

M-20 RECONSTRUCTION FROM US-127BR TO US-127



PUBLIC MEETING
APRIL 15, 2021

TITLE VI OF THE CIVIL RIGHTS ACT

Title VI of the Civil Rights Act of 1964 requires MDOT to provide the opportunity for everyone to comment on transportation programs and activities that may affect their community. Please take this three-question survey in the chat:

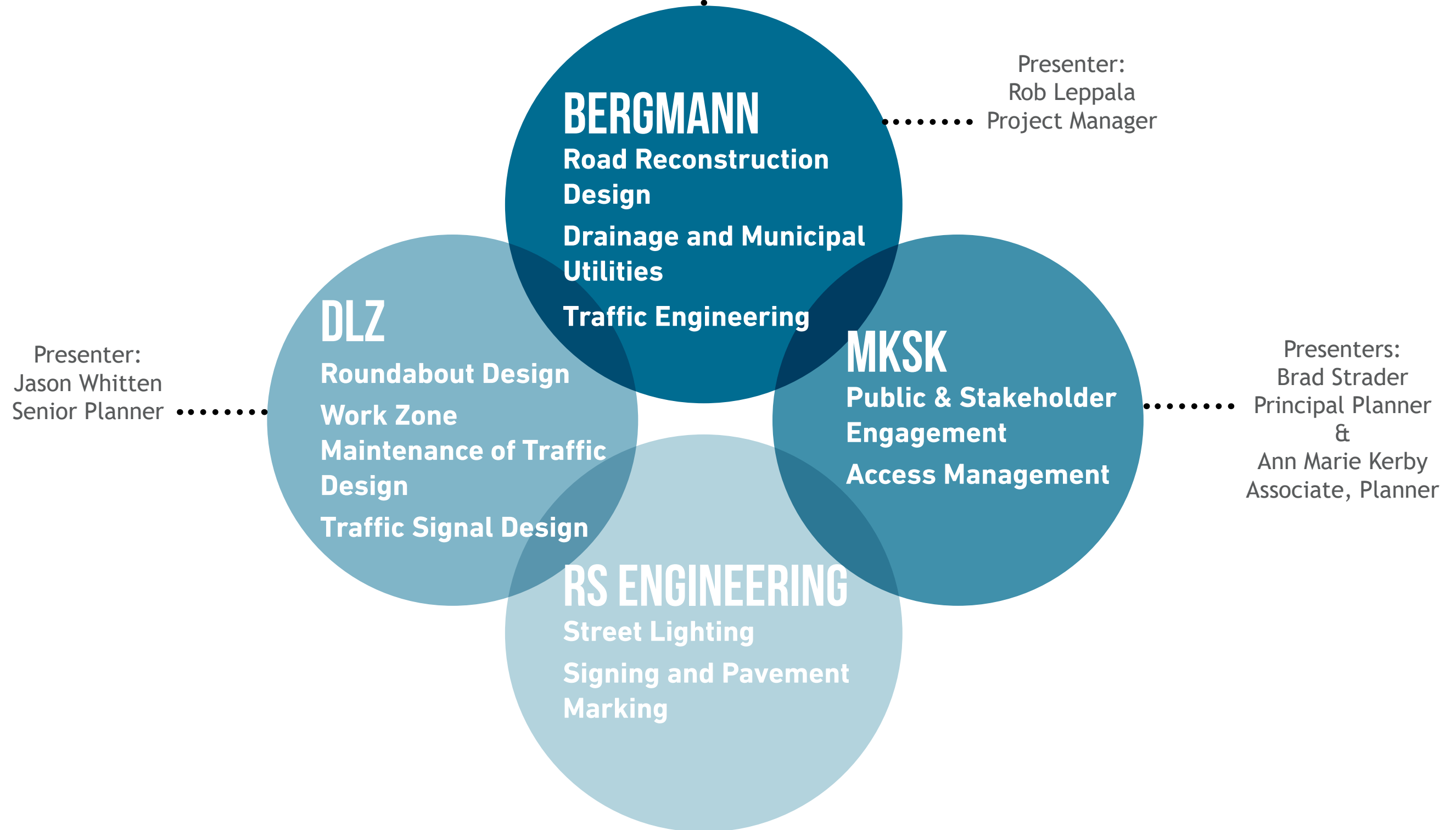
<https://bit.ly/39BiDox>

You can help MDOT comply with Title VI and related statutes, which require the collection of statistical data to aid in assessing MDOT's outreach efforts among those who are affected or interested in this project.

