



**CHAMPAIGN COUNTY BOARD
HIGHWAY COMMITTEE AGENDA**

County of Champaign, Urbana, Illinois
Friday, January 4, 2019 – 9:00 a.m.
Highway Building Conference Room
1605 E Main St., Urbana

Committee Members:

Lorraine Cowart – Chair
Brad Clemmons – Vice-Chair
John Clifford
Jim McGuire

Giraldo Rosales
Chris Stohr
Pranjal Vachaspati

- I. Call to Order
- II. Roll Call
- III. Approval of Agenda/Addenda
- IV. Approval of Minutes – November 9, 2018 1-3
- V. Public Participation
- VI. Communications
- VII. County & Township Motor Fuel Tax Claims – November & December 2018 4-5
- VIII. Review of Champaign County Road & Bridge Projects and Funding 6-12
- IX. Review of the Champaign County Pavement Management Report 13-31
- X. Resolution Appropriating \$3,100,000.00 from County Motor Fuel Tax Funds for the Improvement of County Highway 9, Section #18-00449-00-RS 32-34
- XI. Resolution Appropriating \$55,000.00 from County Bridge Funds for the Repair of the Taylor Bridge on County Highway 9, Section #18-00065-00-BR 35-36
- XII. Other Business
- XIII. Chair's Report
- XIV. Designation of Items to be Placed on the Consent Agenda
- XV. Adjournment

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**Champaign County Board
Highway & Transportation Committee
County of Champaign, Urbana, Illinois**

7
8 **MINUTES – SUBJECT TO REVIEW AND APPROVAL**

9 DATE: Friday, November 09, 2018
10 TIME: 9:00 a.m.
11 PLACE: Highway Building Conference Room
12 1605 East Main, Urbana, IL

13 **Committee Members**

14 **Present:** Lorraine Cowart (Chair), Brad Clemmons, John Clifford, Jim McGuire, Max Mitchell, Chris
15 Stohr, Steve Summers, C. Pius Weibel

16 **Absent:** None

17 **County Staff:** Jeff Blue (County Engineer), Michelle Carter (Recording Secretary), Rita-Morocoima-Black
18 (CCRPC/CUUATS Planning and Community Development Director)

19 **Others Present:** Drew Bargmann (CUMTD)

20 **MINUTES**

21 **I. Call to Order**

22 Committee Chair Cowart called the meeting to order at 9:00 a.m.

23 **II. Roll Call**

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

25 **III. Approval of Agenda/Addendum**

26 Mr. Blue suggested changing the order of the agenda and having agenda item XIII presented before
27 agenda item VIII on the agenda.

28 **MOTION** by Mr. Stohr to approve the agenda with the change; seconded by Mr. Mitchell. Upon vote, the
29 **MOTION CARRIED unanimously.**

30 **IV. Approval of Minutes – September 7, 2018**

31 Mr. Stohr requested line 78 read as follows: Mr. Blue discussed a bridge located on County Highway 15
32 west of Homer that needs to be replaced.

33 **MOTION** by Mr. Mitchell to approve the September 7, 2018 minutes as changed; seconded by Mr. Clifford.
34 Upon vote, the **MOTION CARRIED unanimously.**

35 **V. Public Participation**

36 None

37 **VI. Communications**

38 Mr. Weibel stated this would be the last committee meeting for himself and Mr. Mitchell as members.
39 Mr. Weibel said he has enjoyed it and Mr. Mitchell said he has appreciated being Ms. Cowart's Vice Chair.

40 **VII. County & Township Motor Fuel Tax Claims – September & October 2018**

41 **MOTION** by Mr. Weibel to receive and place on file the County and Township Motor Fuel Tax Claims for
42 September and October 2018; seconded by Mr. Summers. Upon vote, the **MOTION CARRIED**
43 **unanimously.**

44 Jim McGuire entered the meeting at 9:10 AM.

45 **VIII. Resolution Appropriating County Motor Fuel Tax Funds for the Salary and Estimated Expenses of the**
46 **County Engineer for the period of January 1, 2019 thru December 31, 2019.**

47 Mr. Blue presented a resolution appropriating Motor Fuel Tax dollars for his salary for fiscal year 2019
48 and authorizing Mr. Weibel to sign an agreement with IDOT for his salary.

49 **MOTION** by Mr. Mitchell to approve the resolution; seconded by Mr. Clemmons. Upon vote, the **MOTION**
50 **CARRIED unanimously.**

- 51 **IX. Agreement for County Engineer's Salary**
52 Mr. Blue explained the agreement authorizes the County to transfer Federal Surface Transportation
53 Program Funds to IDOT in return for state funds to be used by the County to pay a portion of the County
54 Engineer's salary. Mr. Summers questioned the large gap between Mr. Blue's salary and the Assistant
55 County Engineer's salary. Mr. Summers said he does not know the process for looking at the Assistant
56 County Engineer's salary. Mr. Blue said the Assistant County Engineer's position would have to be re-
57 evaluated. Mr. Blue said when the Assistant County Engineer and Maintenance supervisor retire; his
58 intent is to have the positions re-aligned. Mr. Blue said he could have the Assistant County Engineers
59 salary re-ranked but he does not know that it would change. Usually responsibilities have to change for
60 the ranking to increase. Mr. Blue explained that the Assistant County Engineer is paid at a salary band
61 higher than the ranking of his position based on a market comparison. Mr. Mitchell asked if the IMRF is
62 in addition to the County Engineer's salary. Mr. Blue answered yes.
- 63 **X. County Estimate of Maintenance Cost**
64 Mr. Blue discussed the estimated road maintenance costs for the 2019 fiscal year. The County's Motor
65 Fuel Tax estimated cost is \$924,150.00. The equipment expense of \$225,000.00 is for the use of the
66 county vehicles and equipment.
- 67 **XI. Resolution Appropriating County Motor Fuel Tax Funds for County Roads Maintenance Section #19-
68 00000-00-GM.**
69 **MOTION** by Mr. Weibel to approve the resolution; seconded by Mr. Summers. Upon vote, the **MOTION**
70 **CARRIED unanimously.**
- 71 **XII. Resolution Appropriating Additional County Motor Fuel Tax Funds for CH 23 (Dewey Elliott Road)
72 Section #14-00438-00-RS**
73 Mr. Blue explained the need for an additional appropriation of funds for CH 23. The Dewey Elliott Road
74 project is complete. The resolution is for an additional \$132,806.19. The additional funds were used for
75 ROW and engineering costs.
76 **MOTION** by Mr. Weibel to approve the resolution; seconded by Mr. Clifford. Upon vote, the **MOTION**
77 **CARRIED unanimously.**
- 78 **XIII. Other Business**
79 Mrs. Morocoima-Black presented information for the FY 2019 Downstate Operating Assistance Program
80 Grant Agreement. The amount of the grant agreement is \$589,692.00. The resolution authorizes
81 Champaign County to enter into a Downstate Public Transportation Operating Assistance Agreement
82 with the State of Illinois in order to obtain grant assistance.
83 **MOTION** by Mr. Mitchell to approve the resolution; seconded by Mr. Clemmons. Upon vote, the **MOTION**
84 **CARRIED unanimously.**
- 85 Next, Mrs. Morocoima-Black presented the Annual Rural Transit Service Report for Fiscal Year 2018. The
86 report covers the last completed IDOT grant year, July 1, 2017 to June 30, 2018. The total registered riders
87 had an increase of 9% and the Total Rides for FY 18 had a 20% increase from FY 17. The report includes
88 ridership and statistics for areas served in FY 18. The committee discussed the trip type, average trips,
89 accessibility, denials and a breakdown of the funding. Mr. Stohr asked about complaints received for
90 services not provided on holidays. Mrs. Morocoima-Black replied the complaint is usually for not
91 providing service on the weekend. Mr. McGuire asked about support across the state of Illinois. Mr.
92 Morocoima-Black stated that since Champaign County's program is fairly new, getting funding has been
93 difficult.
- 94 **MOTION** by Mr. Weibel to accept and place on the file the Annual Rural Transit Service Report for Fiscal
95 Year 2018; seconded by Mr. Mitchell. Upon vote, the **MOTION CARRIED unanimously.**
- 96 Mr. Blue invited the committee members to an Employee Appreciation luncheon for the Highway
97 Department on December 13th from 11:30-12:30.
- 98 Mr. Blue said that the Township dinner is most likely December 6th in Gifford. He will notify the committee
99 on the exact date.

100 Mr. Clemmons asked about the contract talks and whether Tracy Wingler would be a part of the
101 negotiations. Mr. Blue said that Deb Busey and Barb Mann contacted him regarding the use of outside
102 council for the negotiations.

