



**South Dakota Department
of Transportation**

U.S. Highway 85 & Colorado Boulevard Intersection Improvements

Project Location: U.S. Highway 85 Intersection with Colorado Boulevard

Project Number: NH-PH0085(110)36

Date: Tuesday, Oct. 28, 2025

Mike Carlson, SDDOT Rapid City Area Engineer

Mark Malone, Project Manager, SDDOT Road Design
Engineering Manager

Mission Statement

We provide a safe and efficient public transportation system.

<https://dot.sd.gov/>

Purpose of the Meeting

Involve the public in
the planning and
design process

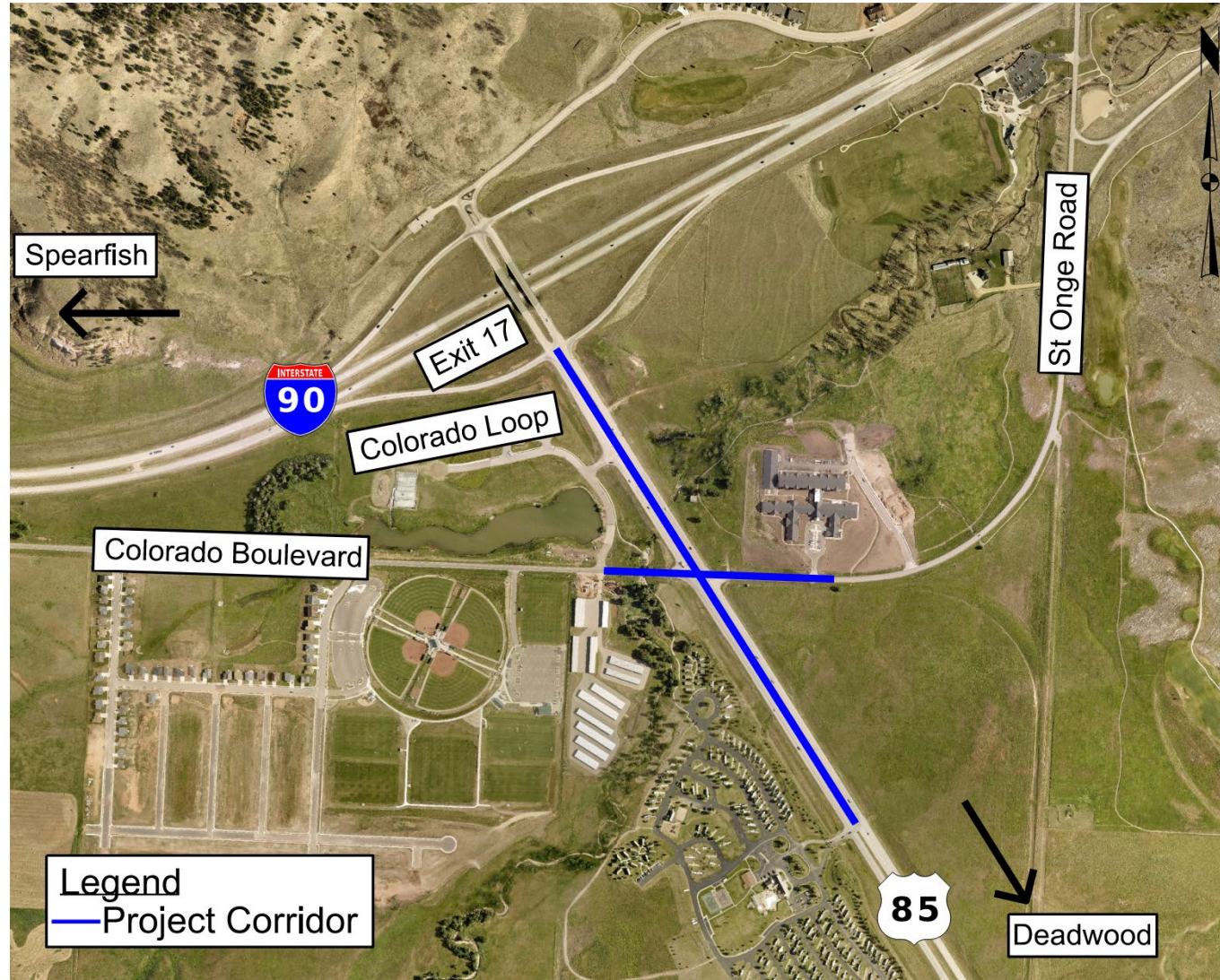
Provide a project
overview

Gather input and
comments



- ✓ **Project Limits**
- ✓ **Background Information**
- ✓ **Proposed Project**
- ✓ **Project Schedule**

