



STANFORD UNIVERSITY

P&TS

Parking & Transportation Services

Transportation Demand Management at Stanford University

A Brief Overview

August 17, 2013



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TDM

Transportation Demand Management is the application of strategies and policies to reduce travel demand (specifically of single-occupancy private vehicles), or to redistribute this demand in space or in time.



Importance of TDM at Stanford

- Environmental Sustainability
 - Climate change
 - Air quality
 - Resource conservation
- Community Relations
 - Traffic (**GUP**) and neighborhood parking
 - Public service (Marguerite)
- Employee Well Being
 - Stress reduction
 - Increased exercise
 - Financial rewards
- Reduce Investment in Parking



TDM Program

- Extensive shuttle
- Parking fee program
- Emergency ride home
- Freshman "no cars"
- Transit information
- Rideshare matching
- Bicycle program
- Pre-tax transit pass + commuter checks
- Eco Pass/Go Pass
- Charter services
- Commute planning
- Car rental: hourly—half-day
- Carsharing
- East Bay Express
- Commute Club
- Work shift mgt.
- Personal outreach
- Promotions / events
- Extensive website



Commute Club Program

- Clean Air Cash (\$300/year) and other incentives
- Carpool permit
- Vanpool subsidies
- Reserved parking spaces for carpools/vanpools
- Complimentary daily parking passes for carpoolers
- Rewards for recruiting members
- 12 free hours of car rental
- Transit subsidy
- Purchase eight daily permits per month
- Entries into regular prize drawings
- Members only gifts
- "Love Stories," Commute Heroes, "Picture My Commute," "Pain at the Pump"



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Marguerite Fleet



32 to 38
passenger
Diesel Electric
Hybrid = 5



32 to 37
passenger
Diesel
Transit = 21



28 to 30
passenger
Diesel
Shuttle = 19



14 to 16
passenger
Diesel
Sprinter = 9



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Marguerite Fleet



Three electric buses due this week



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Promote: Campaigns

Posters

carpool
bicycle
train
bus
walk
vanpool

Caltrain just makes more sense for us than driving. The Caltrain GO Pass and higher gas prices finally changed our minds and our commute. Instead of five days in the car, now we ride the train every day with headphones, books, laptops, conversation, and most importantly relaxation.
IRT Lane Medical Library's EdTech Group

Join the Stanford University Commute Club Today.
<http://transportation.stanford.edu>
(650) 723-9362

Photo credit: from bottom right: Mary Ann, Melissa Martinez, David Tully, Dan Manning, Roger Winkler

Spin the Transportation Wheel of Fortune* and get great tips on how to make an impact for the university, for your financial and physical health, and for the environment.

Fig 1. Don't drive alone on Spine the Hill Drive. Cars cause 25-40% of carbon-emitting problems, which are our biggest danger to the environment when pollution is at its worst.
Fig 2. Avoid driving 20 miles a week. Burn 20 lbs. in 20 days and a week's worth of the equivalent of 3.3 barrels of oil per week.
Fig 3. Refuel when it's cool. Getting gas during cooler hours can help prevent gas vapors from heating up and creating smog.

carpool
bicycle
train
bus
walk
vanpool

There are so many incentives for those who use alternative transportation, both at the university and at the Office of Development. It helps motivate you to find alternative ways to get to work, rather than driving alone.
Stanford Office of Development staff

Join the Stanford University Commute Club Today.
<http://transportation.stanford.edu>
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Photo credit: from left to right: David Hsu, David Austin, Elizabeth Chatterton, Kelly Reynolds, David Reinhardt, Chris Voss, Jennifer Taylor



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Promote: Campaigns

Postcards

46,800 calories burned
and increased life span

every
trip
counts

carpool
bicycle
train
bus
walk
vanpool

Calculations will vary depending on individual commute.

