

# Lane Closure System 2.0 Maintenance/Permit Focused

Virtual Training

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**March 2022** 

## **Maintenance/Permit Focused Training**

- This training is for current users with maintenance-related or permit-related roles (maintenance/permit projects with impacts to an interstate, US and/or state highway) as an overview of the new features of LCS 2.0 including requesting closures, modifying closures, searching/viewing closures, and accepting closures.
- This training will be recorded, the presentation and recording will be available on the WisDOT Work Zones webpage and on the WisLCS homepage.
- Please mute yourself. Enter questions in chat. We will try to answer all questions, if not, we will provide a FAQ afterwards.
- The training examples occur in the training site.
- Please participate in post training survey



## **Training Dates – Maintenance/Permit Focused**

## • Tuesday, March 1, 2022 1:00pm-3:00pm

Microsoft Teams Webinar Or call in (audio only): +1 608-571-2209, 611165157# Phone Conference ID: 611 165 157#

## • Wednesday, March 2, 2022 9:00am-11:00am

Microsoft Teams Webinar Or call in (audio only): +1 608-571-2209, 338470964# Phone Conference ID: 338 470 964#

## Monday, March 7, 2022 1:30pm-3:30pm

Microsoft Teams Webinar Or call in (audio only): +1 608-571-2209, 27807612 Phone Conference ID: 278 076 12#



## **Overview**

- Presentation
  - Background on LCS 2.0 Project
  - Getting Started in LCS
  - Request Closures
  - Modify Closures
  - Search Closures
  - LCS Training Resources
- Break
- Examples in LCS Test Site
- Q&A



# **LCS 2.0 Project Objectives**

- Incorporate lessons learned
- Streamline existing work-flows
- Improve interoperability with external systems
- Improve data quality and timeliness
- Support for modern platforms
- Update the 10-year old software platform



## Background on LCS 2.0 Project What has changed?

- Home Page Options
- Mapping features
- Lane Diagram
- Priority/Non-Priority route map
- Auto Acceptance Rules
- User Roles





## **Getting Started in LCS**

- Logging on: <u>https://transportal.cee.wisc.edu/closures/</u>
- LCS 2.0 will be rolled out March 15

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Welcome to the WisTransPortal. This sys	stem is maintained by the <u>Traffic Operations and Safety Laboratory</u> at
he University of Wisconsin-Madison. Ur	nauthorized access is strictly prohibited.
User ID: Password:	Login
User IDs and passwords are case sensit	rive. This site requires cookies. For help with your account send mail to
ransportal@topslab.wisc.edu or click or	n the links below for further information.





#### Wisconsin Traffic Operations and Safety Laboratory The WisTransPortal System

The WisTransPortal system serves the computing and data management needs of the <u>Wisconsin Traffic Operations and Safety (TOPS) Laboratory</u>. The project scope includes support for ITS data archiving, real-time traffic information services, transportation operations applications, and transportation research. <u>Learn more</u>.



## **Getting Started**

- Roles
  - Standard User (Viewer)
  - Requestor
  - Limited Approver
  - Full Approver
  - Regional Manager
  - System Manager

	Lan	Training Site	stem	
select the User Ty	pe, User Role, Region,	and any optional Authori	zation flags, you would like	to use to log in under.
User Profile Region	User Role	User Type	Access flag	
User Profile RegionSelect	User Role	User Type	Access flag	<b>~</b>
User Profile RegionSelect	User Role	User Type	Access flag	<b>`</b>



LANE CLOSURE SYSTEM Home Projects Request Search Reports 511 Local Events User Preference - Help Contacts Manage Account Log Out

Transportal / Applications / WisLCS / Home

Red - closure past its Start Date

Orange - closure within 1 week

Violet – Any closure, 14 days or

Green - Active closure (between

its Start & End Dates)

Black - Normal/Default

more, past its End Date but not

Home Page

My Closures

& Time

of its Start Date

yet Completed

#### Description Standard Limited Requestor Regional System & Full User Manager Manager (Viewer) Approver This section will display any current х Х Х Х Messages Х messages. High priority messages will be marked with an! icon. **Closures Needing** Х Х Displayed on Approver and Regional Acceptance Managers profiles only. Lists closures the user can accept. х Allowable Lane Displayed on Regional Managers profile Closure Hours only. Lists closures which the user can Needing Acceptance accept. My Closures Any closure where the user or their Team is Х Х• Х part of the closure history (e.g., entered, accepted, modified, etc.). A closure will remain in this section until that closure is either deleted, or until after it has been completed/ cancelled status for three days. Х Х Х Х Bookmarked Shows closures which the user has Х bookmarked Closures

\* If user has Emergency Closure access flag, this section will show up on Home page.



