

# CHAMPAIGN COUNTY BOARD HIGHWAY COMMITTEE AGENDA

**County of Champaign, Urbana, Illinois** 

Friday, August 9, 2024 9:00 a.m. Lorraine Cowart Conference Room 1605 E Main Street, Urbana, Illinois

**Committee Members:** 

Lorraine Cowart – Chair Diane Michaels – Vice-Chair Samantha Carter Brett Peugh Tom "Ed" Sexton Jennifer Straub Leah Taylor

l.	Call to Order	
II.	Roll Call	
III.	Approval of Agenda/Addenda	
IV.	Approval of Minutes – May 10, 2024	1-3
٧.	Public Participation	
VI.	Communications	
VII.	County & Township Motor Fuel Tax Claims – May, June, & July 2024	4-7
/III.	Resolution for Champaign County Regional Planning Commission FY 24 CUUATS Fees, Section #24-00000-00-ES	8-10
IX.	Letter of Intent for the Replacement of Structure #010-0180 on County Road 2000E over I-74 in St. Joseph Township	11-27
X.	Other Business	
XI.	Chair's Report	
XII.	Designation of Items to be Placed on the Consent Agenda	
KIII.	Adjournment	

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# **Champaign County Board Highway & Transportation Committee**

**County of Champaign, Urbana, Illinois** 

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#### MINUTES -SUBJECT TO REVIEW AND APPROVAL

DATE: Friday May 10, 2024

10 TIME: 9:00 a.m.

11 PLACE: Lorraine Cowart Conference Room

1605 East Main Street, Urbana, Illinois

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#### **Committee Members**

Present: Samantha Carter, Lorraine Cowart, Diane Michaels, Brett Peugh, Jennifer Straub,

Leah Taylor

Absent: Tom "Ed" Sexton

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County Staff: Jeff Blue (County Engineer), Jenni Marner (Assistant County Engineer), Ryan Mumm

(Assistant County Engineer), Michelle Carter (Office Manager/Accountant),

Steve Summers (County Executive)

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#### **Others Present:**

232425

#### **MINUTES**

I. Call to Order

Committee Chair Cowart called the meeting to order at 9:03 a.m.

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#### II. Roll Call

A verbal roll call was taken, and a quorum was declared present.

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#### III. Approval of Agenda/Addendum

**MOTION** by Carter to approve the agenda; seconded by Peugh.

Upon vote, the MOTION CARRIED unanimously.

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#### IV. Approval of Minutes – April 5, 2024

**MOTION** by Michaels to approve the minutes of the April 5, 2024 meeting; seconded by Straub.

Upon vote, the MOTION CARRIED unanimously

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#### V. Public Participation

None

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#### VI. Communications

None

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#### VII. County & Township Motor Fuel Tax Claims April 2024

**MOTION** by Carter to receive and place on file the County and Township Motor Fuel Tax Claims for April 2024; seconded by Peugh.

Upon vote, the MOTION CARRIED unanimously.

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#### VIII. Village of Savoy Resolution 2024-R-16

Blue discussed a resolution from the Village of Savoy petitioning the County to participate in the replacement of a bridge on First Street north of Airport Road. The petition is for 50% of the cost of construction. The estimated cost of deck replacement is \$300,000. Blue recommended approving the appropriation of funds.

IX. Resolution Approving the Appropriation of Funds from the County Bridge Fund, Village of Savoy MOTION by Straub to approve the resolution; seconded by Peugh.

Upon vote, the MOTION CARRIED unanimously

Michaels asked if the Village of Savoy had requested aid in the past. Blue said they have not requested funds before. The Village of Savoy does not have a lot of bridges but if they need a replacement, they may petition in the future. There is currently a project in Fisher and a project in Sidney is probably coming up in the near future.

#### X. Salt Dome Parking Lot Bid Tab

Blue reviewed the April 30, 2024 letting results for the Salt Dome parking lot. The engineer estimate was roughly \$209,000 and the low bid of \$154,335.60 was received from Cross Construction. The project was bid with the parking lot at METCAD. Blue recommended awarding the project to Cross Construction.

Carter asked if Cross Construction had minorities working for them. Blue stated he did not have their workforce information but would provide the contact information for Cross Construction.

XI. Resolution Awarding of Contract and Appropriating Funds from the Highway Building Capital Special Revenue Fund for the Improvement of Salt Dome Parking Lot, Section #23-00469-00-RS MOTION by Carter to approve the resolution; seconded by Straub.

Upon vote, the MOTION CARRIED unanimously

#### XII. CH 9 Section #24-00146-00-BR Bid Tab

Blue stated a bridge on CH 9 needs repaired. The engineer estimate was \$100,890. The low bid of \$98,892.50 was received on April 30, 2024 from Stark Excavating. White Construction submitted a much higher bid. Blue recommended awarding the project to Stark Excavating.

XIII. Resolution Awarding of Contract for the Repair of Structure 010-4186 Located on County Road 9 and Appropriating Funds from the County Bridge Fund, Section #24-00146-00-BR MOTION by Michaels to approve the resolution; seconded by Carter.

