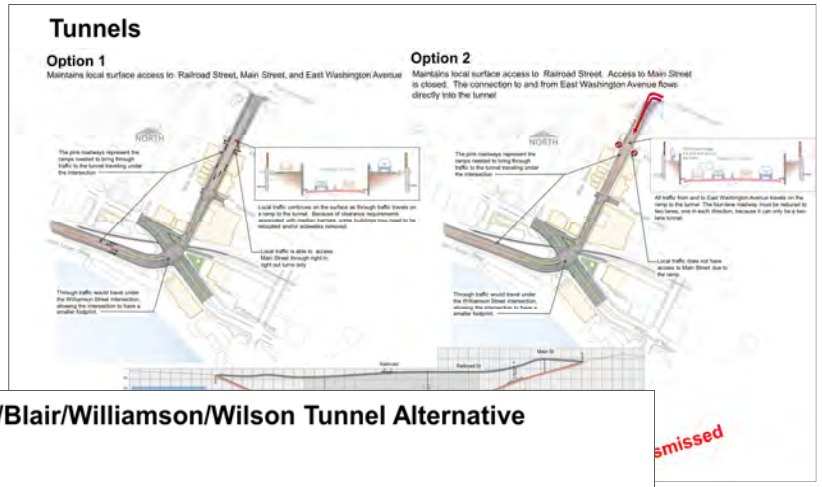
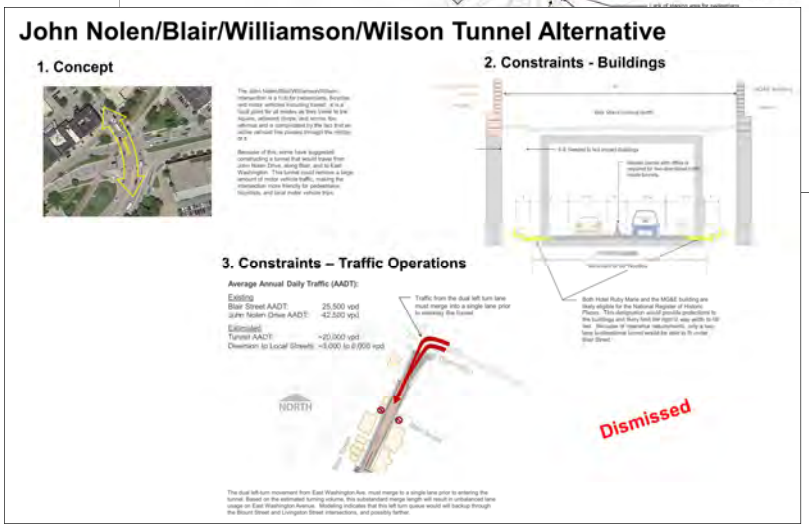


