



Huron, Hamilton, & Washtenaw Proposed Lane Reduction

CITY OF YPSILANTI, MI
DECEMBER 2019

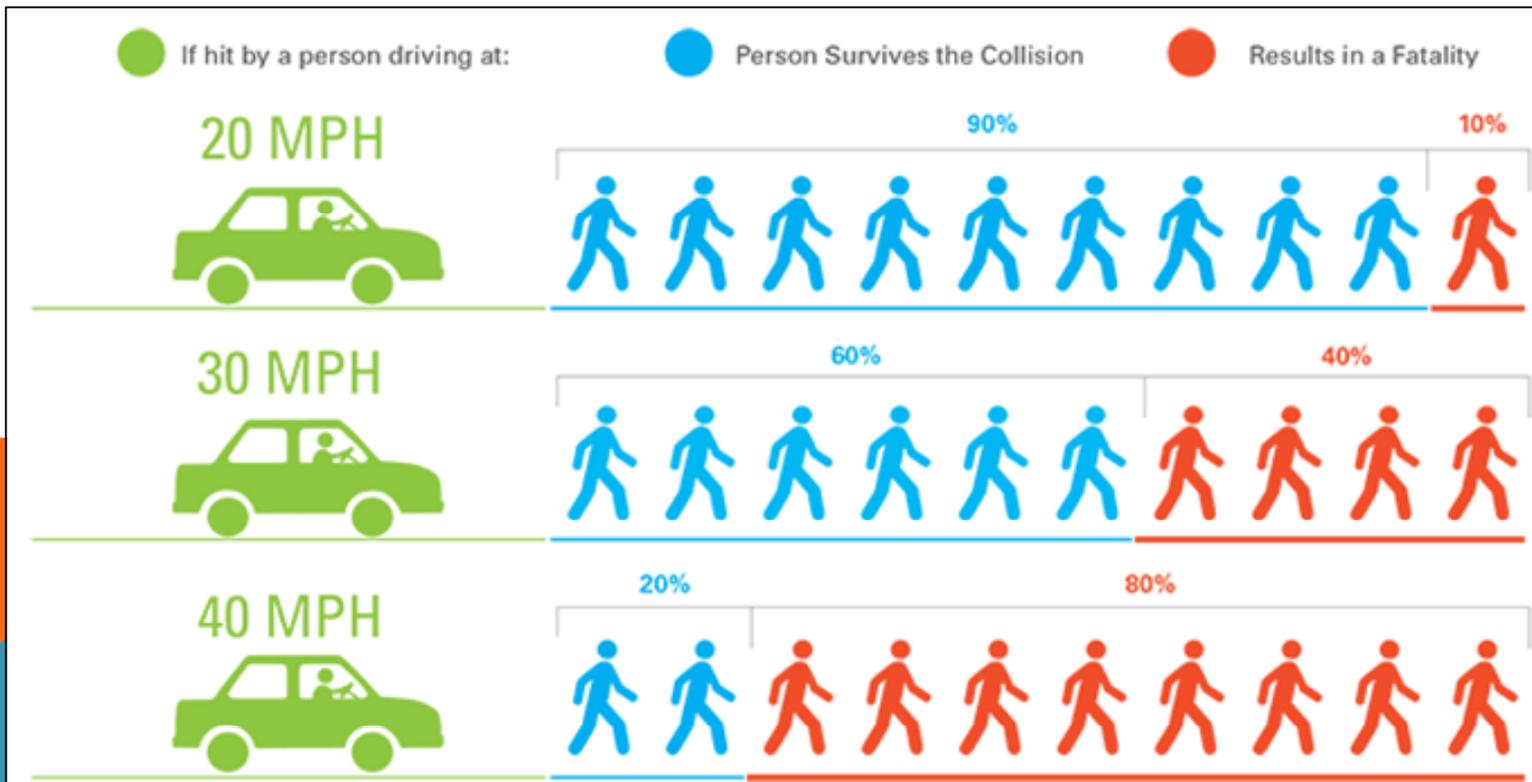
Background

- 2011-12: Michigan State Police perform a speed study on the trunklines; speed limits are raised
City Council directs staff to research ways to reduce travel speeds & speed limits
- 2013: WATS/County perform feasibility study of a nonmotorized crossing of I-94 at Huron
- 2018: MDOT performs Road Safety Audit (RSA) on M-17 between Normal and Harriet at City's request; road diet and pedestrian crossing improvements noted as important safety improvement
- 2019: City completes Lane Reduction Feasibility study.
Grant awarded for design (and eventual construction) of a pedestrian/bike crossing of I-94 at Huron