103 **XIV. Designation of Items to be Placed on Consent Agenda**

104 Ms. Cowart stated that items VIII thru XIII are to be placed on the consent agenda.

105 **XV. Adjournment**

106 There being no further business, Ms. Cowart adjourned the meeting at 9:57 am.

107 ***Please note the minutes reflect the order of the agenda and may not necessarily reflect the order of business conducted at the meeting.*

CHAMPAIGN COUNTY HIGHWAY DEPARTMENT

JEFF BLUE
COUNTY ENGINEER

1605 E. MAIN STREET

(217) 384-3800
FAX (217) 328-5148

URBANA, ILLINOIS 61802

January 4, 2019

COUNTY MOTOR FUEL TAX CLAIMS FOR NOVEMBER

Req No.	Payee	Description	Amount
69	Jeff Blue	Registration for National Summit Conf.	350.00
70	VOID	VOID	0.00
71	Open Road Asphalt Champaign County	4.12 tons cold mix	494.40
72	Treasurer	Equipment rental July-September 2018	59,613.97
73	Open Road Asphalt	2.31 tons cold mix	277.20
			<hr/> \$ 60,735.57 <hr/>

TOWNSHIP MOTOR FUEL TAX CLAIMS FOR NOVEMBER

Req No.	Payee	Description	Amount
			<hr/> \$0.00 <hr/>

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URBANA, ILLINOIS 61802

January 4, 2019

COUNTY MOTOR FUEL TAX CLAIMS FOR DECEMBER

Req No.	Payee	Description	Amount
74	Varsity Striping	Final 2018 Striping of Various Roads	9,495.76
75	Newman Traffic Signs	Various Signs	537.72
76	Lehign Hanson	19.52 tons CA6.10	175.68
77	Sicalco Ltd	4071 gallons Calcium Chloride	2,971.83
78	Hall Signs	misc signs	2,486.96
79	Lehign Hanson	128.79 tons CA6/10	1,159.11
			<hr/> \$ 16,827.06 <hr/>

TOWNSHIP MOTOR FUEL TAX CLAIMS FOR DECEMBER

Req No.	Payee	Description	Amount
90	Champaign County Hwy Fund 83	Engineering fees for Twps 2018 Maint. Program	85,815.18
			<hr/> \$85,815.18 <hr/>

Champaign County Road and Bridge Projects					
Project	Location	Cost	Status	Year Ready	
County Road 9 Rebuild	Ludlow to County Road 32	\$4,000,000	Ready	2018	
Replacement of Bridge 010-01119	County Road 18 Between Philo and US 45	\$1,100,000	In Design	2019	
Replacement of Bridge 010-0080	County Road 15 - 1 mile West of Homer	\$800,000	In Design	2019	
Replacement of Bridge 010-4033	High Cross Road - 1 Mile North of I-74	\$1,500,000	In Design	2019	
Replacement of Bridge 010-0122	County Road 17 - 1 Mile Southwest of Sadorus	\$1,000,000	In Design	2019	
County Road 18 Rebuild	IL 130 to US 45	\$4,500,000	Planning	2020	
County Road 15 Rebuild	IL 130 to Sidney	\$4,000,000	Planning	2020	

County Road 9 Project

R.10E

R.11E

Ford County

Big Four Ditch

1800 E

1700 E

1800 E

1900 E

2000 E

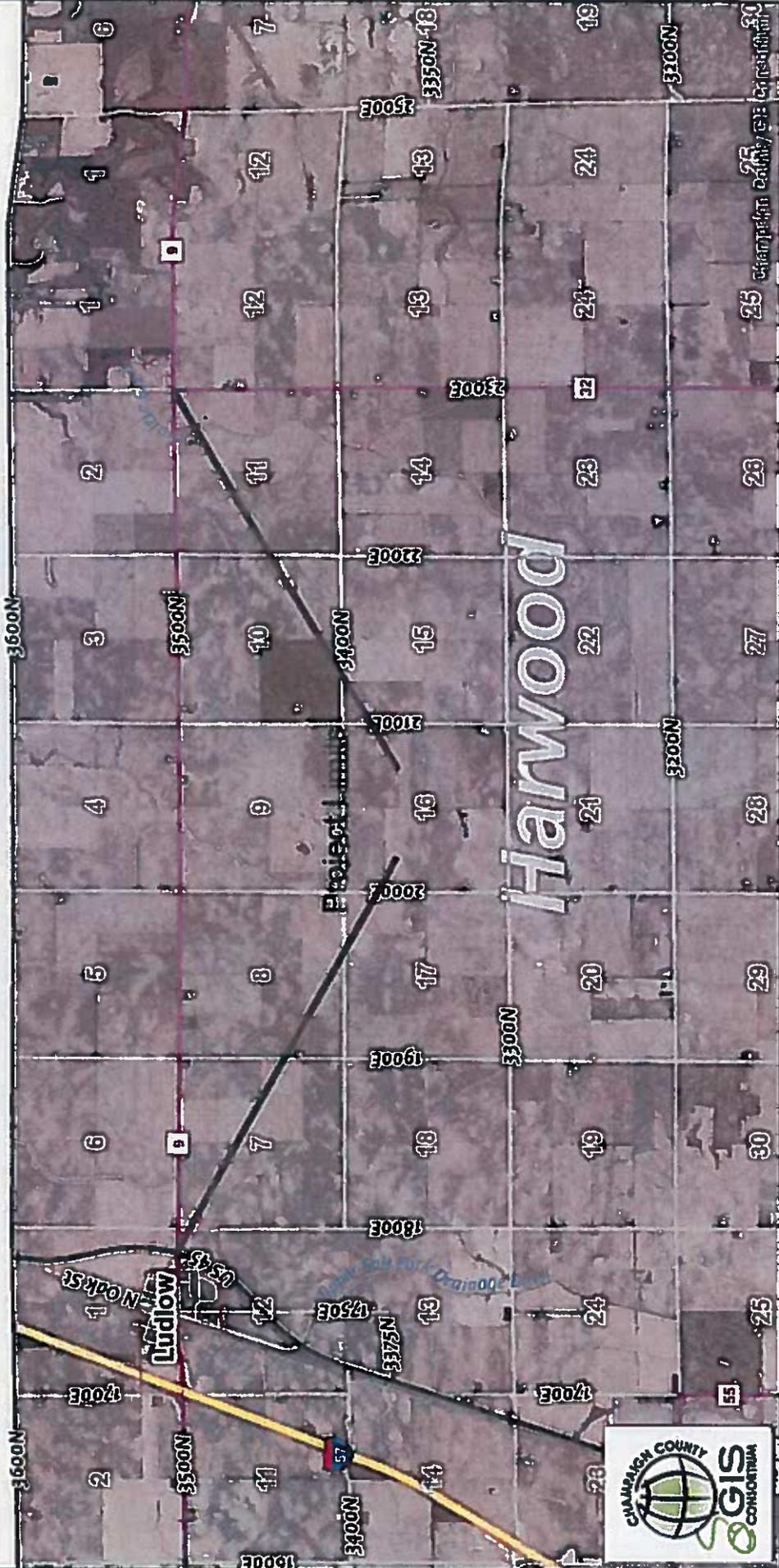
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2300 E

