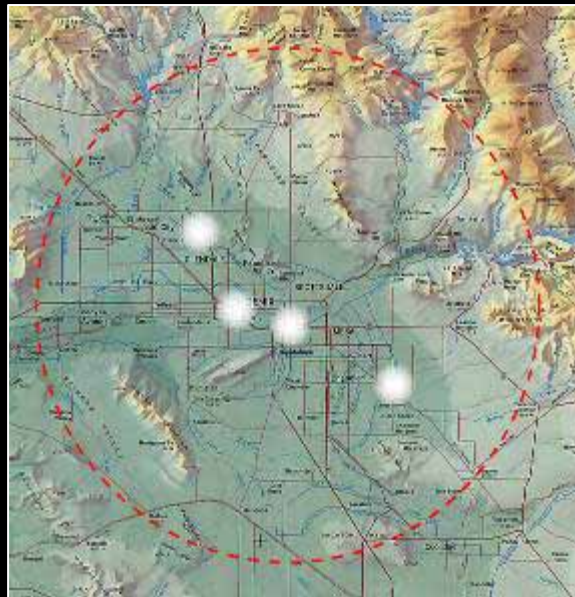




ARIZONA STATE  
UNIVERSITY

## A NEW AMERICAN UNIVERSITY

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## Observations

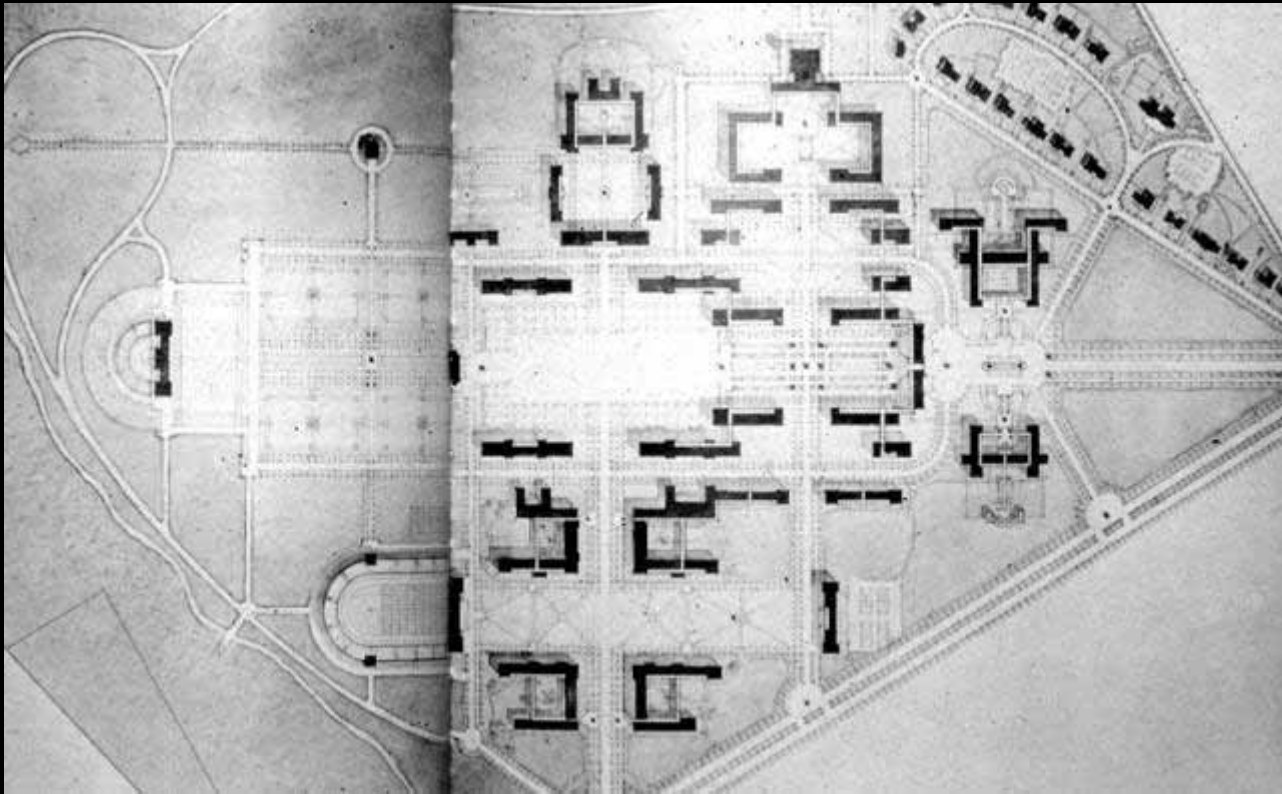
January 26-28, 2004

[www.asu.edu/cdp](http://www.asu.edu/cdp)