Reasoning

- The City has long had as part of its Master Plan and various other visioning documents to switch back to two-way traffic to improve safety and legibility
- At current speeds, pedestrian travel, local vehicle travel (to/from driveways and parking lots/alleys/side streets), and bike travel can be dangerous; risk of death and serious injury for pedestrians/bicyclists is very likely
- Currently no bicycle facility on these roads; important north-south connectors; dangerous, especially for novice/casual riders, to ride in traffic due to speeds



Graphic source:
Speed as a Safety Problem.
Institute of Transportation Engineers,
<https://www.ite.org/technical-resources/topics/speed-management-for-safety/speed-as-a-safety-problem/>.

Current Conditions: Washtenaw

Speed

- 35 mph

Traffic

- Average daily traffic (2012-17):
16,350 vehicles/day

Configuration

- 3 lanes
- Sidewalk on both sides
- Pedestrian crossing at Ballard
- No bike facilities
- No parking



Current Conditions: Hamilton

Speed

- Washtenaw to Ferris: 35 mph
- Ferris to 94: 40 mph

Traffic

- Average daily traffic (2012-17): 13,240

Configuration

- 3+lanes throughout
- Sidewalk both sides Washtenaw to Harriet; sidewalk one side Harriet to 94, no sidewalk across 94.
- Pedestrian crossings at Michigan and Harriet.
- No bike facilities.
- No parking.



Current Conditions: Huron

Speed

- Harriet to Ferris: 40 mph
- Ferris to Pearl: 30 mph
- Pearl to Cross: 35 mph

Traffic

- Average daily traffic (2012-17):
12,243

Configuration

- 3+ lanes throughout
- Sidewalk both sides
- Pedestrian crossings at Michigan and Harriet.
- No bike facilities
- Parking only between Michigan and Pearl (1 block, both sides)



Proposal Goals

Make it safer for bikes

- Add bike lanes & bike boxes

Make pedestrian crossings safer

- Add ramps, signage

Make it safer for drivers

- Reduce the risk of injury in a crash



Washtenaw

Due to curve and intersection with Hamilton, no good location for bike lane

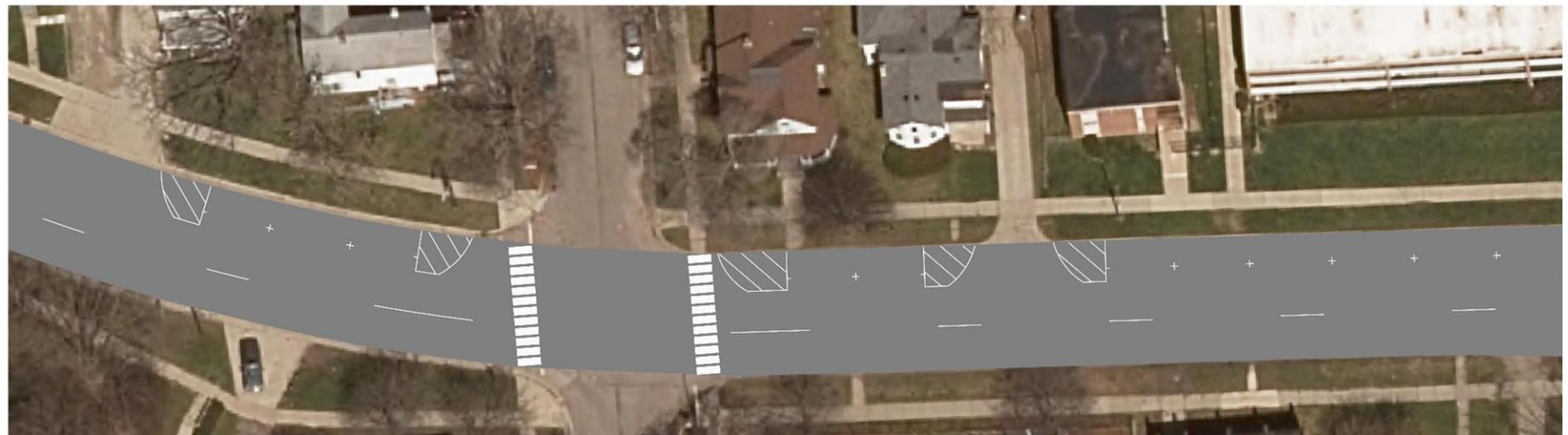
- Normal to Ballard: Parking proposed north side
- Ballard to Hamilton: return to 3-lane

