

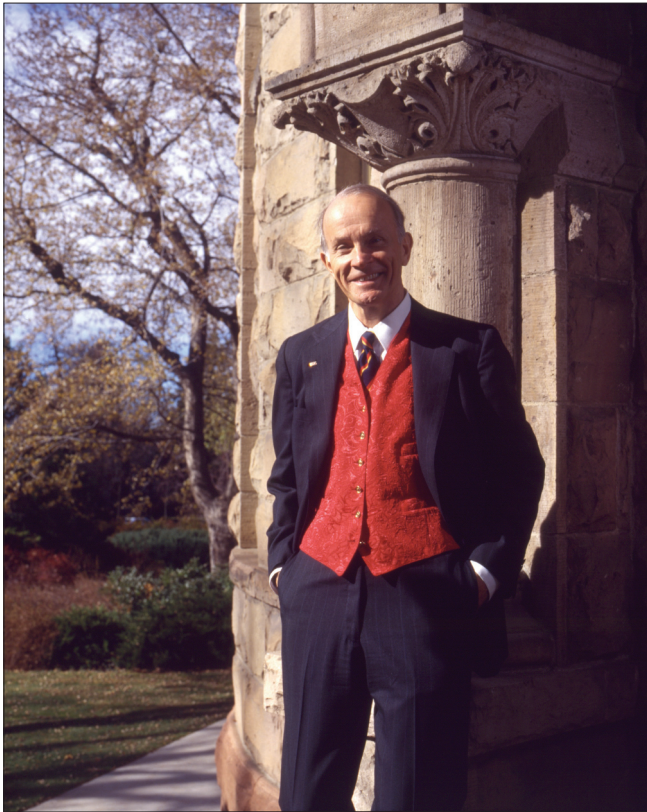
UNIVERSITY OF
DENVER

APPENDIX J

2002 Notes

Foreword by Chancellor Ritchie

(reprinted from 2002)



Chancellor Daniel L. Ritchie

In April of 1994 our University Architect Cab Childress asked me about the long-term future of our Park Hill campus. We were embarking on a very ambitious building program and I replied that it was only a distant hope that one day we would bring all of our core programs to the University Park Campus and therefore we needed to modestly improve the facilities of the former Colorado Women’s College. As music fills Trevorrow hall and the Law School’s clock tower begins to emerge from its construction scaffolding, we are witnessing the culmination of a dream begun 138 years ago.

The University is committed to the belief that the best learning is done together. The inspirational exchanges between jurists and saxophonists are fostered in buildings built to stand the tests of time. Life-long friendships are found on lawns where students can debate citizenship. Teamwork is embraced in facilities that press athletes to perform beyond their expectations. While we are committed to extending the benefit of our learning throughout the world, discovery is sometimes accidental. By bringing all of our students and faculty together on one campus we eagerly anticipate more such accidents.

For this campus to endure, we must cherish it. While we employ thoughtful design and engineering to craft buildings that will serve changing needs for centuries, we are certain that humor is as fundamental as brick and stone—tree and spire. The construction to date has crossed the great variety of programs we offer, improved the living and work environments for our students, faculty, and staff, and reinforced the University’s commitment to the wider community. While we are proud of the work that has been achieved, it compels us to search further for ways to enhance the varieties of learning environments on our campus.

In the last few years we have been encouraged by our neighbors to openly plan for the coming generations and this Land Use Plan affirms our commitment to do so. For the University of Denver to thrive, we must strive to have our neighbors enjoy this institution as much as our students, alumni, faculty and staff. As we look to the future no single project is certain, but each new project can be carefully shaped in light of the principles put forth in this document. While only a guide, it represents a far more considered answer than the one I gave Cab some eight years ago.

Daniel L. Ritchie
Chancellor

Remarks by the University Architect

(reprinted from 2002)

I first met Chancellor Daniel L. Ritchie in early 1992. Dan had asked Cabell Childress to design a “cabin” for his mountain ranch and Cab brought me along to Dan’s office to begin the process of understanding what the project could be. Once we arrived and the pleasantries were exchanged, Cab asked Dan to “tell Mark the story of 3-1/2.”

Dan looked “humored” and “pained” at the same time, sighed, and then launched into a tale. It seems that a few years previous Dan had been in the four corners area of our state and had met a potter. This fellow had pursued an understanding of Anasazi pottery to the point where not only was he one of the foremost authorities on the nuances of the designs, shapes, and patterns, but also how the glazes and clays were fired to achieve the kind of results found in the archeological digs. After a thorough conversation, Dan asked if he could commission the potter to do two pieces for his new “cabin”. The potter replied that he would be delighted, and asked which “phase” would Dan prefer. There are three prime phases of design and the potter was well versed in all three. After a pause, Dan replied “3-1/2”. The potter was a little surprised... Dan continued, “You are a foremost authority on the Anasazi, I really do not want a copy, but rather I am more interested in where you think the Anasazi would have taken their design had they continued to thrive.” The two pots are magnificent, respectful to the traditions that they sprang from, but tantalizing in how they reach to a new place in history.

A few months ago in the midst of the Land Use Plan presentations, it struck me that this story was a fine reflection on what we have worked for. One of Cab Childress’s first comments to me as we stepped onto the Campus in 1994 was that we need to “fall in love” with each of the buildings and places on campus. The University has four major eras of buildings:

- The initial buildings of University Hall and Chamberlain Observatory by Rauschlaub in a Victorian Romanesque style during the 1880s under founder John Evans’ eye.
- The reaffirmation of the University under Chancellor Buchtel with such buildings as the Memorial Chapel, Old Science Hall, the Alumni Gymnasium, and the Carnegie Library in a somewhat southwestern vernacular during the early 1900’s.

- The Collegiate Gothic of the 1930s inspired by Charles Klauder’s Margery Reed Hall followed by the “old row” fraternity houses along with Mary Reed Hall during Chancellor Hunter’s tenure.
- The International style of the post war years under Chancellor Alter’s vision with such buildings as Johnson & MacFarlane Halls, Benjamin Cherrington Hall, and Centennial Halls and Towers.


After slightly more than 100 years, the University can no longer afford to “re-image” itself. Much that is worth cherishing is already here. Both Dan and Cab initially walked the Campus and after some discussion, decided that for the most part reinforcing a red brick with white trim architectural fabric was the direction we would follow. A few “jewels” of stone could shine forth. Existing landmarks such as University Hall (our origin) and the Evans Chapel (our spiritual heart) set the standard. The Ritchie Center and the Newman Center welcome both our students and stand as a commitment of our citizenship to the city of Denver. However, as with “3-1/2”, the new is neither a copy nor a “next” phase. We have tried to acknowledge the value of what is here along with pursuing a “timeless” design. We have embraced both the indoor and the outdoor environments. Some of the most successful moves include: “cranberry” paint, a consistent pedestrian light pole, the removal of the Penrose ramp that separated Old Science Green from Graduation Green, the use of towers for way finding, a “DU” chair in each building, and the pruning of the spruce trees in the Harpers Humanities Garden. As you read through the Land Use Plan, my assignment is that you embrace the principles given, and take the time to learn why this place has earned a commitment across so many generations.

There is another important lesson in the story of “3-1/2”. Dan asked for two pots. A single interpretation is easily criticized. This is a campus, and as such, it encourages interaction, debate, and contrast. No single piece should be held as the prime example.

Mark Eliot Rodgers, AIA
University Architect

Pedestrian and Bicycle Strategies

(reprinted from 2002)



UNIVERSITY
OF
DENVER
Pedestrian & Bicycle
Strategies

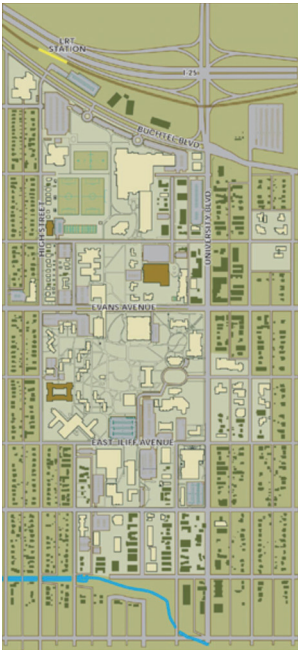
Denver, Colorado

Prepared By:
Glatting Jackson Kercher Anglin
Lopez Rinehart, Inc.

