

# 34TH DBE WORKSHOP & SECRETARY'S GOLDEN SHOVEL AWARDS

Diversifying  
Contracts in  
Design and  
Construction



## 94 NORTH-SOUTH FREEWAY PROJECT

*Plan Ahead, Drive Safely, Move Forward*

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# 34TH ANNUAL DBE WORKSHOP & SECRETARY'S GOLDEN SHOVEL AWARDS



## I-94 NS Freeway Project - Metrics to Date

- **3** contracts
- Total let value of **\$410M**
- Reduced mainline construction schedule by **12 months** (36 months reduced to 24)
- **Eliminated 18 months** of permanent work zone lane reductions

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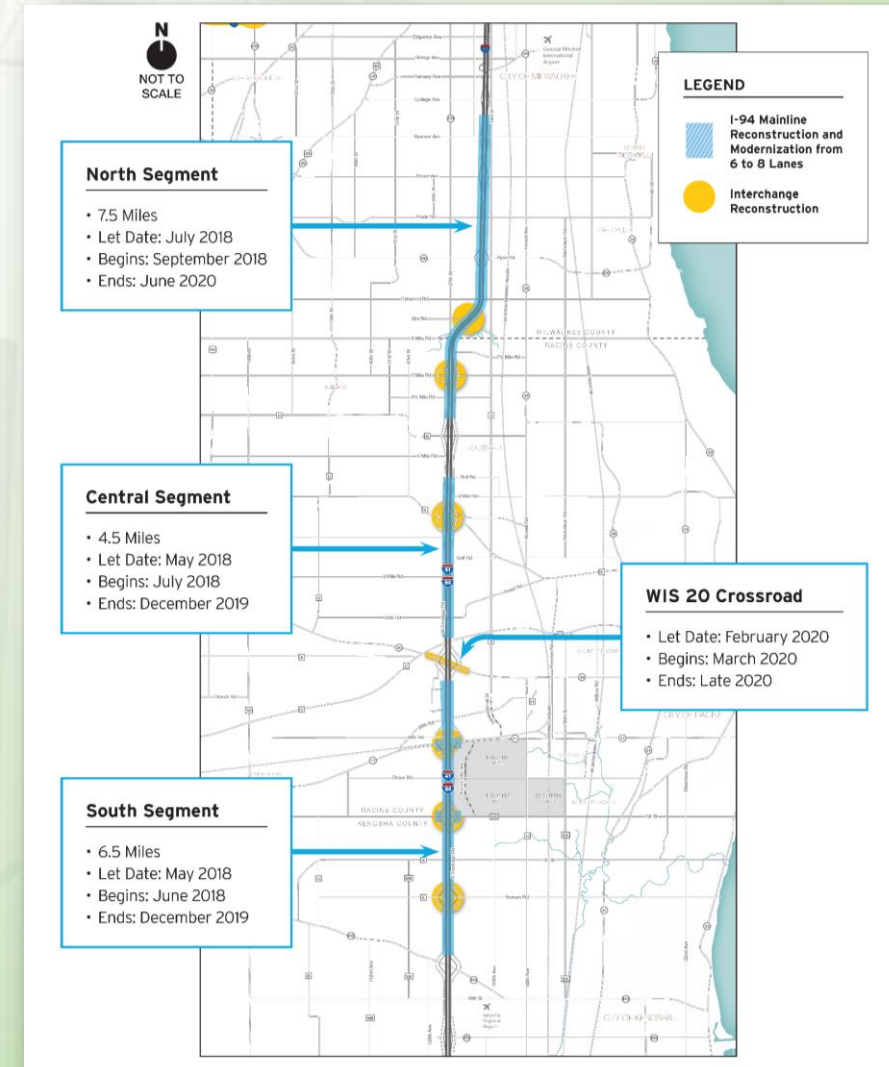
## PROJECT SUMMARY

Three mainline segments

Six interchanges

18.5 miles

Delivery of about \$500M makes this the fastest-paced mega project in WisDOT history



