TrailNation Summit, October 2025

# Overcoming Obstacles To Trail Network Implementation

## Lessons and Case Studies for Rural Communities

RAILS TO Trails conservancy

SMITHGROUP

# OVERCOMING OBSTACLES TO TRAIL NETWORK IMPLEMENTATION

## MASTER CLASS AGENDA

### INTRO
(15 MIN)

### CASE STUDY
(45 MIN)

### ACTION PLANNING
(30 MIN)

# TODAY'S EXPERT FACILITATORS

## MEET THE SMITHGROUP TEAM

SmithGroup Mobility

**CASSIE GOODWIN**
CIVIL ENGINEER, PE
MADISON, WI

**ELLEN SCHMIDT**
LANDSCAPE ARCHITECT, PLA
CHICAGO, IL

**OLIVER KILEY**
LANDSCAPE ARCHITECT, PLA
ANN ARBOR, MI

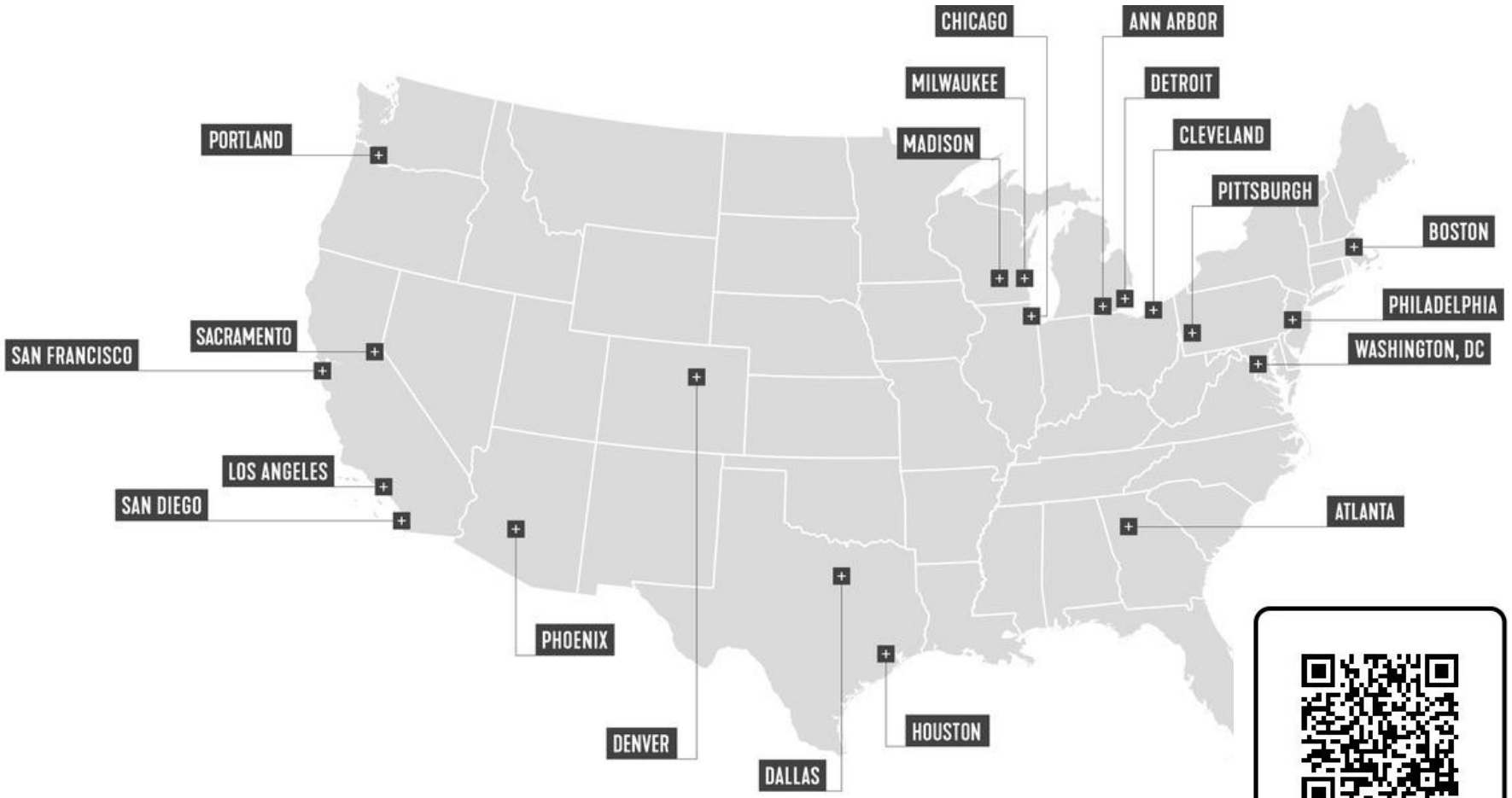
# NATIONAL STORY, MIDWEST ROOTS

**1,500**
Multi-Disciplinary Professionals

**#8**
Architecture & Engineering Firms, *BD+C,* 2024

**11**
Fast Company Innovation by Design Awards in 5 Years

**$84B**
in construction costs for LEED projects




ENR Midwest Names SmithGroup Design Firm of the Year

By Annemarie Mannion

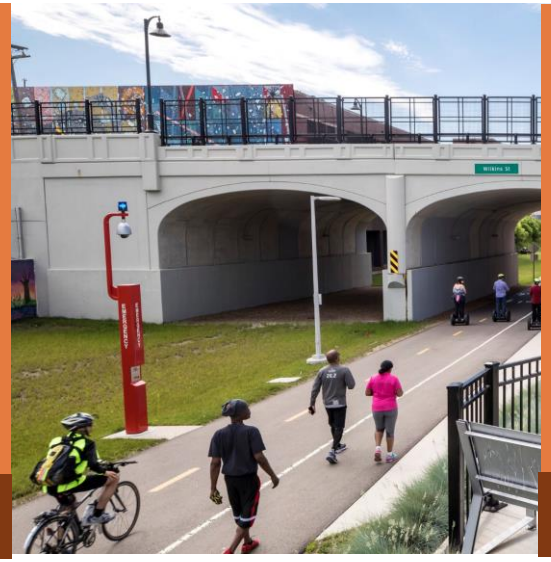
SmithGroup Mobility

# OUR TRANSPORTATION & MOBILITY PRACTICE

**COMPLETE STREETS & CORRIDOR DESIGN**

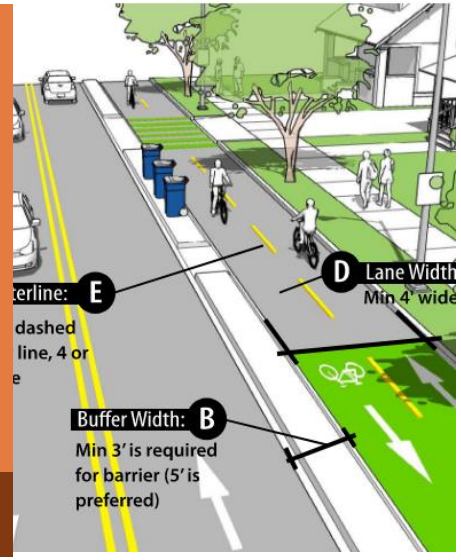
Kercheval St
Detroit

**TRAILS & GREENWAYS**



Dequindre Cut
Greenway Detroit

**MOBILITY POLICY & GUIDELINES**




Kalamazoo
Design Guidelines

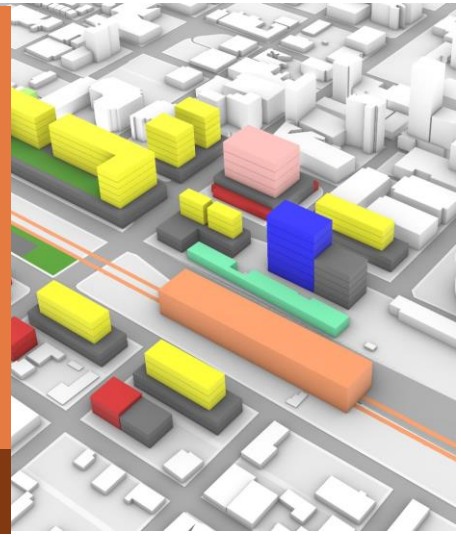
**PLACEMAKING & TACTICAL URBANISM**

Ann Arbor State St
Curbless Street

**MOBILITY & TRANSPORTATION PLANS**


St. Louis
Mobility Plan

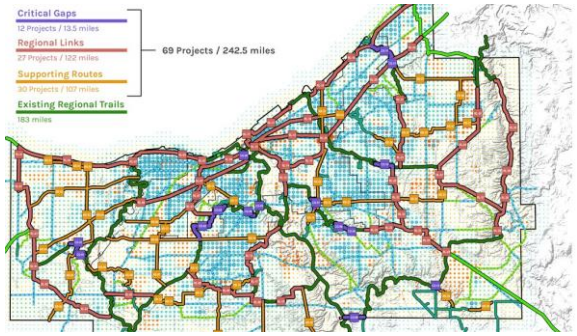
**TRANSIT & TRANSIT-ORIENTED DEVELOPMENT**



Fresno Station
& TOD Plan

# TRAIL PROJECTS THAT ARE MAKING A DIFFERENCE

**DEQUINDRE CUT**
Detroit, Michigan

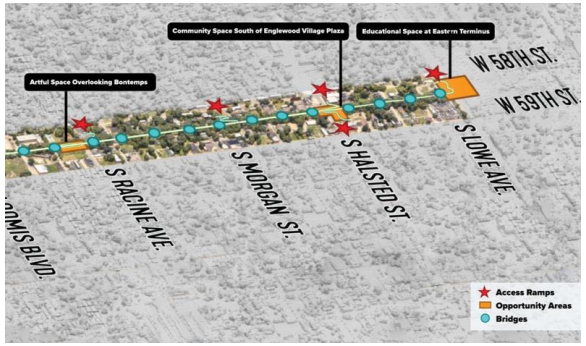



**CUYAHOGA GREENWAYS PLAN**
Cleveland, Ohio

**HANK AARON STATE TRAIL, LAKESHORE PATH**
Milwaukee, Wisconsin

**GREAT RIVERS GREENWAY, BRICKLINE**
St. Louis, Missouri

**HARBOR DISTRICT RIVERWALK**
Milwaukee, Wisconsin




**CDOT ENGLEWOOD TRAIL DESIGN**
Chicago, Illinois

**MARQUETTE GREENWAY/SOUTH SHORE RAIL AND TRAIL HEAD**
Porter, Indiana

**GLASS CITY METROPARK**
Toledo, Ohio


**BRONZEVILLE TRAIL MASTER PLAN**
Chicago, Illinois

**GREAT RIVERS GREENWAY, GATEWAY MALL**
St. Louis, Missouri

**CLEAR LAKE GREENWAY**
La Porte, Indiana


**ROUGE RIVER GREENWAY**
Wayne County, Michigan



SMITHGROUP

# MISSION DRIVEN WORK

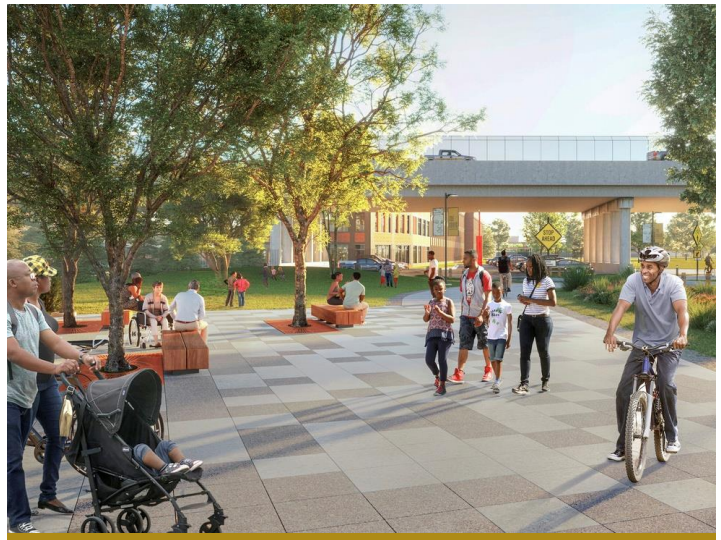
## IMPORTANT DRIVERS OF OUR WORK

### EQUITY

We recognize the impact that transportation has on how people access needs and opportunity in their community.

