

Transportation Inventory and Analysis
An understanding of the transportation systems in and around a
community is critical for sustainable transportation enhancement planning. Transportation systems include paved and unpaved roadways, pedestrian and bike trails, waterways, active railroads, and abandoned railroad right-of-ways.

The Madrid Visioning design team met with lowa Department of Transportation personnel and local officials to identify existing, past, and future transportation systems in the area. Opportunities and constraints were identified in the meetings that could potentially affect project areas.
Survey results of Madrid residents, identified the most heavily used routes for vehicular traffic. Heavy traffic occurs on Water Street, North Street, 22nd Street, 6th Street, and Southern Prairie Drive. Primary roads include Main Street, 1st Street, and 2nd Street. Primary routes carry both heavy traffic and are critical connections through the community and to state highways.
Experienced drivers frequently identify difficult intersections, known as traffic conflicts. Conflicts occur because of multiple factors including limited sight distances, heavy traffic, difficult timing, and pedestrian presence.
Highway 17 and 210 carry significant amounts of traffic through Madrid and both routes present multiple conflict points through the community. One instance on Highway 210 is the two-block shift in alignment at North Lincoln Street. This intersection is difficult for large vehicles to maneuver because of tight turning radii. It also causes confusion because there are no yield signs for straight through traffic.
Another primary conflict is the intersection of the High Trestle Trail and Highway 17. Trail users approaching the intersection have limited visibility to oncoming traffic. Vehicles passing the trail are not required to stop and may be traveling at higher than posted rates of speed. Finally multiple driveways north and south of the intersection draw driver's attention away from watching for trail users.

## Madrid

## Transportation Inventory

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