Table of Contents

- Pedestrian & Bicycle Strategies
 - Campus Context
 - Campus Description
 - Campus Development Patterns
 - Master Plan
 - Origins
 - Destinations
 - Street Network
 - Parking
 - Transit Network
 - Pedestrian Evaluation
 - Campus Walking Environment
 - Barriers
 - Strategies
 - Bicycle Evaluation
 - Campus Cycling Environment
 - Barriers
 - Strategies
- Shuttle Transit Evaluation
 - Campus Transit Environment
 - Shuttle Alternatives
 - Analysis
 - Strategies
- Improvement Opportunities
 - Evans Avenue
 - Asbury Avenue
 - Buchtel Boulevard
 - High Street
 - Iliff Avenue

Campus
Context



Campus Description

Student Enrollment

- 9,539 (reported in profiles)
- 8,547 Students (on campus)

Faculty and Staff

- 837 faculty (adjuncts & part time)
- 1,263 staff
- 284 other
- 2,384 total

Parking Facilities

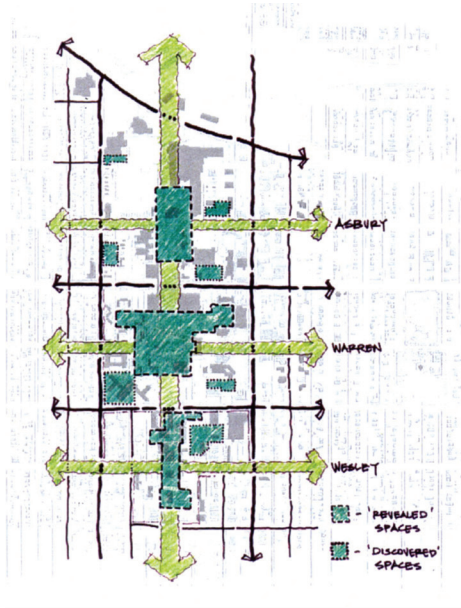
- 4,202 (on campus)
- student / parking ratio (2.0)
- people / parking ratio (2.6)
- 4,870 zoning code for parking (1/600)
- (668) AshcroftA

On-campus housing

- 2,411 beds

Campus Size

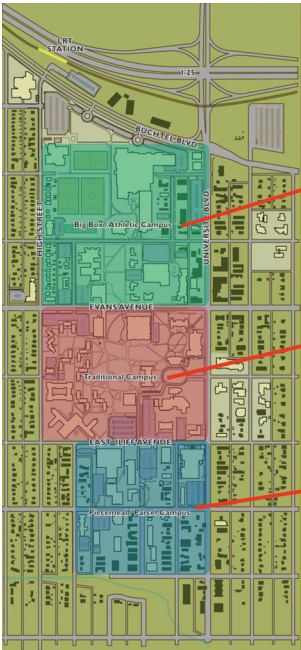
- 118.85 acres



Master Plan
Greensward Vision

A Greensward concept emphasizes orientation of the University and its environs around a central open space spine that extends north-south through the entire campus and beyond to integrate the campus with adjacent open space features. At strategic locations these open spaces will reach into the adjacent neighborhoods. In addition to this primary open space organization, several districts throughout the campus are defined by a secondary, more intimate, open space networkA

- University of Denver
- Draft Land Use Master Plan
- January 11, 2002



Development Pattern

Big Box / Athletic Campus

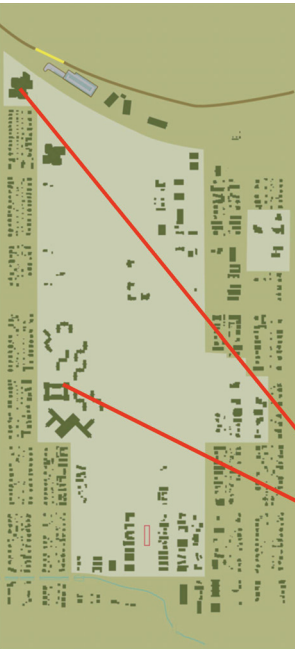
- Pedestrian Accommodating
- Large Scale Facilities
- Operational / Building Focus

Traditional Campus

- Pedestrian Oriented
- Smaller Scale Facilities
- Exterior / Campus Focus

Piecemeal / Parcelized Campus

- Pedestrian Hostile
- Mixed-Scale Facilities
- Operational / Building Focus



Origins

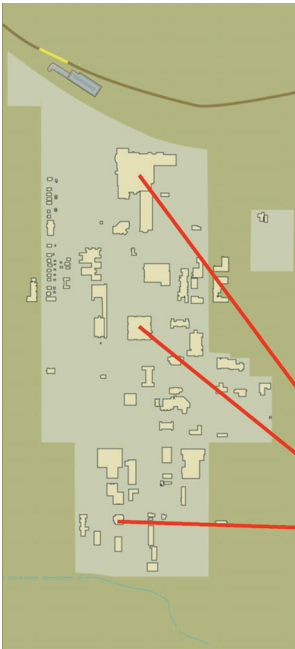
On-campus housing
- 2,411 beds

Students within walking distance to campus
- 600-700

Students, faculty, and staff off-campus
- 7,870

Centennial Towers

Nelson Hall



Destinations

Campus Size
- 118.85 acres

Buildings on-campus
- 2,921,900 (GSF)
- .56 F.A.R.

GSF ratios
- 342 / student
- 267 / person

Peak occupancy
- 70%

Ritchie Center

Penrose Library

Physics



Street Network

Buchtel Boulevard

Asbury Avenue

Evans Avenue



Parking

North Zone - Weekday

Parking Spaces	Existing	Near-Term	
1802	1825	2374	2855

Northeast Parking Lot

Central Zone - Weekday

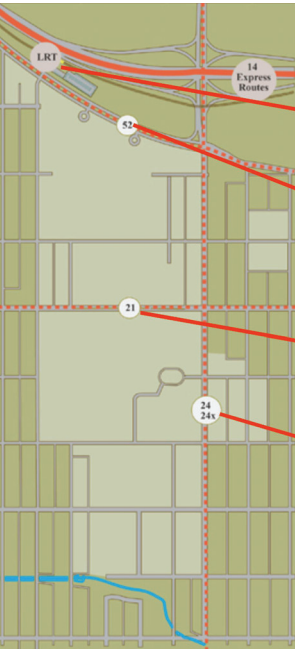
Parking Spaces	Existing	Near-Term	
750	680	686	697

On-street Parking _ E Wesley Avenue

Cherrington

South Zone - Weekday

Parking Spaces	Existing	Near-Term	
542	708	847	1158



Transit Network

Light Rail Transit

- Under construction (opens Fall 2004)
- 15 Minute headways (peak hour)
- operates 3:30 am _2:00 am

Route 52

- 30 Minute headway (peak hour)
- operates 4:44 am _11:45 pm
- Poor walking environment (north side)

