

# BUREAU of BRIDGES

SPANNING

CONNECTING

## Michigan BrM Enhancements

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SAFELY

EFFICIENTLY

# Current FDS List

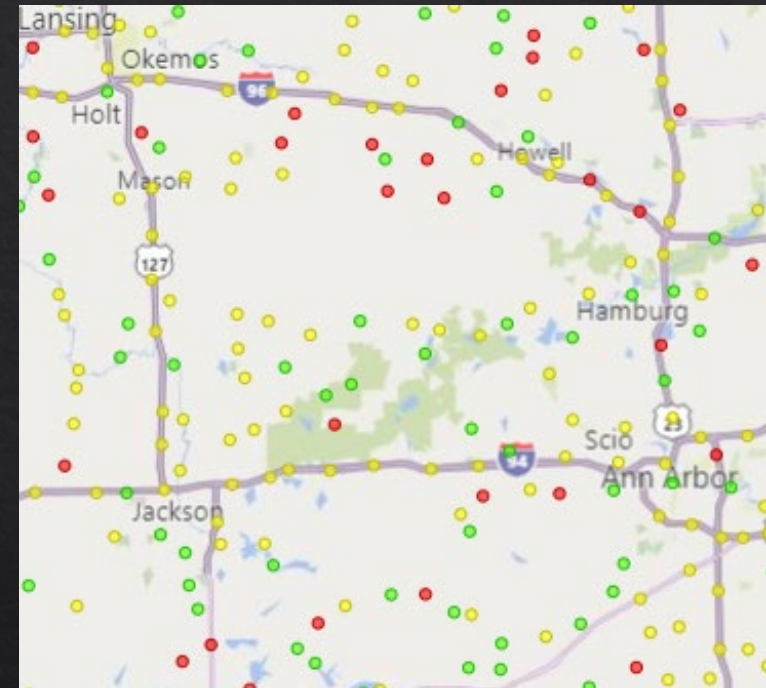
- ◆ 1B - Bridge List Screen (Map w/ Conditional Colors)
- ◆ 3 - User Profile and User Certifications
- ◆ 5 - Multiple Use Dashboards
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- ◆ 27 - Audit Log
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- ◆ 30 - ProjectWise & Security Scan Tool





# 1B - Bridge List Screen (Map w/ Conditional Colors)

- ◆ Based on minimum NBI Rating (58,59,60,62)
- ◆ Green Pin [Min Condition  $\geq 7$ ]
- ◆ Yellow Pin [  $6 \leq \text{Min Condition} \leq 5$ ]
- ◆ Red Pin [ Min Condition = 4]
- ◆ Maroon Pin [ Min Condition  $\leq 3$ ]



# 5 - Multiple Use Dashboards

- ❖ Structure Condition
- ❖ Request for Action / Critical Findings
- ❖ Load Rating
- ❖ Report Assignment
- ❖ If you can think it you can do it! (within Bridge data)

Structure Condition Dashboard

Jurisdiction

drop down

<County/City/Region>

drop down

Display

Structure Inventory Summary

Count

Total Number of Structures

10

Highway Included in the NBI

5

Highway Structures not Included in the NBI

1

Rail Road Structures (X)

1

Pedestrian Structures (P)

1

Other Non-Highway Structures (V, Plaza)

2

Structure Condition Summary

Count

Good (7 or Greater)

10

Highway Included in NBI

5

Non NBI Structures (<20, RR, Ped, etc.)

5

Fair (5-6)

10

Highway Included in NBI

5

Non NBI Structures (<20, RR, Ped, etc.)

5

\*Structurally Deficient NBI

1

Poor (4)

10

Highway Included in NBI

5

Non NBI Structures (<20, RR, Ped, etc.)

5

Serious/Critical (3 or less)

10

Highway Included in NBI

5

Non NBI Structures (<20, RR, Ped, etc.)

5

Unrated Structures

10

Highway Included in NBI

5

Non NBI Structures (<20, RR, Ped, etc.)

5

NBI Condition - Goals Summary

Pct.

Good/Fair (5 or Greater)

50.0

Freeway

75.0

Non-freeway

25.0

Poor/Serious/Critical (4 or less)

50.0

Freeway

75.0

Non-freeway

25.0

\*Good NHS Deck Area

33.3

\*Fair NHS Deck Area

33.3

\*Poor NHS Deck Area

33.3

\*NBI applies only to highway structures ≥ 20'

Additional Bridge Inventory Information

Count

Posted Structures

1

Posting Recommended Structures

1

Closed Structures (K)

1

Closed Structures (Due to Construction)

1

Fracture Critical Structures

1

Scour Critical Structures

1

Scheduled / Under Construction (S,G)

1

<Selected Type, Type>

Documents

Map

Excel Export

Select

Structure Number

Bridge ID

Facility Carried

Features Intersected

Structure Name

Region

NBI

Freeway

Insp.Date

Fract Crit

Scour Crit

Deck Rtg

[search]

Facility

Features Intersected

Structure Name

Region

Y

Y

DATE

Y

Y

#

Facility

Features Intersected

Structure Name

Region

Y

Y

DATE

Y

Y

#

Facility

Features Intersected

Structure Name

Region

Y

Y

DATE

Y

Y

#

Facility

Features Intersected

Structure Name

Region

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DATE

Y

Y

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Facility

Features Intersected

Structure Name

Region

Y

Y

DATE

Y

Y

#

Facility

Features Intersected

Structure Name

Region

Y

Y

DATE

Y

Y

#

<< 1 >>


scroll bar

Page size: 15

6 item(s) in 1 page(s)



# 6 - Controls for Bridge Header

- ◆ Concatenated Fields Control
- ◆ Show Image Based on a Parameter
- ◆ Calculated Structure Condition Field
  - ◆ 'Poor Condition (4)' 
- ◆ VFE Map Button

Item 41 = G or S



Item 41 = K



Item 41 = B

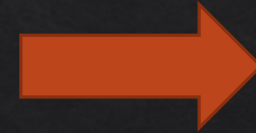


# 7 - MDOT Custom Controls

- ◆ Textbox Resize Vertically
- ◆ User Type-Ahead Field
- ◆ Work Candidates Grid Filters
- ◆ Tool Tip Enhancement

[illegible]

```
Substructure rating. NBI Item 60.  
Table & Column Name: inspevnt.subrating  
Datatype: char  
Width: 1  
Decimal Places: 0  
Allow null: Y  
Unique Key: N  
Minimum: 0123456789  
Maximum: N  
Default: /_/  
NBI Code: 060  
Conversion Paircode: -1  
Metric Units: -1  
English Units: -1  
Validation Type: LIST
```



Substructure rating, NBI Item 60.



