Agenda

– Our Charge
– Process and Schedule
– Emerging Themes
– Projected Needs
– Site Analysis:
  • Development Capacity
  • Climate and Context
– Draft Concept Plan
– Discussion
Our Charge

– Accommodate projected long-term growth

– Create a campus development plan unifying the entire campus

– Connect with adjacent North Nevada Development

– Create a sustainable plan which balances environment, economic, and social needs

– Develop an implementation plan in alignment with the Strategic Plan
# Schedule

## Observations and Concepts
- **July 13-14**: Kick-off and Focus Groups
- **September 8-9**: Concept Plan Workshop

## Scenario Planning
- **October 12-14**: North Campus Scenarios Workshop
- **January 2012**: Draft Strategic Plan
- **February 2012**: Draft Plan Workshop and integration with Strategic Plan

## Plan Integration
- **March 2012**: Draft Plan Presentation
- **April 2012**: Strategic Plan and Master Plan Presentation to Board of Regents

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**Process Update**
July Meetings

- Master Plan Committee
- Business Group
- Provost
- Chancellor
- Advancement
- Academic Affairs
- Neighbors
- Student Success
- City Planning
- Design Review Board
- Athletics and Recreation
September Meetings

- Master Plan Committee
- Parking
- Residence Life
- Student Government Representatives
- Faculty Assembly Representatives
- Recreation Department
- Research
- Athletics
- Graduate Student Representatives
- Open Forum
- Design Review Board
Emerging Themes

- UCCS Identity: high-touch, well-respected, affordable Colorado university
- Projected enrollment growth suggests significant facilities needs balanced with online courses
- Need for student life space and residence halls
- Importance of partnerships to secure funding
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– North and East Campuses are future growth zones

– North Campus program may include:
  • Performing Arts Center
  • Arena
  • Academic uses on a long-term horizon
  • Research
  • University Support Offices
  • University Outreach
  • Student housing
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  - University Outreach
  - Student housing
- Respect the responsible capacity of sensitive sites
Campus Growth
Enrollment Growth: 1965 to present
Potential Future Enrollment

Campus Growth
Campus Organization
Building Use
Campus Organization

Campus Growth
Triple the Enrollment, Triple the Space?

Significant growth is an opportunity to reconsider facilities needs and land use.
Existing Space: 826,029 ASF

- Classroom: 125,792
- Open Labs: 33,676
- Research Labs: 41,468
- Academic Offices: 82,895
- Other Academic: 7,996
- Library: 98,032
- Administrative Offices: 55,774
- Assembly, Gallery, Theatre: 20,751
- Other Administrative: 35,614
- Physical Plant: 12,396
- Athletics, PhysEd, Rec: 56,600
- Student Union: 49,992
- Residence Life: 180,440
## Existing Space: 826,029 ASF

Guideline Space: 926,300 ASF

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<tr>
<th>Category</th>
<th>Existing Space (ASF)</th>
<th>Guideline Space (ASF)</th>
<th>Change (ASF)</th>
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<td>Research Labs</td>
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<td>Library</td>
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*Discrepancy in space classification methodologies.*

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**Campus Growth**
Potential Building Area

Between 2,900,000 and 3,100,000 ASF
Trends: Online Courses and On-campus Housing
Classroom Needs

– Classrooms and teaching labs:
  • Existing: 125,792 ASF
  • Guideline: 105,400 ASF
  • Surplus: 20,400 ASF

– Guideline assumes:
  • Each “station” is 20 ASF
  • Each room is used 30 hours per week
  • 67% station occupancy rate

– Trends to more collaborative teaching paradigms may increase area per student
Growth of Online Courses

- Currently 7% of credit hours are taken online – trend for on-campus students as well
- In the future, will 20% be online? 50%?
- Will decrease classroom space needed
On-Campus Housing

- 9.6% of students live on campus:
  - 900 existing beds
  - 600 suites
  - 300 apartments

- Majority of on-campus residents are first and second year students
  - Trend for more communal living for lower division students
  - Trend for more independent living for upper division students

- Strong demand for on-campus housing:
  - Waiting list for on-campus housing
  - University designing new facilities to add 200 beds
  - Increases housing percentage to 11.8%
Growth of Residential Population

- May want to increase percentage (24% at CU Boulder and Colorado State)
- What age of students will live on campus?
- What type of housing will be provided? (traditional, semi-suite, suite, apartment)
Age Appropriate Units – Typical Model

- Traditional Double: 200-225 gsf/bed
- Semi – suite: 225-250 gsf/bed
- Apartment: 300-350 gsf/bed
- Suite: 275-300 gsf/bed
Age Appropriate Units – Typical Model

Freshmen
Sophomores
Juniors
Seniors

Traditional  Semi-Suite  Suite  Apartments

$  $  $  $$$$
Core and East Campus Master Plan Capacity

- New Core Campus building
- Existing Core Campus building
- Core Campus parking
- East Campus building
- East Campus parking

Campus Growth
Core and East Campus Capacity

Existing 826,029 ASF
Core (200,000 ASF)
East Campus (276,000 ASF)
Existing 826,029 ASF
Transportation

- Parking is one slice of the transportation pie
- Balanced approach of alternative means of transportation
- Take advantage of nearby transportation and parking resources
Bus routes

- UCCS population very dispersed throughout the city
- Few clearly identifiable student neighborhoods
- Northeast and northwest of North campus underserved

Student or faculty residence
North Campus Site Analysis
Topography

- Significant topography across the site
- Rises from 6,184 feet to 6,624 feet
- 440’ rise
- 160” rise from North Nevada to Alpine Village
- Topography gives unique character to the site in distinct zones
- Buildings should be sited in response to topography and protect view sheds from upland development

