

2009 State of the Commute Report

UCLA *Transportation*
Spring 2009



Creating a State of the Commute Report

To reach our campus each day, thousands of students, staff, and faculty use alternative modes, such as public transit, cycling, and walking.

The popularity of these sustainable modes stems from the success of UCLA's transportation programs, which include vanpools, public transit pass subsidies, carpools, a bicycle program, and campus shuttles.



UCLA Campus Shuttle

But just how many people are using each of these modes?

Through the first-ever *State of the Commute Report*, UCLA Transportation seeks to answer those questions. UCLA Transportation will also attempt to evaluate the University's progress in reaching its short and long-term transportation and environmental policy goals. For example, how does the University's progress in moving people onto sustainable modes compare with the Los Angeles region at large?

The 2009 State of the Commute Report relies upon the following sources:

- UCLA Transportation's annual survey of employee travel behavior for its Air Quality Management District (AQMD) reporting requirements.
- UCLA Transportation's annual Spring Student Transportation Survey, which collects information on the travel behavior of students living off-campus.
- UCLA Transportation's annual bicycle rack utilization inventory.
- UCLA Parking Services' annual parking inventory.
- UCLA Transportation's annual fall cordon count.

This report also includes data from transit providers which serve UCLA, including Big Blue Bus and Culver City Bus; Zipcar, the car-sharing company; and UCLA Fleet and Transit.

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Characteristics of UCLA commuters



The daytime population at UCLA is approximately 55,000 to 60,000 people per day. *Table 1* reports the student and employee population at UCLA; *Table 2* reports more specific demographic data about the student body, including the ratio of undergraduate to graduate students and the percentage of students living on and off campus.

Table 1. Total population

	Population
Students (undergraduate & graduate)	36,503 ¹
Faculty and Staff	22,268 ²
Total population	58,771

1. From UCLA Analysis and Information Management (AIM). Three-quarter average head count for 2007-2008. This figure includes students who are studying abroad and not currently on campus.

2. 2008 UCLA Parking Master Plan.

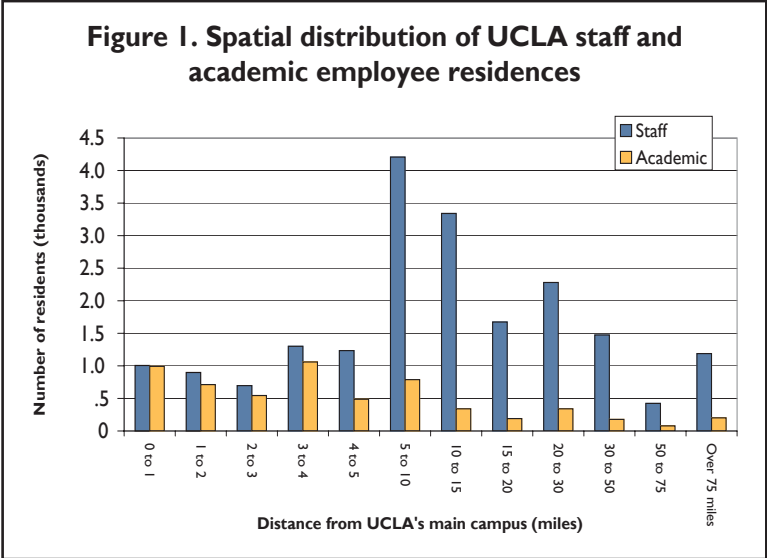
Table 2. Demographics of UCLA student body¹

	Total	Percentage ²
All Students	36,503	
Undergraduate	24,175	66%
Graduate/Interns	12,328	34%
On-campus	10,633	
Undergraduate	9,275	25%
Graduate	1,358	4%
Commuters	24,210	66% ³

1. UCLA AIM three-quarter average head count 2007-08.

2. Percents are rounded.

3. Commuter and on-campus percents do not equal 100% due to students abroad and not currently on campus.



In general, UCLA staff members live further away than faculty members from the main campus. The graph in Figure 1 suggests that the median commute distance amongst staff at UCLA is about ten miles. In contrast, the median commute distance amongst faculty members is about four miles. And as Table 3 reports, over half of the faculty live fewer than five miles from the main campus.

The hot spot map pictured in Figure 2 illustrates the spatial distribution of employee residences across the region. Full-time employees commute to UCLA everyday from across Southern California, including Palmdale in the Antelope Valley, San Bernardino County, Ventura County, and Orange County.

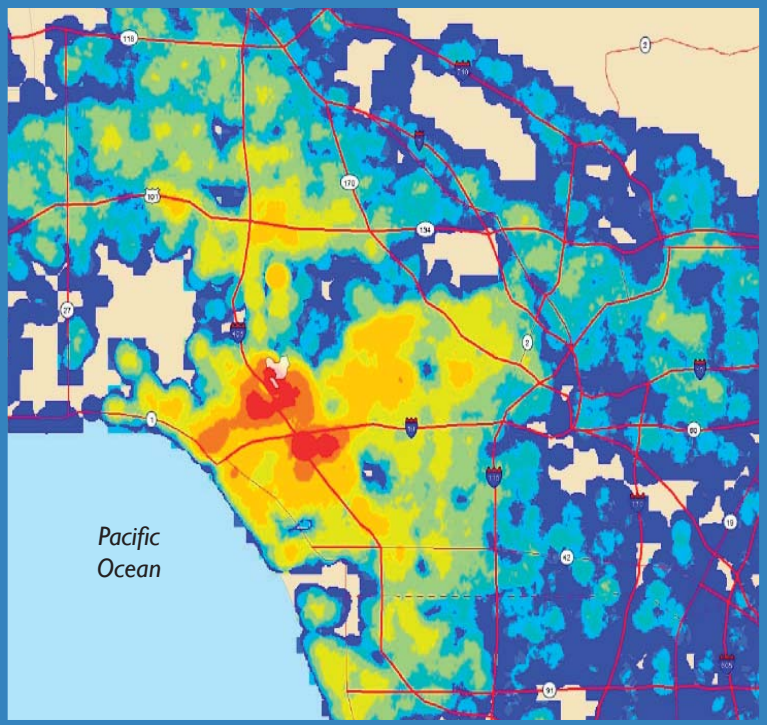


Figure 2. The spatial distribution of all faculty and staff residences across Southern California.

Table 3. How far do faculty and staff live from the main UCLA campus?

