

# Super 2 Highways in Nebraska



## WHAT IS A SUPER 2?

A Super 2 is a two-lane highway that has paved shoulders and passing lanes based on the specific conditions of the highway. Determining the length and spacing of the passing lanes requires considering many different features of the roadway, including the traffic volume, the number of trucks, the terrain, and the types of access points along the highway. The passing lanes generally alternate between the two directions of traffic.

## WHY CONSIDER A SUPER 2?

Super 2s are most often found in more rural areas and have some level of access control, which means there are a limited number of driveways and roads directly connected to the highway.

**Improved traffic operations.** Upgrading a two lane highway to a Super 2 provides more convenient passing opportunities that weren't there before. A Super 2 can be a major improvement for roadways where there are limited opportunities to pass or there is slower moving traffic.

**Improved cost effectiveness.** Super 2s provide an alternate solution to address the transportation challenge. In many cases, constructing a Super 2 can provide substantial improvements for a community or region at a reduced cost compared to a four-lane highway. When looking at the many needs, building a Super 2 can maximize the transportation improvements that can be made across the state.

### SEND COMMENTS TO

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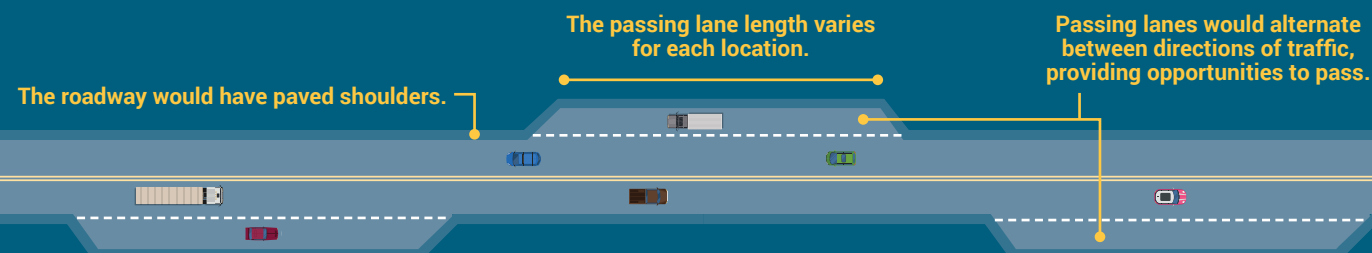
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For illustration purposes only. Each highway would be evaluated for its specific needs based on terrain, access points, and other site-specific conditions.

## PROJECT INFORMATION FACT SHEET

# McCook – North Platte

Project No S-83-1(1027) | Control No 71210

June 5, 2018 | 5:00 to 7:00 p.m.

McCook Municipal Building / Fire Department Training Room  
505 West C St., McCook, NE

June 6, 2018 | 5:00 to 7:00 p.m.

North Platte Holiday Inn Express  
300 Holiday Frontage Road, North Platte, NE

## ABOUT THE PROJECT

This project would improve approximately 60 miles of U.S. Highway 83 (US-83), located in Red Willow, Frontier and Lincoln Counties. The proposed project would begin approximately a half mile north of the corporate limits of McCook, at about mile marker (MM) 18.15, and extend north to about MM 76.71 where the existing divided highway begins, approximately three miles south of the corporate limits of North Platte. Construction may begin and/or end approximately 500 feet ahead of or beyond the actual project limits to accommodate phasing and transitioning the pavement.

## SCOPE OF WORK

The existing roadway on this segment of US-83 consists of two asphalt lanes and paved shoulders. NDOT would construct this project using a Super 2 approach which involves using the existing two lanes of highway in place and adding passing lanes adjacent to the existing lanes to provide passing opportunities. A resurfacing, restoration, and rehabilitation (3R) strategy would be used to preserve the existing two lanes.

Grading would be required at spot locations where culverts are extended, areas of guardrail work, bridge work and where passing lanes are added. Grading would also be required for the length of this project to accommodate a grade raise for resurfacing. Existing bridges would be assessed and used in place, rehabilitated, or replaced as necessary.

## PURPOSE AND NEED

The purpose of this project is to preserve the transportation asset, improve the reliability of the transportation system and perpetuate the mobility of the traveling public. The need for this project is based on the condition of existing roadways and bridges. Pavement preservation activities are required on US-83 to extend the life of the pavement.

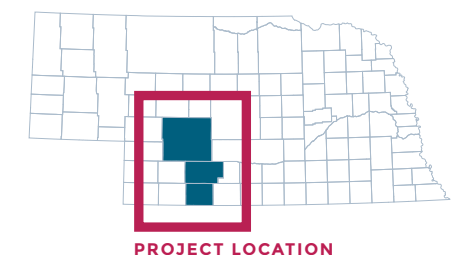
The need for passing lanes is to improve the connectivity between McCook and North Platte and reduce delay on US-83 due to significant truck traffic and terrain.

## WHY IT WAS SELECTED

**Meets a long-term regional need.** The hills and valleys along this corridor can cause sight distance issues and limit a driver's opportunity to pass. The seasonal fog and agricultural traffic along the route compound those challenges. This project would add passing lanes on US-83 from McCook to North Platte. Participants across the state in the project prioritization meetings held under NDOT's Build Nebraska Act and Transportation Innovation Act stated that communities have been looking forward to seeing improvements on US-83. While their preference would be for a four-lane highway, stakeholders recognized that option is not financially feasible at this time, and upgrading to a Super 2 would be a substantial improvement. Utilizing a Super 2 approach, NDOT ranked this project in the top 25 percent for both engineering and economic performance according to NDOT's prioritization process.

