

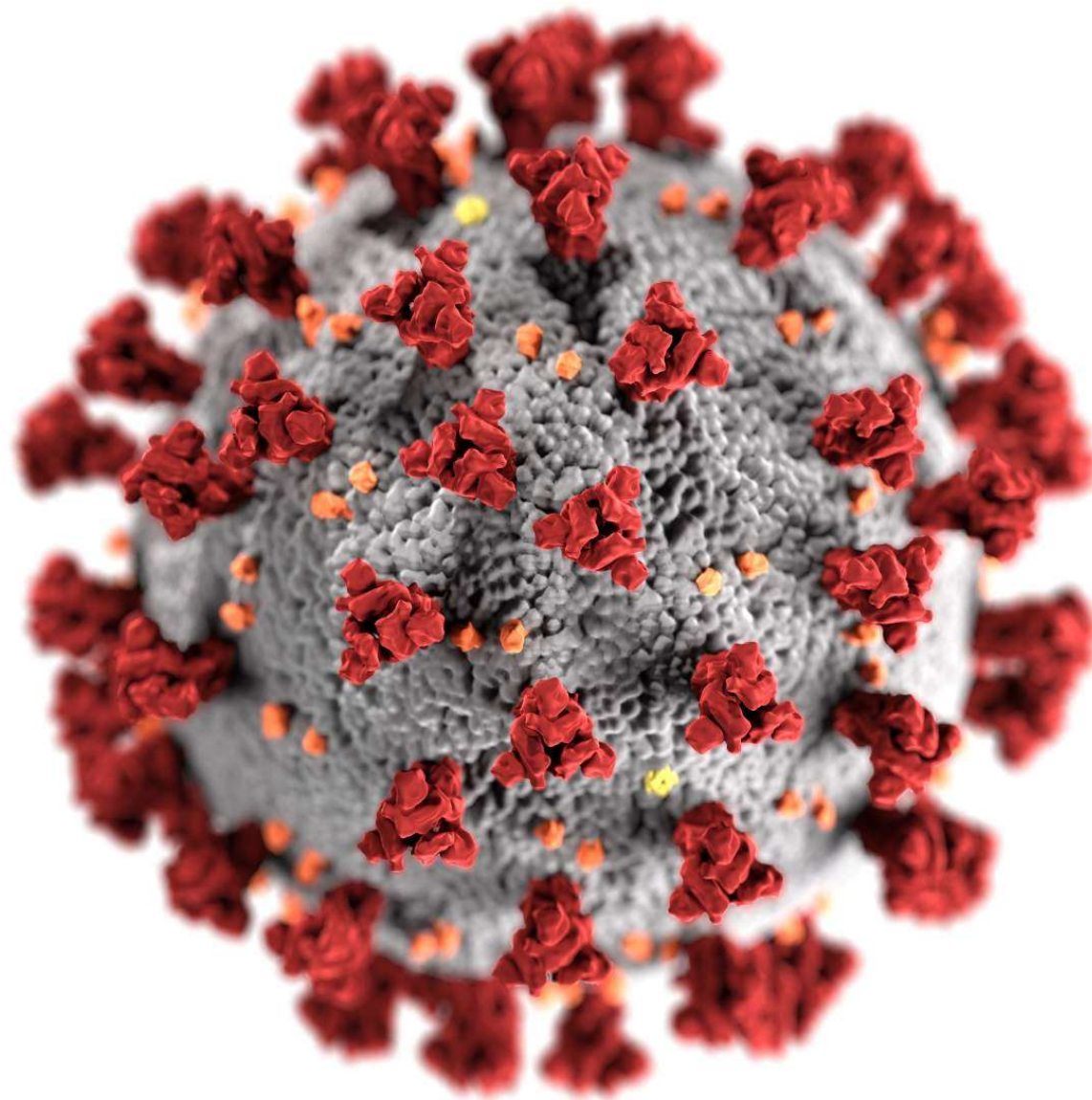
MDOT Update

ASPHALT PAVEMENT ASSOCIATION OF MICHIGAN

FEBRUARY 23, 2021

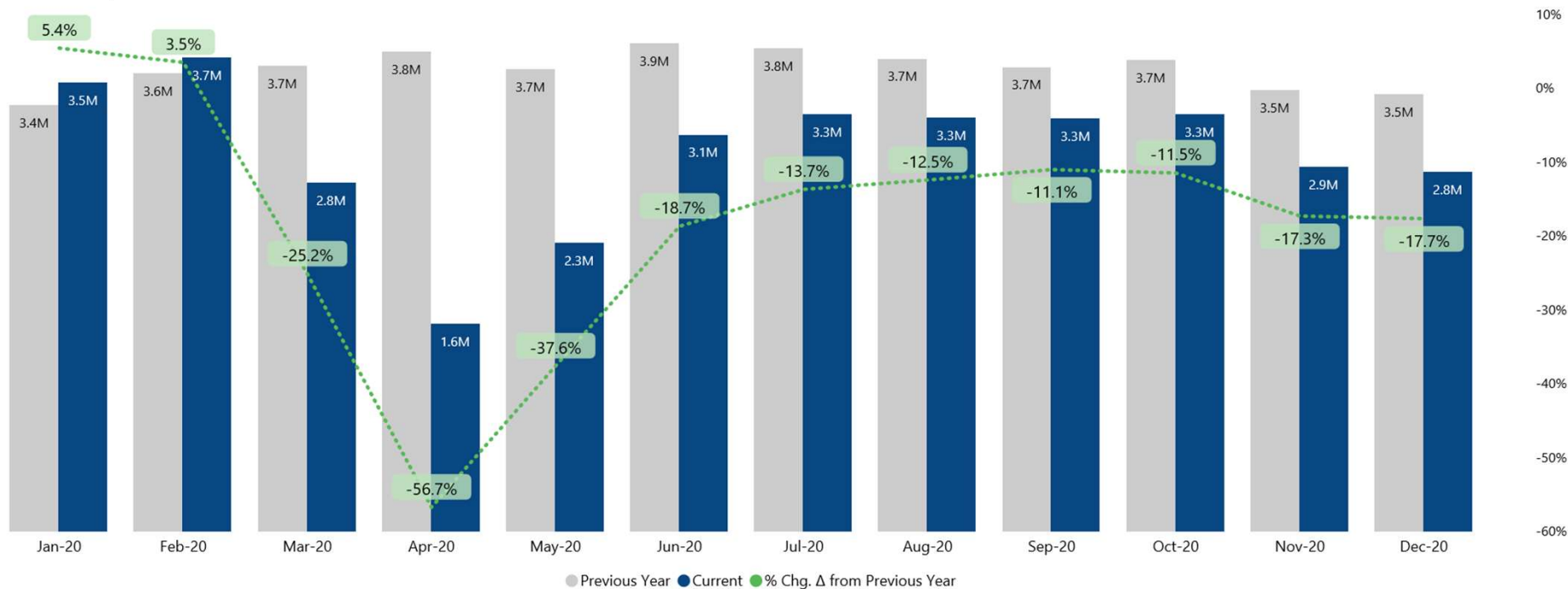
TONY KRATOFIL, PE

CHIEF OPERATING OFFICER & CHIEF ENGINEER



[Back to report](#)