Upon vote, the MOTION CARRIED unanimously

XIV. Intergovernmental Agreement for the Design, Construction, and Maintenance of Wilbur Avenue between the City of Champaign, Somer Township, and the County of Champaign Blue stated the State's Attorney, the City of Champaign, and the Somer Township Attorney have approved an Intergovernmental Agreement for the design, construction, and maintenance of Wilbur Avenue between the City of Champaign, Somer Township, and the County of Champaign. The agreement lays out the terms for rebuilding Wilbur Avenue. The project spans from Market Street to 0.44 miles east. The 3 entities have almost 1.8 million dollars to utilize for the project. The County is the lead agency for the project. Blue asked for the approval of the resolution authorizing the County Executive and the County Board Chair to sign the Intergovernmental

100		Agreement for the County of Champaign. The committee discussed liability insurance and other
101		roads in the area needing improvements.
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103		Steve Summers mentioned the County securing the DECO Grant to use for the improvement of
104		the drainage along Wilbur Avenue.
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106	XV.	Resolution Authorizing the County Executive and the County Board Chair to Sign an
107		Intergovernmental Agreement between the City of Champaign, Somer Township, and the
108		County of Champaign for the Design, Construction, and Maintenance of Wilbur Avenue
109		MOTION by Michaels to approve the resolution; seconded by Peugh.
110		Upon vote, the MOTION CARRIED unanimously
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112	XVI.	Other Business
113		None
114		
115	XVII.	Chair's Report
116		None
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118	XVIII.	Designation of Items to be Placed on the Consent Agenda
119		Cowart stated that items IX, XI, XIII, and XV be placed on the consent agenda.
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121	XIX.	Adjournment
122		There being no further business, Chair Cowart adjourned the meeting at 9:25 AM.
123 124		ase note the minutes reflect the order of the agenda and may not necessarily reflect the order of business conducted at eeting.

## County Motor Fuel Tax Claims

Date	Check No.	Payee	Description	Δ	mount
2/27/2024	35466	Astro Optics, LLC	Rumble Strips	\$	489.30
4/26/2024	32888	Emulsicoat Inc.	HFE-90 FOB 22.16 GAL	\$	566.51
5/1/2024	32856	Central Culvert and Tile, LLC	40 x 15" CMP	\$	874.00
5/2/2024	32872	County Materials Corporation	R.O.W. Marker	\$	142.86
5/3/2024	34205	Warning Lites of Southern IL	Road Signs	\$	908.00
5/24/2024	34007	Jeff Blue	Reimbursement Railroad Safety Training	\$	60.00
6/3/2024	34401	Warning Lites of Southern IL	Road Signs and Sign Parts	\$	1,510.00
6/17/2024	503537	Illiana Construction Co.	17,930.04 Gallons HFRS-2P Champaign County HWY	\$	67,075.14
6/20/2024	34775	Warning Lites of Southern IL	Road Signs and Sign Parts	\$	2,179.50
6/12/2024	34846	Central Culvert and Tile, LLC	15" CMP 15" Band	\$	1,125.25
6/17/2024	34846	Central Culvert and Tile, LLC	18" CMP	\$	1,038.00
7/1/2024	35159	State of IL Treasurer	CH 18 #20-00453-00-SP (1st Installment)	\$	141,185.31
7/2/2024	35208	Jeff Blue	Travel Reimbursement	\$	1,507.52
7/9/2024	35364	Warning Lites of Southern IL	Road Signs and Sign Parts	\$	3,384.00
7/23/2024	To Print	Lehigh Hansen Heidelberg Materials	61.25 Ton Riprap	\$	1,362.82

## **Township Motor Fuel Tax Claims**

Date	Check No.	Payee	Description	,	Amount
4/1/2024	34187	Sand Valley Sand & Gravel	813.60 Ton Ca-16 Kerr TWP	\$	7,322.40
4/14/2024	33192	Pro Agr., Inc.	561.31 Ton CM-16 Somer TWP	\$	14,594.06
4/16/2024	503283	Ezell Excavating	298.51 Ton CA-15 Scott TWP	\$	7,009.42
4/21/2024	33192	Pro Agr., Inc.	273.40 Ton CM-16 Somer TWP	\$	7,108.40
5/1/2024	32887	Emulsicoat Inc.	HFE-90 236.34 GAL FOB Condit TWP	\$	602.67
5/1/2024	32959	Tuscola Stone	196.71 Ton CA-15 Pesotum TWP	\$	4,229.28
5/6/2024	503233	Ezell Excavating, Inc.	243.28 TON CA-15 Hensley TWP	\$	6,203.64
5/7/2024	34891	Heidelberg Materials Midwest Agg, Inc.	44.05 Ton CM-11 Somer TWP	\$	1,002.14
5/7/2024	503283	Ezell Excavating, Inc.	389.80 TON CA-15 Hensley TWP	\$	9,939.91
5/8/2024	34892	Heidelberg Materials Midwest Agg, Inc.	286.30 Ton CM-11 Somer TWP	\$	6,513.34
5/9/2024	34893	Heidelberg Materials Midwest Agg, Inc.	40.65 Ton CM-16 245.02 Ton CM- 11 Somer TWP	\$	6,549.82
5/9/2024	34676	Emulsicoat Inc.	228.80Gallons HFE-90 Condit TWP	\$	583.44
5/9/2024	503442	Illiana Construction Co.	17.89 Ton Cold Mix Pesotum TWP	\$	2,057.35
5/10/2024	34894	Heidelberg Materials Midwest Agg, Inc.	83.21 Ton CM-16 Somer TWP	\$	1,997.04
5/10/2024	503283	Ezell Excavating	CREDIT for 85.73 Ton CA-15 Scott TWP	\$	(2,053.23)
5/15/2041	33348	Emulsicoat Inc.	233.52 Gallons HFE-90 Condit TWP	\$	595.48
5/16/2024	33528	Emulsicoat Inc.	221.73 Gallons HFE-90 Condit TWP	\$	565.41

