

# Rural Access Infrastructure Funding & Inventory Process

IMPLEMENTATION GUIDANCE FOR SDCL § 31-34 FEBRUARY 13, 2023

PREPARED BY DAVE HUFT, SDDOT

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**Small Structure Inventory** 

Small Structure Improvement Plans

**Project Funding Applications** 

Calendar and Next Steps

Presentation Topics

## Legislation & Funding

### HB1259 (2021), HB1070 (2022)

- ■In SDCL § 31-34
- \$3M in FY2022 for inventory
- •\$3M in FY2023
  - Construction
  - Rehabilitation
  - Replacement
  - Engineering
  - Planning
- Requirements and Process

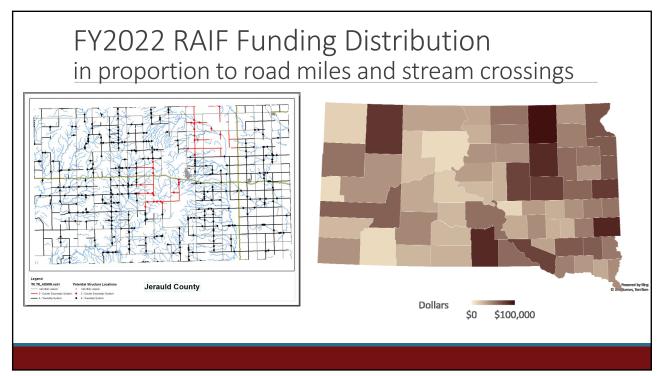
#### HB1306 (2022)

- \$25M appropriated
  - 3 equal annual amounts (\$8.33M)
  - FY2023, FY2024, FY2025
  - Distribution by same method as \$3M FY2023 distribution

#### SB145 (2023) (passed Senate)

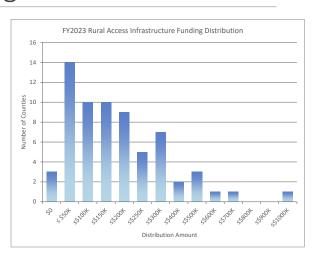
- Allow late grant application in emergency
- Eliminate 50 cents per thousand minimum requirement for tax levy

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## FY2023 RAIF Funding Distribution

- •FY2023: \$11.333 million
  - \$3.000 million from HB1259 (2021)
  - •\$8.333 million from HB1306 (2022)
- Based on number of small structures inventoried in each county on May 31
  - Township or county secondary
  - Full maintenance
  - Culverts ≥ 16 ft<sup>2</sup>
  - Bridges ≤ 20 ft NBIS length
- ■FY2024 & FY2025: \$8.333 million



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## Legislation & Funding



**Small Structure Inventory** 

Small Structure Improvement Plans

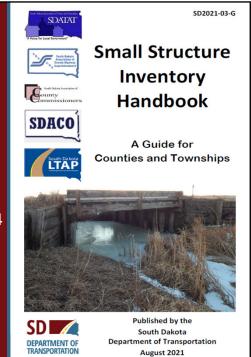
**Project Funding Applications** 

Calendar and Next Steps

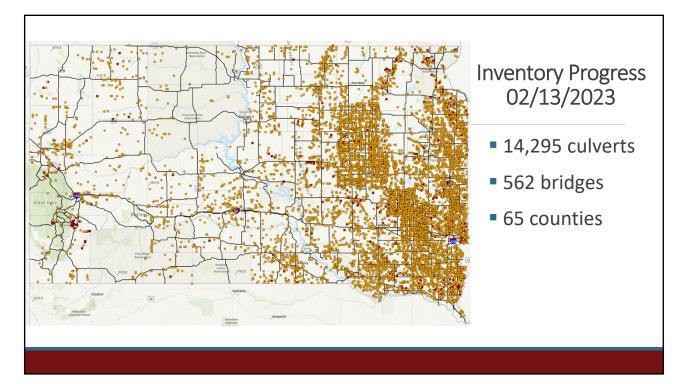
Presentation Topics

## Small Structure Inventory Handbook

- 8½" x 5½" spiral bound
- Item-by-item description
- Lists all allowable responses
- Graphics and photographs to guide selection
- Posted on SDACC and SDATAT websites August 4
- Hard copies to county auditors September 3
- More hard copies are available