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## SOUTH SEGMENT

WIS 142 – WIS 20

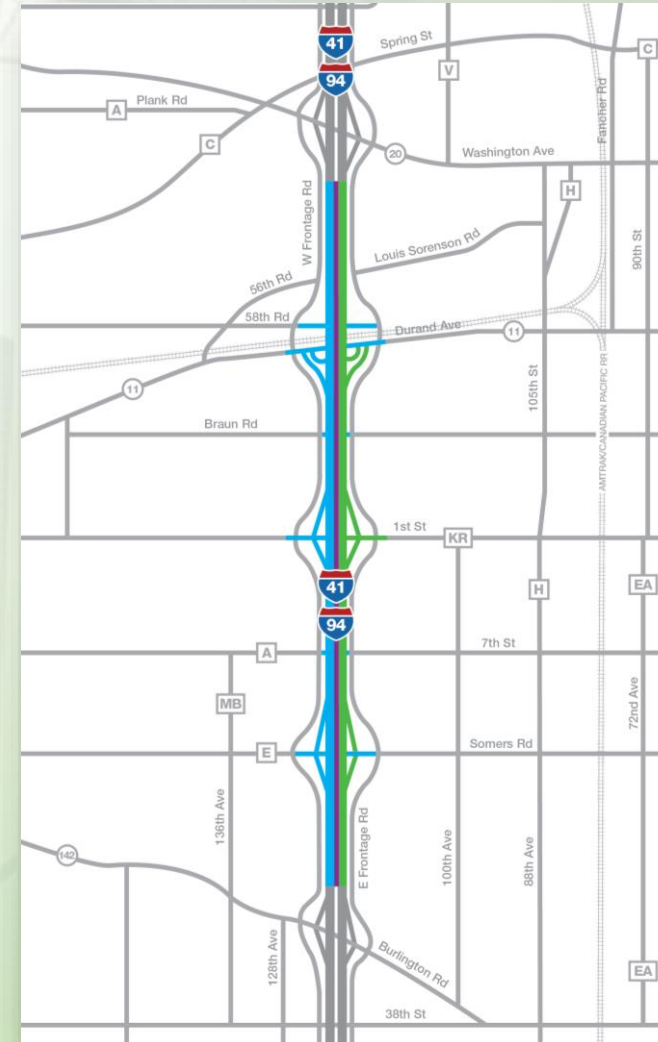
### WORK COMPLETED

Expanded freeway to four lanes in each direction

Replaced bridges at County E, County A, County KR, Braun Road, WIS 11, & 58<sup>th</sup> Road

Reconstructed 6.5 miles of freeway

Reconstructed County E, County KR, & WIS 11 interchanges



#### LEGEND

- Summer – Late 2018 Construction
- Winter 2018/2019 Construction
- Spring – Late 2019 Construction

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## I-94 Project Status – South Segment

Prime contractor: Michels Corp.

- LET Value: **\$168,872,899**
- Revised Contract Cost: **\$168,380,359**
- Paid to Date: **\$159,681,635 / 95%**
- Current configuration:
  - *4 lanes of traffic on I-94 WEST (NB) and I-94 EAST (SB)*
- Remaining work:
  - *Final pavement markings*
  - *Landscaping and restoration*