Project Limits



Background Information

- **Background Information**
- **U.S. Highway 85 Study in 2024**
 - **Alternatives Reviewed**
 - **Crash History**
 - **Traffic Analysis**

Background Information

Grading and Structures in 1972 for U.S. Highway 85 and 1930s for Colorado Boulevard



Last Surface Improvements in 2011 for U.S. Highway 85



Northbound U.S. Highway 85 Left-Turn Lanes Added in 2017 (Colorado Boulevard and Colorado Loop)



All-Way Stop Control Added in 2022

U.S. Highway 85 Corridor Study – Spearfish to Deadwood

- **Completed June 2024**
 - **Traffic Data and Information**
 - **Crash History**
 - **Purpose and Need**
 - **Alternatives Reviewed**

Crash History

34 Reported crashes

(Five-year period from 2017-2021)

- Twenty-three (23) Angle Intersection Crash
- Three (3) Single Vehicle Crashes
- Five (5) Rear-end Crashes
- One (1) Struck Object/Ran Off-road Crashes
- One (1) Sideswipe Crash
- One (1) Head-on Crash
- One (1) Fatality

Rural Principal Arterial

- Reported Crash Rate = 1.94
- Statewide Weighted Crash Rate = 1.50 (Crashes per Million Vehicle Miles of Travel)