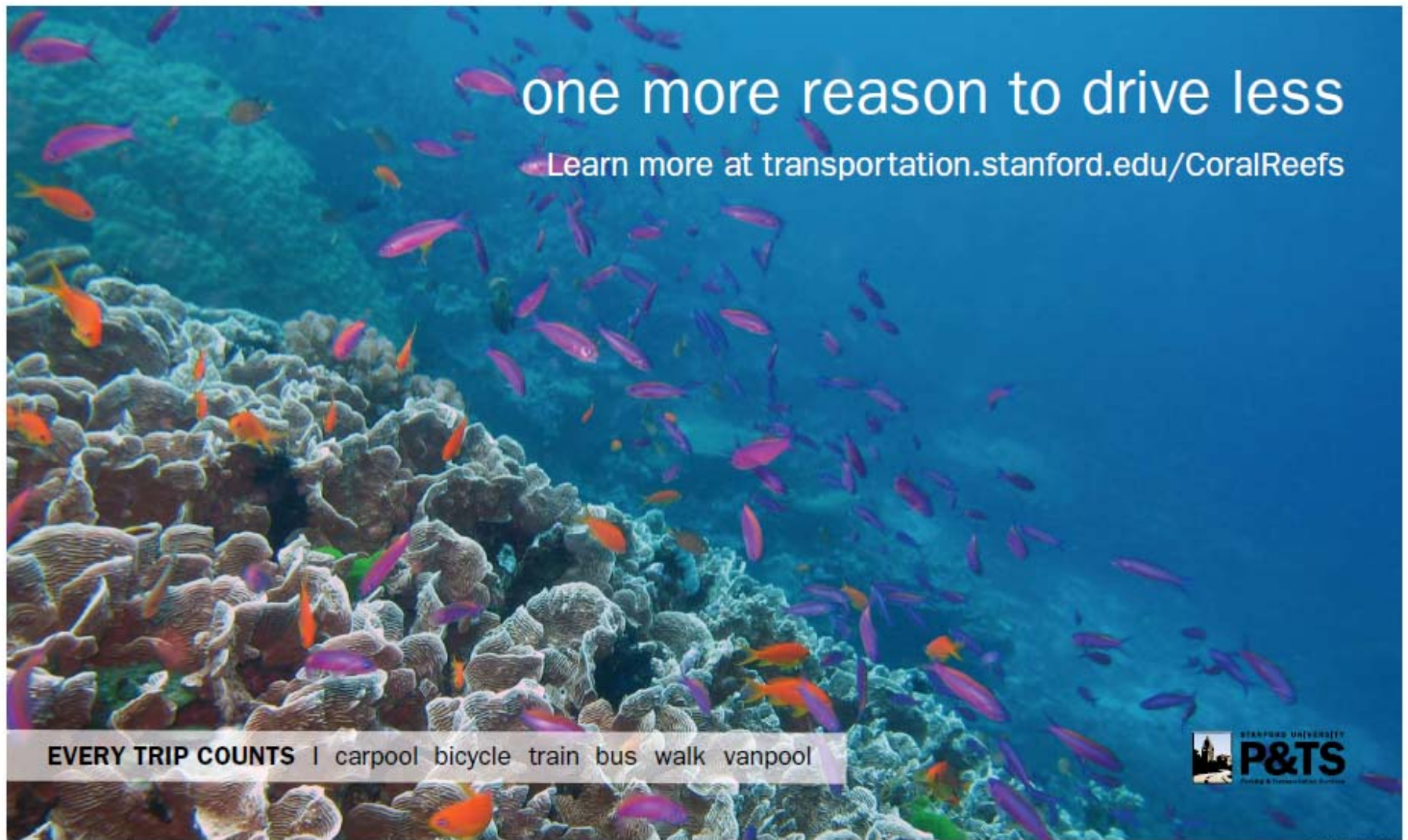
\$1,465 a year saved
or a dream vacation

every
trip
counts

carpool
bicycle
train
bus
walk
vanpool

Calculations will vary depending on individual commute.

Promote: Campaigns



one more reason to drive less

Learn more at transportation.stanford.edu/CoralReefs

EVERY TRIP COUNTS | carpool bicycle train bus walk vanpool

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Promote: Campaigns



Dump the Pump. Rideshare.

commuteclub.stanford.edu

Everything's coming up roses

*Try a sustainable commute.
Things just might come up roses for you, too.*



*Congratulations, Stanford Football!
2013 Rose Bowl Champions*

transportation.stanford.edu

EVERY TRIP COUNTS | bicycle bus carpool train vanpool walk

Stanford Commute Club



**8,000
members.**

**Greater
rewards.**

Learn more >>

A large group of approximately 100 people, mostly adults, are posing for a group photo on a green lawn. They are arranged in many rows, with some people waving at the camera. In the background, there is a large, multi-story building with many windows, and a tall, thin tower is visible in the distance. The sky is overcast.

Commute Club members have more

fun

fitness

me time

money

relaxation

join us!