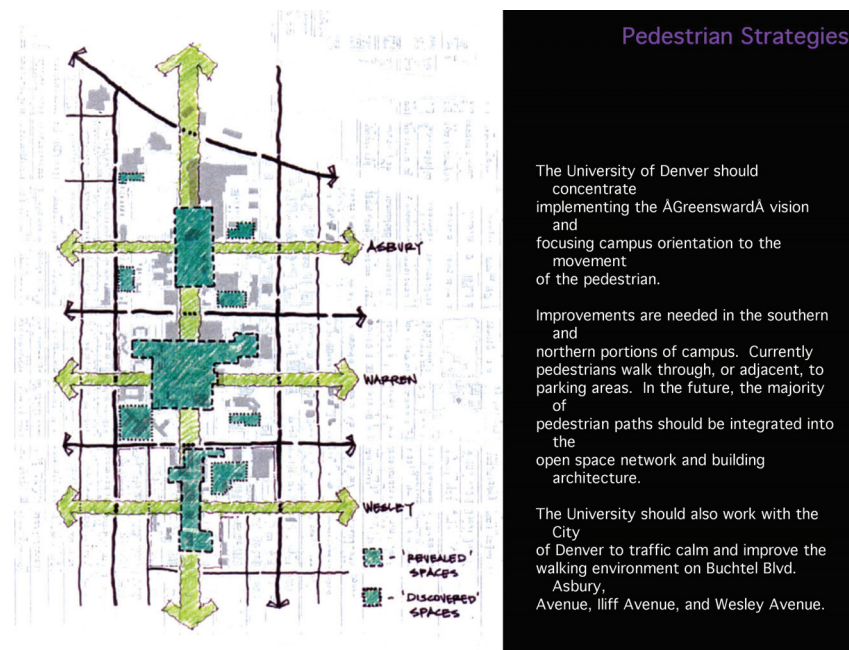
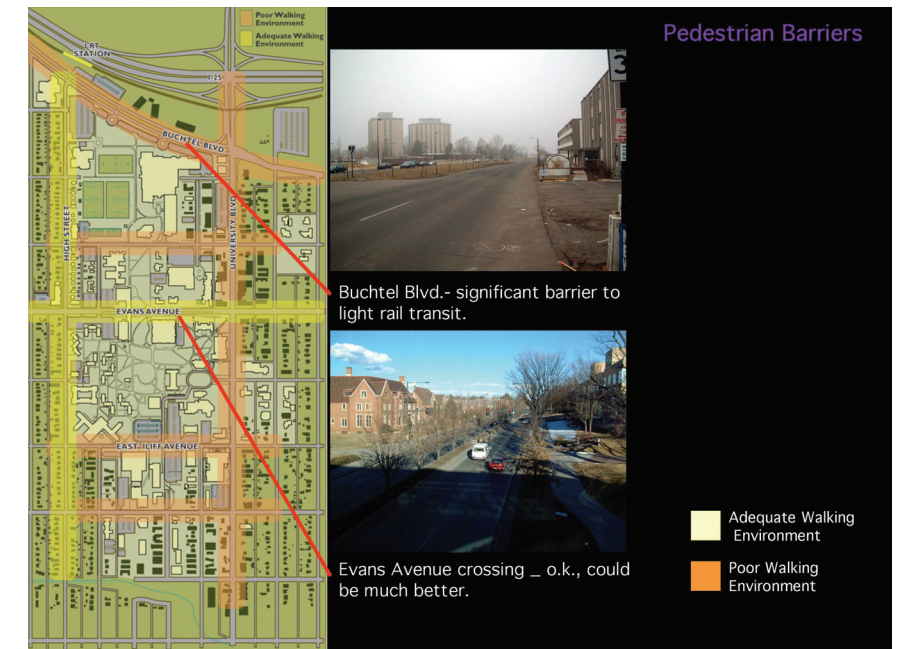
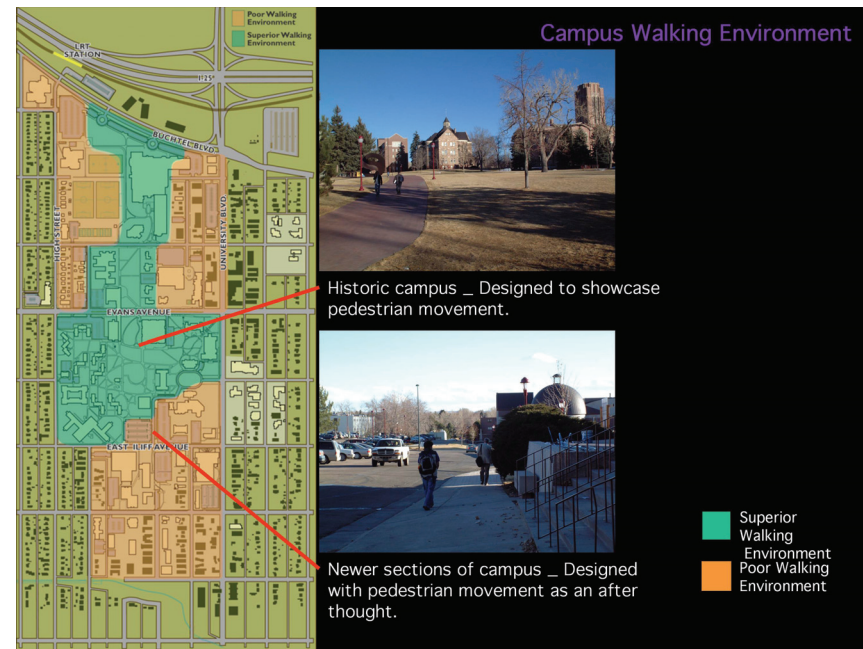
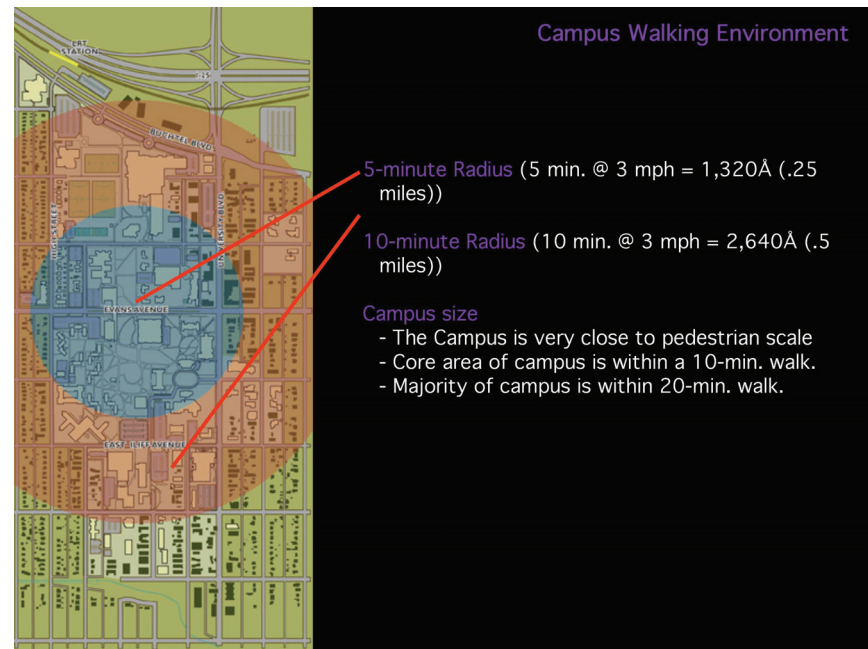
Route 21

- 30 Minute headway (peak hour)
- operates 4:37 am _12:19 am
- Adequate walking environment

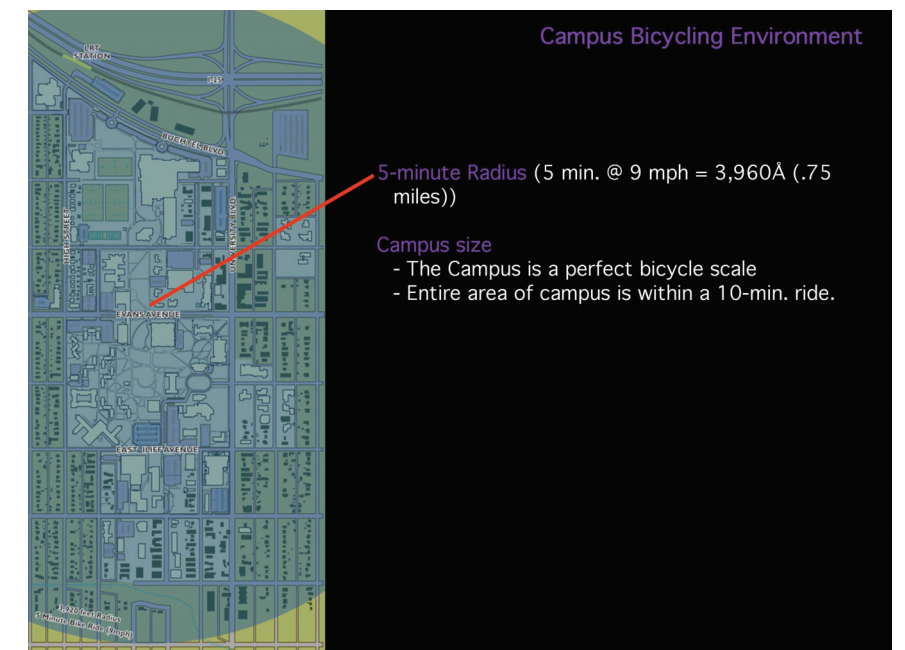
Route 24

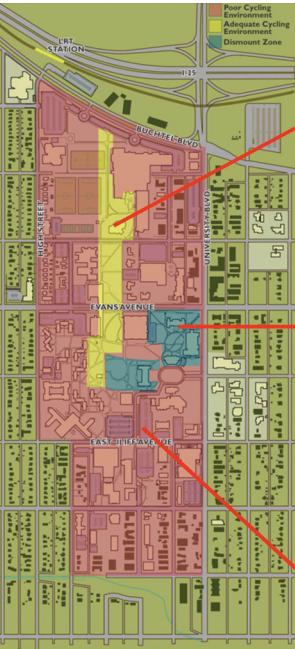
- 30 Minute headway (peak hour)
- operates 5:03 am _9:47 pm
- Adequate walking environment

Pedestrian
Evaluation



Bicycle Evaluation







Campus Cycling Environment

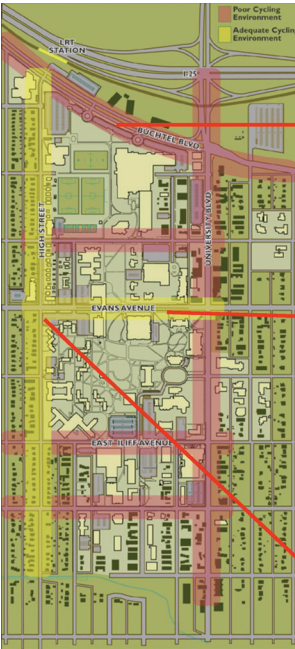
Paths are sized for both pedestrians and cyclists

Paths are undersized, cyclist required to use parking areas and poorly designed streets

Dismount zone

- Dismount zone
- Adequate cycling environment
- Poor cycling environment







Bicycling Barriers

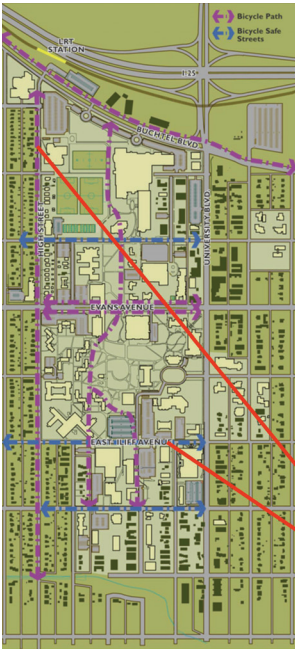
Poor conditions along Buchtel

Room along Evans Avenue

Slow speed; but high volume on High Street

- Adequate cycling environment
- Poor cycling environment





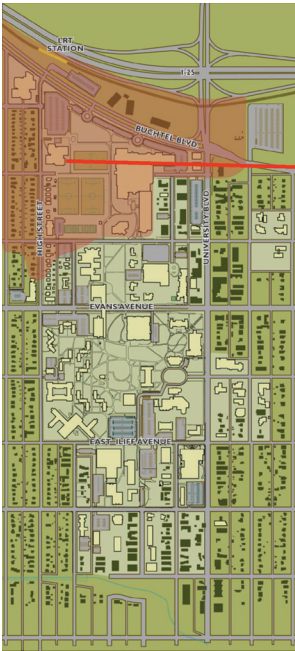
Bicycle Strategies

The University of Denver should concentrate on improving the quality of the bicycle environment throughout the campus by constructing two primary north-south bicycle corridors, one High Street and one within the central portions of campus.