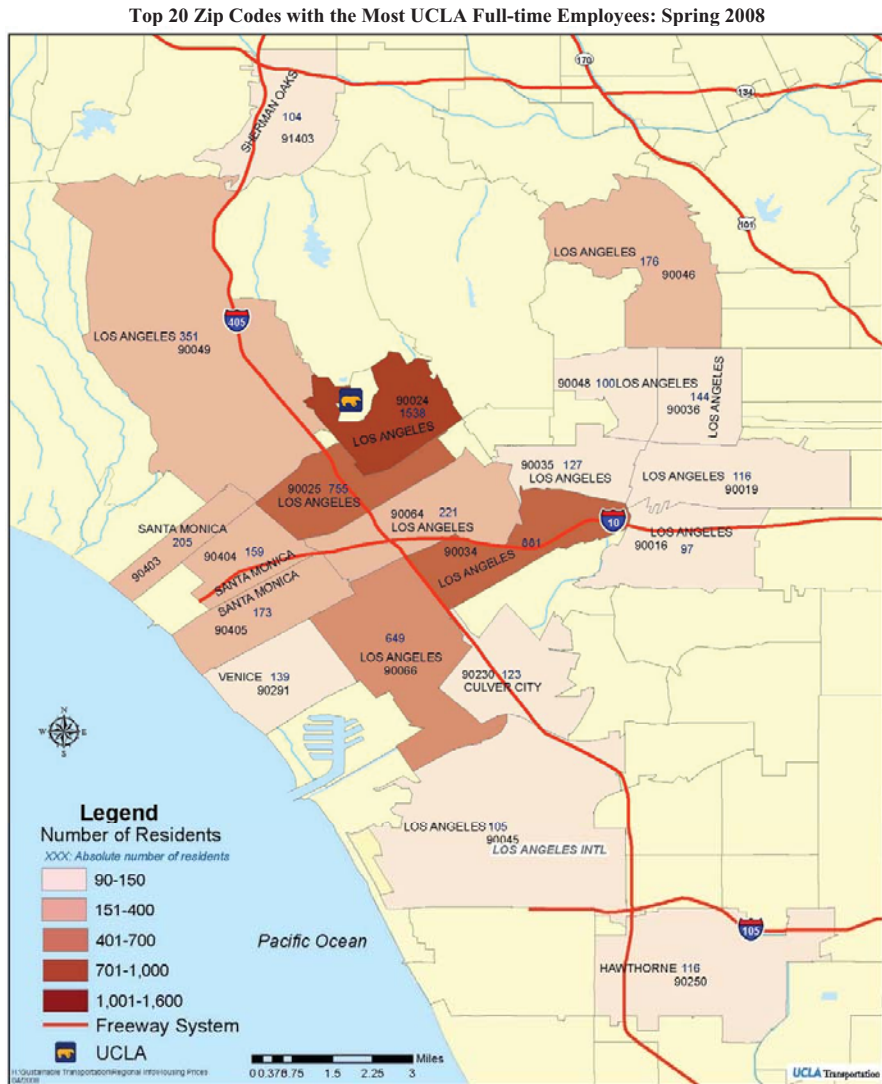
Distance	Faculty	Staff	Both
1	13%	6%	7%
2	22%	13%	14%
3	30%	17%	19%
4	42%	26%	28%
5	53%	33%	35%
10	72%	51%	53%
15	79%	65%	67%
20	83%	72%	74%
30	90%	82%	83%
50	92%	88%	88%
75	93%	89%	90%
75+	100%	100%	100%

Although half of the staff commute fewer than 10 miles each way, approximately half of the staff and almost 30% of the faculty live more than 10 miles from campus.

**TOP 20 ZIP CODES:
UCLA EMPLOYEE LOCATIONS**

ZIP	AREA	POPULATION
90024	Westwood	1,538
90034	Palms	881
90025	Sawtelle	755
90066	Mar Vista	649
90049	Brentwood	351
90064	West L.A.	221
90403	Santa Monica	205
90046	Hollywood	176
90405	Santa Monica	173
90404	Santa Monica	159
90036	Mid-Wilshire	144
90291	Venice	139
90035	West L.A.	127
90230	Culver City	123
90250	Hawthorne	116
90019	Mid-City	115
90045	Westchester	105
91403	Sherman Oaks	104
90048	Mid-City West	100
90016	West Adams	97

Figure 3a. Top 20 zip codes with the most UCLA full-time employee residents.



All but one of the 20 most popular zip codes amongst UCLA employees are within ten miles of the main UCLA campus (Figure 3a). They include neighborhoods in West Los Angeles and Santa Monica, Hollywood, Mid-City, Sherman Oaks, and Hawthorne.

Figure 3b (on page 4) shows the top 20 zip codes most densely populated by staff; they overlap with most of the communities shown in Figure 3a, the map showing the top 20 most popular zip codes for all UCLA employees. Granada Hills, a neighborhood near the 405 and 118 freeways in the San Fernando Valley with roughly 220 staff members, stands out, as it is not on the top 20 list for all employees and its distance from Westwood makes a commute via transit

difficult.

Figure 3c offers a closer examination of the top 20 most populous zip codes amongst faculty members. Communities further than 10 miles away from campus on the list include Palos Verdes Peninsula, as well as communities west of campus, like Topanga, are shown on the map.

Figure 3d suggests that employees hired within the past five years were more likely to live closer to campus.