EVERY TRIP COUNTS | bicycle bus carpool train vanpool walk

transportation.stanford.edu



**My
commute
helped me
keep my
New Year's
resolutions**



[more time for me >>](#)

**Request
2013
Caltrain
and VTA
passes**



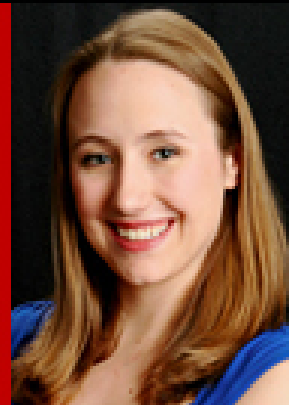
[Eligible employees learn more >>](#)

**My
commute
helped me
keep my
New Year's
resolutions**



[walk more, save more >>](#)

**My
commute
helped me
to lose
two sizes
and make
money**



[exercise more, save more >>](#)



Sustainable Commute.

[Things might come up roses for you. >>](#)

**Request
2013
Caltrain
and VTA
passes**



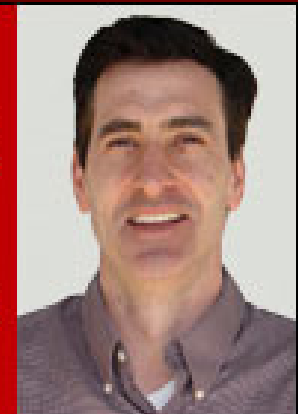
[Eligible employees learn more >>](#)