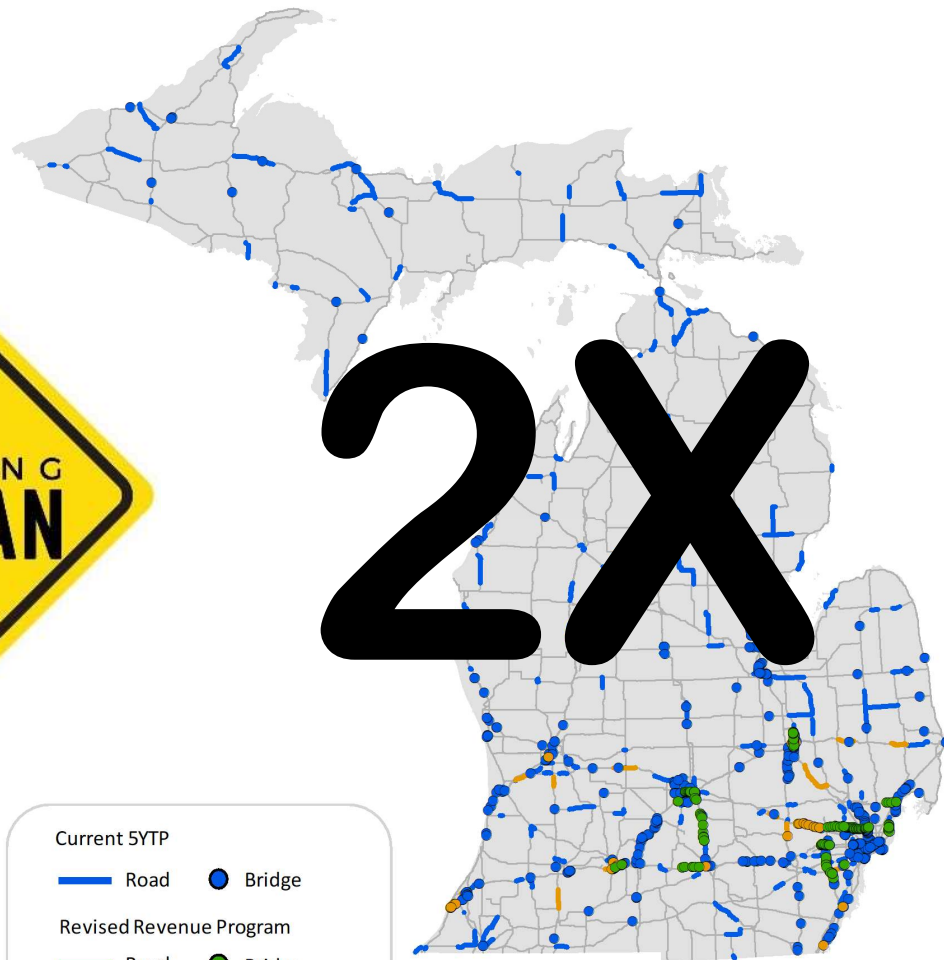
MONTHLY ADT AND % CHG. Δ FROM PREVIC US YEA !



Michigan Traffic Crash Deaths

	Urban	Rural	Total	Commercial Vehicle	Motorcycle	Pedestrian	Bicycle
2019	581	404	985	106	122	149	21
2020	595	409	1004	73	140	160	39
Change	2.4%	1.2%	1.9%	-31.1%	14.8%	7.4%	85.7%

Source: Michigan Department of Transportation, Transportation Data Management System