See page 6

Top 20 Zip Code Areas with the Most UCLA Staff Residents: Spring 2008

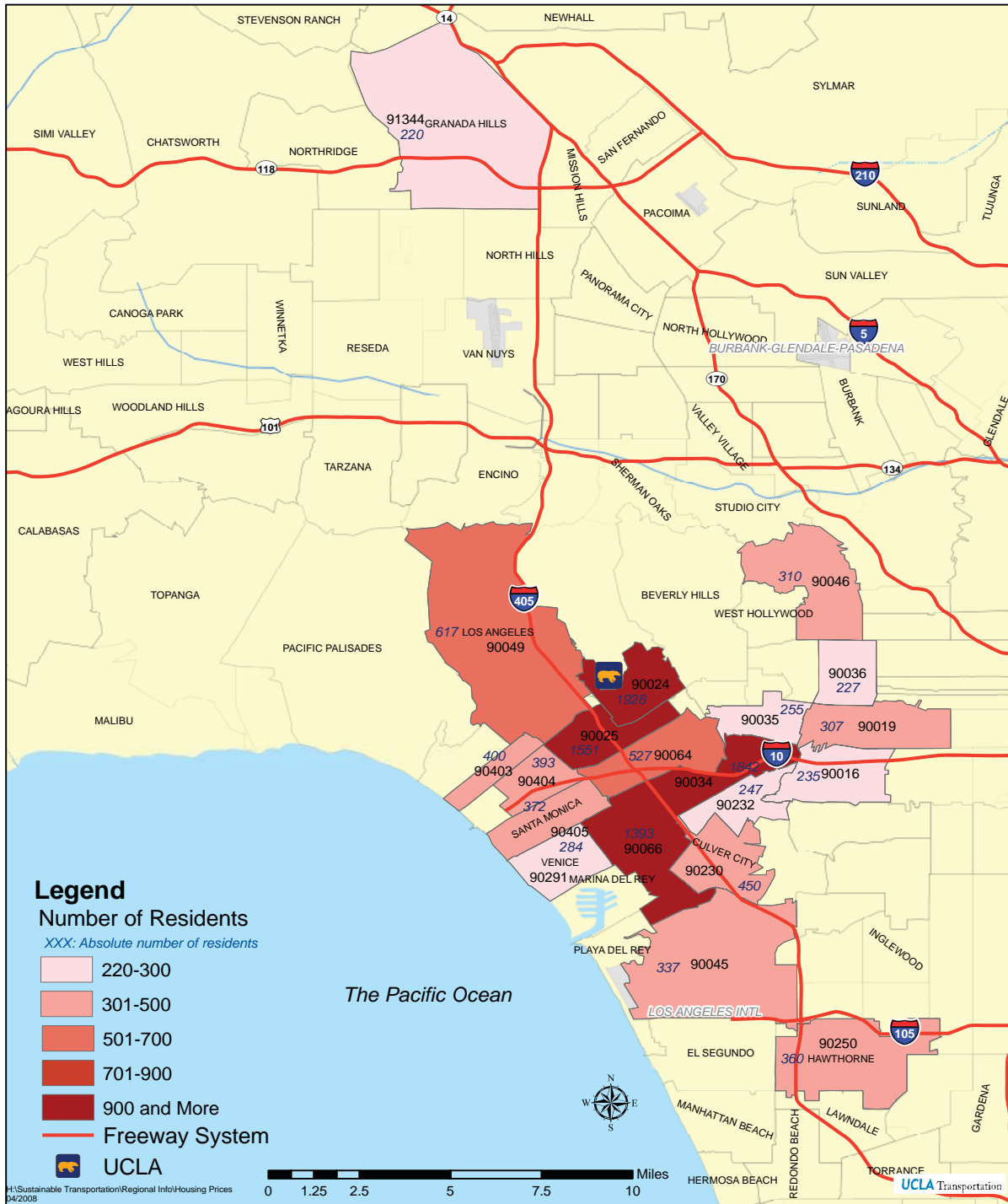
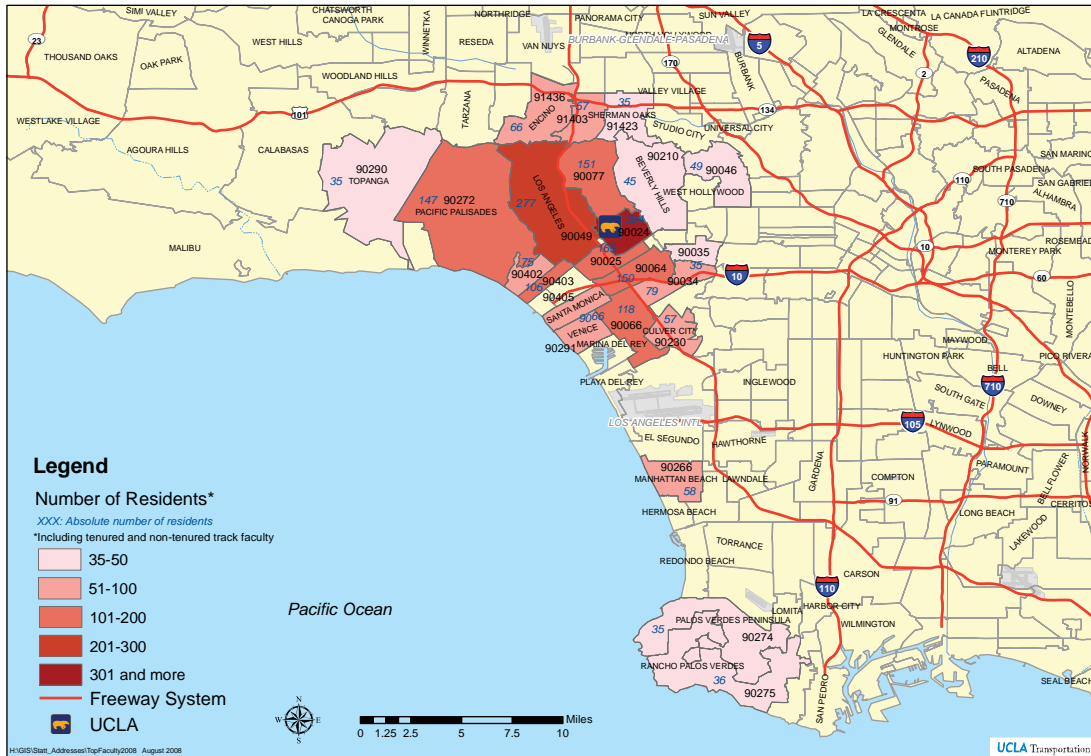
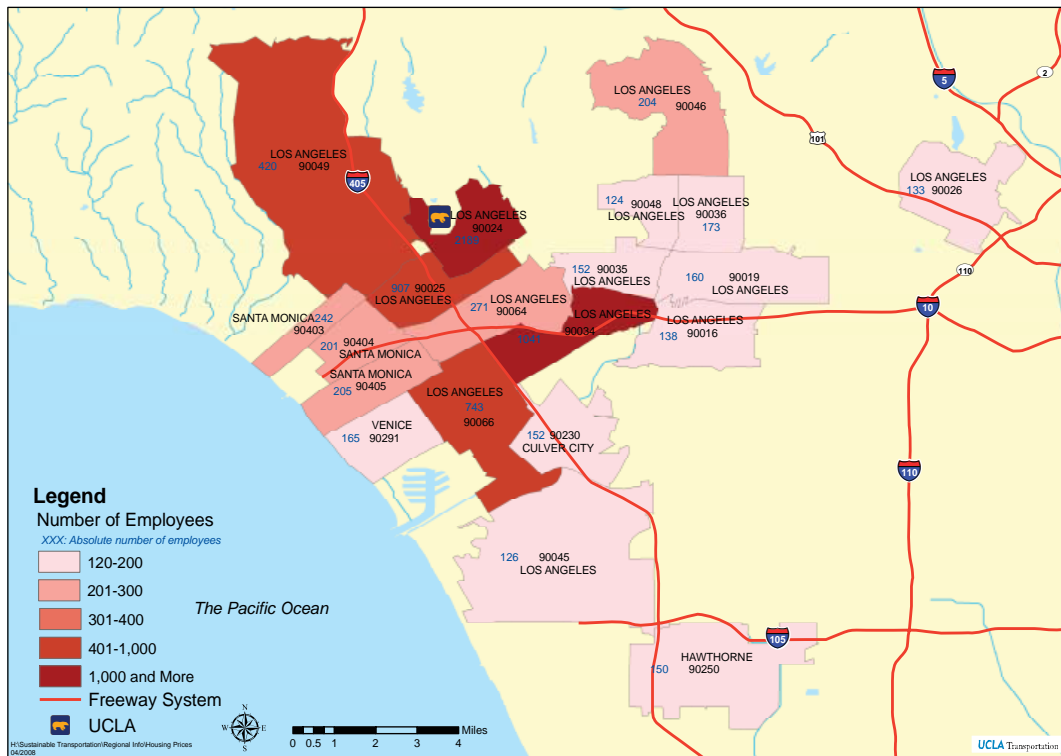


Figure 3b. Top 20 zip code areas with the most UCLA staff residents.