**Can your
commute
put you
in a
better
mood?**

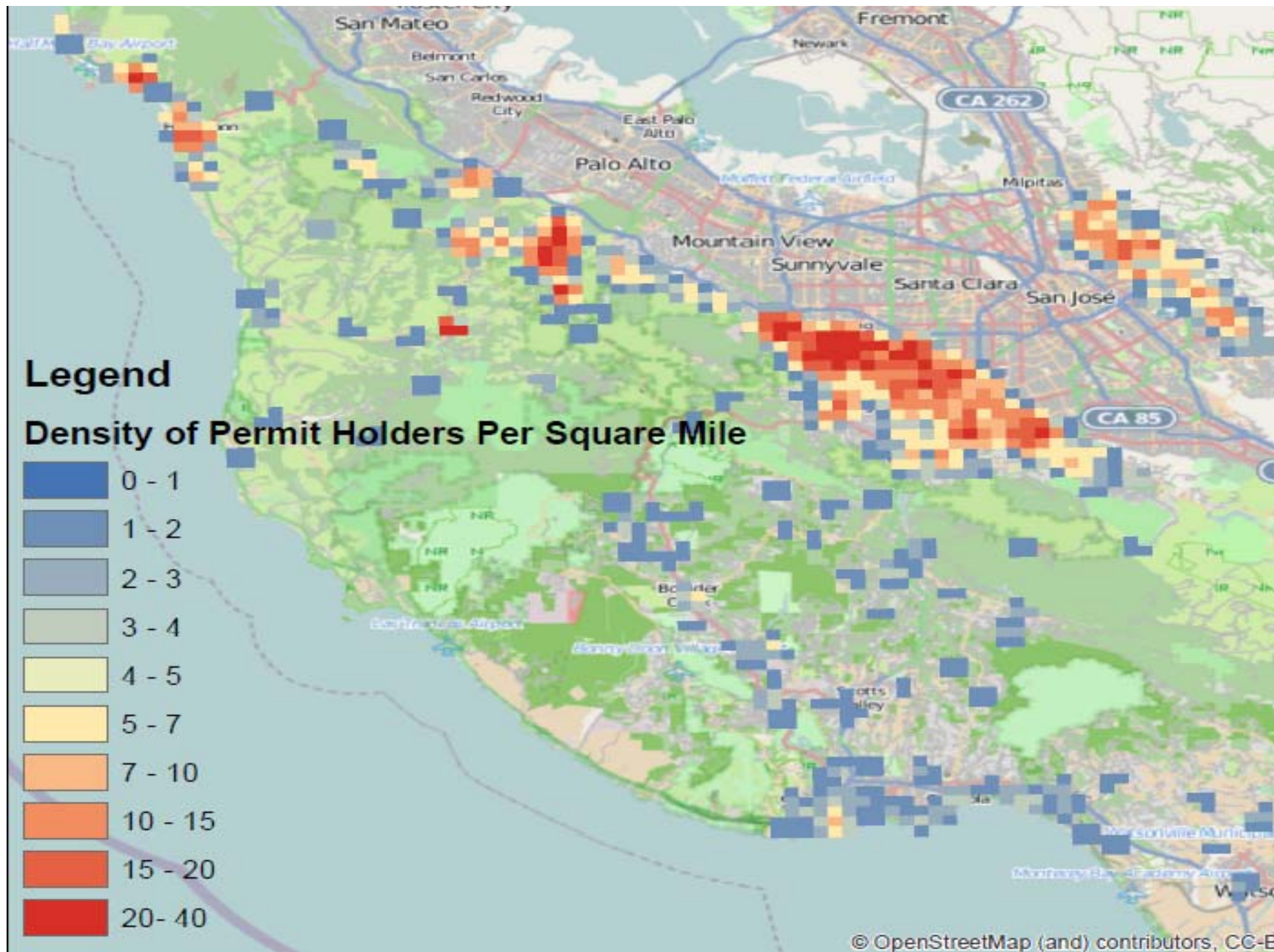


[Ramzi Salti says it can >>](#)

**My
commute
helped me
to lose
weight
and reduce
stress**



[exercise more, stress less >>](#)

