The question of the timing and extent of student facilities usage, including parking, at the Cabrillo College Aptos campus was addressed by analyzing the class schedules from two recent semesters. The Spring 2007 and Fall 2007 schedules revealed that for a typical week at the Aptos Campus location in Spring 2007 there were 2,219 class meetings for the 1,401 classes with regularly scheduled meetings whereas in Fall 2007 there were 2,236 class sessions for the 1,410 classes with regularly scheduled meetings per week. Each class may have more than one meeting per week. The patterns and timing of these course offerings are presented in detail below. In addition to the regularly scheduled courses, there were 390 sections offered in Spring 2007 and 395 sections offered in Fall 2007 which had no fixed schedule. These sections are typically laboratory sections that are ancillary to a main course and may have flexible schedules.

In general, there was little variation in the number and distribution of the class offerings, regardless of the semester. Mornings (from 6 am to 11:59 am) are the most heavily populated time at Cabrillo’s Aptos campus, while afternoons (Noon to 4:59 pm) are fairly busy and evenings (from 5 pm to 9 pm) are the least populated part of a typical day. In general the time period from 9:00 am to 1:30 pm is the busiest time on campus. Confirming this finding is the result of a 2001 survey of Cabrillo students’ transportation usage which found that “most of the main campus students arrive earlier than 8 or between 8 and 10 a.m. and about one-third leave between 1 and 3” (Willett, Luan, Cassada & Trimble, 2001).

An analysis of the schedule by the day of the week showed that 89% of scheduled classes transpire from Monday through Thursday. Among those four most active days, there is some variability; Tuesdays are the busiest day, with 13% more class meetings scheduled than Mondays. Thursdays and Wednesdays are the second and third busiest days, respectively, after Tuesday.
The chart below shows that the peak demand for facilities occurs in the mornings, from Monday through Thursday. Afternoons are the second busiest times and the evening (from 5pm to 9 pm) is relatively quiet, though Tuesday evenings are clearly the busiest night of the week.

Weekends and Fridays are very quiet by comparison to the other days of the week. In particular there is very little afternoon or evening activity and very little class activity at all on Sundays.
As can be seen in the hourly usage charts above, 9 am is clearly the time of peak activity at the Aptos campus. Additionally, 8 am, 9 am, 11 am, Noon and 6 pm are all times in which over 200 class meetings are beginning. These are the five busiest times of day at the Aptos campus, particularly from Monday through Thursday.
Particularly relevant to the issue of parking are the choices that students make about transportation to and from campus. According to a winter 2008 survey, 65% of student trips to campus are as the sole occupant of a car or truck. Another 13% of trips are via carpool, while 12% of student trips use the bus. In other words, approximately 70% to 75% of students on campus will be in need of a parking space for a vehicle.

The validity of these findings are confirmed by their close correlation with the results of the 2001 Cabrillo College Transportation Study in which approximately 60% of student trips were solo car commutes and about 12% were bus trips and 12% were car pool trips. Based on these findings, approximately 75% of the student body will need parking on any given day. A factor that moderates theoretical peak demand is the set of 50 or so “late start” or short-term classes included in the schedule each term; the effect of shifting the first day of class is to reduce the need for parking during peak times in the first three weeks of the semester by about 10%. Based on an average attendance of 18 per class (taking into account an average student absentee rate), the maximum number of students seeking parking would be approximately 5,400 and this theoretical peak parking utilization would occur around 9 am Monday through Thursday. This parking utilization estimate is based on averages; it may be that in practice students use alternative transportation more often during the peak hours, reducing actual peak demand substantially relative to theoretical peak demand. The actual number of parking spaces available at the Aptos campus is about 4,000; so peak demand times present significant parking challenges.

Cabrillo College enrolled nearly 17,000 students in Fall 2008. Not all of students utilized the main campus facilities, but a large majority did (82%). Peak days and hours of usage are from Monday through Thursday from 9 am through 1:00 pm. The demand is particularly acute in the first three weeks of any semester, after which point many students will drop some of their classes. As the semester goes on student absentee rates tend to increase and many classes will experience student withdrawal rates of 20% or more, further reducing facilities usage as the semester goes on.