Top 20 Zip Code Areas with the Most UCLA Faculty Residents



Top 20 Zip Code Areas with the Most Recent UCLA Employees Hired: 2004-2008



From top: Figure 3c. Top 20 zip code areas with the most UCLA faculty residents.
Figure 3d. Top 20 zip codes with employees hired between 2004 and 2008.

Continued from page 3

There are many possible explanations for this trend.

For one, traffic congestion worsened and housing prices skyrocketed during the years between the date of hire for UCLA veterans and recent hires; this in turn may have affected how they made their locational choices.

Recent hires may also be more willing to live in the rental housing in denser neighborhoods near UCLA instead of buying a detached single-family home further away.

Finally, it is possible that the younger employees hired since 2004 have found it desirable to live in gentrifying areas relatively close-in to campus. The list of 20 zip codes with the most recently hired UCLA employees also includes 90026, which is one of the zip codes in Silver Lake. Silver Lake is a gentrifying neighborhood close to downtown that attracts young professionals, including UCLA employees. Although zip code 90026 is about 13 miles from campus, there is reliable transit between the UCLA campus and this area.

Understanding the residential choices made by UCLA employees is under further study.

Vehicle Trips and Traffic

UCLA has voluntarily agreed to cap the number of daily vehicle trips to the campus to fewer than 139,500. To track the University's progress in meeting this target, each fall UCLA Transportation completes a cordon count, which tracks the number of trips made by car and bus to campus over the course of a week.

Table 4 reports the number of vehicle trips to UCLA each day by campus area, with a bus subtraction.

The number of vehicle trips to UCLA fell for the fifth year in a row to roughly 112,000 vehicle trips to and from UCLA each day. This is 6% lower than the Fall 2007 cordon count. Furthermore, the number of vehicle trips to UCLA in 2008 is down by 9% overall since 1990, the year UCLA Transportation began tracking vehicle trips. (Note: At the time of the 2008 cordon count in the third week of October, gasoline prices were still very high. This likely impacted traffic volumes.)

Through the cordon count, traffic patterns onto and off campus are captured. As illustrated in Figure 4, the most popular entrance to the University is Le Conte and Westwood Plaza; other heavily utilized entrances to the University include the intersection of Strathmore and Gayley and Sunset and Westwood Plaza.

Location	2006	2007	2008
Main campus	104,292	102,417	96,171
Southwest campus	14,058	15,196	14,216
Wilshire Center* *(By formula)	2,058	2,058	2,058
Bus trip subtraction	-402	-402	-402
Total	112,043	119,269	120,006



A vehicle travels around the traffic circle at Ackerman Terminal. On average, there are roughly 112,000 vehicle trips to the campus daily.

Figure 4. Traffic Volume by Intersection at UCLA in 2008

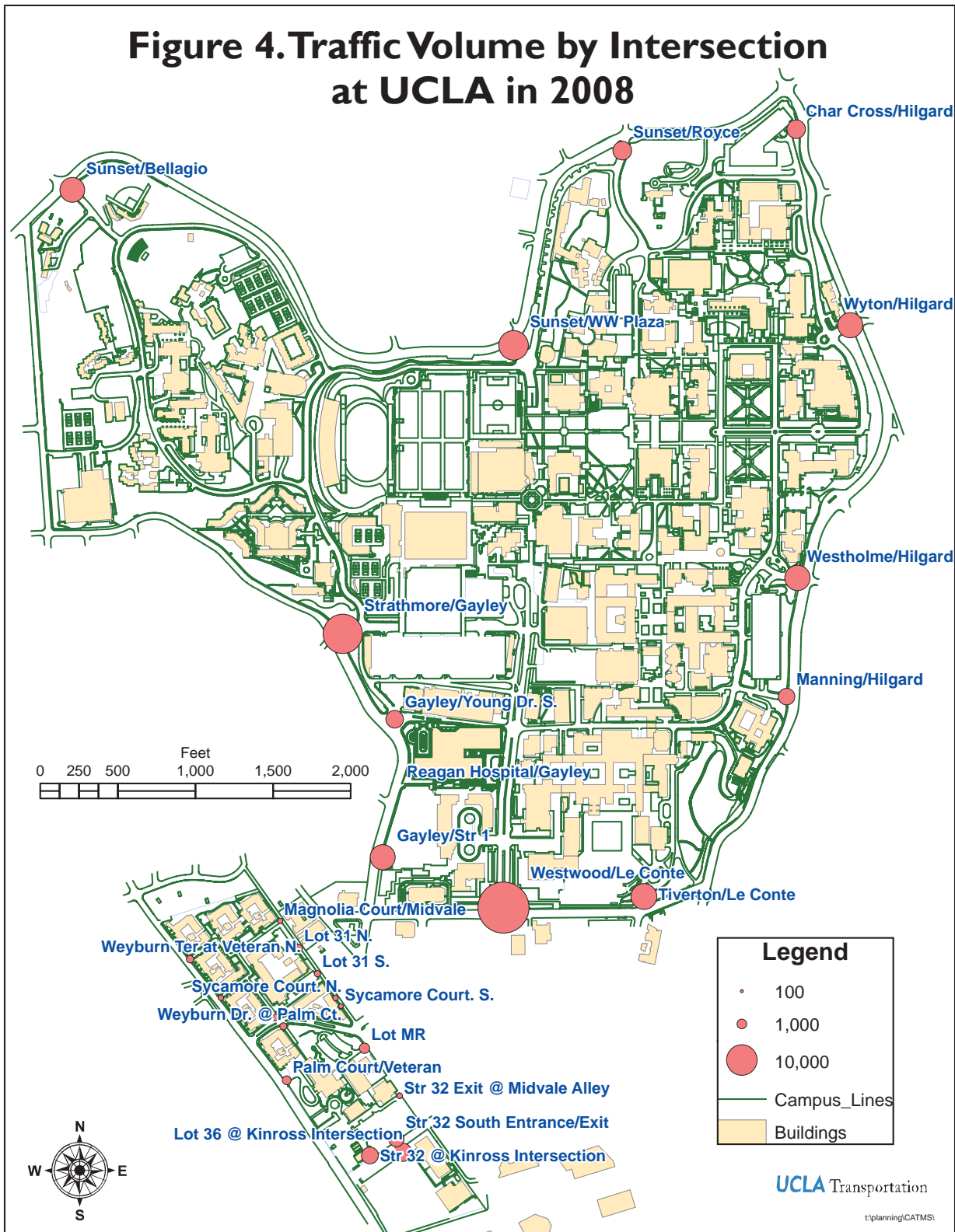


Figure 4. Traffic Volume by Intersection at UCLA in Fall 2008



Commuters arrive on campus using a variety of modes, including by car and on foot.