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## CENTRAL SEGMENT

### WIS 20 – County G

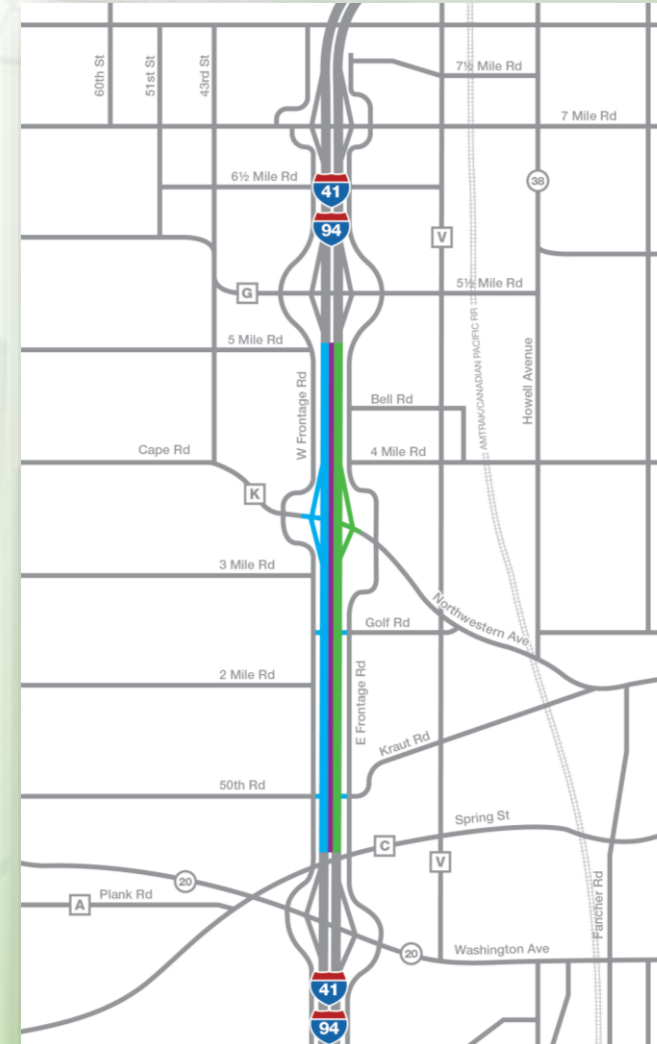
#### WORK COMPLETED

Expanded freeway to four lanes in each direction

Replaced bridges at Kraut Road, Golf Road, & County K

Reconstructed 4.5 miles of freeway

Reconstructed County K Interchange



#### LEGEND

- Summer – Late 2018 Construction
- Winter 2018/2019 Construction
- Spring – Late 2019 Construction

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## I-94 Project Status – Central Segment

Prime contractor: Michels Corp.

- LET Value: **\$80,026,048**
- Revised Contract Cost: **\$80,851,347**
- Paid to Date: **\$76,547,635 / 95%**
- Current configuration:
  - *4 lanes of traffic on I-94 WEST (NB) and I-94 EAST (SB)*
- Remaining work:
  - *Final pavement markings*
  - *Landscaping and restoration*

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## NORTH SEGMENT

### County G – College Avenue

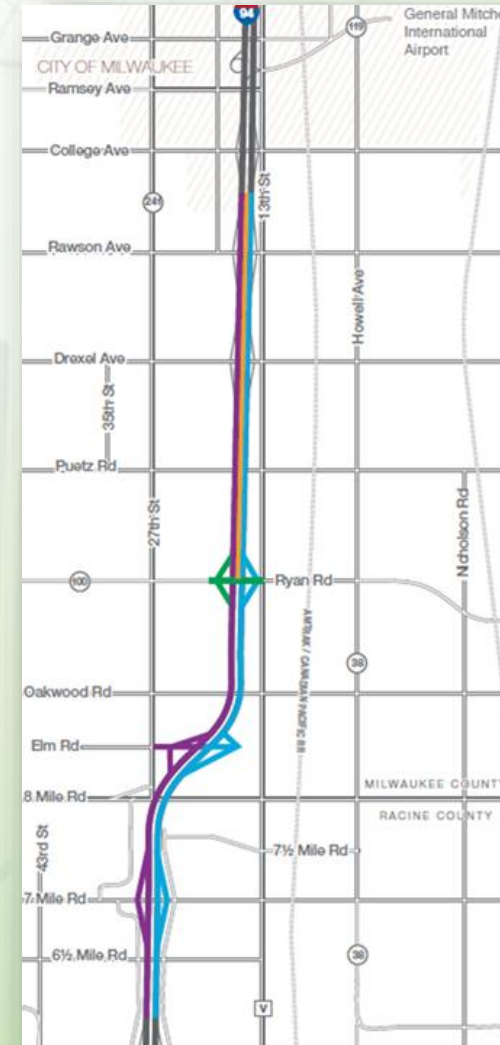
#### WORK COMPLETED

Completed all pavement work on 7.5 miles of mainline

Replaced bridges at Seven Mile Road, Root River, Oakwood Road & Oak Creek

Began construction on a new Elm Road interchange

Southbound noise walls completed





# 34TH ANNUAL DBE WORKSHOP & SECRETARY'S GOLDEN SHOVEL AWARDS



## I-94 Project Status – North Segment

### Prime Contractor: Walsh Construction

- LET Value: **\$161,732,637**
- Revised Contract Cost: **\$163,732,637**
- Paid to Date: **\$144,026,760 / 88%**
- Current configuration:
  - *3 lanes of traffic on I-94 WEST (NB) between County G and College Ave.*
  - *3 lanes of traffic on I-94 EAST (SB) between College Ave. and Ryan Rd.*
  - *4 lanes of traffic on I-94 EAST (SB) between just south of Ryan Rd. and County G*
- Remaining work:
  - *Concrete barrier wall*
  - *Final pavement marking*
  - *Landscaping and restoration*
  - *Completion date: June 21, 2020*

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## WE ARE MAKING PROGRESS!

