A NEW AMERICAN UNIVERSITY

Observations
January 26-28, 2004
www.asu.edu/cdp
“In the press of meeting current needs, many Universities lack a strong vision which looks over the horizon. Unlike corporations, great universities can never move their corporate headquarters. Therefore, in planning a campus, one must see individual decisions in the context of decades, not years. Within this profound lesson is an idea that no one building is more important than the campus as a whole.”

Dean W. Currie – VP for Finance - Rice University
WHAT DIFFERENCE DOES A CAMPUS PLAN MAKE?

- To plan for growth such that every dollar spent improving the physical campus supports ASU’s mission

- So that our daily decisions are part of a optimistic long term vision

- To raise our aspirations

- To raise money
CAMPUS PLANNING PROCESS

Observations

Principles & Concept

Design Guidelines

Precincts

Final Plan

DRAFT
CAMPUS PLANNING PROCESS

Observations

Principles & Concept

Final Plan

Design Guidelines

Precincts
<table>
<thead>
<tr>
<th>Time Frame</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>June-December 2003</td>
<td>Observations</td>
</tr>
<tr>
<td>September 2003</td>
<td>Vision White Paper</td>
</tr>
<tr>
<td>January 2004</td>
<td>Planning Principles and Concept Development</td>
</tr>
<tr>
<td>January-June 2004</td>
<td>District Workshops</td>
</tr>
<tr>
<td>July-Aug 2004</td>
<td>Final Plan and Guidelines Development</td>
</tr>
<tr>
<td>Sept - Oct 2004</td>
<td>Draft Final Plan Public Forums</td>
</tr>
<tr>
<td>Fall 2004</td>
<td>Arizona Board of Regents Presentation</td>
</tr>
</tbody>
</table>
one university many places
Planned Projects

Future Projects

Under Construction

Other Planned Projects

AZ Bio
Foundation and Garage
Arts and Business
South Campus
USB Garage
Co-Gen Plant
Olympic Center
North Parking Garage
Life Sciences Building
LANDSCAPE

- Original Core Campus (Primarily Flood Irrigated)
- Remaining Campus Core (Conventional Irrigation)
- Turf (Ornamental)
- Turf (Recreational)
- Desert Transitional Areas
CAMPUS APPROACH TO TRANSITIONAL SPACE

Gammage Parkway
- One Way Traffic with Parking
- Palm Tree Street Theme

Terrace Road West of Rural
- Future Arizona Bio-Center and Parking Garage

Lemon Street West of Rural
- Parking Garage with Palo Brea Street Tree

College Avenue North of Campus
- ‘A Mountain’
- Tempe Street Tree Theme (Live Oaks)

McAllister Avenue
- Two Way Traffic
- Bicycle Lane

Student Cross-Walk at McAllister
CAMPUS WALKS

Shade
Sightlines
Consistency
COURTYARDS AND PLAZAS

Courtyard
Plazas
Water Feature
Sculptural Art Piece
PLAZAS

Shade
Seating
Water
Scale
RECOGNIZABLE PLACES

Strong Edges and Centers
Unique Identity
Shade and Water
LESS RECOGNIZABLE PLACES

Limited Shade
Mode Conflicts
Inconsistency
Lack of Human Scale
LANDSCAPE ZONES

- ORIGINAL CAMPUS CORE
  (PRIMARILY FLOOD IRRIGATED)
- REMAINING CAMPUS AREA
  (CONVENTIONAL IRRIGATION)
- TURF AREAS (ORNAMENTAL)
  29 ACRES
- TURF AREAS (RECREATIONAL)
  138 ACRES
- DESERT TRANSITIONAL AREAS
- NATIVE DESERT

ASU, Old Main Lawn
Desert Transitional Space
Cady Fountain at Campus Core
Student Recreational Area
Memorial Union Plaza
ASU, Karsten Golf Course
GATEWAYS AND THRESHOLDS

Entry Signage at Rural / Rio Salado
Second Vehicular Threshold
Primary Vehicular Threshold
Pedestrian Threshold
Primary Vehicular Threshold
Pedestrian Bridge, Crosswalk over University
Neighborhood Issues

- Don’t grow into residential neighborhoods
- Keep parking & traffic out of neighborhoods
- Train students to be good citizens
- Reintroduce community retail such as a grocery and convenience stores
- Don’t build blank wall buildings along campus edge
- Don’t locate garages adjacent to neighborhoods
EDGE CONDITIONS

Wide Streets
Inconsistent Landscape
Lack Hierarchy
Buildings as Barrier
Surface Parking

Parking Structures

Parking Structures under construction

Total existing spaces: 20,319

Surface parking:
12,787 (almost 6,000 in perimeter Lot 59, including 1,500 temporary spaces)

400 permanent spaces added over last decade

Structured Spaces: 7,344

Parking Structures Under Construction:
7A on Lot 59N
1,500
ASU Foundation
1,200 (net 1,000 for ASU use)
EXISTING PARKING STUDY

Surface Parking

Parking Structures

Parking Structures under construction

Planned Parking Structures

- Planned Parking Structures

- 7B on Lot 59N: 1,500 (Net 900)

- University Services Building: Net 400

- Arts and Business Center: 1,600 (Net 0 for ASU use)
Land Used by Surface Parking

95.4 Acres
FUTURE PARKING NEEDS

• 2 new parking structures under construction will avoid shortfall (even when 1,500 temporary spaces lost)