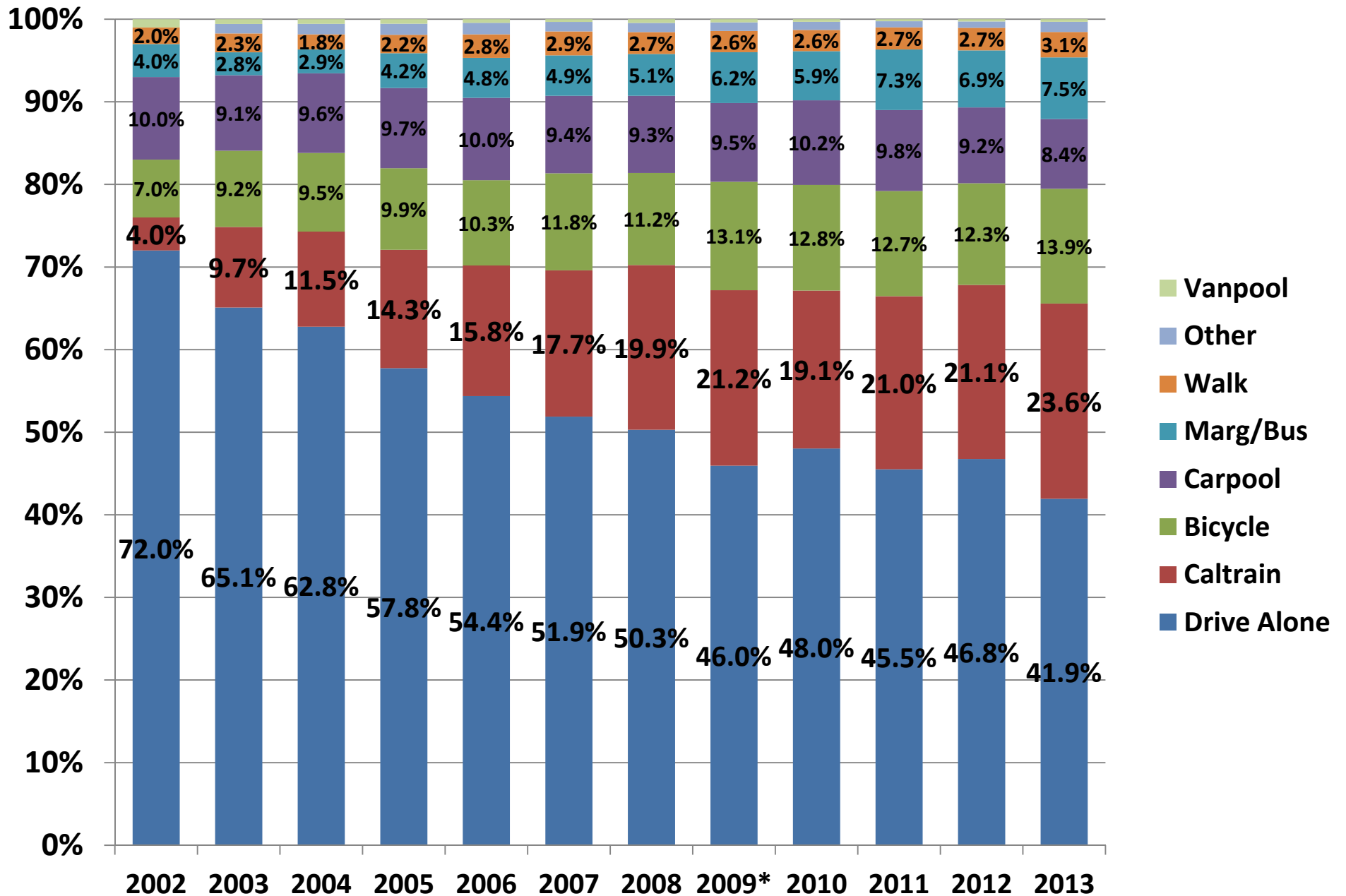




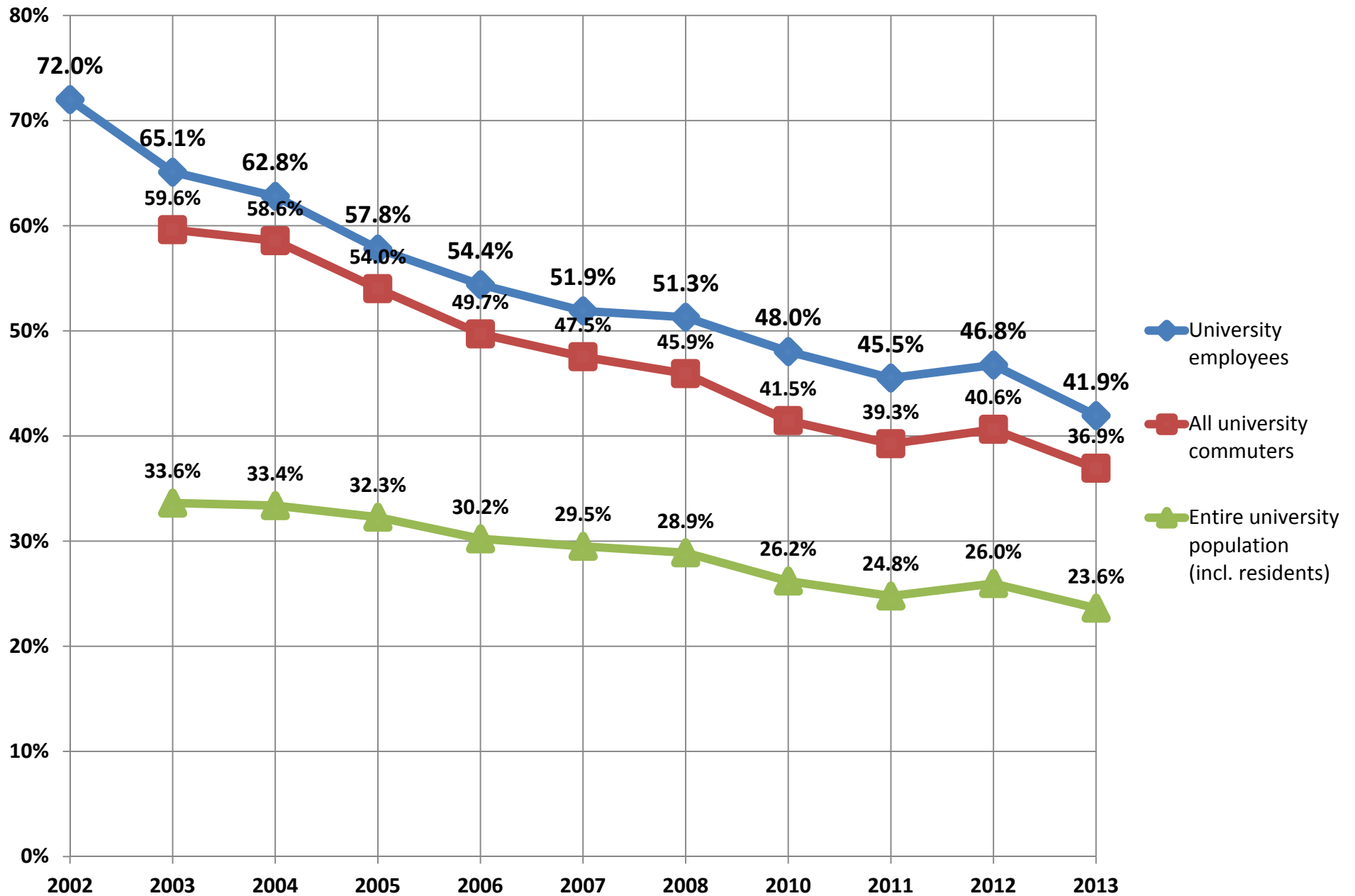
Metrics

- ✓ Annual trip counts (3,474 am, 3,591 pm)
- ✓ Campus commute mode survey
- ✓ Commute Club/carpool participation
- ✓ Parking permit sales
- ✓ Campus parking demand
- ✓ Marguerite shuttle ridership
- ✓ Commuter VMT/carbon footprint
- ✓ Program costs
- ✓ Parking construction costs avoided