2400 E

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3,400 Feet

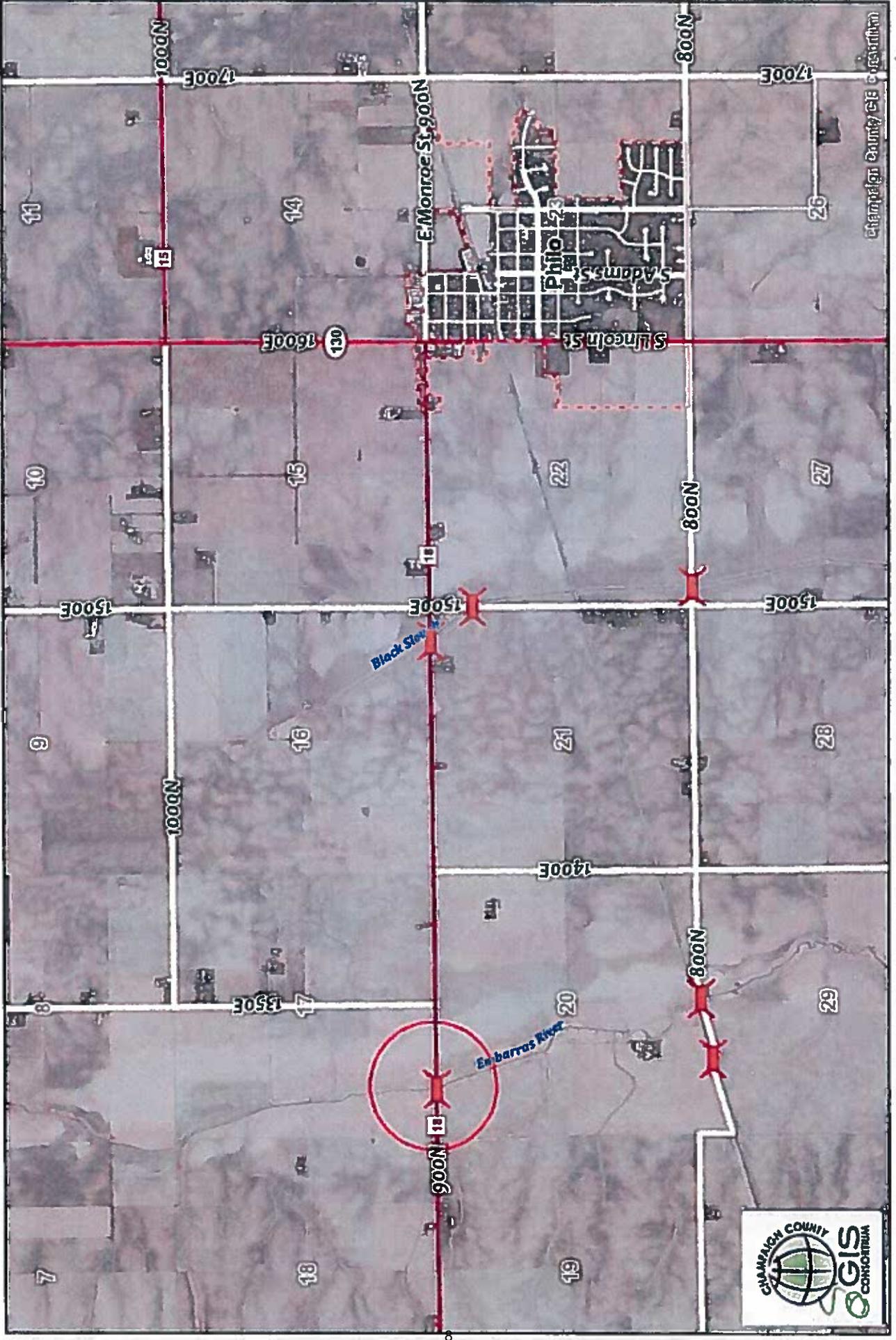


CHAMPAIGN COUNTY GIS CONSORTIUM



NORTH

Bridge 010-0119



1,800

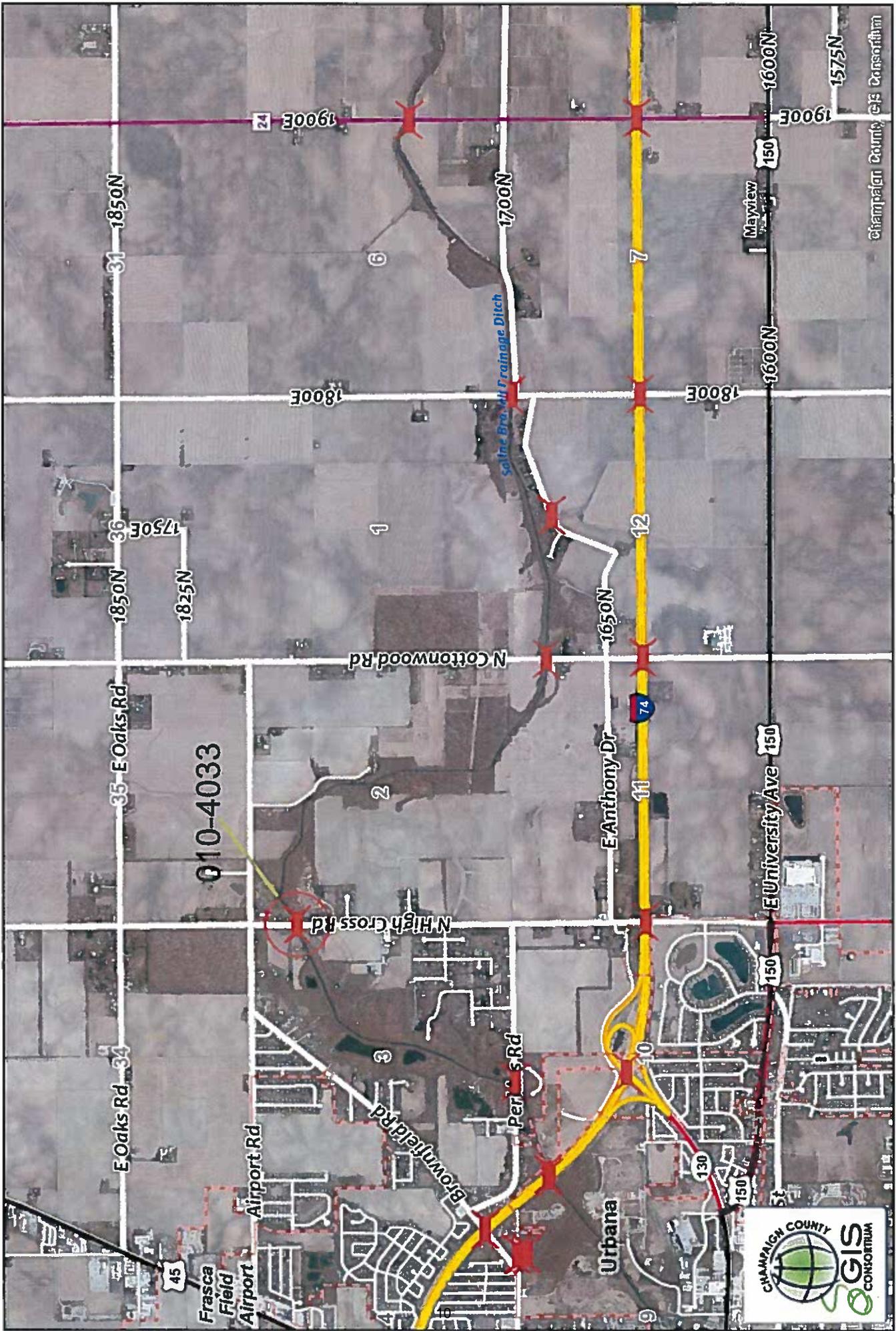
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Champaign County GIS Consortium