5/27/2024	503437	Ezell Excavating and Trucking	42.15 Ton CA-15 Hensley TWP	\$	1,017.92
5/30/2024	503439	Illiana Construction Co.	45,231.87 Gallons HFRS-2P Compromise TWP	\$	158,311.55
5/31/2024	503440	Illiana Construction Co.	7,807.61 Gallons HFE-90 & 1,900 Gallons MC-30 Condit TWP	\$	38,317.12
5/31/2024	503441	Illiana Construction Co.	4,509.99 Gallons HFE-90, 4053.08 Gallons MC-30, & 12,048.95 Gallons HFRS-2P Harwood TWP	\$	77,422.42
6/3/2024	503438	Illiana Construction Co.	11,330.13 Gallons HFRS-2P Hensley TWP	\$	39,655.46
6/5/2024	503492	Illiana Construction Co.	29,926.59 Gallons HFE-90 & 8,312.28 Gallons PG 46-28 Colfax TWP	\$	127,700.80
6/6/2024	503439	Ezell Excavating and Trucking	CREDIT for Inv# 4915 & 4927 Overcharge Hensley TWP	\$	(854.66)
6/7/2024	503486	Ezell Excavating and Trucking	96.58 Ton CA-15 Hensley TWP	\$	2,332.41
6/11/2024	34339	Emulsicoat Inc.	199.12 Gallons HFE-90 Condit	\$	507.76
6/11/2024	503493	Illiana Construction Co.	TWP 54,959.83 Gallons HFRS-2P Ludlow TWP	\$	148,975.00
6/12/2024	503494	Illiana Construction Co.	50,232.56 Gallons HFE-90 Brown Twp	\$	70,800.00
	303474		387.61 Gallons HFE-150 East	-	,
6/12/2024	34338	Emulsicoat Inc.	Bend TWP	\$	988.40
6/14/2024	503538	Illiana Construction Co.	17,972.79 Gallons HFRS-2P Hensley TWP	\$	51,344.54
6/17/2024	34675	Emulsicoat Inc.	354.52 Gallons HFE-150 East Bend TWP	\$	904.02
6/17/2024	503535	Illiana Construction Co.	5,970.89 Gallons CM-300 Somer TWP	\$	30,451.54
6/18/2024	503536	Illiana Construction Co.	30,406.76 Gallons HFRS-2P Newcomb TWP	\$	106,423.66
6/18/2024	34677	Emulsicoat Inc.	155.99 Gallons HFE-150 East Bend TWP	\$	397.77
6/20/2024	34871	Emulsicoat Inc.	201.29 Gallons HFE-150 East Bend TWP	\$	513.29
6/20/2024	503539	Illiana Construction Co.	30,287.30 Gallons HFE-90 Harwood TWP	\$	96,010.74
6/21/2024	503575	Illiana Construction Co.	71,837.78 Gallons HFRS-2P St. Joseph TWP	\$	134,750.00
6/24/2024	34870	Emulsicoat Inc.	161.35 Gallons HFE-150 East Bend TWp	\$	411.44
6/24/2024	503626 & 503627	Illiana Construction Co.	29,228.69 Gallons HFE-90 &12,198.36 Gallons HFRS-2P Stanton TWP	\$	117,949.43

6/25/2024	35076	Emulsicoat Inc.	135.25 Gallons HFE-150 East Bend TWP	\$ 344.89
6/27/2024	503628 & 503629	Illiana Construction Co.	61,596.10 Gallons HFE-90 Ogden TWP	\$ 198,800.00
7/1/2024	503630	Illiana Construction Co.	27,404.81 Gallons HFRS-2P Mahomet TWP	\$ 35,000.00
7/2/2024	35077	Emulsicoat Inc.	474.35 Gallons HFE-90 Condit TWP	\$ 1,209.59
7/2/2024	503632	Illiana Construction Co.	53,988.32 Gallons HFRS-2P Crittenden TWP	\$ 188,959.12
7/3/2024	503631	Illiana Construction Co.	50,930.26 Gallons HFRS-2P Tolono TWP	\$ 105,000.00
7/3/2024	35924	Emulsicoat Inc.	214.86 Gallons HFE-90 Condit TWP	\$ 547.89
7/10/2024	503726	Illiana Construction Co.	45,032.79 Gallons HFRS-2P & 18 Ton Seal Coat Spread East Bend TWP	\$ 178,494.77
7/10/2024	503727	Illiana Construction Co.	5,222 Gallons MC-30 East Bend TWP	\$ 25,989.59
7/17/2024	35490	Emulsicoat Inc.	189.64 Gallons HFE-90 Condit TWP	\$ 483.58
6/20/2024	503728	Illiana Construction Co.	52.05 Ton Cold Mix Pesotum TWP	\$ 5,985.75
7/8/2024	503729	Illiana Construction Co.	26.48 Ton Cold Mix Pesotum TWP	\$ 3,045.20
7/22/2024	To Print	Emulsicoat Inc.	237.05 Gallons HFE-90 Condit TWP	\$ 604.48
7/24/2024	To Print	Illiana Construction Co.	59,754.44 Gallons HFRS-2P Rantoul TWP	\$ 192,500.00
7/23/2024	To Print	Emulsicoat Inc.	234.68 Gallons HFE-90 Condit TWP	\$ 598.43
7/24/2024	To Print	Illiana Construction Co.	41,989.01 Gallons HFRS-2P Urbana TWP	\$ 146,961.54
7/24/2024	To Print	Illiana Construction Co.	24,117.30 Gallons HFE-90 Ayers TWP	\$ 67,093.05
7/24/2024	To Print	Illiana Construction Co.	18,039.16 GAL HFE-90 Raymond TWP	\$ 57,184.14
7/29/2024	To Print	Illiana Construction Co.	5,910.81 Gallons HFRS-2P Compromise TWP	\$ 20,687.84
7/29/2024	To Print	Illiana Construction Co.	63,893.26 Gallons HFRS-2P Sidney TWP	\$ 201,599.32
7/29/2024	To Print	Illiana Construction Co.	23,960.56 Gallons HFE-90 South Homer TWP	\$ 75,954.98



