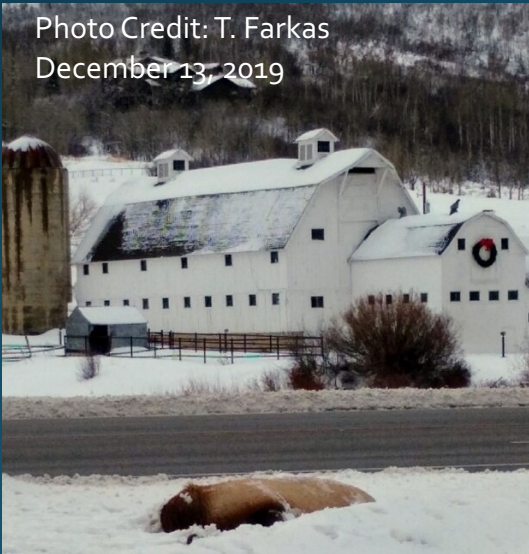


# Wildlife and Roads in Park City: Proposed Solutions for Wildlife-Vehicle Conflict on SR 224 at McPolin Farm

A Presentation to the Park City Council by  
Save People Save Wildlife and  
Dr. Patricia Cramer

Photo Credit: T. Farkas  
December 13, 2019



October 6, 2022



Photo Credit: L. Combs  
SR 224 January 14, 2020  
8:24am



# The Objective of This Presentation

1. Introduce Save People Save Wildlife and Dr. Patricia Cramer
2. Introduce the SR 224 McPolin Farm Wildlife- Vehicle Challenges and Recommendations in Relation to the Bus Rapid Transit Project for Additional Lanes
3. Gain Park City Council's Support in addressing wildlife connectivity and safety with wildlife underpass

# Save People Save Wildlife

## Mission Statement

Reduce or eliminate wildlife-vehicle collisions

[Savepeoplesavewildlife.org](http://Savepeoplesavewildlife.org)



## Accomplishments

45 MPH on SR 224

I-80 Overpass at Parley's Summit in working with UDOT

I-80 Wildlife Exclusion Fence, escape ramps, cattle guards

Summit County and General Obligation Bond for open space

## Working Partners

Local Community

UDOT      UDWR      Summit County Council

Swaner Preserve / Utah State University

Utah Wildlife Connectivity Group

# Dr. Patricia Cramer

## National Leader in Transportation and Wildlife

- UDOT's Trailblazer Award for Excellence in Research
- Three FHWA Environmental Excellence Awards
- Denver Zoo Conservationist of the Year Award
- Utah Wildlife Society Award of Merit
- FHWA – 12 DOTs – National Manual on Wildlife /Transport
- Worked for 14 state DOT's, FHWA, and Nat'l Academies

### Wildlife Crossing Structures in Utah: Determining the Best Designs

Prepared for  
Utah Division of Wildlife Resources  
Submitted by \_\_\_\_\_

Report No. UT-17.15

### TESTING NEW TECHNOLOGY TO RESTRICT WILDLIFE ACCESS TO HIGHWAYS: PHASE 1

Report No. UT-17.16

US 191 Monticello Wildlife Crossing Structure and Double Cattle Guard  
Monitoring Project  
Final Report  
Submitted to Utah Department of Transportation, Region 4

US 189 Wildlife Crossing Structures and Escape Ramps Monitoring  
Final Report  
Submitted to Utah Department of Transportation  
By  
Patricia Cramer, PhD

Report No. UT-19.19

Report No. UT-19.27

### IDENTIFICATION OF WILDLIFE-VEHICLE CONFLICT HOTSPOTS IN UTAH

Prepared For:  
Utah Department of Transportation  
Research & Innovation Division

Final Report  
December 2019

LTDOT RESEARCH  
Utah Department of Transportation  
1500 South 200 West • PO Box 114400 • Salt Lake City, UT 84111



[www.wildlifeconnectivity.org](http://www.wildlifeconnectivity.org)