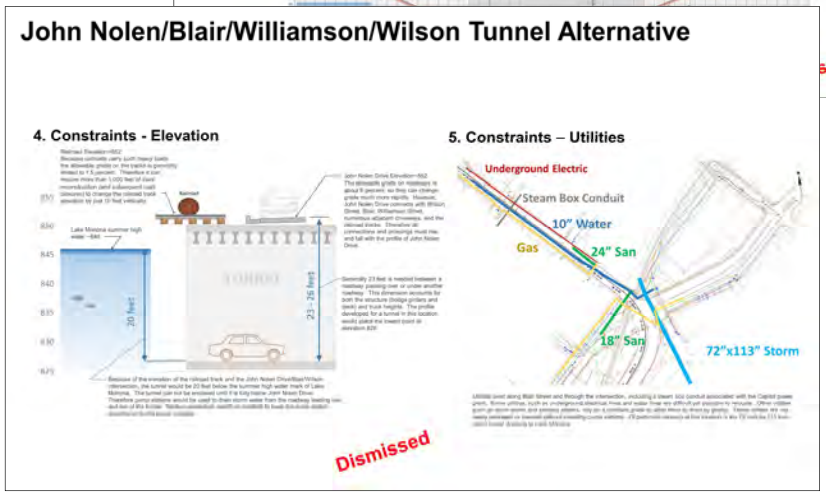
John Nolen/Blair/Wilson/Williamson Area

- 4 exhibits on Needs and Tunnel Investigations



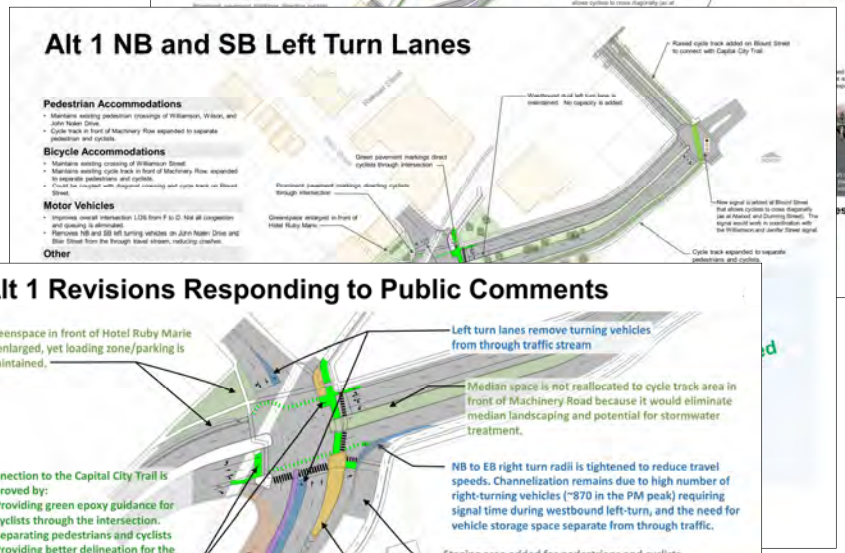


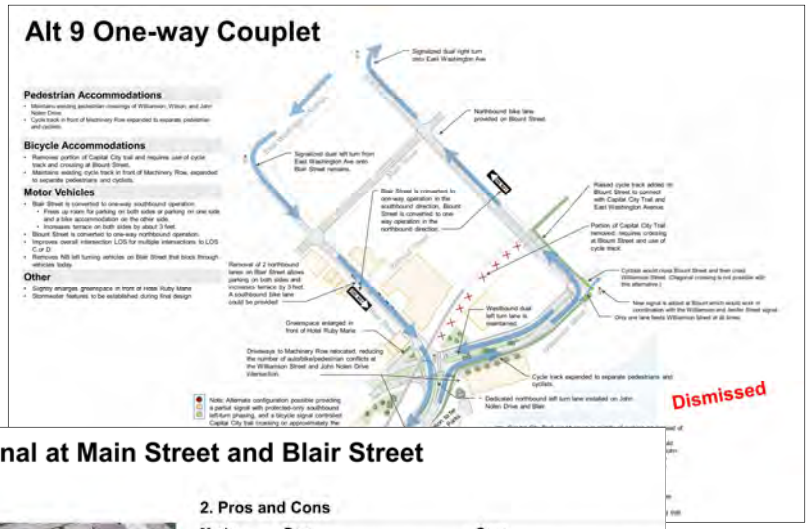




John Nolen/Blair/Wilson/Williamson Area

- 5 exhibits on Alternatives





John Nolen/Blair/Wilson/Williamson Area
- 2 exhibits comparing Alternative 1 and Alternative 9