Current 5YTP

— Road ● Bridge

Revised Revenue Program

— Road ● Bridge

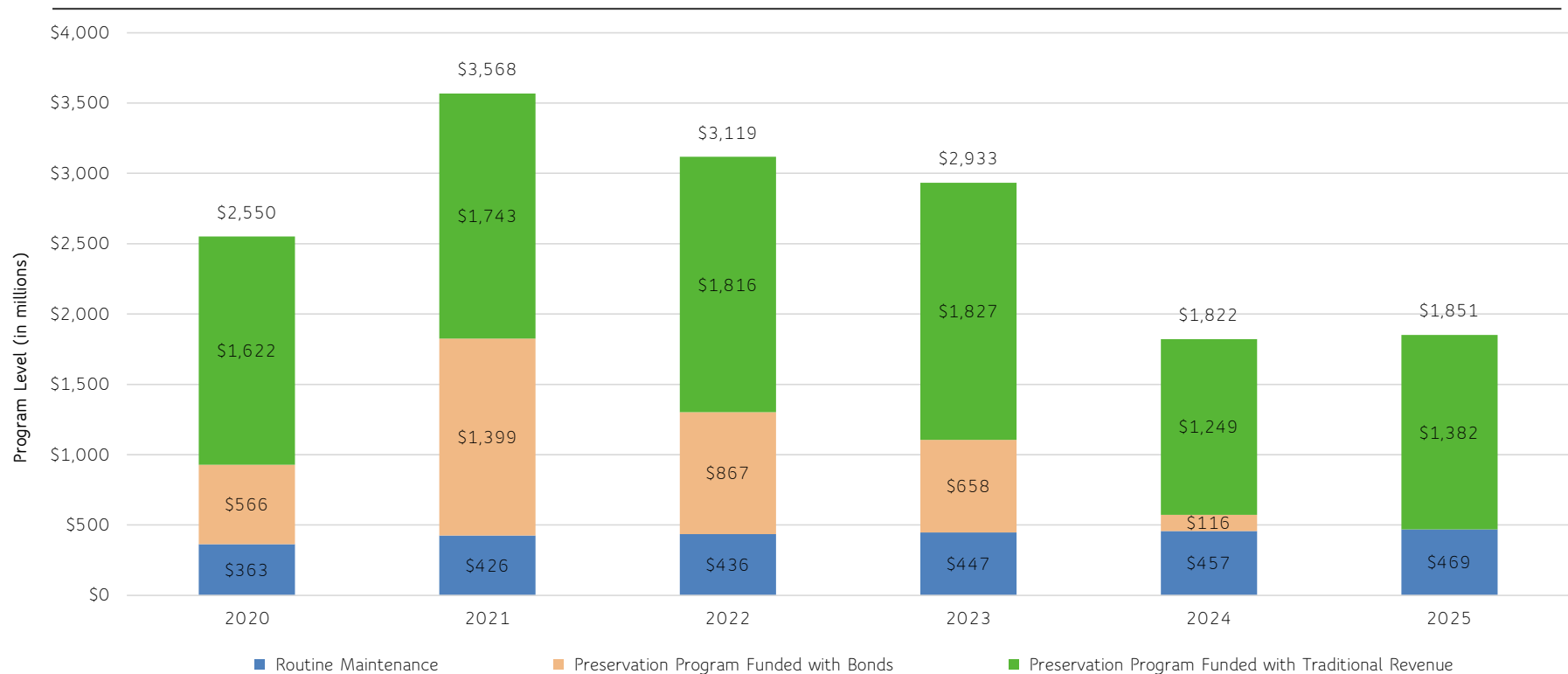
Bonded Revenue Program

— Road ● Bridge



Rebuilding Michigan

Highway Program Investment FY 2020-25 (in millions)

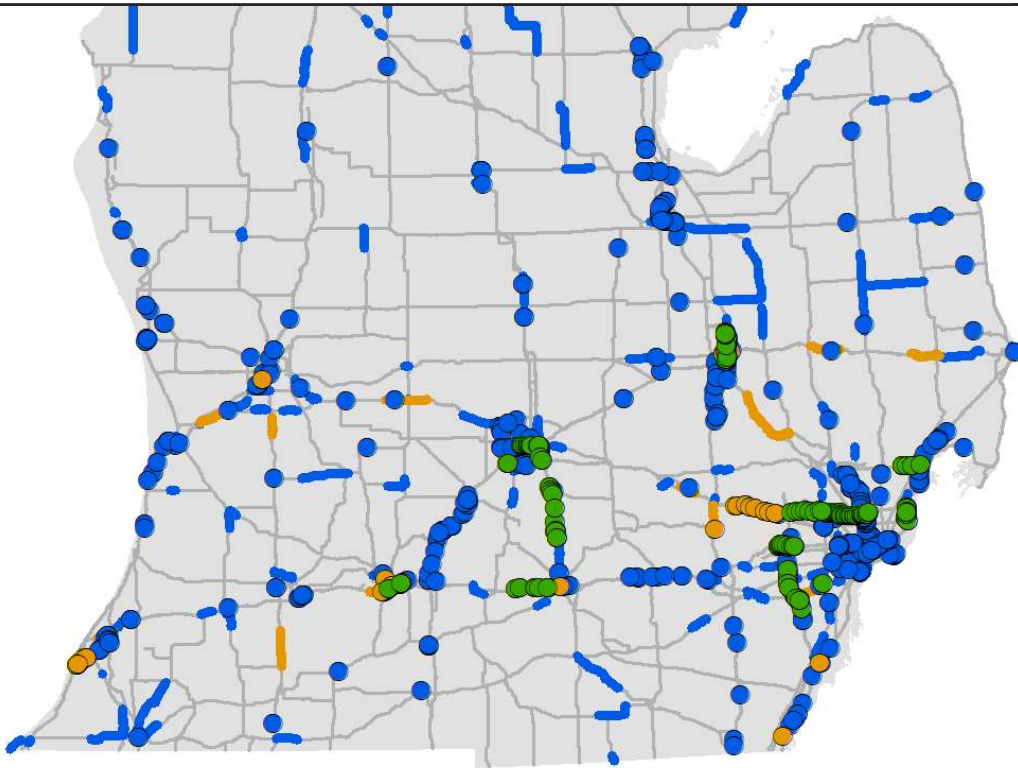


*This slide shows investment by obligation year while the previous slide shows construction phase investment only

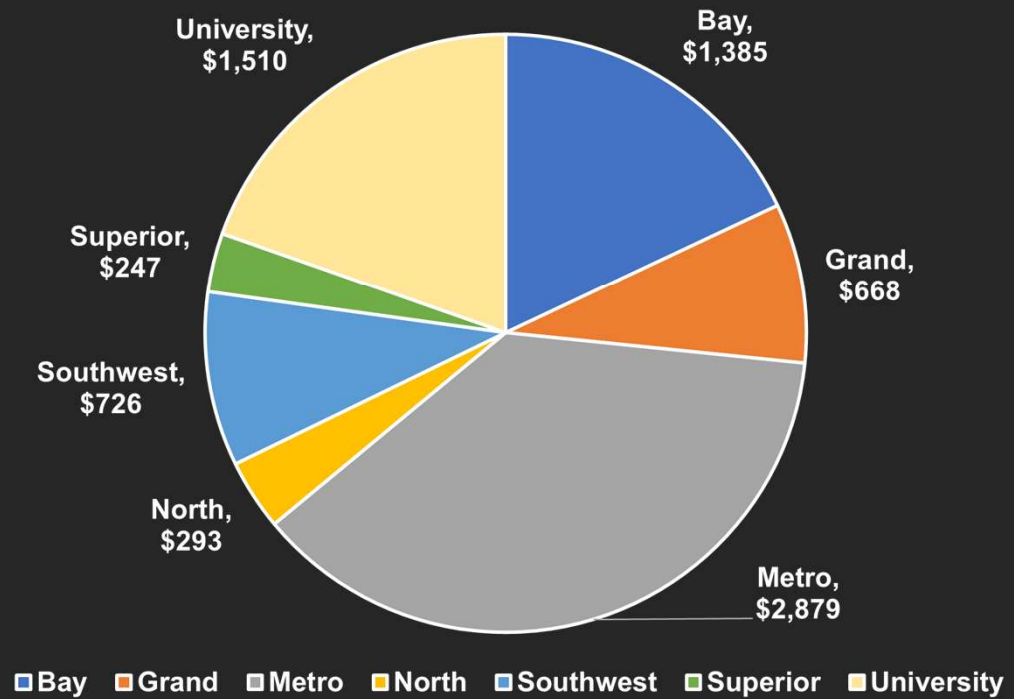


Rebuilding Michigan

Highway Program Investment by Region (in millions)