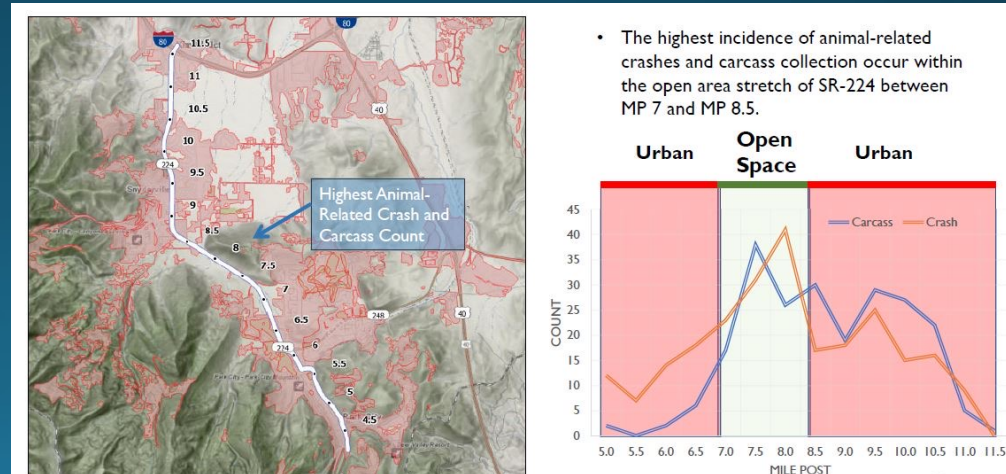
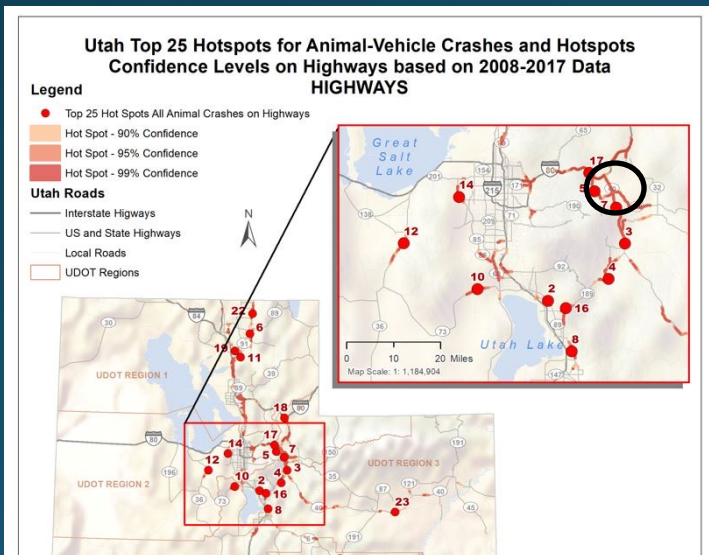


# Wildlife And Roads Challenges in Park City

SR 224 is the Number 5 Hotspot for Wildlife-Vehicle Crashes in Utah based on crashes / mile / year (Cramer et al. 2019)

Kimball Junction to Kearns Blvd, 6 miles, there are 2.97 reported crashes per mile per year, = 17.8 crashes with wildlife in this stretch per year

SR 224 MP 7-8 (McPolin Farm) has the highest number of crashes with wildlife and collected carcasses on SR 224.  
*Data from BioWest-UDOT report, below.*  
*Data 2010-2020*



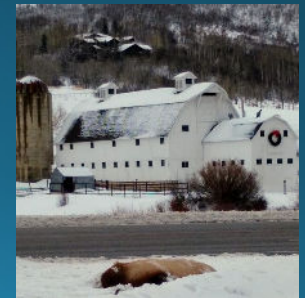
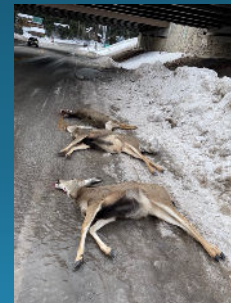
# Wildlife-Vehicle Crashes at McPolin Farm