Currently, I-94 North-South is configured with four lanes of traffic in each direction between WIS 142 and County G and three lanes of traffic in each direction between County G and College Avenue.

### SOUTH SEGMENT (WIS 142 TO WIS 20)



**Major construction  
complete!**

### CENTRAL SEGMENT (WIS 20 TO COUNTY G)



**Major construction  
complete!**

### NORTH SEGMENT (COUNTY G TO COLLEGE AVENUE)

Work continues on this 7.5 miles of freeway reconstruction, with the project on track to finish by summer 2020.



**17 months complete**

**4 months to go**



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**PROJECT STATISTICS:** THESE NUMBERS REPRESENT THE WORK COMPLETED IN 2018 & 2019

27



NEW BRIDGES

1.9M

CUBIC  
YARDS OF  
EXCAVATED  
SOIL

45

SIGN STRUCTURES

19 MILES  
OR  
1.68M SQUARE  
YARDS  
OF MAINLINE CONCRETE

4 NOISE  
WALLS



16 SIGNALIZED  
INTERSECTIONS



141,500  
LINEAR FEET  
OF STORM SEWER

19 RETAINING  
WALLS

2,100  
STORM SEWER  
STRUCTURES



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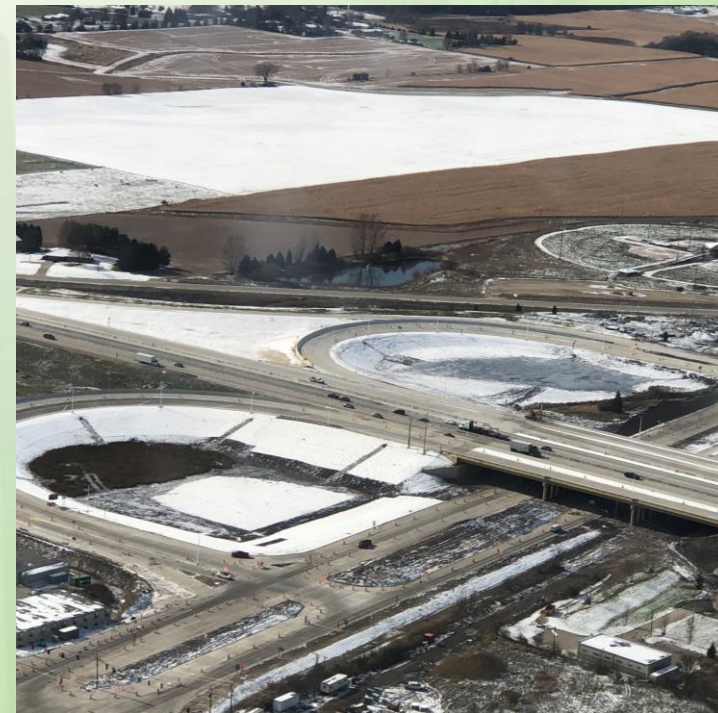
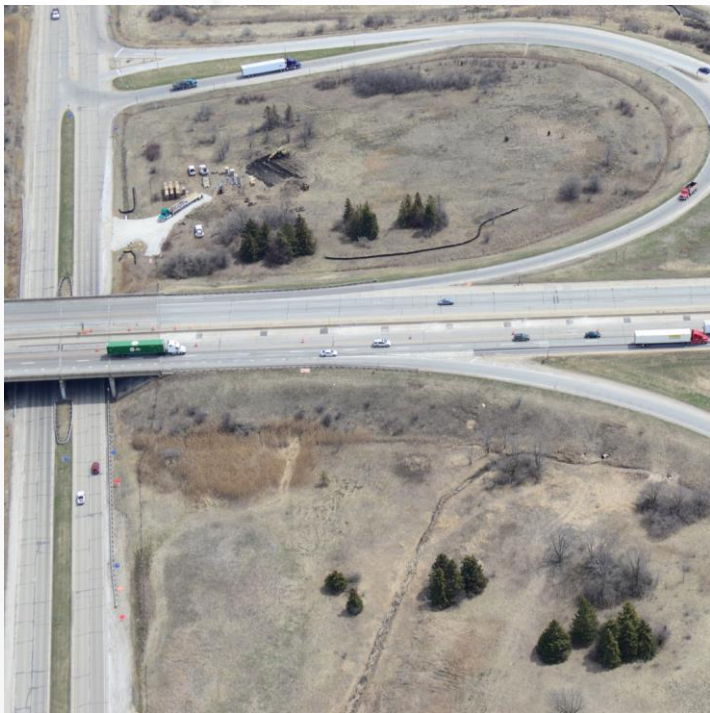
## Total Estimated Quantities