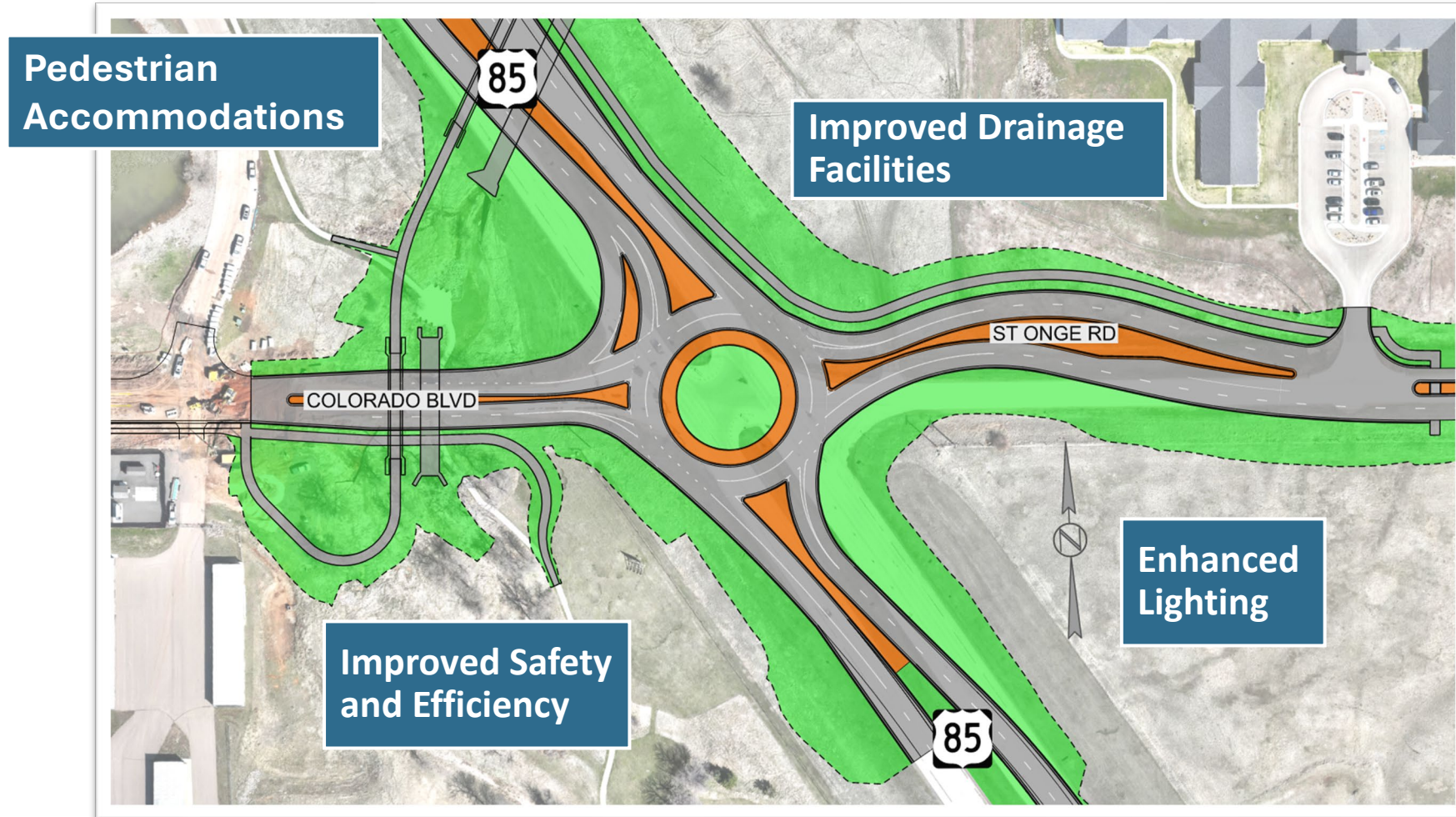
Why This Project is Needed



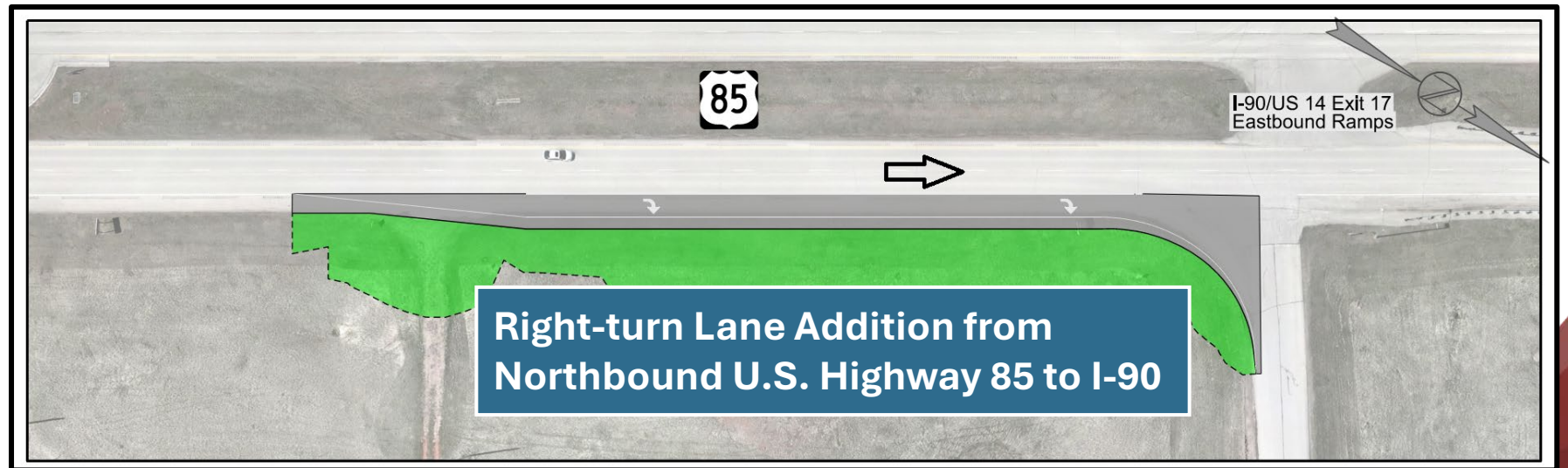
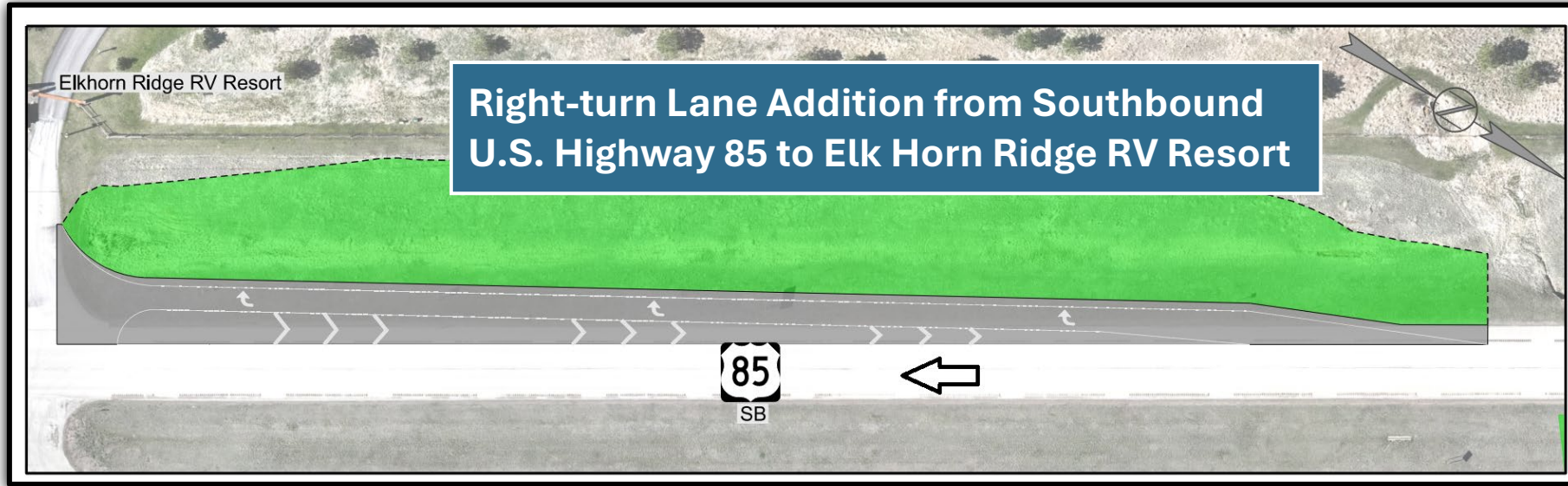
Alternatives Reviewed

