

CSJ 0902-90-195 and 0902-90-196 – Bicycle Signal Informational Sheet

Proposed Intersection with Bike Signal:

- East 4th Street and South Sylvania Avenue, Fort Worth
- East 4th Street and Riverside Drive, Fort Worth
- East 1st Street and Beach Street, Fort Worth

Propose of Bicycle Signal:

- Bicycle signals facilitate bicyclist crossings of roadways safely while restricting conflicting vehicle movements at the intersection.

Bicycle Signal Heads:

- Bicycle signals are traditional three lens signal heads with green-yellow and red bicycle stenciled lenses that can be employed at standard signalized intersections.



Figure 1: Typical Bicycle Signal Head

Bicycle Detection and Phasing:

- Bicycle detection is used at traffic signals to alert the signal controller to bicycle demand on a particular approach.
- Properly located detection enables the length of green time assigned for bikes to adjust based on demand.
- Detection zones are provided based on the typical bike speed.

CSJ 0902-90-195 and 0902-90-196 – Bicycle Signal Informational Sheet

- Addition of detection and signal timing ensures that bicycles are provided safe crossing opportunities and reduces the potential for red-light running.
- Detection also allows the intersection to operate more efficiently, especially during off-peak periods when traffic volumes are lower.
- Signal detection also provide operational improvements at the intersection.
- The project will provide actuated detection where the bike phase may not be automatically called during every cycle, bicycle detection must be provided to ensure that bicyclists receive a green signal indication.
- The project will provide concurrent bike phase with leading interval which Provides an advanced green indication for the bike signal. Lead interval may provide 3 to 7 seconds of green time for bicycles prior to the green phase for the concurrent vehicle traffic. Lead bike intervals may typically be provided concurrently with lead pedestrian intervals.
- The lead time will be determined by the City during their traffic signal timing development.
- The leading interval allow bicyclist to enter the intersection prior to vehicle hence approving visibility for turning vehicles.

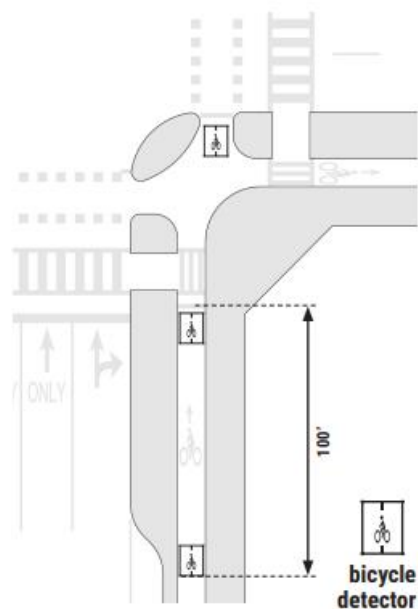


Figure 2 Typical Bike Detector