# 8 - Inspection Type Screen

- ◇ Streamlined Work Recommendation Entry
- ◇ Smart Form For Bridge Vs Culvert
- ◇ Field Dependent Control
  - ◇ Load Posting Signs
  - ◇ Delayed Inspection/ Frequency
- ◇ Component Tied To Element Grid
- ◇ “Repeater Control”
  - ◇ Fracture Critical Members
  - ◇ Fatigue Sensitive Members
  - ◇ Dolphin Tracking

The screenshot displays a software interface for bridge inspection data entry. At the top, a table lists inspection items with columns for 'Item', 'Rating', and 'Comments'. The first row shows '3. Surface (SIA-58A):' with a 'drop down' rating. Below this, a 'Fatigue Sensitive' section is active, showing a 'Navigation Protection Systems' form. This form includes a 'Protection Systems' section with checkboxes for 'Fender Timbers', 'Berm', 'Other', and 'Dolphins', followed by a 'Protection Systems Comments' text area and an 'Add Previous Comment' button. Below this, a 'Location' section has a text input field and another 'Add Previous Comment' button. The 'Description' section contains a 'Dolphin String Type' dropdown (set to 'drop down'), a 'Clearance Meas (ft):' input field, and an 'Inspection Comments' text area with an 'Add Previous Comment' button. The interface uses a blue and white color scheme with various input fields, dropdowns, and checkboxes.

Item	Rating	Comments
3. Surface (SIA-58A):	drop down	

**Fatigue Sensitive**

**Navigation Protection Systems**

Protection Systems:

☐ Fender Timbers  
☐ Berm  
☐ Other  
☐ Dolphins

Protection Systems Comments:

[Add Previous Comment](#)

**Location:**

[Add Previous Comment](#)

**Description:**

Dolphin String Type:  Clearance Meas (ft):

Inspection Comments:

[Add Previous Comment](#)

## 9 - Parallel Inspections

- Multiple Inspections Open at Once
- Data Entry per Inspection Type





# 11b - Request for Action Screen Dashboard

Request For Action Dashboard

JurisdictionMDOT Statewide

Display

NBI FilterAll

NHS FilterAll

Request For Action (RFA) Summary	Count	Priority Level	In Progress	Complete	Reviewed by Committee	Not Reviewed by Committee
Total No. of Incomplete RFAs	1070	Level 1	126	215	62	279
Total No. of Complete RFAs	1882	Level 2	228	175	177	226
RFAs Submitted by Me	0	Level 3	270	258	306	222
Incomplete RFAs Assigned to Me	0	Level 4	285	118	184	219
Complete RFAs Assigned to Me	0					
Critical Findings	144					

Intermediate Action Type	Complete	In Progress	Reviewed	Not Reviewed	Critical Finding Type	Complete	Incomplete
Detailed Inspection	185	38	68	38	Close Bridge	59	0
Damage Inspection	42	0	10	2	Close Lane	51	0
Scour Evaluation	50	19	32	5	Close Shoulder	30	0
Schedule Special Inspection	65	1	9	5	Load Reduction ≥ 20%	4	0
False Decking R&R	16	0	0	0			
Load Rating	376	40	182	0			
Load Reduction < 20%	0	0	0	0			
Temporary Supports	223	74	83	42			
PRJ Installation	49	29	16	20			
Steel Repairs	215	136	118	70			
Concrete Repairs	262	77	39	56			
Beam End Repairs	34	15	13	19			
Scour Repairs	33	15	16	6			
Scale Concrete	857	139	242	120			
Other Actions	419	71	90	67			
Program Project	117	191	165	60			
Joint Repair	54	30	5	28			
Railing Repair	59	28	12	20			
Sign Repair	60	27	17	19			

# 12 - Comments Control with Username and Date Stamp

Comments	Name	Date	Edit
Add Comment: <input type="text"/>			

Comments	Name	Date
Comment 1 comment 1 comment 1 comment 1 comment 1 comment 1 comment 1 comment 1 comment 1 comment 1 comment 1 comment 1 comment 1 comment 1 comment 1 comment 1 comment 1 1 comment 1 comment 1 comment 1 comment 1 comment 1 comment 1 comment 1 comment 1 comment 1 comment 1 comment 1 comment 1 comment 1 comment 1 1 comment 1 comment 1	FirstNameLastName	MM/DD/YYYY
Comment 2 comment 2 comment 2 comment 2 comment 2 comment 2 comment 2 comment 2 comment 2 comment 2 comment 2 comment 2 comment 2 comment 2 comment 2 comment 2 2 comment 2 comment 2 comment 2 comment 2 comment 2 comment 2 comment 2 comment 2 comment 2 comment 2 comment 2	FirstNameLastName	MM/DD/YYYY
Comment 3 comment 3 comment 3 comment 3 comment 3 comment 3 comment 3 comment 3 comment 3 comment 3 comment 3 comment 3 comment 3 comment 3 comment 3 3 comment 3 comment 3 comment 3 comment 3	FirstNameLastName	MM/DD/YYYY