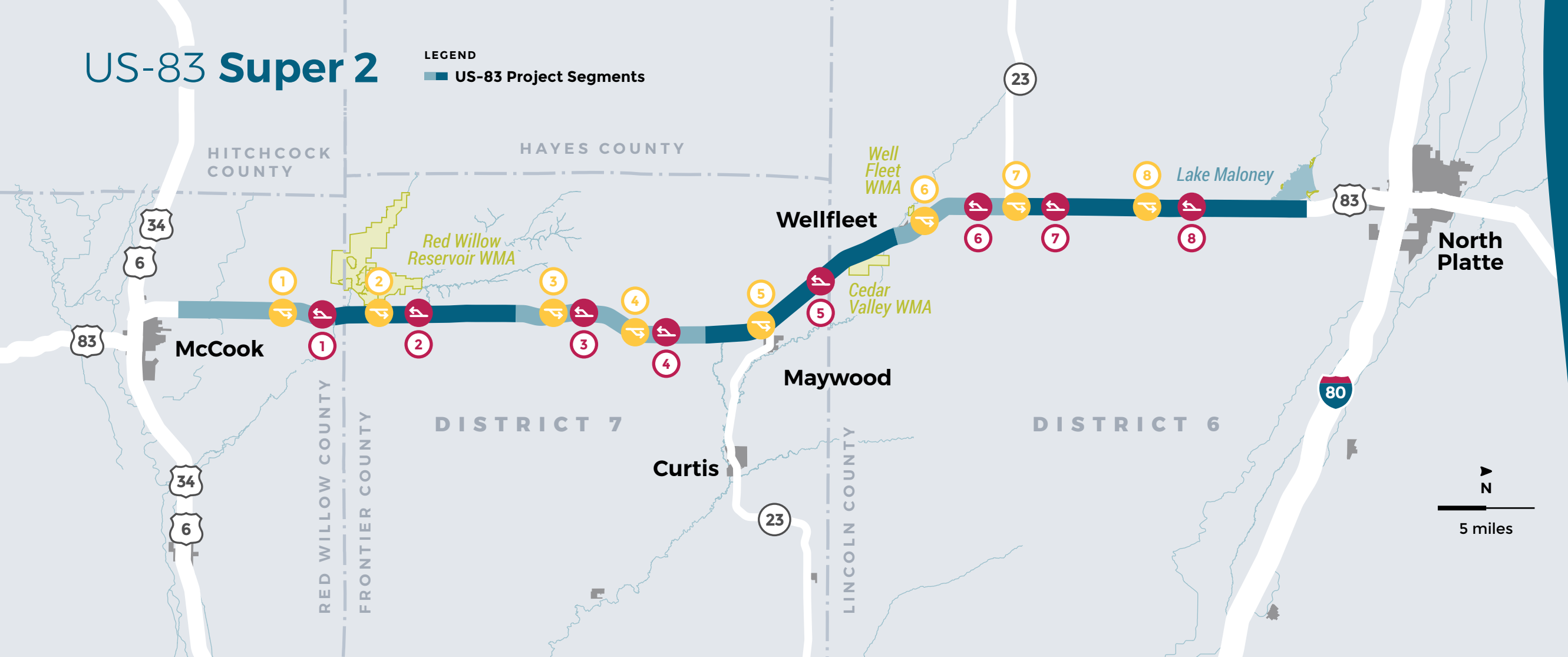
**Supports Regional Commerce.** This project would improve connectivity between two major west/west central communities: McCook and North Platte. It would also enhance connectivity to the interstate, which would be beneficial to regional commerce. It's anticipated that the improvement of this route would facilitate additional freight movement between I-80 in Nebraska and I-70 in Kansas.

**Local and regional support.** This project was named a top priority at two of NDOT's regional meetings, showcasing its broad appeal. Stakeholders have continually stressed that this project would benefit multiple communities.



# US-83 Super 2

LEGEND  
 US-83 Project Segments



## PROPOSED PASSING LANE LOCATIONS

- SOUTHBOUND**
- 1 MM24.74 to MM25.97 (Existing)
  - 2 MM29.74 to MM30.74
  - 3 MM37.96 to MM38.96
  - 4 MM41.84 to MM42.84
  - 5 MM49.99 to MM50.99
  - 6 MM59.42 to MM60.42
  - 7 MM63.75 to MM64.75
  - 8 MM70.53 to MM71.53
- NORTHBOUND**
- 1 MM22.85 to MM23.85
  - 2 MM27.68 to MM28.68
  - 3 MM36.51 to MM37.51
  - 4 MM40.22 to MM41.22
  - 5 MM48.17 to MM49.17
  - 6 MM57.58 to MM58.58
  - 7 MM61.82 to MM62.82
  - 8 MM68.34 to MM69.34

### ACCOMMODATING TRAFFIC

This project would be constructed under traffic with lane closures controlled by appropriate traffic control devices and practices.

### POTENTIAL IMPACTS

Potential impacts to environmental resources would be evaluated as the proposed project design progresses. These resources include, but are not limited to, environmental justice/civil rights, cultural resources, historic properties, publicly owned recreations properties (Section 4(f)), endangered and threatened species, hazardous materials, water quality, and other water resources, including wetlands.

### ESTIMATED PROJECT COST

The cost of this project is approximately \$51 million (based on 2018 dollars) and would derive from federal and state funding sources.

### RIGHT-OF-WAY

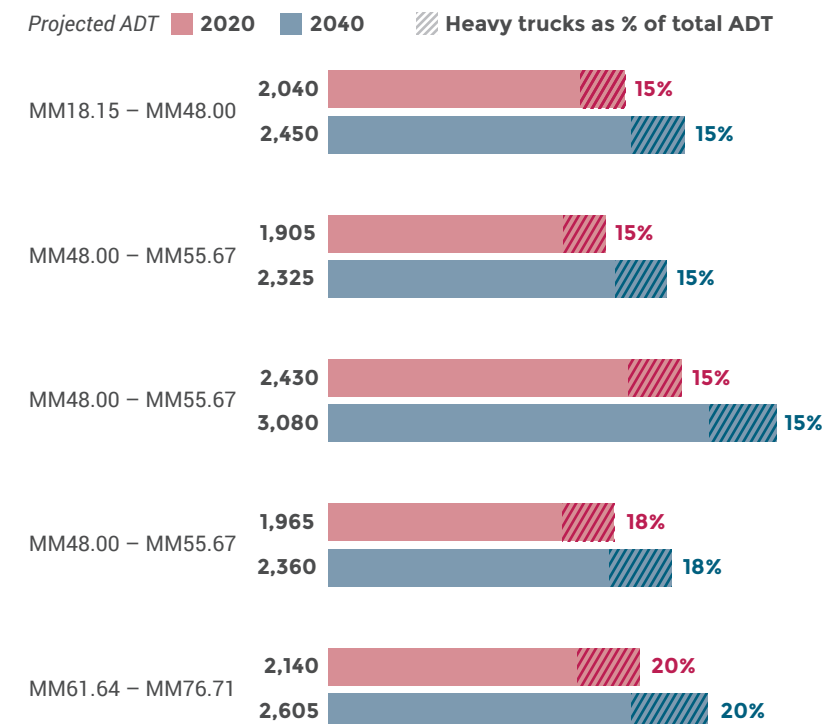
This project would require the acquisition of additional property rights which could include new right-of-way (ROW), control of access (CA), permanent easements (PE), and/or temporary easements (TE). Access to adjacent properties would be maintained during construction. Access to driveways may be limited due to phasing requirements.

### CONSTRUCTION SCHEDULE

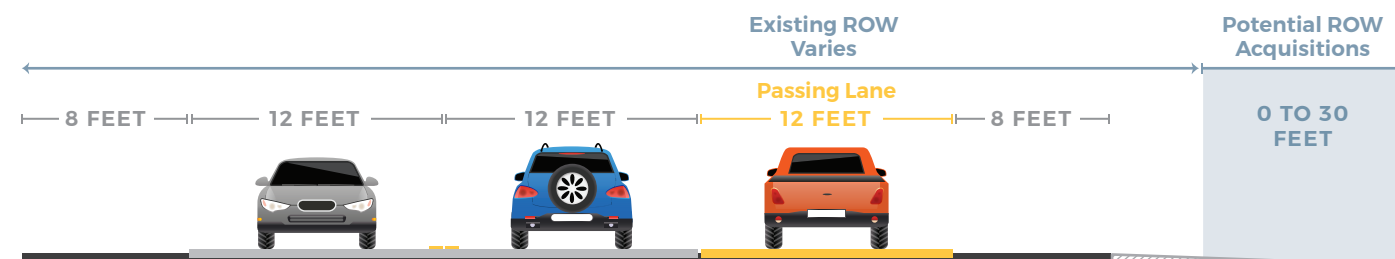
Construction of the passing lanes would be phased to coincide with planned pavement preservation activities anticipated to begin in 2020.

### TRAFFIC VOLUMES

Average Daily Traffic (ADT) is the average number of vehicles traveling a roadway within a 24-hour period.