How do UCLA commuters get to campus?



Bicycle

The use of bikes to commute to and around the UCLA campus has grown in visibility following the adoption of the UCLA Bicycle Master Plan in 2006.

The findings of UCLA Transportation’s May 2008 Bike Rack Utilization Survey suggest that bike racks are heavily utilized, especially by residents in UCLA campus housing on the Northwest Campus and at Weyburn Terrace. The results of the survey are summarized in *Table 5*. Additional bike racks are deployed as the bicycling population grows.

Roughly 1.3% of employees and 4.5% students commute to UCLA by bicycle on a daily basis.¹

¹ Employee mode split calculated using results from 2008 AQMD Survey data (full day, not the AM window period). Student mode split calculated using results from UCLA Transportation’s annual Spring Student Survey.

Bike racks conveniently located near academic buildings and student residences are often at capacity during the day. Right: A student locks up his bicycle near one of the Engineering buildings.

Table 5. Bike rack utilization at UCLA				
Campus area	Bike Racks	Capacity	No. of bikes on racks	No. of bikes on railings
Northwest Campus	132	1,067	272	12
South Campus	174	525	147	6
Central Campus	156	397	200	5
North Campus	128	151	123	8
Health Sciences and Southwest Campus	41	236	103	7
Total	642	2,508	958	57



Campus Express & Wilshire Express Shuttle Bus Routes



A decorated Campus Express shuttle bus.

UCLA Transportation estimates that the Campus Express and Wilshire Express provide 1.1 million trips to, from, and around campus annually.

On a typical day, *Table 6* reports that the Campus Express serves 3,300 passenger trips and the Wilshire Express serves 1,700 passenger trips.

The two campus shuttle routes serve a diverse constituency. But as the mode split pie chart for both the Campus Shuttle (*Figure 6*) and the Wilshire Shuttle (*Figure 7*) show, many riders are transfers from other modes. These modes include transit, vanpools, cycling, and carpooling.

Additionally, as reported in *Table 7*, roughly 5% of passengers on both routes had parked their cars elsewhere before boarding a shuttle to reach their final destination.

Table 6. Typical ridership on the UCLA Campus Express and Wilshire Express, 2005-2007

	2005	2006	2007
Campus Express	2,786	3,263	3,279
Wilshire Express	1,836	1,639	1,727
Total	4,622	4,902	5,006

This is a mid-week count during the middle of the quarter.

Table 7. Where do commuters park cars before transferring to a UCLA campus shuttle?

	Campus Express	Wilshire Shuttle
UCLA Permit	163	26
Daily Permit	12	2
Off-Campus Lot	19	5
Surface Street	36	38
Total	230	71

Figure 6. What percentage of Campus Express riders transfer from other modes?

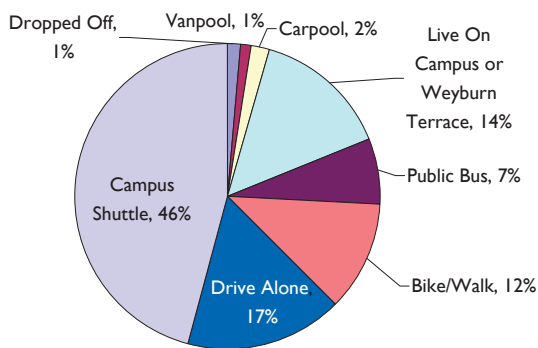
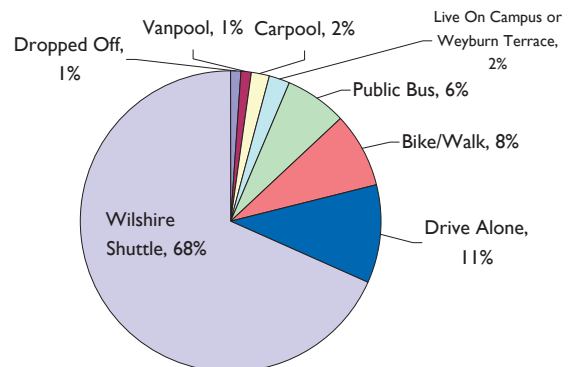


Figure 7. What percentage of Wilshire Express riders transfer from other modes?



Carpooling

Carpool represents the mode of choice for about 6% of students and 17% of faculty and staff. UCLA Transportation offers a discounted parking permit to students, faculty, and regular visitors who sign up to carpool together. The number of permits sold and the number of carpools parking with those permits are listed below in *Table 8*.

	Students	Staff/Faculty	Non-UCLA (volunteers, visitors/ temps)	TOTAL
Fall Quarter 2005	606 permits	410 permits	Not Available	1,016 carpools
	1,451 participants	934 participants		2,385 participants
Fall Quarter 2006	468 permits	413 permits	7 permits	888 carpools
	1,168 participants	941 participants	17 participants	2,126 participants
Fall Quarter 2007	415 permits	422 permits	7 permits	844 carpools
	1,022 participants	958 participants	15 participants	1,995 participants
Fall Quarter 2008	379 permits	454 permits	6 permits	839 carpools
	935 participants	1,025 participants	15 participants	1,975 participants

Note: The number of permits sold include both 2- and 3- person carpools; student sub-totals include both undergraduate and graduate student populations.
* Source: Parking Services, UCLA Transportation



Above: UCLA staff and students who buy a Go Metro pass receive a Transit Access Pass (TAP card) from the Los Angeles County Metropolitan Transportation Authority like the one pictured above. Bottom right: UCLA is served by five area transit agencies, including the Culver CityBus.

	Students	Staff/Faculty
1990	15%	7%
2000	17%	7%
2004	23%	11%
2008	21%	14%

Public Transit

During the 2007-2008 year, about 21% of students and 14% of staff and faculty used public transit regularly to commute to UCLA (see *Table 9* and *Figure 8*). The percentage of commuters using public transit has risen since 1990. Between 1990 and 2008, the percentage of staff and faculty using transit to get to campus doubled, from 7% to 14%.