- **Signalization with Skew Correction**
- **Reduced Conflict Intersection (RCI)**
- **Roundabout – Chosen Alternative**

Proposed Improvements - Roundabout



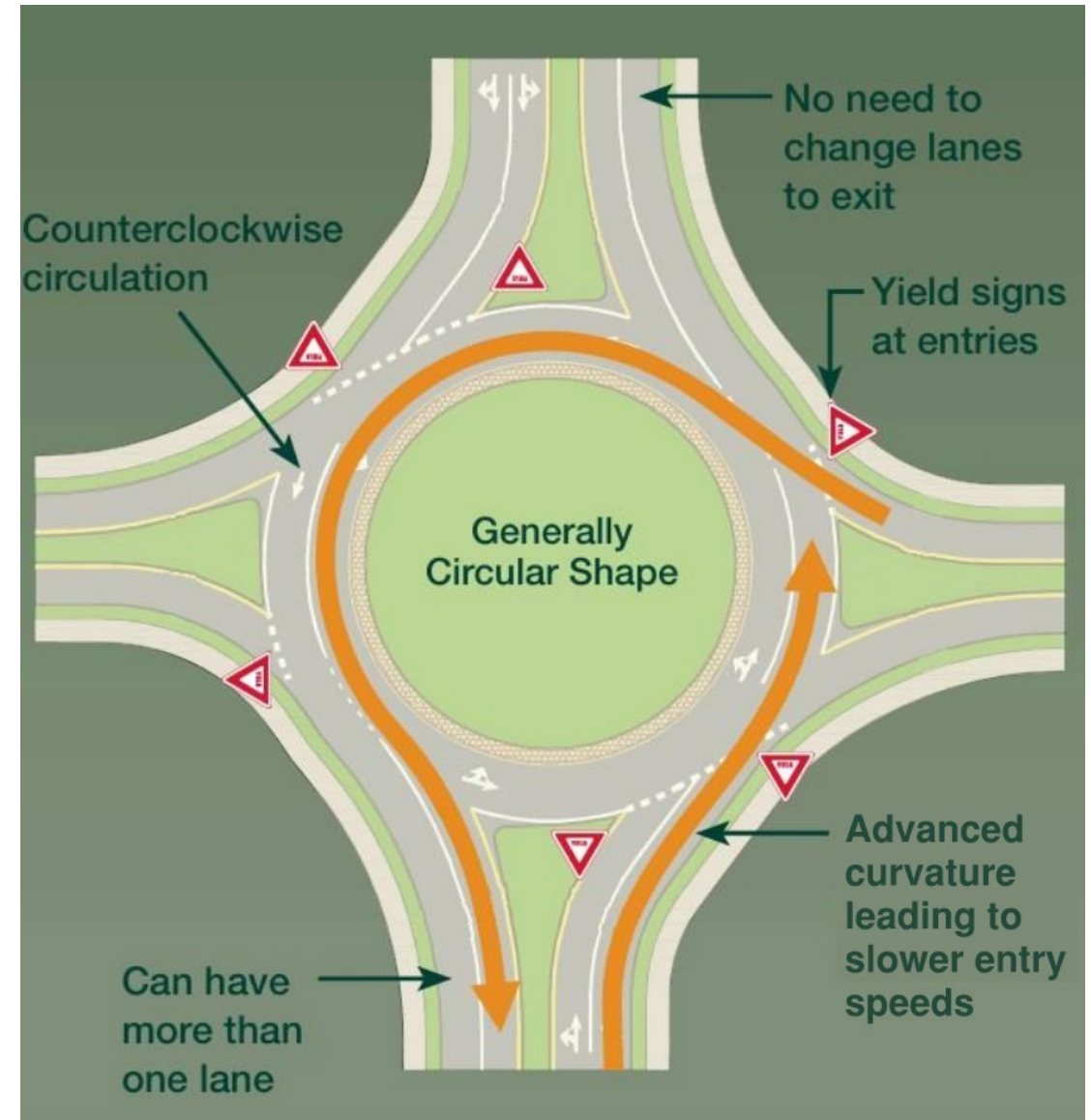
Proposed Improvements - Right-turn Lane Additions