Improvements on campus should include adequate width on pathways to safely accommodate both pedestrians and cyclists.

The University should also work with the City of Denver to traffic calm and improve the cycling environment on Buchtel Blvd., Asbury Avenue, Iliff Avenue, and Wesley Avenue.

Shuttle Transit Evaluation

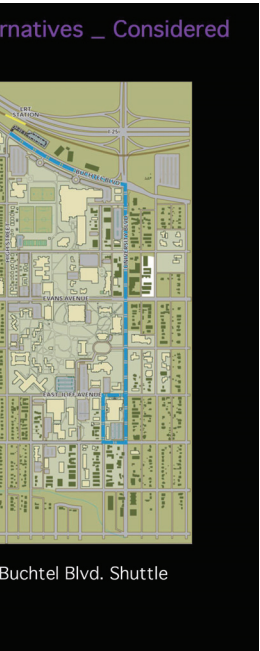




Campus Transit Environment

10-minute Walk (10 min. @ 3 mph = 2,640' (.5 miles))

Campus size

- The Campus is not effectively served by light rail transit.
- Due to Interstate alignment, LRT station influence area is diminished.
- Buchtel Blvd. is a significant barrier to walking and bicycling access to station.
- An LRT shuttle would contribute to the success of the station and the viability of transit supportive development near the University, as well as Washington Park.

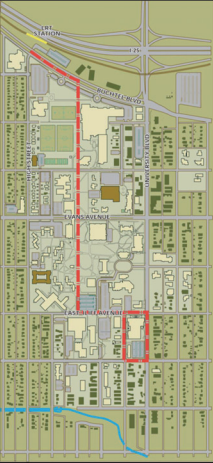


Transit Shuttle Alternatives _ Considered



High Street Shuttle

Evans Avenue Shuttle

Buchtel Blvd. Shuttle



Greensward Shuttle



Transit Shuttle Alternative _ Not Considered

The Greensward Shuttle was determined to be an inappropriate shuttle alternative because of three primary reasons.

- 1) It does not fit within the historic and physical context of the campus core.
- 2) It is not consistent with the Greensward Land Use Vision.
- 3) It is deemed an inappropriate alternative by campus stakeholders.

Transit Shuttle Evaluation

Persons served

The number of persons served for each alternative was estimated:

- 1) Campus buildings and parking facilities within 500 feet of the route.
- 2) Assumed building occupancy of 267 gross square feet per person (based on year 2002 estimates provided by the University).
- 3) Student housing, the population is based on the maximum number of beds available.
- 4) It is assumed that campus facilities are 70 percent occupied at their peak period

Transit Shuttle Evaluation

Capital Costs

Capital cost:

- 1) Assumed two shuttles to maintain 10-minute headways.
- 2) Assumed a 27' shuttle average cost of 165,000 (source: American Public Transit Association, APTA).

Operating Costs

Annual operating cost:

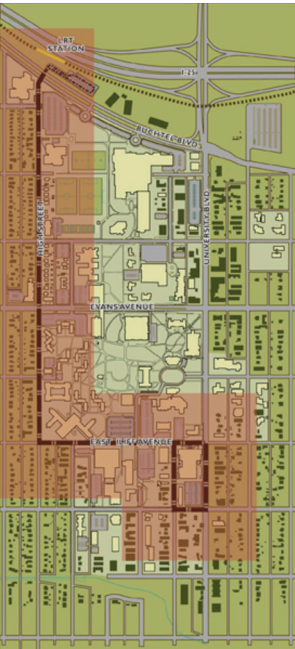
- 1) Assumed the route would operate Monday-Friday from 7 AM to 6 PM.
- 2) 10-minute headways
- 3) Would not operate during intercessions or when the University is closed.
- 4) Hourly operating costs for the shuttle are based on data reported by the Regional Transportation District as part of the National Transit Database.
- 5) Route lengths for each alternative were measured to be the similar.
- 6) Average travel speeds for each alternative were the same.

Transit Shuttle Evaluation

Operational Analysis for All Alternatives

Route length, miles (one way)	1.35
One-way travel time, minutes	7.5
Layover time, minutes	2.5
Total one-way travel time, minutes	10
Travel speed, mph	10.8
Headway, minutes	10.0
Buses needed	2.0
Daily no. hours operated	11
Annual no. days operated	215
Operating expense per vehicle revenue hour	\$85.38

Route lengths and travel time were measured to be the same.
Measurements were taken on weekdays between 10:00 am _ 1:00 pm

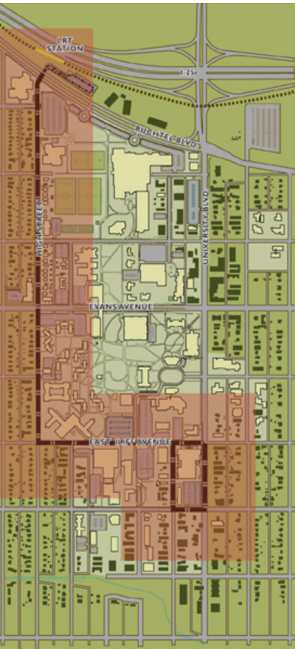


Transit Shuttle Alternatives _ High Street

Student Housing Served	Occupancy	Peak Occupancy
Centennial Halls	630	441
Nelson Hall	421	302
Johnson and McFarlane	414	290
Centennial Towers	230	203
Aspen	54	38
Hilltop	54	38
Skyline	54	38
Gamma Phi Beta	32	22