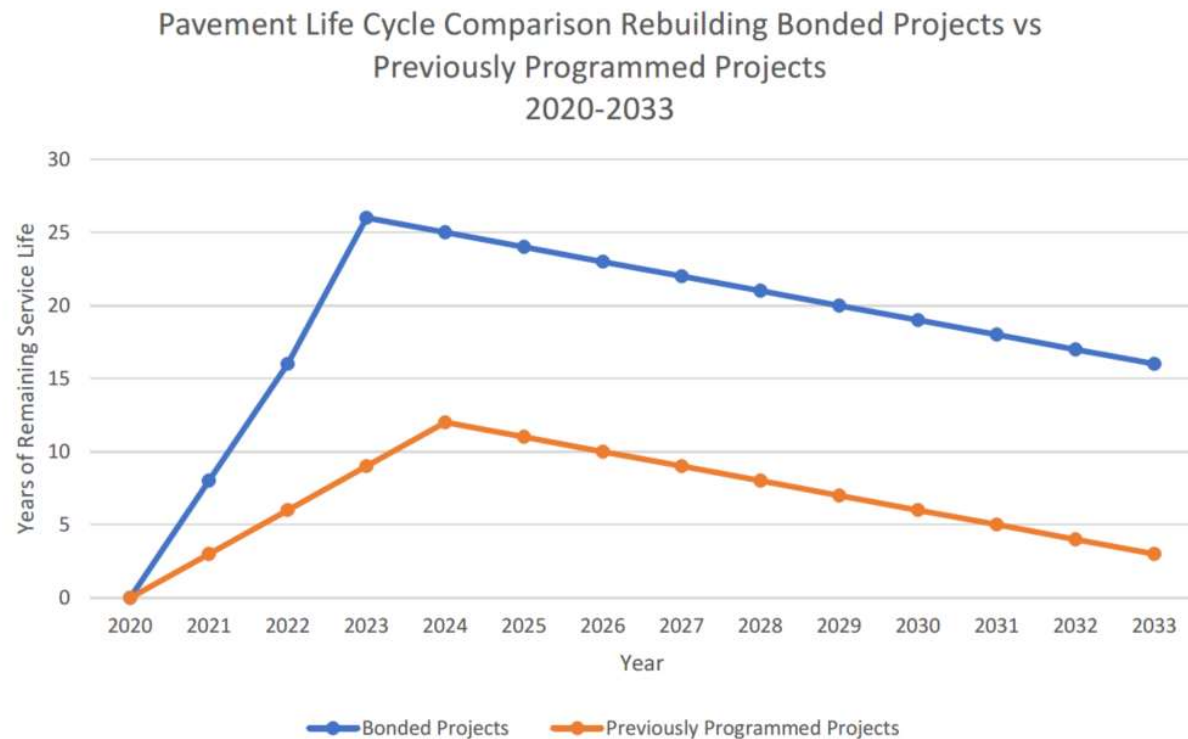
Total 2021-2025 Five Year Construction Plan
\$7.70B





Rebuilding Michigan

Focuses on Long Term Fixes

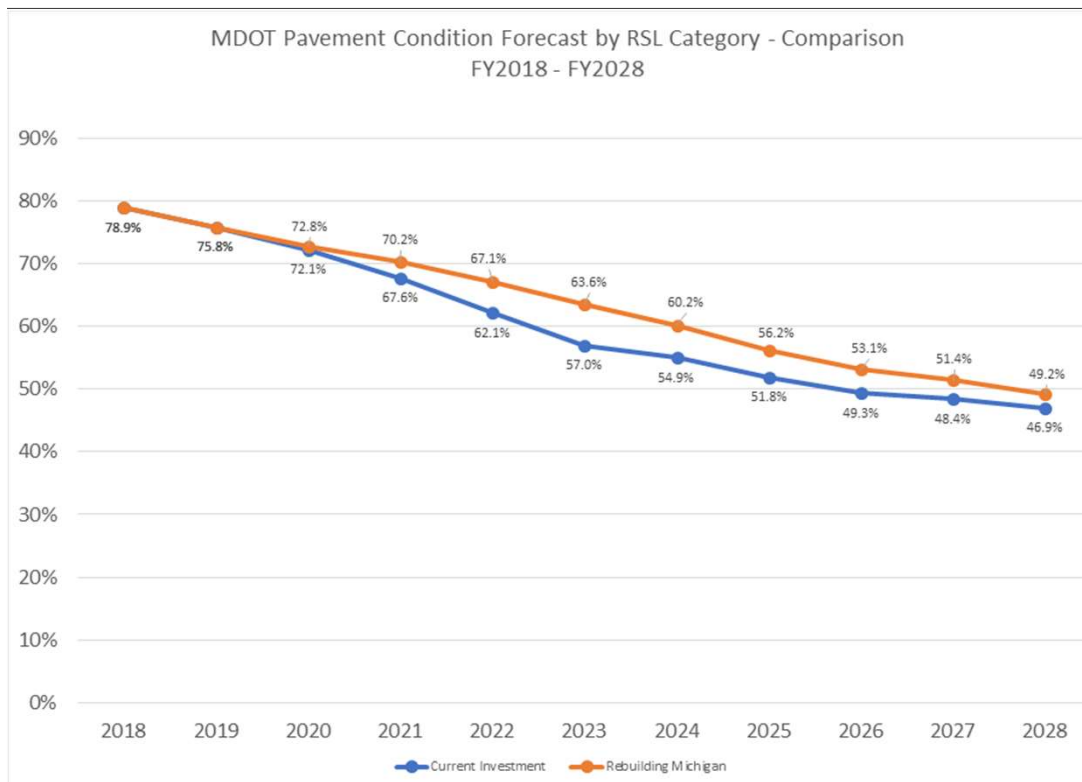


*This slide shows investment by obligation year while the previous slide shows construction phase investment only



Rebuilding Michigan

Long Term Condition Impact



- 6.5% better than previous investment
- 569 more lane miles than previously planned
 - With backfills will address just over 1,000 lane miles
- Benefiting over 62,000 vehicles per day per project
 - 3 million vehicles per day program-wide

*This slide shows investment by obligation year while the previous slide shows construction phase investment only

The figure displays 12 monthly calendars for the year 2021, arranged in a 3x4 grid. Each calendar shows the days of the month with the day of the week (M, T, W, T, F, S, S) indicated above the dates. The months are color-coded: January (red), February (orange), March (yellow), April (green), May (light green), June (light yellow), July (yellow), August (orange), September (red), October (yellow), November (orange), and December (red).