Site Analysis
Slope

- 0-3% - few challenges
- 3-7% - challenging for athletic fields
- 7-15% - challenging for surface parking
- 15-25% - prefer to remain undisturbed, buildable in some cases
- 25%+ - should remain undisturbed


Slopes 18% and greater
Geology

- Bluffs and Arroyos are difficult to develop due to subsurface stability:
  - Upper part of the Dawson Formation, Facies Unit One (Upper Cretaceous and Paleocene)
  - Upper member of Laramie Formation (Upper Cretaceous)
  - Middle sandstone member of the Laramie Formation (Upper Cretaceous)

- Should preserve unique formations if possible:
  - Lower part of the Dawson Formation (Upper Cretaceous)

Geology

- Other geologic formations will accommodate development:

  - **T**errace **A**lluvium **T**hree (late-middle Pleistocene)
  - **O**lder fan deposits (late and middle Pleistocene)
  - **A**lluvial and colluvial undivided (Holocene)
  - **A**rtificial fill (latest Holocene)

Soils

- Erodible north campus soils: Careful excavation, tight construction boundaries, and attention to dispersed and concentrated run-off to preserve non-disturbed areas.

- Poor nutrient levels will make landscape establishment and restoration of disturbed native landscapes difficult.


- Kutch soil characteristics will require the most structural engineering and landscape design mitigation.

Soil types:  □ Travessilla  □ Blakeland  □ Kutch

Source: Soil Survey of El Paso County Area, Sheet No. 8. US Department of Agriculture Soil Conservation Service and Colorado Agricultural Experiment Station, 1975
Hydrology

- Three drainage basins
- Adequate land for natural water flows should be preserved
- Washes collecting water from 500 acres to less than 25 acres:
  - 500 acres and greater
  - Less than 25 acres
Plant Communities

- Undisturbed vegetation contributes to site character
- Sensitive to changes in drainage patterns
- Large stands should be protected
- Undisturbed plant communities include:
  - Native prairie
  - Pine shrub
  - Pinyon juniper
  - Mountain shrub
  - Cottonwood willow
  - Upper arroyo oak/elm

Pine shrub  Mountain shrub  Pinyon/Juniper
Cottonwood/Willow

Upper Arroyo Oak/Elm
Native Prairie
Plant Communities

- Vegetation in several areas of the site is already disturbed
- Disturbed areas are priority development sites
- Disturbed areas include:
  - Non-native turf
  - Non-native prairie
  - Introduced locust
  - Weed infestation
  - Compacted soil

Weed infestation

Arroyo
Site Analysis: Context and Climate
Cultural Resources

- Drainages are historic migration corridors
- Artifacts may be located at or below the surface across the entire site
- Monitoring necessary during construction
  - Archaeology students have monitored in the past
- Known sites should be preserved, particularly those used by the Anthropology Department
- Potential resources
- Known resources
  - Sites utilized by Anthropology Department

Minette Church (conversation). Anthropology Department, 2011.
Mining

- History of formal and informal mining in the region

- Abandoned mines under the main campus are low to very low concern

- No evidence of formal or bandit mines under North Campus

History

North-South Boulevards
- N. Cascade
- N. Nevada
- N. Wahsatch

East-West Boulevards
- Platte
- Pikes Peak
- Vermijo

Civic Places
- Colorado College
- Acacia Park
- Antlers Park
- Alamo Square
Regional Context
Views

- Views reinforce character
- Should preserve and frame important views
- North and east views to the bluffs, especially Pulpit Rock
- Pikes Peak to the southwest
Solar radiation

- 300 days of sunshine per year - potential for solar power and hot water generation
- Solar south is 8.5 degrees west of true south
- Summer altitude: 73.5
  - Winter altitude: 26.5
- Thin atmosphere leads to significant solar penetration
- Seasonal and daily temperature swings
Solar radiation

- Orient buildings with long edge facing solar south to southeast
- South: block summer sun and capture winter sun
- North: diffuse light should be used for daylighting
- West: block direct sun year round to prevent excess heat gain
- East: less threat of heat gain, treatments vary dependent on building needs
Wind

Source: USDA National Resources Conservation Service

Site Analysis
Wind

- Winds tend to emanate from both north and south year round
- Wind gusts are periodically severe and turbulent
- Cold winter winds from north
- Chinook Winds arrive in Spring from west and warm Valley
- Albuquerque Low from south bring significant snowfall
**Wind**

- Orient buildings to block winter winds
- Vegetated windbreaks can add extra protection
- Stagger buildings to prevent wind tunnels
- Allow summer winds to pass through the site
- Site active uses (cafes, plazas) on south sides of building to shelter from winter winds and expose to summer winds and sun
Respect the site’s natural features

Define views to natural landmarks:

- Pulpit Rock
- Austin Bluffs
- Pike’s Peak
Respect the site’s natural features

- Define views to natural landmarks
- Preserve and enhance functionality of drainage corridors
Respect the site’s natural features

- Define views to natural landmarks
- Preserve and enhance functionality of drainage corridors
- Preserve large stands of native vegetation and reintroduce native species to developed landscapes

- Arroyo
- Prairie
- Mountain
Reinforce vibrant campus anchors

Concept Plan
Reinforce vibrant campus anchors

- Tight-knit academic core
- College town district where the city and university meet
Connect campus destinations

Pedestrian, bike and transit spine becomes the primary connection between the anchors.
Connect campus destinations

Pedestrian, bike and transit spine becomes the primary connection between the anchors

Neighborhoods and nodes activate the path between Core and North campuses
Concept Plan

- Respect the site’s natural features
- Reinforce vibrant campus anchors
- Connect campus destinations