# Resolution for Improvement Under the Illinois Highway Code

Is this project a bondable capital im	provement?		Resolution	Туре	Resolution Number	Section Number
⊠ Yes □ No			Original			24-00000-00-ES
BE IT RESOLVED, by the Board				of the	County	
of Champaign County			t the following	ng descri		c Agency Type ucture be improved under
Name of Local Public the Illinois Highway Code. Work sha	* '		Labor ·			
For Roadway/Street Improveme	nts:					
Name of Street(s)/Road	d(s) Length (miles)	F	Route	*	From	То
For Structures:						
Name of Street(s)/Roa	d(s) Existi Structur	_	Route		Location	Feature Crossed
BE IT FURTHER RESOLVED,						
1. That the proposed improvement	shall consist of					
Champaign County Regional	Planning Commiss	ion Cl	JUATS Fe	ees		
	-x					
2. That there is hereby appropriate	d the sum of					
Thirty Six Thousand Nine Hu				ollars ( _	\$36,984.00	) for the improvement of
said section from the Local Public A BE IT FURTHER RESOLVED, that of the Department of Transportation	the Clerk is hereby direct				fied originals of this reso	olution to the district office
I, Aaron Ammons	Coun	tv		С	lerk in and for said Cou	ınty
Name of Clerk			ic Agency Ty			Local Public Agency Type
of Champaign County  Name of Local Public	Agency					files thereof, as provided by
statute, do hereby certify the forego				nal of a re		
Board Governing Body Type	of Champaign		n <b>ty</b> al Public Ager	ncy	at a meeting held on	August 22, 2024
IN TESTIMONY WHEREOF, I have				_ day of	Month, Year	<u>_</u> ·
(SEAL, if required by the LPA)				٥	lerk Signature & Date	
	Samantha Carter,	Chair			Арр	roved
	Champaign Count	у Воа	rd		legional Engineer Signate Department of Transporta	
	Steve Summers, C	county	/ Executiv	— /e		



July 2, 2024

Mr. Jeff Blue, County Engineer Champaign County Highway Department 1605 East Main Street Urbana, IL 61802

RE: Champaign County Regional Planning Commission

**CUUATS** Fee

Dear Mr. Blue:

Enclosed please find an *Invoice* from this office for the County's CUUATS fee for the period July 1, 2024, through June 30, 2025.

Please remit payment to the Regional Planning Commission. Should you have any questions regarding this *Invoice*, please contact me. Thank you for the County's continued support of the Commission's endeavors.

Sincerely,

Lori Gillespie
Accounting & Audit Manager
lgillespie@ccrpc.org

Enclosure



## $\square$ INVOICE $\square$

**DATE:** July 2, 2024

**TO:** Mr. Jeff Blue, County Engineer

Champaign County Highway Department

1605 East Main Street Urbana, IL 61802

FROM: Lori Gillespie, Accounting & Audit Manager

**RE:** Champaign County Regional Planning Commission

**CUUATS** Fee

PERIOD OF SERVICE: July 1, 2024 - June 30, 2025

**CUUATS FEE:** \$36,984.00

Cost Distribution Data
Dept: 100
Charge Code: 100016

Project String: 730CUATS25-LOCAL-CHAMP CO

Line-Item: 2075-00-0226t-06-100-003-730-0000-400476

Amount: \$36,984.00

FAI 74 (I-74), TR 258 (CR 2000 E) Section TBD County of Champaign Champaign County Job No. C-95-\_\_\_-Agreement No. LU-52025501 Contract No. 70

#### LETTER OF UNDERSTANDING

This agreement entered into this \_\_\_\_\_ day of \_\_\_\_\_, A.D., 20\_\_\_, by and between the STATE OF ILLINOIS, acting by and through its DEPARTMENT OF TRANSPORTATION hereinafter called the STATE, and Champaign County, of the State of Illinois, hereinafter called the COUNTY.

#### WITNESSETH:

WHEREAS, the STATE in order to facilitate the free flow of traffic and insure safety to the motoring public, is desirous of improving approximately \_\_\_\_\_ feet of TR 258 (CR 2000 E) over FAI 74 (I-74) 2.2 miles west of St Joseph, State Section TBD by replacing Structure Number 010-0180 (presently closed – super-structure has been removed) with Structure Number 010-0\_\_\_, installing new guardrail on the structure, installing new impact attenuators in the median of I-74 (FAI 74) to protect the center pier, replacing/resurfacing approach pavement and performing all other work necessary to complete the improvement in accordance with the approved plans and specifications; and

WHEREAS, the COUNTY is desirous of said improvement in that same will be of immediate benefit to the COUNTY residents and permanent in nature;

NOW, THEREFORE, in consideration of the mutual covenants contained herein, the parties hereto agree as follows:

- 1. The STATE agrees to make the surveys, obtain all necessary rights-of-way, prepare plans and specifications, receive bids and award the contract, furnish engineering inspection during construction and cause the improvement to be built in accordance with the plans, specifications and contract.
- 2. The STATE agrees to pay for all right-of-way, construction and engineering costs, as hereinafter stipulated.
- 3. Upon final field inspection of the improvement and so long as FAI 74 (I-74) is used as a State Highway, the STATE agrees to maintain or cause to be maintained the median, the through traffic lanes lying on either side of the median, and the curb and gutter or stabilized shoulders and ditches adjacent to those traffic lanes and turn lanes to be maintained by the STATE.
- 4. Upon final field inspection of the improvement, the COUNTY agrees to maintain or cause to be maintained those portions of the improvement which are not maintained by the STATE including proposed SN 010-\_\_\_\_, the approach pavement, shoulders, slopes, mowing, all guardrail and impact attenuators required to protect the proposed structure on FAI 74 (I-74) and TR 258 (CR 2000 E), all drainage structures required for the construction of the proposed structure, and snow, ice, and debris removal on the proposed structure.

The COUNTY will be responsible for future bridge replacement projects required by STATE policy. If at any time, the COUNTY abandons the proposed structure and closes TR-258 (CR 2000 E) to through traffic, the COUNTY will be responsible for the removal of SN 010- and all appurtenances required by the STATE.