# **Getting Started**

- User Types
  - Construction
  - Maintenance
  - Permit
- Closure Type
  - Construction
  - Maintenance
  - Permit
  - Special Event
  - Emergency flagged

# **Getting Started**

Example Events	User Type
Construction Company to perform construction project on state highway	Construction
County Highway Dept to perform maintenance work on state highway	Maintenance
City/town/village to close state highway for Special event	Permit*
(race, parade, etc.)	
City/town/village to perform maintenance work on state highway	Maintenance
(connected highway)	
City/town/village to perform construction project on state highway	Construction
(connected highway)	
Utility Company to conduct utility work on state highway	Permit
Any company working on a state highway with an approved permit	Permit

\*If entering a special event, first choose permit as a user type and then special event as closure type.



## • Timeline for entering closures

**CLOSURE TYPE AND REQUIRED MINIMUM ADVANCE NOTIFICATION** Closure type <u>with</u> height, weight, or width restrictions MINIMUM NOTIFICATION (available width, all lanes in one direction <16') Lane and shoulder closures 7 calendar days Full roadway closures 7 calendar days 7 calendar days Full Ramp closures 7 calendar days Detours **Closure type without height, weight, or width restrictions** MINIMUM NOTIFICATION (available width, all lanes in one direction ≥16′) Lane and shoulder closures 3 business days 3 business days **Ramp closures** Modifying all closure types 3 business days





## **Auto Acceptance**

- Settings can be viewed in the User Preference Menu
- For Maintenance closures, auto acceptance is Region specific
- For Construction closures, allowable hours will be auto accepted



LANE CLOSURE SYSTEM Home Projects Request Search Reports 511 Local Events User Preference - Help Contacts Manage Account Log Out

Transportal / Applications / WisLCS / Home

## **Requesting a Maintenance Closure**

Go to Request Tab
 Select Region & Closure Type –
 Select Maintenance Type

Red	quest
Please select the closur	e you would like to request.
Region:	Closure Type:
Select 🗢	Select 🕈
Create Ne	wCancel

				Maintenance Clo	sure - General Section	on	
	Maintenance Clo	osure - Gener					
			Maintenance Type:	Select ① •	Primary Contact:	Name 🕕	Phone Number ①
Maintenance Type:	Select 🗢	Primary Coi					
	Select	Constantinue (	Other:		Secondary Contact:	Name	Phone Number
Other:	Attenuator Work	Secondary			Emergency Traffic		
	Barrier Wall Work	Emorgonau			Control Contractor:	Name	Phone Number
	Bridge Repair	Control Cor					
	Bridge Sweeping				Law Enforcement:	Name	Phone Number
					Other Contact:		
					other contact.	Name	Phone Number
.cCON .							
A TAR				Continue	Cancel		
THIN OF TRANSP		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~					

- Attenuator Work
- Barrier Wall Work
- Bridge Inspections
- Bridge Repair
- Bridge Sweeping
- Bridge Work
- Bump Grinding
- Cable Guard Work
- Clearing, Grubbing & Tree Removal
- Crack Fill

# Work Types - Maintenance

- Crash/Spill Cleanup
- Culvert Work
- Curb Work
- Delayed Recovery
- Ditch Work
- Drainage Work
- Fence Work
- Guard Rail Work
- ITS Work
- Inlet Work
- Joint Work

- Lighting Work
- Merrimac Ferry Maintenance
- Paint Testing
- Patching Work
- Pavement Markings
- Pavement Repair (Concrete or Asphalt)
- Paving
- Poly/Mud Jacking
- Railroad Work

- Ramp Gate/Ramp Meter Work
- Retaining Wall Repair
- Shoulder Work
- Sign/Sign Bridge Inspection
- Snow Removal
- Soil Boring
- Surveying
- Traffic Signal Work
- Water Main Work
- Other





Transportal / Applications / WisLCS / Home

## **Requesting a Permit Closure**

Go to Request Tab
 Select Region & Closure Type
 Select Permit Type

		Ne	quest	
	Please sele	ct the closur	e you would like to request.	
	Region:		Closure Type:	
-	Select	¢	Select	¢
		Create Ne	wCancel	

Request

Permit Number:		h	Prima
Permit Type:	Select	¢	Prim
	Select	A	Emer
Other:	Asbestos Bridge Survey		Cont
	Borings		com
	Cable Work		Law I
	Duct Installation		
	Electrical Work		
	Fiber Work		Othe