INTRODUCTIONS



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Presenter:
Jason Whitten
Senior Planner

Presenter:
Rob Leppala
Project Manager

Presenters:
Brad Strader
Principal Planner
&
Ann Marie Kerby
Associate, Planner

TODAY'S AGENDA

- 1 Project Overview
- 2 Project and Engagement Schedule
- 3 Existing Conditions
- 4 Roundabouts and Benefits
- 5 Maintenance of Traffic
- 6 Next Steps
- 7 Q&A/Discussion

PROJECT OVERVIEW

BACKGROUND AND NEED

- Pickard Road/M-20 was originally constructed in 1933
- The road was widened in 1961, completed with a new freeway interchange at US-127
- Numerous pavement preservation methods have been applied over the years, but it has reached the end of its useful life, thus the decision was made to rebuild the roadway



The newly completed US-127 freeway interchange with M-20 in 1961

Source: Mt. Pleasant Daily Times-News

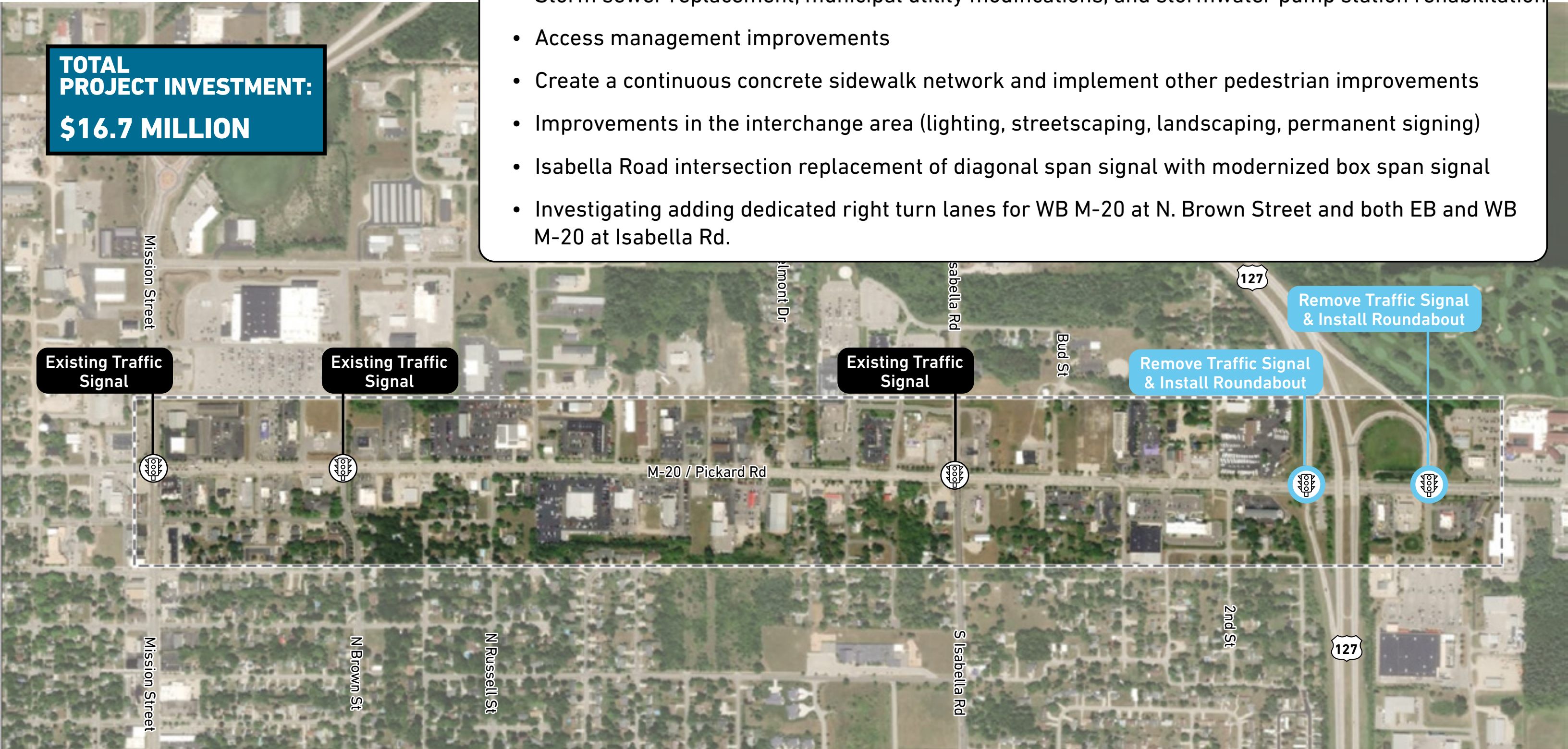
PROJECT OVERVIEW

STUDY AREA & DESCRIPTION

KEY PROJECT COMPONENTS

- Reconstruction of M-20 (will remain a 5-lane road)
- Construction of roundabouts at the US-127 interchange ramp terminals
- Storm sewer replacement, municipal utility modifications, and stormwater pump station rehabilitation
- Access management improvements
- Create a continuous concrete sidewalk network and implement other pedestrian improvements
- Improvements in the interchange area (lighting, streetscaping, landscaping, permanent signing)
- Isabella Road intersection replacement of diagonal span signal with modernized box span signal
- Investigating adding dedicated right turn lanes for WB M-20 at N. Brown Street and both EB and WB M-20 at Isabella Rd.

**TOTAL
PROJECT INVESTMENT:
\$16.7 MILLION**



PROJECT GOALS



Implement long-term pavement condition improvements



Enhance traffic operations and reduce congestion



Implement access management strategies to benefit overall corridor safety; safer intersections and driveways, as well as improved pedestrian safety.

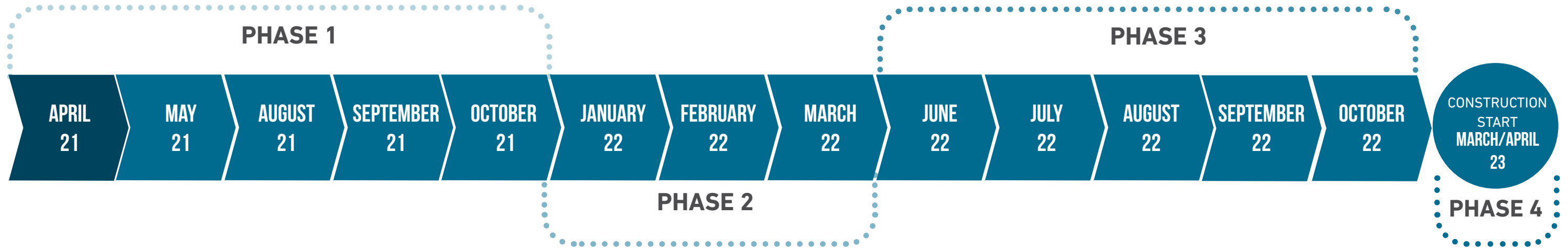


Update underground utilities and drainage



Provide safe construction zones and minimize disruption to traffic and business access during construction