Above: A Big Blue Bus (BBB) 12 waits at the Hilgard Terminal, the northern terminus of its route. Five BBB routes serve the main UCLA campus.

Since the development of BruinGo, UCLA’s first transit pass subsidy program, the percentage of transit riders has risen significantly.

Since 2004, the transit mode amongst students has fluctuated between 20% and 23%. In that time, Weyburn Terrace opened, allowing 1,350 graduate students to move to the Southwest Campus. Those students shifted from being potential regular public transit users to utilizing other modes, such as the Campus Shuttle, walking, and cycling, to reach the main campus.

As a part of its Transportation Demand Management program, UCLA Transportation partially subsidizes the purchase of quarterly bus passes or bus ride coupons for the five transit agencies directly serving UCLA: Metro through Go Metro; Big Blue Bus and Culver CityBus through BruinGo; City of Santa Clarita Transit; and the Los Angeles Department of Transportation (LADOT).

UCLA subsidized over one million Big Blue Bus (BBB) and Culver CityBus rides during FY2008 and over seven million rides since BruinGo’s inception

Figure 8. Student and employee transit mode share, 1990-2008

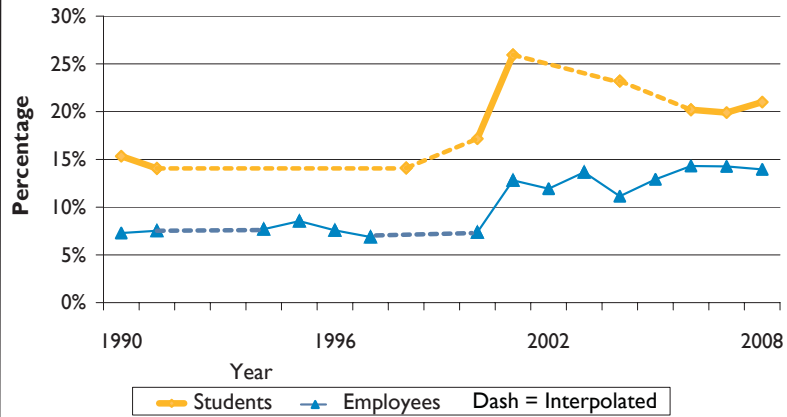
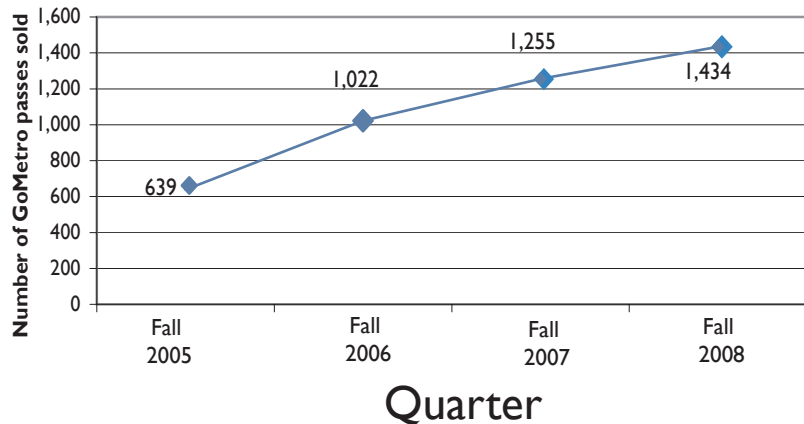


Figure 9. Go Metro Transit Pass Sales, Fall 2005-Fall 2008



A Metro Rapid 761 bus travels southbound on Hilgard Avenue en route to its terminus point by Wilshire and Veteran. The 761 is a key connector between the UCLA campus and the eastern San Fernando Valley.



in 2000 (see Table 10).

Figure 9 (on page 11) illustrates the rapid growth of UCLA Transportation's Go Metro subsidy program. Between Fall Quarter 2005 and Fall Quarter 2008, the number of transit passes sold to students and staff more than doubled.

Figure 10 reports the number of passes subsidized and sold by UCLA since 2006, separated by transit operator.

According to Table 10, UCLA subsidized over one million Big Blue Bus and Culver CityBus rides during FY2008 and over seven million rides since BruinGo's inception in 2000.

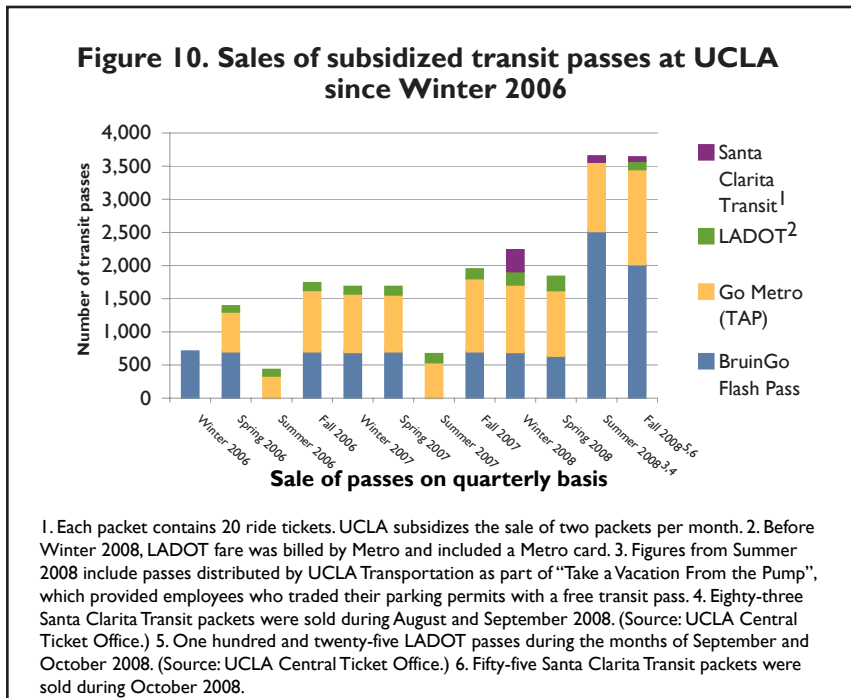


Table 10. BruinGo ridership since inception								
	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008
Big Blue Bus Trips	1,313,455	1,661,161	1,918,667	1,350,529	1,149,084	968,050	733,549	974,174 ¹
Big Blue Bus Riders	22,549	26,657	30,044	26,420	22,801	Not Available	Not Available	Not Available
Culver CityBus Trips	Not Applicable ³	Not Applicable	Not Applicable	163,672	179,055	169,162	141,141	108,918 ²
Culver CityBus Riders	Not Applicable	Not Applicable	Not Applicable	6,421	7,086	Not Available	Not Available	Not Available
BruinGo Total Trips	1,313,455	1,661,161	1,918,667	1,514,201	1,328,139	1,137,212	874,690	1,083,092

1. Missing 31 days - either omitted or underreported.
2. Change in fare collection machine meant that BruinGo riders did not have to swipe cards anymore.
3. UCLA Transportation added Culver CityBus to BruinGo in 2003.