From 2010-2020 on SR 224 from MP 7-8 there were **95 Reported Crashes with Wildlife.**

*Biowest-UDOT report 2022*

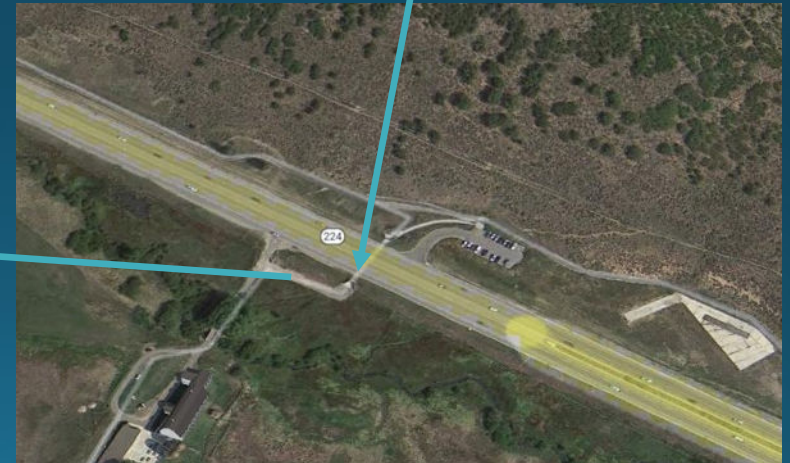
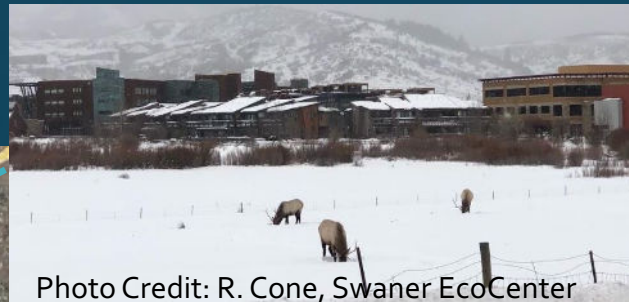
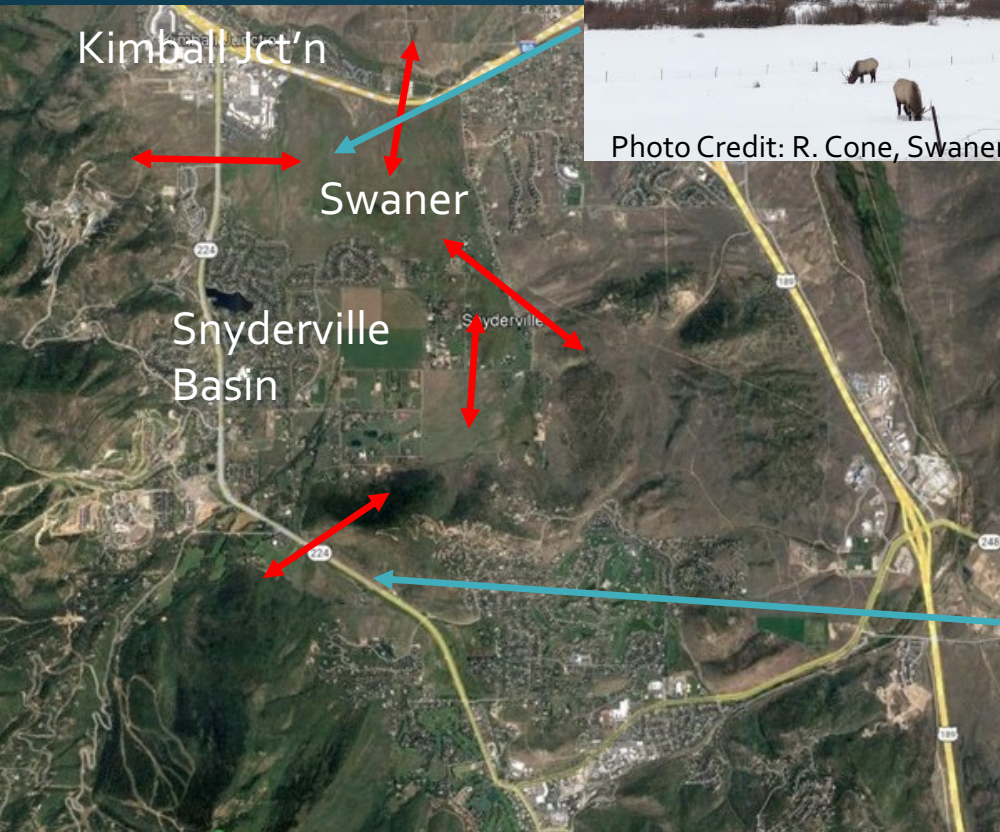
The cost to society for these crashes ranges from a minimum \$1.1 million to \$3.4 million and more