### HEALTH

We recognize that the safety and comfort of transportation systems is a matter of public health and basic welfare.



### PLACE

We recognize that transportation systems continue to negatively impact the cohesion and identity of communities.

# OVERCOMING OBSTACLES TO TRAIL NETWORK IMPLEMENTATION

MASTER CLASS

# OVERCOMING OBSTACLES

## LET'S START WITH SOME TERMINOLOGY

| | |
|---|---|
| **OBSTACLE** | a thing that prevents or hinders progress |

# OVERCOMING OBSTACLES

## LET'S START WITH SOME TERMINOLOGY

| | |
|---|---|
| **OBSTACLE** | a thing that prevents or hinders progress |
| **ISSUE** | context-based fact contributing to the obstacle |

# OVERCOMING OBSTACLES

## LET'S START WITH SOME TERMINOLOGY

| | |
|---|---|
| **OBSTACLE** | a thing that prevents or hinders progress |
| **ISSUE** | context-based fact contributing to the obstacle |
| **DYNAMIC** | emotion at play in the situation creating the obstacle |

# WHAT IS AN OBSTACLE YOU HAVE FACED?

# WHAT IS AN ISSUE TIED TO THAT OBSTACLE?

# WHAT IS A DYNAMIC AT PLAY WITH THAT OBSTACLE?

# OVERCOMING OBSTACLES TO TRAIL NETWORK IMPLEMENTATION

## CASE STUDY PRESENTERS

### RURAL CASE STUDY:
### COWBOY RECREATION AND NATURE TRAIL

**HANNAH** JONES

**Planning & Development Administrator**
Nebraska Game and Parks Commission

### SUBURBAN CASE STUDY:
### CAROLINA THREAD TRAIL

**BRET BARONAK**

**Executive Director,**
Carolina Thread Trail

### URBAN CASE STUDY:
### JOE LOUIS GREENWAY

**DANIEL STEFANSKI**

**Real Estate Development Manager, Joe Louis Greenway**
City of Detroit Planning and Development

# Cowboy Recreation & Nature Trail

## Rural Case Study

NEBRASKA GAME PARKS

SMITHGROUP

RAILS TO Trails conservancy

# COWBOY RECREATION & NATURE TRAIL

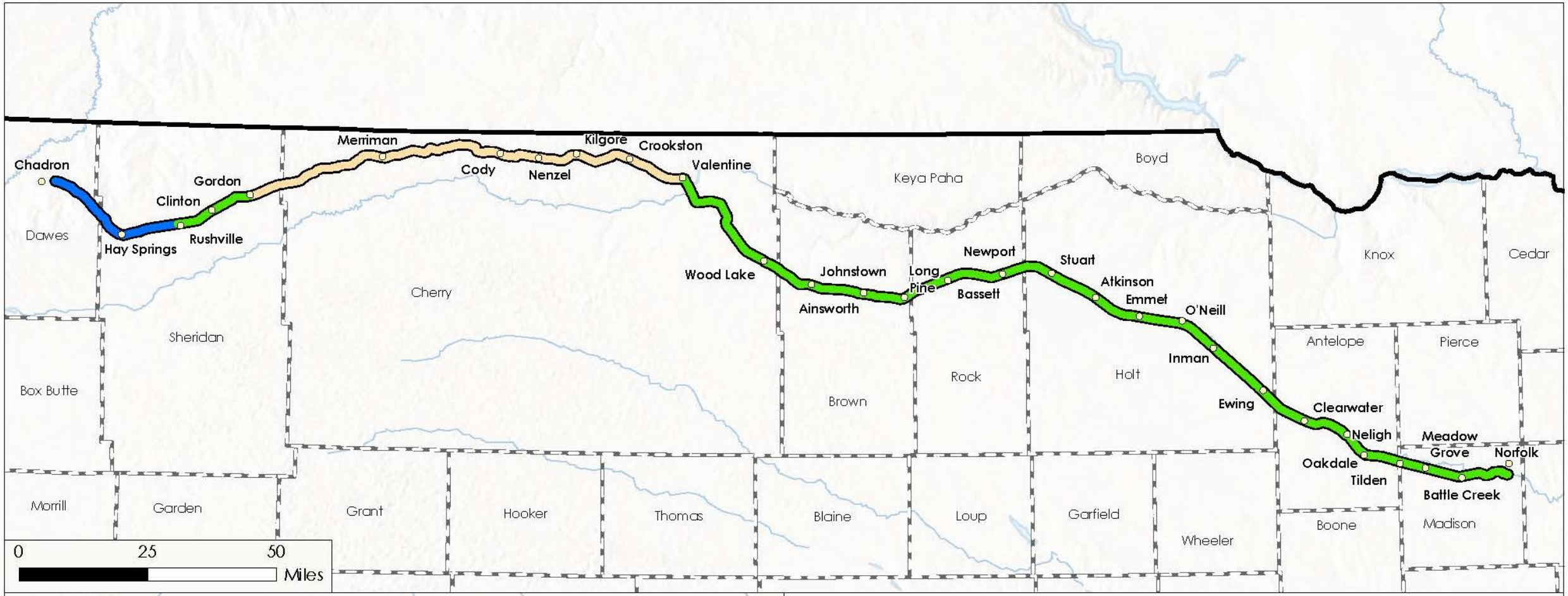
317-mile rail corridor gifted to the state in 1993

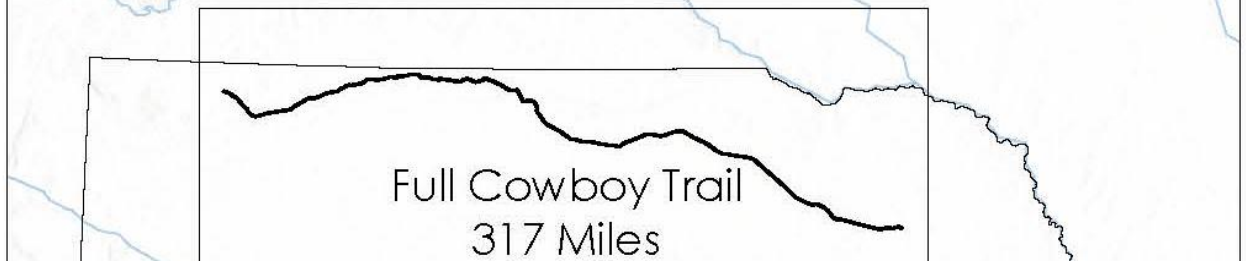
Hannah Jones
Planning & Development Administrator

# Facts about the trail

- Over the last 30 years, 202 developed miles of trail open to walking, cycling, and equestrians
  - 24 additional miles constructed in 2026
- Spans 8 counties, 30 communities and all 4 ecoregions of Nebraska
- Over 50,000 residents live in proximity to the trail
- Longest Rails-to-Trails project in the United States

# COWBOY TRAIL DEVELOPMENT




**Completed - 202 Miles**

**Scheduled for Development - 24 Miles**

**Future Development - 91 Miles**

# Assets of the Trail

- 221 Bridges
- 400+ culverts
- 202 miles of surfaced trail
- 3 buildings
- 159 crossings
- 5,700 acres of land to maintain
- 1 FTE on trail, 2 part-time,
- 2-staff in HQ
- 40 trail counters


# 2024 & 2025 Counts



**Nebraska Game and Parks Commission**
July 23 ·

The Cowboy Recreation and Nature Trail has new mile markers installed!

Each of the new mile posts includes a horseshoe and railroad spike forming a "CT" to resemble the past life of the railroad corridor and the trail users it serves today. Next time you're along the trail between Ta Ha Zouka park in Norfolk and mile 187 in Valentine, keep an eye out for the new mile markers!

📷: Hannah Jones

415 52 32

Most relevant

**Gary Wenzl**
Really nice! I've seen some of them, recently on a bike ride from the West end of Valentine to Ta Ha Park and beyond in Norfolk. It was an awesome ride with a lot of neat things to see along the way, 226 miles in two days.

11w Like Reply

Nebraska Game and Parks ... · 1 Reply

**Jeanne Miller**
Thank you! And what a clever concept! When I'm walking a trail, I like to look ahead and encourage

Topic #1:

# Navigating Disaster Recovery & Infrastructure

## Cowboy Trail Case Study

NEBRASKA GAME PARKS

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# Maintenance is our #1 Challenge

## 01

**The Trail is next to the River and in the floodplain**

The River likes to flood and move

## 02

**The Trail is on 125-year-old infrastructure**

That infrastructure is failing and was designed with early 20th Century Engineering Methods

## 03

**Legislature no longer provides General Funds for the Trail**

## 04

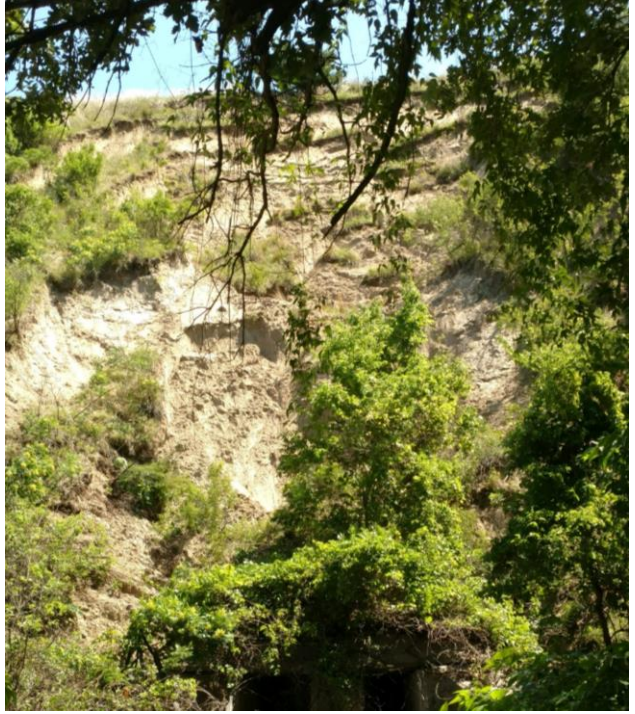
**Cost to Maintain Continues to Increase**