PROJECT	Concrete (Sq. Yards)	Excavation (Cu. Yards)	Borrow (Cu. Yards)	Base Course (Tons)	Bridge (Sq. Feet)	Barrier Wall (Lin. Feet)
South Segment	722,500	582,500	1,109,000	387,500	251,000	110,050
Central Segment	432,500	263,300	292,000	190,500	60,300	76,732
North Segment	803,000	1,097,000	602,500	469,000	127,300	65,049
Totals	1,958,000	1,942,800	2,003,500	1,047,000	438,600	252,000

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## WIS 11 Interchange Progress



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**I-94 at Root River Progress**



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## Elm Road Interchange Progress



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**Noise Wall**



**Decorative  
Retaining Wall**

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## Stakeholder Impacts



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## South Segment – List of Key DBE Contractors

<b>Arrow-Crete Construction</b>	Concrete Surface Drains, Curb and Gutter, Sidewalk, and Concrete Barriers	<b>\$7,804,683</b>
<b>Pro Electric</b>	Electrical	<b>\$2,959,615</b>
<b>Arbor Green</b>	Guardrail and Signs	<b>\$1,764,451</b>
<b>Wisconsin Rebar</b>	Steel Erection	<b>\$1,331,312</b>
<b>Platt Construction</b>	Sign Supports	<b>\$785,545</b>
<b>DK Contractors</b>	Storm Sewer	<b>\$700,000</b>
<b>Interra</b>	Material Testing, QMP for Grading, and MSE Wall Work	<b>\$508,757</b>
<b>Con-Cor Company</b>	Sawing Asphalt and Sawing Concrete	<b>\$141,434</b>

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## Central Segment – Key DBE Contractors:

<b>Arrow-Crete Construction</b>	Concrete Surface Drains, Curb and Gutter, Sidewalk, and Concrete Barrier	<b>\$4,068,284</b>
<b>DK Contractors</b>	Storm Sewer	<b>\$4,000,000</b>
<b>Arbor Green</b>	Guardrail, Signage, and Landscaping	<b>\$793,966</b>
<b>Pro Electric</b>	Removing, Install Conduit, Pull Boxes Steel, Concrete Bases, Cable Traffic Signal, Electrical Wire, Electrical Service Meter Breaker, and Electrical and Lighting	<b>\$732,539</b>
<b>Wisconsin Rebar</b>	Steel Erection	<b>\$556,480</b>
<b>Interra</b>	Material Testing, QMP for Grading, and MSE Wall Work	<b>\$306,857</b>
<b>Platt Construction</b>	Sign Supports	<b>\$148,836</b>
<b>Con-Cor Company</b>	Sawing Asphalt and Sawing Concrete	<b>\$82,631</b>
<b>Surface Preparation Technologies</b>	Rumble Strips	<b>\$38,667</b>

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## North Segment - Key DBE Contractors:

<b>Arrow-Crete Construction</b>	Concrete Flatwork	<b>\$5,202,896</b>
<b>Arbor Green</b>	Guardrail, Signage, and Landscaping	<b>\$3,889,290</b>
<b>Choice Construction Companies</b>	Rebar Installation and Beam setting	<b>\$1,000,000</b>
<b>Interra</b>	Material Testing	<b>\$955,748</b>
<b>Hard Rock Sawing &amp; Drilling</b>	Sawing	<b>\$224,527</b>
<b>Royal Crane Service</b>	Crane Rental	<b>\$227,768</b>
<b>Mincon</b>	Painting/Staining	<b>\$157,831</b>