*Using UDOT crash cost values, and 1<sup>st</sup> assumed all 95 crashes were Property Damage Only, 2<sup>nd</sup> assumed there were 5 injury crashes and 90 PDO crashes. PDO crash = \$12,300, Injury = \$233,500*





# Why SR 224 at MP 7.6 is Important



Annual Average Daily Traffic is ~ 30,000 – Close to impermeable for wildlife. It will increase in the future.

# Successful Solutions in Other Places

Wildlife underpass structures with wildlife exclusion fence



Elk used a SR 9 underpass in Colorado

Photo Credit: Colorado DOT, CO Parks and Wildlife, Eco-resolutions

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Jackson, WY & Teton Co. Plans for Underpass WY 22

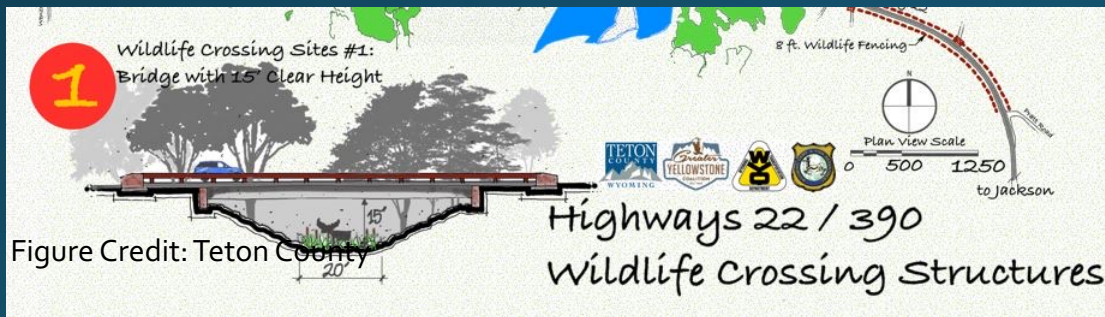


Figure Credit: Teton County

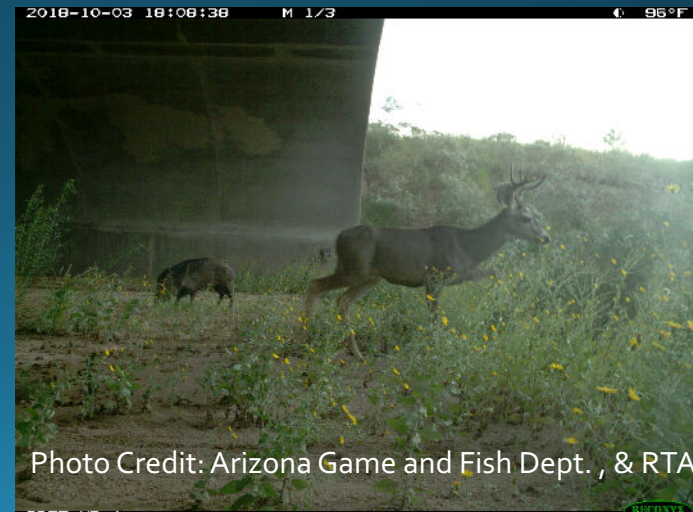


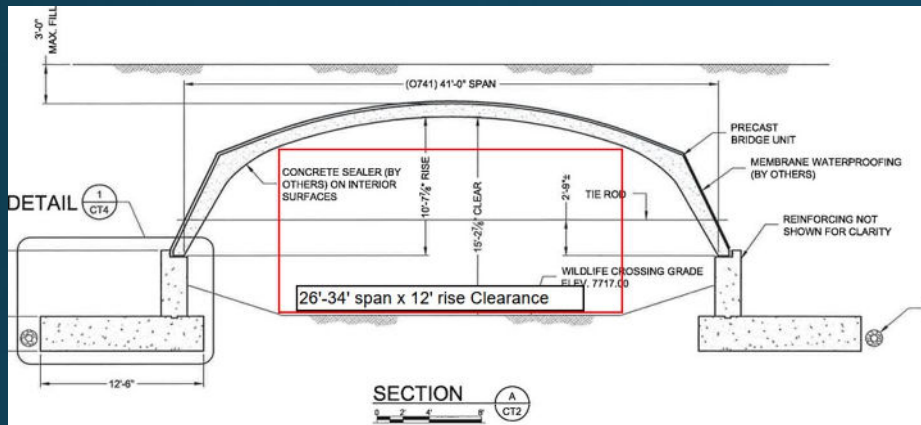
Photo Credit: Arizona Game and Fish Dept., & RTA

Mule Deer & Javelina use a Tucson & Pima County Wildlife Underpass SR 77



# Specific Solution for SR 224

Potential structure: A Pair of Contech's Conspan Arches



Approximately 2 miles of wildlife fence in each direction from MP 7.6 where structure could be placed

# Potential Costs of Structure and Other Mitigation

Pair of wildlife crossing structures and 4 miles of fence would cost about \$4 million

\$4 million is ~5% of the total cost of the BRT Project

To secure outside funding:

- Bipartisan Infrastructure Law
- HSIP Safety Funds
- County, Agencies, Partners

**CONTECH**  
ENGINEERED SOLUTIONS

Contech Engineered Solutions LLC  
5025 Centre Pointe Drive, Suite 44  
West Chester, OH 45380  
Phone: (513) 645-7000  
Fax: (513) 645-7099  
www.contechES.com

August 30 2022