Roundabout Characteristics

- Counterclockwise Circulation
- Single and Multilane Entry Approaches and Through the Roundabout
- Entry Vehicles Yield to Traffic in Roundabout
- Splitter Islands to Slow Entering Vehicle Speeds
- Low Entry Speeds Enhance Safety

Source of Illustration- Modern Roundabouts: A Safer Choice, Federal Highway Administration (FHWA-SA-08-006)



Roundabout Benefits

- Traffic Analysis – Greatest Benefit/Cost Ratio
- Reduces Delay – Vehicles Continually Moving
- Provides Safe Storage for Left-turning Vehicles
- Reduces the Number of Conflict Points for Left-turning Vehicles and for Vehicles Entering the Roadway
- Slows Entering Vehicle Speeds
- Truck Apron Accommodates Large Vehicles
- Reduced Maintenance Costs when Compared to Traffic Signals



✓ See handout

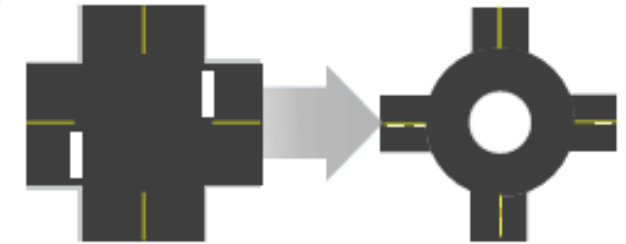
Roundabout Safety Benefits

- Reduces Intersection Conflict Points
- Typical Entry and Circulatory Speeds of 15-25 mph
- Shown to Have Less Collisions than Traffic Signal
- 78-82% Reduction in Severe Crashes
- Reduces the Severity of Collisions Due to Lower Speeds and Flat Angle of Impact
- 76% Reduction in Personal Injuries
- Facilitates More Flexibility in Turning Movements (U-turns)

Source of Illustration: Roundabouts, FHWA
(FHWA-SA-21-042)

Safety Benefits:

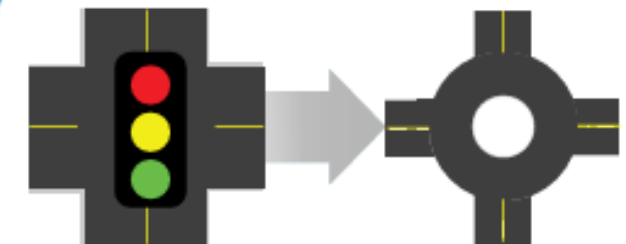
Two-Way Stop-Controlled Intersection to a Roundabout



