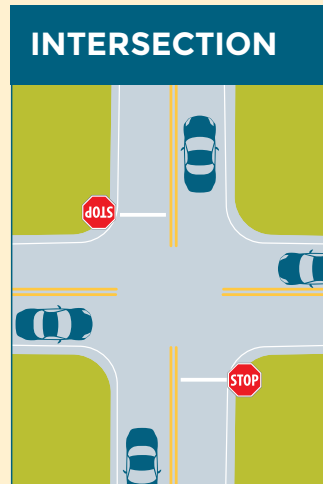
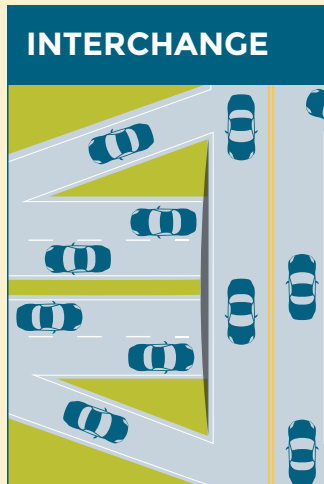


Interchanges

An interchange is a roadway junction that uses grade separation, with one or more ramps, to allow traffic on at least one highway to pass through the junction without impeding the flow of traffic.

The primary purpose of an interchange is to reduce conflicts caused by vehicle crossings and minimize conflicting left-turn movements. Interchanges are typically found on interstates and multi-lane highways, or sometimes high-volume roads, where traffic cannot be efficiently controlled by intersections at-grade.

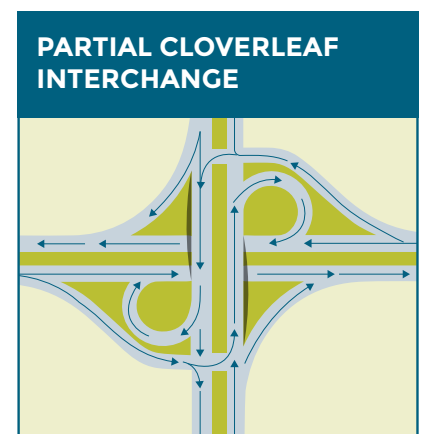
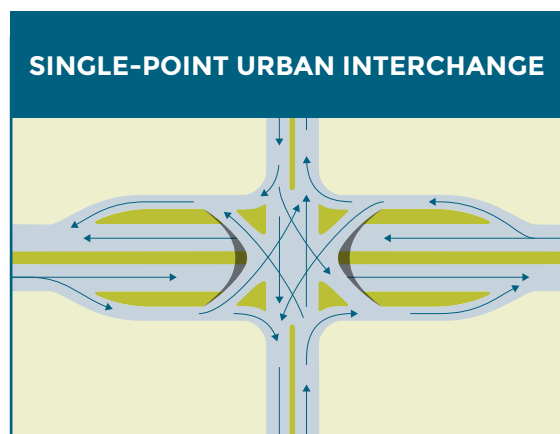
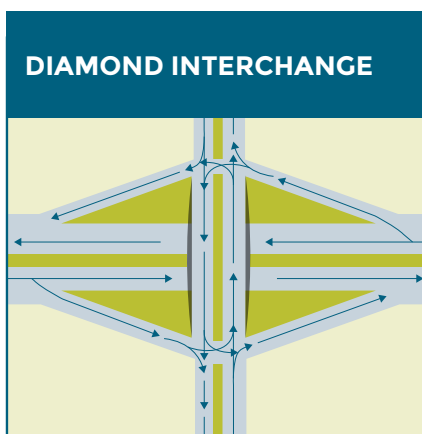


WHAT'S THE DIFFERENCE BETWEEN AN INTERCHANGE AND AN INTERSECTION?

An *interchange* uses grade separation, meaning roads are at different heights, with ramps connecting the roadways so as not to disrupt the flow of traffic flow. An *intersection* is when roads cross at-grade, at the same height.

