

Complete Streets Performance Monitoring Program



COMPLETE STREETS PERFORMANCE MONITORING PROGRAM

Purpose

In accordance with the Carson Area Metropolitan Planning Organization (CAMPO) Unified Planning Work Program (UPWP) for Fiscal Years (FY) 2017 and 2018, this document will establish a method and schedule for the collection of pedestrian and bicycle data. Through the use of pedestrian and bicycle counters, staff will establish baseline information and maintain future data to evaluate and monitor the performance of Complete Streets measures.

Complete Streets Measures

Complete Streets are streets for everyone, designed and operated to enable safe access and comfortable accommodation for all users of all ages and abilities, including pedestrians, bicyclists, transit riders, and motorists of all types. The Complete Streets design seeks to develop an integrated and connected network of streets that are safe and accessible for all people. This design makes active transportation such as walking and bicycling more convenient; provides increased access to employment centers, commerce, and educational institutions; and allows more options in traveling.

Figure 1.0 Graphic Example of a Complete Street Design Treatment



Data Collection Strategy

Using federal planning funds, CAMPO purchased four pedestrian counters and two bicycle counters. To collect data for multiple corridors and during different seasons, the counters will need to be rotated on a regular basis. Four primary corridors, noted below, have been chosen based on their recent or planned implementation of Complete Streets measures.

- Carson Street Downtown (between William Street and Fifth Street)
- South Carson Street (between Fifth Street and Roland Street)
- William Street (between Carson Street and I-580)
- North Carson Street (between William Street and Arrowhead Drive)

Annual Schedule

Since bicycle and pedestrian activity is significantly influenced by seasonal weather, an annual schedule has been created to help capture seasonal fluctuation. The annual schedule is broken into three four-month time periods, shown below:

- Summer: May through August
- Fall and Spring: September through October and March through April
- Winter: November through February

Schedule for Bicycle Counters

Two bicycle counters will rotate around the four corridors as a pair. Counters will be placed for varying times, typically one week at a time.

Figure 2.0 Annual Schedule for Bicycle Counters

Month	Annual Schedule											
	July	August	September	October	November	December	January	February	March	April	May	June
Carson Street Downtown												
South Carson Street												
William Street												
North Carson Street												

Pedestrian Counters

One pedestrian counter will be placed in each of the four corridors. Counters will be placed for varying times periods, typically ranging between a few weeks to a month. Initially, counters will be placed near land uses anticipated to have high pedestrian activity.

Schedule for Pedestrian Counters

The counters will be located at the beginning, middle, and end of each corridor and rotated periodically. Locations will mainly be chosen based on surrounding land uses. The table shown below will be used by staff to track the location of each counter throughout the year.

Figure 3.0 Annual Schedule for Pedestrian Counters

	Annual Schedule											
	July	August	September	October	November	December	January	February	March	April	May	June
Carson Street Downtown												
William Street to Robinson Street	Red		Yellow		Blue			Grey		Grey		Grey
Robinson Street to King Street		Red		Yellow		Blue		Grey		Grey		Grey
King Street to 5 th Street							Blue	Grey	Yellow	Grey	Red	Grey
South Carson Street												
Tenth Street and Stewart Street							Grey	Blue	Grey	Yellow	Grey	Red
Sonoma Street and Moses Street	Red		Yellow		Blue		Grey		Grey		Grey	
Eagle Station Lane and Snyder Avenue		Red		Yellow		Blue	Grey		Grey		Grey	
William Street												
Carson Street and Roop Street		Grey		Grey		Grey	Blue		Yellow		Red	
Roop Street and Saliman Road		Grey		Grey		Grey		Blue		Yellow		Red
Saliman Road and Russell Way	Red	Grey	Yellow	Grey	Blue	Grey						
North Carson Street												
College Parkway and Nye Lane	Grey	Red	Grey	Yellow	Grey	Blue						
Nye Lane and Hot Springs Road	Grey		Grey		Grey		Blue		Yellow		Red	
Bath Street and Corbett Street	Grey		Grey		Grey			Blue		Yellow		Red

Corridor Descriptions

Carson Street Downtown Corridor

The Carson Street downtown corridor extends from William Street to Fifth Street. The current configuration of the roadway includes a single north and southbound travel lane and a center turn lane with free turning movements.