### WHAT DOES A PASSING LANE LOOK LIKE?



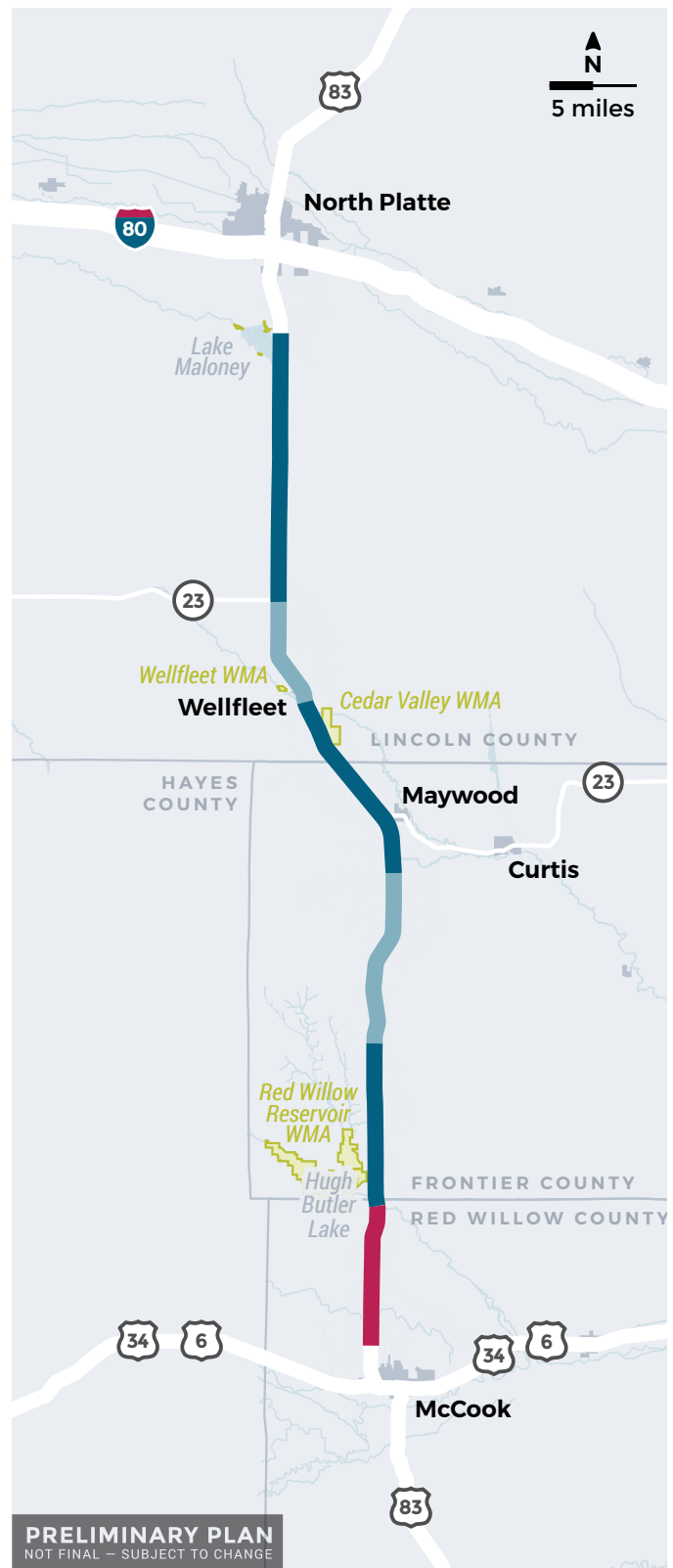
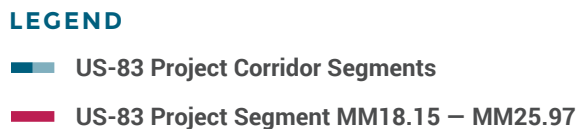
**PRELIMINARY PLAN**  
 NOT FINAL – SUBJECT TO CHANGE

*These illustrations depict preliminary design for the future US-83 Improvements. The passing lane locations, estimated right-of-way limits, and estimated construction cost shown for this project are based on the most current information available but may be changed in the future to accommodate the final design. These illustrations are current as of June 5, 2018 and are subject to change without notice.*

## US-83 McCook – North Platte

**MM 18.15 – 25.97**

This segment is 8 miles of US-83 in Red Willow County between the north corporate limits of McCook and Red Willow Creek. This resurfacing, restoration and rehabilitation (3R) project would resurface the existing roadway and add a passing lane in the northbound direction. The cost of this segment is approximately \$6 million (based on 2018 dollars) and would derive from federal and state funding sources.



# US-83 McCook – North Platte

## MM 18.15 – 25.97

### KEY FEATURES

#### Existing Southbound Passing Lane

The existing passing lane in the southbound direction of travel is located between Road 723 and Red Willow Creek. This existing passing lane would be preserved to provide passing opportunities between the Red Willow State Recreation Area (SRA) and McCook. This passing lane is for slower moving traffic or large vehicles on the steep upgrade.




#### McCook

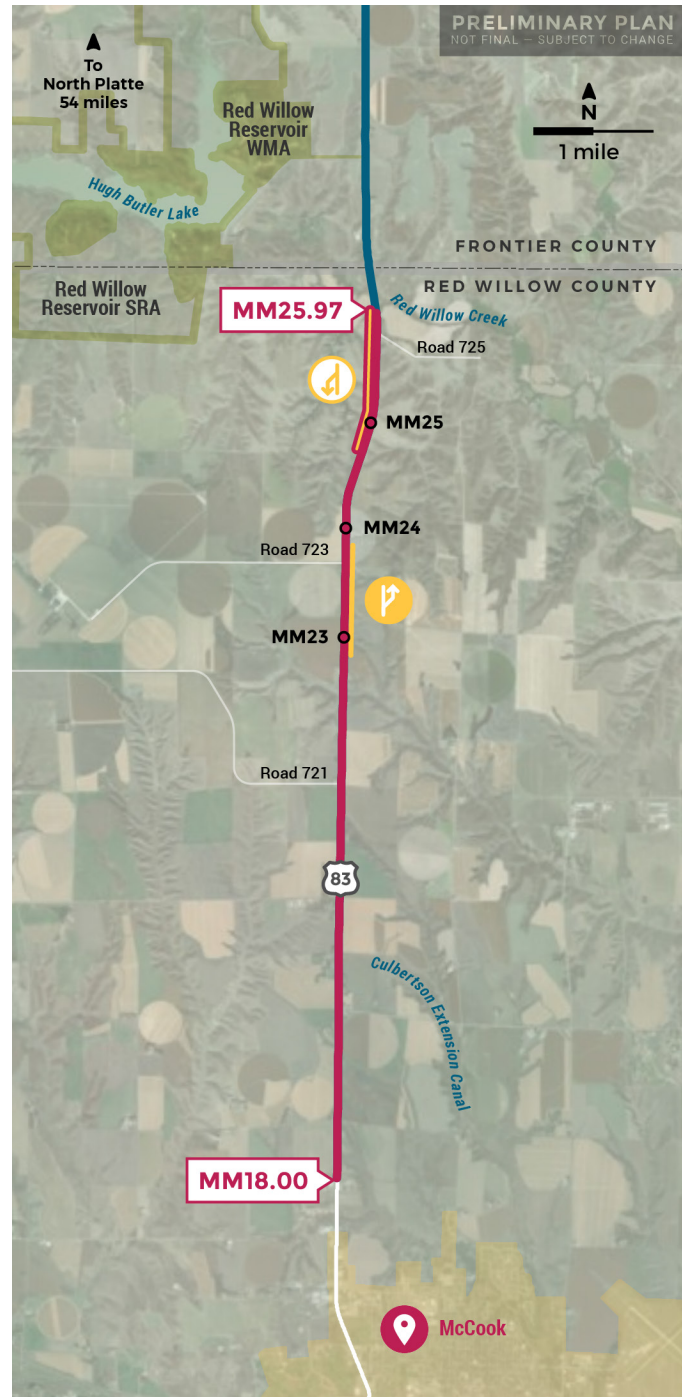
US-83 transitions to an existing 3-lane section at the southern end of the project near the northern corporate limits of McCook. US-83 is a link to the vitality of McCook. Improvements to US-83 would enhance connectivity to the interstate, which would be beneficial to regional commerce.