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## South/Central Segment Cost Reduction Incentives (CRIs)

### CRI 01/02 - Open Cut Cross Drain Install Method

- Instead of boring under live traffic, the contractor proposed to shift traffic and open cut the storm sewer.
- **\$418,728 Savings**



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## North Segment CRI's

### CRI 04 – 54W PPC Girders for NB/SB Over Oak Creek

- Changed bridge types from slab span to single span structures and eliminated planned piers in the Oak Creek. Able to build bridge in a time where the DNR had placed water disturbance restrictions.
- **\$68,301 Savings**

### CRI 05/07 – 36W PPC Girders for NB/SB over Oakwood Road

- Changed bridge types to single span structures instead of a three span haunched slab bridge, by reducing back-to-back abutment length by installing a mechanically stabilized earth wall and slightly increasing the I-94 profile.
- **\$494,481 Savings**

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## North Segment CRI's cont.

### CRI 06 – Shoulder Repair in lieu of Replacement

- Installed asphalt patches on concrete shoulder prior to placing traffic on it, in lieu of replacement of entire shoulder.
- **\$69,070 Savings**

### CRI 08 – Re-Stage of 1C & NB Median Shoulder Replacement

- Proposed traffic Stage 1C to complete the removal of the median barrier wall, installation of the proposed trunk line storm sewer in the NB median shoulder, and construction of a temporary shoulder and ramp crossovers to be used in Stage 2B.
- **\$388,538 Savings**



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A rectangular image showing a close-up of several US dollar bills, including \$1 and \$5 bills, stacked on top of each other. The bills are slightly out of focus, with the green and white colors of the currency clearly visible.

**\$1,439,117**

**Total Project Savings**

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Just to let you know that I think your team has done an amazing job! I can't even imagine designing and working on a project of this magnitude. While it's been an inconvenience, it's good to hear that things are moving along and that the project is ahead of schedule. It's great to get these updates too.