## WHY DO WE NEED A MASTER PLAN?

**“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

Final Plan

Design Guidelines

Precincts

DRAFT

# CAMPUS PLANNING PROCESS

## Observations



## Principles & Concept



Final Plan

Design Guidelines

Precincts

DRAFT

# CAMPUS PLANNING PROCESS

## Observations



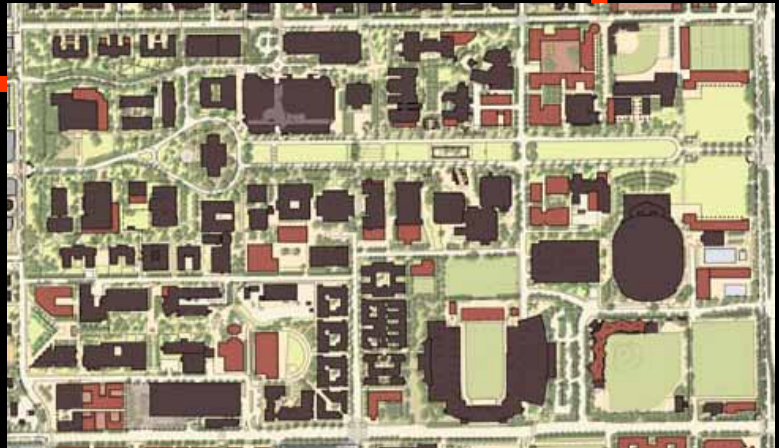
## Principles & Concept



## Final Plan

## Design Guidelines

## Precincts



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# CAMPUS PLANNING PROCESS

## Observations



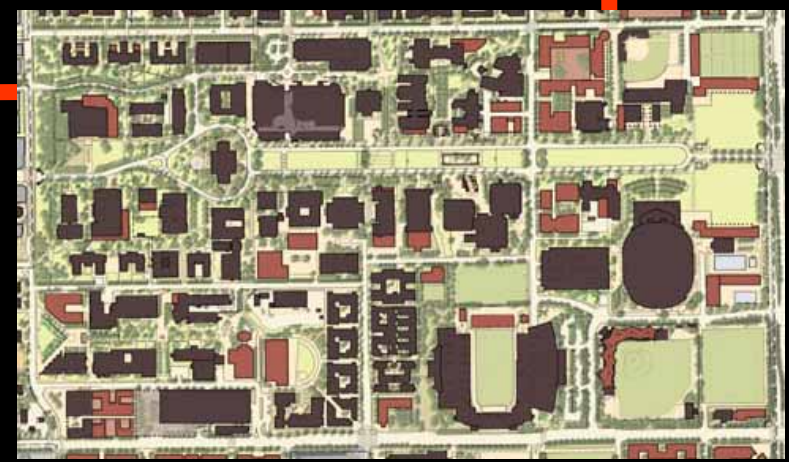
