



Traffic Analysis - Existing

Introduction

This document summarizes traffic related issues at Delta College in Stockton, CA. The college is currently undergoing a master plan project to accommodate its future needs throughout San Joaquin County. While the long-term plans include development and expansion of potential satellite locations at Lodi, Manteca, and Mountain House, this review focuses on the Stockton campus.

Existing Circulation System

Delta College is located in the mid-northern area of the City of Stockton. It is generally bounded by Robinhood Drive on the north, Pacific Avenue on the east, Burke Bradley Road on the south, and Pershing Avenue on the west. The internal circulation at Delta College is provided mainly by a ring road that circles the main classroom and parking areas. Access to the college is provided via driveways connecting to Robinhood Drive, Pacific Avenue at Yokuts Avenue, Burke Bradley Road at Precissi Lane (providing access to March Lane), Burke Bradley Road at Pershing Avenue, and Burke Bradley Drive at Pershing Avenue / Venetian Drive. The Pacific Avenue entrance is considered the main entrance to the campus.

Existing Traffic Conditions

Traffic conditions on campus roads and adjacent facilities vary by location and peak use periods. Campus traffic is at its peak in the morning and early afternoon, and fluctuates somewhat depending on the semester schedule. Peak demand occurs at the beginning of each semester, and diminishes to a more uniform level after the first two weeks of the semester.

Traffic flow is generally good on campus, with the exception of the Pacific Avenue frontage road during peak periods when queues extend north and south of the entrance point at Pacific Avenue and Yokuts Lane. The northbound segment of the frontage road approaching the Pacific Avenue entrance experiences the most significant backup, at times extending south and onto Burke Bradley Road.

There is also traffic congestion on the north entrance road off Robinhood Drive. This is largely not a function of campus generated traffic, but is due to the overall proximity of the entrance road to Robinhood Drive and Pacific Avenue. There is also a fire station along this segment that creates delays when trucks are entering or exiting.

Traffic volumes along Pacific Avenue are the highest in the study area. Pacific Avenue is a six-lane facility that provides direct access to the college, the shopping malls to the east, and is a major north-south commuter route. During peak hours, intersections in the vicinity of the campus on Pacific Avenue including Robinhood Drive, Yokuts Avenue, and March Lane all exhibit varying degrees of congestion.

Pershing Avenue provides access to the college from the west. Traffic volumes on Pershing are lower than those on Pacific Avenue, and the intersections at Burke Bradley Drive and Burke Bradley Road generally operate at good levels. Traffic on Pershing Avenue sometimes form queues that occasionally impact the campus driveways, however, this is generally in the PM commuter peak (4:00 – 6:00 PM) when campus traffic is relatively light.



Burke Bradley Road serves as the southern portion of the campus ring road. This road is shared by the campus and the City of Stockton. It provides access to retail uses south of the campus and to March Lane via Precissi Lane. Traffic conditions are typically good on this roadway, with the exception of backups that occasionally extend from the Pacific Avenue frontage Road.

Parking

Based on information provided by Carter Burgess, there are currently 6,340 parking spaces on campus. This equates to one space per two daytime students, and one space per FTE. The parking areas generally ring the main building areas of the campus and access is provided by the ring road. Information on parking demand for community colleges is limited, but a study prepared by the University of the Pacific (UOP) Master Plan identified a range of demand from 0.1 to 0.5 spaces per FTE student, depending on the nature (off-campus commuter or non-commuter) of the college. Delta College has a rate of 1.0 per FTE, indicating it has a significantly higher than average parking ratio. This was confirmed through field observations that indicated high levels of parking availability on campus. The lots nearest the main campus do exhibit high rates of occupancy, but the lots further away are largely underutilized. All lots on campus are within one-quarter mile of the main campus area, which is considered an acceptable minimum walking distance for colleges and similar uses.

Internal Circulation

The ring road serving the campus generally provides adequate capacity and access for campus traffic. It serves as a connection to the adjacent public street system, as well as providing access to the college parking lots. There are, however, sight distance and vision, internal intersection alignment, and signage deficiencies. Many of the sight distance restrictions are due to the berms and vegetation along the ring road and parking lots. This makes it difficult for motorists and pedestrian to see an adequate distance before making maneuvers. Some of the internal intersections have short radius approaches to other intersections that also cause some inefficiency in movements. Some signage is obscured by both berms and vegetation and at several locations not located within a sufficient decision making distance.

Transit

Transit provides a significant mode of transportation for students at Delta College. Several San Joaquin Metropolitan Area Regional Transit (SMART) routes serve the campus, with the primary access from a transfer point on Yokuts Avenue near Claremont Lane. Students using this point must cross the Pacific Avenue / Yokuts Avenue intersection. This intersection experiences considerable pedestrian activity during peak periods. Due to the width of Pacific Avenue, the pedestrian crossing time is high and contributes to overall intersection delay that occurs at times at this intersection. SMART is currently exploring plans to provide a new transit center in this area.

City of Stockton Issues

The City of Stockton is the public agency responsible for the street system adjacent to Delta College. As such, they are responsible for the operation and maintenance of the streets serving the college, and would have permitting authority over any new or modified access points to the campus. The City would require an overall traffic study for any new plan before granting any approvals. This study would have to be prepared to meet environmental review standards, either as an Environmental Impact Report or Negative Declaration. At a minimum, the study would need to address all access points to the college under existing and cumulative conditions, and at major intersections surrounding the college: Pacific Avenue / Robinhood Drive, Pacific Avenue / Yokuts Drive, Pacific Avenue and March Lane, Pershing Avenue and March Lane, and Robinhood Drive / north entrance. The study would also have to address any changes to internal road reconfiguration that may affect their facilities, and the adequacy of parking under future scenarios.

The City's long-term plan for Pacific Avenue is to widen it to eight-lanes with acceleration and deceleration lanes in front of the college. This would likely involve some right of way acquisition along the campus frontage. In addition, this would increase the pedestrian crossing time at Yokuts Avenue for students using the SMART Yokuts Avenue / Claremont Lane transfer point. The City has stated that it would consider an extension of Burke Bradley Drive east from its terminus at the Pacific Avenue frontage as a right turn only lane onto Pacific Avenue. This improvement would help alleviate the queuing that occurs on the frontage road as a result of vehicles using the Pacific Avenue / Yokuts Avenue intersection. Any connection at this location would require additional study and an amendment to the Pacific Avenue Specific plan and issuance of an encroachment permit.

Pershing Avenue is also identified to be widened to six lanes adjacent to the campus. This proposed improvement is constrained by the land uses in the study area that may preclude ultimate widening. City staff has recommended that the master plan consider orienting more traffic towards the Pershing Avenue access points, as these are currently less congested than the Pacific Avenue / Yokuts Avenue intersection. The recommendation is also based on anticipated future traffic volumes.

The City has an existing concern relative to the northern college driveway that connects to Robinhood Lane. The proximity of the driveway access on Robinhood Lane to Pacific Avenue causes queuing that can block the driveway intersection. City staff have indicated a desire to restrict access at Robinhood lane to right turn movements only. This change would likely not occur as long as the existing fire station remains at its current location, and would require technical analysis and public hearings.

The City of Stockton is currently undergoing a General Plan update process that includes evaluation of future traffic conditions under a year 2035 land use plan. The plan is currently undergoing public hearings, and will likely be adopted this year. Traffic studies have been prepared as part of the update, and those should be used in the assessment of future traffic conditions for the Delta College Master Plan.