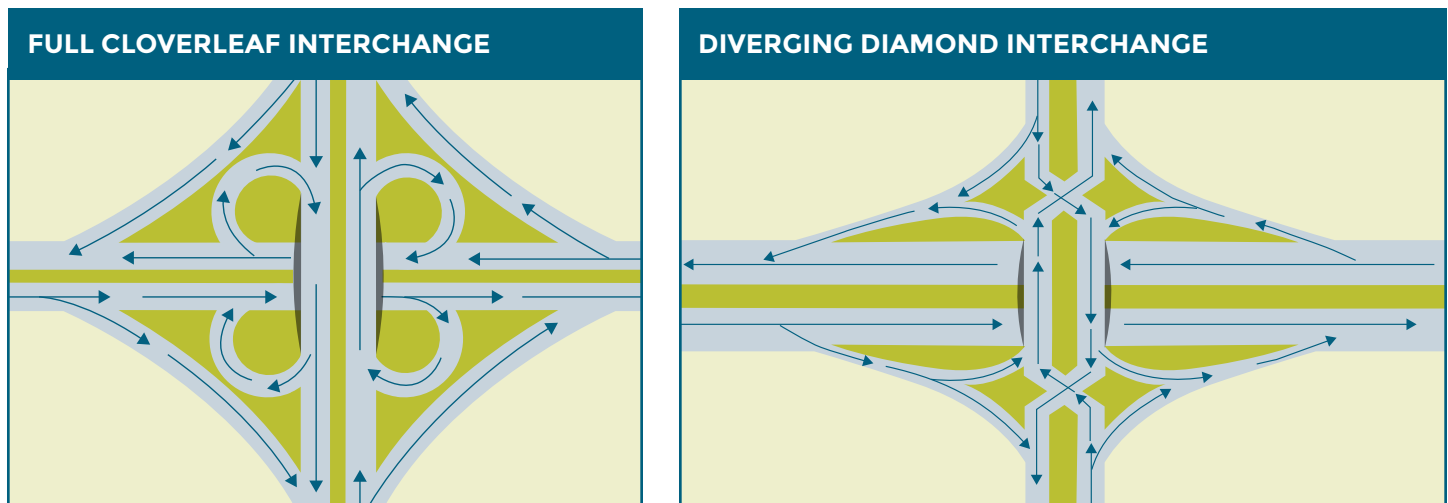
What kinds of interchanges are there?

There are a number of different types of interchanges* that can be used, depending on traffic needs at the specific location. Interchanges most commonly found in Nebraska include:



*Actual interchange design may vary.

Other common interchanges you might be familiar with are:



When does NDOT decide to construct an interchange?

The Nebraska Department of Transportation (NDOT) first takes into account traffic volumes when considering constructing an interchange. If traffic volumes are high enough, NDOT considers a variety of other factors, including:

- Crash history
- Adjacent land use
- Existing traffic control devices (signs, traffic signals, etc.)
- Potential impacts, including to the natural and built environment

If an interchange is ultimately selected for an intersection, it must be able to be constructed and maintained under traffic and handle current and projected traffic volumes.

Benefits

Efficiency. Interchanges allow traffic to flow unimpeded at road junctions, so traffic on the major road can flow continuously and smoothly.

Increased Capacity. By separating traffic movements, interchanges allow more vehicles to proceed through the interchange without interruption.

Trade-Offs

High Cost. Constructing any type of interchange is a costly endeavor that requires millions of dollars and several years to go through a planning process to secure State or Federal funding needed to study, design and construct an interchange. This is why NDOT investigates other intersection improvements, apart from an interchange, that address the immediate needs of an area and are more cost-effective and quicker to construct. Additionally, ongoing maintenance costs for interchanges are high.

High Impact. Interchanges have a larger design footprint than other types of intersection improvements, which can impact nearby homes and businesses. NDOT weighs these impacts against the benefits of constructing an interchange.