Permit Closure - General Section						
Permit Number:		0,	Primary Contact:	Name	0	Phone Number ①
Permit Type:	Select	•	Prime Contractor:	Name	0	Phone Number ①
Other:			Emergency Traffic Control Contractor:	Name	0	Phone Number ①
			Law Enforcement:	Name		Phone Number
			Other Contact:	Name		Phone Number
		Save	Cancel			



# Work Types – Permit

- Asbestos Bridge Survey
- Borings
- Cable Work
- Duct Installation
- Electrical Work
- Fiber Work
- Gas Line Repair
- Gas Main Work

- Infrared Thermography
- Sanitary Work
- Surveying
- Trenching
- Utility Work
- Water Main Work
- Wetland Delineation
- Other



# Work Types – Special Event

- Car Show
- Festival
- Parade
- Procession
- Race
- Other



# Work Types - Emergency

- Barrier Wall Repair
- Bridge Hit
- Bridge Repair
- Bump Grinding
- Cable Guard Repair
- Clearing, Grubbing & Tree Lighting Repair Removal
- Crash Cleanup
- Culvert Repair
- Drainage Repair



- Fiber Repair
- Flooding
- Gas Main Repair
- Guard Rail Repair
- ITS Repair
- Patch Work
- Pavement Buckle
- Pavement Heave Repair

- Pavement Marking Repair
- Pavement Repair
- Sewer Repair
- Shoulder Repair
- Traffic Signal Repair
- Utility Service Repair
- Washout Repair
- Water Main Repair
- Other

# Work Types - Construction

- Barrier Wall Work
- Beam Launching/Setting
   Erosion Control
- Bridge Work
- Cable Guard Work
- Clearing & Grubbing
- Crack Fill
- Culvert Work
- Curb ramp replacement/installation

Deck Overlay

- Deck Replacement
- Guard Rail Work
- Inlet Work
- Joint Work
- Lighting Work
- Milling Operation
- Patching
- Pavement Marking Work
   Water Main Utilities
- Pavement Work

- Paving Operation
- Railroad Work
- Shoulder Work
- Sign Installation
- Sign Base Installation
- Signal Base Installation
- Soil Boring
- Survey Work
- Other

- 1. Select the facility type
- 2. Enter the schedule information
- 3. Enter the roadway status and/or lane diagram Information
- 4. Enter the highway location information

1564646546

Surveying

202797 | Permit | Draft

Permit Number

Permit Type:

Add Facility

Other:

5. Enter restrictions and/or detour routes limit

**Primary Contact:** 

Prime Contractor:

Law Enforcement: Other Contact:

Contractor:

**Emergency Traffic Control** 

Joshua Falk (falkst (414) 987-7415

Erin Schoon (123) 645-6974

Chris Mills

(156) 984-6511

	Add Facility							
	Facility Type:Select	٥	Schedule Closure					
sure	Roadway Status: Lane or Shou	Ider Closure	Left Lane Lane Right Shoulder Shoulder Open Open					
on	Add Location Begin County: End County:	Hwy:	- La Dense					
l/or lane	Begin Location:	End Location:		Tenting				
	Distance From:	Distance From:		1 COLV				
	Direction From:	Direction From:	2	Mattor				
	Latitude:	Latitude:	2	11				
	Longitude:	Longitude:		aven i				
	Width Restrictions	Vertical Restrictions	Weight Restrictions	Speed Restrictions				
	Width Restrictions?	Vertical Restrictions?	Weight Restrictions?	Speed Reduction?				
ur –	No •	No •	No •	No •				
	Restriction Type:	Minimum Vertical Distance:	Maximum Vehicle Weight:	Reduced Regularatory Speed:				
	0	ft in	lbs	0				
Add Facility	Available Roadway Width: ft in	Temporary Signalization:						
) Edit General	Effective Roadway Width:							
	ft in							
	Signed Detour No Available	¢	Additio	onal Information				
Cancel Request Save as Draft		Save	Cancel					

## Closure Duration Types

- Daily occurs on a recurring daily or nightly basis. The closure is active for only part of each day.
- Weekly typically a few days per week, but on a recurring basis.
- Continuous a 24-hour work zone typically lasting more than one week, starting on the Begin Date and Time, and ending on the End Date and Time.

#### **Pick Closure Dates**

<		API	RIL 20	)22					MA	Y 202	22	
SU	MO	TU	WE	TH	FR	SA	SU	MO	τu	WE	TH	FR
					1	2	1	2	3	4	5	6
3	4	5	6	7	8	9	8	9	10	11	12	13
10	11	12	13	14	15	16	15	16	17	18	19	20
17	18	19	20	21	22	23	22	23	24	25	26	27
24	25	26	27	28	29	30	29	30	31			

## Closure Begin & End Time:

Start.	00.00 AM	•
End:	04:30 PM	~
Durati D W V	on Type: aily ? /eekly ? ontinuous ?	