## Principles & Concept



## Design Guidelines



## Precincts



## Final Plan

DRAFT

# CAMPUS PLANNING PROCESS

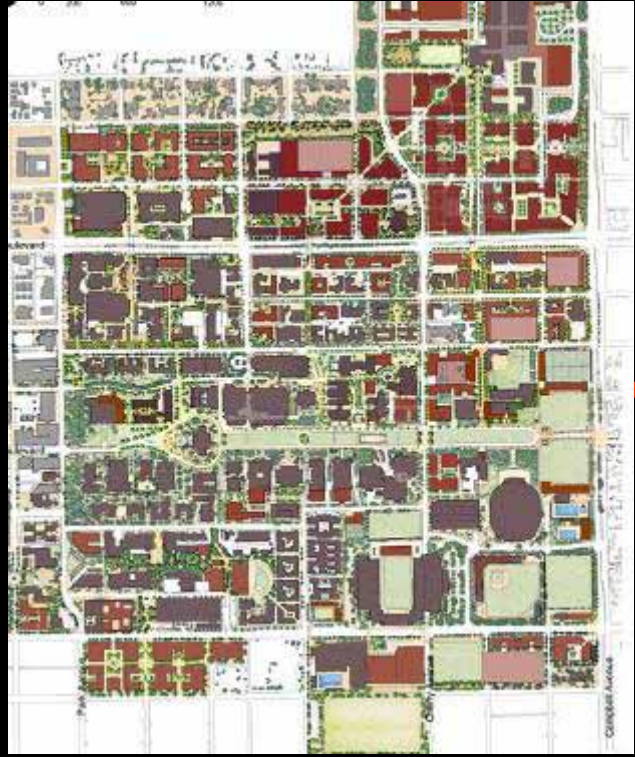
## Observations



## Principles & Concept



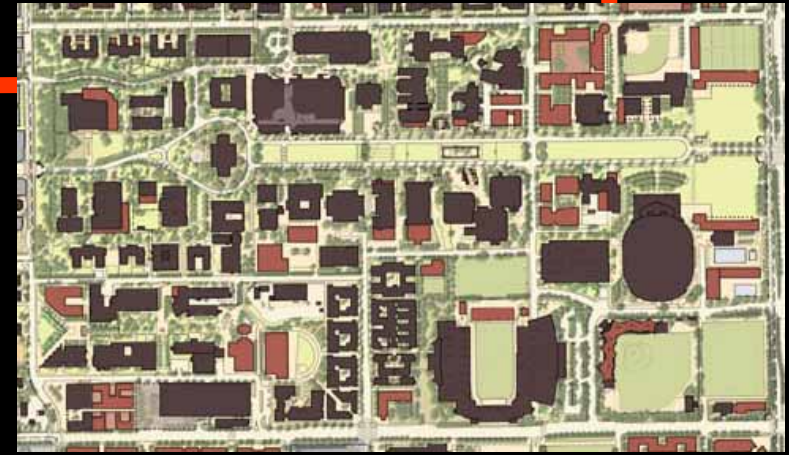
## Final Plan



## Design Guidelines



## Precincts





**June-December 2003 Observations**

**September 2003 Vision White Paper**

**January 2004 Planning Principles and Concept Development**

**January-June 2004 District Workshops**

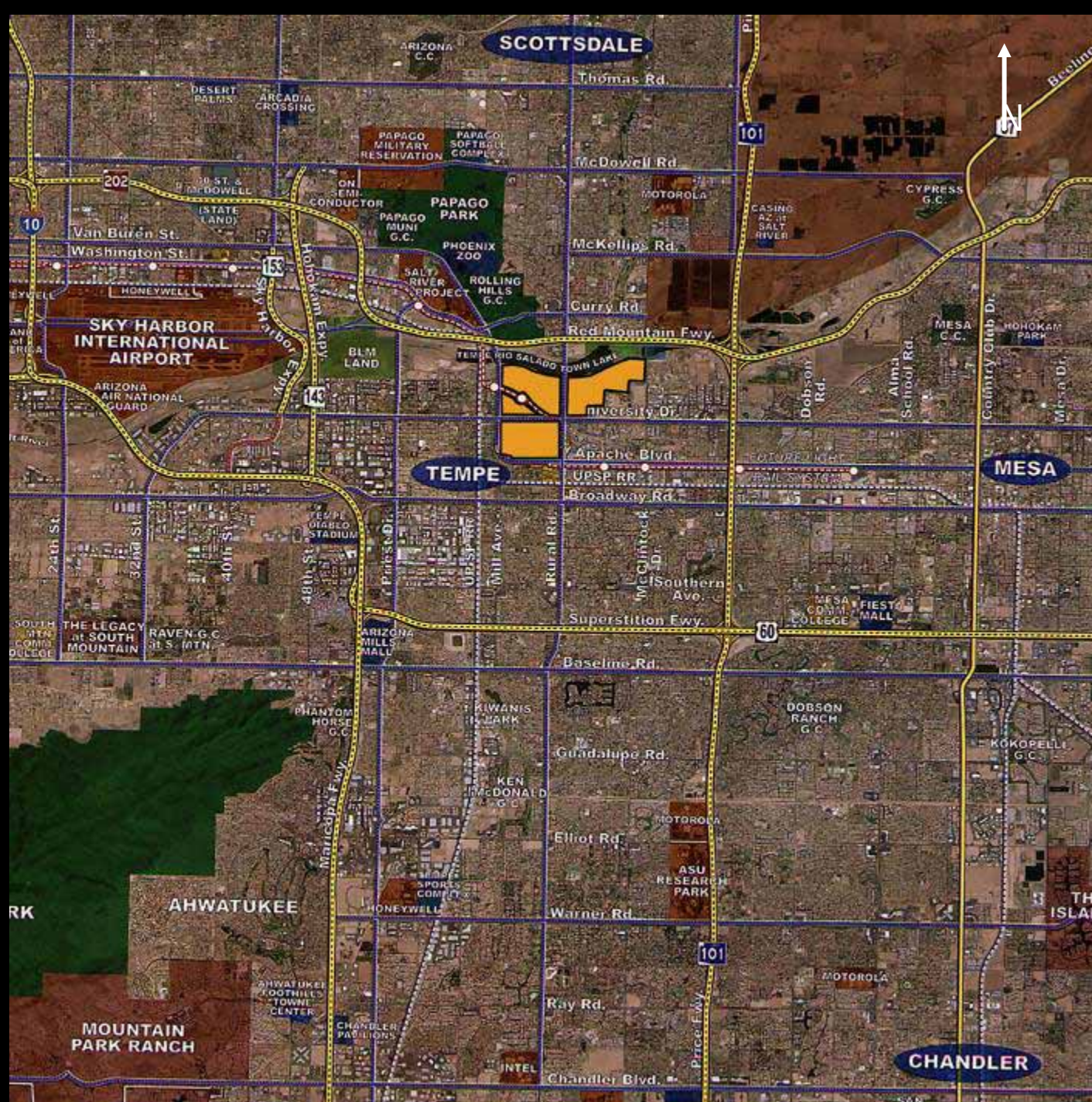
**July-Aug 2004 Final Plan and Guidelines Development**