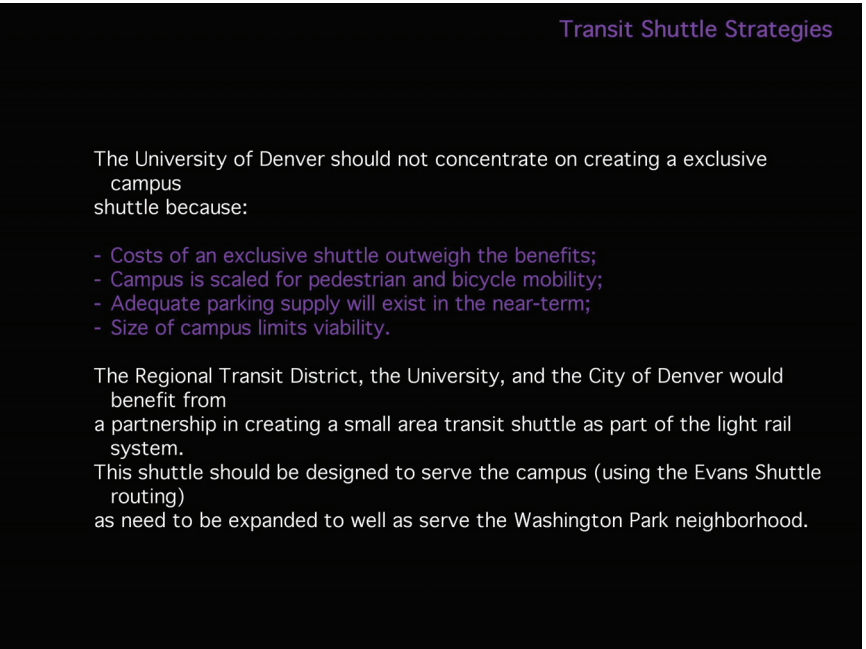
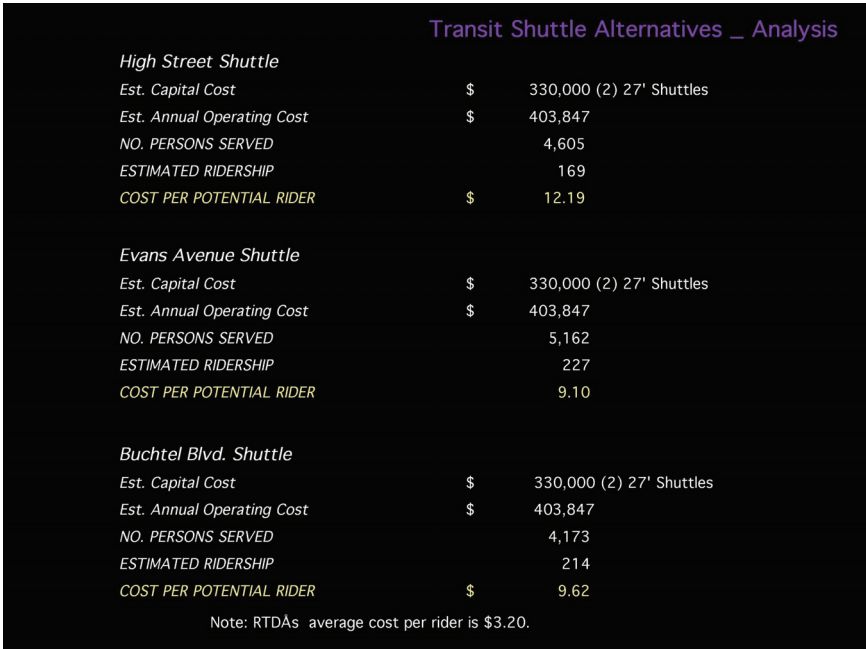
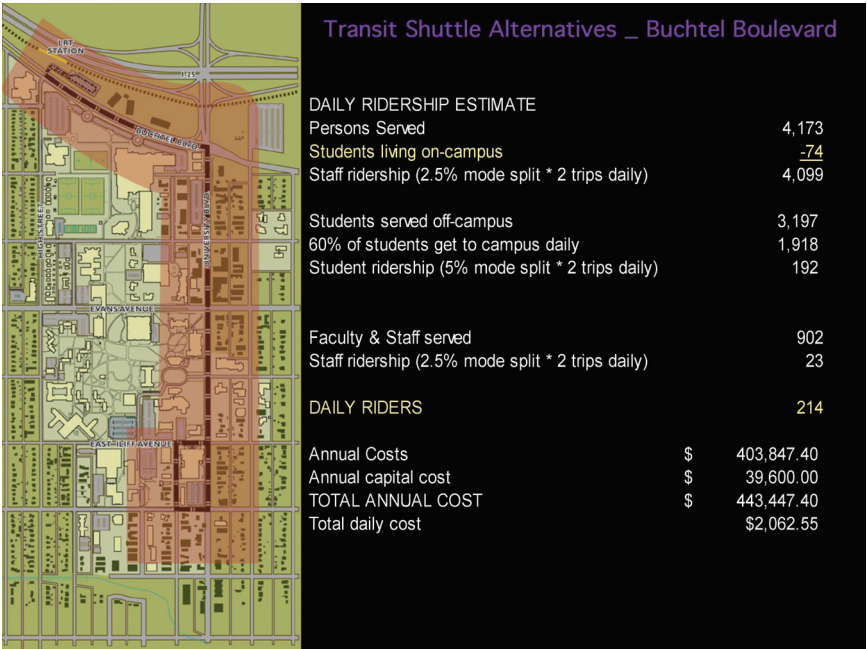
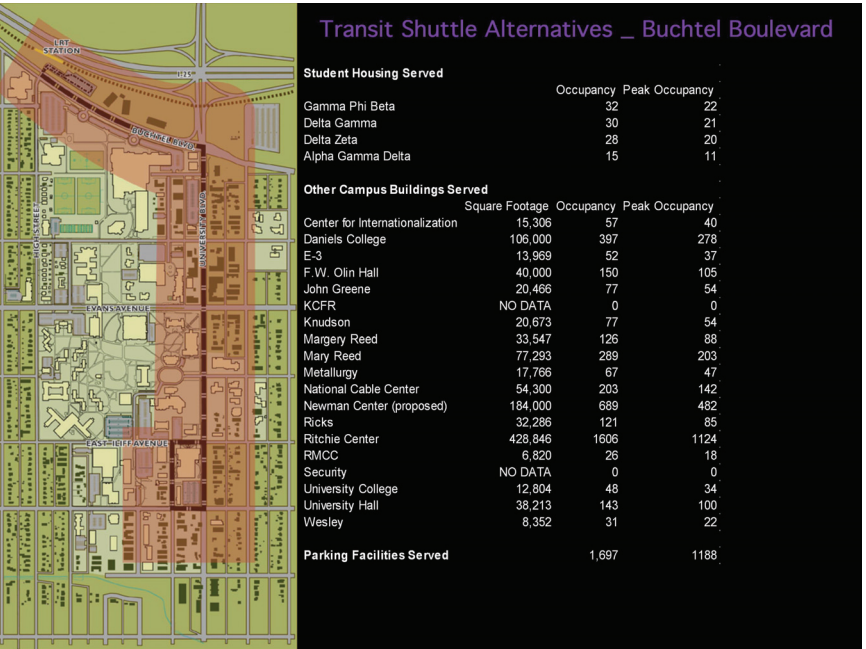
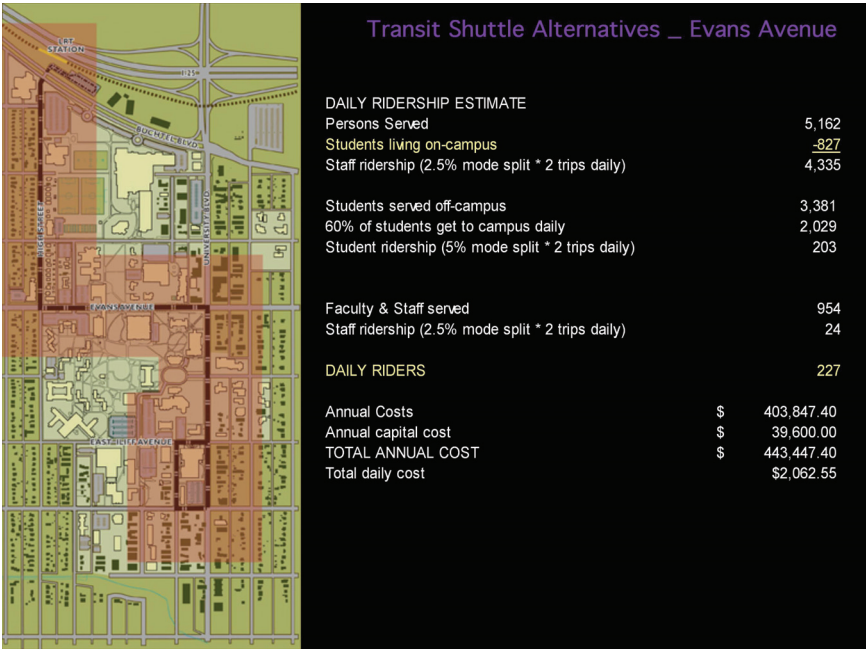
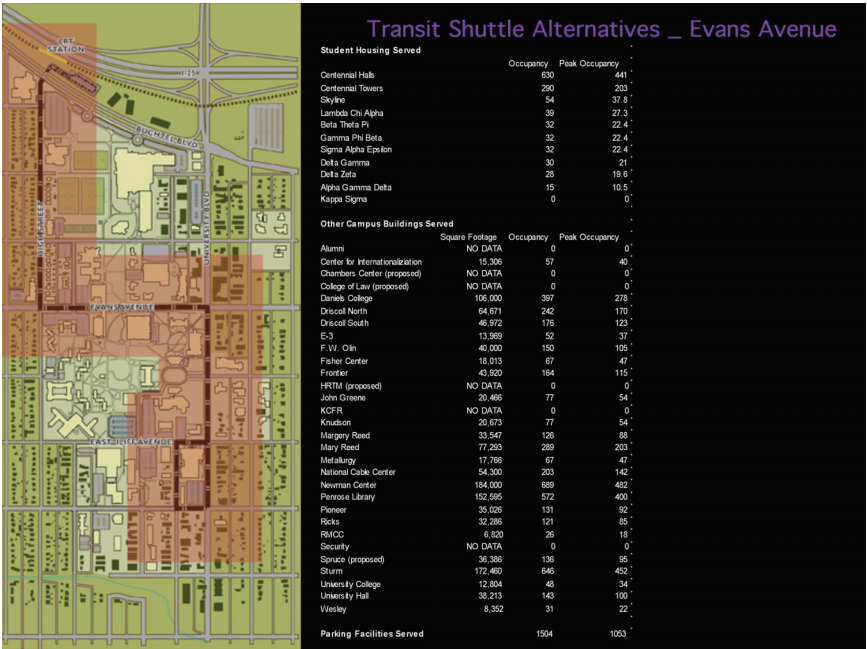
Other Campus Buildings Served	Square Footage	Occupancy	Peak Occupancy
Boettcher Center	65,671	246	172
Chambers Center (proposed)	NO DATA	0	0
Cherrington	30,308	114	79
E-3	13,969	52	37
F.W. Olin Hall	40,000	150	105
Fisher Center	18,013	67	47
Frontier	43,920	164	115
John Greene	20,466	77	54
KCFR	NO DATA	0	0
Knudson	20,673	77	54
Mary Mac	10,635	41	29
Metallurgy	17,766	67	47
National Cable Center	54,300	203	142
Newman Center	184,000	689	482
Pioneer	35,026	131	92
R.M.C.C.	6,820	26	18
S.G. Mudd	64,770	243	170
Security	NO DATA	0	0
Spruce (proposed)	36,386	136	95
Sturm Hall	172,460	646	452
Wesley	8,352	31	22