Supplies and materials have increased between 30-80% over last 10 years

## 05

**More people are using the trail**

The more use of any park facility, the more maintenance it requires


# Natural Disasters

- 2011 and 2019 floods
- Working with FEMA
- Lessons learned

# What have we done to try to overcome challenges?

**We've reached out to other states and researched how to diversify our approach to maintain the trail**

**We've changed our management practices to work "smarter" not "harder"**

**We've organized advocates to help maintain the trail**

**We've tried to pass bills to restart Legislature's financial support**

**We've obtained grants to help us with repairs**

# FEMA Projects

## Broken Bridge, Before

## Broken Bridge, After

# FEMA Projects

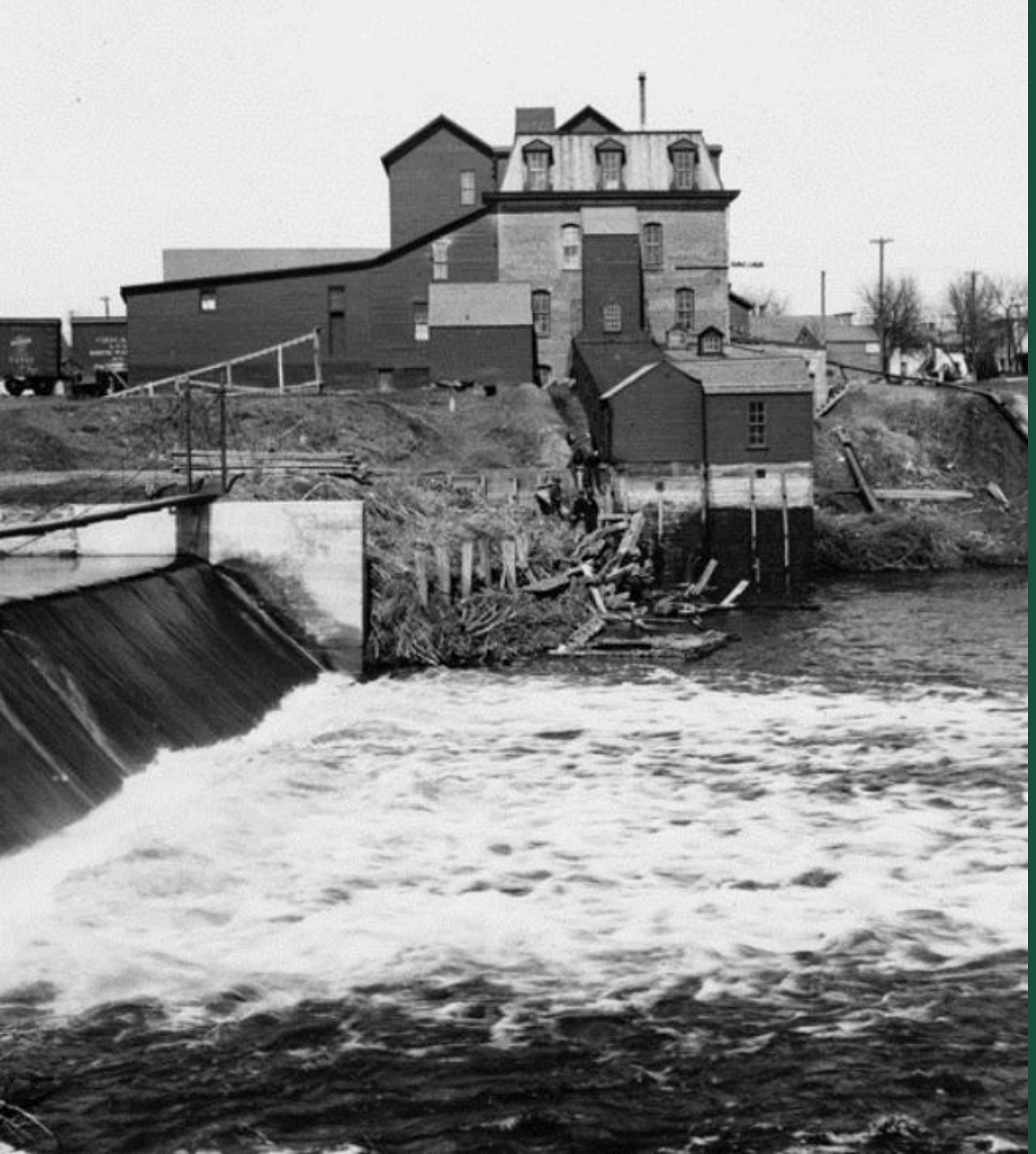
## HWY 275 Erosion, Before

## HWY 275 Erosion After

# FEMA Projects

## Long Pine Hole, Before

## Long Pine Hole, After



# Development

# Bridge Decking, Rushville to Chadron

**Bridge 625, Before**

**Bridge 625, After**


FULLER
69-620B


FULLER

# Our impact to Nebraska

**Free and accessible recreation in a recreational desert**

**Economic stimulus to local communities**

**Over 89,000 visitations in 2024 from 31 different states and several countries**

**We use local vendors and contractors for development and maintenance, so the economic impact stays close to home**

**We contribute to maintaining healthy habitat for our plants and animals**

## Topic #2:

# Empowering Community

### Cowboy Trail Case Study

NEBRASKA GAME PARKS

SMITHGROUP

RAILS TO Trails conservancy

# Cowboy Trail Partners & Coalition

GREAT AMERICAN RAIL-TRAIL®

Visit website

Nebraska Trails Foundation

Visit website

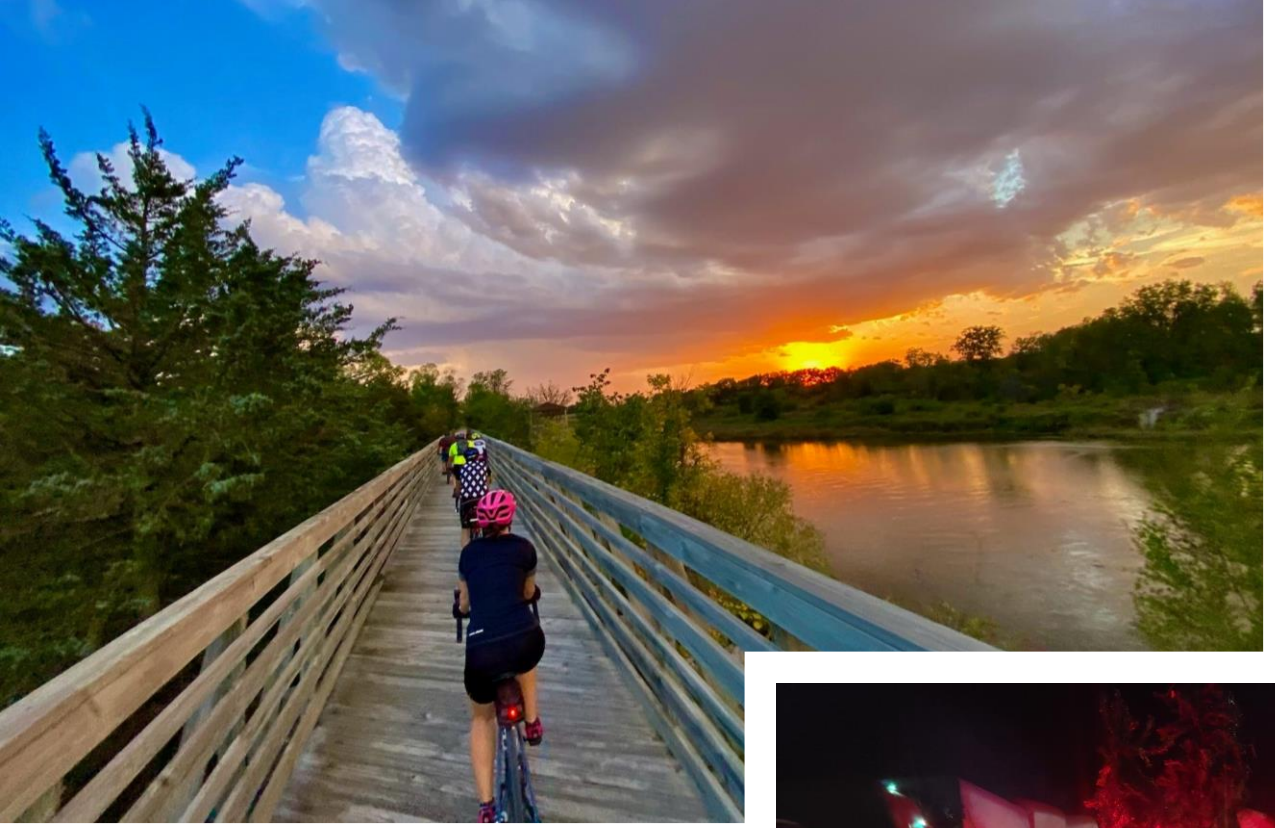
BIKE WALK NEBRASKA

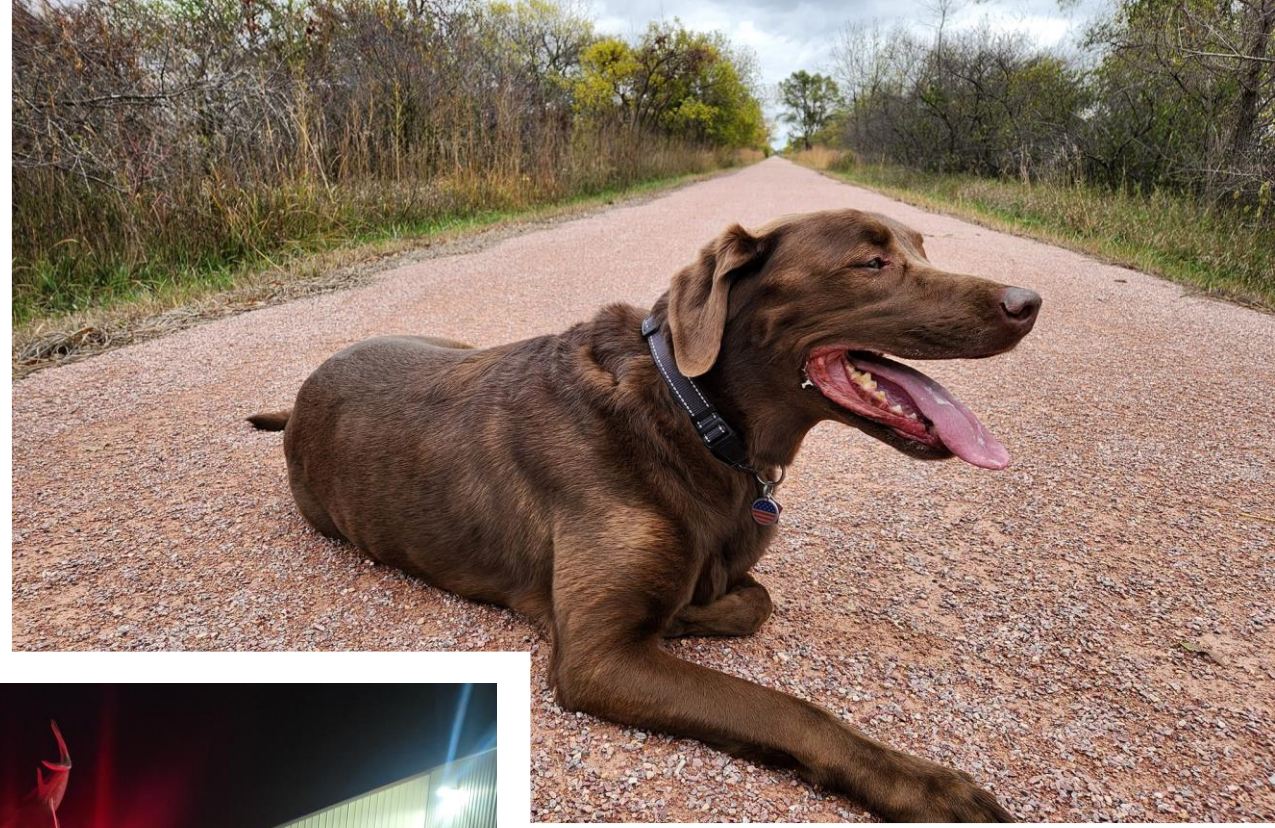
Visit website

NORTHWEST NEBRASKA TRAILS ASSOCIATION

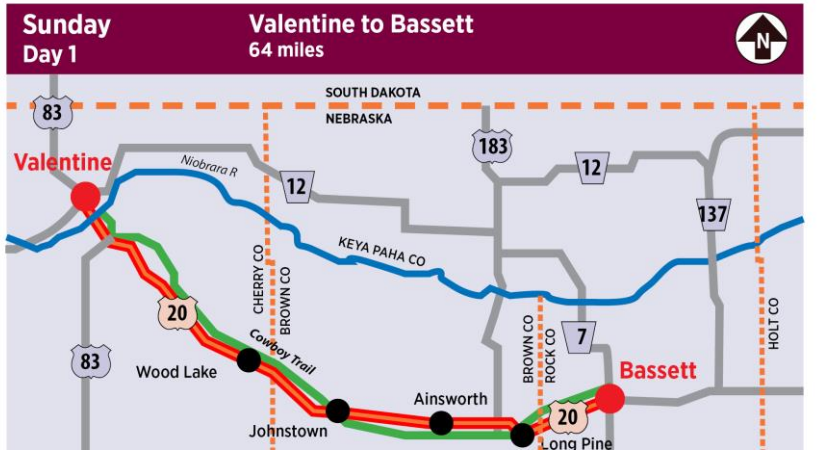
VISIT NEBRASKA

COWBOY TRAIL WEST



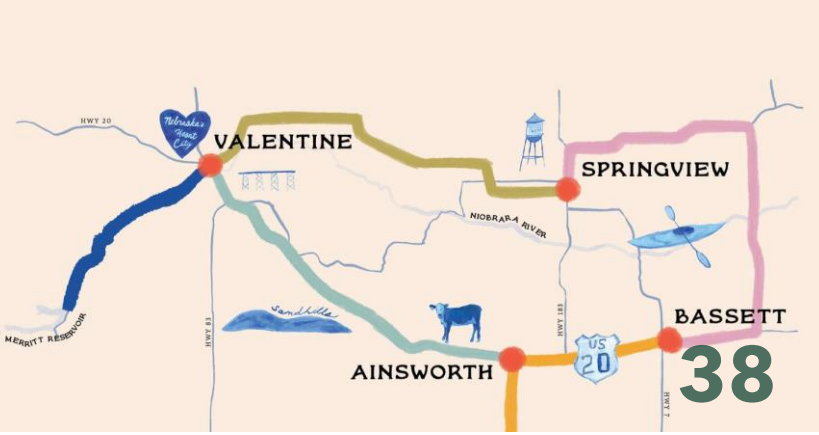



JOHN DEERE
GATOR

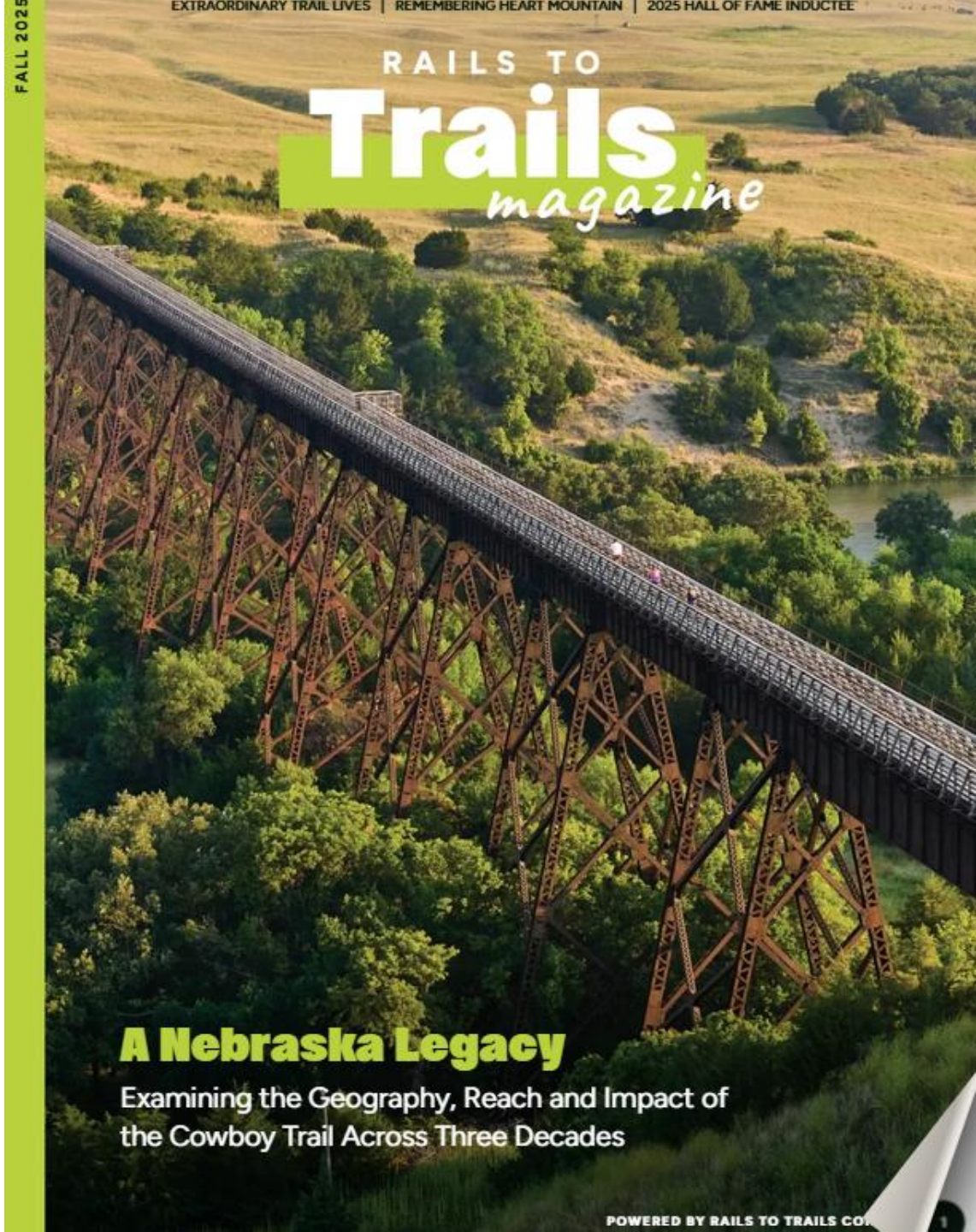




# BRAN 42

ROLLING ACROSS THE HEARTLAND



# CBT 30TH CELEBRATION



# Signature Event


EST. 1995

# COWBOY TRAIL

YOUR PATHWAY THROUGH THE PLAINS


Shortgrass Prairie
Mixed-grass Prairie
Sandhills
Tallgrass Prairie

**The Cowboy Recreation and Nature Trail spans 317 miles from Norfolk to Chadron, making it one of the longest Rails-to-Trails projects in the U.S.** Hikers, bikers and horseback riders can access the crushed limestone trail between Norfolk and Valentine (187 miles) and between Gordon and Rushville (15 miles).

Crossing Nebraska's four ecoregions, the trail showcases diverse landscapes, plants and wildlife. This guide identifies some of the flora and fauna trail users may experience. Before setting out, visit our website for trail updates, etiquette, and an interactive map.

**OutdoorNebraska.gov**

*Search "CowboyTrail" or scan the QR code to learn more.*

## Shortgrass Prairie Ecoregion

This ecoregion features diverse topography, including several areas of rocky escarpments, sandsage prairie, sand prairie, pine woodlands, badlands, and other vegetation types.

Soils range from sands to clays, with a greater variety of soil types than other ecoregions in the state. Annual precipitation ranges from 12-17 inches.

**PLANTS:** Short-grass prairies are dominated by grasses such as buffalo grass and blue grama. Common forbs in this prairie type include milk-vetches, scarlet gaura, cutleaf ironplant, prickly pear and prairie-coneflower.

The low precipitation in the Shortgrass Prairie Ecoregion, in conjunction with grazing, causes most short-grass vegetation to rarely exceed 10 inches in height. Open canopies of tall cottonwoods and shorter peachleaf willows are common in many stream valleys of the ecoregion. Pine woodlands are mostly comprised of ponderosa pines, with the badlands being largely unvegetated aside from small shrubs.


