



# Airport Way/Steese Expressway Intersection Reconstruction Project

Project No. 0002(385)/NFHWY00245

## Continuous Flow Intersection (CFI)

A CFI intersection will improve traffic flow and reduce collisions. Left turns from Gaffney Road and Airport Way are moved to the outside of oncoming traffic. This allows the main intersection to operate with fewer signal cycles and more green light time, while reducing the chance of collisions at the main intersection.

The CFI alternative proposes to relocate the eastbound and westbound left turns. The northbound and southbound right turns bypass the main intersection using dedicated right turn lanes.

Widening for the intersection will require modification to the frontage road.

### Benefits:

- At-grade solution requires no structures therefore less expensive
- Does not alter access to 10th Street via Airport Way
- Improves traffic operations by reducing signal phases

### Drawbacks:

- Unfamiliar driving pattern; public education is recommended
- Uses closely spaced signals that are sensitive to signal timing/progression to eliminate waiting
- Design modifications to the frontage road may be necessary
- Increases the number of pedestrian crossing locations





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## Continuous Flow Intersection Median U-Turn (CFI-MUT)

A CFI MUT intersection will improve traffic flow, reduce collisions, and stay within the existing right of way. The hybrid continuous-flow intersection-median U-turn (CFI-MUT) uses two treatments to provide an at-grade solution that improves intersection performance and reduces wait times through 2045.

The CFI-MUT displaces all the left turns from the Gaffney Road, Airport Way, Richardson Highway, and the Steese Expressway (GARS) intersection reducing the number of conflict points and simplifying the traffic signal operations.

Displacing all left turns from the GARS intersection simplifies the traffic signal phasing and provides the most green time to all movements. The northbound and westbound left turns both use a CFI treatment which moves left-turn movement to the outside. The left turns are completed outside of the existing intersection which reduces offset head on collisions. The southbound and eastbound left turns require drivers to continue through the intersection to complete a U-turn followed by a right turn. The increased drive length will not correlate an increased drive time. Drivers rarely need to stop at more than one intersection, reducing wait time.

### Benefits:

- At-grade solution requires no structures
- Does not alter access to 10th Street via Airport Way
- Improves traffic operations by reducing traffic signal phases
- Improves safety by reducing the number of conflict points
- No right-of-way required or design exceptions anticipated
- Footprint minimizes the need to clear adjacent trees that act as a sound barrier

### Drawbacks:

- Does not maintain driver expectancy; public education is recommended
- Uses closely spaced traffic signals that require signal timing/progression to minimize potential for vehicles having to stop at multiple signals
- Out-of-direction travel for southbound and eastbound left-turning vehicles