It is mutually agreed that the actual bridge maintenance will be preformed by the COUNTY, either with its own forces or through a contractual agreement. It is further mutually agreed that the bridge will be maintained to the standard described in the Illinois Department of Transportation Bridge Preservation Guide of copy of which is attached hereto as "Exhibit A" and made a part hereof.

It is also understood that if, in the judgment of the STATE, the COUNTY has not provided adequate maintenance for SN 010-\_\_\_\_, the STATE will, upon giving 30 days written notice, arrange for the appropriate maintenance efforts and bill the COUNTY for the costs. The COUNTY will provide the required bridge inspections as described in the Illinois Department of Transportation Structural Services Manual published on the STATE's website and forward the results to the STATE along with any plans for required maintenance.

- 5. The COUNTY agrees to provide written approval of that portion of the plans and specifications relative to the COUNTY financial and maintenance obligations described herein, prior to the STATE's advertising for the aforedescribed proposed improvement.
- 8. Obligations of the STATE and COUNTY will cease immediately without penalty or further payment being required if, in any fiscal year, the Illinois General Assembly or Federal funding source fails to appropriate or otherwise make available funds for this contract.
- This LETTER OF UNDERSTANDING and the covenants contained herein shall be null
  and void in the event the contract covering the construction work contemplated herein is
  not awarded within the three years subsequent to execution of the agreement.

This agreement shall be binding upon and to the benefit of the parties hereto, their successors and assigns.

FAI 74 (I-74), TR 258 (CR 2000 E) Section TBD County of Champaign Champaign County Job No. C-95-\_\_\_--Agreement No. LU-52025501 Contract No. 70

#### **CHAMPAIGN COUNTY**

Signature:	 	
Printed:	 	
Title:	 <del>.</del>	
Date:		

# STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION By: Kensil A. Garnett, P.E. Region Three Engineer Date:





# **BRIDGE PRESERVATION GUIDE**

November 1, 2019

### **Bridge Preservation Guide**

Prepared and Published By

Office of Highways Project Implementation

Bureau of Bridges & Structures

Illinois Department of Transportation

Springfield, Illinois November 1, 2019

#### **Document Control and Revision History**

The Bridge Preservation Guide is reviewed during use for adequacy and updated by the Bureau of Bridges and Structures as necessary to reflect current policy. The approval process for changes to this manual is conducted in accordance with the document control standards outlined in Departmental Order 01-01: Policy Administration Program and in this manual.

This manual is intended to be used electronically as it includes hyperlinks within and resources external to the document. Portable Document Format (PDF) has been selected as the primary distribution format, and the official version of this manual is available on the <a href="Policy Center">Policy Center</a> on InsideIDOT.

The information contained in this manual is current as the date of issuance. Employees are responsible for ensuring use of the most current version of any document. All current policy documents are available on the Policy Center on InsideIDOT.

Date	Description	Approval
11/1/2019	New manual	Loete

# Illinois Department of Transportation Bridge Preservation Guide

#### Introduction

The Illinois Department of Transportation (IDOT) Bridge Preservation Guide provides goals, measures, and strategies for the preservation of bridges within the State of Illinois. This document contains criteria used to identify condition based and non-condition based cyclical preservation, maintenance, and improvement work actions for bridges. These actions maximize system-wide life expectancy and performance of bridges.

Bridges are key components of our highway infrastructure. The term "bridge" as used here denotes structures that have an AASHTO structure length greater than 20 feet as described in the National Bridge Inspection Standards. As of April 2019, Illinois had 26,794 bridges, of which 4,805 were on the National Highway System. While IDOT maintains 29.3 % of the total bridge inventory by count, it maintains the largest percentage of the National Highway System at 84.5%. The aging infrastructure is expected to deteriorate faster in the coming decades with increased maintenance demands unless concerted efforts are taken to preserve and extend its life. In addition, the state's bridge infrastructure will likely see increased funding competition among various highway assets. As a result, IDOT must emphasize a concerted effort to preserve and extend the life of its bridge infrastructure while minimizing long-term maintenance costs. A breakdown of the bridge inventory in Illinois is available in Appendix A for statewide totals and Appendix B for National Highway System structures only.

This guide will provide IDOT and Local Public Agency personnel a framework for developing preservation programs and projects using a systematic process that reflects the environment and conditions of bridges and reflects the priorities and strategies of the Department.

A well-defined Bridge Preservation program will enable IDOT to use federal funding for Preventative Maintenance (PM) activities by using a systematic process of identifying bridge preservation needs and its qualifying parameters as identified in FHWA's Bridge Preservation Guide, Spring 2018. The IDOT *Bridge Preservation Guide* will promote timely preservation actions to extend and optimize the service life of bridges in the state.

#### Definitions:

Acceptable Condition: The state of structures that are in "Good" or "Fair" conditions. This is determined by the lowest of the primary condition ratings for either Deck, Superstructure, Substructure, or Culvert. Good condition structures have a primary condition rating of 7, 8, or 9. Fair condition structures have a primary condition rating of 5 or 6. Poor condition structures have a primary condition rating of 4 or less.

**Bridge Preservation:** Actions or strategies that prevent, delay or reduce deterioration of bridges or bridge elements, restore the function of existing bridges, keep bridges in good or fair condition and extend their service life. Preservation actions may be schedule or condition based.

**Preventive Maintenance (PM):** A means of proactively extending the service life of highway bridges by applying cost-effective treatments to bridge elements. PM activities delay future deterioration and minimize large expenses in bridge rehabilitation or replacements.

**Routine Maintenance:** Any maintenance work performed in reaction to an event, season, or activity that are done for short-term operational need and do not have preservation value. This work usually

requires regular reoccurring attention. Examples include snow removal, trash/dead animal removal, asphalt patching, storm damage and accident damage such as bridge hits. These activities are not eligible for federal-aid funding.

