Diverging Diamond Interchange Fact Sheet



Overview of a Diverging Diamond Interchange

- A Diverging Diamond Interchange (DDI) crosses traffic to the opposite side of the road across an interchange so vehicles have unimpeded movement onto the freeway ramps.
- Left-turn movements, which are a typical challenge with standard four-way interchanges, are eliminated with a DDI.
- The DDI maximizes the use of the existing infrastructure (including the McCaslin bridge structure over US 36) to accommodate bicycle and pedestrian mobility, maintain transit connectivity and foreseeable demand.



 As of May 2014, there are 34 DDIs in the country, including one in Grand Junction, Colo., that opened in early 2014, and one in Colorado Springs, Colo., that will open in summer 2016.

New DDI at McCaslin Boulevard

- The new DDI replaced the current McCaslin Boulevard interchange, as part of the US 36 Express Lanes Phase 2 project.
- Based on the projected capacity of the interchange, these improvements are necessary to extend the operational life of the interchange.
- The DDI, which was not originally part of the Phase 2 scope, was paid for by the City of Louisville, the Town of Superior and the Regional Transportation District (RTD).
- The City of Louisville and the Town of Superior conducted a traffic study to learn more about the efficiency and effectiveness of a DDI and to consider other alternatives.
- New bus ramps were also built under the on- and off-ramps to US 36, allowing buses to quickly get on and off the highway without merging with general traffic, saving time for bus riders.
- New bike lanes will be provided across the interchange.

Benefits of a DDI

- Reduces delays using a two-phase signal as opposed to traffic signals.
- Requires fewer lanes but can handle more traffic capacity.
- Reduces conflict points at intersections.
- Shortens pedestrian crossings.
- Increases left-turn capacity.
- Eliminates wrong-way entry to ramps.
- Costs less than a typical free-flow interchange.

HOTLINE: 303-404-7042 | www.us36expresslanes.com