#### Passing Lane Opportunity

A passing lane in the northbound direction of travel is proposed near Road 723. Passing Lanes reduce delay and improve driver mobility by providing an opportunity to pass slower moving or large vehicles, common in this US-83 corridor.

### LEGEND

-  US-83 Project Segment MM18.15 – MM25.97
-  Proposed Passing Lane
-  US-83 Project Corridor



## US-83 McCook – North Platte

**MM 25.97 – 35.00**

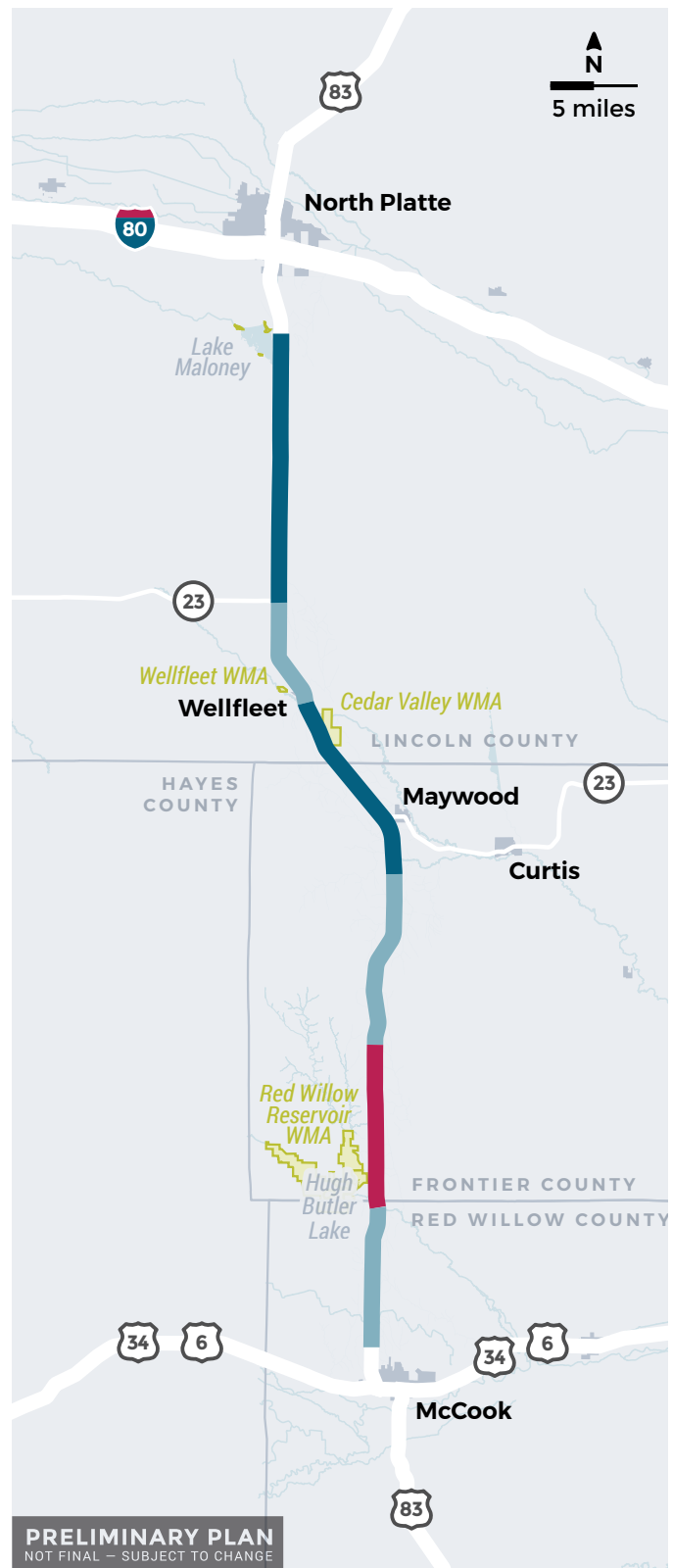
This segment is 9 miles of US-83 in Red Willow and Frontier Counties from approximately Red Willow Creek to the intersection of US-83 and Road 735. This resurfacing, restoration and rehabilitation (3R) project would resurface the existing roadway and add a pair of passing lanes, one in the southbound direction and one in the northbound direction. The cost of this segment is approximately \$8 million (based on 2018 dollars) and would derive from federal and state funding sources.

### TIMELINE



### LEGEND

- US-83 Project Corridor Segments
- US-83 Project Segment MM25.97 – MM35.00



# US-83 McCook – North Platte

## MM 25.97 – 35.00

### KEY FEATURES

#### **Hugh Butler Lake**

Located on US-83 eight miles north of McCook, Hugh Butler Lake and Red Willow Reservoir Wildlife Management Area (WMA) are part of the Red Willow State Recreation Area (SRA). Red Willow SRA has excellent facilities for camping and water-oriented recreation, generating a significant percentage of visitors with large vehicles, trailers, and recreational vehicles. These vehicles require additional distance for acceleration or deceleration.