The City's first Complete Streets project was completed in fall 2016, for downtown Carson City. The project improvements included lane reductions, bicycle lanes, on-street parking, landscaping, and a continuous center turn lanes. Carson Street historically functioned as a state and national highway. Prior to 2016, the roadway was comprised of two north and southbound travel lanes, and a center left turn lane, that included a landscaped median in places. The configuration did not include bicycle lanes and the sidewalks were approximately six feet wide. In 2009, the I-580 highway was extended from U.S. 50 south to Fairview Drive, this highway extension reduced the volume by approximately 60 percent.

Carson Street from William Street to Proctor Street is zoned as downtown mixed-use to encourage a broader mix of uses and promote a pedestrian friendly environment. Carson Street from Proctor Street to Fifthth Street is zoned public/quasi-public because of the close proximity to government offices.

South Carson Street Corridor

The South Carson Street corridor extends from Fifth Street to Roland Street. The current configuration of the roadway varies through the corridor. The portion north of Stewart Street is between 60 and 70 feet in width and is comprised of two north and southbound travel lanes with a center left turn lane. Non-motorized accommodations are limited, and include a six foot wide sidewalks and no designated bicycle lanes. The portion south of Stewart Street is between 83 and 93 feet in width and is comprised of three north and southbound travel lanes with a center turn lane. Non-motorized accommodations are limited, and include a six foot wide sidewalks and no designated bicycle lanes. Additionally, there are gaps in the sidewalk connectivity.

The existing South Carson Street corridor is designated as a major arterial with land uses containing commercial development but has reduced entrances and exits into businesses. The roadway provides a direct connection from Douglas County to Carson City and acts as a destination for shopping for the CAMPO region. With the completion of I-580, it is anticipated that vehicular traffic will decrease by 40 percent. Corridor land uses range from mixed-use in the north to community/regional commercial in the south. The corridor is dominated by vehicular traffic. A Complete Streets Corridor Study for South Carson Street is in process. The study will present conceptual designs to improve safety, access to businesses, and to integrate pedestrian and bicycle facilities.

East William Street Corridor

The East William Street corridor extends from Carson Street to I-580. The current configuration of the roadway includes two eastbound lanes and two westbound lanes with a center turn lane with free turning movements.

William Street historically functioned as a state and national highway, prior to the I-580 extension. The roadway is comprised of two east and westbound travel lanes, and a center left turn lane. After I-580 expanded, traffic has decreased but all travel lanes remain. There is no on-street parking, transit service, bicycle lanes, or intersections with insufficient markings or signals, making it difficult for vehicles and pedestrians to share the roadway. William Street from Carson Street to Roop Street is zoned as downtown mixed-use on the south side and community/regional commercial on the north side. Roop Street to Saliman Road is zoned as parks and recreation on the south side and mixed-used residential on the north side. In 2014, the EPA conducted a workshop for potential improvements to be made along the corridor that integrated bicycle and pedestrian facilities along with landscaping improvements from U.S. 50 to Saliman Road and prepared a study for the City to implement when funding allows.

North Carson Street Corridor

The North Carson Street corridor extends from Arrowhead Drive to William Street.

North Carson Street is a retail corridor that serves nearby residents. The Carson City Master Plan has identified North Carson Street as an underused and underutilized corridor with potential for mixed-use development. Access is inadequate for pedestrians and there are minimal bicycle facilities that connect the corridor. Traffic decreased in 2005 when I-580 extended to William Street, shifting traffic south of North Carson Street. The corridor is dominated by commercial and mixed-use land uses. Mixed-use commercial encourages compact development that should incorporate bicyclists and pedestrian facilities close to transit. Planned studies have not been developed to integrate Complete Streets on this segment of the corridor.