TRAFFIC ENGINEERING

INTERSECTION SAFETY CAPACITY IMPROVEMENTS
Cedar Rapids, IA

IMPROVING SAFETY & EFFICIENCY

We're committed to helping you create a transportation network that's user-friendly, safe, and effective for people of all ages and physical abilities, regardless of how they travel.

To improve traffic operations, we gather an understanding of the function and context of the area. Combining field review, advanced traffic analysis, and modeling tools helps us analyze intersection, interchange, and corridor traffic operations. With deficiencies identified, options to increase safety and better accommodate existing and long-range traffic demands are evaluated. Recommended improvements are developed using current best practices.

PLANNING FOR GROWTH & DEVELOPMENT

Community growth and development can affect the safety and function of transportation corridors. Based on current and projected conditions, capacity and safety improvements may include:

- Roadway widening
- Adding auxiliary turn lanes
- Bicycle/pedestrian accommodations
- Traffic signals
- Roundabouts
- Road diet conversions

SNYDER & ASSOCIATES

TRANSPORTATION
BICYCLES & PEDESTRIANS
FREIGHT RAIL
PUBLIC TRANSIT
STREETS & HIGHWAYS
TRAFFIC ENGINEERING

ROUNDABOUT
Clive, IA

HOW WE CAN HELP

TRAFFIC & SAFETY STUDIES
A study is often the first step to plan and design transportation improvements by clearly identifying the project need, budget costs, and potential funding sources. Following analysis, we'll develop and document recommendations in a study report.

MODELING & OPTIMIZATION
Our traffic study and signal timing projects utilize traffic modeling software such as HCS, Synchro/SimTraffic, and VISSIM to evaluate and optimize traffic operations. Depending on project needs, simulation modeling may be necessary to further evaluate operations and identify improvement needs.

ROADWAY LIGHTING
Our experience includes all types of lighting, working with LED fixture retrofits, and new lighting control systems. Analysis and simulation of lighting designs are modeled utilizing software AGi32 to help demonstrate actual lighting patterns, illuminance, and dark sky concerns.

SIGNAL SYSTEMS DESIGN
We combine a deep understanding of traffic operations, safety issues, and applicable standards with knowledge of physical site constraints to design cost-effective traffic signal and control improvements.

SIGNAL TIMING & COORDINATION
From data collection through traffic modeling, timing plan development, and field implementation, we are committed to effective traffic operations.

ROUNDABOUT ANALYSIS & DESIGN
Analysis of short and long-term needs is necessary to optimize roundabout capacity and safety. Our design process includes performance checks to ensure roundabout safety benefits are achieved.

FUNDING ASSISTANCE
Utilizing years of experience, we can help identify funding opportunities, create competitive applications, and administer funding documentation.