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## Small Structure Inventory Common Elements

#### **LOCATION**

- Structure ID #
- County Name
- Township Name
- Structure Owner
- Latitude
- Longitude
- Location (roadway or approach)

#### **ROAD**

- Highway Number
- Roadway Maintenance Level
- Number of Residences Served
- Detour Length (if culvert fails)
- Surface Type
- Surface Condition

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## **Culvert Inventory Elements**

	THOTY Elements	
<b>DIMENSIONS</b>	CONDITION	<b>DRAINAGE</b>
Number of Cells	Crushing	■ End Type
■ Span	Infiltration	■ Erosion Control
Rise	Joint Separation	■ Inlet Erosion
Length	<ul><li>Material Deterioration</li></ul>	<ul><li>Outlet Erosion</li></ul>
Skew Angle	Plugging	Water Level
Length along	Load Posting	Perching
•	<ul><li>Culvert Damage</li></ul>	<ul><li>Overtopping</li></ul>
<ul><li>Cover Height</li></ul>	Overall Condition	Frequency
	Inslope Cavities	
	<ul><li>Number of Cells</li><li>Span</li><li>Rise</li><li>Length</li><li>Skew Angle</li></ul>	<ul> <li>Number of Cells</li> <li>Span</li> <li>Infiltration</li> <li>Joint Separation</li> <li>Length</li> <li>Material Deterioration</li> <li>Skew Angle</li> <li>Length along Roadway</li> <li>Cover Height</li> <li>Culvert Damage</li> <li>Overall Condition</li> </ul>

## Small Bridge Inventory Elements

#### **ATTRIBUTES**

- Structure Status (open, posted, closed)
- Bridge Railing (yes/no)
- Approach Guardrail (yes/no)
- Design Type
- Material Type
- Condition

#### **DIMENSIONS**

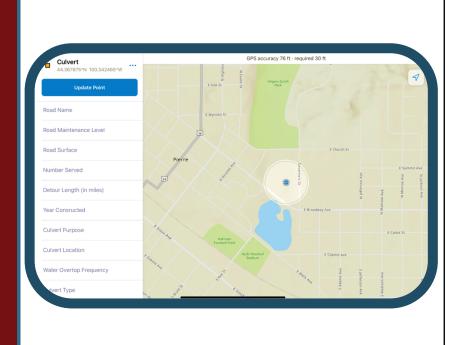
- Structure Length
- Number of Spans
- Number of Lanes
- Deck Width
- Roadway Width
- Skew Angle

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## Small Structure Inventory Mobile App

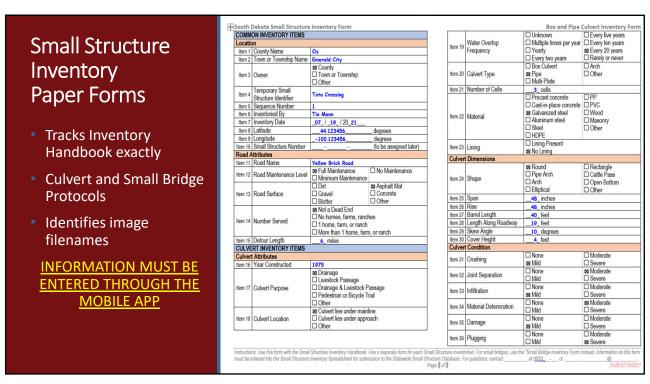
- ESRI Collector app
- Tracks Inventory Handbook exactly
- Culvert and Small Bridge Protocols
- Embeds photograph images
- Feeds directly into Statewide Small Structure Database