PROJECT AND ENGAGEMENT SCHEDULE



PHASE	1. DESIGN PLANS	2. PRE-FINAL PLANS	3. FINAL PLANS AND BID LETTING	4. CONSTRUCTION
DELIVERABLE	<ul style="list-style-type: none"> Submit Base Plans to MDOT - 4/23/21 Submit Preliminary Plans to MDOT - 9/10/21 	<ul style="list-style-type: none"> Submit FPC Plans to MDOT - 2/11/22 	<ul style="list-style-type: none"> Plan Completion - 6/2/22 Submit Final Plans to MDOT- 7/29/22 Letting Date -10/7/22 	<ul style="list-style-type: none"> Construction of Project Begins - March/Apr 23 Construction anticipated to take 2 years
ENGAGEMENT	<ul style="list-style-type: none"> 1st Stakeholder Meeting - 4/6/21 1st Public Meeting -4/15/21 (TODAY) Base Plan Review Meeting - 5/27/21 2nd Stakeholder Meeting -8/21 Plan Review Meeting - 10/19/21 	<ul style="list-style-type: none"> 3rd Stakeholder Meeting - 1/22 FPC Meeting - 3/23/22 	<ul style="list-style-type: none"> 4th Stakeholder Meeting - 7/22 2nd Public Meeting - 9/22 	

EXISTING CONDITIONS

TRAFFIC VOLUMES



	2019	2023	2043
Total Average Daily Traffic (ADT)	19,400	19,775	21,850
Directional ADT	10,075	10,275	11,375
% Commercial of ADT	4%		
Commercial DDHV	39	40	44

LEGEND

AA DT

- Mission St to Isabella Rd
- Isabella Rd to US-127
- US-127 to Summerton Rd

Source: [MDOT Traffic Volumes Map \(2019\)](#)

EXISTING CONDITIONS

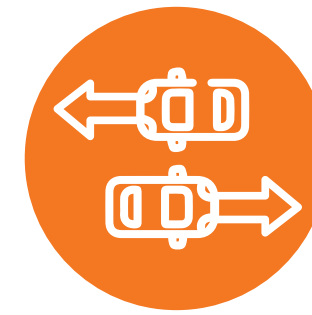
CRASH AND SAFETY ANALYSIS

- Five-Year Study Period
- **91 crashes** attributed to vehicles entering or exiting driveway
- Accounting for **26% of all crashes** on the corridor
- From Mission Street to Brown Street:
23 driveway related crashes
- Between US-127 NB and SB ramps:
18 driveway related crashes

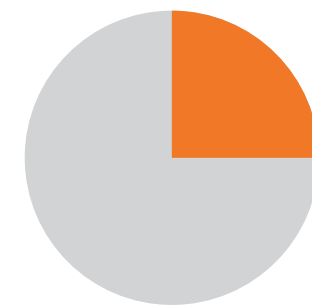
Driveway Related Crash Severity Summary

Crash Severity	M-20	
Property Damage Only	69	75.8%
C-Level Injury	12	13.2%
B-Level Injury	9	9.9%
A-Level Injury	1	1.1%
Fatal	0	0.0%
Total	91	

Source: MSP/Office of Highway Safety Planning(January 1, 2015 through December 31, 2019)