Levels of Service

Washtenaw/Summit (EB approach)			
Peak Hour	Current	2038 Unchanged	2038 Lane Reduction
AM	A	A	A
PM	B	B	B

Washtenaw/Ballard (EB approach)			
Peak Hour	Current	2038 Unchanged	2038 Lane Reduction
AM	A	A	A
PM	A	A	A

PERRIN ST



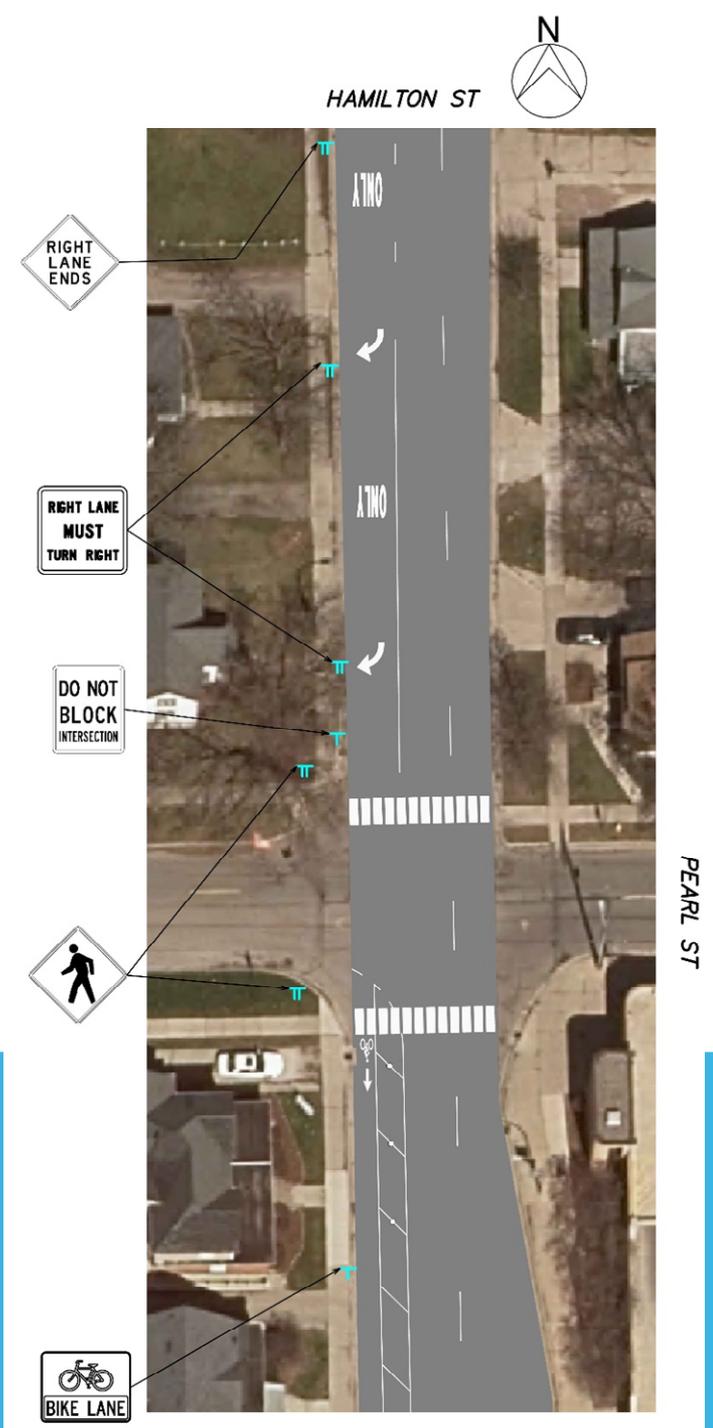
Hamilton:

Washtenaw to Michigan (1/3)

- Washtenaw-Pearl: rightmost lane becomes right-only to Pearl
- Pearl-Harriet: rightmost lane (west side) becomes bike lane

Levels of Service

Hamilton/Michigan (SB approach)			
Peak Hour	Current	2038 Unchanged	2038 Lane Reduction
AM	C	C	C
PM	C	D	D



Hamilton:

Michigan to Ferris (2/3)

- Michigan-Ferris: Rightmost lane (west side) becomes bike lane; left-only lane to Ferris (east side) becomes on-street parking
- Ferris intersection is improved with ADA ramps and striping; pedestrians only cross 2 lanes of traffic (from four)

Levels of Service

Peak Hour	Hamilton/Ferris (SB approach)		
	Current	2038 Unchanged	2038 Lane Reduction
AM		N/A – Free-flow	
PM		N/A – Free-flow	

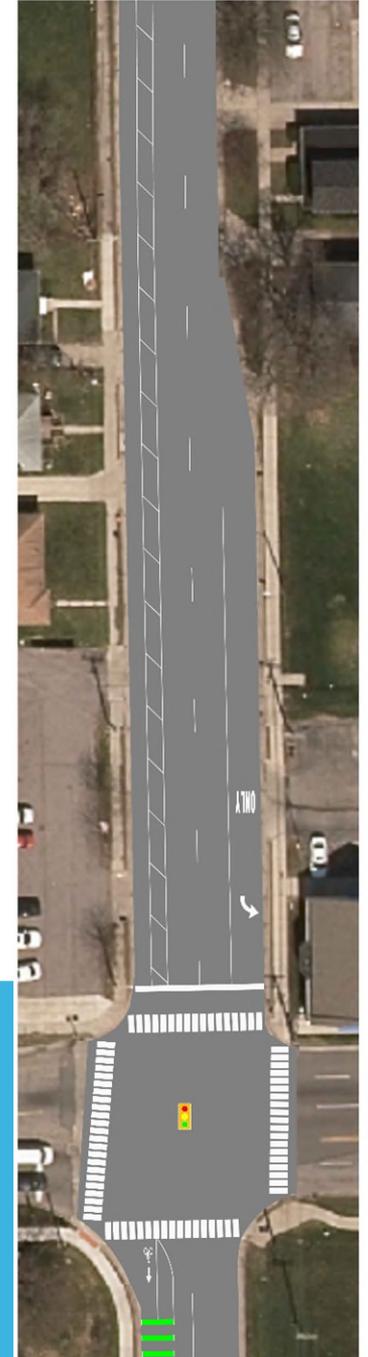


Hamilton: Ferris to Harriet (3/3)

- Ferris-Harriet: Rightmost lane (west side) becomes bike lane

Levels of Service

Peak Hour	Hamilton/Harriet (SB approach)		
	Current	2038 Unchanged	2038 Lane Reduction
AM	B	B	A
PM	C	D	D



Proposed I-94 Crossing

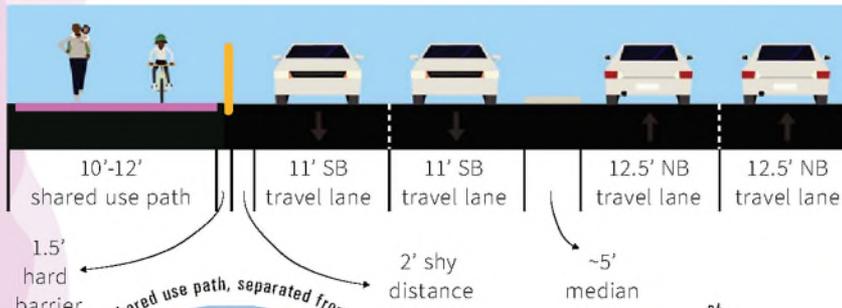
Preferred Alternative

Shared Use Path on West Side

Key Improvements

- * 10'-12' shared use path
- * Hard barrier on outside of path
- * Pedestrian signals
- * Reconfigured southwest on-ramp
- * Better sidewalk connections