Bridge 010-4033



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1,800 Feet

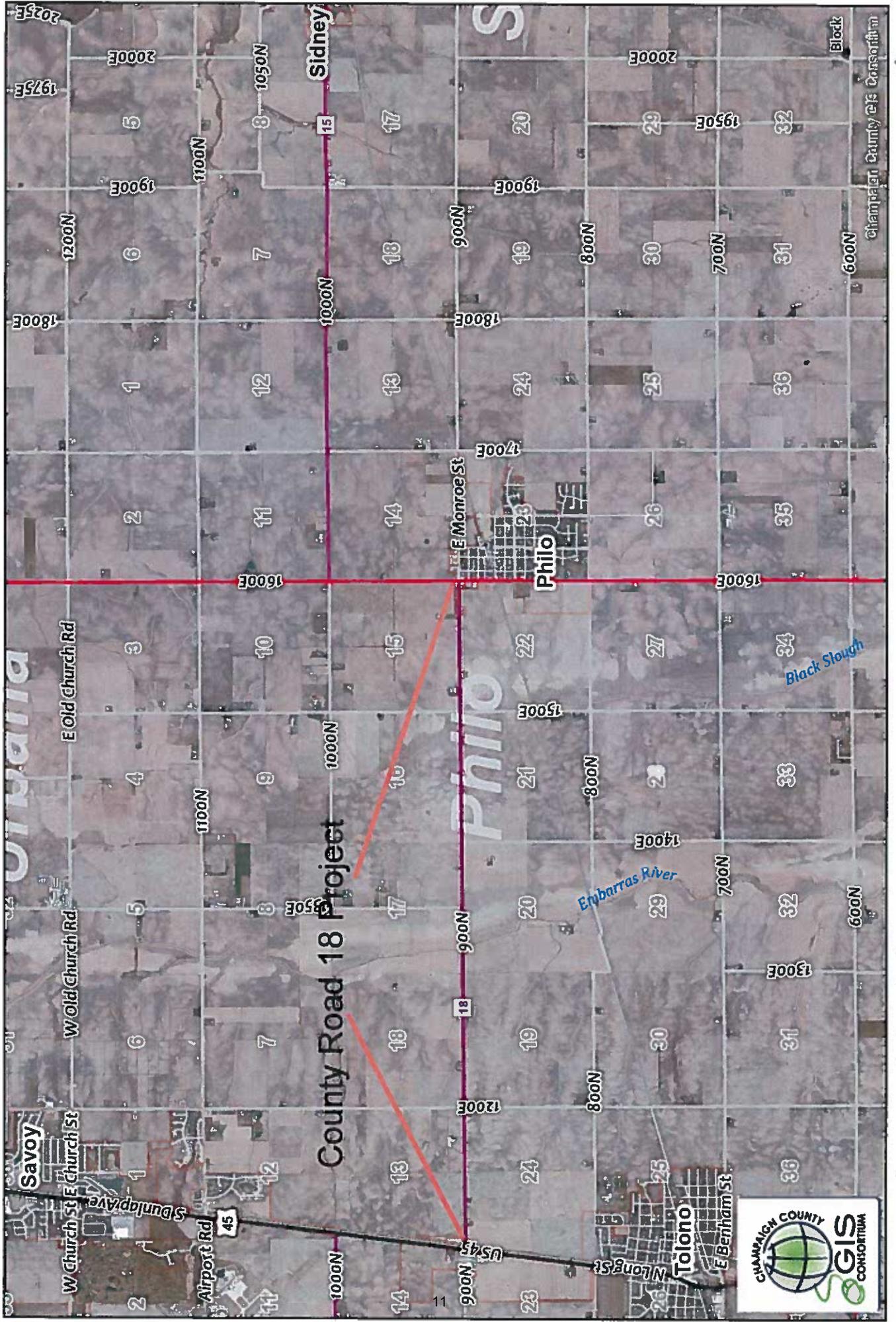


Champaign County GIS Consortium



NORTH

County Road 18 Rebuild



3,600 Feet

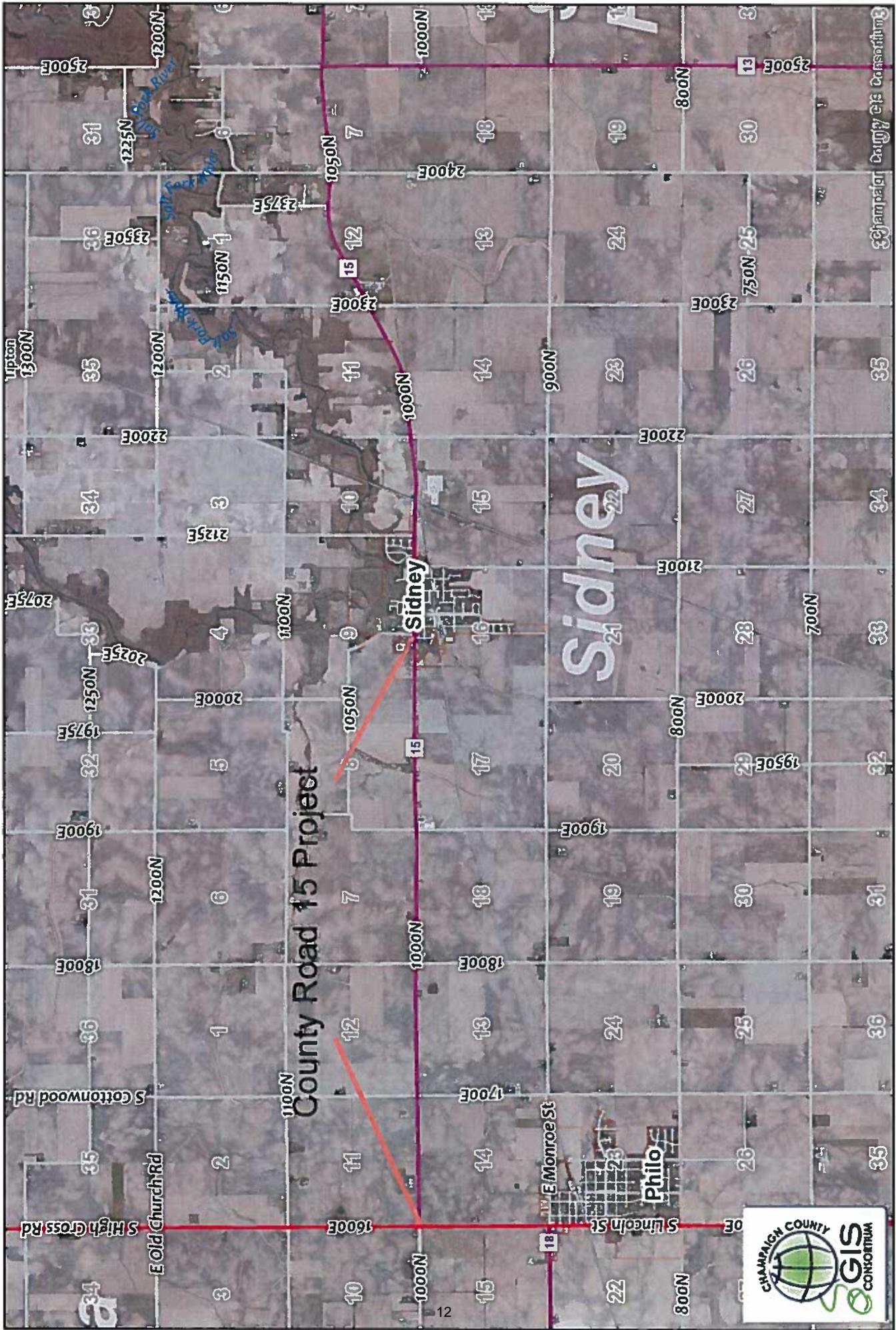
CHAMPAIGN COUNTY GIS CONSORTIUM

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CHAMPAIGN COUNTY GIS CONSORTIUM

NORTH

County Road 15 Rebuild



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3,600 Feet





May 5, 2018

Jeff Blue, P.E.
County Engineer
Champaign County
1605 E. Main St.
Urbana, IL 61802
(217) 384-3800 telephone
(217) 328-5148 fax

**Subject: Champaign County Pavement Management System Update—2018-22
Maintenance and Rehabilitation Plan. ARA Project No. 002351**

Dear Mr. Blue:

Applied Research Associates, Inc. (ARA) appreciates the opportunity to submit to Champaign County your annual Pavement Management System (PMS) update, including the 2018-22 maintenance and rehabilitation plan.

It has been a pleasure providing pavement management services to Champaign County and we look forward to our continued relationship.

Sincerely,

A handwritten signature in black ink, appearing to read "D. Steele".

Douglas A. Steele, P.E.
Senior Engineer

A handwritten signature in black ink, appearing to read "W. Vavrik".

William R. Vavrik, Ph.D., P.E.
Vice President and Principal Engineer

Attachment

cc: Joe Stefanski, ARA

TRANSPORTATION SECTOR

100 TRADE CENTRE DRIVE, SUITE 200 ■ CHAMPAIGN, IL 61820
(217) 356-4500 ■ FAX: (217) 356-3088 ■ WWW.ARA.COM/TRANSPORTATION

REPORT

**Champaign County Pavement Management System
2018-22 Maintenance and Rehabilitation Plan**

Prepared for:

Champaign County Highway Department

1605 E. Main St.
Urbana, IL 61802
Tel. (217) 384-3800

Prepared by:

Applied Research Associates, Inc.

Transportation Sector
100 Trade Centre Dr., Suite 200
Champaign, IL 61820
Tel. (217) 356-4500

May 5, 2018

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BACKGROUND

The Champaign County Highway Department maintains a pavement management system (PMS) to objectively evaluate, assess, and manage the approximately 400 lane miles of County-maintained roads in Champaign County. Applied Research Associates, Inc. (ARA) developed and manages the PMS through a multiyear contract with the County. Together, the County and ARA use the PMS to evaluate which roads to work on, what types of treatments to perform, and the timing of improvements. Ultimately, by managing their highway network through use of a PMS, Champaign County is able to make the optimal use of their annual highway pavement maintenance and construction funds.

This report presents the proposed 2018-2022 maintenance and rehabilitation plan developed jointly between ARA and the County. It also presents a 10-year network condition forecast taking into account projected needs and anticipated funding. The PMS is updated annually to reflect work performed each year and to generate an updated capital improvements program for the next 5 years. Field assessment is performed biannually.



Figure 1. Champaign County's PMS optimizes the expenditure of construction funds over the long-term by choosing the most appropriate treatment and timing for road improvements (County Highway 23, pre- and post-2017 construction).

UPDATED RECORDS

The County Highway Department performed the following maintenance and rehabilitation activities in 2017.

- CH 23 (mile 0 to 6.49): 4-in cold inplace recycling (CIR) and 3-in asphalt concrete (AC) overlay
- CH 9 (mile 13.31 to 17.06): seal coating
- CH 20 (mile 8.79 to 12.87): seal coating
- CH 22 (mile 8.52 to 15.18): seal coating

Funding Updates

There are no changes to the construction and maintenance budgets for 2018.

ROADWAY ASSESSMENT

Pavement Condition

ARA performed the biannual survey of pavement conditions in November 2017, following the completion of all construction and maintenance activities. The condition survey used an automated digital camera and global positioning systems (GPS) mounted on a survey vehicle that filmed 100 percent of the County’s highway network. Figure 2 shows the digital image survey system used on this project. The vehicle also measures longitudinal pavement profile for roughness calculation, pavement rutting, and texture. ARA reviewed the digital images to calculate the amount, severity, and extent of pavement distress, which in turn we used to determine the Pavement Condition Index (PCI) of each road. The PCI method is a well-established technique for evaluating the pavement’s functional and structural condition based on visual distress (ASTM D6433).

Figure 3 shows the distribution of PCI values by mileage for five years—2009, 2011, 2013, 2015, and 2017. Figure 4 displays the spatial layout of PCI values for the critical lane of each road section. In general, the predominant pavement distresses are transverse cracking (thermal cracking and reflective cracking of underlying PCC joints), longitudinal cracking of the centerline joint, longitudinal cracking due to lane widening, and fatigue (alligator) cracking in the wheelpaths. Minor distresses included block cracking, edge cracking, patching, and bleeding.

Overall, 85 percent of Champaign County’s roads are in good to very good condition, while only 1.9 percent are in poor or very poor condition. While the distribution by condition has shifted slightly from year to year, the overall network PCI has been very stable, averaging 81.5 in 2017.



Figure 2. ARA’s van-mounted camera and laser system captures high-resolution images.

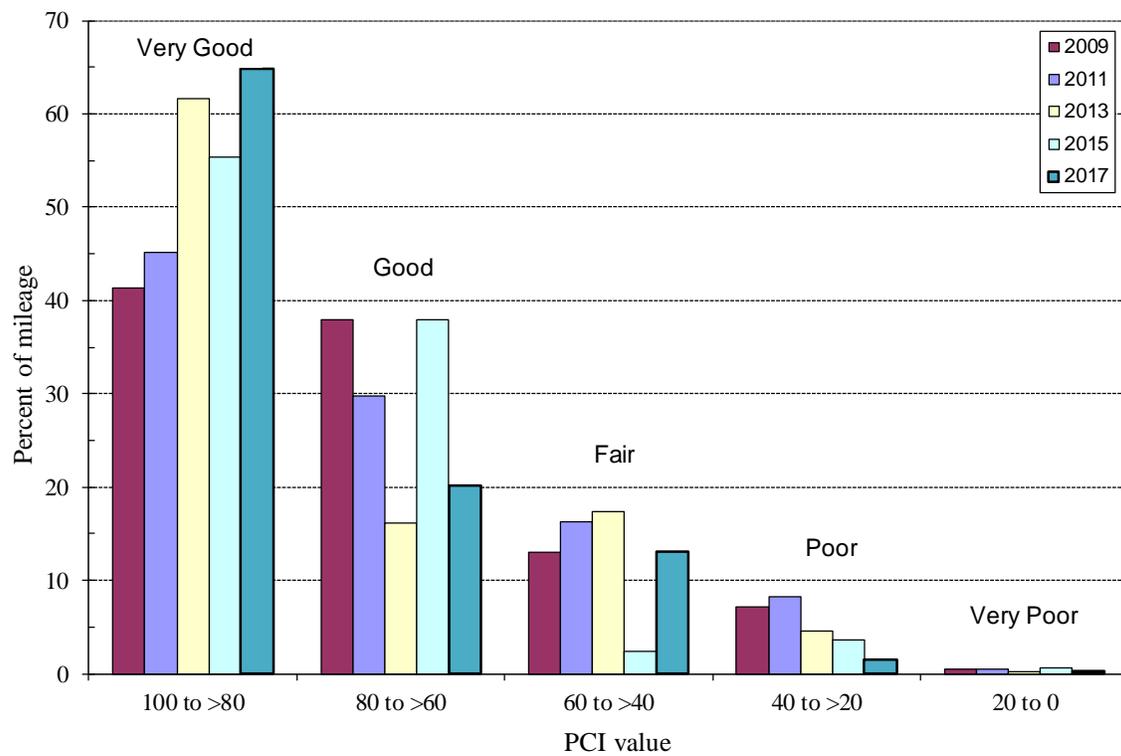


Figure 3. Condition of Champaign County’s roads by mileage (5 years).