91
driveway related
crashes



26%
of all crashes
on the corridor



24%
of driveway crashes
result in injury



18
driveway crashes
occurred around US-127

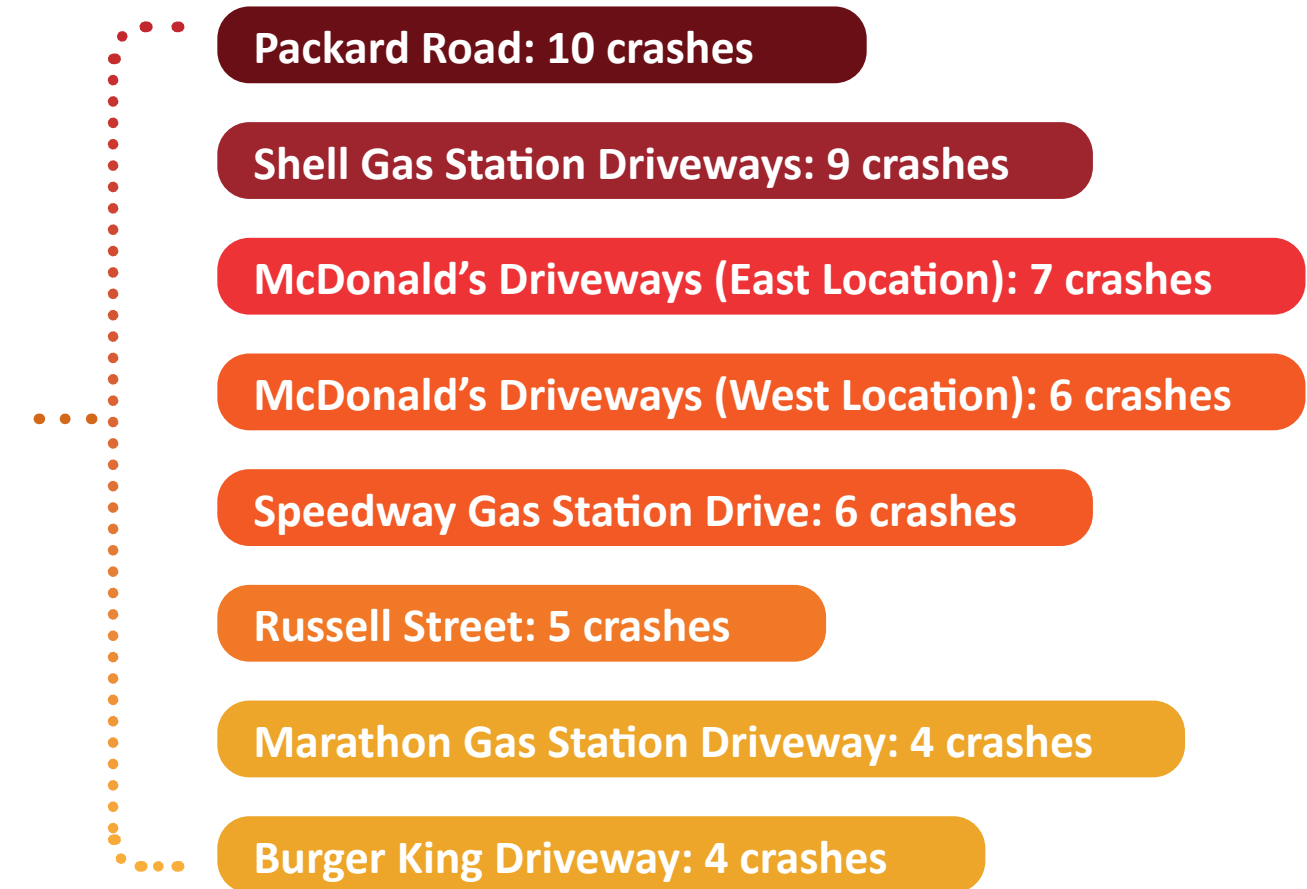
EXISTING CONDITIONS

CRASH AND SAFETY ANALYSIS

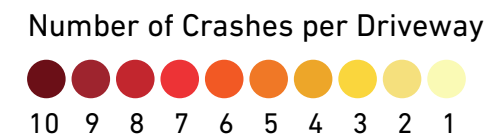
Driveway Related Crash Type Summary

#	Driveway	Angle	Head-On LT	Rear-End RT	Rear-End LT	Side-swipe	Head-On	Single Vehicle	Backing	Total
1	2nd Street	1	0	0	0	0	0	0	0	1
2	Advance Auto Parts Driveway	2	0	0	0	0	0	0	0	2
3	Airway Drive	1	0	0	0	0	0	0	0	1
4	Belle Tire Drive	0	0	3	0	0	0	0	0	3
5	Belmont Drive	2	0	0	0	0	0	0	0	2
6	Burger King Driveway	3	0	1	0	0	0	0	0	4
7	Carter Street	1	0	0	0	0	0	0	0	1