JANUARY 2021						
M	T	W	T	F	S	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

FEBRUARY 2021						
M	T	W	T	F	S	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28

MARCH 2021						
M	T	W	T	F	S	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

APRIL 2021						
M	T	W	T	F	S	S
				1	2	3
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

MAY 2021						
M	T	W	T	F	S	S
				1	2	
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

JUNE 2021						
M	T	W	T	F	S	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

JULY 2021						
M	T	W	T	F	S	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

AUGUST 2021						
M	T	W	T	F	S	S
					1	
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

SEPTEMBER 2021						
M	T	W	T	F	S	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

OCTOBER 2021						
M	T	W	T	F	S	S
			1	2	3	
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19					

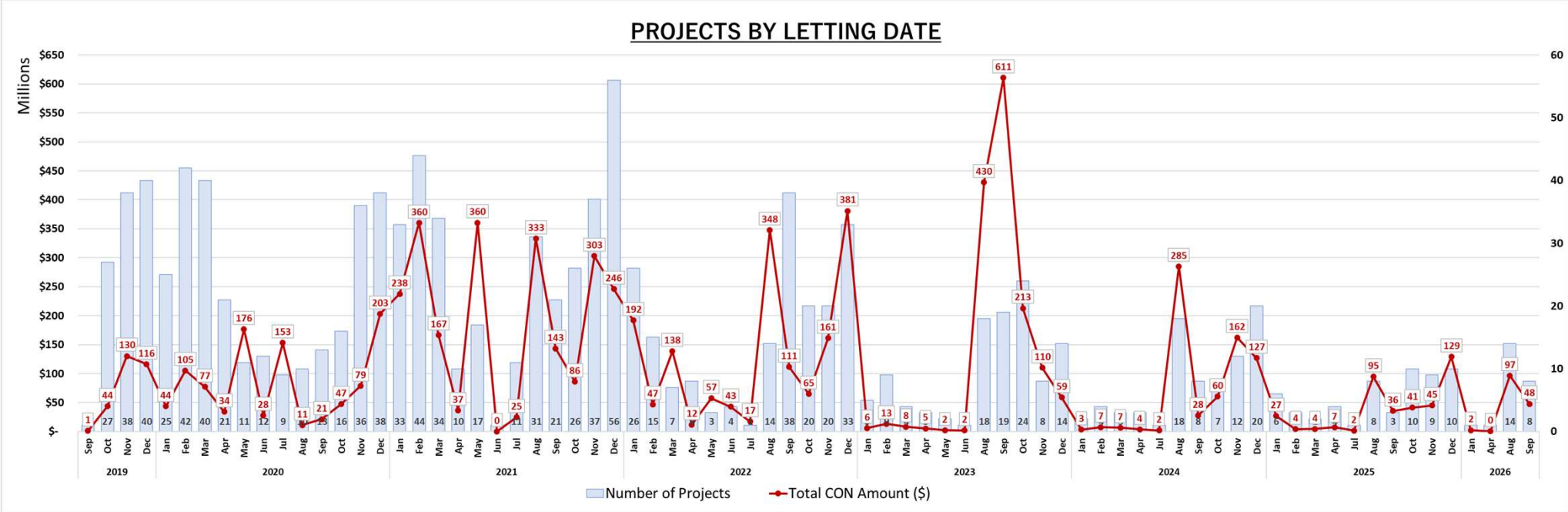
The figure displays a 3x3 grid of calendar snippets for the months of 2021. Each snippet shows the days of the week (M, T, W, T, F, S, S) and the corresponding dates. The months are color-coded: January (light blue), February (light blue), March (light blue), April (light green), May (light green), June (light yellow), July (light yellow), August (light yellow), September (light yellow), October (light yellow), November (light yellow), and December (light yellow). A large, bold, black text overlay with a white outline, reading '+ 30-40%', is centered across the middle of the grid, indicating a significant increase in the number of days with a specific characteristic (likely a holiday or event) across the year.

JANUARY 2021							FEBRUARY 2021							MARCH 2021						
M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S
				1	2	3	1	2	3	4	5	6	7	1	2	3	4	5	6	7
4	5	6	7	8	9	10	8	9	10	11	12	13	14	8	9	10	11	12	13	14
11	12	13	14	15	16	17	15	16	17	18	19	20	21	15	16	17	18	19	20	21
18	19	20	21	22	23	24	22	23	24	25	26	27	28	22	23	24	25	26	27	28
25	26	27	28	29	30	31								29	30	31				

APRIL 2021							MAY 2021							JUNE 2021							
M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	
				1	2	3	4					1	2			1	2	3	4	5	6
5	6	7	8	9	10	11	3	4	5	6	7	8	9	7	8	9	10	11	12	13	
12	13	14	15	16	17	18	10	11	12	13	14	15	16	14	15	16	17	18	19	20	
19	20	21	22	23	24	25	17	18	19	20	21	22	23	21	22	23	24	25	26	27	
26	27	28	29	30			24	25	26	27	28	29	30	28	29						

JULY 2021							AUGUST 2021							SEPTEMBER 2021						
M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S
				1	2	3	4					1				1	2	3	4	5
5	6	7	8	9	10	11	2	3	4	5	6	7	8	6	7	8	9	10	11	12
12	13	14	15	16	17	18	9	10	11	12	13	14	15	13	14	15	16	17	18	19
19	20	21	22	23	24	25	16	17	18	19	20	21	22	20	21	22	23	24	25	26
26	27	28	29	30	31		23	24	25	26	27	28	29	27	28	29	30			
							30	31												

OCTOBER 2021							NOVEMBER 2021							DECEMBER 2021												
M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S						
				1	2	3					1	2	3	4	5	6	7					1	2	3	4	5
4	5	6	7	8	9	10	8	9	10	11	12	13	14	6	7	8	9	10	11	12						
11	12	13	14	15	16	17	15	16	17	18	19	20	21	13	14	15	16	17	18	19						
18	19	20	21	22	23	24	22	23	24	25	26	27	28	20	21	22	23	24	25	26						
25	26	27	28	29	30	31	29	30						27	28	29	30	31								



Rebuilding
Michigan
doubled the
program

Accelerated
letting
schedule
Aug -> Dec

Addressing
Work Zone
Safety



COVID-19
Pandemic

telework
furloughs
hiring freeze

Unpredictable
revenue,
budget &
spending
restrictions

DBE Goal
Attainment
Challenges



Rebuilding Michigan

Bid Results to Date

Region	Major Route	Location	Engineer Estimate	Low Bid	Bid Difference	Percentage
University	I-496	I-96 to Lansing Road	\$52,232,908.33	\$47,817,642.22	-\$4,415,266.11	-8.45%
Southwest & University	I-69	I-69 Corridor	\$214,129,045.00	\$210,180,169.69	-\$3,948,875.31	-1.84%
Southwest	I-94 & US-31	Berrien County	\$133,130,299.00	\$121,483,900.00	-\$11,646,399.00	-8.75%
University	I-94	I-94 Near Jackson	\$97,350,893.92	\$117,137,913.01	\$19,787,019.09	20.33%
Bay	I-69	Cox Doty Drain to M-19	\$46,759,163.34	\$37,806,489.95	-\$8,952,673.69	-19.15%
Grand	I-196	130 th Ave to US-31	\$35,921,000.00	\$33,580,522.97	-\$2,340,477.03	-6.52%
Metro	M-59	Romeo Plank to I-94	\$61,688,000.00	\$60,974,226.42	-\$713,773.58	-1.16%
Cumulative To Date			\$641,211,309.89	\$628,980,864.26	-\$12,230,445.63	-1.91%