Patricia Craemer  
[cramerwildlife@gmail.com](mailto:cramerwildlife@gmail.com)  
(435)764-1995

**Project:** Park City Wildlife Underpass, Conspan O Series, Park City, UT

The following is a CON/SPAN O-Series Bridge System ENGINEER'S COST ESTIMATE for Conspan O Series. This ESTIMATE is intended for preliminary estimating purposes only and should **not** be interpreted as a final QUOTATION. The information presented is based on the most current data made available to CONTECH.

CONTECH will fabricate and deliver the following described CON/SPAN O-Series Bridge components and appurtenances:

**DESCRIPTION OF SUPPLIED MATERIALS:**

- 54 L.F. of 37'-0" FT. span x 12'-6" FT. rise CON/SPAN O-Series Bridge Precast Concrete units (6 FT. Typical Lay Length)
- 2 precast headwalls
- 4 precast wingwalls with mounting hardware (10' long)
- Joint sealant material
- Masonite shims
- Filter fabric and perforated drain tile
- On-site consultation during installation

**ESTIMATE - \$309,875 Delivered (F.O.B.)**



# Requested Actions from Park City

Save People Save Wildlife requests Park City to collaborate with regional partners on a wildlife crossing structure on SR 224 at McPolin Farm

Commit to ensure inclusion of wildlife mitigation measures as part of the Bus Rapid Transit (BRT) Project to increase motorist safety by reducing wildlife-vehicle collisions and promote wildlife connectivity





Silhouettes placed in Jackson, WY

# Donor Funded Silhouettes

Requested Action  
from Park City

Permission to place 2 elk  
reflective silhouettes on Park  
City land to raise driver  
awareness, and help reduce  
WVC



Work with Staff to place 2 elk  
silhouettes on Park City land