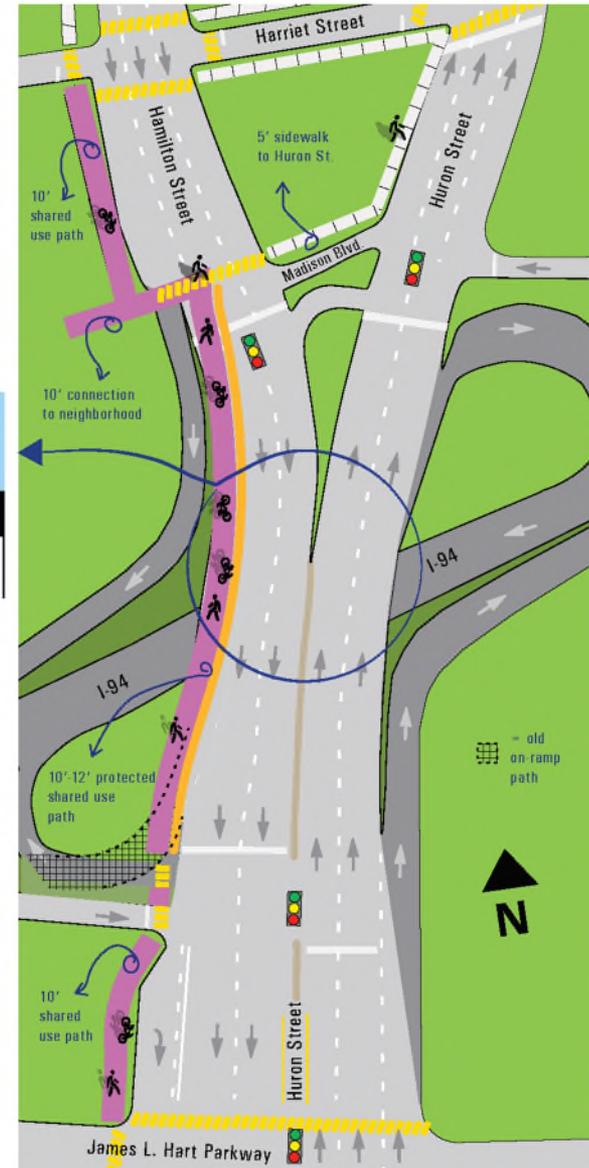
Cross section at center of bridge



side-running shared use path, separated from roadway



shared use path

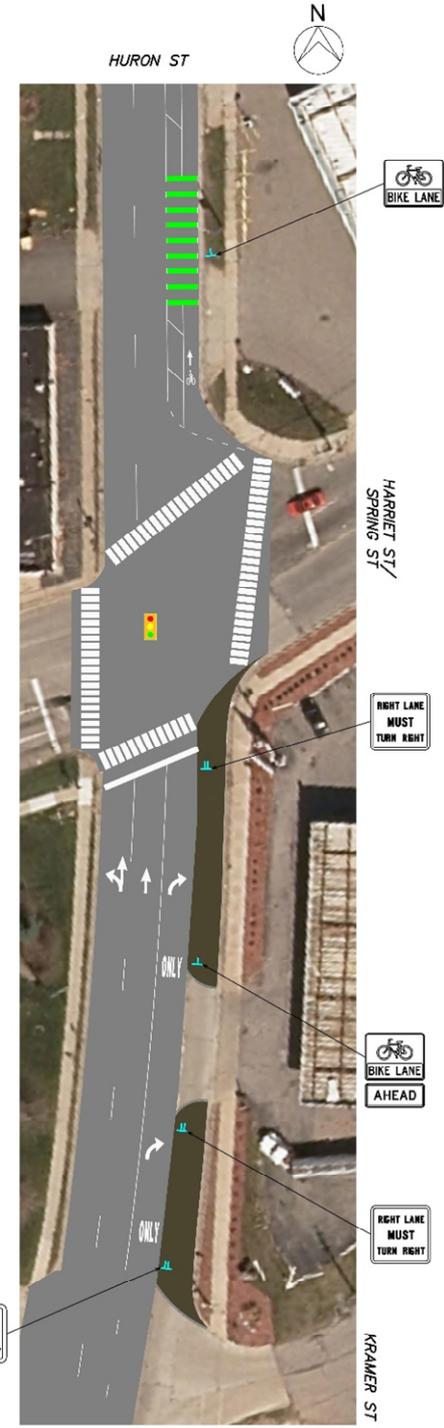


Huron: Harriet to Ferris (1/4)

- South of Harriet: current right-only lane is removed (replace with streetscaping); rightmost lane becomes right-only
- Harriet – Ferris: rightmost lane (east side) becomes bike lane

Levels of Service

Peak Hour	Huron/Harriet (NB approach)		
	Current	2038 Unchanged	2038 Lane Reduction
AM	B	B	C
PM	A	A	B