2021 Significant Projects

07-Jan-21

Major CS	Route	Location	Major Work Description	HMA (Tons)	Conc (Syds)	Region	Letting
39022	I-94	East of Lovers Lane to East of Portage Road	210-Addition Of One Or More Lanes Over 0.5 Mi	19,397	107,085	Southwest	2/5/2021
39022	I-94	Portage Road to Sprinkle Road	210-Addition Of One Or More Lanes Over 0.5 Mi	0	76,500	Southwest	2/5/2021
03034	I-196 S	From 130th Avenue north to US-31	160-Reconstruction	111,728	211,485	Grand	2/5/2021
52042	US-41/M-28	from Front St to County Rd HQ	684-Mill and Two Course HMA Overlay	35,808	0	Superior	3/5/2021
31051	US-41	from Macinnes Drive to Isle Royal St.	164-Asphalt Reconstruction	10,949	0	Superior	3/5/2021
25084	I-69	Fenton Road to M-54	160-Reconstruction	20,836	196,985	Bay	3/5/2021
82293	I-275 S	S. of M-153 to 5 Mile Road	160-Reconstruction	124,472	20,642	Metro	5/7/2021
82292	I-275 S	Northline Road (S. of I-94) to M-153	160-Reconstruction	1,410	653,839	Metro	5/7/2021
82293	I-275 S	5 Mile Road & Six Mile Road over I-275 & SB to EB I-96 over I-275	424-Overlay - Deep	0	600	Metro	5/7/2021
82102	M-14 E	13 structures on I-275 from 5 Mile to Ford Rd.	418-Overlay - Epoxy	0	0	Metro	5/7/2021
82293	I-275 S	I-275 NB & Collector over M-14, I-275 SB over Schoolcraft	130-Deck Replacement	0	0	Metro	5/7/2021
82293	I-275 N	3 Railroad structures carrying I-275 over CSX RR	424-Overlay - Deep	0	0	Metro	5/7/2021
33044	I-496 E	Lansing Road to the Grand River	160-Reconstruction	0	0	University	6/4/2021

Note:

Information as of 07-Jan-2021; subject to change.

Projects represent approximately \$943.70 million of work.

www.michigan.gov/mdot

Doing Business >> Contractor Services >> Bid Letting >> Anticipated Projects

2021 Quantity Report 07-Jan-21

This information is draft and may change as the program continues to be developed. This is developed from a listing of job numbers.

Type	2020						2021						YEAR TOTAL
	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	
HMA (tons)	234,250	37,018	76,036	89,012	257,554	358,238	330,322	471,969	251,877	52,689	139,164		2,298,129
Concrete (SYDS)	466,378		1,336	17,341	31,841	30,411	1,666,734	398,368	313,211	19,639	707,382		3,652,641
Bridge work (\$M)	\$16.46	\$2.07	\$3.95	\$23.41	\$19.08	\$62.44	\$16.38	\$59.05	\$44.09	\$11.60	\$16.58	\$7.00	\$282.10
Beams Steel (LBS)					240,130	2,420,500		2,646,454					5,307,084
Beams Conc (LFT)				408	6,174	4,997		4,075	1,146				16,800
Aggregate (TONS)	870	5,437	11,276	25,674	127,369	8,522	27,922	16,125	8,048				231,243
Aggregate (SYDS)	569,378	967	1,023	62,829	131,606	376,367	412,649	517,431	313,659	3,991	1,425,418		3,815,318
Aggregate (CYDS)	100	4		636	2,283	1,177	1,001	23,059	17,896				46,156
Subbase (CYDS)	248,750		402	19,318	95,613	172,561	284,592	199,897	164,506	25,685	8,471		1,219,795

www.michigan.gov/mdot

Doing Business >> Contractor Services >> Bid Letting >> Anticipated Projects



Progress & Immediate Look Ahead

Route	Location	Work Type	Letting
I-496	I-96 to Lansing Road	Reconstruct	2020 Feb
I-94	At US-31	Reconstruct (Design/Build)	2020 Jun
I-69	I-94 to Island Hwy	Reconstruct	2020 July
I-94	At Elm, Lansing Rd, and West Ave	Reconstruct (Design/Build)	2020 Oct
I-69	Cox Doty Drain to M-19	Reconstruct	2021 Jan
I-196	From 130th Avenue north to US-31	Reconstruct	2021 Feb
M-59	Romeo Plank to I-94	Reconstruct	2021 Feb
I-69	Fenton Road to M-54 & I-475 Interchange	Reconstruct	2021 Mar
I-69	I-96 to Airport Road	Reconstruct	2021 Apr
I-275	Northline Road (S/I-94) to 5 Mile Road (N/M-14)	Reconstruct	2021 May
I-69	M-24 to Lake George Road	Reconstruct	2021 Aug
I-96	I-275 to Kent Lake Road	Reconstruct & Flex Route	2021 Aug
I-496	Lansing Road to the Grand River	Reconstruct (Design/Build)	2021 Aug
I-75	Newport Road over I-75, Monroe County	Bridge Replacement	2021 Aug
US-31	From I-196 north to Central Avenue	Reconstruct	2021 Sept
I-75	M-15 to Oakland County Line	Rehab & Resurface	2021 Sept
I-696	I-275 to Lahser	Reconstruct	2021 Nov
US-127	Ingham/Jackson County Line to M-36	Rehab & Resurface	2021 Nov
I-196	From Byron Road east to 32nd Avenue	Reconstruct	2021 Dec
I-94	Michigan Avenue to M-60	Reconstruct	2021 Dec
I-75	Erie Rd to Otter Creek	Reconstruct	2022 Feb
I-94	I-94 BL (Exit 23) to the St. Joseph River	Reconstruct	2022 Mar
US-131	M-216 north to U Avenue	Major Rehab	2022 May

www.michigan.gov/mdot

Projects & Programs >> Strategic Planning >> Five Year Transportation Program



COVID-19 Relief

Federal Stimulus

Federal
Reauthorization

State Infrastructure
Initiatives

- Final draft posted for use:

www.michigan.gov/mdot Publications

- Printed copies expected early summer 2021
- Effective with August 2021 lettings