*Western meadowlark*

**BIRDS:** More than 300 species of resident and migratory birds have been recorded in the Shortgrass Prairie Ecoregion. Common species could include the western meadowlark, grasshopper sparrow and lark bunting. The region's wetlands support many species of waterfowl, including Canada goose, mallard and northern pintails, among many species of shorebirds.

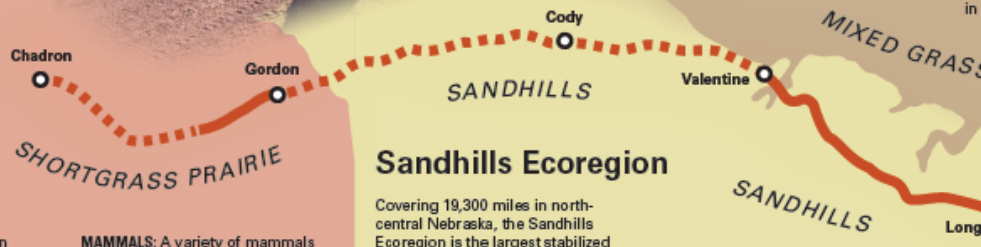
**MAMMALS:** A variety of mammals are known to occur in this ecoregion as well. This includes mammals with solid hooves, such as white-tailed and mule deer, elk, pronghorn and bighorn sheep. Mountain lions also have been recorded in this area; they are the largest natural predator here among coyotes and bobcats.

**AQUATIC HABITAT:** The aquatic habitats of Nebraska's Panhandle support numerous species of fish. River-associated species include channel catfish, shovelnose sturgeon, western silvery minnow, plains minnow and several species of darters.

Many species of reptiles and amphibians are known to occur in the Shortgrass Prairie Ecoregion as well. You may spot amphibians like the boreal chorus frog or Woodhouse's toad. Reptiles include bullsnakes, prairie rattlesnakes, lesser earless lizards, great short-horned lizards and ornate box turtles.


*Ornate box turtle*


*Near Valentine*




## Sandhills Ecoregion

Covering 19,300 miles in north-central Nebraska, the Sandhills Ecoregion is the largest stabilized dune system in the Western Hemisphere – and one of the largest, intact native grasslands in North America.

The Sandhills remain as one of the last large vestiges of the Great American Plains. Sand blows on the trail, which can saturate the surfacing quicker than other ecoregions along the trail. This creates softer surfacing more quickly, requiring more frequent maintenance.

**UNIQUE FEATURES:** Geologically, the Sandhills are young. Several major episodes of dune formation have occurred over the past 13,000 years, with periods of drought-induced sand movement in the past 1,000 years.

Scientists speculate that, at times in its history, the Sandhills were a sea of blowing sand, similar to today's Sahara Desert. The Sandhills climate is semiarid with an annual amount of precipitation ranging from 23 inches in the east to less than 17 inches in the west.

**WATER RESOURCES:** Extensive aquifers up to 900 feet thick have formed below the dunes, mainly in sand and gravel deposits. The underground reservoir is part of the Ogallala aquifer and contains an estimated 700-800 million acre-feet of groundwater. This is nearly double the amount of water found in Lake Erie. Where the region's high-water table intersects the ground surface in Sandhill valleys, nearly 2,000 shallow lakes and over a million acres of wetlands have formed.


*Long Pine Creek Bridge*

**PLANTS:** The Sandhills contain a variety of native plant communities, ranging from wetlands to dry upland prairie. Nearly 700 native plant species have been documented in the Sandhills, including several at-risk species.

The Sandhills prairie community consists of a mixture of sand-adapted grasses including sand bluestem, prairie sandreed and hairy grama. Forbs in this region include stiff sunflower, bush morning glory and Plains gayfeather. Freshwater marshes in the Sandhills have shallow standing water most of the year as well.

**BIRDS:** More than 300 species of resident and migratory birds have been documented in the Sandhills. This region is a stronghold for sharp-tailed grouse and greater prairie-chicken and is considered an important breeding site for the world's largest sandpiper, the long-billed curlew. Other waterbirds in the Sandhills include Wilson's phalarope, American avocet, western grebe and black tern.