# 13 - Ancillary Structures

- ◆ Sign Cantilever
- ◆ Sign Truss
- ◆ Communication Tower
- ◆ Lattice Tower
- ◆ Lighting Tower
- ◆ Noise Wall
- ◆ Retaining Wall
- ◆ Spun Concrete Pole
- ◆ Steel Strain Pole
- ◆ Wood Pull
- ◆ Culverts <10'
- ◆ Frangible/Non-Frangible Lights
- ◆ Embedded Poles
- ◆ Mast Arms



# 13 - Ancillary Structures

- ◇ Dashboards
- ◇ Work Candidates
- ◇ Request for Action
- ◇ Layouts/Filters across assets
- ◇ Multimedia
- ◇ Reports





# 14 - My Assignment Dashboard

My Assignments Dashboard

Inspection Type	Total	Scour Actions	Total	Load Ratings	Total	Requests for Action	Total	Work Recommendations	Total
All Inspections	##	Scour Action Plans	##	Load Ratings	##	Requests for Action	##	Work Recommendations	##
Routine	##								
Fracture Critical	##								
Fatigue Sensitive	##								
Underwater	##								
Other Special	##								

Assigned <selected type>

Unassign

Documents

Map

Excel Export

Select	Structure Number	Bridge ID	Facility Carried	Features Intersected	Owner	Latitude	Longitude	Routine	Fracture Critical	Fatigue Sensitive	Under-water	Other Special	Earliest Assigned Inspection
<input type="checkbox"/>	(search)												
<input type="checkbox"/>	#####	#####	Facility	Features Intersected	Owner	#####	#####	DATE	DATE	DATE	DATE	DATE	DATE
<input type="checkbox"/>	#####	#####	Facility	Features Intersected	Owner	#####	#####	DATE	DATE	DATE	DATE	DATE	DATE
<input type="checkbox"/>	#####	#####	Facility	Features Intersected	Owner	#####	#####	DATE	DATE	DATE	DATE	DATE	DATE
<input type="checkbox"/>	#####	#####	Facility	Features Intersected	Owner	#####	#####	DATE	DATE	DATE	DATE	DATE	DATE
<input type="checkbox"/>	#####	#####	Facility	Features Intersected	Owner	#####	#####	DATE	DATE	DATE	DATE	DATE	DATE
<input type="checkbox"/>	#####	#####	Facility	Features Intersected	Owner	#####	#####	DATE	DATE	DATE	DATE	DATE	DATE

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# 15 - Inspection Previous Field Value and Card Controls

Section Label

Field Label:

previous comment is added here

Add Previous Comment

# 16 - Navigation

- ❖ Side Navigation Enhancement
- ❖ Bridge Summary Page

Layout: drop down Excel

Event Date	Event Type	Event Frequency	Event By
<a href="#">Search</a>	<a href="#">Search</a>	<a href="#">Search</a>	<a href="#">Search</a>
<a href="#">MM/DD/YYYY</a>	Routine	##	First
<a href="#">MM/DD/YYYY</a>	Fracture Critical	##	First
<a href="#">MM/DD/YYYY</a>	Scour Action Plan		First
<a href="#">MM/DD/YYYY</a>	Request for Action		First
<a href="#">MM/DD/YYYY</a>	Routine	##	First
<a href="#">MM/DD/YYYY</a>	Load Rating		First
<a href="#">MM/DD/YYYY</a>	Routine	##	First
<a href="#">MM/DD/YYYY</a>	Routine	##	First

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Layout: drop down Excel

Project Name	Start Date	Project Type
<a href="#">Search</a>	<a href="#">Search</a>	<a href="#">Search</a>
<a href="#">Project 1</a>	<a href="#">MM/DD/YYYY</a>	<a href="#">Project Type</a>
<a href="#">Project 2</a>	<a href="#">MM/DD/YYYY</a>	<a href="#">Project Type</a>
<a href="#">Project 3</a>	<a href="#">MM/DD/YYYY</a>	<a href="#">Project Type</a>
<a href="#">Project 4</a>	<a href="#">MM/DD/YYYY</a>	<a href="#">Project Type</a>
<a href="#">Project 5</a>	<a href="#">MM/DD/YYYY</a>	<a href="#">Project Type</a>
<a href="#">Project 6</a>	<a href="#">MM/DD/YYYY</a>	<a href="#">Project Type</a>

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USER, PONTIS



DASHBOARD

ASSIGNMENTS

BRIDGE

BRIDGE LIST

PROCEDURES

CONDITION

CROSS SECTIONS

QC DESK REVIEW

REPORTS

GATEWAY

BRIDGE ID:

ROUTINE

FRACTURE CRITICAL

FATIGUE SENSITIVE

UNDER WATER

OTHER SPECIAL

Inspection > Condition

Bridge ID: 0007


Facility Carried: Key Bridge

Feature Intersected: WHITEHURST FRWY

Inspection Date: 2020-02-15 (DOHP)

Inspector: DON COONEY

Inspection Types: ROUTINE NBI, FRACTURE CRITICAL



Condition Ratings

Deck (058): 7 Good

Superstructure (059): 5 Fair

Substructure (060): 4 Poor

Channel (061): 7 Minor Damage

Culvert (062): N N/A (NBI)

Waterway (071): 9 Above Desirable

Unrepaired Spalls: 2,002 (SF)