Parking Facilities Served	Occupancy	Peak Occupancy
	1,459	1021



Transit Shuttle Alternatives _ High Street

DAILY RIDERSHIP ESTIMATE	
Persons Served	4,605
Students living on-campus	<u>-1,371</u>
Staff ridership (2.5% mode split * 2 trips daily)	3,234
Students served off-campus	2,523
60% of students get to campus daily	1,514
Student ridership (5% mode split * 2 trips daily)	151
Faculty & Staff served	711
Staff ridership (2.5% mode split * 2 trips daily)	18
DAILY RIDERS	
Annual Costs	\$ 403,847.40
Annual capital cost	\$ 39,600.00
TOTAL ANNUAL COST	\$ 443,447.40
Total daily cost	\$2,062.55



Physical Improvements

Physical Improvements

Numerous physical improvements are needed to improve the walking and bicycling environment on campus (as well as adjacent streets and neighborhoods). These improvements should focus on physically elevating the status of the public realm and making the "Greensward" vision a reality.

In order to improve the quality of the walk and the quality of the bicycle ride, campus and city planners need to concentrate on the details, such as: curb radii, pedestrian crossings, traffic calming, pathway dimensions, and campus orientation. Like the campus core the "Greensward" vision will greatly aid to campus walkability.

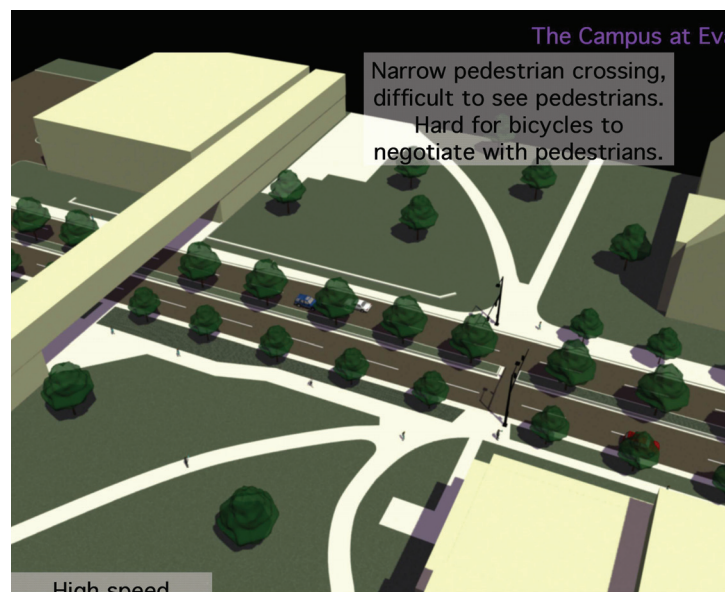
Finally, the University and the City of Denver should focus effort on overcoming the immediate barriers to walking and cycling around the campus. The next several graphics illustrate barriers and possible solutions.

The Campus at Evans Avenue



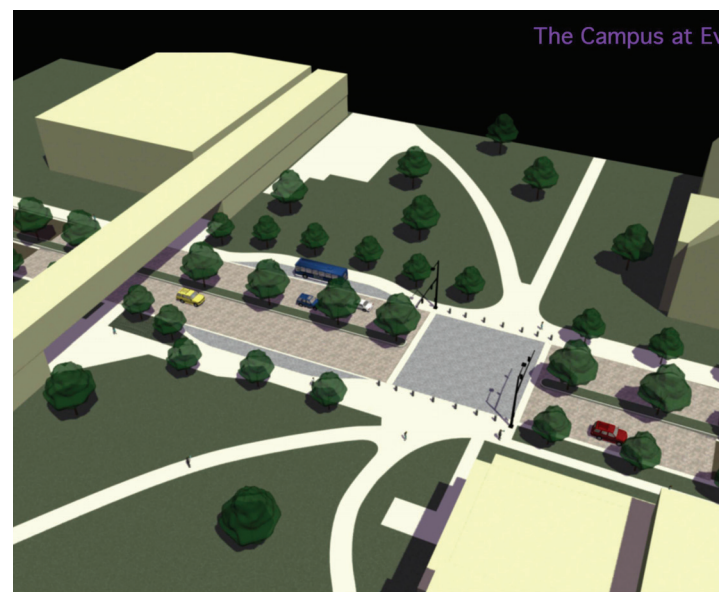
The Campus at Evans Avenue

Narrow pedestrian crossing, difficult to see pedestrians. Hard for bicycles to negotiate with pedestrians.