#### **Bridge over Red Willow Creek**

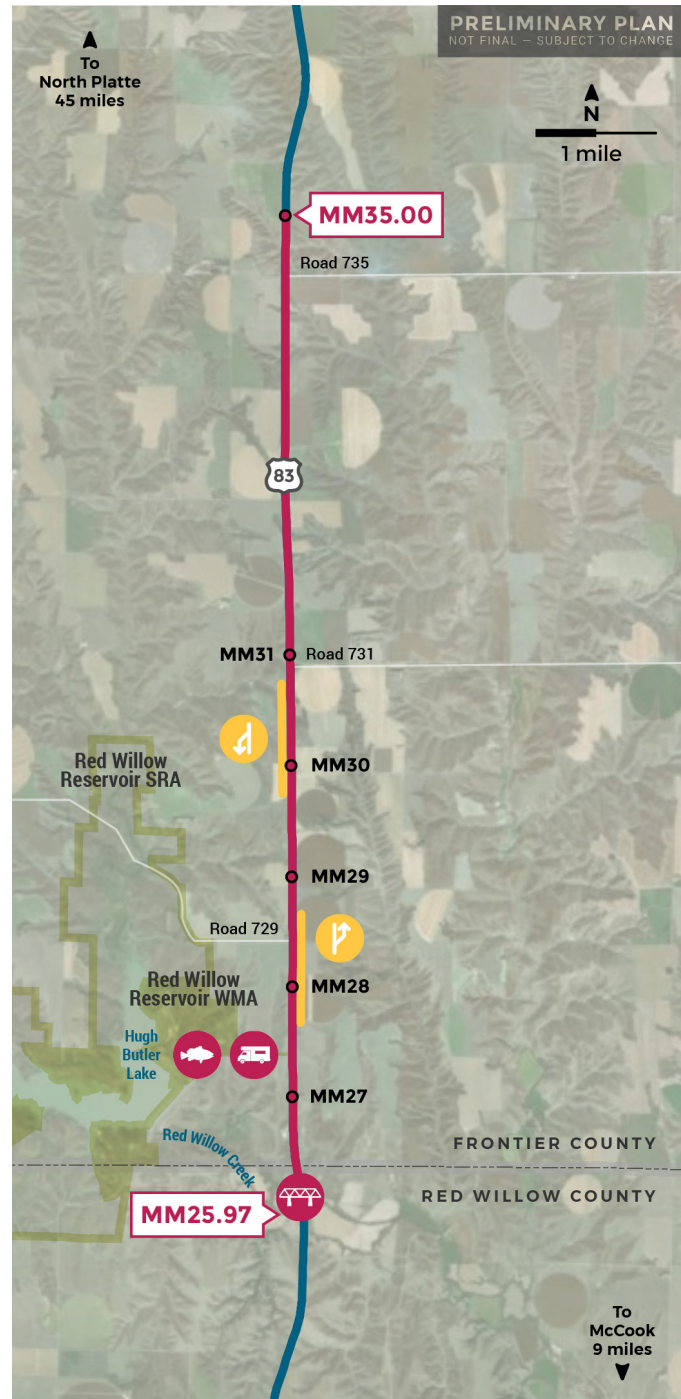
Located on US-83 at MM 26.04, the existing bridge over Red Willow Creek is proposed to remain in place. New guardrail and surface deck repairs are anticipated for this bridge.

#### **Passing Lane Opportunity**

A passing lane in the northbound direction of travel is proposed near Road 729. A passing lane in the southbound direction of travel is proposed just south of Road 731. Passing Lanes reduce delay and improve driver mobility by providing an opportunity to pass slower moving or large vehicles, common in this US-83 corridor.

### LEGEND

-  US-83 Project Segment MM25.97 – MM35.00
-  Proposed Passing Lane
-  US-83 Project Corridor



## US-83 McCook – North Platte

**MM 35.00 – 44.75**

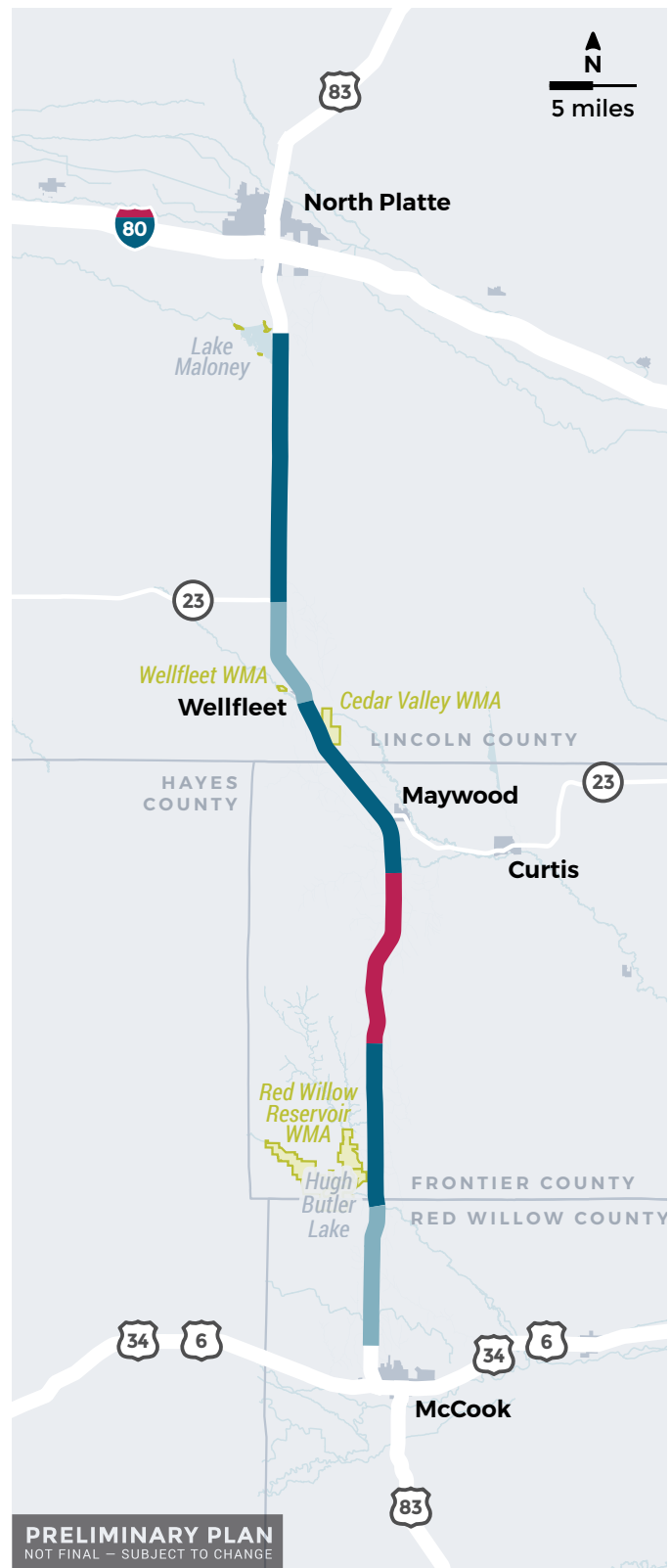
This segment is 10 miles of US-83 in Frontier County between the intersection of US-83 and Road 735 and the intersection of US-83 and Road 743. This resurfacing, restoration and rehabilitation (3R) project would resurface the existing roadway and add four passing lanes, two in the southbound direction and two in the northbound direction. The cost of this segment is approximately \$10 million (based on 2018 dollars) and would derive from federal and state funding sources.

### TIMELINE



### LEGEND

- US-83 Project Corridor Segments
- US-83 Project Segment MM35.00 – MM44.75



# US-83 McCook – North Platte

## MM 35.00 – 44.75

### KEY FEATURES

#### Bridge over Frazier Creek

Located on US-83 at MM 42.89, the existing bridge sized box culvert at Frazier Creek is proposed to remain in place. New guardrail is anticipated in this location.




