PUBLIC SURVEY RESULTS

The public survey posed 37 questions relating to the existing transportation network in Union County. A total of 22 surveys were completed and 2 individual comments were submitted outside of the survey. Some of the results and comments from the survey are shown below.

SAFETY FEEDBACK – SPECIFIC CONCERNS

- “Speeding, texting/calls on cell phones.”
- “Steep ditches in places. Small shoulders.”
- “Distracted drivers and wild animals on the roads.”
- “Asphalt roads are rough, too many tar joints (dangerous when on motorcycle) ditches aren’t mowed frequently enough (concern on watching for wildlife)

FEEDBACK ON ROADS AND BRIDGES – SPECIFIC CONCERNS

- “Some of the gravel roads that are exposed to recent floods and truck traffic show signs of deteriorating.”
- “Some of the concrete roads buckle with heat (not enough expansion joints).
- “County Road 4B.”
- “Maintenance of current roads/bridges.”

ACTIVE TRANSPORTATION AND RECREATION – SPECIFIC CONCERNS

- “People do NOT know the rules for riding bikes, scooters, skateboards, walking on roads
- “No shoulders on county roads, specifically on Hwy 23 (334th St.)”
- “Safe place to walk/bike not readily available.”

36% of survey respondents report walking or biking 3-5 days per week, while 27% report walking and biking 6-7 days per week, a great baseline number for active living and active transportation in Union County.

OTHER CONCERNS

- “Public transit and electric vehicle charging.”
- “Mitigation of road flooding.”
- “Growth of new developments.”
- “Traffic congestion around Dakota Valley School”
MAJOR ROADS PLAN

The Union County Major Roads Plan classifies county roads based on the following priorities and objectives:

- Maintain connectivity – recreation, jobs, and destinations
- Maintain existing infrastructure
- Prioritize the most critical roads for farm-to-market, ethanol plants, and other heavy freight
- Support the growth of economic activity and quality of life
- Identify considerations for change in roadway functional classification
- Identify considerations for change in roadway jurisdiction
- Support a multimodal transportation network through allocation of space for pedestrians, bicyclists, and transit.
ADDRESSING ISSUES AND DEFICIENCIES

A list of Issues and Deficiencies have been identified as a result of the existing conditions analysis, discussions with the study advisory team, and public feedback:

- Bridge Replacement Needs
- Road Conditions
- Increasing Truck Traffic
- Locations with Multiple Crashes
- Flooded Roads
- Lack of Bike/Ped Infrastructure and Safety
- North Sioux City Development Causing Concerns
- Jurisdictional Ownership
- Prioritizing Improvements with Available Funding

FUTURE PROJECTS PROPOSED TO ADDRESS KNOWN ISSUES

Safety Improvements and other Enhancements were identified during Existing Conditions Review. Future projects with specific solutions that address these issues have been proposed and will be ranked by priority as funding becomes available.

- Corridor Improvements
- Intersection Improvements
- Bridge Replacement
- Drainage Improvements
- Safety Improvements
- Bike and Pedestrian Improvements
- Jurisdictional Transfer
BRIDGE REPLACEMENT PLAN

Union County maintains 113 bridges. As a result of bridge inspections, the condition of the bridges falls under one of three categories: Good, Fair, or Poor. Most of Union County bridges are in Fair or Good condition (68%), but 36 of Union County bridges are currently in Poor condition (32%), which means they are structurally deficient. These bridges have short or unknown remaining service lives, and likely require high-cost repairs or replacement. Comparatively, in all of South Dakota, 26% of all county-owned bridges are in Poor Condition.

Between 2016-2020, Union County has replaced 1.6 bridges/year, usually with significant funding assistance from SDDOT Bridge Improvement Grants. At current funding levels, Union County faces a difficult challenge to maintain all bridges in a state of good repair, as bridges continue to deteriorate at a faster rate than they can be repaired or replaced.

As part of this Plan, the 36 bridges currently in Poor condition have been identified as a priority for replacement in either the Short-Term (2022-2026) or the Mid/Long-Term (2027-2045). However, the list is expected to grow as bridges currently in Fair or Good condition may also deteriorate to Poor condition.

CANDIDATES FOR FUTURE BRIDGE CLOSURE

If funding is not available to keep up the bridge replacement needs in Union County, 7 bridges were identified as candidates for future bridge closure by conducting an initial screening for bridges with low traffic volumes and short detour length.