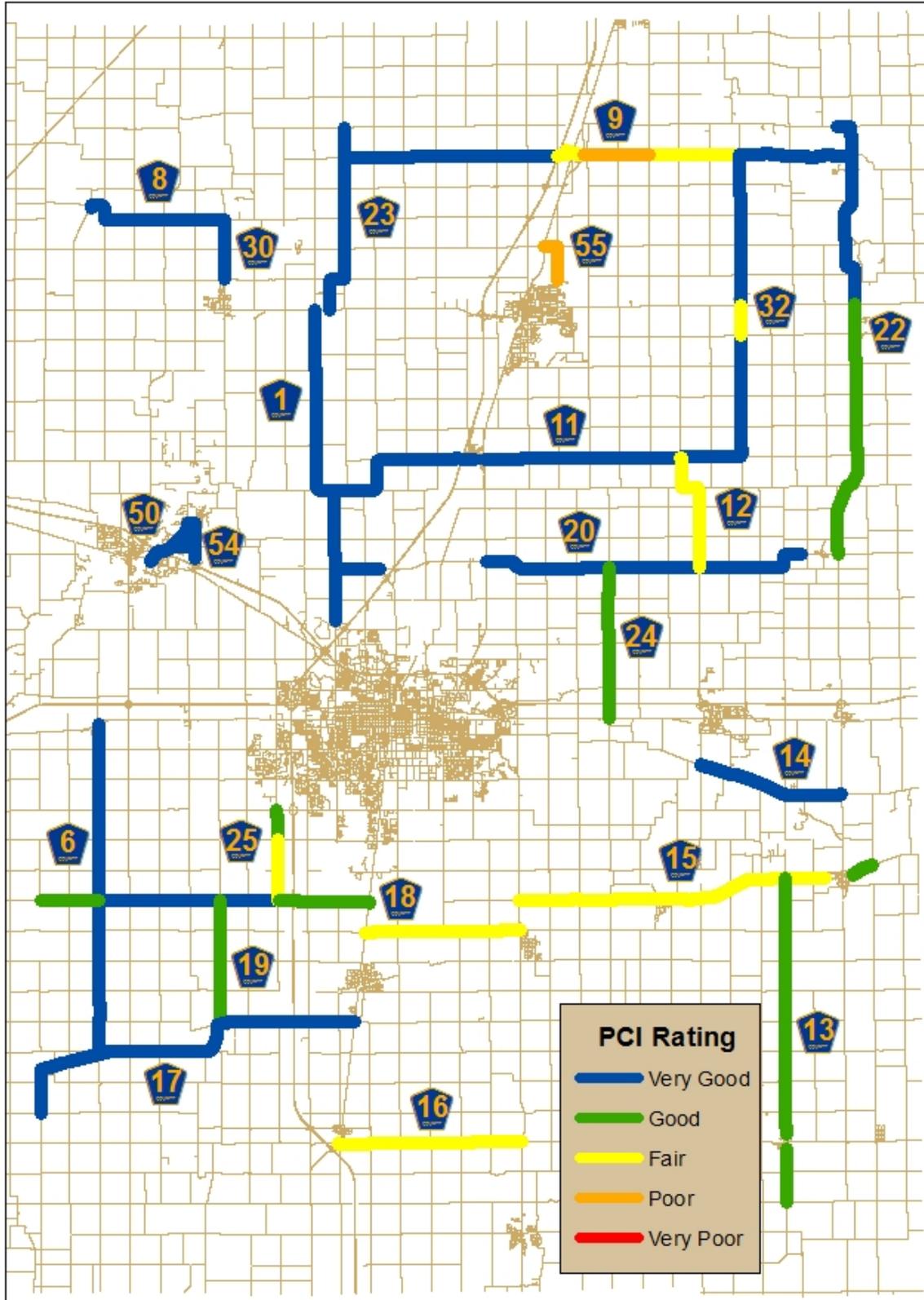


Figure 4. 2017 PCI ratings (field survey).

Roughness

The International Roughness Index (IRI) is a widely accepted measure of pavement roughness (ASTM E1926). In general, high-quality pavements are constructed at low IRI values (e.g., <100 in/mi) and IRI increases over the pavement’s life due to accumulation of distress. Typically, significant user discomfort is noticed at IRI values greater than 200 in/mi, requiring functional improvement, such as AC overlay. ARA collected IRI data on all the County’s roads simultaneous to video data collection using the van’s onboard laser system.

Figure 5 displays the IRI results for the 2017 survey. The vast majority of roads have low roughness, with 68.1 percent of the network having IRI values less than 100 in/mi.

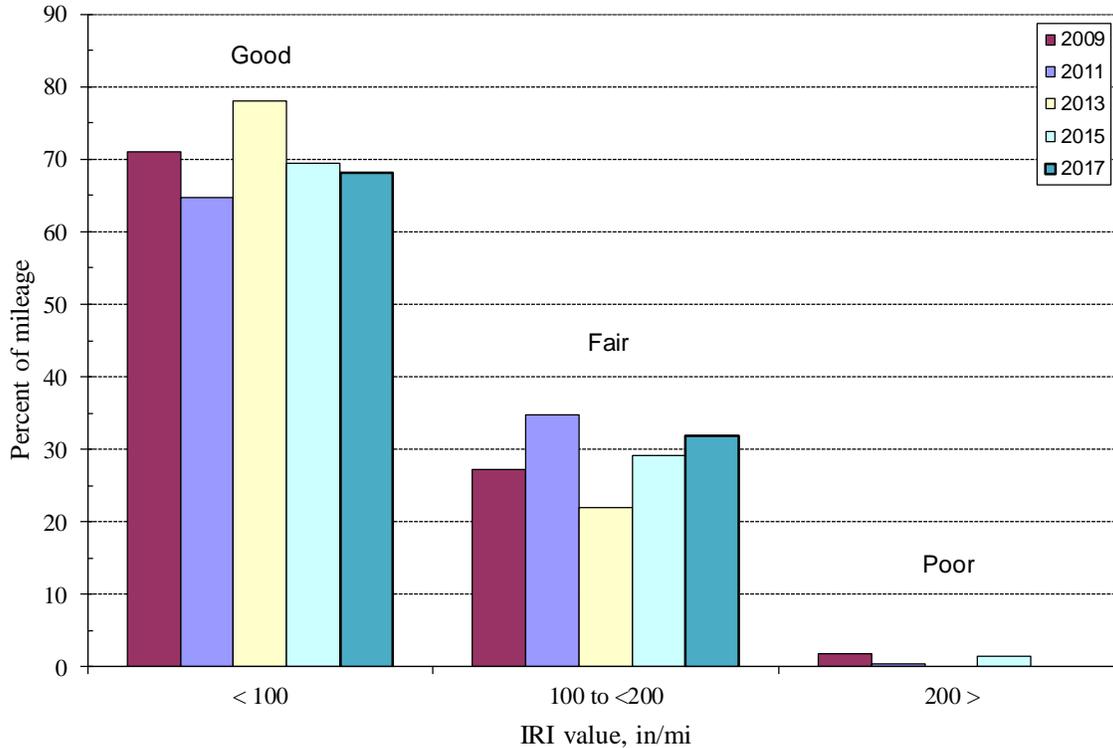


Figure 5. Roughness distribution by mileage (5years).

Rutting

Pavement rutting was measured by the video van’s onboard sensors and averaged between the two wheelpaths. Typically, rutting is negligible for the first few years of pavement life and increases with age. It is important from both functional and safety aspects, as differential rutting in the wheelpaths increases roughness and excessive rutting can hold water and cause hydroplaning during rain. Figure 6 shows the rutting results. Overall, 100 percent of Champaign County highways show less than the acceptable threshold of 0.25 in of rutting.

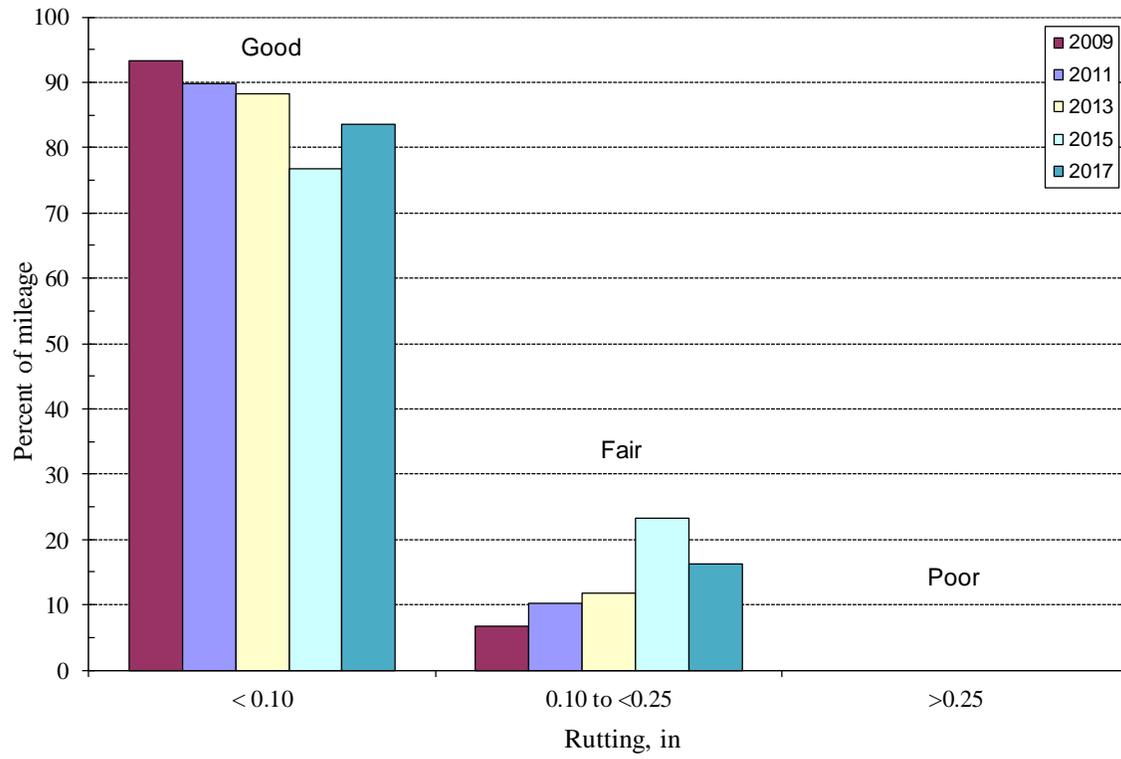


Figure 6. Rutting distribution by mileage (5 years).