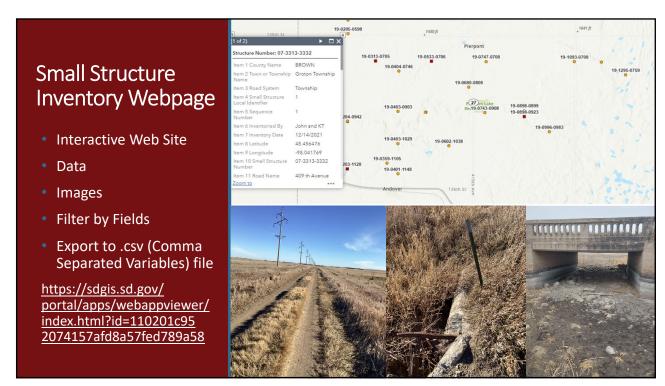
MUST BE USED FROM NOW ON



#### South Dakota Small Structure Inventory - Culvert **Small Structure** Start Over Submit Form Instructions: Enter a response in each highlighted field. Inventory LOCATION Item 1 County Name\* **Spreadsheet** -Item 2 Township\* -Tracks Inventory Item 3 Owner\* -Handbook exactly Item 4 Temporary Small Structure Identifier Culvert and Small **Bridge Protocols** Item 5 Culvert Sequence Number\* Embeds photograph Item 6 Permanent Identifier images Item 7 Inventoried By\* Can be imported into Statewide Small Item 8 Inventory Date (mm/dd/yyyy)\* Structure Database Item 9 Latitude\* **NO LONGER** Item 10 Longitude\* **SUPPORTED**

ROAD ATTRIBUTES





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## FY2024 RAIF Distribution

#### Distribution

- \$8.333 million
- July 2023
- In proportion to number of qualifying small structures (culverts + small bridges) in each county
- As of May 31, 2023

#### To ensure your fair share:

- Get access to the mobile app
- Complete your inventory
- Correct data errors
- Resolve system assignment
  - Only county secondary and township roads are eligible
  - County primary roads are not
- Resolve maintenance policy
  - Minimum and no-maintenance roads are ineligible

## Legislation & Funding

Small Structure Inventory

Small Structure Improvement Plans

**Project Funding Applications** 

Calendar and Next Steps

Presentation Topics

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## Rural Access Infrastructure Funding Guide

- Legislation & Process
- Agency, Roadway, Structure Eligibility
- Inventory Collection & Maintenance
- Small Structure Improvement Plan Guidance & Template
- Funding Application Guidance & Template



# Rural Access Infrastructure Funding Guide











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South Dakota

Department of Transportation

August 2022

Published online August 2022

## Improvement Eligibility

#### **Eligible Agencies**

- Townships with either:
  - 50¢ per thousand annual property tax (SB145 would eliminate 50¢ minimum)
  - Tax levy opt-out
- Counties

#### **Eligible Roads**

- Township
- County Secondary
- Full Maintenance Only

#### **Eligible Structures**

- ≥16 ft² opening
- "Not a bridge as defined in SDCL § 31-14-1"

#### **Eligible Activities**

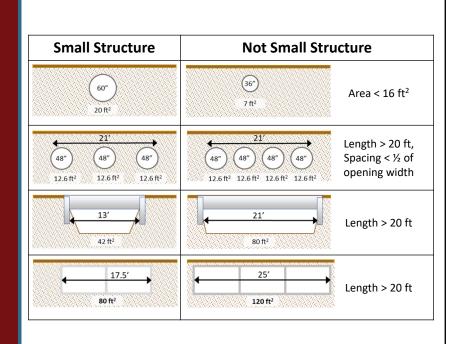
- Engineering, hydrological studies, planning, materials, and other costs necessary to plan for and complete the projects
- Construction, rehabilitation, or replacement of small structures

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# What is a Small Structure?

SDCL § 31-34-1 defines a small structure as "any small bridge or culvert with an opening of sixteen square feet or more located on a township road or county secondary road, excluding bridges as defined in § 31-14-1".