82%

reduction in fatal
and injury crashes.¹

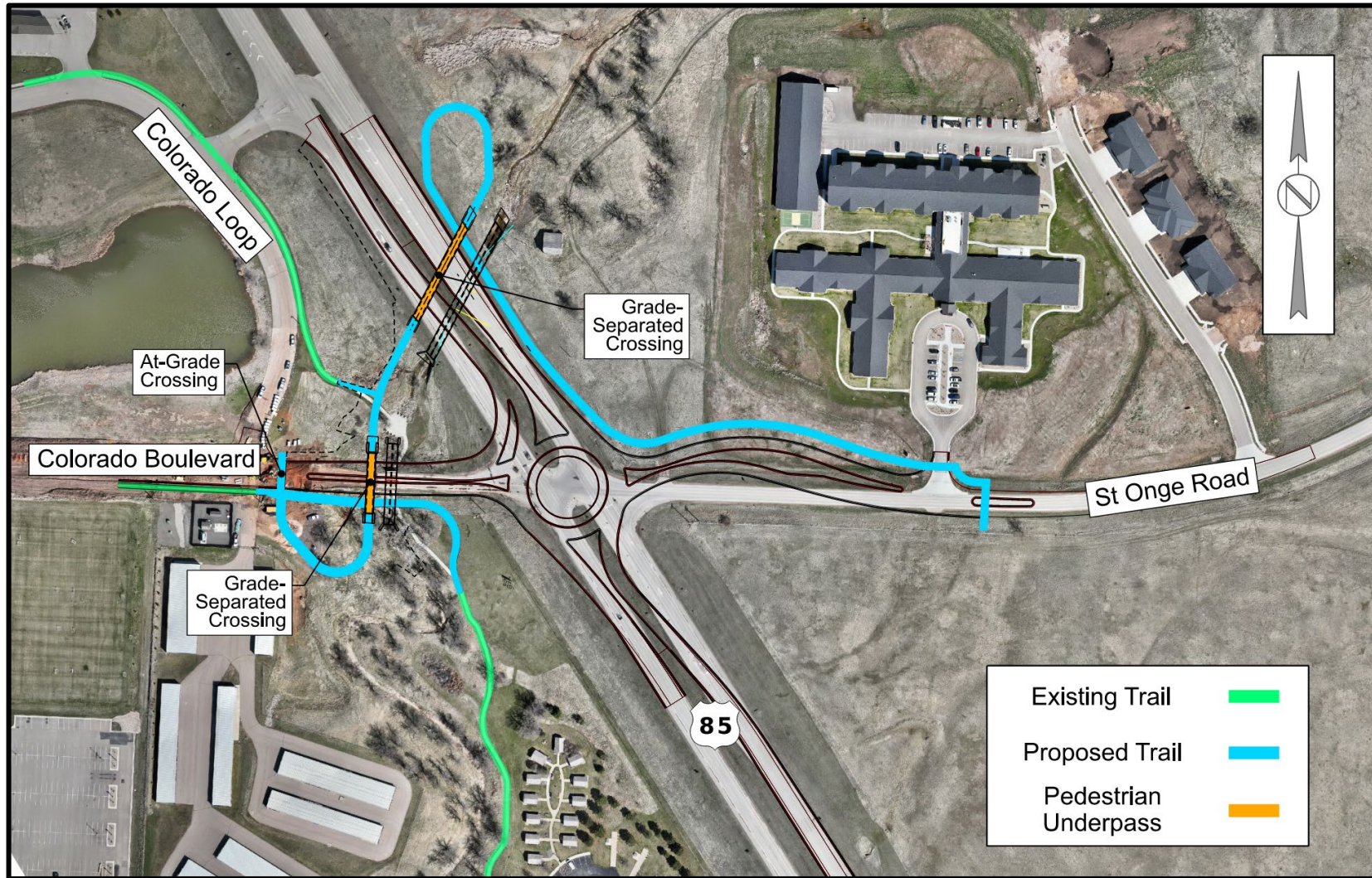
Signalized Intersection to a Roundabout



78%

reduction in fatal
and injury crashes.¹

Proposed Pedestrian Accommodations - Alignments



Roadway Lighting

**Enhanced LED Lighting
Will Be Included at the
Intersection**

Right of Way (ROW)

Existing Width varies 100-360 feet



```
graph TD; A[Existing Width varies 100-360 feet] --> B[Purchase Additional ROW as needed]; B --> C[Temporary Easements as Needed];
```

The diagram is a vertical flowchart with three rectangular boxes. The top box is dark red with white text. A yellow arrow points down from the bottom right of the first box to the top right of the second box. The second box is blue with white text. Another yellow arrow points down from the bottom right of the second box to the top right of the third box. The third box is dark red with white text. The boxes are staggered to the right, creating a descending staircase effect.

Purchase Additional ROW as needed

Temporary Easements as Needed

See handout

Encroachments

Private Property in Public ROW

**Federal Highway
Regulations for Safety**

Examples

- **Signs**
- **Private Use (Parking)**
- **Landscaping**

Notification

**Owners of
encroachments will be
notified by the
Rapid City Area Office.**

See handout

Utility Coordination

**Some utilities may
need to be relocated.**



**Utility companies
negotiate easements
with landowners.**



- **Black Hills Energy**
- **Bluepeak
Communications**
- **Butte Electric Cooperative**
- **City of Spearfish**
- **Lumen Technologies**
- **Midcontinent
Communications**
- **Montana-Dakota Utilities**
- **South Dakota Network**

See handout

Environmental, Social, and Economic Concerns

This project is being developed in accordance with applicable State and Federal environmental regulations.

- **National Environmental Policy Act of 1969 (NEPA), as amended.**
- **Section 106 of the National Historic Preservation Act**

Section 106 of the National Historic Preservation Act requires Federal actions to take into account the effects of project undertakings on historic properties. The public is invited to provide information on any known historic properties. The project occurs inside the boundaries of the Frawley Ranch National Historic Landmark. SDDOT will coordinate effects of the project with the National Park Service and the State Historic Preservation Office.

Environmental, Social, and Economic Concerns

- **Section 404 of the Clean Water Act**

Federal regulations require that wetland impacts caused by highway construction be avoided, minimized, or mitigated. If you are interested in creating or restoring wetlands on your property, please complete the Wetland Mitigation Registry Form in the handouts.

- **Section 4(f) of the USDOT Transportation Act of 1966**

Project development will include all possible planning to avoid and minimize harm to publicly owned parks, recreational areas, wildlife & waterfowl refuges, or public & private historical sites. The public is invited to review and comment on the possible effects on the activities, features, and attributes to: the Spearfish SportsPlex at Skyridge along Colorado Boulevard, west of the project, and to the segment of the Spearfish Bike Trail inside the project limits.