#### Goals of the Department's Bridge Preservation Program

The main goal of a bridge preservation program is to maximize the useful life of bridges in a cost-effective way. To meet this goal, many of the strategies are aimed at applying the appropriate preventive maintenance treatments and activities at the proper time, resulting in longer service lives at an optimal life cycle cost. Federal Transportation Legislation (MAP-21 and subsequently, the FAST Act) promotes the goal of maintaining or preserving infrastructure assets "in a state of good repair". Preservation of assets is one of the tools that will be used to achieve an overall transportation investment strategy. There are several related goals that have been developed to address the priorities of the department and our stakeholders.

- Maintain bridges in a "state of acceptable condition" using cost effective strategies.
- Implement timely PM treatments on structurally sound bridges to promote optimal life cycle cost and extend service life. This will delay the need for costly major rehabilitation and replacement.
- Limit adverse impacts to traffic operations and various stakeholders.
- Promote and support budgeting of preventive maintenance and preservation activities.
- Establish performance goals and monitor progress related to preservation of bridges.
- Optimize the benefits and effectiveness of long-term maintenance investment in achieving bridges in acceptable condition.

To achieve the goals of the bridge preservation program, IDOT will use data driven strategies. This approach is intended to apply the appropriate bridge preservation treatments and activities at the proper time. These strategies also intend to maximize the efficiency and effectiveness of the program. The Strategies include:

- 1. Regular analysis of the bridge inventory data to establish conditions and trends related to performance.
- 2. Develop and maintain criteria for eligible preservation activities.
- 3. Define preservation program and project needs.
- 4. Develop estimates of needed financial resources at the Project/Program level.
- 5. Identify preservation needs that can be performed in coordination with maintenance, repair and rehabilitation actions and timelines.
- 6. Prioritize, plan, and perform preservation treatments.
- 7. Bundle preservation maintenance projects to promote economy and minimize the inconvenience to the public.
- 8. Secure approval and support from key stakeholders in the use of Federal and State funding for systematic preventive maintenance and preservation activities.
- 9. Consider preservation and long-term durability at the bridge planning and design stages.

#### Objectives and Performance Measures

Performance measures in the IDOT *Bridge Preservation Guide* are consistent with the objectives of the program and reflect the goals of the IDOT Transportation Asset Management Plan (TAMP). IDOT's Bridge Preservation Guide was developed with input from IDOT District Bridge Maintenance Engineers.

IDOT's targets, based on deck area, are to maintain 93% of the bridges on the National Highway System and 90% of the state-owned bridges NOT on the National Highway System in acceptable condition. These targets may be extended to local public agency structures, and to bridges less than 20 feet and buried structures (Box Culverts less than 20 feet) in the future.

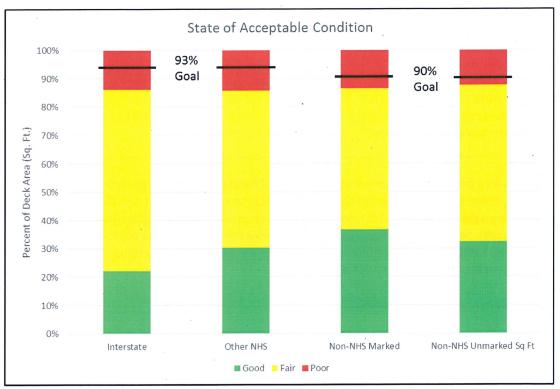


Figure 1: Goals and Current Performance of Bridges

The following table shows the objectives and performance measures used to evaluate the success of the Bridge Preservation program.

**Table 1 Objectives and Performance Measures** 

Objective	Target/Goals	Performance Measure
Maintain bridges in good or fair condition	93% of bridge deck area on NHS 90% of bridge deck area not on NHS	Percentage of bridge in good or fair condition (NBI rating 5 or higher)
Maintain bridge decks in condition state 2 or better (Element Level Inspections)	90% of bridge deck area	Percentage of bridge decks in condition state 2 or better (Element Level Inspections)

Maintain expansion joints in condition state 2 or better (Element Level Inspections)	90% of the overall length of expansion joints	Percentage of expansion joints (based on overall length) in condition state 2 or better
Maintain paint coatings in condition state 1 (Element Level Inspections)	90% of paint coatings	Percentage of paint coatings in condition state 1
Maintain beam ends in condition state 1 (Element Level Inspections)	90% of beam ends	Percentage of beam ends in condition state 1
Maintain bearings in condition state 1 (Element Level Inspections)	90 % of bearings	Percentage of bearings in condition state 1
Seal concrete decks in condition state 2 or better (Element Level Inspections) with sealant every 4 years	Maintain sealing of concrete deck in good or fair condition.	Number of decks sealed (sq. ft of deck area) each year during a 4- year period

Bridges with a primary condition rating of poor (NBI Rating < 5) and are open for operations are safe. However, these structures may need corrective action to ensure current and future operation. Maintaining safe and dependable operations is a high priority for the Department. These bridges, while typically not eligible for Preventive Maintenance funding, might be eligible if localized deterioration is driving the condition rating. Preventive Maintenance funding might be authorized on an individual basis after prior FHWA approval.

#### **Bridge Preservation Activities**

Bridge preservation activities are both condition-based and schedule-based, defined as follows:

#### Condition-based Activities Objectives

Condition based preventive maintenance activities are performed on bridge elements as needed and identified through the bridge element inspection process. This typically involves elements that have deteriorated to a condition state of 3 or 4. There are several performance objectives for the bridge elements that will promote this goal.

#### Schedule-based Activities Objectives

Schedule-based activities are typically preventive maintenance activities which are performed on a set pre-determined interval and aimed to preserve existing bridge element or component conditions. These types of activities may not improve the condition of the bridge element or component directly but will delay their deterioration.