High speed environment for cars

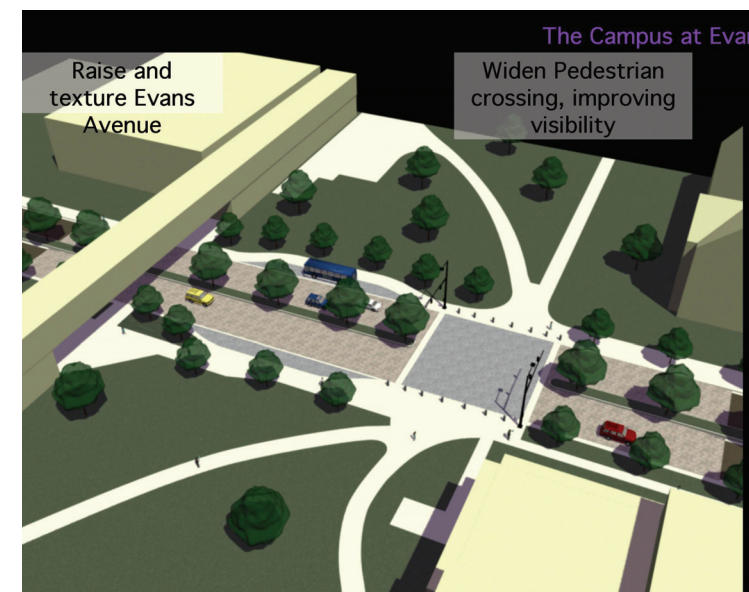
The Campus at Evans Avenue



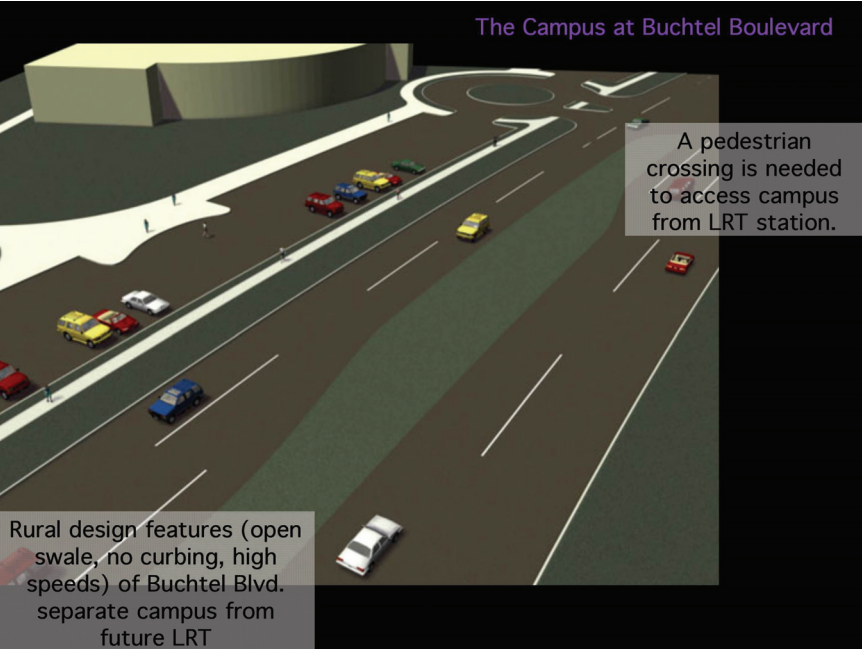
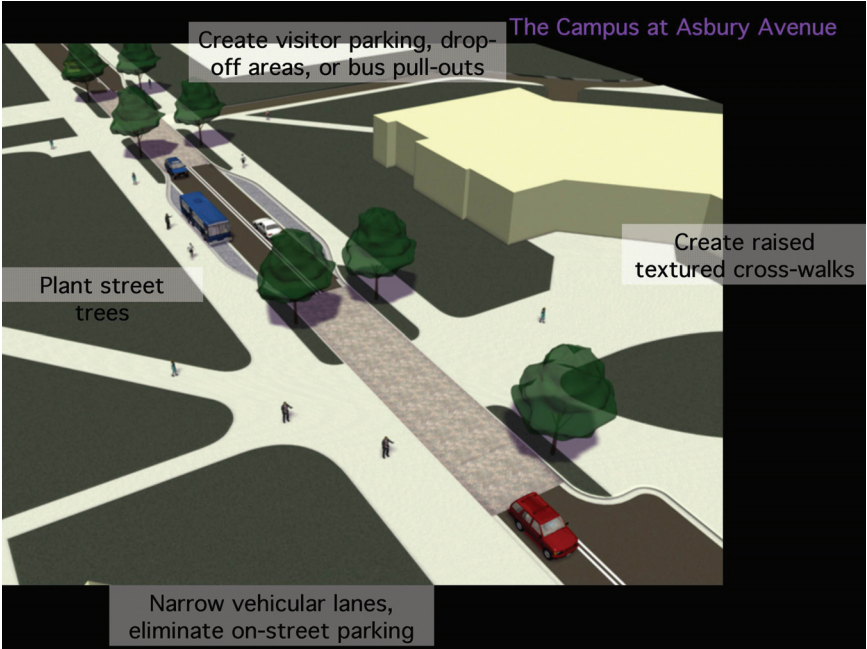
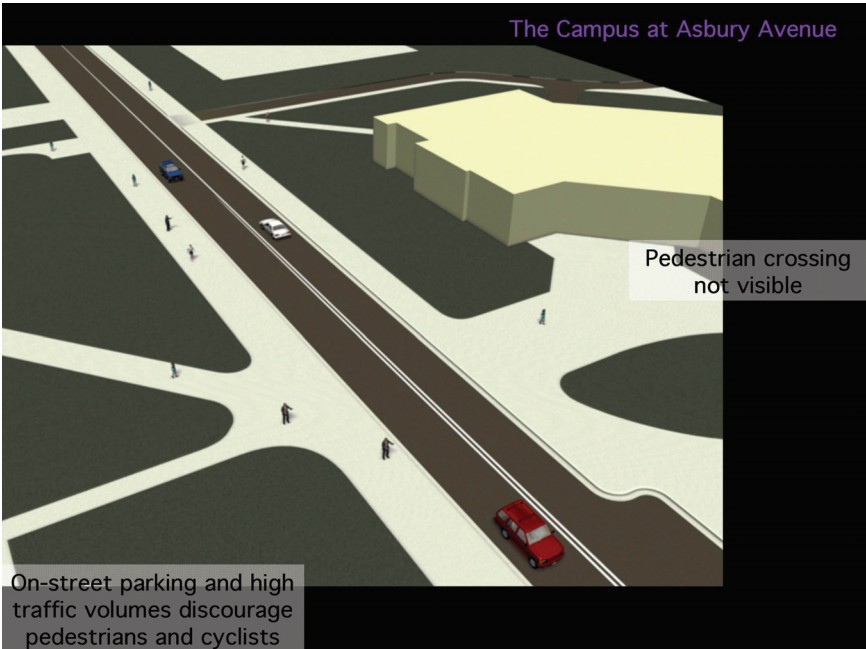
The Campus at Evans Avenue

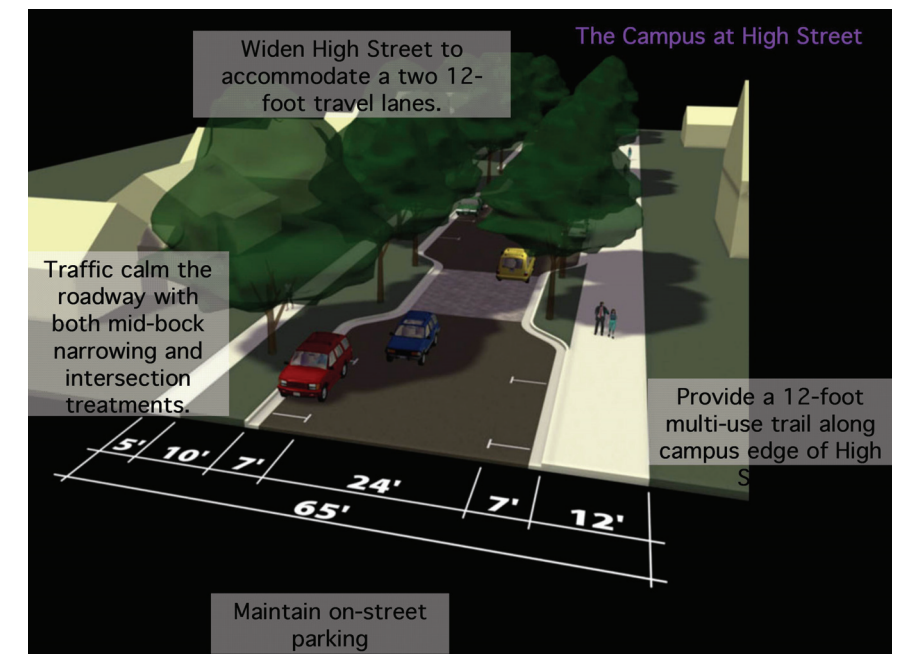
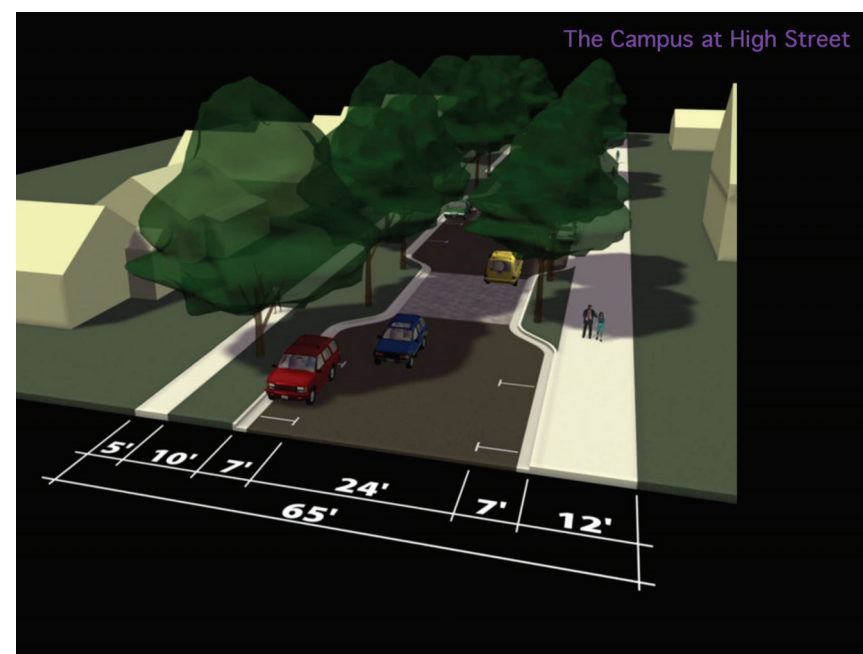
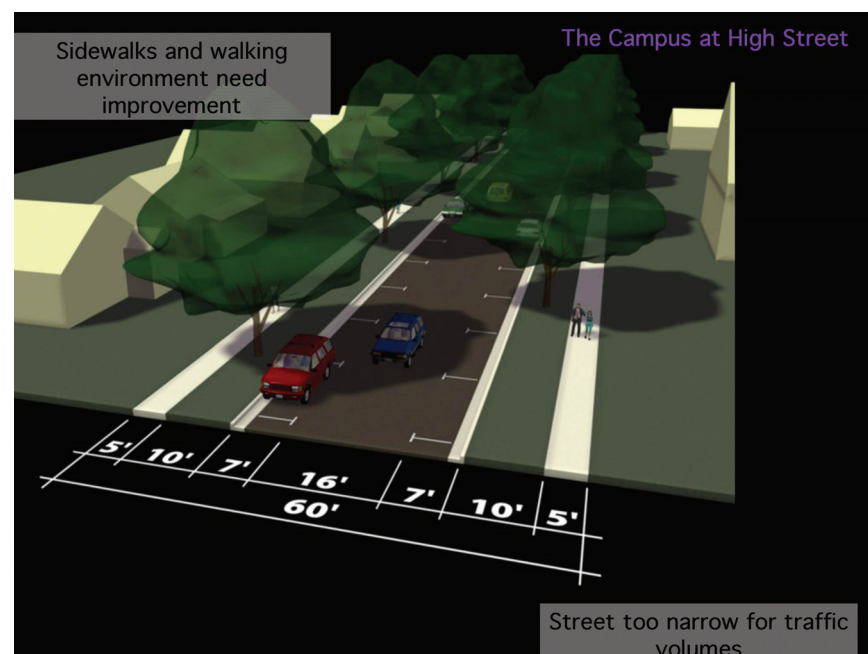
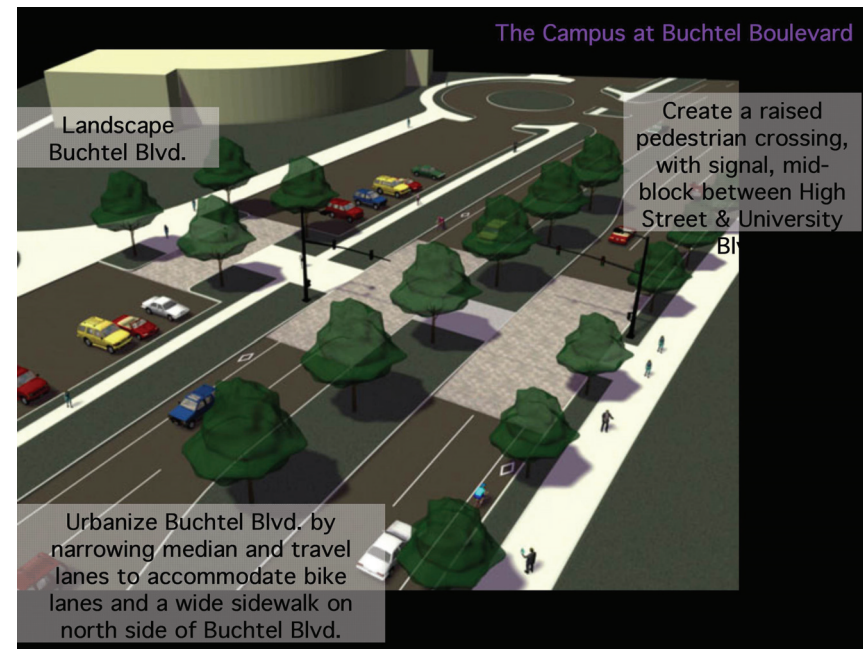
Raise and texture Evans Avenue