Environmental, Social, and Economic Concerns

- **Section 7 of the Endangered Species Act**

The U.S. Fish and Wildlife Service will review the project to determine if it will impact the following species that are known to occur in Lawrence County:

- Birds: Rufa Red Knot
- Mammals: Northern Long-Eared Bat, Tricolored Bat
- Insects: Monarch Butterfly

Efforts are proceeding to ensure this undertaking will not adversely affect listed species in Lawrence County.

Construction Traffic Control

Two-year Plan

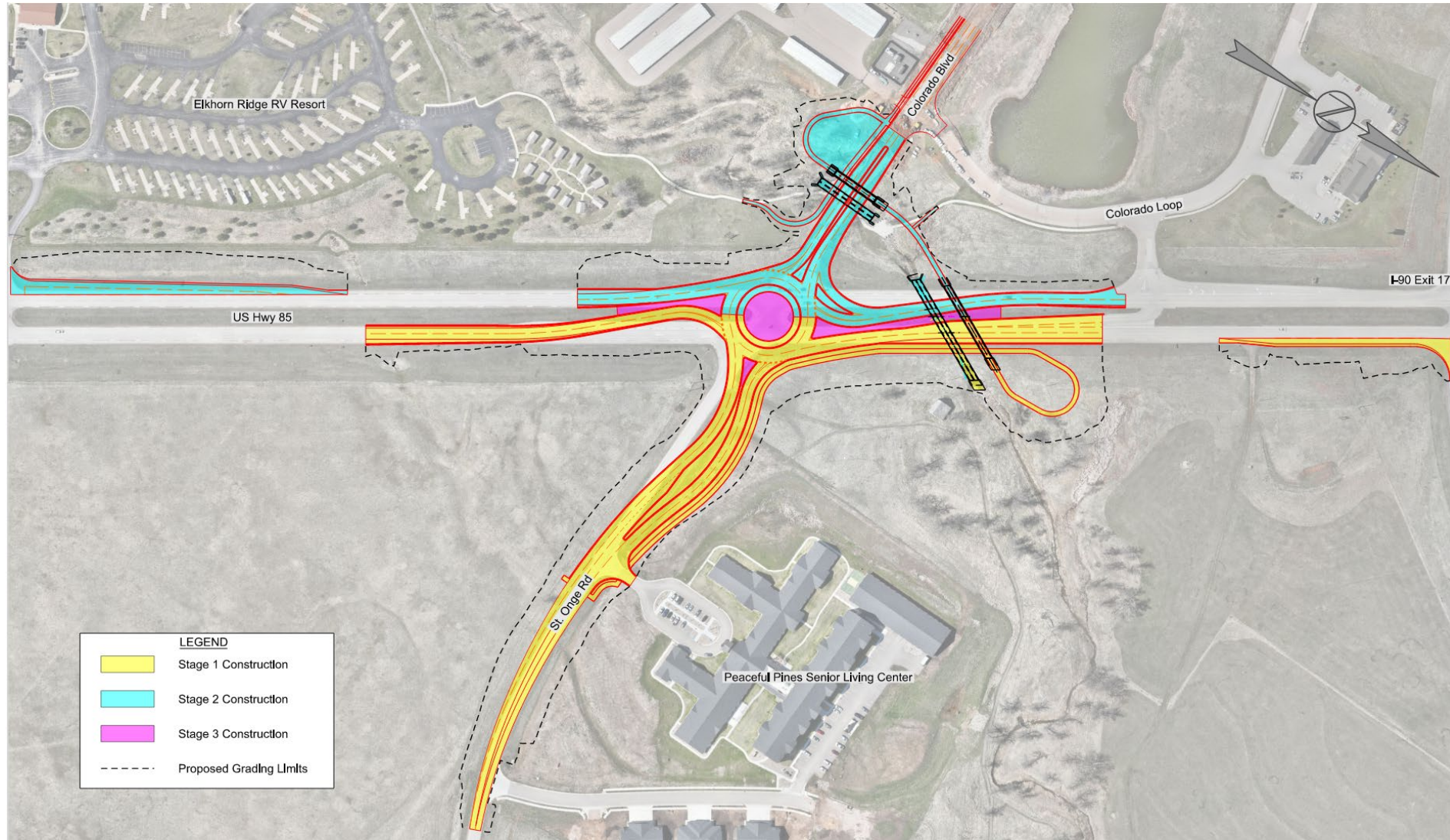
Phase One (1): Northbound U.S. Highway 85
and St. Onge Road