×

~

#### Exclude Dates Begin & End Time

05/28/2022:	12:00 AM	~	11:59 PM	~
05/29/2022:	12:00 AM	~	11:59 PM	~
05/30/2022:	12:00 AM	~	06:00 AM	~

Memorial Day	1.
Memorial Day	1.
Memorial Day	1.

Click on individual calendar dates to exclude them





- Lane Details
  - Intersections
  - Non-intersections
  - Various Lanes Closed
  - Entrance Ramp
  - Exit Ramp
  - System Interchange









## Example #2







## Example #6

One Lane Road Stop Condition

Roadway Status:	Select	٥
	Select	
Add Location	Full Closure Lane or Shoulder Closure	
Begin County:	One Lane Road Temporary Signal	L
End County:	One Lane Road Stop Condition Moving Lane Closure	
	Rolling Full Closure	





LANE CLOSURE WITH STOP SIGNS TWO-LANE, TWO-WAY ROAD









- Various Lanes Closed
  - "Various times closed" checkbox should only be checked if user does not know what time the lane closures will occur.









## Lane Detail Scenarios

- Entrance Ramp
  - Right lane and shoulder closed

			Add Location						×
Intrance	Ramp		Facility Type:	Right Entrance Ra	amp				
Right I	and and sh	ouldor	Begin County:	DANE	✓ ≑			Select Begin Landmark:	X
		IUUIUEI	End County:	DANE	\$	E	131	ON RAMP FROM WIS 19 WB	
closed			Highway:	I-90 WB	\$	BE		OFF RAMP TO WIS 19 EB	
			Landmark:				- ///	ON RAMP FROM US 51 SB	
			Distance From:	0.0				delete Marker	
L	.eft Lane Lane	Right		miles				V EL >	
SI	hldr.	Shldr.	Direction From:		\$	(19)		Service Press	Serve
	• V	$\sim$	Latitude :					39	er Rd
		$\sim$	Longitude :						
0	pen Open Closed	Closed							
					~				
							Confirm Cancel Reset		
*** &	2 👥 🚈			0					

## **Lane Detail Scenarios**

#### Add Location



## • System Interchange

landmarks



# Entering Detour Routes Type free text into cell For full closures, detour information is required US 61/WIS 35, between south of Lancaster and Dickeyville US 151, between Dickeyville and Platteville WIS 80/WIS 81 within Platteville



## Replicate Facilities

- Take an existing closure and facility and click "Replicate"
- "As-Is" copies the facility exactly and user can adjust
- "In-Opposite-Direction" changes the direction to other side of roadway. User can adjust afterwards







Weekly from 02/08/2022 to 02/23/2022, 08:30

Altoon

## **Modifying a Closure**





## **Copying a Closure**





Edit

# Submitting a Closure

Left Lane Shldr.	Lane Right Shldr.				
Begin County:	COLUMBIA	Hwy:	I-39 NB		
End County:	COLUMBIA			-	Joseph Transfer
Begin Location:	ON RAMP FROM REST AREA	End Location:	WISCONSIN RIVER 11 (B-11-		1721S
Distance From:	0.48		0023- END)		CA Star -
Direction From:	Upstream	Distance From:	0.01		
Latitude:	43.434902976	Direction From:	Upstream		Constraint.
Longitude:	-89.484511853	Latitude:	43.450310135	Y H	X Sauch
Closure Length:	1.19	Longitude:	-89,495887495	25 6	
Width Restr	ictions	Vertical Restriction	ns Weight	Restrictions	Speed Restrictions
Width Restrictions	? Ve No	rtical Restrictions?	Weight Restric	tions?	Speed Reduction? No
Restriction Type:	Mi	nimum Vertical Distan	ce: Maximum Veh	icle Weight:	Reduced Regularatory Speed:
Available Roadway	Width: Ter	mporary Signalization	:		
Effective Roadway	Width:				
Signed Detour Avai	ilable No	Detour Rout	e Info	Additiona	I Information