Carsharing

Zipcar, the nation's largest carsharing service, serves the UCLA community with eleven Zipcars parked around the UCLA campus and in Westwood (see Figure 11). As of October 2008, there are 181 students and 129 faculty members affiliated with UCLA's Zipcar account.

As Figure 12 reports, on average, Zipcars enjoy weekday utilization rates of over 30% on and weekend utilization rates of over 55%¹.

Employees who use an alternative mode to commute to UCLA are eligible to join UCLA Transportation's Alternative Mode Commuter Program, which offers the complimentary use of a Zipcar for up to eight hours per month.

Alternative mode commuters use Zipcars to travel anywhere from one to two miles away up to over 200 miles on a given trip; however, on average, they travel between 15 and 23 miles. The typical user takes a Zipcar for between two and three hours. Table 11 reports the average distance traveled, length of reservation, and total vehicle miles traveled by alternative commuters between July and November 2008.

¹ Note: Zipcar began its carsharing operation in June 2008 after the completion of its merger with Flexcar. A complete set of data for Flexcar use data is no longer available.



This XB Scion is one of the eleven available Zipcars on the UCLA campus.

Figure 11. Locations of Zipcars at UCLA and around Westwood

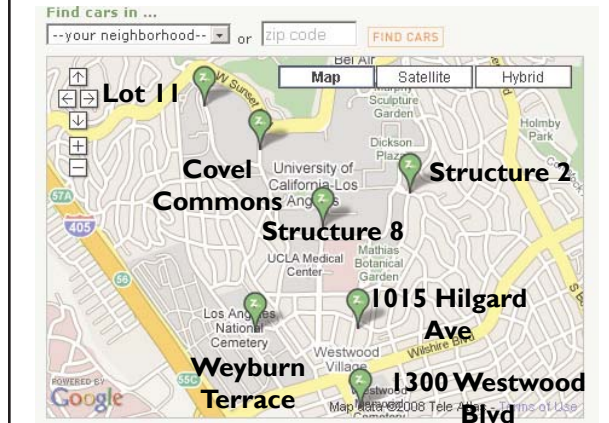
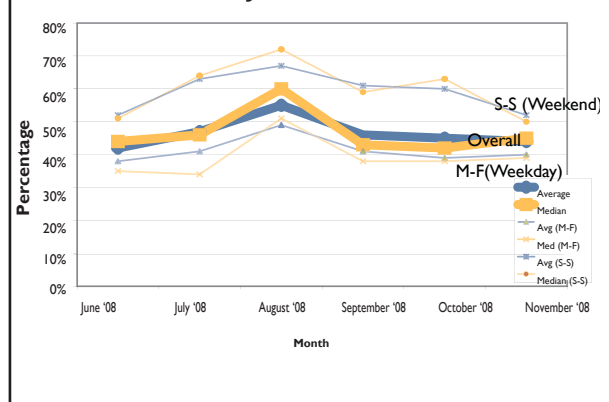


Table 11. UCLA Alternative Mode Commuter Zipcar usage, July 2008 - December 2008

Month	Average distance traveled (in miles)	Average length of reservation (in hours)	Total Vehicle Miles Traveled	Number of unique users each month
July '08	15	2.4	667	31
Aug. '08	21	3	880	19
Sept. '08	23	2.8	1,231	27
Oct. '09	18	2.6	1,033	34
Nov. '08	17	2.8	680	33
Dec. '08	~19	2.7	902	28

Figure 12. Utilization rate of Zipcars between June and November 2008



Between July and November 2008, the utilization rate of these Zipcars averaged over 30% during the week and over 55% on the weekends.

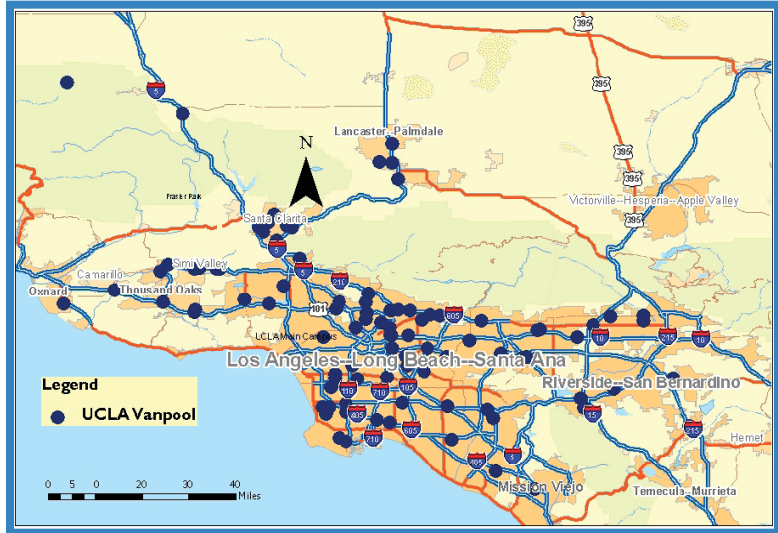
Table 12. Demographics of UCLA Vanpoolers	
Destinations served	72
Number of vans	157
Occupancy rate	98%
Total number of full-time participants	1,678
Students	161
Staff & faculty	1,281
Non-UCLA participants	135
Part-time riders	700-800 trips per month during peak periods



Vanpool

Approximately 2,500 staff, students, and community members participate in UCLA's Vanpool Program. About two-thirds (1,678) of vanpoolers are full-time riders and, as *Figure 13* shows, they board vanpools at locations across Southern California, from Apple Valley to San Bernardino County. *Table 12* describes the demographics of the vanpool riders and our fleet.