Both types of activities will be employed in the preservation program. The ultimate objective is to increase a new structure's life expectancy to 100 years. To achieve this objective, bridges should have activities completed on the following schedule:

**Table 2 Recommended Activities Schedule** 

Year	Work Activities	Criteria
0	New Bridge (Includes deck sealing within 1 year)	
Every 1 to 2 years throughout the structure's life	Sweeping, power washing and cleaning of the deck (Element Condition States 1 and 2, NBI ≥ 5) and drains, steel or concrete elements below deck joints, abutment and pier seats below deck joints and other areas of the bridge that collect debris and animal droppings.	
Every 4 years throughout the structure's life	Seal the deck (Element Condition States 1 and 2, NBI ≥ 5) *, cracks, concrete superstructure and substructure elements below deck joints, using a penetrating sealer.	
12	1. Replace Expansion Joint Gland Seal (Element Condition States 3 + 4 >=25%)	<ol> <li>Schedule or condition based</li> <li>Condition based</li> </ol>
	<ol> <li>Spot Painting of coated steel elements (Element Condition States 2 + 3 &gt;5%)</li> <li>Zone Painting of coated steel elements (Element Condition States 2 + 3 &gt;25%)**</li> </ol>	Condition based  4. Condition based
•	<ol> <li>Repair/replace moveable bearings as needed (Element Condition States 3 or 4)</li> </ol>	
25	<ol> <li>Patch deck with hard overlay</li> <li>Replace Expansion Joints</li> <li>Zone Painting of coated steel elements</li> <li>Repair/replace moveable bearings as needed (Element Condition States 3 or 4)</li> </ol>	<ol> <li>Schedule or condition based</li> <li>Schedule based</li> <li>Schedule based</li> <li>Condition based</li> </ol>
37	<ol> <li>Replace Expansion Joint Gland Seal (Element Condition States 3 + 4 &gt;=25%))</li> <li>Spot Painting of coated steel elements</li> </ol>	<ol> <li>Schedule or condition based</li> <li>Condition based</li> </ol>
	(Element Condition States 2 or 3 >5%) 3. Zone Painting of coated steel elements (Element Condition States 2 or 3 >25%)**	4. Condition based
	<ol> <li>Repair/replace moveable bearings as needed (Element Condition States 3 or 4)</li> </ol>	•
50	<ol> <li>New Deck/Second Generation Hard Overlay (includes expansion joint replacement)</li> <li>Full Painting of coated steel elements</li> </ol>	<ol> <li>Schedule or condition based</li> <li>Schedule based</li> </ol>
	Replace moveable bearings	3. Schedule based

#### Exhibit A

62	Replace Expansion Joint Gland Seal     (Element Condition States 3 + 4)	<ol> <li>Schedule or condition based</li> <li>Condition based</li> </ol>
	>=25%))	Z. Condition based
	2. Spot Painting of coated steel elements (Element Condition States 2 or 3 >5%)	3. Condition based
	3. Zone Painting of coated steel elements (Element Condition States 2 or 3 >25%)**	4. Condition based
	4. Repair/replace moveable bearings as needed (Element Condition States 3 or 4)	
75	Patch deck with hard overlay	1. Schedule or condition based
,	2. Replace Expansion Joint	2. Schedule based
	3. Zone Painting of coated steel	3. Schedule based
	elements	
A.	4. Repair/replace moveable bearings as	4. Condition based
	needed (Element Condition States 3 or 4)	
87	Replace Expansion Joint Gland Seal	1. Schedule or condition based
	(Element Condition States 3 + 4 >=25%))	2. Condition based
	2. Spot Painting of coated steel elements (Element Condition States 2 or 3 >5%)	3. Condition based
	3. Zone Painting of coated steel elements	4. Condition based
	(Element Condition States 2 or 3 >25%)**	
	4. Repair/replace moveable bearings as needed (Element Condition States 3 or	
100	4)	1 Cabadula basad
100	1. Replace Bridge	Schedule based

Reset bearings and scour mitigation as needed throughout the life of the structure.

#### Eligibility Criteria

The preservation activities listed above will form a basis to generate an eligibility list of bridges that are candidates for schedule-based and condition-based actions. It applies to both new and in-service bridges. This list will be generated by the Bridge Management and Inspection Unit on an annual basis prior to the programming cycle and forwarded to the bridge owners.

Bridge inspection information and data stored in the Illinois Structures Information System (ISIS) will be used to develop reports quantifying needs at the program and project level.

<sup>\*</sup> In-Service decks with an NBI condition rating of 4 or less are not preservation candidates and should be maintained as needed to promote traffic safety. In-Service decks that have an NBI rating of 4 can remain in the deck sealing program on a discretionary basis. After the next deck or superstructure replacement project, the new deck will fall within these preservation activities schedule.

<sup>\*\*</sup> Based on amount of work to be done, either spot painting or zone painting can be done at these age milestones. In-house forces can be used for spot painting.

#### Exhibit A

Sound engineering judgment is needed to decide if the recommended action is best suited for extending the life of the bridge. Other factors may need to be considered in the decision-making process such as: deck age, size, deck design, and type of reinforcement, functional class, ADT, design load, detour lengths, corridor plans, and operation issues including traffic control. Specific deck/slab actions should be matched to the condition of the existing deck, deck material, age, and anticipated service life. Preservation projects may include some repair work that will raise the NBI condition rating to at least a "5" (element condition state 1 and/or 2) as long at the preservation work is >= 60% of the total cost of the project.

#### Requirements for Use of Federal Funds for Preventive Maintenance

The list of Federally eligible preventive maintenance activities is contained in the TAMP work activities table of the IDOT's Transportation Asset Management Plan.

## AGREEMENT FOR THE USE OF FEDERAL FUNDS FOR PREVENTIVE MAINTENANCE OF STRUCTURES

This agreement between the Illinois Department of Transportation (IDOT) and the Illinois Division of the Federal Highway Administration (FHWA), is intended to further implement the use of Federal Aid Highway Funding for Preventive Maintenance (PM) and Preservation activities as authorized in 23 USC 116 (e), and the FHWA Memorandum dated February 25<sup>th</sup>, 2016 titled "Guidance on Highway Preservation and Maintenance" on all eligible Federal Aid Highways in the State of Illinois.