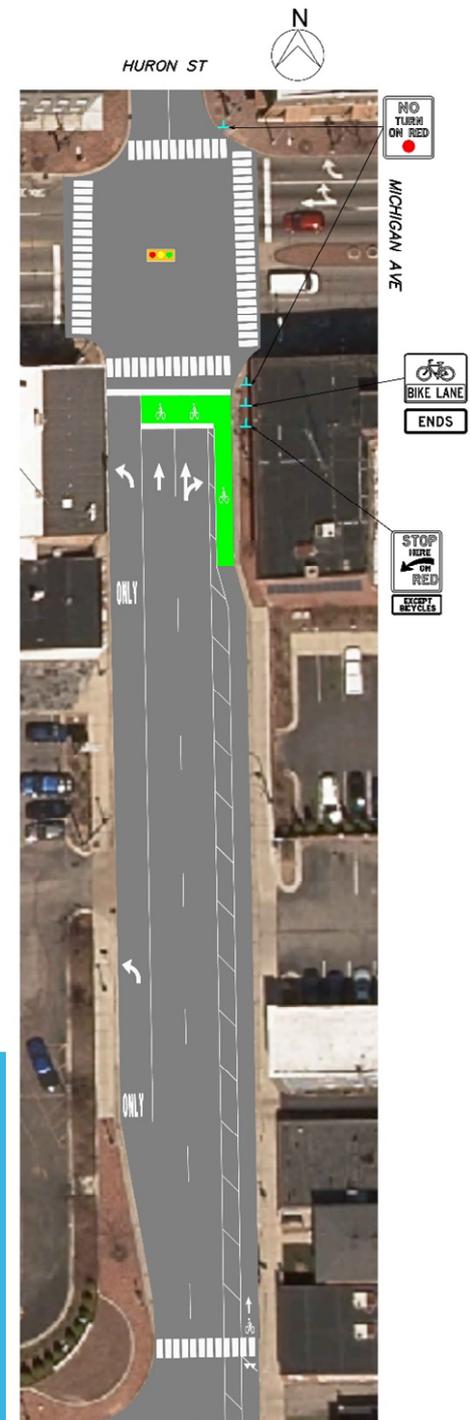


Huron: Ferris-> Pearl (2/4)

- Ferris-Michigan: current no-parking area becomes bike lane
- Michigan-Pearl: "share the road" signage and pavement markings
- Bike box at Michigan: <https://www.youtube.com/watch?v=tQKKAynF2pg>
- No vehicle lanes removed

Levels of Service

Peak Hour	Huron/Michigan (NB approach)		
	Current	2038 Unchanged	2038 Lane Reduction
AM	B	C	C
PM	B	B	C



Huron: Michigan -> Pearl (3/4)

- Michigan to Pearl: no changes to lanes; add "share the road" signage and sharrows.