PMS UPDATE

ARA collects condition data on Champaign County’s network biannually. This data serves as the basis for the PMS analysis in RoadCare to select roads to work on, what treatments to perform, and timing. In years when data collection is not performed, RoadCare predicts pavement condition (i.e., PCI values) based on a deterioration curve determined from historical data.

ARA summarizes all condition data on a section basis determined by road, pavement construction history, and traffic level. Figure 7 shows Champaign County’s PMS sections.



Figure 7. Champaign County PMS sections based on road, construction history, and traffic.

Pavement Performance Model

Figure 8 shows the pavement deterioration curve used in RoadCare to predict pavement deterioration in its simulation. ARA developed the original curve with historical data provided by the County and we updated it with later years' data from our surveys. The curve shows an estimated service life of 17 years before major rehabilitation is required, such as mill and thick AC overlay or cold-inplace recycling.

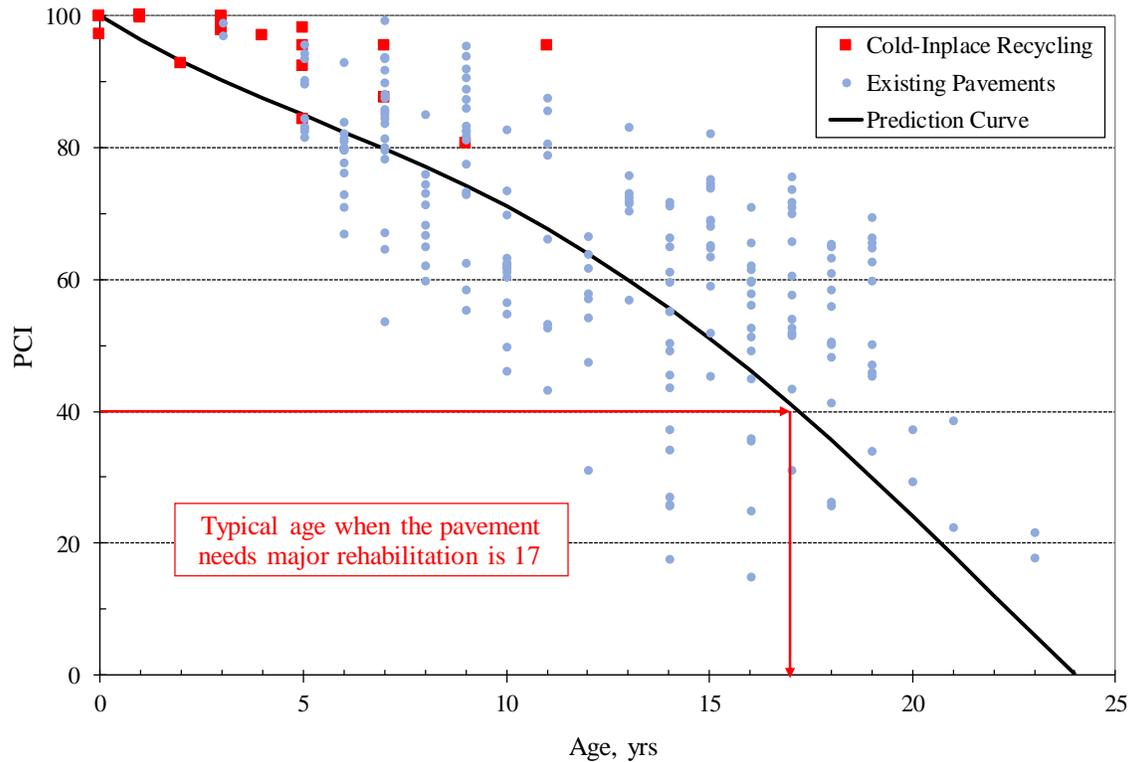


Figure 8. The typical rehabilitated pavement in Champaign County lasts 17 years before requiring its next rehabilitation.

The above figure shows the performance of CIR rehabilitation projects performed on County Highways 8, 23, 30, and portions of 9, 11, 20, and 22. Overall, the CIR projects are performing better than the prediction curve for their given age. It should be noted that several have been maintained with chip seals, which increases their PCI; however, since this is standard practice for Champaign county highways, the benefit of the surface treatment should be considered in the prediction curve. It should also be noted that the CIR projects are relatively new. The County performed their first CIR project on the easternmost section of County Highway 9 in 2006, meaning the oldest section was 11 years old at the time of the 2017 PCI survey.

Unit Costs for Treatments

Champaign County provided estimated unit cost data for typical work activities, such as placing chip seals, AC milling, and placing AC overlays. From this, ARA determined typical unit costs for each M&R alternative listed in the treatment matrix. The County provided costs on a per lane-mile basis and we subsequently converted to units of cost per square yard. Table 1 presents the estimated unit costs.

Table 1. Estimated unit costs used in RoadCare.

Activity Description	Budget Category	Unit Cost (\$/sy)	Unit Cost (\$/cl-mi) ^a
Crack Sealing	Maintenance	\$ 0.98	\$ 13,798
Distress Repair & Crack Seal	Maintenance	\$ 1.54	\$ 21,683
Chip (slag) Sealing	Maintenance	\$ 1.99	\$ 28,019
2" HIR and 2" AC Overlay	Construction	\$ 19.00	\$ 267,520
2" Mill and 2" AC Overlay	Construction	\$ 16.00	\$ 225,280
2" Mill and 3" AC Overlay	Construction	\$ 21.00	\$ 295,680
4" CIR and 1.5" AC Overlay	Construction	\$ 21.00	\$ 295,680
4" CIR and 3" AC Overlay	Construction	\$ 27.00	\$ 380,160
Reconstruction and 3" AC	Construction	\$ 31.00	\$ 436,480
Reconstruction and 4" AC	Construction	\$ 36.00	\$ 506,880

^a Based on two 12-ft lanes.

Treatment Matrix

Figure 9 shows the Champaign County treatment matrix. In general, the PCI value determines the required depth of AC milling (i.e., the worse the condition, the greater the depth of milling), while the RWD deflection determines the required net increase in AC thickness, if any. If deflection currently is adequate for the given traffic level, a mill and overlay of the same thickness is sufficient. If the pavement is lacking in structural capacity, as indicated by a medium or high deflection, the matrix recommends either increasing the AC thickness or performing cold-inplace recycling (CIR) with an AC overlay.

The matrix also distinguishes between high- and low-traffic roads, recommending less extensive treatments for low-volume roads relative to high-traffic roads in the same condition. This is because low-traffic roads can tolerate less-extensive treatments than those with higher truck traffic.

PCI Value	PCI Rating	High Truck Traffic			Low Truck Traffic		
		Design RWD Deflection, mils			Design RWD Deflection, mils		
		< 35 Good	35 - 50 Fair	> 50 Poor	< 45 Good	45 - 75 Fair	> 75 Poor
100	Very Good	Defer Maintenance			Defer Maintenance		
80		Crack sealing (maximum 1 time)			Crack sealing (maximum 1 time)		
60	Good	Chip Seal (maximum 2 times)	Distress Repair & Crack Seal (max 2 time)		Chip seal, (maximum 2 times)		Defer Improvements
40	Fair	2" Mill & 2" ACOL	2" Mill & 3" ACOL	4" CIR & 3" ACOL	2" HIR & 2" ACOL		2" Mill & 3" ACOL
20	Poor	4" CIR & 3" ACOL			4" CIR & 1.5" ACOL	4" CIR & 3" ACOL	
0	Failed	4" Reconstruction			3" Reconstruction		

Figure 9. The Champaign County treatment matrix.

All roads rehabilitated with a new AC surface are crack sealed every year beginning in the third year after construction, and chip sealed in the fifth year after construction.

FIVE-YEAR M&R PLAN AND CONDITION FORECAST

Maintenance and Rehabilitation Plan

ARA updated the maintenance and rehabilitation plan by simulating pavement deterioration and improvements in RoadCare over a 10-year period. RoadCare simulates deterioration of each section based on the performance curve determined specifically for Champaign County roads and increases the condition rating accordingly for any road receiving a maintenance or construction treatment during the simulation period. RoadCare selects projects with the highest benefit-to-cost ratio that are feasible within the allocated budget. Additional anticipated funding from sources other than State MFT funds (such as Federal STR or State HSIP funds) are added to the annual \$2,500,000 MFT construction and maintenance fund. ARA and the County Engineer finalized the maintenance and rehabilitation program based on practical considerations, such as spatial distribution of selected projects and anticipated funding.

Table 2 presents the proposed 5-year plan for 2018 to 2022. Figure 10 presents the surface treatment and rehabilitation projects for all five years. The main rehabilitation projects over the next five years include:

- 1.5” HIR and 2” AC overlay on all of CH 13 in 2018.
- 1.5” HIR and 2” AC overlay on all of CH 25 in 2018.
- 4” CIR and 3” AC overlay on all of CH 16 in 2018.
- Reconstruction on CH 9 from Ludlow to CH 32 in 2019.
- Rehabilitation on CH 18 from US 45 to SR 130 in 2020.
- Rehabilitation on CH 15 from SR 130 to Homer in 2021.
- Rehabilitation on all of CH 12 in 2022.
- Rehabilitation on all of CH 55 in 2022.

Table 3 presents the expected pavement expenditures for the next 5 years, based on the RoadCare simulation results.