$1.2 Trillion Infrastructure Investment and Jobs Act (IIJA)

The largest and most comprehensive infrastructure bill in American history passed by Congress on November 6, 2021, will reauthorize surface transportation programs for five years and invest $110 Billion in additional funding to repair roads and bridges. These funds will filter down to South Dakota counties like Union County and is expected to help in the replacement of existing bridges.
UNION COUNTY FIVE-YEAR HIGHWAY AND BRIDGE IMPROVEMENT PLAN 2022-2026

Each year, Union County develops a Five-Year Highway and Bridge Improvement Plan. It is a short-range planning document that is designed as a tool to assist the County in budgeting, planning, and incorporating the needs and concerns of the public into annual road and bridge projects. This plan is updated each year with some projects removed and others added as need.

Additionally, by completing this short-range plan each year, Union County is rewarded with eligibility for funding through the local Bridge Improvement Grant (BIG), established by the SDDOT. Almost all bridge replacements in Union County are aided with funding from the BIG program.

<table>
<thead>
<tr>
<th>Map ID</th>
<th>Year</th>
<th>Project Location</th>
<th>Bridge Number</th>
<th>Project Description</th>
<th>Total Project Cost</th>
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<td>22-1</td>
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<td>300th St</td>
<td>64-084-030</td>
<td>BIG Replacement Grant replace with bridge</td>
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</tbody>
</table>
BICYCLE AND PEDESTRIAN PLAN

On-Road Bicycle and Pedestrian Accommodations in Union County
The addition of paved shoulders (according to Major Roads Plan) and Bike Route designation is recommended in Union County to provide enhanced safety for bicyclists and occasional pedestrians. (See map to the right.)

Trails Master Plan Phases
Phase 1 Northern and Southern Community Connections – Phase 1 of the comprehensive trails plan is shown in pink and are envisioned to closely follow rail corridors such as the BNSF railroad from North Sioux City through Jefferson to Elk Point. Another planned Phase 1 Trail alignment connects the northern Union County towns of Beresford to Alcester and are envisioned to closely follow the D&I railroad.

Phase 2 Intermediary Trails – Phase 2 trails are shown in blue. The southern Union County trail is envisioned to closely follow the BNSF railroad northwest from Elk Point to the county line with Clay County, also following the D&I railroad northeast from Elk Point to the Big Sioux River, and generally following the Big Sioux River north to Brule Creek. Another planned Phase 2 Trail alignment connects the northern Union County town of Alcester east to the Big Sioux River closely following the D&I railroad and eventually connecting to Sioux County.

Phase 3 Brule Creek Trail – Phase 3 shown in green are envisioned to be scenic forested trails that connect the planned north and south trail networks of Union County with Union Grove State Park.

Phase 4 Big Sioux River Greenway – Trail shown in purple generally following the Big Sioux River from North Sioux City north to the county line of Lincoln County. This trail should serve as the crown jewel of the Union County Trails Network, and include park benches, riverbank activations, fishing platforms, and interpretive signage.

Phase 5 Missouri River Greenway – The final trail shown in orange generally following the Missouri River from North Sioux City northwest to the county line of Clay County. The Missouri River Greenway will connect on the southern end to existing trails in the Dakota Dunes Subdivision and will also connect to the Phase 1 Community Connections trail in two different locations on the southwestern portion of Union County.
FUTURE TRAFFIC VOLUMES (2045)

Based on future planning daily traffic volumes for the year 2045, traffic congestion is not expected to be an issue for the vast majority of county roads. Almost all County roads are well below planning level capacity.

The highest planned traffic volumes are near North Sioux City:

- County Road 23
- County Road 1B
- Intersection of County Road 23 (Northshore Dr) & County Road 1 (484 Ave / Westshore Dr)

The intersection of CR 23 and CR 1 will exceed capacity according to 2045 Traffic Demand Model, though it assumed significant development which has yet to take place.

As these roads begin to approach planning capacity volumes, additional driving lanes may be necessary, but only after a detailed traffic operations study indicates the need for it.

TRANSPORTATION STANDARDS FOR NEW DEVELOPMENT

As part of the MTP, standards have also been created to aid with new development that stresses the transportation network:

- Access Management Guidelines
- Traffic Impact Study Guidelines
- Jurisdictional Transfer Legal Agreement Template
GETTING INVOLVED

STAY CONNECTED

Receive updates and announcements by visiting the project website and submitting your email address: www.ulteig.com/unioncountymtp/

LEAVE A COMMENT

If you have additional comments about the project, please fill out the comment form on the project website.

If you have and direct questions or concerns, please contact one of the project managers listed below.

Steve Gramm (Steve.Gramm@state.sd.us), Paul Deutsch (Paul.Deutsch@Ulteig.com), Will Kerns (William.Kerns@ulteig.com) or Brad Stangohr (Brad.Stangohr@Ulteig.com)