**MAMMALS:** The Sandhills are also home to 55 species of mammals. Small mammals include the plains pocket gopher, masked shrew, and Ord's kangaroo rat. This ecoregion also supports a few elk and relatively small numbers of pronghorn, particularly in the west.

**AQUATIC HABITAT:** Streams and lakes are home to nearly 75 species of fish such as channel catfish, flathead chub and river carpsucker. Twenty-seven species of amphibians and reptiles reside here, including one salamander, three toads, four frogs, six turtles, four lizards and nine snakes. Insects are important to the ecology of the Sandhills; they serve several vital functions as pollinators, decomposers, and food for many other species of wildlife.

## Mixed-grass Prairie Ecoregion

The Mixed-grass Prairie Ecoregion lies between the Tallgrass Prairie Ecoregion to the east and the Shortgrass Prairie Ecoregion to the west. As the name implies, this is a transition zone where the tallgrass and shortgrass prairie merge, taking on characteristics of both. Its highly diverse flora and fauna include a mix of species found also in the tallgrass and shortgrass prairie. The region's climate is semiarid, with annual precipitation ranging from 28 inches in the east to 20 inches in the west.

**PLANTS:** The Mixedgrass Prairie Ecoregion includes a variety of native plant communities. Tallgrass prairie species tend to dominate in the east along river floodplains, and shortgrass species dominate the western part of the ecoregion.

Prairie hilltops have many species of drought-resistant short-grass prairie plants, such as blue grama and buffalo grass. Forbs also are fairly abundant and include prairie-clovers, prairie-coneflowers and dotted blazingstar. The wet meadows and wet prairie along the river include a variety of plants such as woody sedge, spike rush and prairie cordgrass.

**BIRDS:** More than 350 species of resident and migratory birds have been documented using the Mixed-grass Prairie Ecoregion. Common grassland birds include


*Platte River cad*

grasshopper sparrow, dickciss western meadowlark and field sparrow. More than two dozen species of waterfowl regularly use the Rainwater Basin wetlar during migration.

## Tallgrass Prairi

In Nebraska, the Tallgrass Prai Ecoregion covers the eastern fourth of the state and receive around 25-36 inches of annua precipitation. This is more th any other ecoregion i the state

TALLGRASS PRA

The ecoregion contains stretcl of two of Nebraska's major rivers, the Missouri River and the Platte River. The Tallgrass and Mixed-grass ecoregions have meandering rivers, like t Elkhorn, which is prone to floc and causing damage to the tra

**PLANTS:** Eastern Nebraska has diversity of other types rangin from deciduous woodlands to saline wetlands. Upland tallgrass prairie is dominated by big bluestem, Indian grass, switchgrass and Canada wild- Tallgrass prairies also include hundreds of species of wildflo and other forbs.

Native woodlands are foun extensively along the Missour River Valley, which includes species such as cottonwoods, willows, boxelders and American elms.

# Moving Forward

## Cowboy Trail Case Study

NEBRASKA GAME PARKS

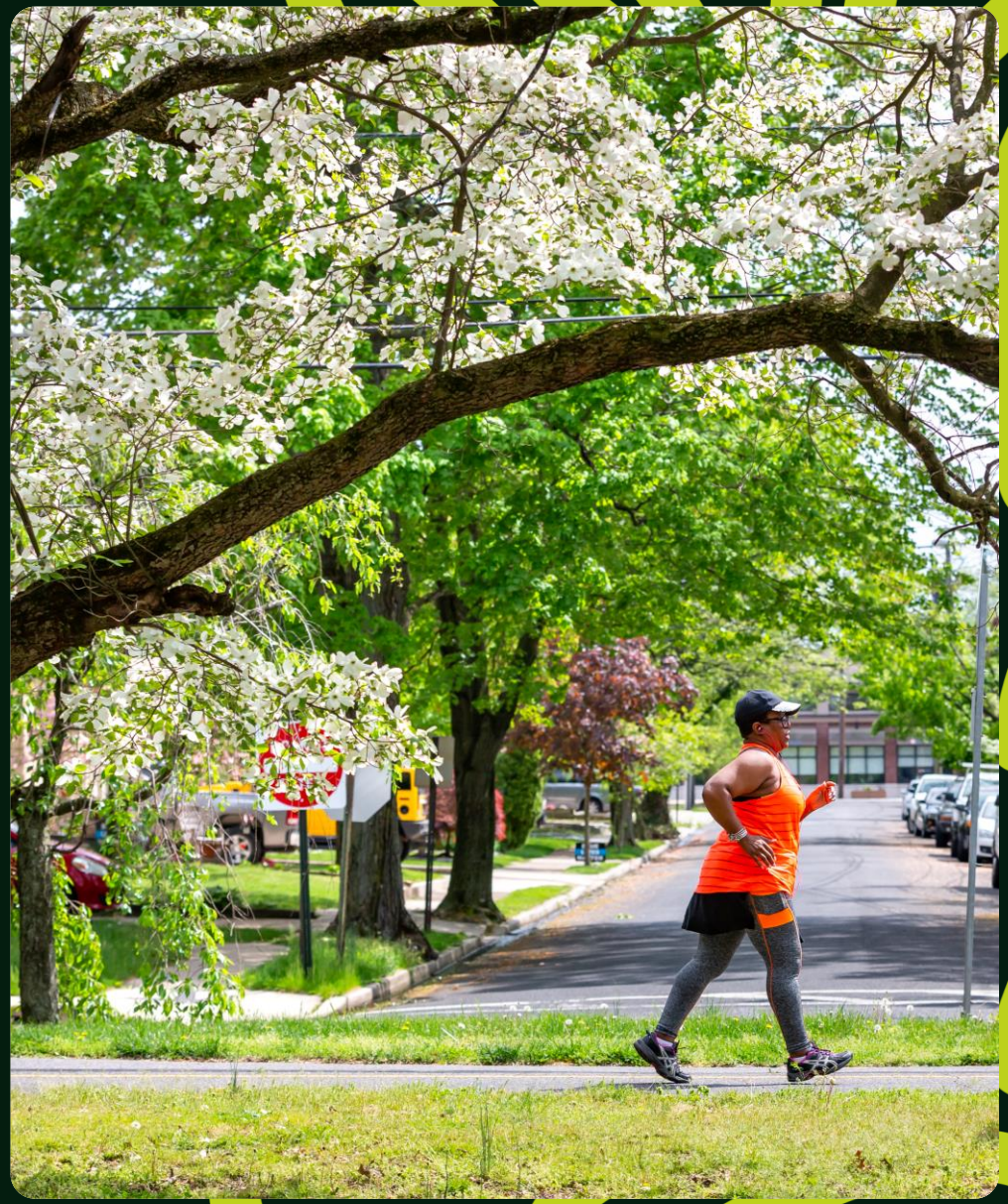
SMITHGROUP

RAILS TO Trails conservancy

# The Trail Ahead

- Sustainable funding sources
- Endowments
- Community Partnerships & Trail Towns Initiative
- Development
- Educate Nebraskans about trail benefits
- Continue to encourage events
- Continue to assess and address areas of need

# Discussion

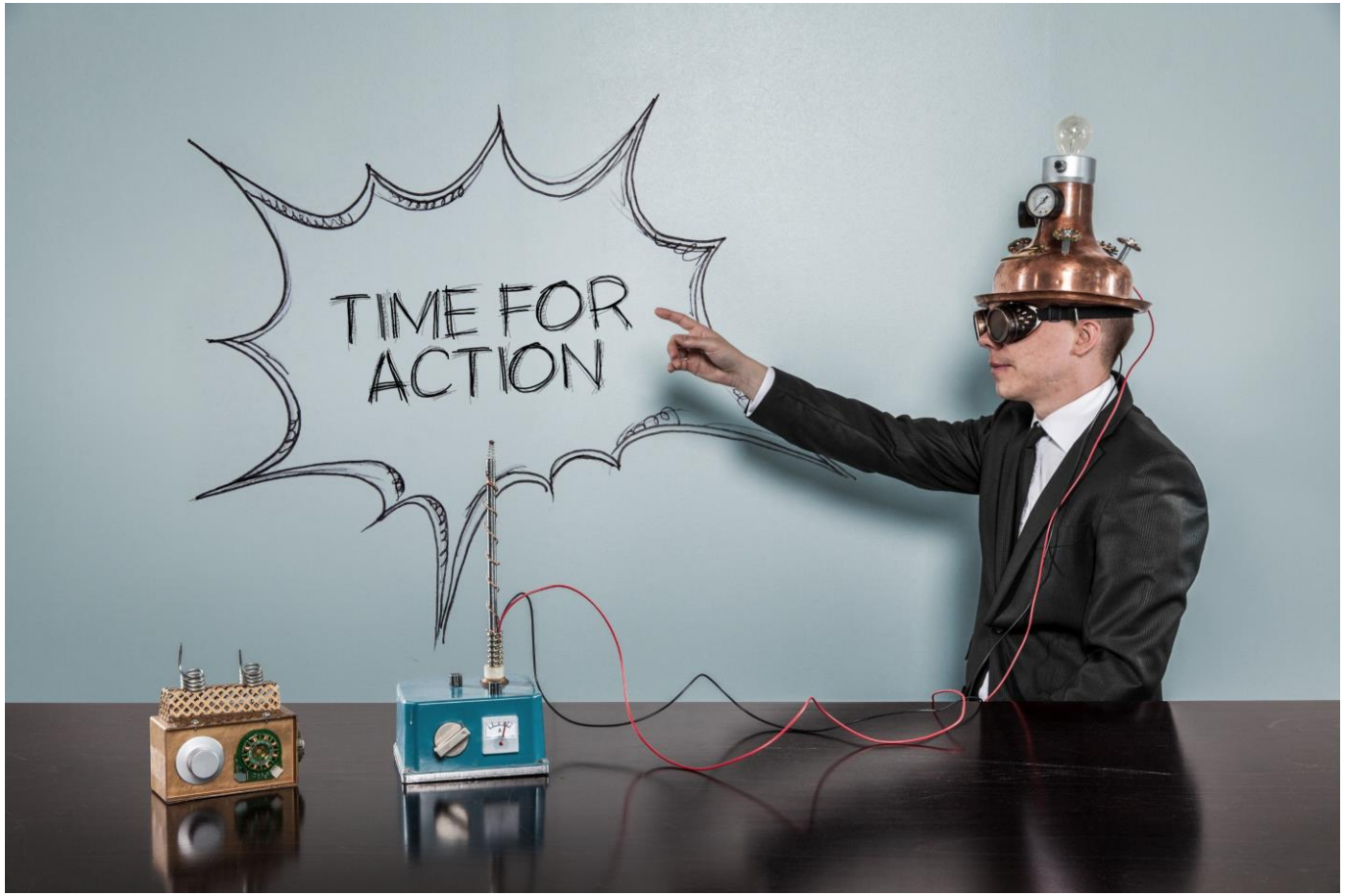


RAILS TO Trails conservancy

SMITHGROUP

# OVERCOMING OBSTACLES TO TRAIL NETWORK IMPLEMENTATION

## ACTION PLANNING



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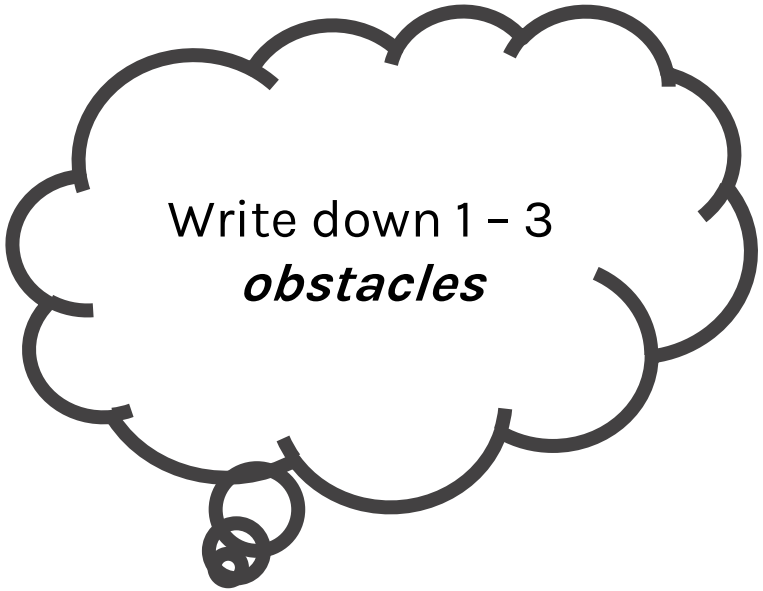