SDCL § 31-14-1 defines a bridge as "a structure, including supports, erected over a depression or an obstruction, as water, highway, or railway, the structure having a length measured along the center of the roadway of more than twenty feet between undercopings of abutments or extreme ends of openings for multiple boxes and pipes where the clear distance between openings is less than half of the smaller contiguous opening".



## Small Structure Improvement Plan Required Content

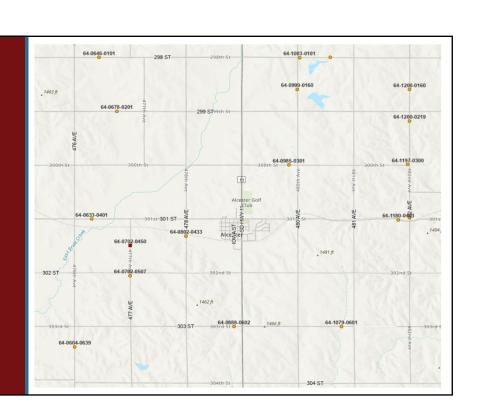
- Map(s) of all small structures in jurisdiction
- Data for all structures
  - Location
  - Width
  - Length
  - Condition
  - Load Posting

- ■5-year Improvement Project List
  - Location
  - Type
  - Funding Source(s)
  - Estimated Cost
  - Year of Completion
- Financial Report (townships only)
- Other items prescribed by SDDOT (none identified so far)

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## Small Structure Improvement Plan Content

- Map(s) of all small structures in the jurisdiction
  - Create from GIS database, or
  - Custom maps by agency



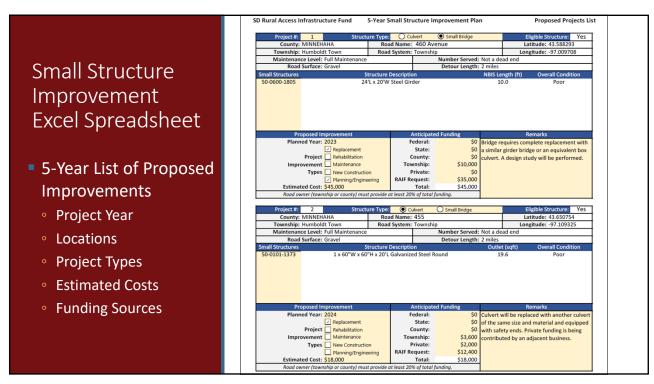
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	1			_			Road Systems	, i			,	
Small Structure	2	Reported System	County	Se condary	Township	Other	All Systems	Mapped System (changes in red)	Eligible System	Highway Maintenance Level	Seq #	No C Nearby N Culvert (
	235 236	Town ship			Township		Town ship Town ship	Township Township	Yes	Full Minimum	1	
Improvement	237	Township County	County		Township		County	County	Yes No	Full	1	
	238	County	County				County	County	No	Full	1	
Fyeol Chroadchaot	239	County	County				County	County	No	Full	1	
Excel Spreadsheet	240 241	Secondary Secondary	County?			_	County	County	No No	Full	1	
'	241	Secondary	County?				County	County	No No	Full	1	
	243	Secondary	County?				County	County	No	Full	1	
	244	Township			Township		Township	Township	Yes	Full	1	
Import data from Small	245	Town ship Secondary			Township?	_	Town ship Town ship	Township Township	Yes Yes	Full	3	
Import data from Small	246 247	Township			Township	_	Township	Township	Yes	Full	1	
Characteria las contras.	248	Town ship			Township		Township	Township	Yes	Minimum	1	
Structure Inventory	249	Town ship			Township		Township	Township	Yes	Full	1	
	250 251	Township Township			Township Township	_	Town ship Town ship	Township Township	Yes Yes	Full	1 2	
	252	Township			Township		Township	Township	Yes	Minimum	1	
Assess eligibility	253	Township			Township		Township	Township	Yes	Full	2	
ο ,	254	Town ship			Township		Township	Township	Yes	Full	1	
	255 256	County	County				County	County	No No	Full	1	
Flag location errors	257	Township			Township		Township	Township	Yes	Full	3	
riag recation errors	258	Town ship			Township		Township	Township	Yes	Full	1	
	259 260	Town ship Town ship			Township		Township	Township	Yes Yes	Full	1	
Flag some data errors	260	Township			Township Township		Town ship Town ship	Township Township	Yes	Full	2	
- Hag some data errors	262	Township			Township		Township	Township	Yes	Full	3	
	263	Township			Township		Township	Township	Yes	Full	1	
CDDOT WILL LIBRATE TO	264 265	Township Township			Township Township		Township Township	Township Township	Yes Yes	Full	2	
SDDOT WILL UPDATE TO	266	Township			Township		Township	Township	Yes	Full	1	
MODIC ON ALL VERSIONS	267	Town ship			Township		Township	Township	Yes	Full	1	
WORK ON ALL VERSIONS	268	Township			Township		Township	Township	Yes	Full	1	
05 5)(05)	269 270	Town ship			Township Township		Town ship Town ship	Township Township	Yes	Full	3	
OF EXCEL	270	Township			Township		Township	Township	Yes	Minimum	1	
	272	Township			Township		Township	Township	Yes	Full	3	