**Sept - Oct 2004 Draft Final Plan Public Forums**

**Fall 2004 Arizona Board of Regents Presentation**

# ASU MAIN CAMPUS





one university many places

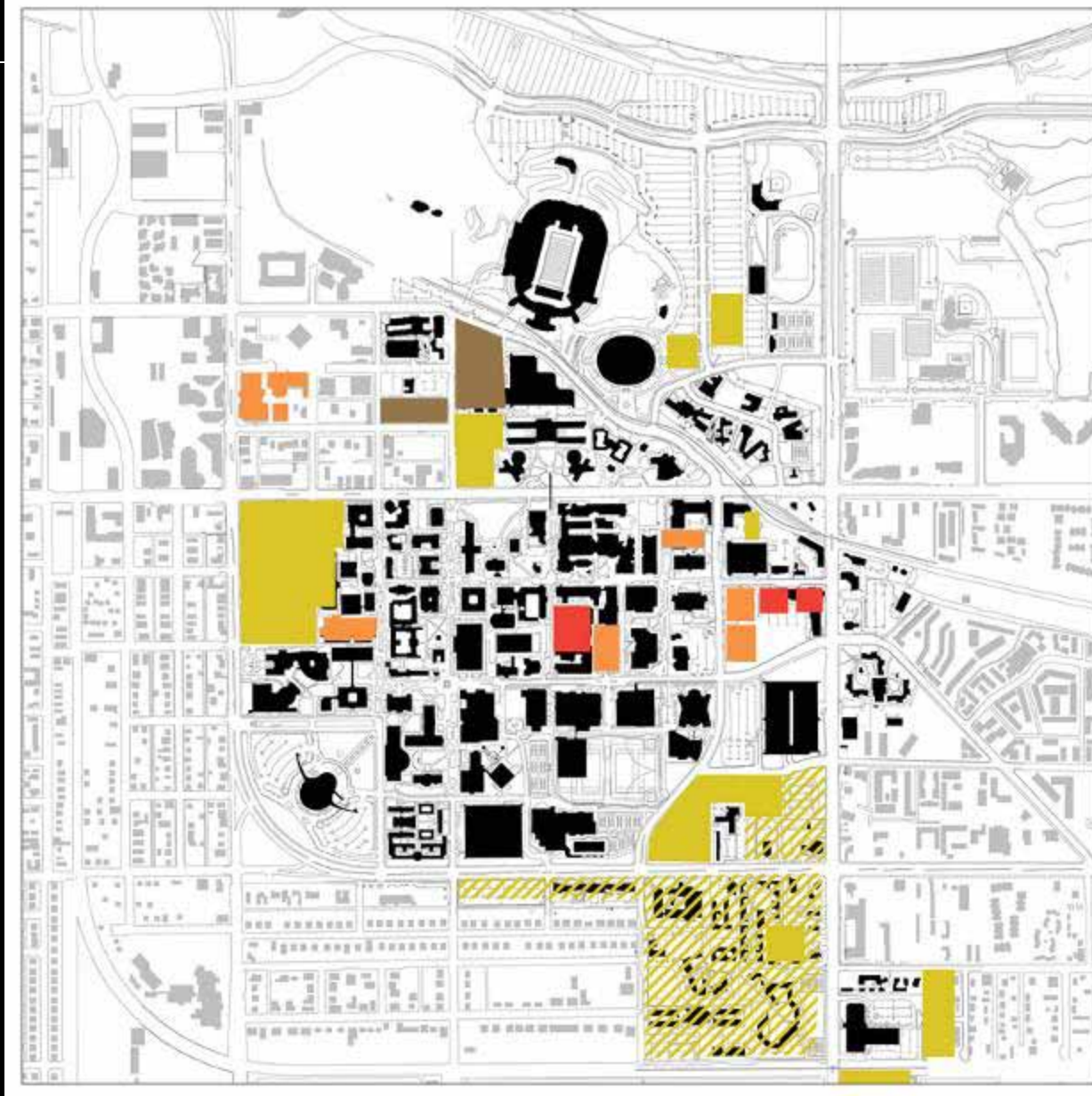
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PROPERTY LINES