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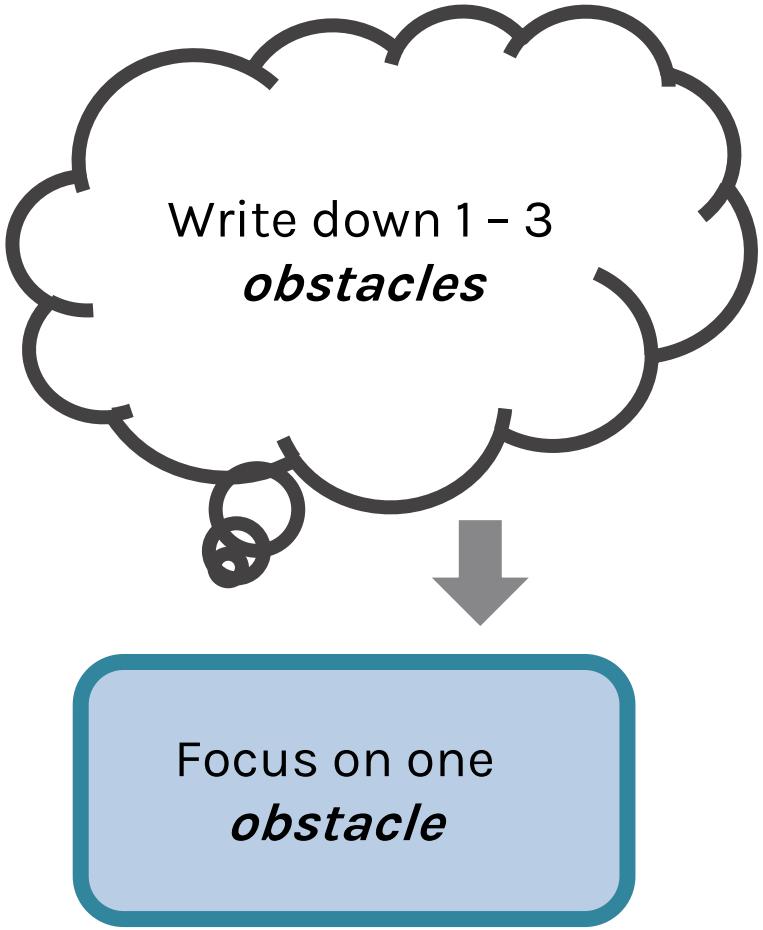
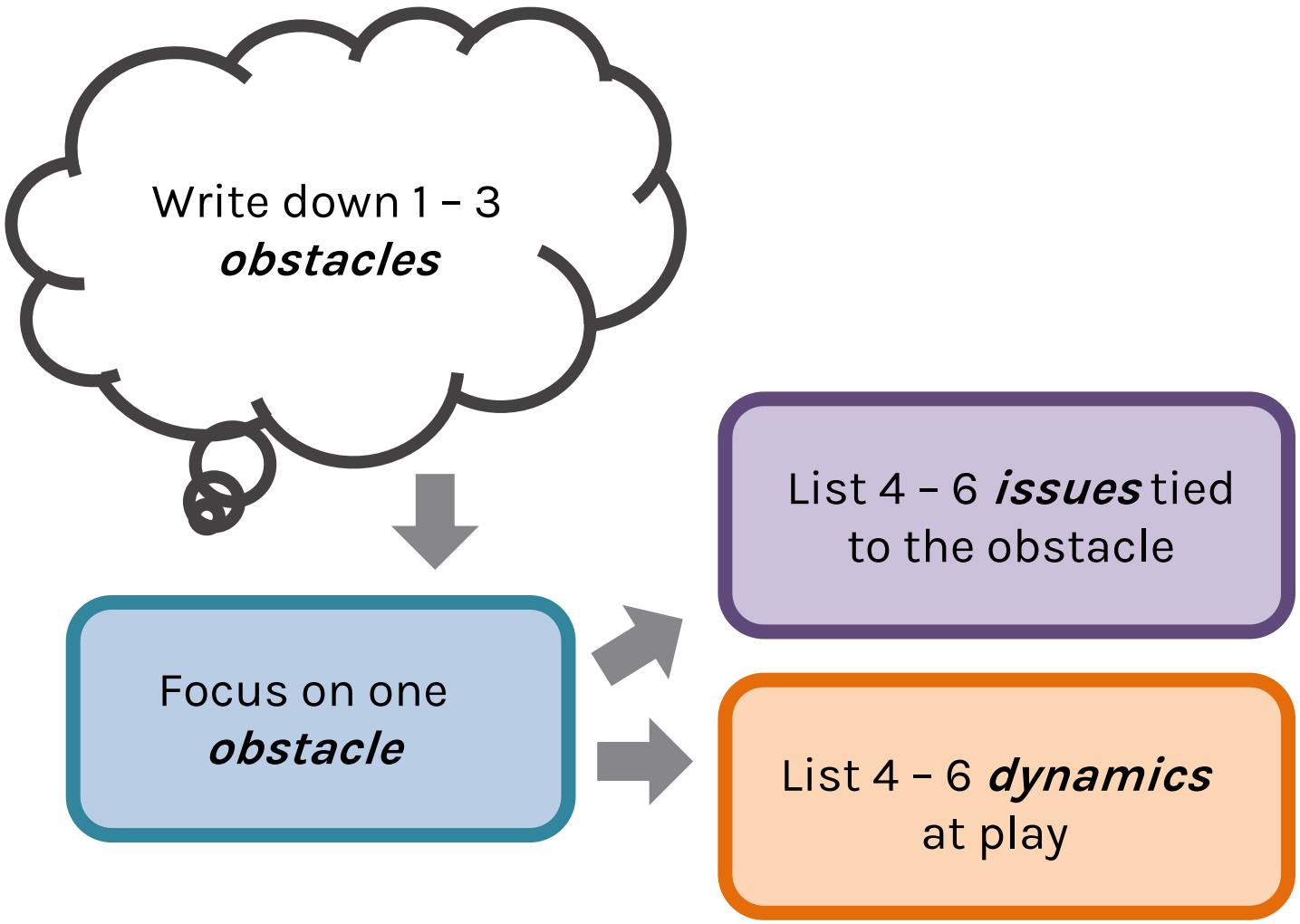