Figure 13. UCLA Vanpool Program pick-up locations

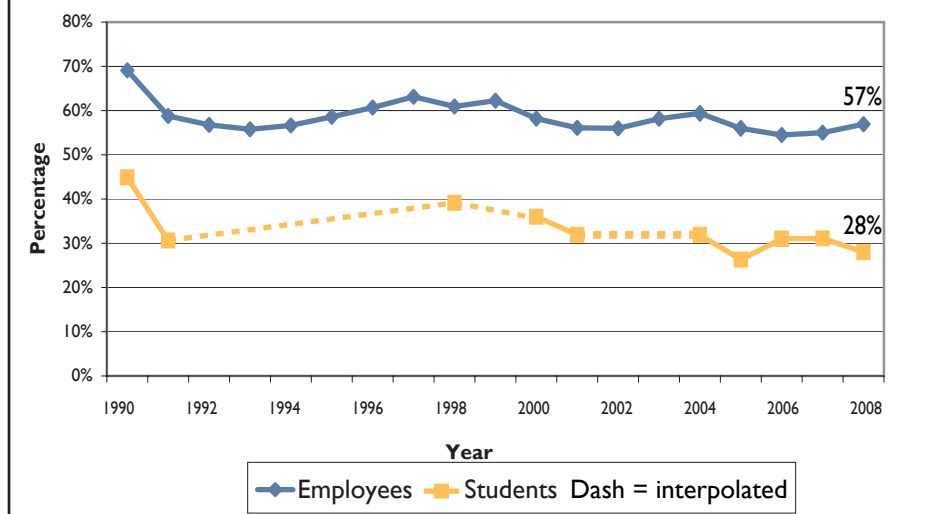


Left: UCLA vanpool vehicles carry up to 11 passengers. Above: The map illustrates the spatial distribution of UCLA vanpool pick-up locations throughout Southern California.

Drive Alone

Roughly 57% of employees and 28% of students reported driving to campus alone in 2008. This is far lower than the commuter drive-alone rate in the Los Angeles metropolitan area of about 75%, according to the Southern California Association of Governments (SCAG). *Figure 14* reports the drive-alone rate for students and staff between 1990 and 2008.

Figure 14. Employee and student drive-alone rate, 1990 to 2008





On Foot

In the 2008 Spring Student Transportation Survey, 7,935 of the respondents - or roughly 30% - reported that they walked to campus. According to the responses from the 2008 AQMD survey, roughly 5.6% of all staff and faculty report walking to work.

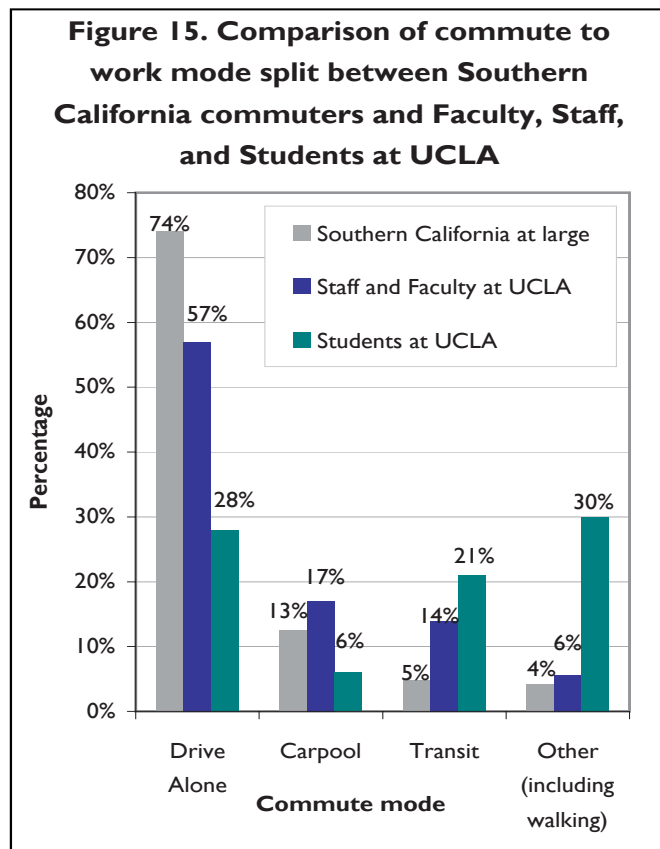
Programs such as I Heart Walking Week, seek to promote walking as both a way to travel as well as a way to exercise. Left: Participants in I Heart Walking Week 2008 walk briskly during one of the activities planned by UCLA.

UCLA now and in the future

How do UCLA commuting patterns compare with the region as a whole?

UCLA defies the infamous car culture of Los Angeles. Los Angeles County drive-alone commute rates are approximately 74%, but UCLA employees come in significantly lower, at around 57% (see *Figure 15*). Students have even lower drive-alone rates at 28% and heavily utilize the transit pass subsidies. Traffic volumes into and out of campus have declined for the past several years, even as campus activity has grown.

The passage of the American College and University Presidents Climate Commitment (ACUPCC) and the UC Policy on Sustainable Practices led to the completion of UCLA's first ever Climate Action Plan. The Climate Action Plan included the calculation of UCLA's greenhouse gas emissions (GHG) campus-



UCLA bucks the infamous car culture of Los Angeles. The drive-alone rate of UCLA employees is about 57%, which is 17% lower than the region average of about 74%.

wide. Similar to the State's climate bill, AB32, UCLA's commitment to ACUPCC requires the reduction of the University of California's GHG emissions to 1990 levels by the year 2020. By UCLA Transportation's calculations, the campus' mobile source GHG emissions in 2007 were lower than in either 1990 or 2000; thus, the UCLA campus has already met part of its goals set forth by the ACUPCC and the UC Policy.

The University's Transportation Demand Management program has been critical in this accomplishment.

How to continue UCLA's progress in fulfilling its Climate Action Plan goals?

UCLA Transportation intends to continue its TDM program to keep up with the growth in the campus' development and daytime population. The UCLA Climate Action Plan states that behavioral change at both the institutional and individual level is necessary for the success of many of UCLA's proposed initiatives to reduce GHG emissions. UCLA Transportation seeks to lower the commuter drive-alone rate to 50% by 2014.

The initiatives articulated in the UCLA Climate Action Plan to reduce overall vehicle miles traveled (VMT) include the following:

- The expansion of on-campus housing for undergraduate and graduate students, workforce housing for staff and faculty.
- The expansion of transit, vanpool, carpool, walking, and biking programs.

Sustainable Transportation at UCLA

The Sustainable Transportation program at UCLA includes a menu of options:

- Transit pass subsidy agreements (at least 50% subsidy for students and employees);
- Commute support services, such as the emergency ride home program.
- Discounted membership and hourly rentals for Zipcar, a car-sharing program serving the UCLA campus.
- The installation of bicycle infrastructure, such as bike sharrows, racks, and bike lockers; and an agreement with UCLA Recreation which provides student and employee bicycle commuters with shower access.
- Two shuttle routes (the Campus Express and the Wilshire Express) enable staff and students to travel around the University as well as to transfer to and/or from other modes to reach their final destination.



Above: A commuter parks her bike in a bicycle locker.

- UCLA Vanpool Program, which serves nearly 1,700 staff, students, and community participants, provides access to UCLA from across six Southern California counties.
- Discounted parking permits for students and staff who carpool.
- Zimride, a Facebook application, allows users to focus carpool matches on those within the UCLA network.

Currently, UCLA spends about \$6.6 million dollars per year to fund the sustainable modes program.