**Wayne Wilson** I-94 North-South team, Thank you for the fantastic work.

Like · Reply · 4w



**Karen Gross** Excellent! Well worth the wait!

Like · Reply · 4w



**Amy Fulton** It's really nice!! Good job!!

Like · Reply · 4w



**Ken Rorek** You guys are doing a great job. Thank you for all your hard work



**Patrick Wright** West bound G to College, was done incredibly fast! Thank you

Like · Reply · 4w



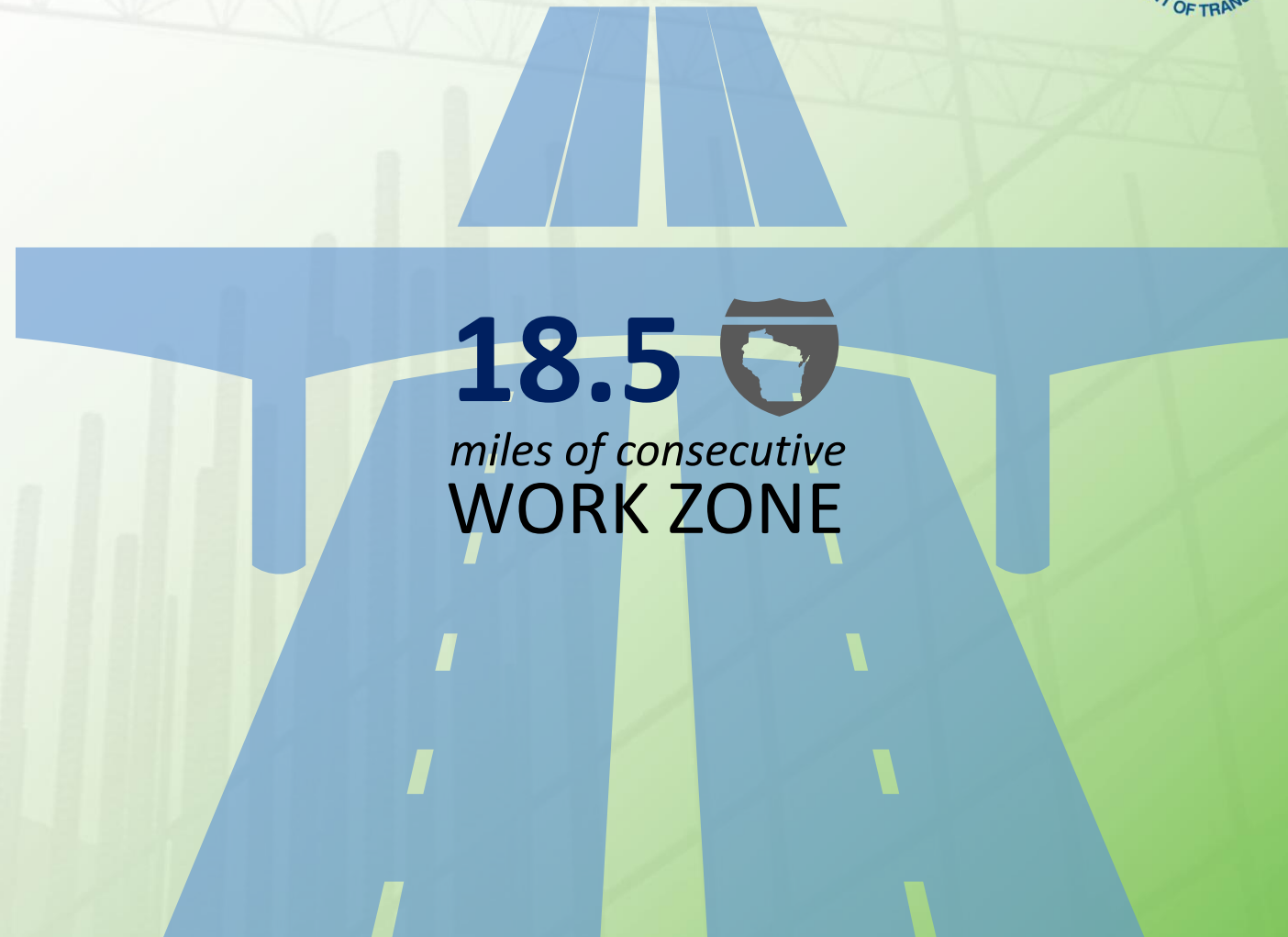


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WisDOT continues to implement **strategies to encourage and enforce safer driver behavior** through the freeway work zone.

**Safety is our top priority.**



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**The I-94 N-S Traffic Management Plan (TMP) is a robust plan that addresses:**

- Local and regional mobility
- Traveler safety
- Emergency responder coordination
- Detour and alternate routes
- Traveler information





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Enhanced safety strategies in place to increase awareness of ***narrow shoulders*** to help remind drivers to stay in their lanes:

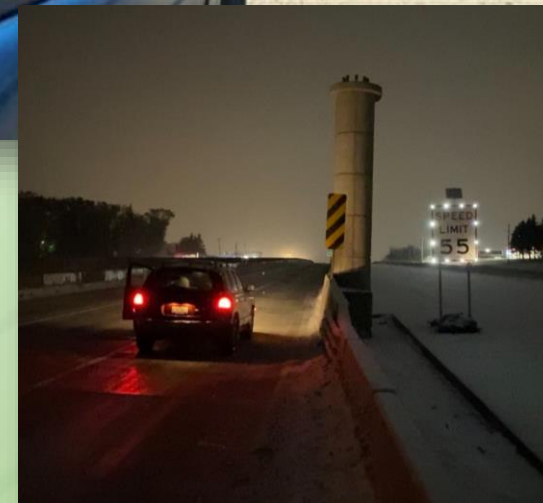
- Solid pavement markings approaching bridges
- Hazard markers on barrier wall at bridges
- Raised pavement markers



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Enhanced safety strategies to address *speeds*:

- Speed limit was reduced to 60 mph from WIS 142 to Rawson Avenue, and 55 mph from County G to Rawson Avenue.
- More electronic speed boards placed throughout the work zone.
- Increased law enforcement presence to encourage/enforce compliance with the posted speed limit.
- Piloted blinking LED speed limit signs to increase awareness.





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**CONGRATS!**

This project has been a major success in part due to the hard work of the contributing DBEs!

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