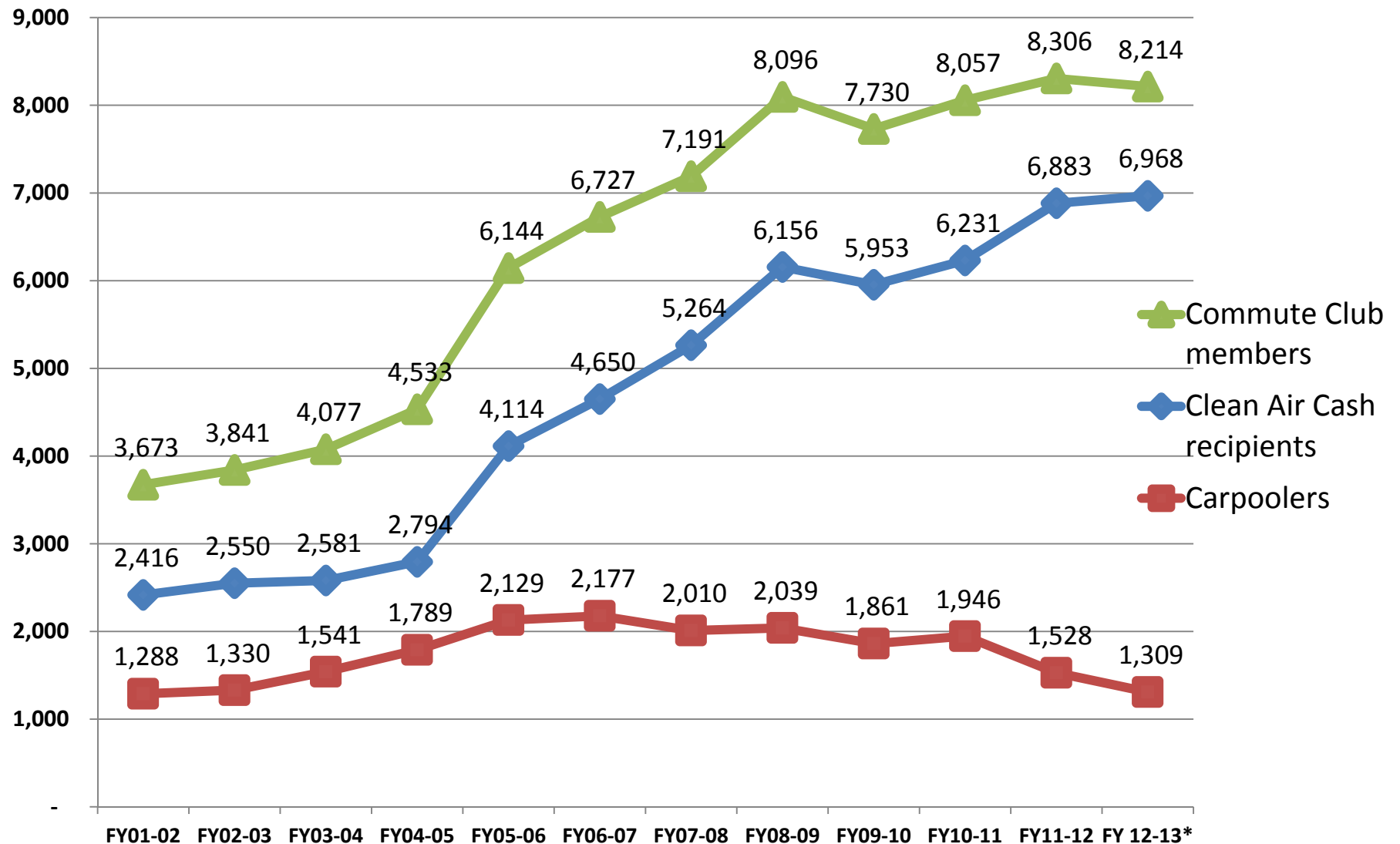
University Mode Split



University Drive Alone Rates

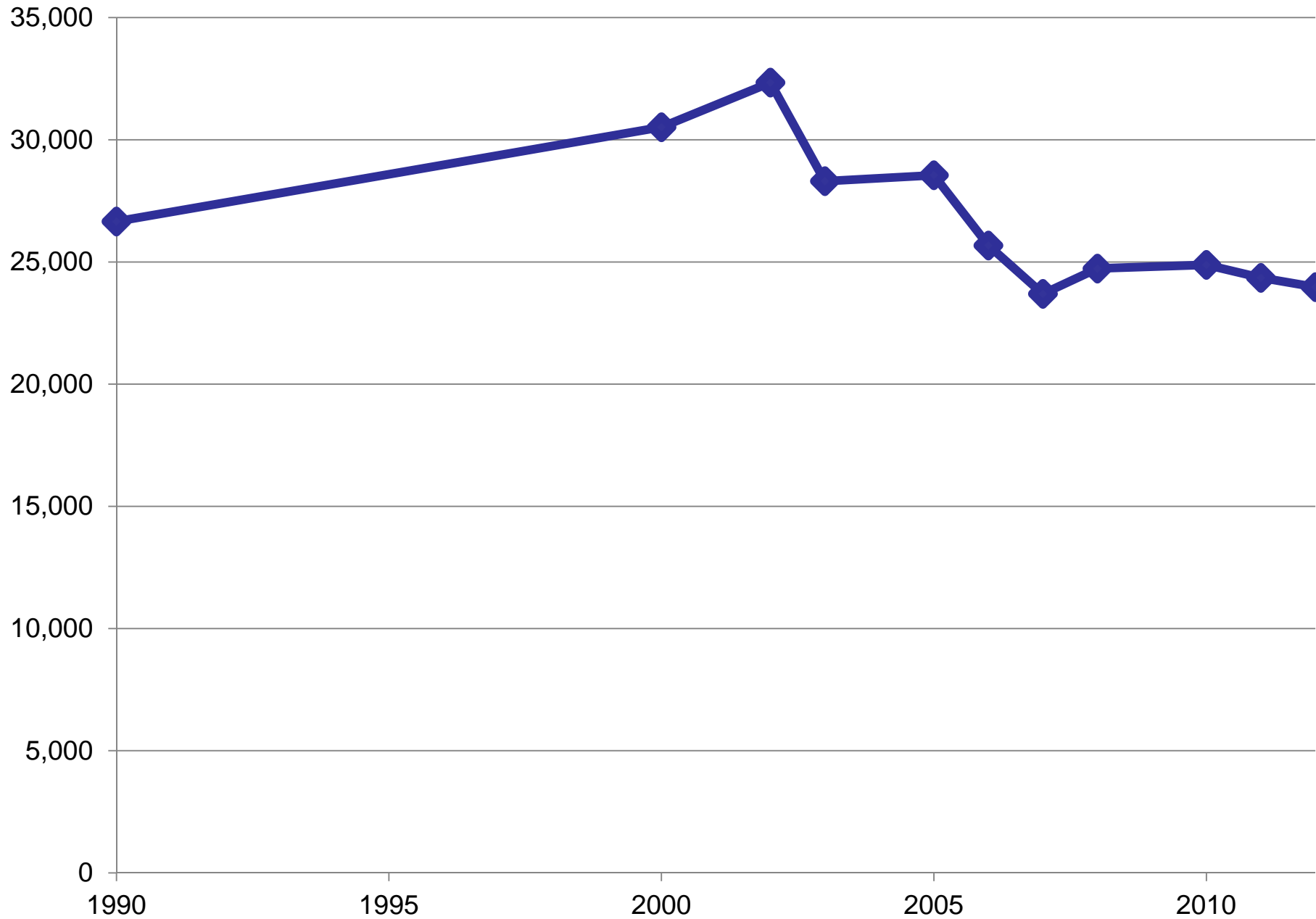


Commute Club Membership



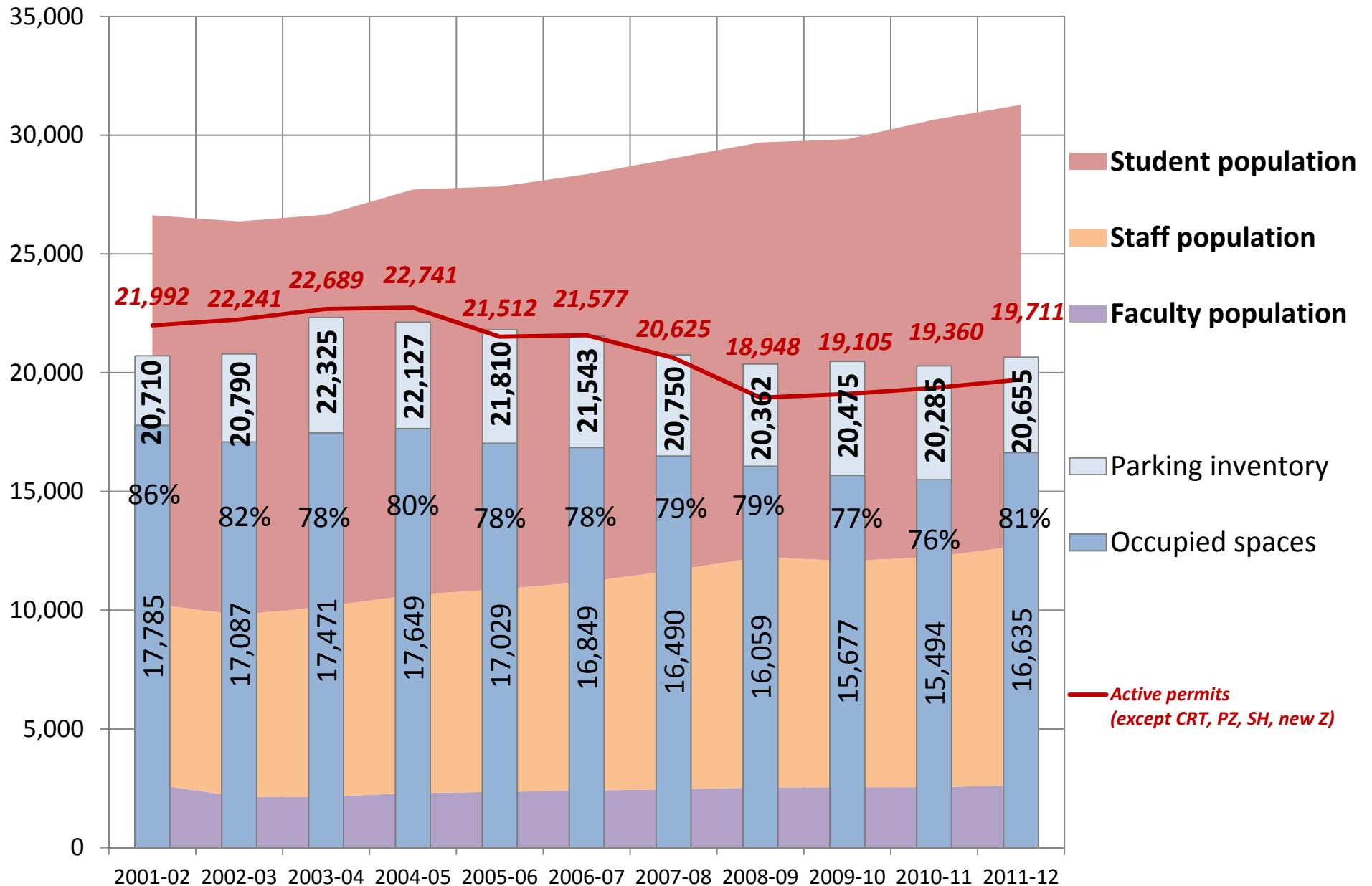
*Sept.-May only

Commuter CO₂ Emissions (metric tons)



Parking Inventory/Utilization

Feb. 15 parking permit snapshot





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Parking Construction Avoided

Group

Drive alone rates

Employees	2002 = 72%	2011 = 45.5%
Grad Students	2004 = 51.6%	2011 = 28%
Postdocs	2003 = 46%	2011 = 21%

Parking spaces not constructed due to drop in parking demand:

3,172

Construction cost avoided: $3,172 \times \$34,000/\text{space} =$

\$107,848,000



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