Phase Two (2): Southbound U.S. Highway 85
and Colorado Boulevard



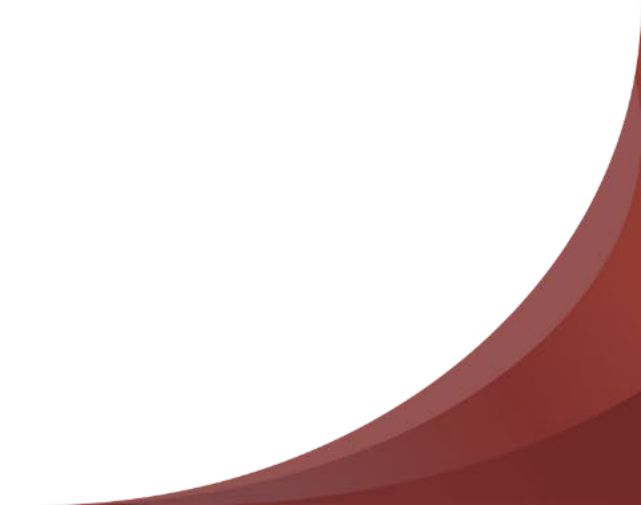
U.S. Highway 85
Open to Traffic
Phased Construction

Preliminary Staging Plan – Main Stages



Landowner Meetings

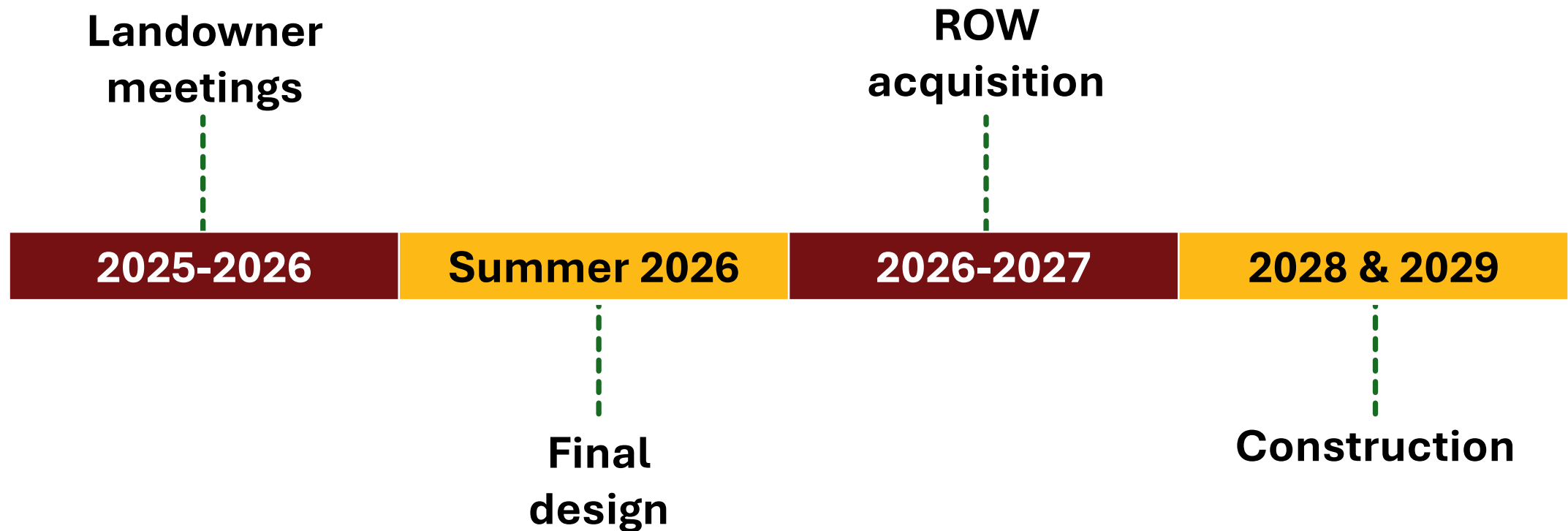
Discussion Items

- Access Locations/Widths
 - Sidewalk and Curb Ramps
 - Fences
 - Drainage
 - Trees
 - Temporary Easements or Partial ROW Acquisition
- 
- A thick, dark red curved shape that starts from the bottom right corner and sweeps upwards and to the left, ending near the bottom center of the slide.

Tentative Project Schedule

Dependent on Federal funding

Estimated cost: \$8.0 – \$8.5 million



Questions or Comments

- Deadline:
Tuesday, Nov. 11, 2025
- Submit To:
Mark Malone, Project Manager
South Dakota Department of Transportation
700 E. Broadway Ave.
Pierre, SD 57501
Mark.Malone@state.sd.us
- Website
<https://dot.sd.gov/projects-studies/projects/public-meetings/#06UH>