# ACTION PLANNING



# ACTION PLANNING

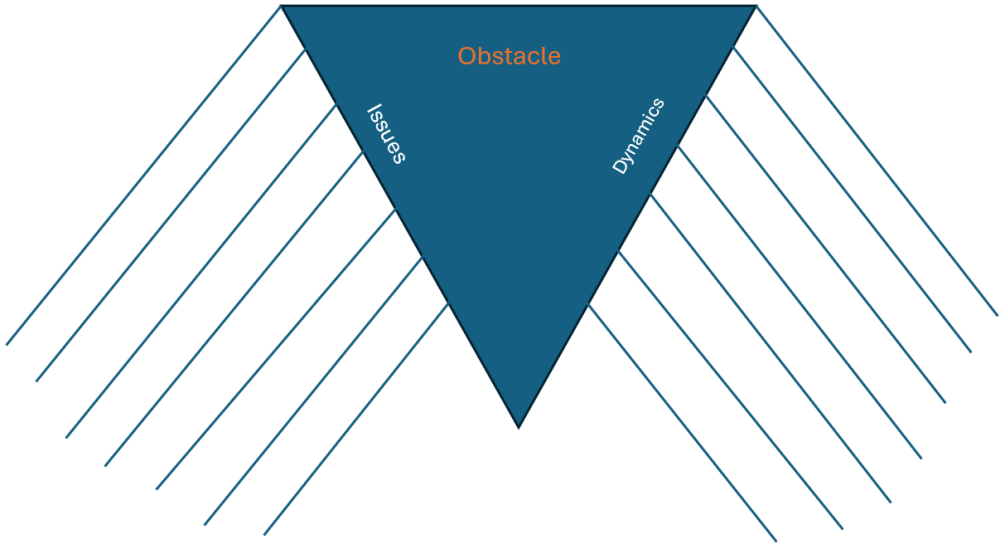
Write down 1 – 3 ***obstacles***

Focus on one ***obstacle***

List 4 – 6 ***issues*** tied to the obstacle

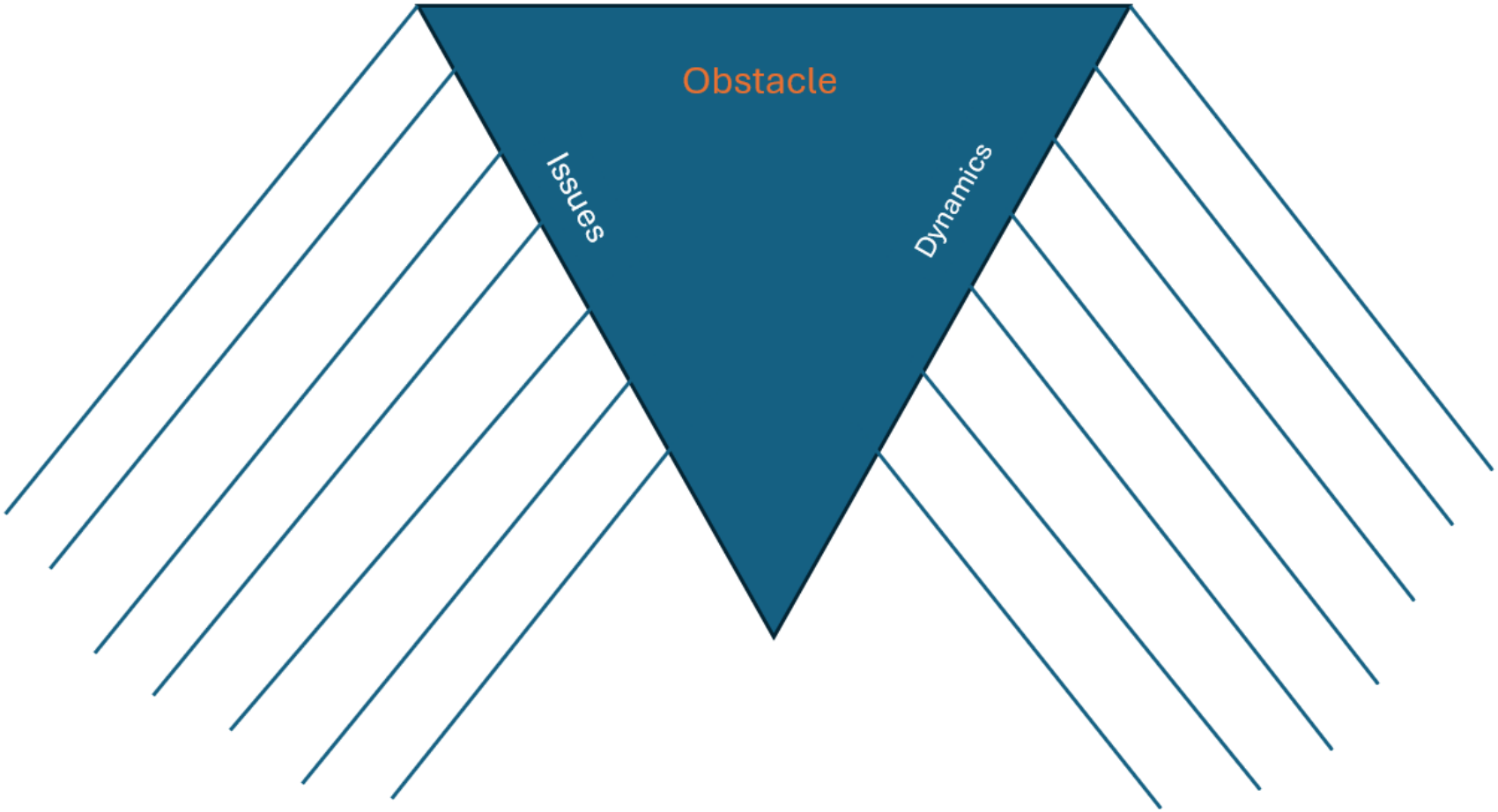
List 4 – 6 ***dynamics*** at play

Map the issues and dynamics on the ***pillar diagram***



# DISLODGING PILLARS

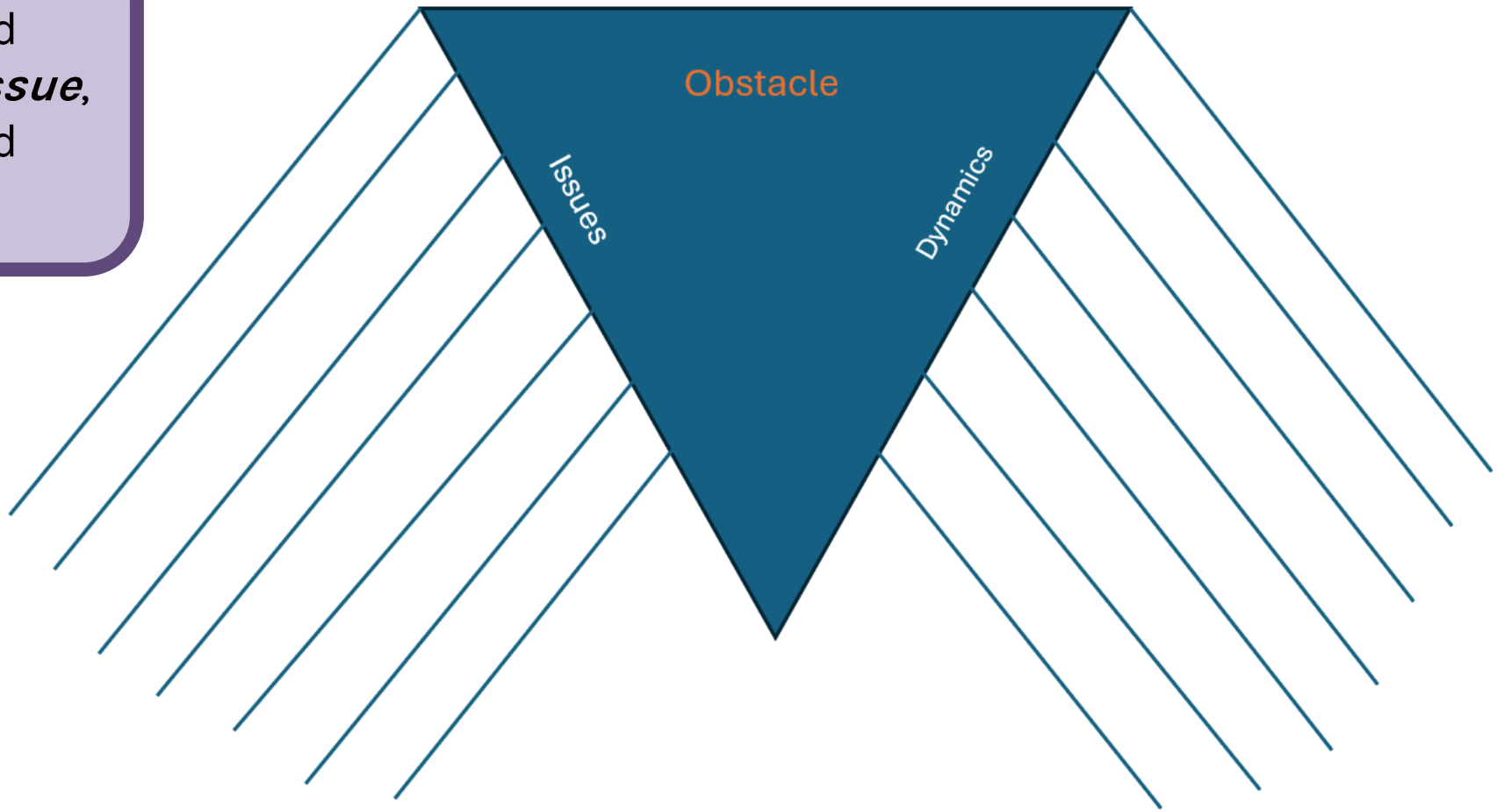
## THINK OF THE ISSUES AND DYNAMICS AS "PILLARS" HOLDING UP THE OBSTACLE



# DISLODGING PILLARS

## THINK OF THE ISSUES AND DYNAMICS AS "PILLARS" HOLDING UP THE OBSTACLE

If you could dislodge an ***issue***, what would happen?



# DISLODGING PILLARS

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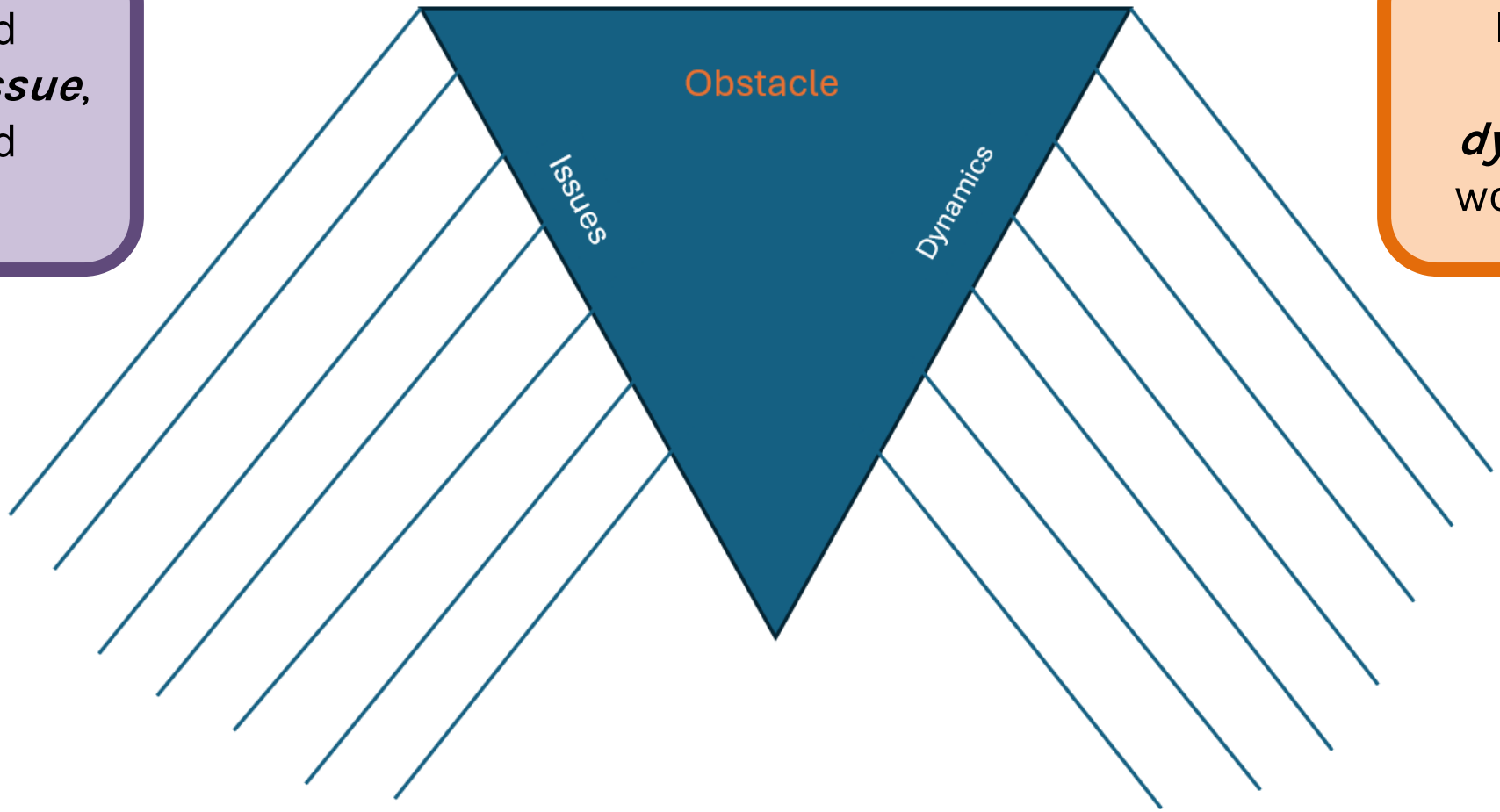



If you could change a ***dynamic***, what would happen?