Self Accept Closure

Add Facility

Cancel Request Save as Doft Submit Close

Successfully Submitted	×
Success!	
	Close

OFFICE ALLONG	ŔŶ	Ś		, <b>Å</b> 7

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## **Viewing Closures on Home Page**

essages	1				
test					
Closu	res Col	apse All Exp	and All		
202358 - ( (12345) Ga	Utility - <mark>Ent</mark> as Main Wo	ered Priority ork	/ Rdwy		View
Facility ID	Hwy	B/E County	Facility Type	Description	Duration
1	1-90 EB	DANE/DANE	Right Exit Ramp	Lane or Shoulder Closure fror 13-0091- BEGIN)	m WIS 19 (B- Daily from 01/14/2022 to 01/14/2022, 06:00 AM - 09:00 AM, F
202359 - 5 Car Show	Special Eve	nt - Entered	Priority Rdwy		View
Facility ID	Hwy	B/E County	Facili Type	ty Description	Duration
1	US 53 SB	LA CROSSE/I CROSSE	.A Mainl	Full Closure from CLIN CASS ST	NTON ST to Daily from 09/24/2022 to 09/24/2022, 06:00 AM - 05:00 PM, Sat
2	US 53 SB	LA CROSSE/I CROSSE	.A Mainl	ine Full Closure from CLIN CASS ST	NTON ST to Daily from 09/24/2022 to 09/24/2022, 06:00 AM - 05:00 PM, Sat



## Search

Search Closures			
Closure Type Construction, Maintenance	Region         Region         County         County         Highway         Highway         Duration Type         Duration Type         Begin Date         02/10/2022         End Date         mm/dd/yyyy         Search         Reset	Project ID Project ID Closure ID ⑦ Project ID and Closure ID entries override ALL other search selections. Entered By Entered By	Overlapping Closures         Select a closure         202664 (1)         202734 (3)         Original Discord (1)         Closure ID: 202734 (3)         Closure ID: 202734 (3)         Closure Status: Entered         Recility Type: Mainline         Begin County: DANE         Highway: US 14 EB         Closure Length: 4.36 Miles         Duration: Daily from         03/21/2022, 03/21/2022,         08/30 AM - 03:00 PM, M
🐝 🖧 🚍			Tenn of Centry Rand A On type Rand A





## Accepting/Rejecting a Closure

	User Type				User Region		Acceptance Authority		
User Roles	Maintenance	Permit	Construction	All Types	One	ALL	Full	Limited	No
Standard User (Viewer)				x	х	x			x
Requestor	x	x	x		х				x
Limited Approver	x	x	x		х			x	
Full Approver	x	x	x	x	х		x	x	
Regional Manager	x	x	x	x	х		x	x	
System Manager***	x	x	x	х	х	x	x	x	

\*\*\* can assign acceptance authority and administrative privileges



## Accepting a Closure

ccept	Accept Closure
ect	
e	Are you sure you want to accept this closure?
nark	(optional comment)
Closure	
re Map	Yes, Accept Close





## **Features in Progress**

- Reports feature
- Subscription Emails
- 511 Local Projects
- CSV Download

Most are sent or	Email Sub All emails here a nce per day. The LCS Report e Please select the ones you	bscription are digest emails. email can also be received on a Weekly basis. u are interested in receiving.
LCS Report Choose Region/County: Closure Type(s):	Region/County * Closure Type *	(Suggested for Approvers)      Email me when Emergency Closure entered in my region.      Email me when a Pending Change needs to me accepted.      Email me when a closure starting within 72 hours is entered.
Daily or Weekly?	Daily     Weekly	(Suggested for Requesters)  Email me when a closure I entered is accepted/rejected. Email me when a Pending Chance I entered is accepted/rejected.
Other email addresses to send the LCS Report to:	Other email addresses	[] Cancel



## **Training Resources**

- LCS Homepage
  - https://transportal.cee.wisc.edu/closures/
- User Manual and Recorded Trainings
  - To be posted after trainings
- LCS Training Site "sandbox"
  - For users to learn, practice and test closures



Wisconsin Lane Closure System (WisLCS) Enter the Wisconsin Lane Closure System live site.

<u>New User - WisLCS Account Request Form</u> Online form to request a Lane Closure System login account.

WisLCS User Manual and Documentation WisLCS Quick Reference, User Manual, and other documentation.

Lane Closure System Training Site Enter the WisLCS 2.0 Training site.

WisLCS Contact Information WisDOT regional contacts and technical support.



# Help

- Technical Support, User Account and Issues Entering Closure Requests: wislcs@topslab.wisc.edu
- Additional information about LCS: <u>erin.schwark@dot.wi.gov</u> or <u>sparker@wisc.edu</u>
- Other questions about LCS usage: Regional Contacts from the contacts website: <u>https://transportal.cee.wisc.edu/closures/contact.html</u>



## **Live Examples**

- How to Log In to LCS
- How to Enter Closure Requests
- How to Search for a Lane Closure



## Take a Break!

## • Will resume in 5 minutes