Element Conditions

Show Elem Inspection Details

Arrow Key Grid Navigation Help

Element:  Struct. Unit: All Env: All Clear Filters

☐ Quantity ☒ Percent

Elem.	Str. Unit	Env.	Element Description	Tot. Qty.	Units	Pct1	Pct2	Pct3	Pct4
12	1	Sev. (4)	Re Concrete Deck	31400	sq.ft	95.000%	5,000	0,000	0,000
113	1	Sev. (4)	Steel Stringer	6200	ft	0.000%	50,000	50,000	0,000
120	1	Sev. (4)	Steel Truss	3100	ft	10.000%	25,000	65,000	0,000
152	1	Sev. (4)	Steel Floor Beam	1200	ft	0.000%	50,000	50,000	0,000
162	1	Sev. (4)	Stl Gus Plate	328	each	100.000%	0,000	0,000	0,000
210	1	Sev. (4)	Re Conc Pier Wall	70	ft	23.143%	5,143	35,857	35,857
215	1	Sev. (4)	Re Conc Abutment	50	ft	4.000%	48,000	48,000	0,000
303	1	Sev. (4)	Assem Jnt With Seal	20	ft	0.000%	0,000	0,000	100,000
304	1	Sev. (4)	Open Expansion Joint	60	ft	30.000%	35,000	0,000	35,000
310	1	Sev. (4)	Elastomeric Bearing	6	each	100.000%	0,000	0,000	0,000
311	1	Sev. (4)	Moveable Bearing	4	each	100.000%	0,000	0,000	0,000
313	1	Sev. (4)	Fixed Bearing	6	each	100.000%	0,000	0,000	0,000
330	1	Sev. (4)	Metal Bridge Railing	3140	ft	0.000%	90,000	10,000	0,000
600	1	Sev. (4)	Signs Sm Flag	6	(EA)	100.000%	0,000	0,000	0,000
601	1	Sev. (4)	Brush Sm Flag	1	(EA)	100.000%	0,000	0,000	0,000

Status: Locked Review Needed Approved By:

Save Save & Close



# 17 - Load Rating Module

## Load Rating Assumptions

Created by:	<i>Read Only</i>	Event Name:	<i>read only</i>
Rating Considers Field Conditions of Members*:	<input type="text" value="drop down"/>	Related Inspection Date:	<input type="text"/>
Deck Rating at Time of Load Rating:	<input type="text"/>	Super Rating at Time of Load Rating:	<input type="text"/>
Sub Rating at Time of Load Rating:	<input type="text"/>	Culvert Rating at Time of Load Rating:	<input type="text"/>
Deterioration*:	<input type="text"/>		
Most Recent Year Construct/Reconstruct/Overlay*:	<input type="text"/>		
History of Work Impacting Load Rating*:	<input type="text"/>		

## Superstructure

Superstructure Component*:	<input type="text" value="drop down"/>	Beam $f_y$ (ksi):	<input type="text"/>	Beam $f'_c$ / $f_b$ (ksi):	<input type="text"/>
Composite:	<input type="text" value="drop down"/>	Number of Beams:	<input type="text"/>	Shop Drawings Verified:	<input type="text" value="drop down"/>
Beam Size(s) & Names (each span):	<input type="text"/>				

## Deck

Thickness (in):	<input type="text"/>	$F_y$ / $f'_c$ (ksi):	<input type="text"/> / <input type="text"/>	Deck Design Load > H15:	<input type="text" value="drop down"/>
Wearing Surface Material:	<input type="text"/>	Wearing Surface Thickness (in):	<input type="text"/>	Wearing Surface Unit Weight (pcf):	<input type="text"/>

# 17 - Load Rating Module

Roadway									
	Left			Center			Right		
Barrier Type / Weight (plf):	<input type="text"/>	/	<input type="text"/>	<input type="text"/>	/	<input type="text"/>	<input type="text"/>	/	<input type="text"/>
Sidewalk Width / Thick (in):	<input type="text"/>	/	<input type="text"/>	<input type="text"/>	/	<input type="text"/>	<input type="text"/>	/	<input type="text"/>
Shoulder Width (ft)	<input type="text"/>			<input type="text"/>	/	<input type="text"/>	<input type="text"/>		
Number of Striped Lanes/ Lane Width (ft):	<input type="text"/>	/	<input type="text"/>	<input type="text"/>	/	<input type="text"/>	<input type="text"/>	/	<input type="text"/>
Shoulder Width & Striped Lanes Field Verified:	<input type="text" value="drop down"/>								

Additional Information	
Additional Loads:	<input type="text"/>
Unique Factors that Affect Rating:	<input type="text"/>

Load Rating Summary	
<div><div>Compliance Issues</div><div>Compliance Issues: <i>Read Only 1, Read Only 2, Read Only 3</i></div></div>	
Analysis Program:*	<input type="text" value="drop down"/>
Analysis Program Version:	<input type="text"/>
Controlling Component and Failure Mode*:	<input type="text"/>

New Inventory Coding			
<input type="checkbox"/> Set Load Rating data as Current for this Bridge			
NBI Item 63 - Operating Rating Method*:	<input type="text" value="drop down"/>		
NBI Item 64F - Federal Operating Rating*:	<input type="text"/>		
MDOT Item 64MA - Michigan Operating Method*:	<input type="text" value="drop down"/>		
MDOT Item 64MB - Michigan Operating Rating*:	<input type="text"/>		
MDOT Item 64MC - Michigan Operating Truck*:	<input type="text"/>	Loading Type:	<input type="text" value="drop down"/>
NBI Item 65 - Inventory Rating Method*:	<input type="text" value="drop down"/>		
NBI Item 66 - Federal Inventory Rating*:	<input type="text"/>		
NBI Item 41 - Structure Open Posted Closed*:	<input type="text" value="drop down"/>	<input type="button" value="Create Bridge Management Inspection"/>	
NBI Item 70 - Bridge Posting*:	<input type="text" value="drop down"/>		
<div style="border: 1px solid black; padding: 10px;"> <div>Posted by: <input type="text" value="drop down"/></div> <div>MDOT Item 141 - Posted Loading: <input type="text"/></div> <div>Calculated Weight Limit: <input type="text"/></div> <div style="float: right; border: 1px solid black; padding: 5px; text-align: center;">SIGN IMAGE HERE</div> </div>			
MDOT Item 193A - Michigan Overload Class:	<input type="text" value="drop down"/>		
MDOT Item 193C - Overload Status:	<input type="text" value="drop down"/>		
Analyzed By*:	<input type="text"/>	Date*:	<input type="text"/>
Checked By*:	<input type="text"/>	Date*:	<input type="text"/>