Michigan STIC Members:

FHWA	MDOT
MITA	County Road Association
MCA	Michigan Municipal League
APAM	Michigan Planning Association
MRPA	Michigan Legislature Members
MAA	Michigan Association of Counties
ACEC	Michigan Association of Drain Commissioners

STIC Highlights Workshop
March 17, 2021 9:30-11:30 am
*Series of 15 Minute Presentations on
Innovative Products and Practices*
Open to everyone



Targeted Overlay Pavement Solutions

Safety. Thousands of miles of pavements need structural enhancement and improved surface characteristics, such as smoothness, friction, and noise. Targeted overlay pavement solutions can improve the condition in a relatively short time.

Cost Savings. Timely and well-designed overlay applications are consistently cost-effective because less subsurface work is required.

Performance. Targeting overlay solutions to high-maintenance areas such as intersections, bus lanes, ramps, and curved alignments can pay immediate dividends in terms of reduced maintenance needs, fewer work zones, and improved safety.

Credit: NAPA

e-Ticketing

Safety. e-Ticketing enhances data collection while reducing exposure to adjacent vehicular traffic and construction equipment for inspectors and work crews while retrieving paper tickets.

Time Savings. Real-time access, via electronic handling of tickets, reduces processing time for quality assurance and payment, decreasing the inherent delays in paper-based project administration.

Quality. Project documentation is more consistent and efficient using e-Ticketing platforms. Standardized data enables archiving for future reference, leading to improved design, construction, maintenance, and operations.



Marc VanTil, Give 'em A Brake
Craig Innis, MDOT



Kim Webb, MDOT
Rob Coppersmith, MITA



Aden Shea, PK Contracting
Steve Brink, MDOT



Mike Malloure, CA Hull
Tom Fox, MDOT



Ryan O'Donnell, Anlaan
Craig Heidelberg, MDOT



Lindsey Renner, MDOT
Mike DeFinis, lafrate



Brian Morley, Great Lakes Eng.
Chris Brookes, MDOT & Deven Rau, Cadillac Asphalt *

* Joining in 2021:
John Osika, Operating Engineers
Daryl Gallant, Laborers

Significant 2019-20 Accomplishments

- ✓ Established dialogue & relationship with Prosecutors' Association
- ✓ Improvements to MDOT Work Zone Safety & Mobility Manual & plan development process
- ✓ Expanded use of Alternate Technical Concepts (ATC) for Maintenance of Traffic
- ✓ **Proposed concept for Safety Contingency Fund to be piloted in 2021**
- ✓ Completed first and second industry-wide Work Zone Safety Perception Survey
- ✓ **Developed “use statements” for high value safety technology/devices**
- ✓ **Proposed process of early industry review on constructability & safety to be piloted in 2020**
- ✓ Initiated design & procurement of Work Zone Safety awareness trailer for education efforts
- ✓ Established social media presence & **#WorkZoneWednesday** industry-wide messages
- ✓ **Held first-ever industry-wide work zone safety technology forum**
- ✓ Encouraged safety moments in all project meetings



Pilot Initiatives



 **Early industry review on constructability & safety**

 **Work Zone Safety Collaboration Special Provision**

 **Work Zone Safety Contingency Fund**





Modified Approach



- ✓ Vet ideas earlier and more thoroughly to avoid the frustration of going down a path that has pitfalls.
- ✓ Get more senior MDOT leaders buy- in and sponsorship of ideas to expedite and help navigate them to implementation.

Kim Webb – Aaron Johnson
Gregg Brunner – Brad Wieferich
Matt Chynoweth



Zach Morisette

St. Clair Shores

*Macomb County
Roads Department*



Jeremy Zeitz

Gladwin

Anlaan Corporation



Nicholas Sada

Lansing

C&D Hughes, Inc.



Davyon Rose

Lansing

C&D Hughes, Inc.



Allen Craig

Richmond

*Dan's Excavating,
Inc.*



Larry Leonarduzzi

Gaastra

*Iron County Road
Commission*



Higher Urgency on Key Themes



Positive Protection



Night Work



High Risk Operations
(e.g. Set-ups & Stage Changes)



Enforcement



Temporary Rumble Strips

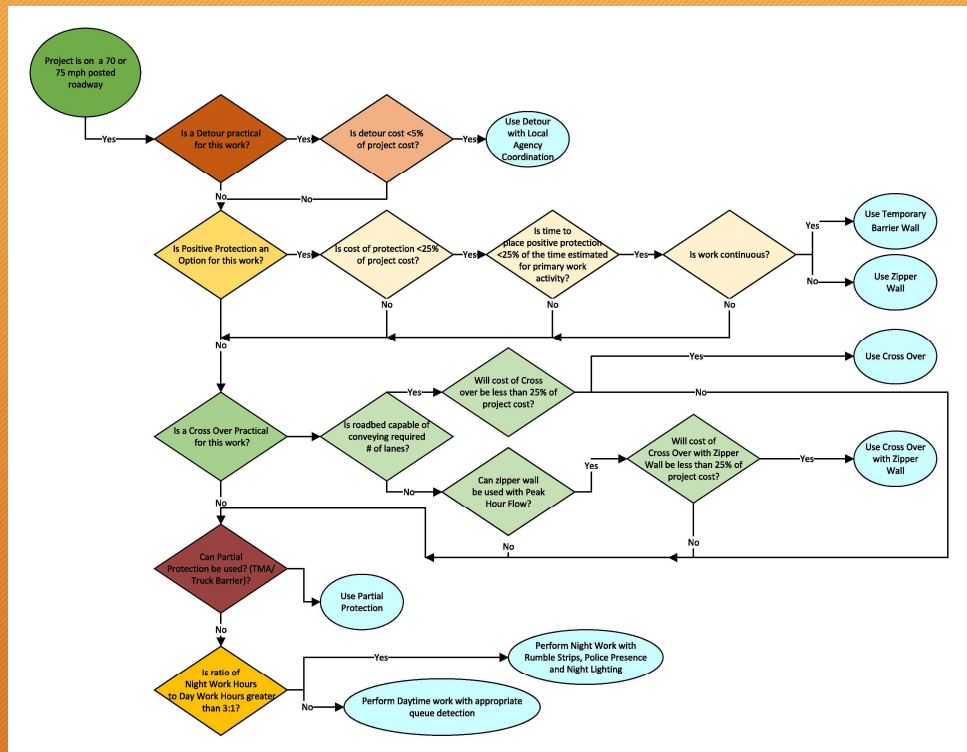


Truck Mounted Attenuators



Worker Training

Work Zone Safety & Mobility Policy & Manual Changes



- ✓ Decision Tree
 - High Speed Routes
 - Evaluating Positive Protection First
 - Closure & Detours
 - Barrier Separation
 - Minimizing Night Work w/o Positive Protection
- ✓ Leveraging “Menu” of Best Practices from Action Team 2



Work Zone Safety & Mobility Culture

POSITIVE PROJECT SAFETY COLLABORATION AWARD





An award aimed at recognizing and celebrating the uniting of all parties on a Michigan highway construction project to achieve a positive safety culture.