# ACTION PLANNING

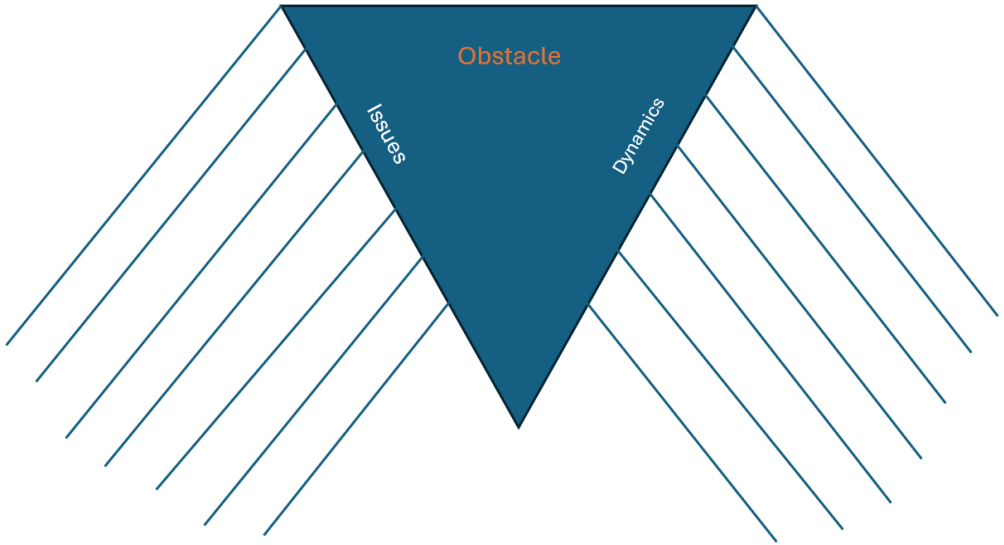
Write down 1 – 3 ***obstacles***

Focus on one ***obstacle***

List 4 – 6 ***issues*** tied to the obstacle

List 4 – 6 ***dynamics*** at play

Map the issues and dynamics on the ***pillar diagram***



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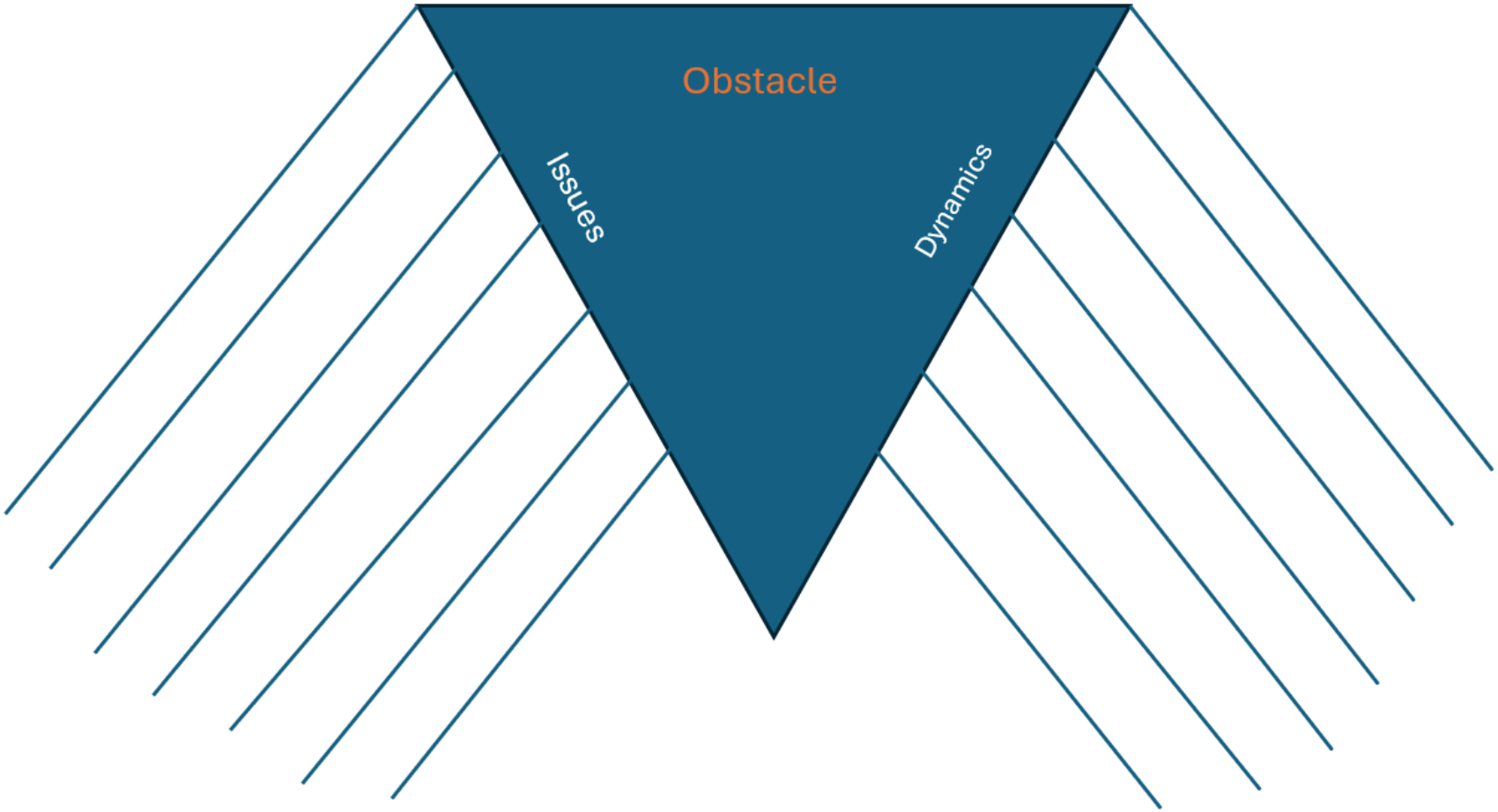

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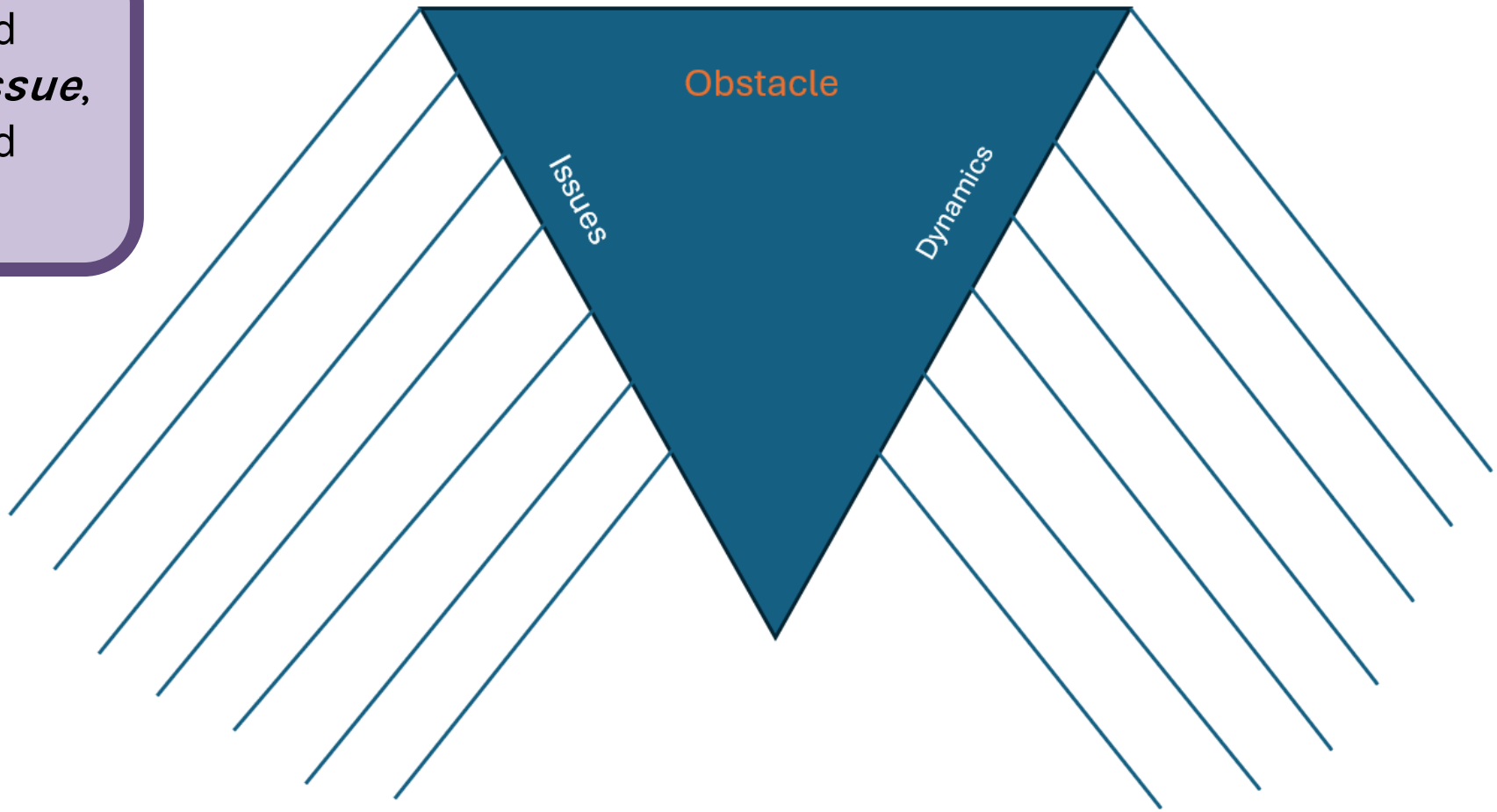

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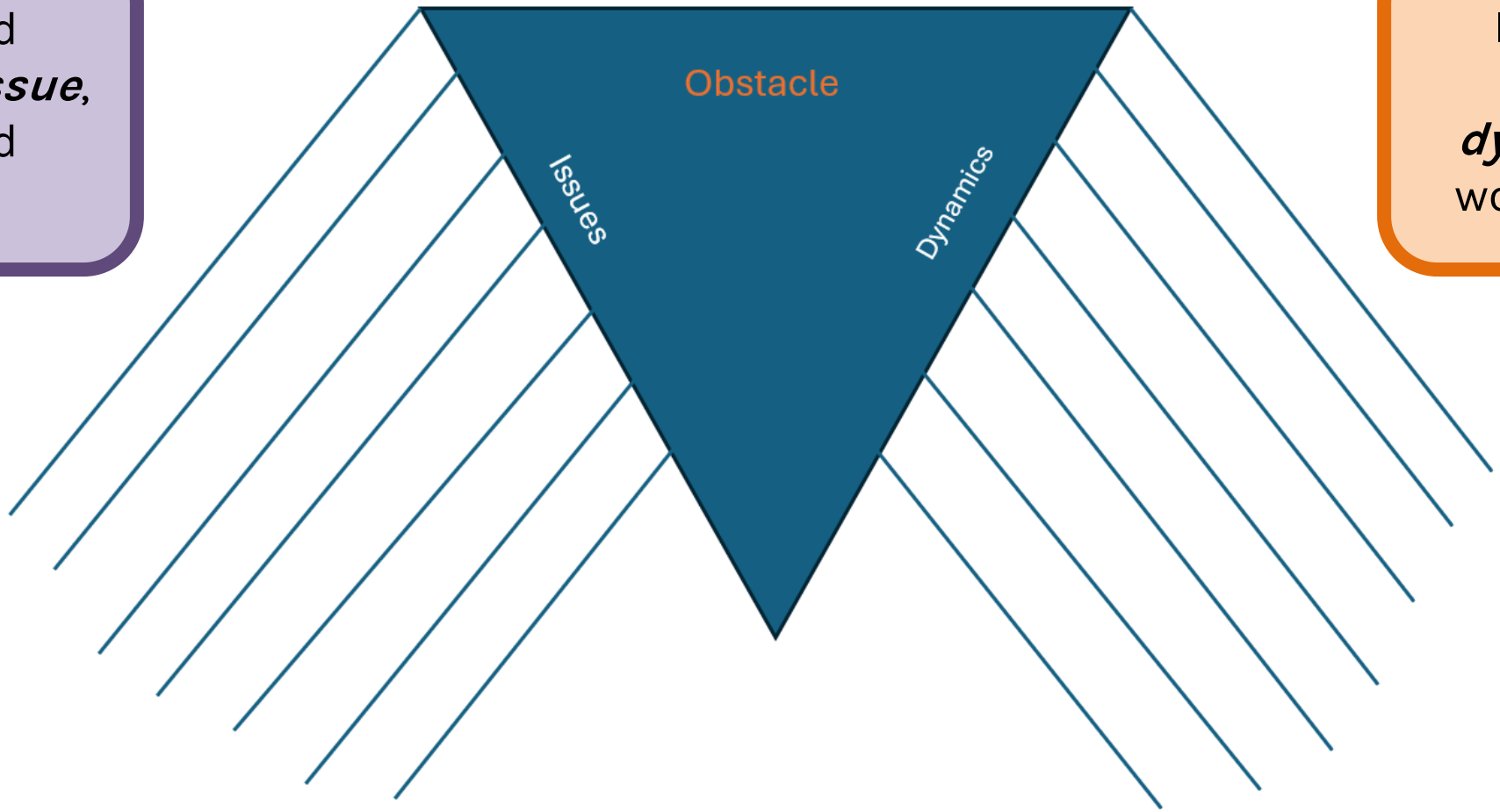


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# Make a Plan

## Working in Pairs

# Reach Out!

Nebraska Game and Parks Commission:

Hannah Jones-Hannah.jones@nebraska.gov

SmithGroup:

Ellen Schmidt - ellen.schmidt@smithgroup.com

Oliver Kiley - oliver.kiley@smithgroup.com

Cassie Goodwin - cassie.goodwin@smithgroup.com

Rails to Trails Conservancy:

Greg Lawson – glawson@railstotrails.org

Kate Foster – kate@railstotrails.org

RAILS TO Trails conservancy

SMITHGROUP