#### Pavement Distress

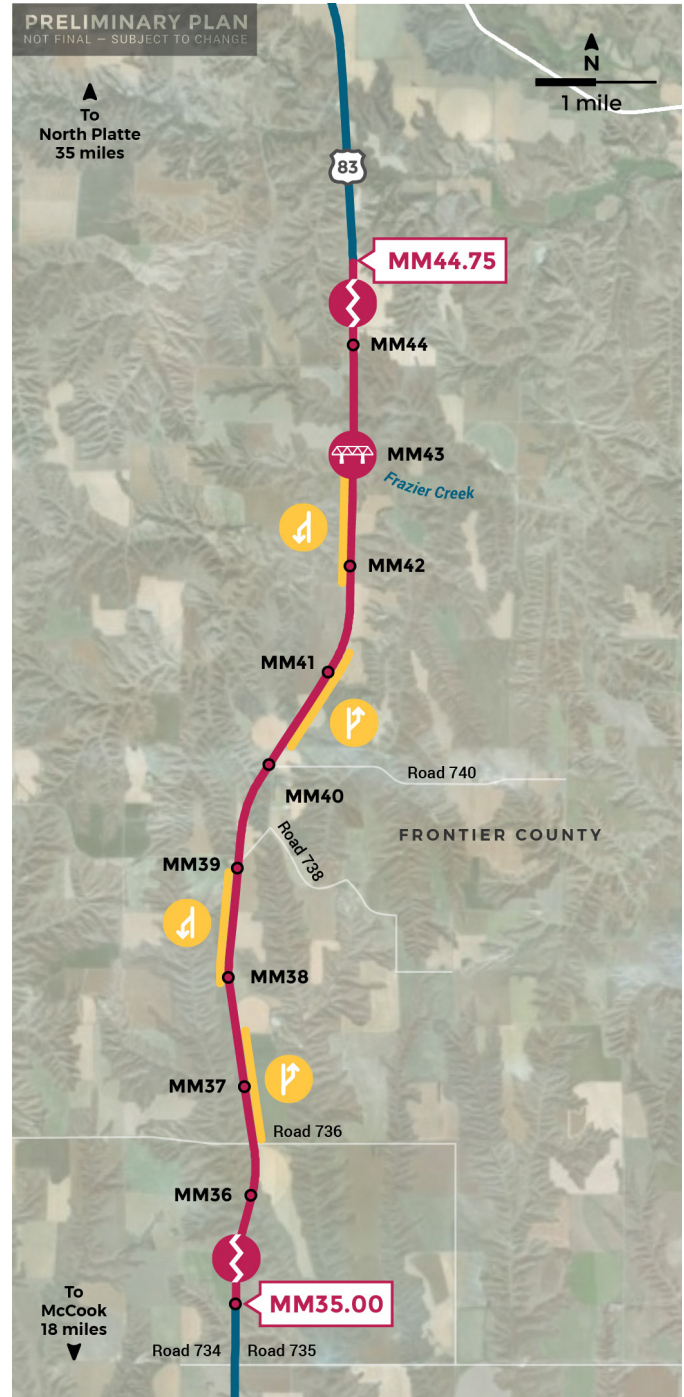
The pavement distresses present on this section of US-83 are significant enough to warrant rehabilitation in the next two to six years. The existing roadway has large areas of patching. Pavement preservation activities are required on this segment of US-83 to extend the life of the pavement.

#### Passing Lane Opportunity

Two passing lanes in the northbound direction of travel are proposed, one just north of Road 736 and one just north of Road 740. Two passing lanes in the southbound direction of travel are proposed, one just south of Road 738 and one just south of Frazier Creek. Passing lanes reduce delay and improve driver mobility by providing an opportunity to pass slower moving or large vehicles, common in this US-83 corridor.

### LEGEND

-  US-83 Project Segment MM35.00 – MM44.75
-  Proposed Passing Lane
-  US-83 Project Corridor





## US-83 McCook – North Platte

**MM 44.75 – 55.76**

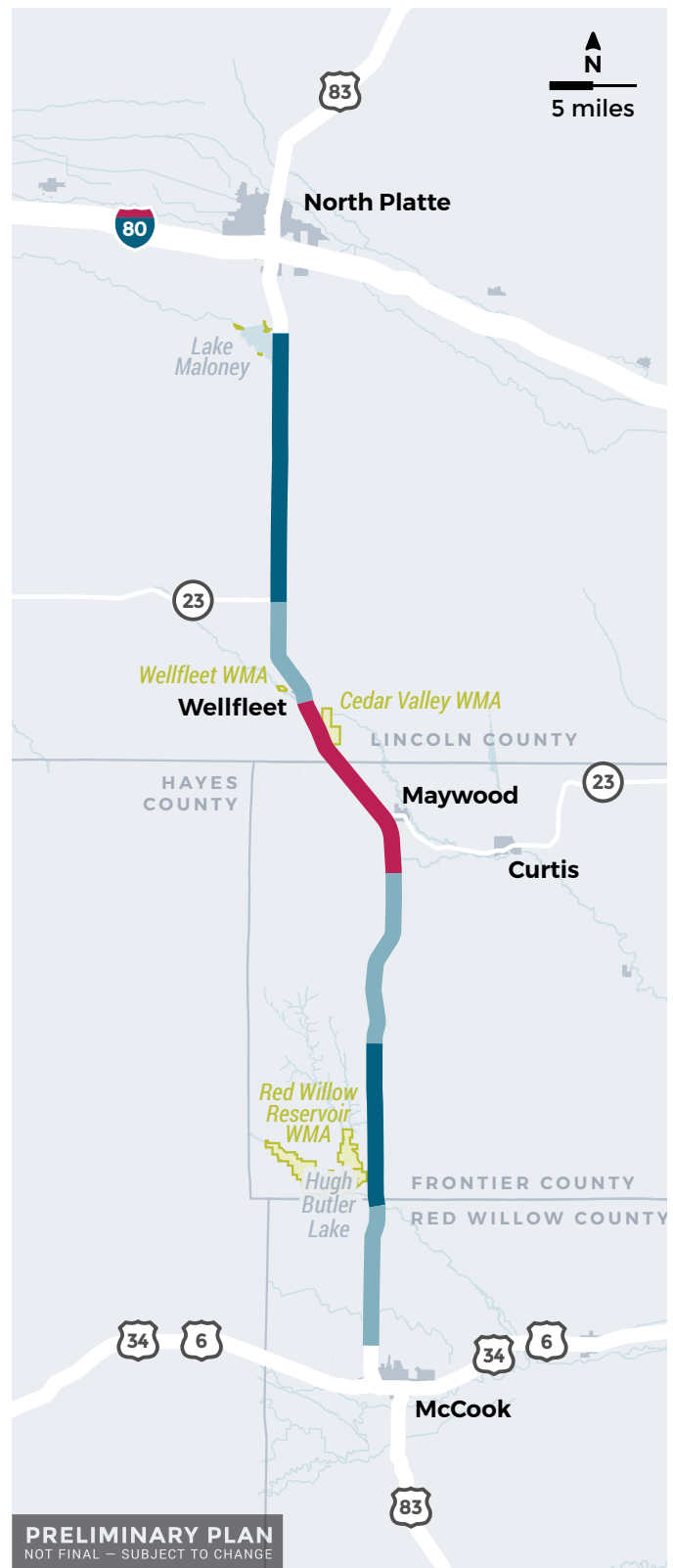
This segment is 11 miles of US-83 in Frontier and Lincoln Counties between the intersection of US-83 and Road 743 and the Nebraska, Kansas, Colorado Railway south of Wellfleet. This resurfacing, restoration and rehabilitation (3R) project would resurface the existing roadway and add a pair of passing lanes, one in the southbound direction and one in the northbound direction. The cost of this segment is approximately \$10 million (based on 2018 dollars) and would derive from federal and state funding sources.