Alt 1 and Alt 9 Comparison – Expressed Needs

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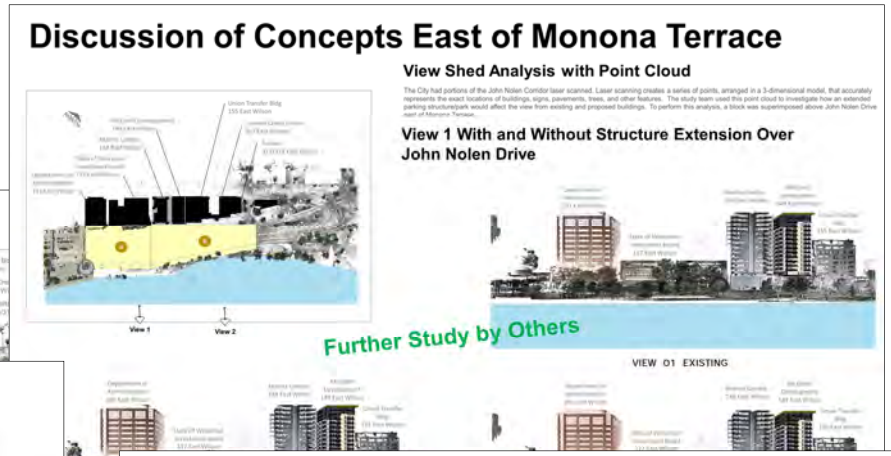
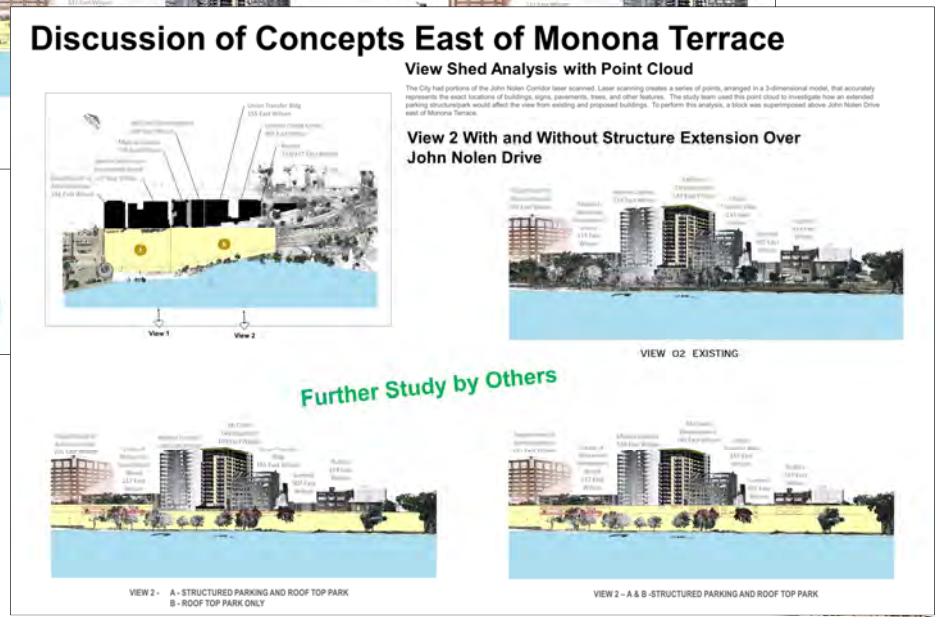
Additional Considerations	• Reduced crashes with the addition of left-turn bays.	• Reduced crashes with the addition of left-turn bays. • Spreads traffic burden among two streets instead of one. • Perception of encouraging John Nolen Drive northbound/ eastbound traffic to use Williamson Street instead of East Washington Avenue.
Result	Recommended	Dismissed