New Inventory Coding			
<input type="checkbox"/> Set Load Rating data as Current for this Bridge			
NBI Item 63 - Operating Rating Method*:	<input type="text" value="drop down"/>		
NBI Item 64F - Federal Operating Rating*:	<input type="text"/>		
MDOT Item 64MA - Michigan Operating Method*:	<input type="text" value="drop down"/>		
MDOT Item 64MB - Michigan Operating Rating*:	<input type="text"/>		
MDOT Item 64MC - Michigan Operating Truck*:	<input type="text"/>	Loading Type:	<input type="text" value="drop down"/>
NBI Item 65 - Inventory Rating Method*:	<input type="text" value="drop down"/>		
NBI Item 66 - Federal Inventory Rating*:	<input type="text"/>		
NBI Item 41 - Structure Open Posted Closed*:	<input type="text" value="drop down"/>	<input type="button" value="Create Bridge Management Inspection"/>	
NBI Item 70 - Bridge Posting*:	<input type="text" value="drop down"/>		
<div style="border: 1px solid black; padding: 5px;"> <div>Posted by: <input type="text" value="drop down"/></div> <div>MDOT Item 141 - Posted Loading: <input type="text"/></div> <div>Calculated Weight Limit: <input type="text"/></div> <div>SIGN IMAGE HERE</div> </div>			
MDOT Item 193A - Michigan Overload Class:	<input type="text" value="drop down"/>		
MDOT Item 193C - Overload Status:	<input type="text" value="drop down"/>		
Analyzed By:* <input type="text"/>	Date*: <input type="text"/>		
Checked By:* <input type="text"/>	Date*: <input type="text"/>		



# 17 - Load Rating Module

<b>Compliance Justification</b>	
<input type="checkbox"/> Compliance Verified	
Compliance Justification:	<input type="text"/>
<b>MDOT Compliance Issues</b>	
<input type="checkbox"/> MDOT Identified Compliance Issue	
Comment:	<input type="text"/>
<b>Load Rating QAQC</b>	
QAQC Performed By:	<input type="text" value="drop down"/>
	QAQC Date: <input type="text"/>
<input type="checkbox"/> QAQC Identified Issue	
Comment:	<input type="text"/>


# 18 - Multimedia Screen Improvements

- ◆ Field Dependent Dropdowns
  - ◆ Category drives Sub-Category

Upload Files

Context: BRIDGE

Folder: Bridge (000101)





Sort Order:

Report Flag:

Agency Type:

Notes:

Tags:

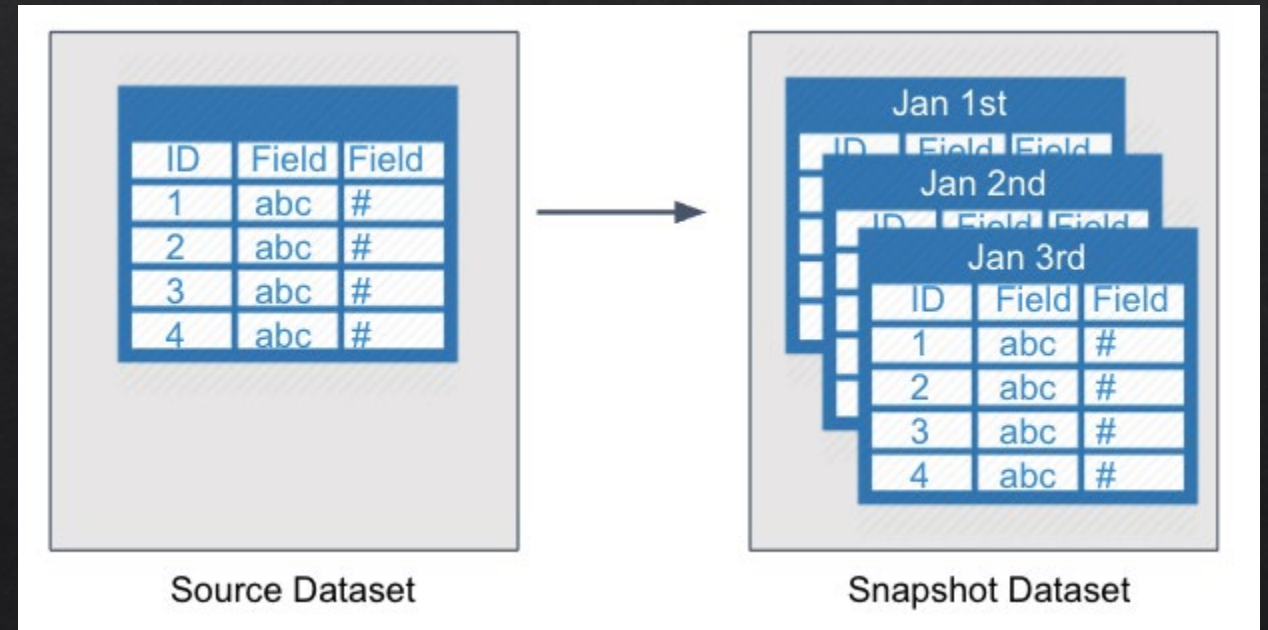
 

**Category**

**Add Sub Category**

# 19 – Historic Bridge Information

- ◆ Database Script managed by Schedule Task
- ◆ Set at a given frequency in Schedule Task module
- ◆ Data only Available by Database Query





# 22 – Scour Plan Of Action

Bridge:

Inspection:

## Scour Plan of Action

Scour Plan of Action Created by: *Read Only*

Agency/Company Name: *Read Only*

Risk Rating:\*

## Plan of Action Authors

Name	Agency	Phone	Email	Last Modified Date
FirstName LastName	Agency Name	###-###-####	email@email.com	MM/DD/YYYY
FirstName LastName	Agency Name	###-###-####	email@email.com	MM/DD/YYYY
FirstName LastName	Agency Name	###-###-####	email@email.com	MM/DD/YYYY
FirstName LastName	Agency Name	###-###-####	email@email.com	MM/DD/YYYY
FirstName LastName	Agency Name	###-###-####	email@email.com	MM/DD/YYYY
FirstName LastName	Agency Name	###-###-####	email@email.com	MM/DD/YYYY

## Scour Vulnerability

Scour Criticality (Item 113): *read only*

Waterway Adequacy (Item 71): *read only*

Channel Rating (Item 61): *read only*

Executive Summary Scour  
Evaluation:

## Calculated Values

Scour Analysis Frequency	25 Year	50 Year	100 Year	500 Year	Comments
Anticipated Surface Elevation (ft):					
Distance Below Bottom Chord (ft):					
Anticipated Flow (cubic ft/sec):					
Anticipated Pressure Flow (Y/N):	drop down	drop down	drop down	drop down	

## Substructure Information

Foundation	Normally in Water	Normal Water Depth (ft)	In Water (100 Year)	Footing Type	Depth Known	Soil Type	Calculated Scour
Abutment A	drop down		drop down	drop down	drop down	drop down	
Abutment B	drop down		drop down	drop down	drop down	drop down	
Pier 1	drop down		drop down	drop down	drop down	drop down	
Pier 2	drop down		drop down	drop down	drop down	drop down	
etc	drop down		drop down	drop down	drop down	drop down	

## Countermeasure Recommendations

☐ Only Monitoring Required

☐ Structural/Hydraulic Countermeasures Considered Recommended Countermeasure:  Estimated Cost (\$):

Countermeasure Comments:

## Monitoring Program

Recommended Monitoring  
Requirements:

(check all that are recommended)

Type	Frequency/ Amount	Comments
<input checked="" type="checkbox"/> Routine Inspection		
<input type="checkbox"/> Other Special Inspection		
<input type="checkbox"/> Underwater Inspection		
<input type="checkbox"/> Stream Bed Cross Sections		
<input type="checkbox"/> Monitoring Devices (Fixed, Sonar, etc)	N/A	

Flood Monitoring Frequency

Flood Monitoring - Initiate monitoring when any of the following occur

☐ NOAA Flood Warning (This includes both flash flood and flood warnings.)

Flow Information

☐ Discharge (cfs)

☐ Rainfall (in/hr)

☐ WS Elevation (ft)

Measured from:

☐ Pressure Flow

☐ Debris Accumulation

Items to Watch During  
Monitoring:

## Foundation

## Items to Watch

Abutment A

Abutment B

Pier/Bent 1

Pier/Bent 2

etc

# 22 – Scour Plan Of Action

Inspection and Monitoring Summary

Type	Latest Date Completed	Current Frequency	Inspector	Agency
Inspection Type	MM/DD/YYYY	##	FirstName LastName	Agency Name
Inspection Type	MM/DD/YYYY	##	FirstName LastName	Agency Name
Inspection Type	MM/DD/YYYY	##	FirstName LastName	Agency Name
Inspection Type	MM/DD/YYYY	##	FirstName LastName	Agency Name
Inspection Type	MM/DD/YYYY	##	FirstName LastName	Agency Name

Bridge Closure Plan

Conditions to Consider Bridge Closure:





☐ Water Surface Elevation  ft  
☐ Overtopping of Road or Structure  
☐ Pressure Flow  
☐ High Debris Accumulation  
☒ Observed Structure Movement/Settlement  
☒ Loss of Scour Countermeasures  
☐ Observed Scour

Comments

Responsible Contacts

Add Existing Contact

Add New Contact

Name	Title	Agency	Work Phone	Cell Phone	Email	Resp. for Closure	Resp. for Opening	
FirstName LastName	Title	Agency	###-###-####	###-###-####	email@email.com	T/F	T/F	 
FirstName LastName	Title	Agency	###-###-####	###-###-####	email@email.com	T/F	T/F	 

<< 1 >>

2 item(s) on 1 page(s)



Detour Route

Possible Detour Route:

Bridges/Culverts on Detour Route

Map Detour Bridges/Culverts

Add Bridge/Culvert

Detour Struct#	Feature Intersected	Scour Rating	Load Posting	
#####	Feature Intersected	Scour Rating	##	
#####	Feature Intersected	Scour Rating	##	

<< 1 >>

2 item(s) on 1 page(s)

Save

Save & Close

Cancel

Delete

## 23 – Assign Jurisdiction

- ◆ Inspections Assigned to An Individual
- ◆ “Primary” Group
- ◆ “Secondary” Groups
  - ◆ Non-Admin can assign only for their Primary Group

Assign Jurisdiction Groups

Export

Add New

Name	Jurisdiction Group	Agency
search	search	search
LastName, FirstName	Group Name	Agency
LastName, FirstName	Group Name	Agency
LastName, FirstName	Group Name	Agency
LastName, FirstName	Group Name	Agency
LastName, FirstName	Group Name	Agency
LastName, FirstName	Group Name	Agency
LastName, FirstName	Group Name	Agency
LastName, FirstName	Group Name	Agency
LastName, FirstName	Group Name	Agency
LastName, FirstName	Group Name	Agency
LastName, FirstName	Group Name	Agency
LastName, FirstName	Group Name	Agency
LastName, FirstName	Group Name	Agency
LastName, FirstName	Group Name	Agency
LastName, FirstName	Group Name	Agency

<< 1 >>

15 item(s) in 1 page(s)



# 25 – Damage Inspection

<b>Damage Inspection</b>	
Inspector Name: <i>Read Only</i>	Agency/Company Name: <i>Read Only</i>
Inspection Date*: <input type="text"/>	Date of Occurrence: <input type="text"/>