### TIMELINE



### LEGEND

- US-83 Project Corridor Segments
- US-83 Project Segment MM44.75 – MM55.76



## US-83 McCook – North Platte

MM 44.75 – 55.76

### KEY FEATURES

#### NCKR Railway

Located just south of Wellfleet, the Nebraska, Kansas, Colorado Railway intersects US-83.

#### Bridge over Medicine Creek

Located on US-83 at MM 55.19, the existing bridge over Medicine Creek is proposed to remain in place. New guardrail is anticipated for this bridge.

#### South Junction of US-83 and N-23

Located just west of Maywood, the south junction of N-23 links the communities of Maywood and Curtis, home of the Nebraska School of Technical Agriculture, to the US-83 corridor.


#### Bridge over Brushy Creek

Located on US-83 at MM 46.10, the existing bridge over Brushy Creek is proposed to be removed and replaced. The new structure width is anticipated to match the abutting roadway sections.

#### Passing Lane Opportunity

A passing lane in the northbound direction of travel is proposed between the south junction of N-23 and Road 748. A passing lane in the southbound direction of travel is proposed just north of Road 748. Passing Lanes reduce delay and improve driver mobility by providing an opportunity to pass for use by slower moving or large vehicles, common in this US-83 corridor.

### LEGEND

-  US-83 Project Segment MM44.75 – MM55.76
-  Proposed Passing Lane
-  US-83 Project Corridor



## US-83 McCook – North Platte

**MM 55.76 – 61.82**

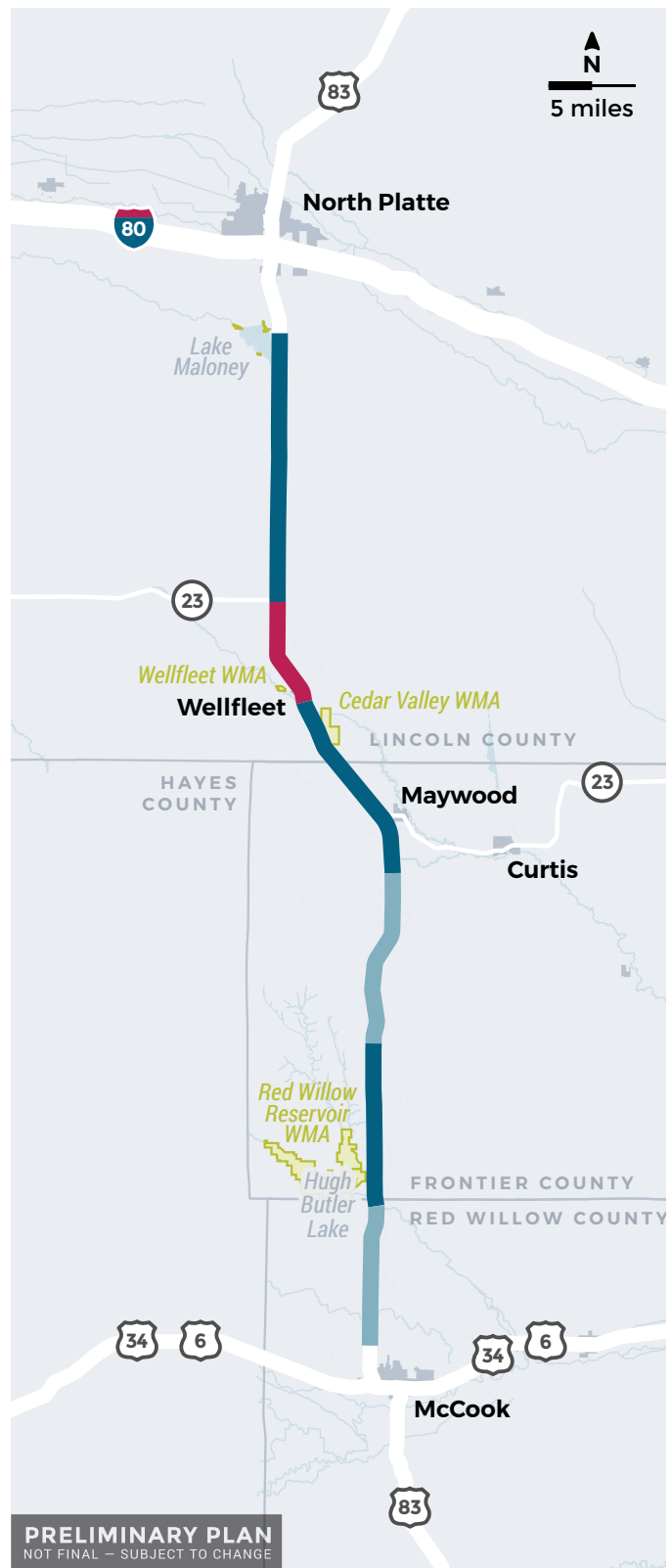
This segment is 6 miles of US-83 in Lincoln County between the Nebraska, Kansas, Colorado Railway south of Wellfleet and the north junction of US-83 and N-23. This resurfacing, restoration and rehabilitation (3R) project would resurface the existing roadway and add a pair of passing lanes, one in the southbound direction and one in the northbound direction. The cost of this segment is approximately \$5 million (based on 2018 dollars) and would derive from federal and state funding sources.

### TIMELINE



### LEGEND

- US-83 Project Corridor Segments
- US-83 Project Segment MM55.76 – MM61.82



# US-83 McCook – North Platte

## MM 55.76 – 61.82

### KEY FEATURES

#### North Junction of US-83 and N-23

Located north of Wellfleet, the north junction of N-23 serves as an important agricultural linkage to US-83. Traffic from agricultural operations are prevalent in the US-83 corridor between McCook and North Platte. Farm equipment, trucks, and other large vehicles require additional distance for acceleration and deceleration.