The criteria used to develop this Agreement Is based on the FHWA Bridge Preservation Guide (FHWA-HIF-18-022) published in Spring 2018, which is the basis for the IDOT Bridge Preservation Guide. The IDOT Bridge Preservation Guide documents consistent and systematic criteria to identify Structure Preventive maintenance and Preservation activities that are eligible for the use of Federal-aid Highway Funded Projects.

This agreement is limited to PM and Preservation activities on Structures. This agreement includes inspection and training activities to support data driven application of Preventative Maintenance and Preservation.

By signing this agreement, IDOT and the FHWA incorporate by reference the laws, regulations, policies, standards, and procedures which govern or are applicable to Federal-Aid projects. IDOT certifies that it will comply with all provisions of 23 USC 133(b), "Surface Transportation Block Grant Program" and 23 USC 119(d) "National Highway Performance Program".

Nothing in this agreement shall be construed to relieve IDOT from ultimate accountability for compliance with Federal Laws and regulations with respect to the expenditure of Federal-Aid highway funds for PM activities in the State of Illinois, including those funds used for local government projects.

This agreement shall become effective November 1, 2019. It may be canceled or modified at any time by mutual agreement of IDOT and the FHWA.

Illinois Department of Transportation

Paul Loete, Director of Highways

Federal Highway Administration

Arlene Kocher, Division Administrator

# Appendix A

## **Statewide Structures (4-3-2019)**

	To	otal	Good				Poor			
	Structure	Square	Structure	%	Square	%	Structure	%	Square	%
System	Count	Footage	Count	Count	Footage	Sq. Ft.	Count	Count	Footage	Sq. Ft.
State	7,851	85,858,667	2,919	37.2%	23,826,841	27.8%	751	9.6%	12,514,948	14.6%
Toll	574	9,174,265	322		4,974,972		4	7	57,963	
County	4,086	13,667,715	2,128		6,263,011	•	334		1,223,741	
Township	12,160	20,658,848	6,709		11,699,414		1,019		1,398,982	
Muni	1,973	14,920,527	947		5,039,193		274		2,590,393	4
Other	150	999,860	59	a <sup>3</sup>	128,693		. 27		148,687	
Local	18,943	59,421,215	10,165	53.7%	28,105,284	47.3%	1,658	8.8%	5,419,765	9.1%
TOTAL	26,794	145,279,882	13,084	48.8%	51,932,125	35.7%	2,409	9.0%	17,934,714	12.3%

<sup>\*</sup>Illinois Bridge Inventory Statistics 4-4-2019-The lowest of the primary condition ratings for either Deck, Superstructure, Substructure, or culvert are used to define the Good, Fair, Poor categories. Good condition structures have a primary condition rating of 7, 8, or 9. Fair condition structures have a primary condition rating of 5 or 6. Poor condition structures have a primary condition rating of 4 or less.

9

# Appendix B

## NHS Structures (4-3-2019)

	To	tal	Good				Poor			
	Structure	Square	Structure	%	Square	%	Structure	%	Square	%
System	Count	Footage	Count	Count	Footage	Sq. Ft.	Count	Count	Footage	Sq. Ft.
State	4,062	59,344,177	1,314	32.3%	14,867,075	25.1%	390	9.6%	9,078,866	15.3%
Toll	447	7,618,964	254		4,059,445		2		33,454	
County	80	837,722	39		162,116		7		114,581	
Township	0	0	0		0		0		0	
Muni	212	5,637,037	53		1,565,532		33		893,658	
Other	4	111,466	0		0		1		4,680	
Local	743	14,205,190	346	46.6%	5,787,093	40.7%	43	5.8%	1,046,373	7.4%
TOTAL	4,805	73,549,367	1,660	34.5%	20,654,169	28.1%	433	9.0%	10,125,239	13.8%

NOTE: NHS - National Highway System

\*Illinois Bridge Inventory Statistics 4-4-2019-The lowest of the primary condition ratings for either Deck, Superstructure, Substructure, or culvert are used to define the Good, Fair, Poor categories. Good condition structures have a primary condition rating of 7, 8, or 9. Fair condition structures have a primary condition rating of 5 or 6. Poor condition structures have a primary condition rating of 4 or less.

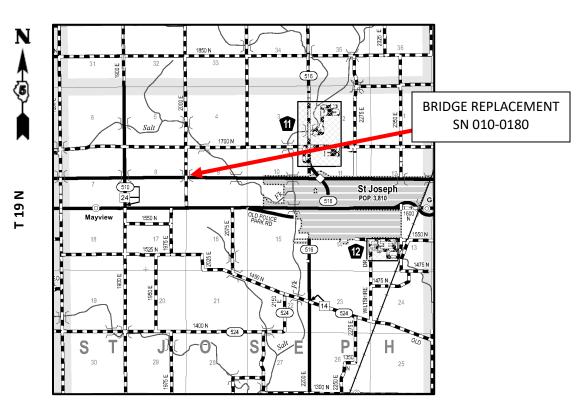
# STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS

#### **LOCATION MAP**

FAI 74 (I-74), TR 258 (CR 2000 E) SECTION TBD CHAMPAIGN COUNTY

#### BRIDGE REPLACEMENT SN 010-0180 2.2 MILES WEST OF ST JOSEPH

CONTRACT NO.: 70\_\_\_ C-95-\_\_\_-



**R 10 E** 

#### SCALE: N/A

TOTAL LENGTH OF SECTION & PROJECT = \_\_\_ FT = \_\_\_ MILES

NET LENGTH OF SECTION & PROJECT = \_\_\_ FT = \_\_\_ MILES