# YR 2004 PLANNED PROJECTS



Planned Projects

Future Projects

Under Construction

Other Planned Projects

AZ Bio

Foundation and Garage

Arts and Business

South Campus

USB Garage

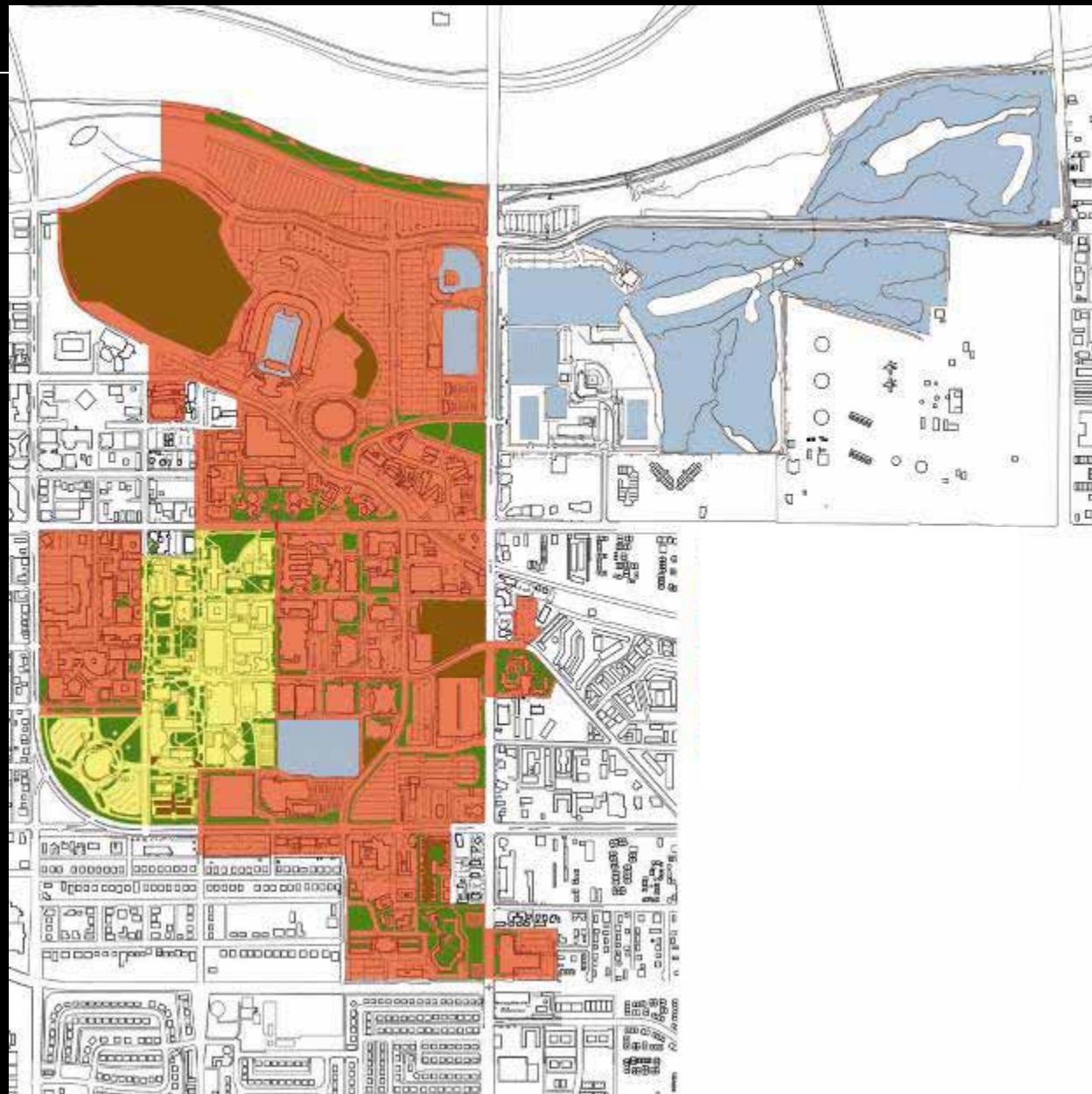
Co-Gen Plant

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)



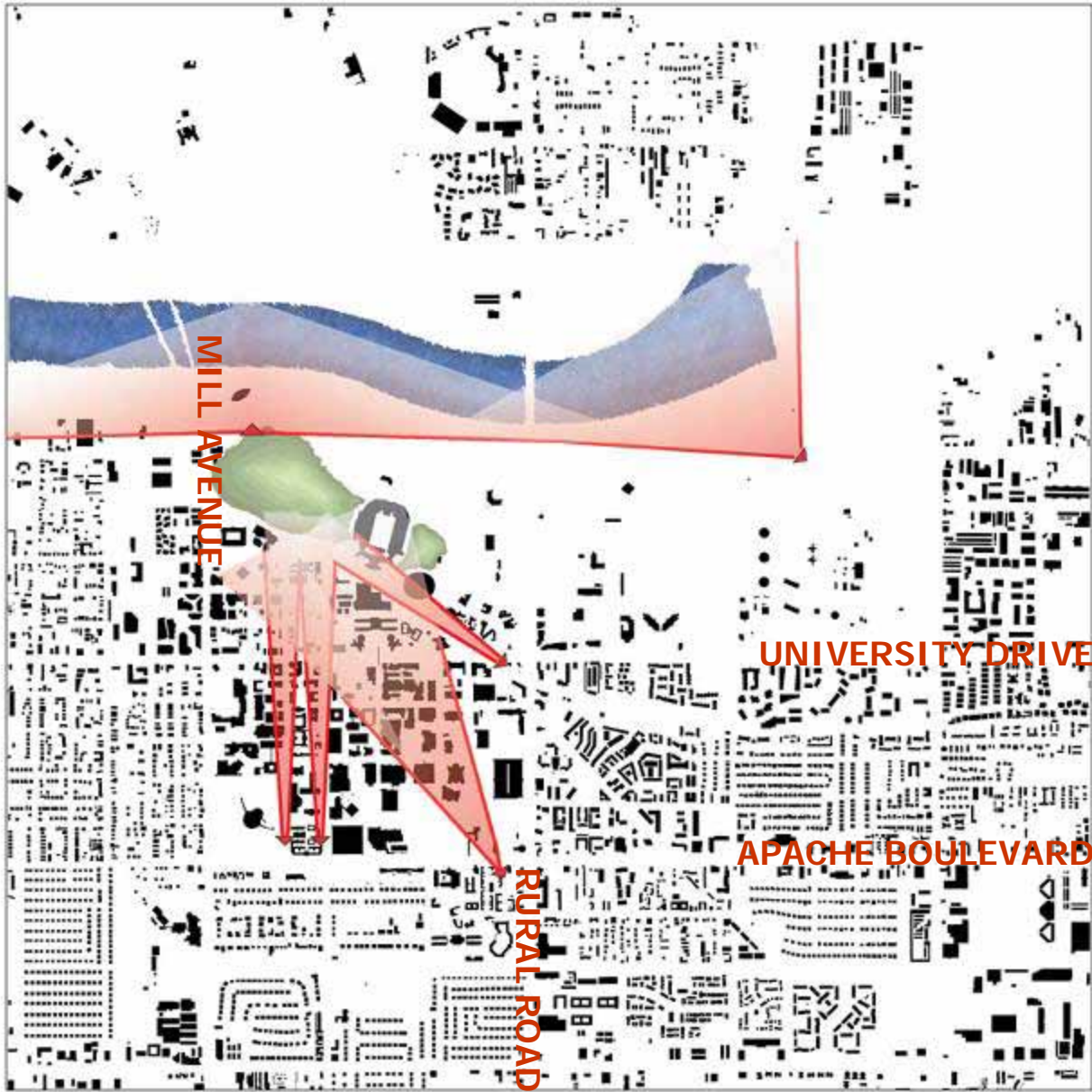
McAllister Avenue  
- Two Way Traffic  
- Bicycle Lane