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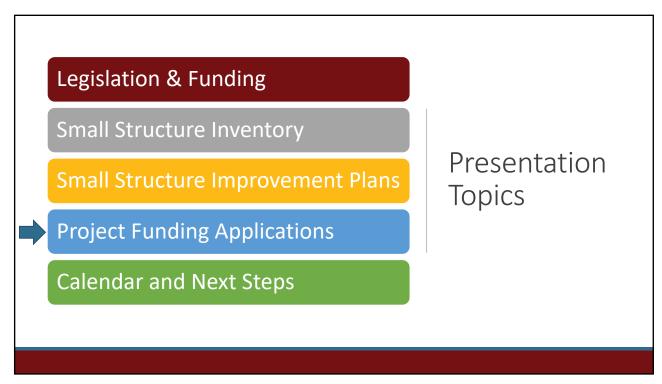
Culvert Detail Report SD Small Structure Inventor County: MINNEHAHA **Small Structure** Township: Wellington Township Road System: Township Road Name: 267 St Local Identifier: 267st n23w0103.5 Latitude: 43.514282 Longitude: -97.058078 **Improvement** Maintenance Level: Full Maintenance Road Surface: Gravel Number Served: Not a dead end Detour Length: 2 miles Excel Spreadsheet Culvert Type: Pipe Culver Culvert Location: Culvert lies beneath mainline Overtop Frequency: Unknown Lining: No Lining Culvert Shape: Round Culvert Material: Galvanized Steel Barrel Length: 45 feet Span: 96 inches Rise: 96 inches Cover Height: 2 feet Small Structure Report Cross Section Area: 50.3 sq ft Overall Condition: Physical Damage: N One structure per page Crushing: Plugging Joint Separation: No Embankment Settlement: N Road Surface Distress: Negligible road surface distress Infiltration: Inlet or Outlet Only laterial Deterioration: Moderate Complete inventory information Other None Inlet End Treatment: None Outlet End Treatment: None Perched Outlet? No
Outlet Water Level: Culvert Partially Filled Outlet Erosion Control: Rip Rap Outlet Erosion: None Erosion Outside ROW: No erosio Inlet Erosion Control: Rip Rap Inlet Erosion: None on Outside ROW: No ero Traffic Status: Open without load restrictions Single Unit Vehicle Posting: None Combination Vehicle Posting: None Inventory By: Cory mackedanz / Nathan Klopp Inventory Date: 10/28/2021
Further Inspection Needed? Inspection complete