<b>Damages</b>	
Description of Damages:	<input type="text"/>

<b>Record of Action</b>	
Initial Inspection Report Provide to Chris Idusuyi	<input type="checkbox"/>
Contact Region / TSC for Immediate Action	<input type="checkbox"/>
Contact Design	<input type="checkbox"/>
Reach-All / Detailed Inspection	<input type="checkbox"/>
Contact Region Special Crew	<input type="checkbox"/>
Contact Statewide Bridge Crew	<input type="checkbox"/>
Estimate Done	<input type="checkbox"/>
Comments:	<input type="text"/>

<b>Work Recommendations</b>		<a href="#">Add New</a>
Recommendation Type: <input type="text" value="drop down"/>	Priority: <input type="text" value="drop down"/>	X
Description:	<input type="text"/>	
<a href="#">Add Previous Comment</a>		
Recommendation Type: <input type="text" value="drop down"/>	Priority: <input type="text" value="drop down"/>	X
Description:	<input type="text"/>	
<a href="#">Add Previous Comment</a>		

## Field QC

Quality Control Report									
Inspector Name:	Read Only	Agency/Company Name:	Read Only						
Inspection Frequency:	Read Only	Inspection Date:	Read Only						
QC Inspector:	Read Only	Agency/Company Name:	Read Only						
QC Inspection Type*:	<div>drop down</div>	QC Inspection Date*:	<div></div>						
General Notes									
General Notes:	Read Only Read Only								
Quality Control Comments:	<div></div>								
Approach									
Item	Rating	Comments							
1. Approach Pavement:	Read Only	Read Only Read Only							
Quality Control Rating:	<div>drop down</div>	<div></div>							
Approach Pavement Element Conditions									
Elem.:	<div>Search</div>	Struct. <div>Unit:</div>	<div>drop down</div>	Env.:	<div>drop down</div>	<input checked="" type="radio"/> Quantity <input type="radio"/> Percent			
Element	Str.Unit	Env.	Element Description	Tot. Qty.	Units	Qty 1	Qty 2	Qty 3	Qty 4
	###	##	##	Element Description	### ft	###	###	###	###
2. Approach Slopes:	Not applicable N/A		Read Only Read Only						
Quality Control Rating:	Not applicable N/A		<div></div>						
Approach Slopes Element Conditions									
Elem.:	<div>Search</div>	Struct. <div>Unit:</div>	<div>drop down</div>	Env.:	<div>drop down</div>	<input checked="" type="radio"/> Quantity <input type="radio"/> Percent			
Element	Str.Unit	Env.	Element Description	Tot. Qty.	Units	Qty 1	Qty 2	Qty 3	Qty 4
	###	##	##	Element Description	### ft	###	###	###	###

Work Recommendations			
Recommendation Type:	read only	Priority:	read only
Description:	read only read only		
Recommendation Type:	read only	Priority:	read only
Description:	read only read only		
Quality Control Comments:	<div></div>		