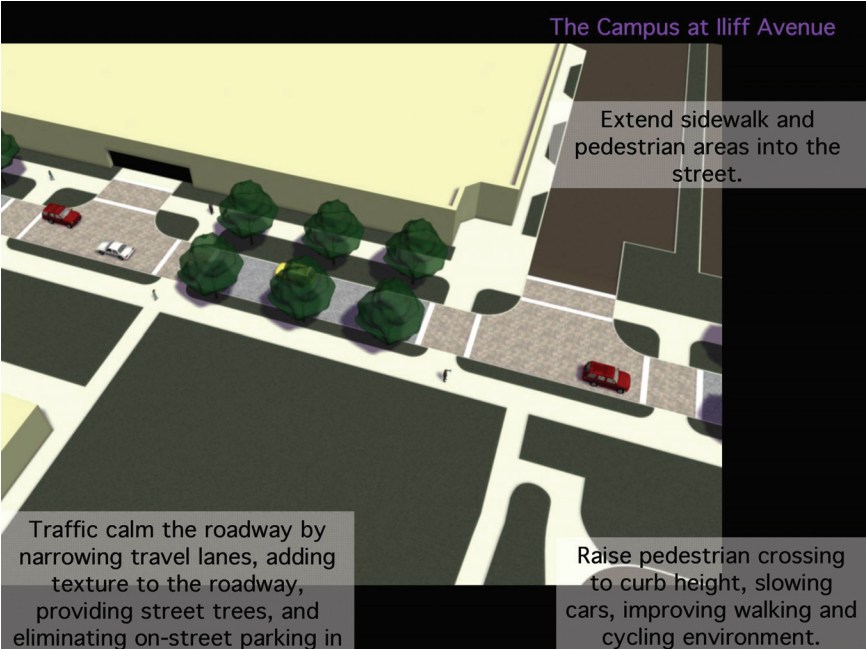
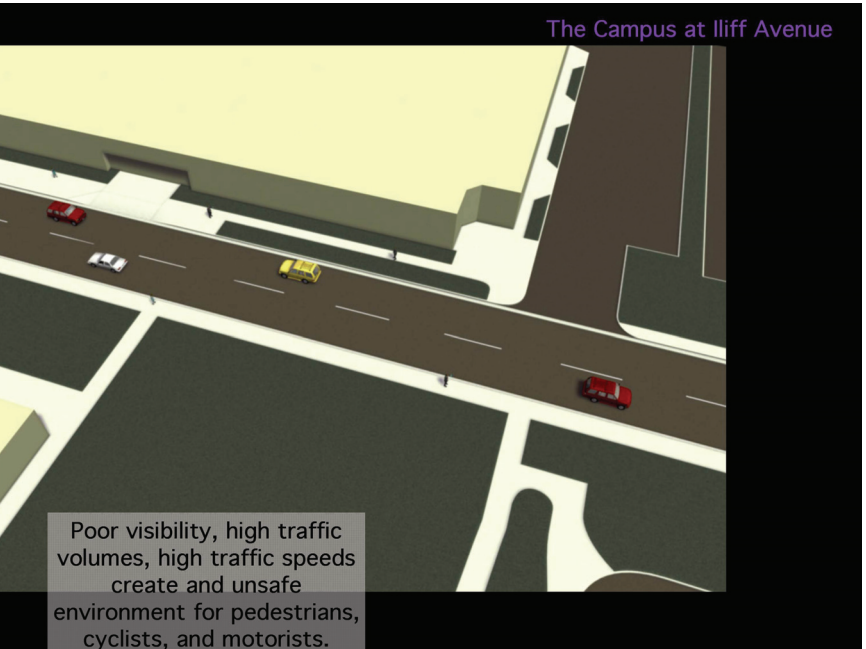
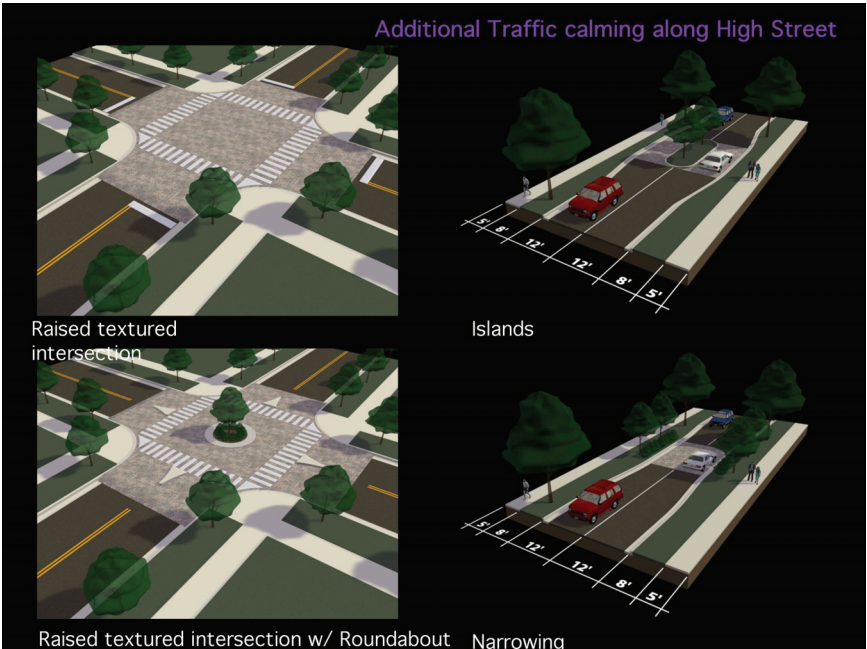
Widen Pedestrian crossing, improving visibility



Provide textured bus pull-outs.







List of Participants

(reprinted from 2002)

Steering Committee:	Mark E. Rodgers, AIA, Chair University Architect University of Denver
	Daniel L. Ritchie, Chancellor University of Denver
	Pat Livingston, Chair, Board of Trustees Buildings & Grounds Committee
	Robert D. Coombe, Provost University of Denver
	Jennifer T. Moulton Director of Community Planning & Development Agency City & County of Denver
	Craig Woody, Vice Chancellor, Business & Financial Affairs University of Denver
	Jeff Bemelen, PE, Director, Facilities Management University of Denver
Working Committee:	Jeff Bemelen, PE, Director, Facilities Management University of Denver
	Tom Best, Senior City Planner City & County of Denver
	Vicky Bunsen, West Side Representative West University Community Association (WUCA)
	Penny Elder, South Side Representative
	Carol Farnsworth, Vice Chancellor, Communications & Marketing University of Denver
	Neil Krauss, Assistant Vice Chancellor Business and Financial Affairs University of Denver
	Kelly McCormick, Vice President for Business Affairs & CFO Iliff School of Theology
	Todd Olson, Assistant Vice Provost, Campus Life University of Denver

Working Committee
Continued :

- Stacy Porto, Undergraduate Representative
AUSA President
University of Denver
- John M. Prosser
John Prosser Associates
Urban Planning Consultant
- Charles A. Rapp, FAAR
Landscape Consultant
- Mark E. Rodgers, AIA
University Architect
University of Denver
- Ruth Rollins, City Engineer
City & County of Denver
- Meg Spohn, GSAC Graduate Student Representative
University of Denver
- Gordon E. Von Stroh, Professor/Director MSM Program
Daniels College of Business
University of Denver
- Dennis Swain, Development Program Manager
Community Planning & Development Agency
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- Bill Winn, East Side Representative
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