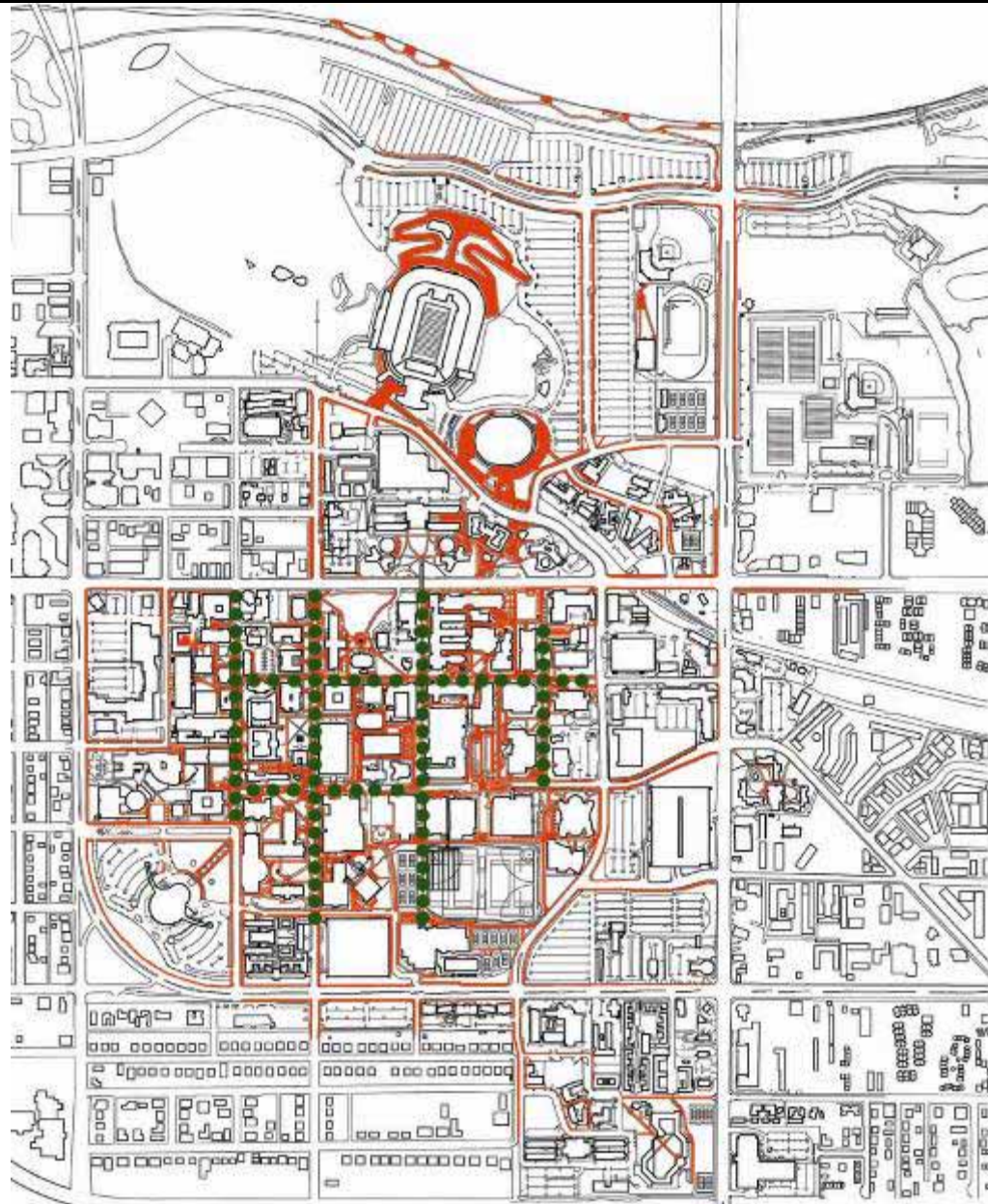
Student Cross-Walk at McAllister



# VIEWS AND VISTAS







# CORRIDORS



Zoo

Mill Ave

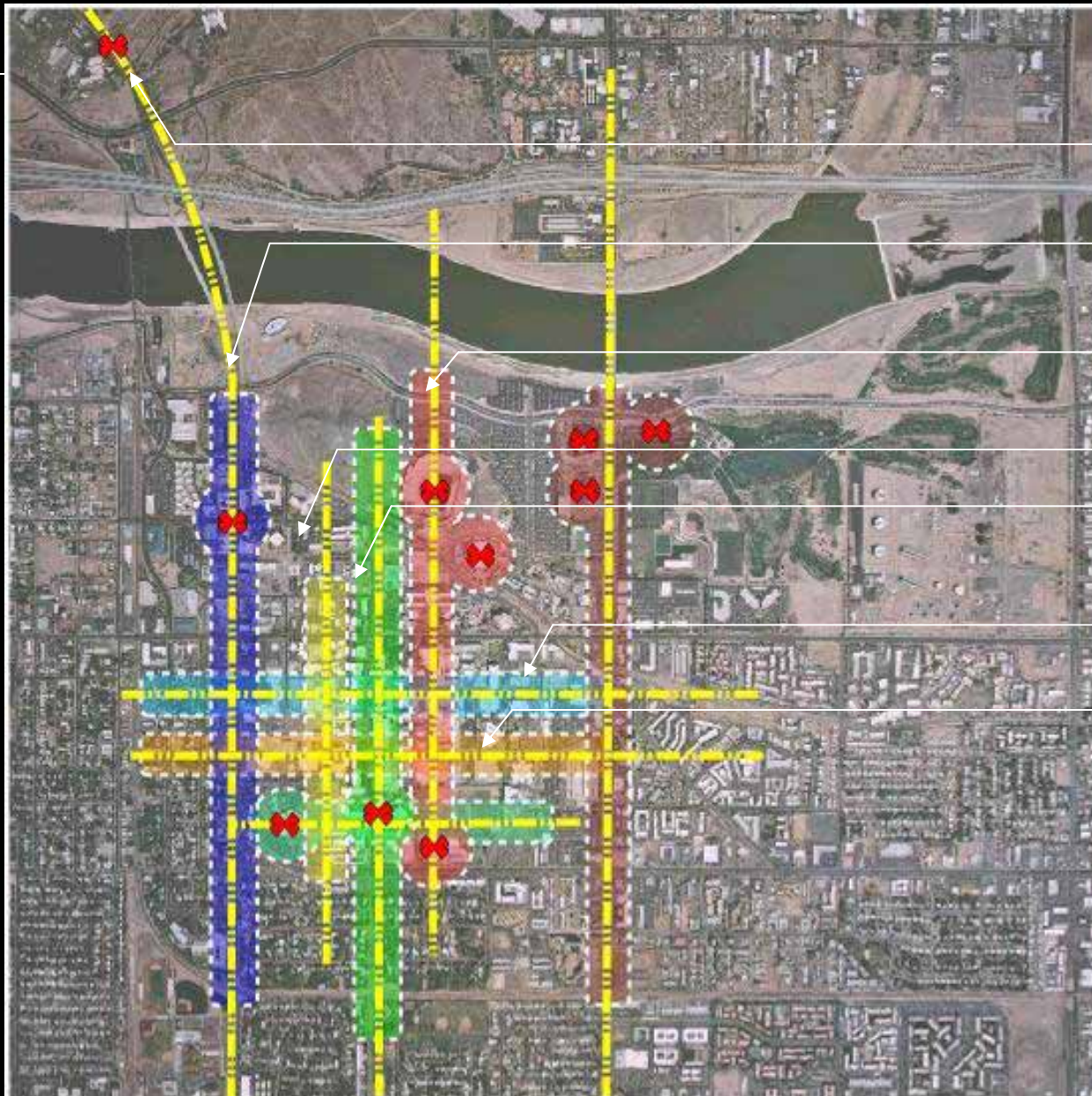
Palm Walk

Forest Mall

Cady Mall

Orange Mall

Lemon Mall