## 27 – Audit Log

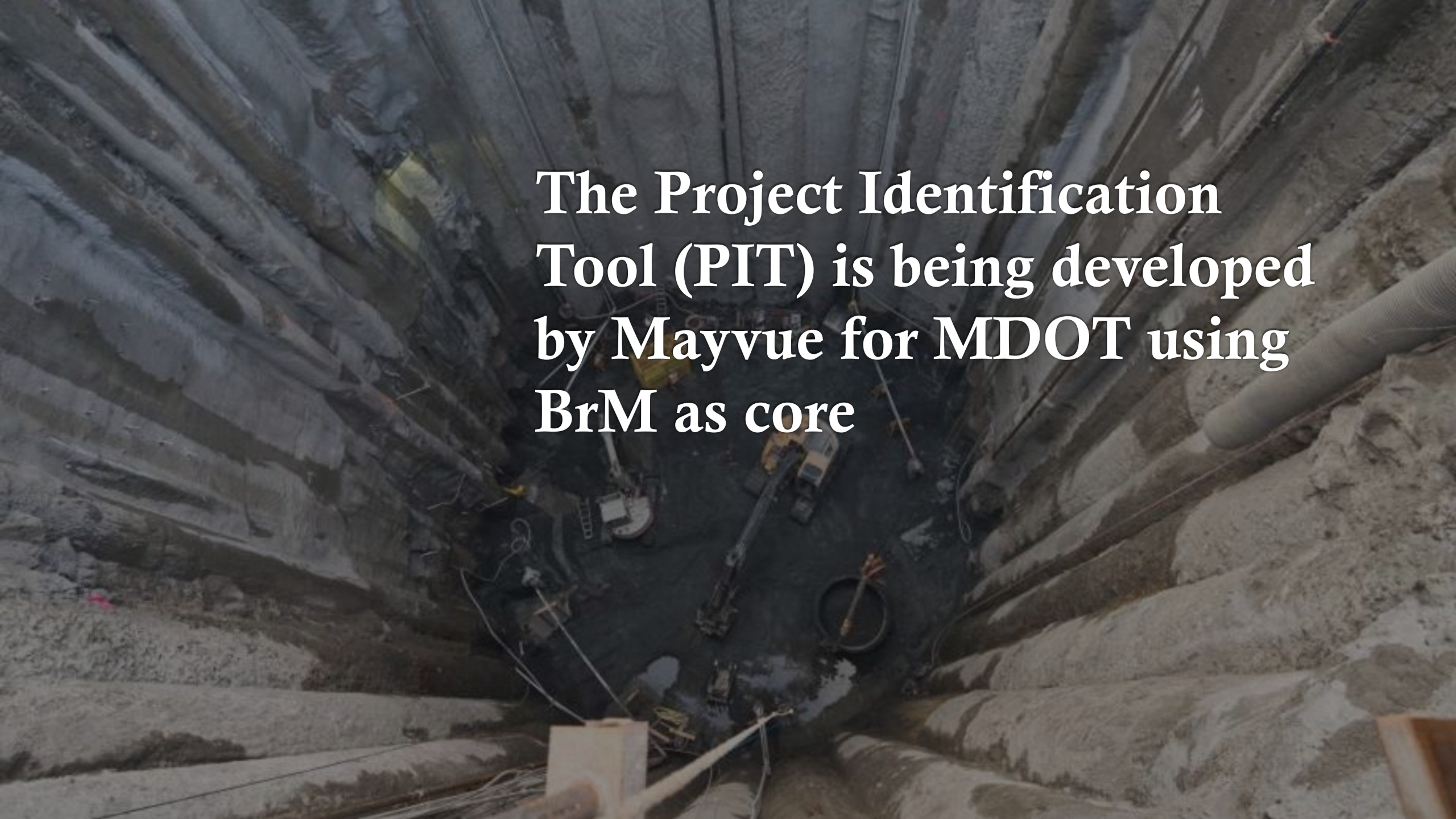




# 30 – ProjectWise & Security Scan Tool

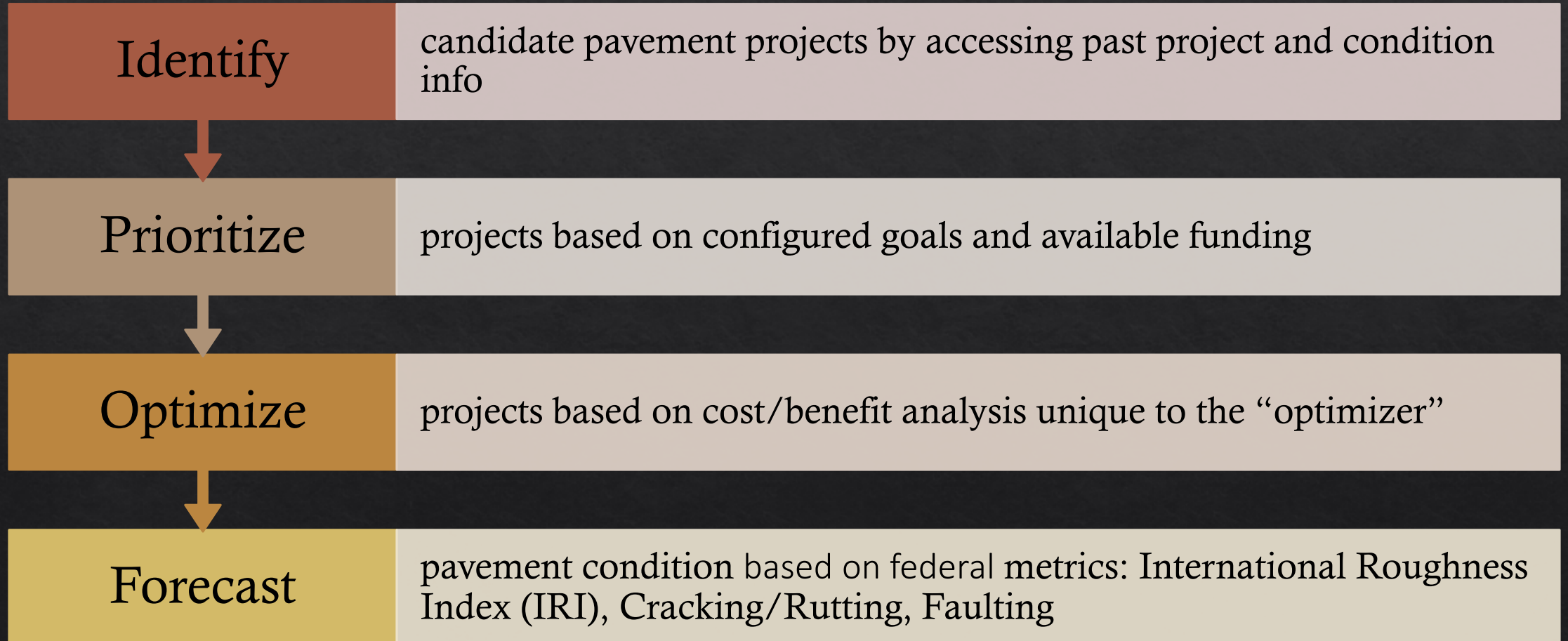




An aerial photograph of a large-scale construction project, possibly a bridge or tunnel. The image shows a deep, narrow excavation with steep, rocky walls. Several pieces of heavy machinery, including excavators and cranes, are visible within the site. A large, curved concrete structure is prominent on the right side. The overall scene is one of intense engineering and construction work.

**The Project Identification  
Tool (PIT) is being developed  
by Mayvue for MDOT using  
BrM as core**

# Objectives of Phase I







## Phase 1 Screens & Modules

### **Round 1:**

- Pavement List Screen
- Segment Manager Screen
- Asset Link Manager Screen
- Element & Metric Deterioration Screen
- General Condition Rating Builder Module

### **Round 2:**

- Inventory Screen
- Base Inspection Module
- Utility, Weight Profiles, and Analysis Module
- GCR Deterioration – Stepped/Linear Screen
- Benefits & Actions Module
- Network & Lifecycle Policies Module
- Funding Sources Screen

### **Round 3:**

- Projects Module
- Prioritizer Screen
- Analysis – Single Segment Screen
- Pavement Optimizer Module & Queue



## What's Next?

Engage in internal process improvement discussions to integrate PIT into our highway Call for Projects

**Identify additional functionality for Phase II, including:**

- Network level optimization
- Multi-Asset Analysis and Integration with BrM
- Recursive Analysis/Lifecycle Cost Analysis for Pavement
- Dashboard by user type

**Explore PIT's future as an AASHTOWare product**

- Solicitation to other states to determine level of interest

# Questions



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