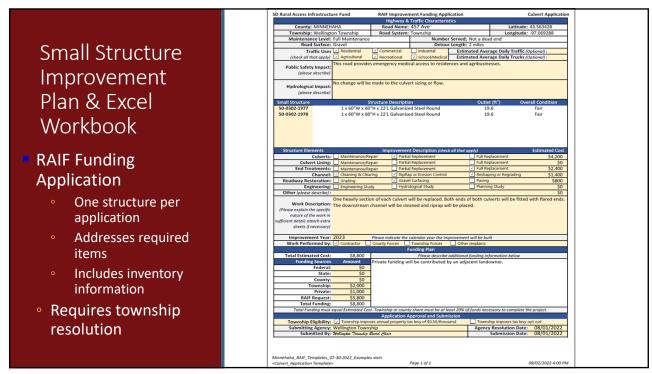
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# Small Structure Improvement Plan Content Pla

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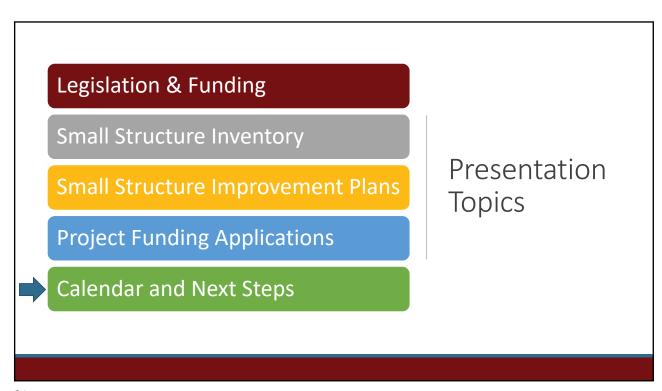
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## County Commissions Must Consider (SDCL § 31-34)

- Traffic use of the highway
- Public safety
- Residential, commercial, recreational, and other uses of the highway
- Cost of the project
- Length of detour if the project is not completed
- Number of residences, farms, and ranches served by the project
- Financial contribution from township or others to the project

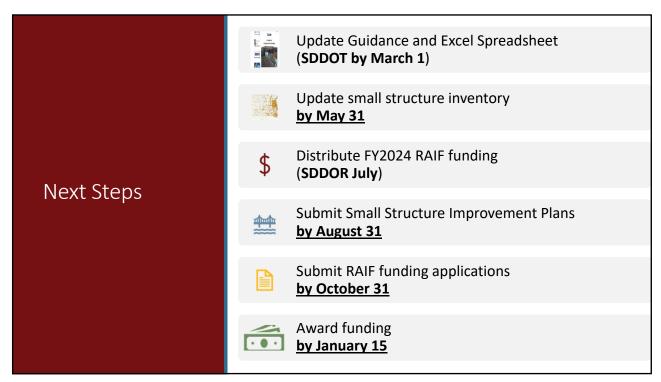
- Ability of township to fund the project without the rural access infrastructure fund
- Confirmation the project is not located on a no maintenance or minimum maintenance road
- Hydrological impact
- Whether the highway terminates into a field entrance, driveway, single residence, farm, or ranch
- The application or group of applications that best serves the citizens of South Dakota

Counties and townships have to establish funding agreements & procedures



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											Fu	nding I	Distrib	ution															
Calculate funding distribution																													
Distribute RAIF to counties (\$M)		3.0	Aug 1											11.3	Aug 1											8.3	Aug 1		
											Small	Struct	ture In	ventor	y														
Establish inventory database																													
Publish inventory handbook and tools																													
Inventory small structures												May 31												May 31					₽
										Sma	all Stru	cture l	mprov	ement	Plans														
Publish guidance for improvement plans																													
Develop small structure improvement plans															Aug 31												Aug 31		
		•						•		Fu	nding A	Applica	tions a	and Aw	ards/												-		
Develop grant applications																	Oct 31												
Award grants																				Jan 15									



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Questions	
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	605.773.3358
-	