8	Celebration Cinema Drive	1	1	0	0	0	0	0	0	2
9	Crankers Drive	1	1	0	0	0	0	0	0	2
10	Dan Dan Mattress Man Drive	1	0	0	0	0	0	0	0	1
11	Elizabeth Street	2	0	0	1	0	0	0	0	3
12	Godwin's Furniture Drive	0	0	1	0	0	0	0	0	1
13	Graf Chevrolet Drives	1	0	0	0	1	0	0	0	2
14	Green Spot Pub Drive	1	0	0	0	0	0	0	0	1
15	IHOP Drive	1	0	1	0	0	0	0	0	2
16	Marathon Gas Station Driveway	4	0	0	0	0	0	0	0	4
17	McDonald's Driveways (East Location)	3	2	0	1	0	0	1	0	7
18	McDonald's Driveways (West Location)	5	1	0	0	0	0	0	0	6
19	Meijer Drive East	2	1	0	0	0	0	0	0	3
20	Meijer Drive West	0	0	1	0	0	1	0	0	2
21	Meijer Gas Station Drive	1	0	0	0	0	0	0	0	1
22	Northridge Drive	0	0	0	0	1	0	0	0	1
23	O'Reilly's Auto Drive	0	0	1	0	0	0	0	0	1
24	Packard Road	10	0	0	0	0	0	0	0	10
25	Park & Ride Drive	2	0	0	0	0	0	0	0	2
26	Pickard Square Plaza Drive	1	0	0	0	0	0	0	0	1
27	Ponderosa Drive	1	0	0	0	0	0	0	0	1
28	Russell Street	3	1	0	0	1	0	0	0	5
29	Shell Gas Station Driveways	1	4	1	2	0	0	0	1	9
30	Speedway Gas Station Drive	5	0	0	0	0	0	1	0	6
31	Tattoo Shop Drive	1	0	0	0	0	0	0	0	1
32	Tim Hortons Drive	1	0	0	0	1	0	0	0	2
33	Tolas Auto Sales Drive	1	0	0	0	0	0	0	0	1
34	Tuffy Drive	1	0	0	0	0	0	0	0	1
Total		59	11	9	3	4	2	2	1	91

Top Driveway Related Crash Locations:



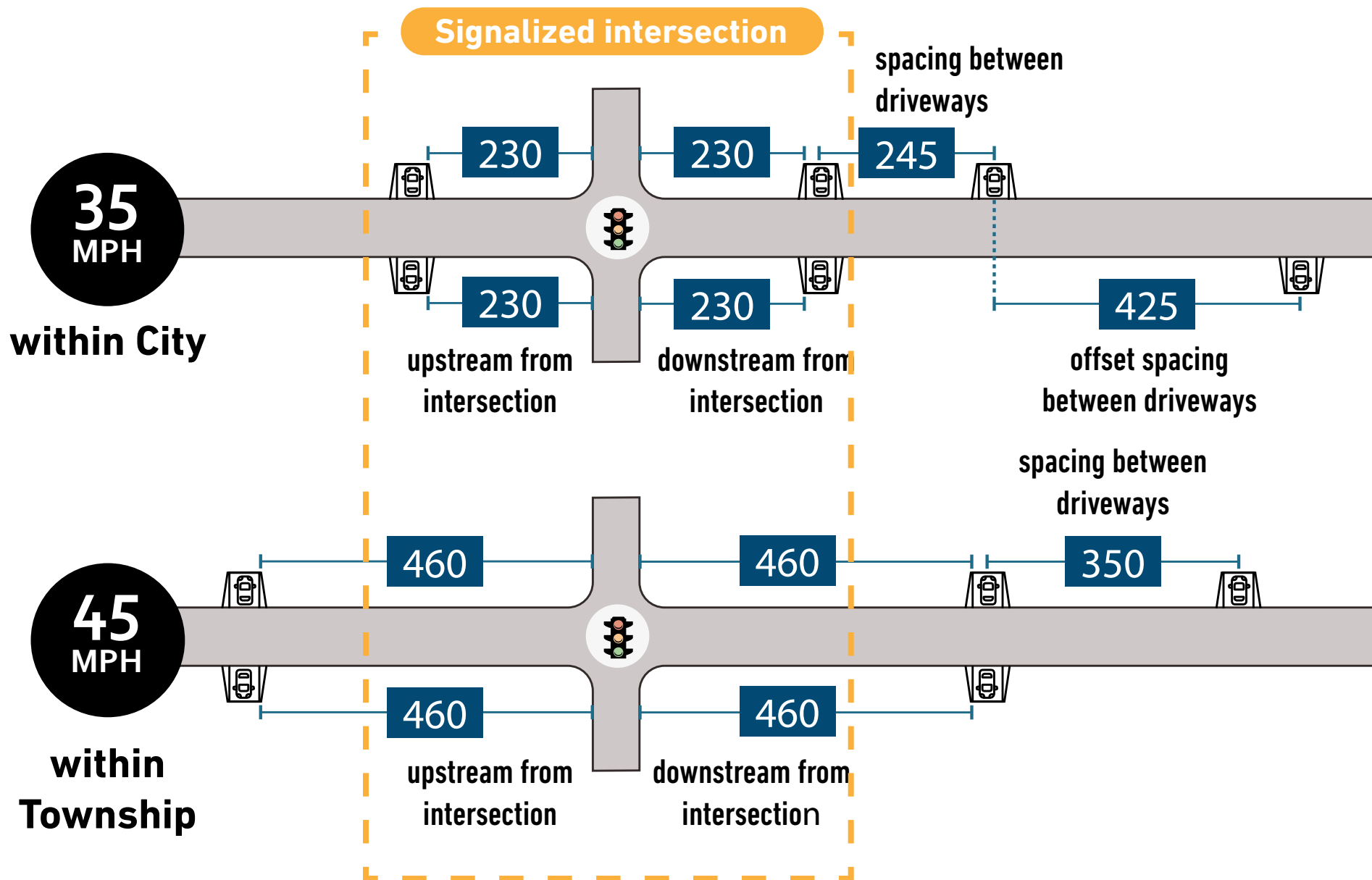
Source: MSP/Office of Highway Safety Planning (January 1, 2015 through December 31, 2019)



