Sustainable Transportation on Campus

• “Travel patterns that students learn in college are likely to affect their transport choices for the rest of their lives”

• “College life might be a student’s first experience with transportation choices”
• TDM performance indicators

† Awareness — the portion of potential users who are aware of a program or service.
† Participation — the number of people who respond to an outreach effort or request to participate in a program.
† Utilization — the number of people who use a service or alternative mode.
† Mode split — the portion of travelers who use each transportation mode.
† Mode shift — the number or portion of automobile trips shifted to other modes.
Average Vehicle Occupancy (AVO): Number of people traveling in private vehicles divided by the number of private vehicle trips. This excludes transit vehicle users and walkers.

Average Vehicle Ridership (AVR): All person trips divided by the number of private vehicle trips. This includes transit vehicle users and walkers.

Vehicle Trips or Peak Period Vehicle Trips: The total number of private vehicles arriving at a destination (often called “trip generation” by engineers).

Vehicle Trip Reduction — the number or percentage of automobiles removed from traffic.

Vehicle Miles of Travel (VTM) Reduced — the number of trips reduced times average trip length.

Energy and emission reductions — these are calculated by multiplying VMT reductions times average vehicle energy consumption and emission rates.
Cost Per Unit of Reduction – these measures of cost-effectiveness are calculated by dividing program costs by a unit of change. For example, the cost effectiveness of various TDM programs could be compared based on cents per trip reduced, or ton of air pollution emission reductions. However, as described later, cost-effectiveness analysis that only considers direct impacts and a single objective may overlook additional costs and benefits to participants and society. For example, two TDM programs may have the same direct costs per unit of emission reduction, but differ significantly in terms of consumer costs, consumer travel options, traffic congestion, parking costs, crash risk and land use impacts.
UC Davis 1996 Modal Split

Modal Split for Students at UC Davis

- Transit
- Van/Carpool
- Drive
- Other
- Bike/Walk
University of Washington

University of Washington Modal Split 1989

University of Washington Modal Split 2002

- Transit
- Van/Carpool
- Bicycle
- Walk
- Other
- Drive Alone

- Transit
- Van/Carpool
- Bicycle
- Walk
- Other
- Drive Alone
Interesting Programs

UC Irvine -

Offers incentives to employees who walk and ride their bicycles to campus.

Employees who walk or bike to campus and do not purchase long term parking permits may register at the Transportation Services Office to receive either a ST Permit (4 days of parking/month) OR Greenhouse Cash ($10.00/month).

The ST Permit is valid in general or reserved parking when one box on the permit is dated.

Greenhouse Cash may be used to purchase food or merchandise from participating local businesses or to purchase one-day parking permits.
University of Washington UPass Program

- a. Transit
  - i. U-Pass holders get unlimited access to all bus routes at all times
- b. Carpoools
  - i. Receive free parking permits if two or more participants per vehicle hold U-Passes
  - ii. Carpooling has increased 57% since induction of programs
- c. Vanpooling
  - i. Subsidized rates for people living 10 mi or more from campus
- d. Ride Match Program
  - i. 2 different matching services for people in the Puget sound area
- e. Nighttime Shuttle
  - i. Provides free rides from dusk-12:30 to neighborhoods within a mile of campus
• Bicycling
  – i. Funds from U-Pass program used to improve bicycling infrastructure
• g. Reimbursed Rides Home
  – i. up to 5 taxi rides home per semester reimbursed with a 10% co-pay
• h. Flexcar
  – i. 10 Cars on campus that can be used for carsharing with hourly rates
• i. Flexible Parking
  – i. people who drive less than 2 or more times per week can purchase subsidized rates of $2.35/day instead of the normal $8/day also if someone chooses to give up their parking pass for an alternative transportation they have 6 months to get it back if the decide that it isn’t going to work
• j. Shuttles
  – i. Shuttles for passengers between hospitals and the parking lots and the university, as well as a shuttle for handicap use
Questions? Comments?