Table 2. Detailed work activities for 2018 to 2022.

Year	Route	Begin MP	End MP	Activity	Cost
2018	CR13	0	10.8	1.5" HIR & 2" ACOL	\$2,528,777
	CR25	0	3.04	1.5" HIR & 2" ACOL	\$813,260
	CR16	0	6.13	4" CIR & 3" ACOL	\$2,136,183
	CR18	0	1.96	Distress Repair & Crack Seal	\$42,477
	CR20	5.69	8.79	Distress Repair & Crack Seal	\$61,616
	CR22	0	8.52	Chip Seal	\$199,006
2019	CR09	8.1	13.31	4" Reconstruction	\$2,420,310
2020	CR18	11.97	17.1	2" Mill & 2" ACOL	\$1,157,714
	CR18	0	1.96	Distress Repair & Crack Seal	\$42,477
	CR18	1.96	7.94	Chip Seal	\$167,498
2021	CR15	0	10.35	4" CIR & 3" ACOL	\$3,935,416
	CR09	0	7.12	Chip Seal	\$182,897
2022	CR12	0	4.17	4" CIR & 1.5" ACOL	\$1,130,508
	CR55	0	1.57	3" Reconstruction	\$1,248,260
	CR20	12.87	16.63	Distress Repair & Crack Seal	\$78,152
	CR50	1.89	2.9	Chip Seal	\$23,652

Table 3. Projected expenditures for 2018 to 2022.

Budget Source	2018	2019	2020	2021	2022
Maintenance	\$495,317	\$429,195	\$391,542	\$477,265	\$496,689
Construction	\$5,478,221	\$2,420,310	\$1,157,714	\$3,935,417	\$2,378,769
Total	\$5,973,538	\$2,849,505	\$1,549,256	\$4,412,682	\$2,875,458

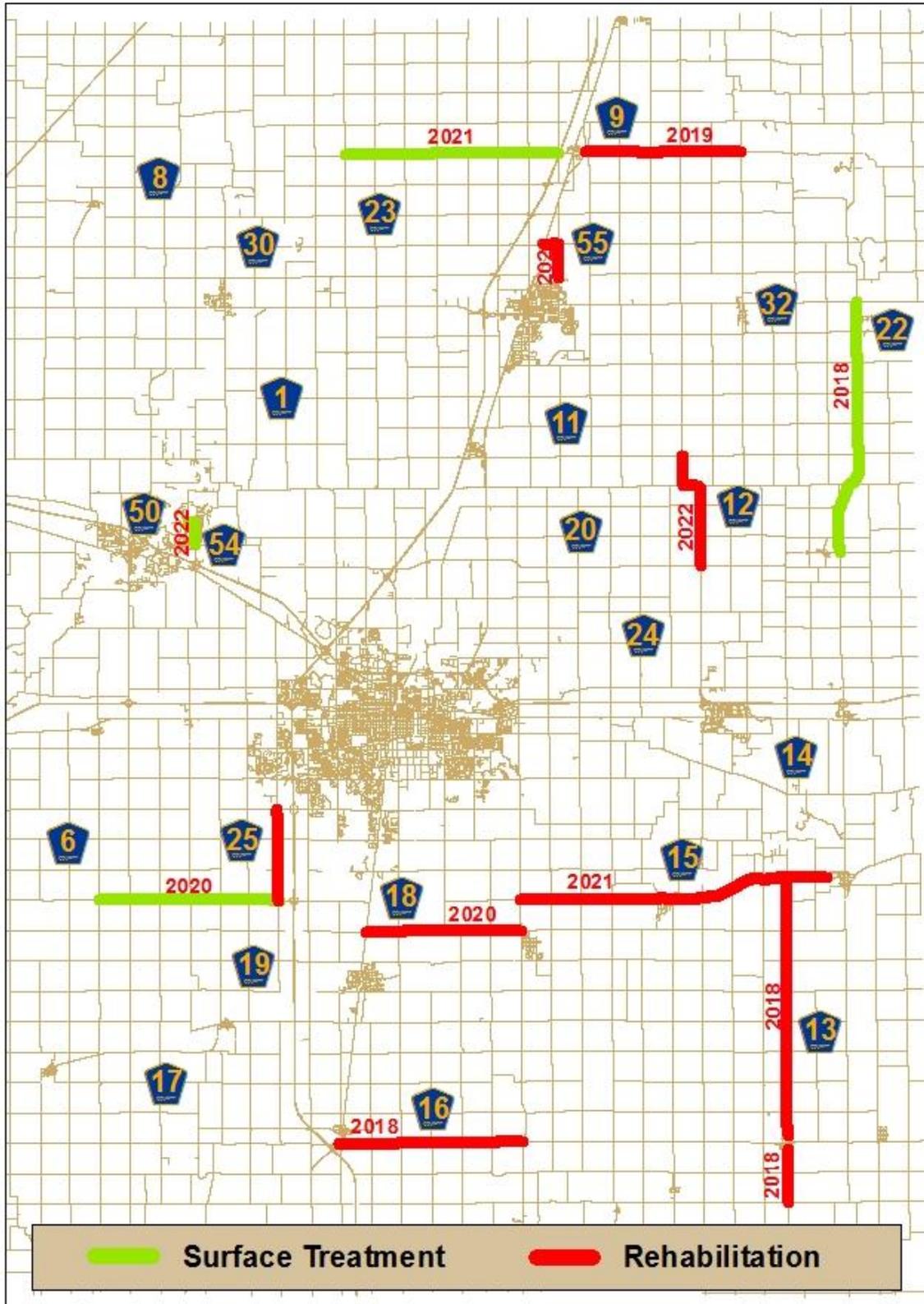


Figure 10. Rehabilitation and surface treatment plan, 2018 to 2022 (event year shown in red).

10-Year Network Condition Forecast

Figure 11 presents the RoadCare pavement condition simulation results for the next 10 years. The chart shows the predicted percentage of lane mileage in each rating category (e.g., very good, good, fair, poor, and very poor) and the predicted average network PCI. The simulation predicts that the network PCI value will remain stable over the next 10 years, averaging 81.1 (i.e., very good to good), while the percentage of pavements in good condition will increase, with a corresponding decrease in the number of pavements in very good, fair, poor, and very poor condition.

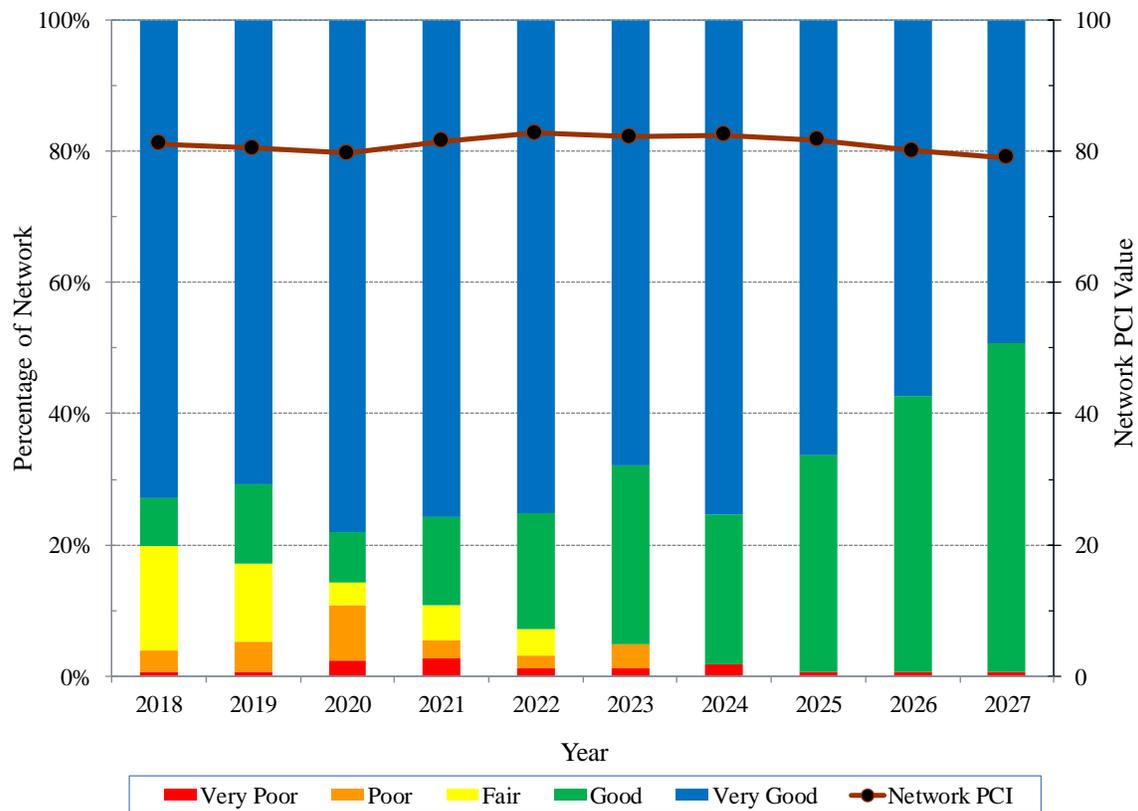


Figure 11. Predicted network condition for 2018 to 2027.

It is worthwhile to view the predicted network performance in the context of historical condition, as the County now has condition survey data from multiple past surveys to track the performance of the network over time. Figure 12 presents the network PCI value (i.e., overall performance indicator) for surveys performed in 2006, 2009, 2011, 2013, 2015, and 2017, as part of their ongoing pavement management activities. The data show that the network PCI value has increased steadily from approximately 70 to 81 since 2006, the year the County implemented their pavement management system.