#### Wellfleet WMA

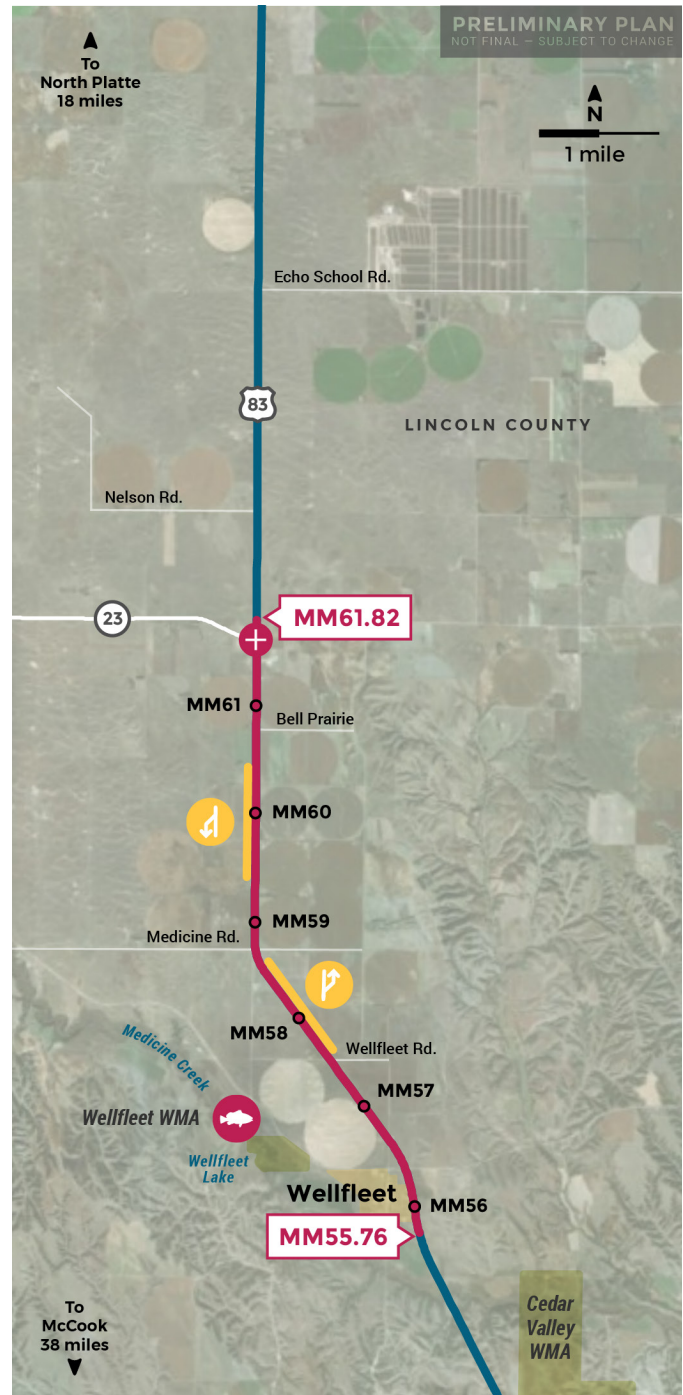
Located just west of Wellfleet, Wellfleet Lake and Wellfleet Wildlife Management Area (WMA) host public fishing and hunting generating visitors with large vehicles and trailers. These vehicles require additional distance for acceleration or deceleration.

#### Passing Lane Opportunity

A passing lane in the northbound direction of travel is proposed between Wellfleet Road and Medicine Road. A passing lane in the southbound direction of travel is proposed between Medicine Road and Bell Prairie. Passing Lanes reduce delay and improve driver mobility by providing an opportunity to pass slower moving or large vehicles, common in this US-83 corridor.

### LEGEND

-  US-83 Project Segment MM55.76 – MM61.82
-  Proposed Passing Lane
-  US-83 Project Corridor



## US-83 McCook – North Platte

**MM 61.82 – 76.71**

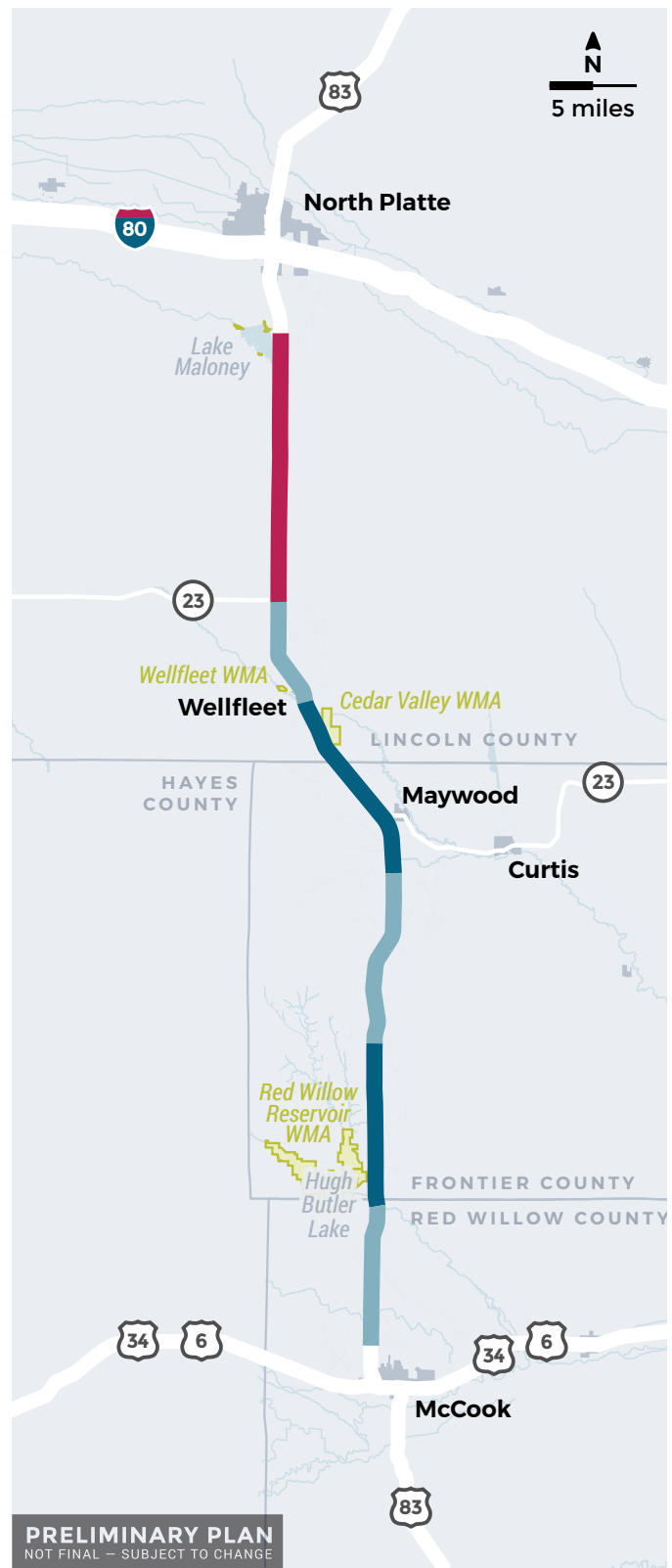
This segment is 15 miles of US-83 in Lincoln County between the north junction of US-83 and N-23 and the intersection of US-83 and North Lake Road. This resurfacing, restoration and rehabilitation (3R) project would resurface the existing roadway and add four passing lanes, two in the southbound direction and two in the northbound direction. The cost of this segment is approximately \$12 million (based on 2018 dollars) and would derive from federal and state funding sources.

### TIMELINE



### LEGEND

- US-83 Project Corridor Segments
- US-83 Project Segment MM61.82 – MM76.71



# US-83 McCook – North Platte

## MM 61.82 – 76.71

### KEY FEATURES

#### Lake Maloney

Located on US-83 six miles south of North Platte, Lake Maloney is popular for boating, fishing, water sports and camping. As part of the Lake Maloney State Recreation Area (SRA), a significant percentage of visitors to the SRA have large vehicles, trailers, and recreational vehicles that require additional distance for acceleration or deceleration.




#### NuStar Energy

Located on US-83 eight miles south of North Platte, NuStar Energy serves approximately 150 trucks per day. Large vehicles require additional distance for acceleration and deceleration.

#### Passing Lane Opportunity

Two passing lanes in the northbound direction of travel are proposed, one between the north junction of N-23 and Nelson Road and one just north of Lone Star Road. Two passing lanes in the southbound direction of travel are proposed, one just south of Echo School Road and one between White Road and Kaneb Road. Passing lanes reduce delay and improve driver mobility by providing an auxiliary lane for use by slower moving or large vehicles, common in this US-83 corridor.

### LEGEND

-  US-83 Project Segment MM61.82 – MM76.71
-  Proposed Passing Lane
-  US-83 Project Corridor