ACCESS MANAGEMENT

MDOT STANDARDS

We will be using these standards to make recommendations for consolidating drives and adhering to MDOT standards for driveway design and spacing.



Source: MDOT Access Management Guidebook

Access Management

- Reduction of driveways can help avoid congestion and reduce potential for crashes
- M-20 2006 Access Management Plan
- MDOT's current guidelines

Potential Access Management Changes

- More consistency in driveway width/radii
- Remove tapers
- Evaluate removal of some driveways
- Those that are too close to traffic signals
- Those that are too close to other driveways
- Businesses that have other driveways

MDOT will be available to discuss particular access options

BENEFITS OF ROUNDABOUTS

Roundabouts can:

- **Improve safety** by reducing number of conflict points and promoting lower speeds and traffic calming. Roundabouts reduce head-on/left turn and angle type crashes which can result in serious or fatal injuries.
- **Lead to improved operational performance** by reducing vehicular delays and increases the capacity of the intersection.
- **Reduce the long-term operational and maintenance costs** associated with traditional signalized intersections.
- **Create enhanced aesthetics** over traditional signalized intersections, including green space instead of overhead wires and large poles that clutter the visual environment.

State Trunkline Roundabouts



EXAMPLES OF SUCCESSFUL ROUNDABOUTS



SAGINAW - I-75 AND M-46



SANFORD - US-10 AND M-30



CLARE - US-127 (BUSINESS ROUTE)



MIDLAND - US-10 (BUSINESS ROUTE)