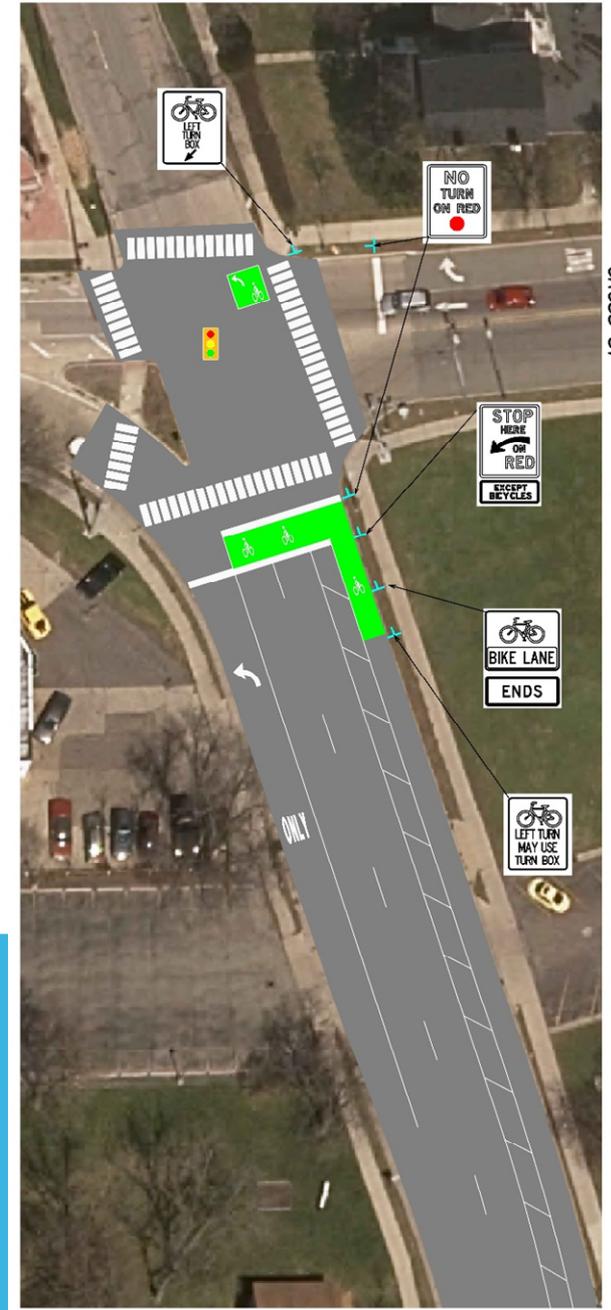
Huron: Pearl to Cross (4/4)

- Pearl-Cross: rightmost lane (east side) becomes bike lane
- At Cross: 2-stage left for bikes- will make turning left to W Cross bike lane easier for bikes and more predictable for vehicle traffic
https://www.youtube.com/watch?v=5S_JjsxZGU

Levels of Service

Peak Hour	Huron/Cross (NB approach)		
	Current	2038 Unchanged	2038 Lane Reduction
AM	C	C	C
PM	C	C	C

