


Cities and campuses working together



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What are universities looking for?

- **Good mobility and access**
- **Inexpensive transportation**
- **Quality campus experience**
- **Convenience**
- **Adequate parking**
- **Best use of limited \$**
- **Best use of limited debt capacity**

What are cities looking for?

- **Managing congestion on city streets**
- **Reducing student and faculty parking demand in neighborhoods**
- **Maintaining good relations with universities**

The parking squeeze

- **Surrounding community generally resents, may restrict student parking**
- **Development of new academic buildings often displaces parking lots**
- **For many campuses, the only way to expand parking is to build structures**

The parking squeeze

- **“ A University is a diverse community held together by common complaints about parking” - Clark Kerr, former chancellor of the University of California at Berkeley**

Construction costs

- **Surface parking \$1500-\$5000/space**
- **Structured parking \$5,000-\$30,000/space**
- **As ratio of structured parking increases, monthly rates increase: at CU Boulder 0%=%13.50/month, 20%=\$30/month, 100%=\$200/month!**
- **All these assume land is free**

Debt constraints

- Most schools can not cash finance construction - must use debt capacity
- Debt capacity limited by bond rating agencies
- Even if parking users can pay annual costs, parking expansion still requires use of university debt capacity

Other approaches may be cheaper:

- Transit passes typically cost \$5-\$10/month; involve no debt
- Cost of one new bicycle parking space: ~\$150; cost to get one new rider ~\$5,000
- Market incentives - net revenue gain if parking charges are increased

Parking Economics Example

- The CU faculty/staff bus pass reduces parking demand by 350 spaces, at a cost of \$1125/space
- Cost to add parking - \$2723/space
- It is 3 times more expensive to add a space than to shift one person to transit!

Managing demand through price

- Parking demand goes down as price goes up - ~1%/dollar
- CU example - to increase parking supply by 1/3, parking rates would have to triple.
- But - increasing rates by 55% would reduce demand by 1/3!
- In many cases managing demand through price increases will actually be less costly to parkers than a supply side approach!

Many schools choosing other paths

- New vision for campus transportation based on
 - expanded transit access (routes and pass programs)
 - market incentives to reduce parking demand
 - better bike/pedestrian access
 - housing closer to campus

Some interesting examples

- Stanford University
- University of Washington - Seattle
- University of California-Davis
- Cornell University

Boulder/CU Approach

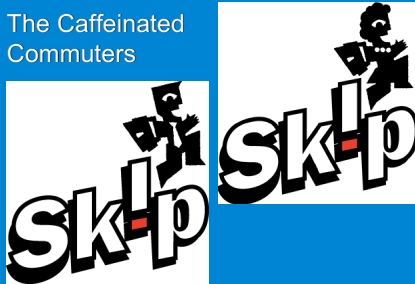
- Student Pass and Faculty/Staff ECO Pass: Transit passes create demand
- HOP, SKIP, JUMP, BOUND: Quality transit service designed by current/potential customers
- Quality pedestrian/bicycle systems
- Gradual increases to parking rates
- Outreach & information

Quality Transit Service

- Designed to meet the needs of the customer
- High frequency
- Extended hours of service
- Community character
- Supported by pass programs

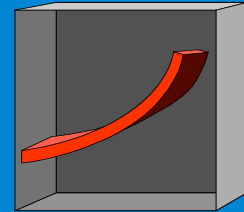
Create a Quality Service

The Caffeinated Commuters



Generate Demand

- Plan Marketing & Outreach Strategy
- Expand Pass Programs



Pass Programs

- Unlimited-use, photo-ID transit passes
- Students voted to pay a fee (currently \$25/semester) for access to local and regional routes
- Faculty/staff passes paid from general fund and parking revenues
- Proven to increase ridership & reduce single occupant vehicle travel

Ecopass ridership

- Students transit use increased 200% in first year of pass program (92); is now up 400%
- Faculty/staff ridership increased 85% in first year of pass program

Pass Programs - University Benefits

- Recruit/retain employees: eg. second wage earner of a one-car family
- Recruit students; give students more options for residential choice
- Improved neighbor relations
- Reduced parking supply costs
- “Green” image

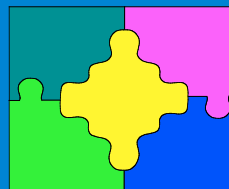
Bikeways

- *Engineering, education, enforcement, events orientation*
- Over 80 miles of bikeways in a 35-square-mile vicinity
- Bike routes, bike paths, bike lanes
- Bike-actuated crossings at intersections
- Grade-separated crossings

City/university bike planning

- Joint development of bikeways accessing campus
- Planned \$2.5 million off-street path, crossing treatments, and other bike enhancements along East edge of downtown
- Bike/ped underpasses provide access to campus

Marketing



- Unusual for government
- Full package approach to products
- People have to know about it to use it

Measurable Results

- In 1990, 55% of students trips by car - 38% in 2000
- Transit went from 2% to 12%
- Biking from 20% to 31%
- Walking went from 23% to 19%
- Source: “Modal Shift in the Boulder Valley”, National Research Center, 2001

Next Steps

- Stampede, DASH
- Intermodal center and bike station next to student union- applying for federal funding
- Develop 28th St on east side of campus into multimodal corridor - \$10 million investment
- Bus rapid transit linking Boulder campus to Denver

STAMPEDE, DASH

- Next two links in high frequency community transit system
- STAMPEDE will link the east campus and west campus of CU
- DASH will bring commuters from suburban town into CU campus and downtown Boulder
- Funding partnership - City, university, federal funds, transit agency

Intermodal Center

- Planned as one of 3 in Boulder - one downtown, one at rail station, one on campus
- To serve transit users, include bike stations, new bike/ped underpasses between campus and neighborhood
- Contingent on receipt of federal \$ through TIP process

28th Street Project

- Converting an auto-only arterial to a multi-modal corridor
- Southern end - add off-street path, transit service, transit "super-stops"
- Central section - parkway or boulevard design
- Tie in to planned rail station

Bus Rapid Transit

- US 36 MIS has recommended bus rapid transit between Boulder and Denver
- Bus routes would split at Boulder border, serve both sides of campus
- Funding ballot issue likely in 2002 or 2003, along with commuter rail

Ongoing Debates

- How many parking spaces should CU provide for students (university wants more, city less)?
- How much housing will CU provide for students, faculty and staff?
- How much will CU grow?

Web pages for more information

- City of Boulder: www.ci.boulder.co.us/goboulder
- CU: www.colorado.edu/center
- The Victoria Transport Policy Institute has a good review of campus TDM strategies at www.vtpi.org/tdm