• Approximately 4,000 spaces may be lost at build-out

• Additional demand, primarily for residential students at build-out, is 3,500 spaces if current ratios are maintained

• Even with additional planned parking structures (1,900 spaces), would need 4,400 more spaces

• Overall, need to build approximately 6,000 plus net new spaces if current ratios are maintained
PARKING ALLOCATION

• 18,340 parking spaces are reserved or permitted with decals

• Everyone is eligible for a decal (sell approximately 32,000 decals per year)

• Allocation of decals:
  – Employee: 22%
  – Commuter Student: 67%
  – Resident Student: 11%

• Ratio of Parking Spaces to Persons:
  – Employee: 1 per 1.6 faculty and staff
  – Commuter Student: 1 per 4.3 commuter students
  – Resident Student: 1 per 2.2 resident students

• 1,350 visitor/meter spaces (down significantly)
PARKING NEED

Parking Need under Current Ratios
20,300 existing
+2,500 net under construction
+1,300 net planned
+4,400 net need for more resident students, fac/staff, etc.
-1,500 temporary spaces lost
27,000 total gross need

Need to build 5,000 – 6,000 net new spaces
THE COST OF PARKING

• Most new parking must be in structures

• Capital cost per space:
  – Aboveground $12,000
  – Underground $20,000

• Total capital cost for 6,000 spaces:
  – $90 million

• Total annualized cost:
  – $7.2 million
  – $1,200 per new space

• Decal rates would have to more than double to cover cost of continuing to satisfy parking needs on campus
ADDITIONAL “COSTS” OF PARKING

• Increased traffic
• Traffic and pedestrian/bike conflicts
• Increased congestion – local and regional
• Degradation of air quality
• Loss of building sites (opportunity cost)
• Impact on community
• Maricopa County population projected to double over next 30 years

• Despite $15.8 billion investment in transportation improvements, congestion will worsen

• 8-hour ozone standards violated

• Trip reduction program mandated by state
As we grow...

1. We lose surface lots to new facilities
2. While physical growth increases parking demand
3. $3,000 to build a surface parking space, $11,000/space to build a structured above ground parking garage, $25,000 +/space to build below ground parking
4. Existing road network and capacity limits the amount of new parking
5. The result is we must invest in alternatives
Creating a Transit Accessible, Park-Once Campus

- Transit Incentives (regional and local)
- Park-and-ride
- Bicycles
- Ridesharing
- Telecommuting
- Housing
- Remote resident parking
EXPERIENCE AT OTHER UNIVERSITIES

- Cheaper to fund alternatives than build parking (Stanford added 2 mill SF without more traffic by paying employees not to drive and improving transit and bikes)

- Cornell decreased cars on campus by 26% in 1 year

- Sale of SOV permits dropped by 22% at U of Washington

- Many examples of reduced parking needs and traffic through bike and transit improvements:
  - U of California-Davis, U of Colorado-Boulder
  - U of Michigan, U of Wisconsin-Milwaukee
  - Penn State, U of Oregon
  - UNC-Chapel Hill
LRT will greatly enhance campus accessibility along with other planned transportation improvements. Reduced parking becomes realistic.
• Extensive local bus service with planned service improvements
• Transit pass costs more than Access A & B decals No incentive to use transit
• Introduce Transit fee for unlimited transit pass?
- Carries up to 140,000 riders per month (typically 100,000+)
- Scheduled to run every 10 minutes in each direction
- Service slowed by traffic and lights
- Neighborhood FLASH serves Tempe community
  - Should it penetrate campus more?
  - What other locations should be served?
• High level of bicycle usage:
  - 15,000 bicycle trips per day
  - 11,800 bicycle spaces

• Bicycle lanes and shared use paths
University and the City committed to improving bicycle network.
Key issues:
• Bicycle/pedestrian conflicts
• Safety of riding on major roads
Key Issues

- Conflicts between multiple users
- Major concern to handicapped persons
Pedestrian Circulation
CIRCULATION

Vehicular Circulation
Pedestrian Circulation
Auto-Ped Conflicts
• Pedestrian overpass not well used

• 4 lanes required for current traffic and buses

• Could be improved with more streetscaping

• Consider planted median with turn lane or narrow street and widen street tree plantings
TRANSPORTATION KEY ISSUES

- Parking:
  - Future parking policies
  - Resident student parking
    - Off-campus
    - Restrictions
  - Commuter parking
  - Handicapped parking
- Move to alternative modes
  - Capitalize on LRT
  - Unlimited access pass
  - Remote parking/park-and-ride
- Bicycle safety & improvements
- Pedestrian/traffic conflicts
- Pedestrian/bicycle conflicts
- Service vehicles
TRANSPORTATION PRINCIPLES

- Improve accessibility to campus by all modes
- Enhance on-campus circulation
- Develop a pedestrian oriented campus
- Minimize future parking needs and impacts
- Develop a bicycle friendly campus
Summary of Observations

There are no clear edges or thresholds to the Tempe campus

Many of our buildings are not of the quality of the institution

Lack connections with natural environment

Conflicts with pedestrians, bicycles, and autos

Arterial roads separates campus internally and from community

Lack of clear identity and image

Campus difficult to comprehend

The campus will benefit from respecting neighborhood issues
Create a vibrant 24/7 living learning environment for education and culture that is interwoven into the spirit of the surrounding area.

Create a great research University whose buildings and grounds reflect the stature of a world class institution.

Create a campus which is responsive to the unique history, place, climate and sustainability of our region.