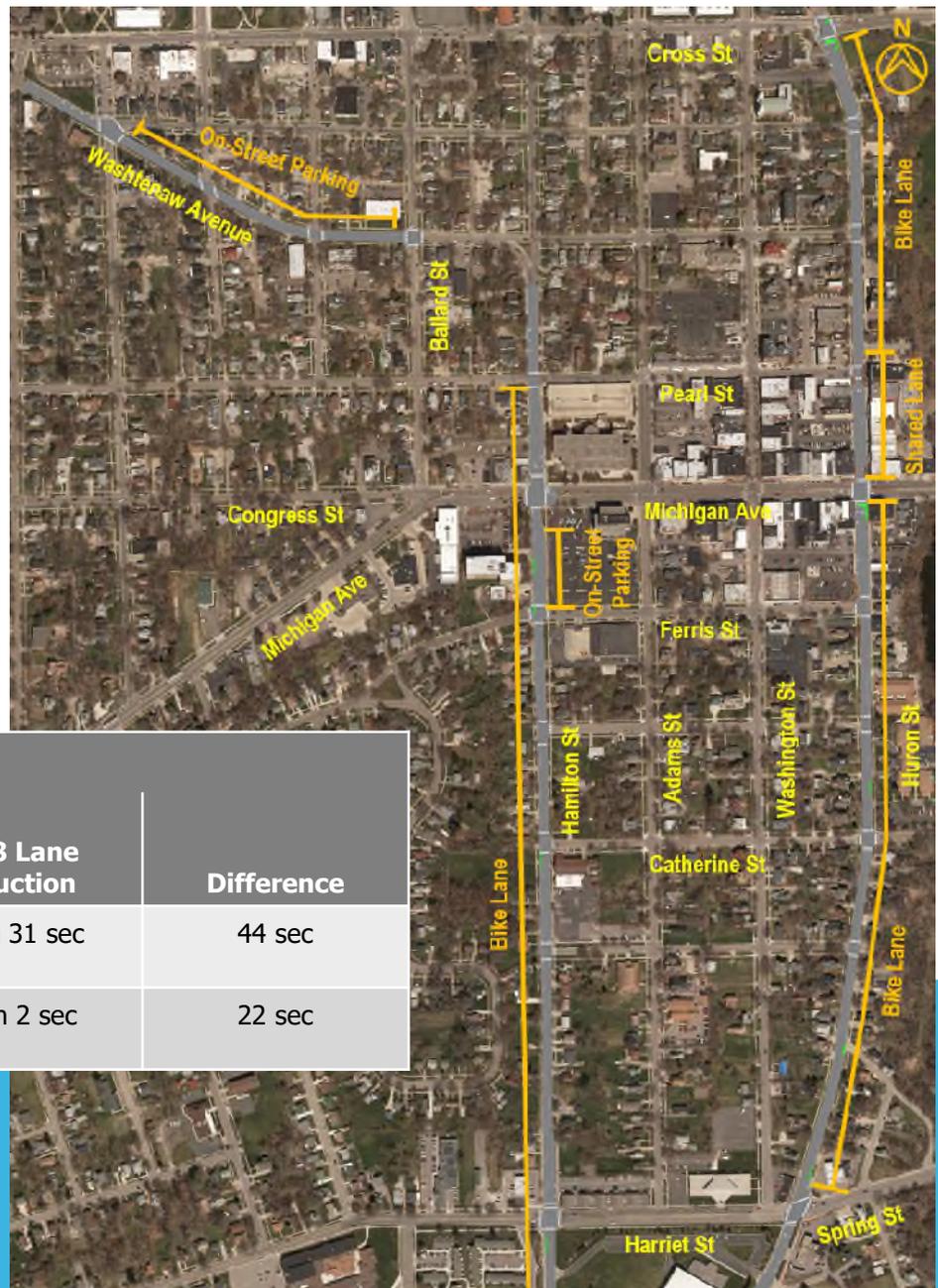
HURON ST



Overall Changes

- Add over a mile of bike lanes and safe turning at major intersections
- Add ADA ramps at major pedestrian crossings
- Maintains bus service
- Adds less than half a minute to PM peak travel on Hamilton; less than a minute to AM peak travel on Huron

	Current (Google Maps)	Travel Times		
		2038 Unchanged	2038 Lane Reduction	Difference
Huron AM peak	2 minutes	3 min 49 sec	4 min 31 sec	44 sec
Hamilton PM peak	3 minutes	2 min 42 sec	3 min 2 sec	22 sec



Summary & Next Steps

The project would:

- Improve pedestrian and bicyclist safety.
- Enable more people who cannot or choose not to drive (and park) to bike instead.
- Slow vehicle traffic speeds, reducing the risk of fatal injury in a crash.
- Increase vehicle travel time through downtown by less than a minute at peak times.
- Tie in to the planned pedestrian/bike crossing of I-94, making crossing much easier and much safer.
- Add on-street parking downtown and near campus.
- Reduce the predicted number of crashes per mile per year by reducing the number of travel lanes.

Next Steps:

- Review & incorporate public feedback
 - Council determination
 - MDOT determination
- 

Questions?