Award Details

The award will be presented by the Work Zone Safety Task Force to one or more project teams (MDOT, contractors, designers) that demonstrate a remarkable partnership to achieve the safest work environment possible for workers, motorists, and other stakeholders.

Criteria for Consideration

- Collaboration amongst all parties involved in the project.
- Innovation/implementation of new ideas and techniques for work zone safety.
- Responsiveness to change in the work zone to promote safety.
- Effective communication to maintain positive results.
- Demonstration of a collective and positive project safety culture.

ABOUT THE WZSTF

The Michigan Work Zone Safety Task Force launched in October 2018 as a collaborative effort between the Michigan Department of Transportation (MDOT) and Michigan's heavy/highway construction industry. It is the goal of the task force to reduce and eliminate work zone injuries and deaths of construction workers and motorists.

OUR MISSION

Working together, MDOT and the heavy construction industry are advancing our culture and practices to put safety first in Michigan's work zones.

For more information, visit our website: Michigan.gov/WorkzoneSafety | MichiganWZSTF

- ✓ **Collaboration** amongst all parties involved in the project.
- ✓ **Innovation** / implementation of new ideas and techniques for work zone safety.
- ✓ **Responsiveness to change** in the work zone to promote safety.
- ✓ **Effective communication** to maintain positive results.
- ✓ Demonstration of a collective and positive project **safety culture**.



Work Zone Safety & Mobility Culture

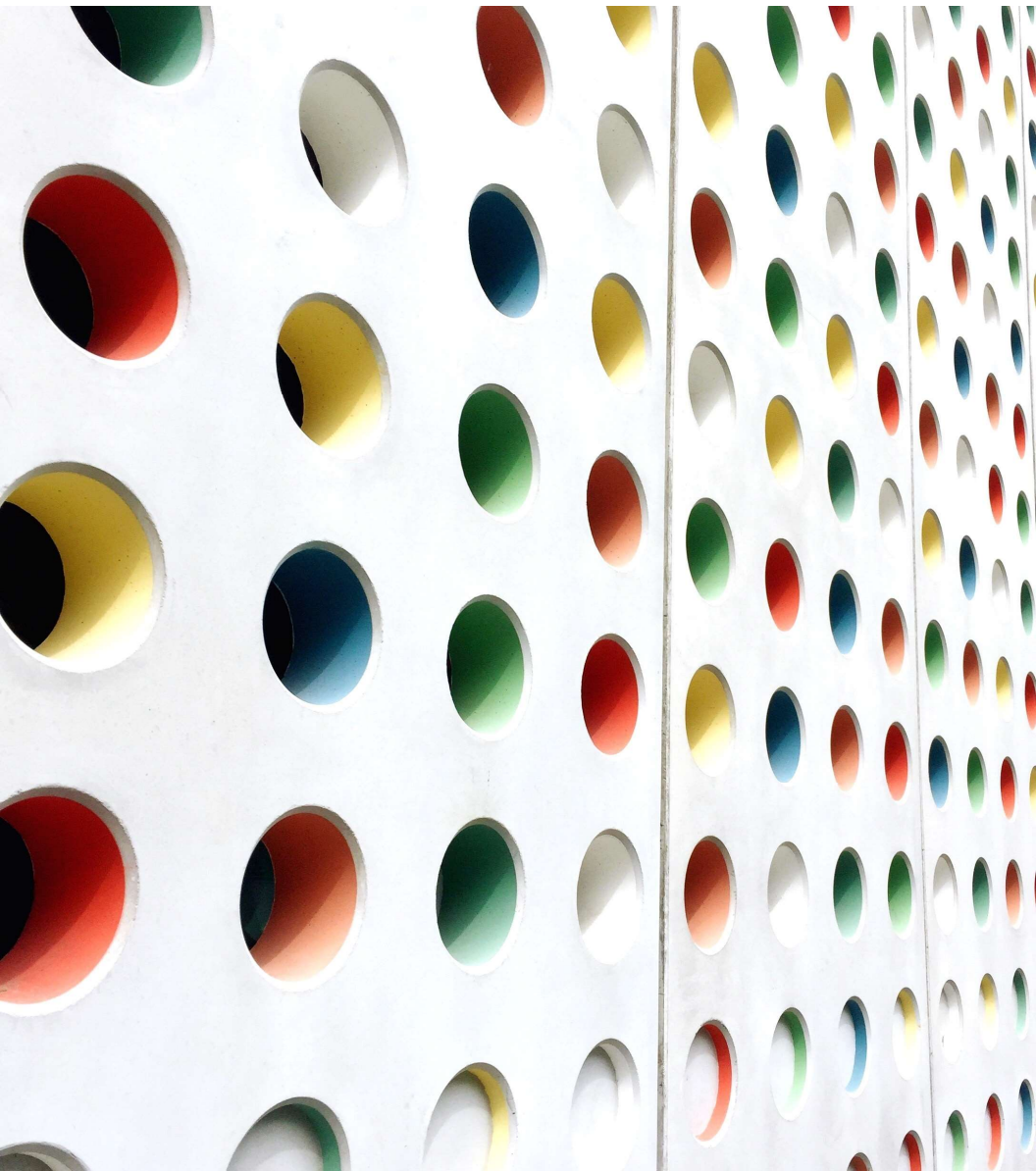
**National
Work Zone Safety
Awareness Week
April 26-30, 2021**

Smaller statewide event due to the pandemic

Consider safety standdowns:

- ✓ On projects
- ✓ At each company
- ✓ Reach out to your local media





MDOT Update

ASPHALT PAVEMENT ASSOCIATION OF MICHIGAN

FEBRUARY 23, 2021

TONY KRATOFIL, PE

CHIEF OPERATING OFFICER & CHIEF ENGINEER