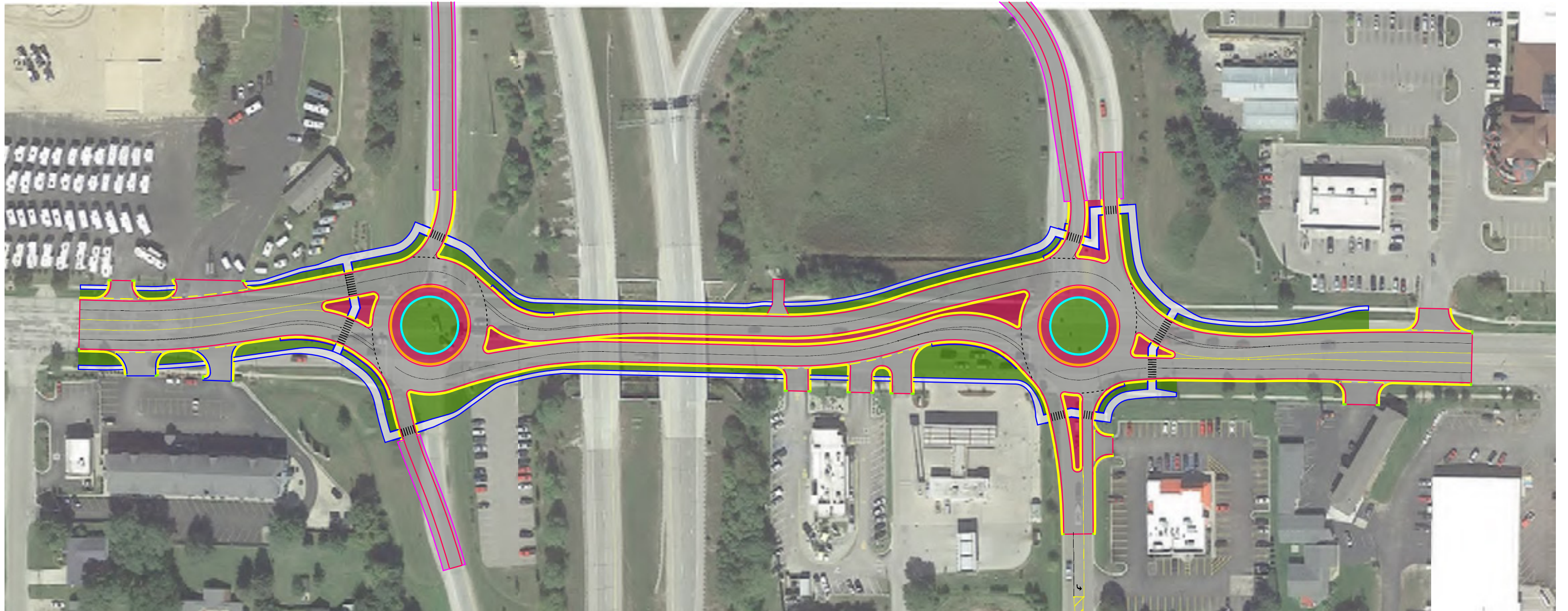
SAGINAW - I-75 AND M-81



UNION TWP - NORTH MISSION ST

PROJECT DESCRIPTION

PROPOSED INTERCHANGE ROUNDABOUT CONCEPT



- **Proven safety benefit:** Safety analysis showed a significant reduction of the crash types that currently exist; safety funding was granted for the roundabout at the NB ramp terminals
- **Operational improvement:** Operational analysis shows a Level of Service A at both roundabouts for the 2043 design year

MAINTENANCE OF TRAFFIC

- The Project Team is focused on investigating options that will construct the roadway part-width, maintaining 1 lane in each direction along M-20 at all times (along with a center lane for left turns where feasible).
- At the US-127 interchange, ramp closures with detours will be required to complete the ramp work.
- Access to businesses will be maintained at all times.



NEXT STEPS

- Additional comments/questions can be submitted to MDOT:
Kim Hill, Cost & Scheduling Engineer - Mt. Pleasant TSC
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- MDOT will be meeting with property owners in April and May to discuss implementation of access management
- Project Team will be drafting design and final plans (2021-2022)
- 2nd Public Meeting will take place in Summer/Fall of 2022 to review Final Plans
- Project Website where you can find more information:

https://www.michigan.gov/mdot/0,4616,7-151-9621_11008-556760--,00.html

Q&A / DISCUSSION

Options FOR GIVING FEEDBACK OR ASKING QUESTIONS:

- Type your question IN THE CHAT BOX or
- Use “raise hand” icon to speak

Call-in attendees will have an opportunity to unmute and speak

- Project Website where you can find more information:

https://www.michigan.gov/mdot/0,4616,7-151-9621_11008-556760--,00.html