Law Park Area
- 5 exhibits

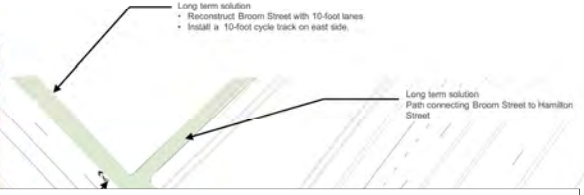




Broom and North Shore Area
- 5 exhibits

North Shore Drive/North Broom Street Expressed Needs

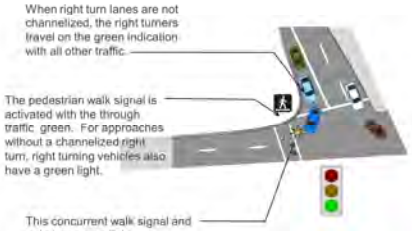
Broom Street

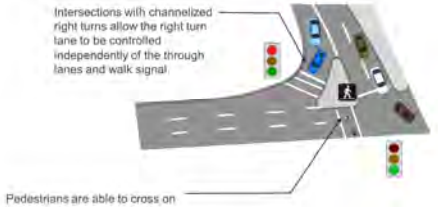


Right Turn Channelization

Role of the channelized right turn lane

Channelized right turn lanes with pork chop islands are often criticized for increasing the intersection footprint and increasing pedestrian crossing distances. However, for approaches with high volumes of right turning vehicles they can reduce pedestrian/turning vehicle conflicts. Channelizing the right turn lane allows it to be controlled independently of the through movements and the pedestrian walk signals. While making it a two-stage crossing for pedestrians and cyclists, it can substantially reduce conflicts.





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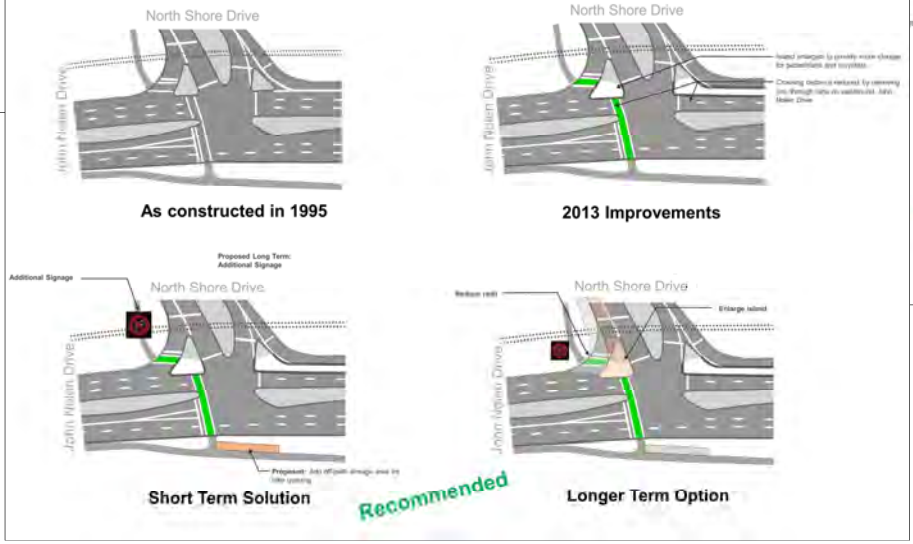
North Shore Drive



North Shore and Broom Street - Bicycle Underpass

Project Process and Schedule

Phase 1 – Needs & Alts Development

- PIM # 1, Needs and Priorities
- Range of Alternatives
- Alternatives Pros and Cons

Oct.'16-Mar.'17

Phase 2 – Alternatives Refinement

- PIM # 2, Range of Alternatives
- Refined Alternatives
- Preferred Combinations

Mar.'17-Jun.'17

Phase 3 - Recommendations

- PIM #3, Draft Recommendations
- Conceptual Layout, Range of Costs
- Layout Refinement
- Finalize Recommendations

Jun.'17-Sep.'17

Next Steps

1. Develop the final study report: September/October
   - Present to City Committees/Boards
   - Present to Common Council
2. Advance Alternative 1 at John Nolen Drive/Blair Street
   - Apply for Highway Safety Improvement Program (HSIP) funding
   - City engineering to begin final design
3. Begin formal planning process for Law Park area

Blair Street and John Nolen Drive Corridor Study

Public Involvement Meeting #2
Overview of Exhibits