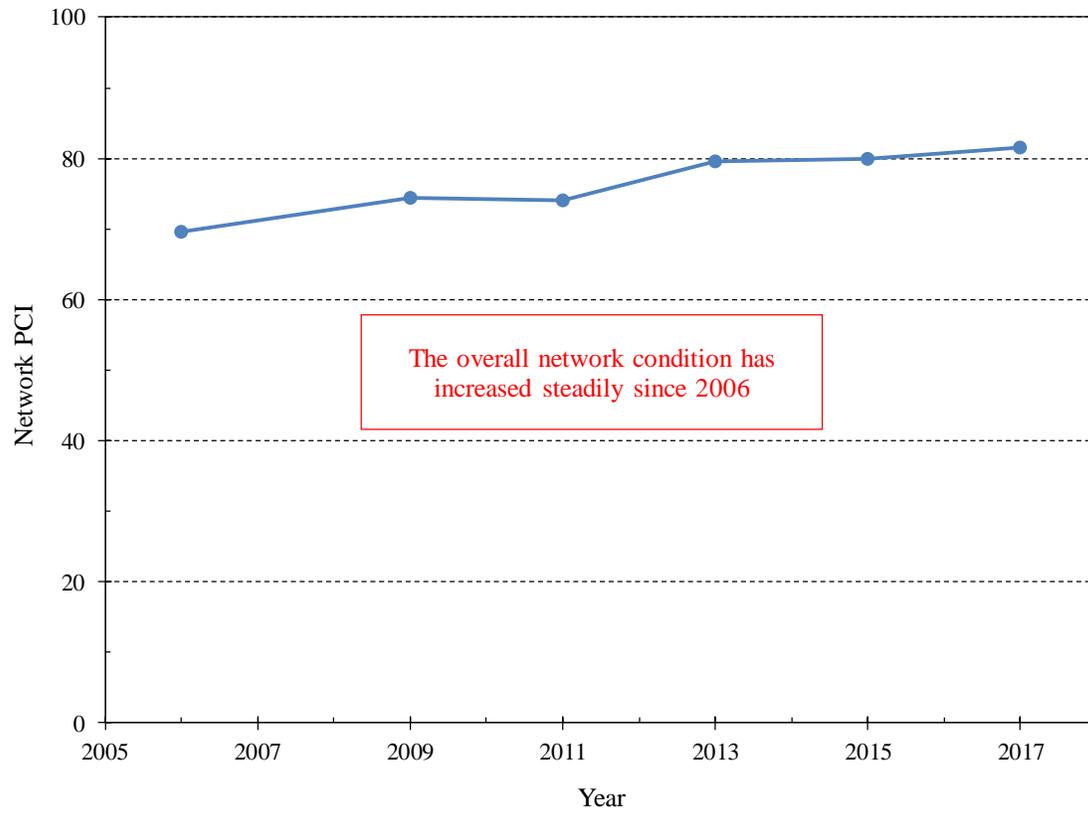


Figure 12. Historical network condition since 2006.

RESOLUTION NO. _____

RESOLUTION APPROPRIATING \$3,100,000 FROM
COUNTY MOTOR FUEL TAX FUNDS
FOR THE IMPROVEMENT OF COUNTY HIGHWAY 9
SECTION #18-00449-00-RS

BE IT RESOLVED, By the County Board of Champaign County, Illinois, that County Highway 9 (Ludlow Road) beginning at US Route 45 and extending easterly to County Highway 32, a distance of approximately 5.22 miles, in Champaign County is in need of improvement; and

BE IT FURTHER RESOLVED, That the type of improvement shall consist of full-depth recycling with an asphalt overlay and aggregate shoulders and shall be designated as Section #18-00449-00-RS; and

BE IT FURTHER RESOLVED, That the improvement shall be by contract; and

BE IT FURTHER RESOLVED, That there is hereby appropriated the sum of Three Million One Hundred Thousand Dollars (\$3,100,000.00) from the County's Motor Fuel Tax Funds for the costs of the improvement.

PRESENTED, ADOPTED, APPROVED and RECORDED this 17th day of January A.D., 2019.

Giraldo Rosales, Chair
County Board of the County of
Champaign, Illinois

Darlene A. Kloepfel, County Executive

ATTEST: _____
Aaron Ammons, County Clerk and
Ex-Officio Clerk of the County Board

Prepared by: Jeff Blue
County Engineer

Resolution No.

I, Aaron Ammons, County Clerk in and for said County, in the State aforesaid and keeper of the records and files thereof, as provided by statute do hereby certify the foregoing to be a true, perfect and complete copy of a resolution adopted by the County Board of Champaign County at its County Board Meeting held at Urbana, Illinois, on January 17, 2019.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seal of said County at my office in Urbana in said County this _____ day of _____ A.D. 2019.

Clerk

SEAL

APPROVED

Date

Department of Transportation

District Engineer

RESOLUTION NO. _____

RESOLUTION APPROPRIATING \$55,000.00 FROM
COUNTY BRIDGE FUNDS
FOR THE REPAIR OF THE TAYLOR BRIDGE
ON COUNTY HIGHWAY 9
SECTION #18-00065-00-BR

WHEREAS, The Taylor Bridge on County Highway 9 (Ludlow Road) located between Sections 4 and 9 in Harwood Township is in need of repair; and

WHEREAS, To insure the safety of the traveling public, it is necessary that said bridge be repaired; and

WHEREAS, The cost of repairing the aforesaid bridge is estimated to be \$55,000.00; and

WHEREAS, The Highway and Transportation Committee recommends that said repair be made; and

WHEREAS, The County Board of Champaign County concurs in the action recommended by the Committee;

NOW, THEREFORE, BE IT RESOLVED, That there is hereby appropriated the sum of Fifty-Five Thousand Dollars (\$55,000.00) from County Bridge Funds for this repair.

PRESENTED, ADOPTED, APPROVED and RECORDED this 17th day of January A.D., 2019.

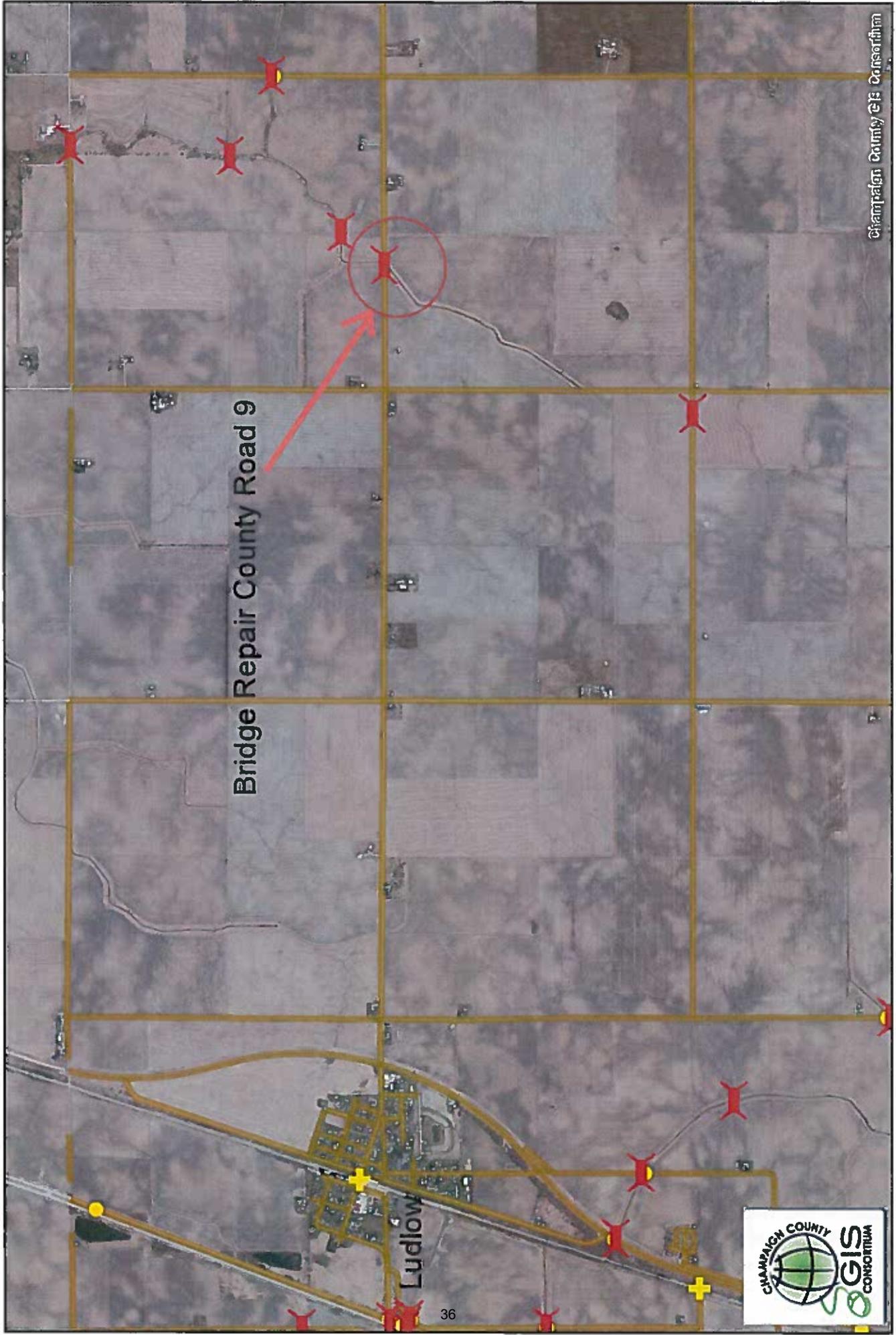
Giraldo Rosales, Chair
County Board of the County of
Champaign, Illinois

Darlene A. Kloeppel, County Executive

ATTEST: _____
Aaron Ammons, County Clerk and
Ex-Officio Clerk of the County Board

Prepared by: Jeff Blue, County Engineer

Taylor Bridge - County Road 9



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1,500 Feet