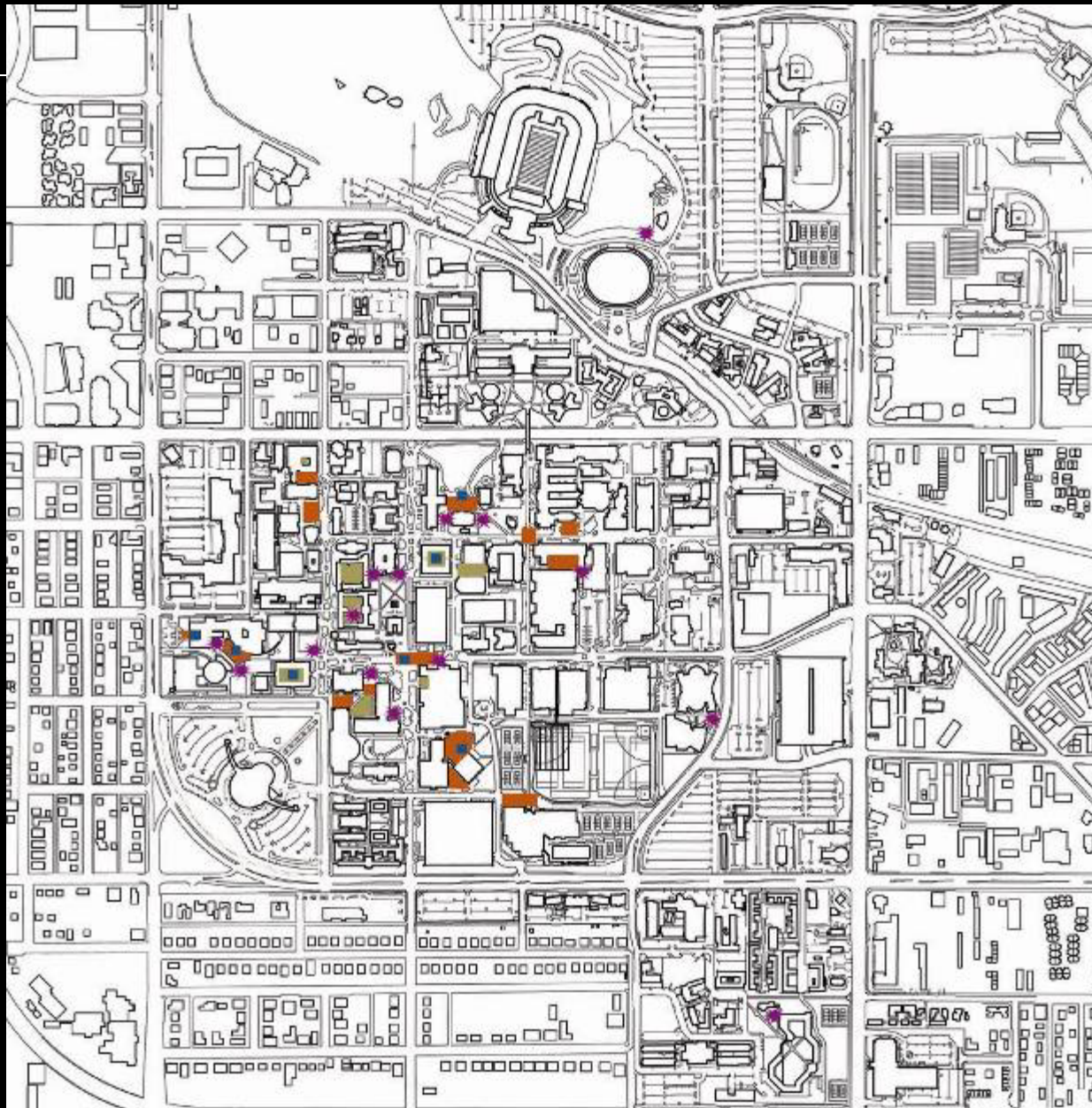
# CAMPUS WALKS



Shade  
Sightlines  
Consistency



# COURTYARDS AND PLAZAS



Courtyard

Plazas

Water Feature

Sculptural Art Piece

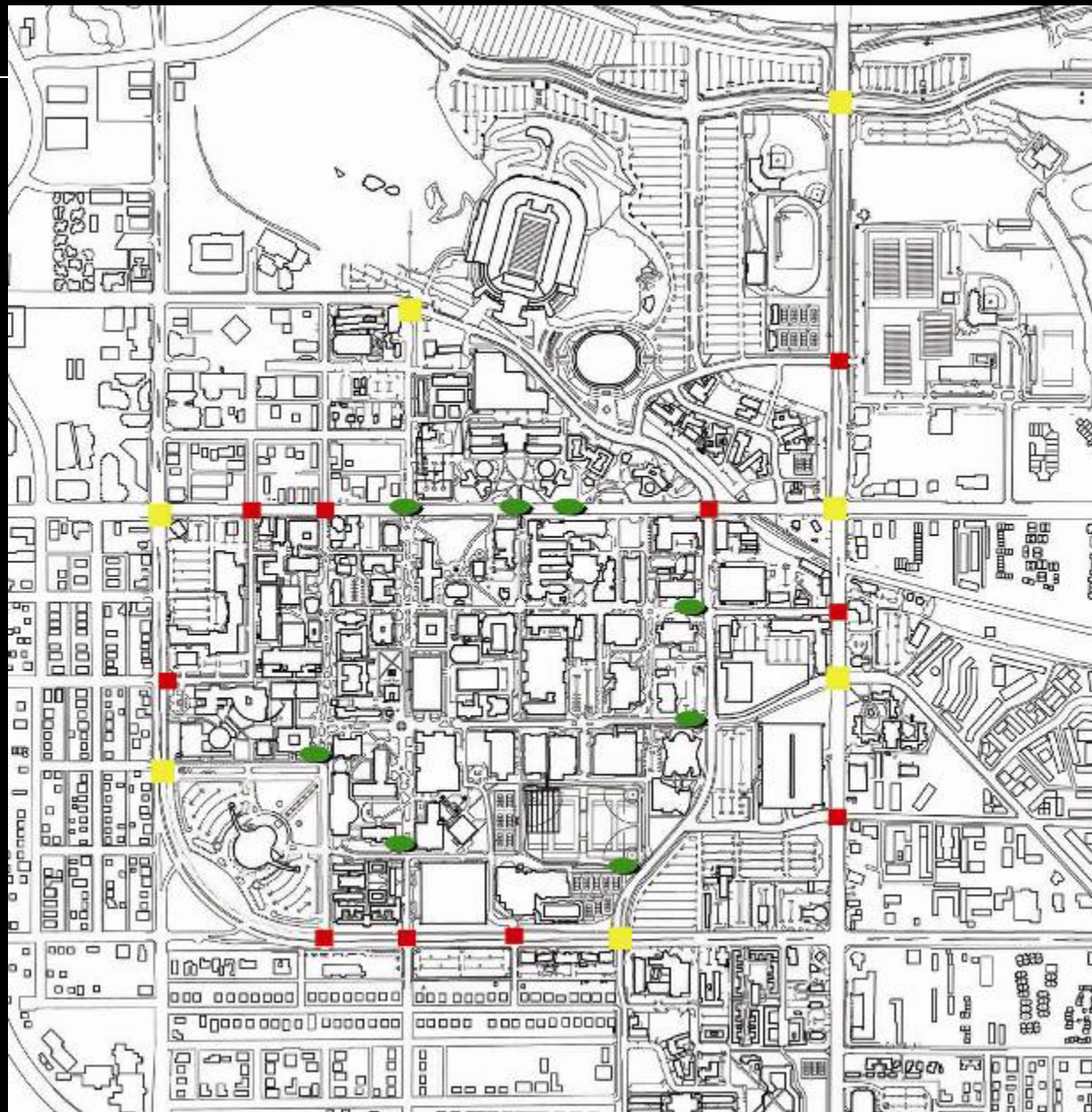




Shade  
Seating  
Water  
Scale



# GATEWAYS



RECOGNIZABLE PLACES



Strong Edges and Centers  
Unique Identity  
Shade and Water



# LESS RECOGNIZABLE PLACES



Limited Shade  
Mode Conflicts  
Inconsistency  
Lack of Human Scale





CAMPUS ART



Historical Marker



Sculptural Art Pieces

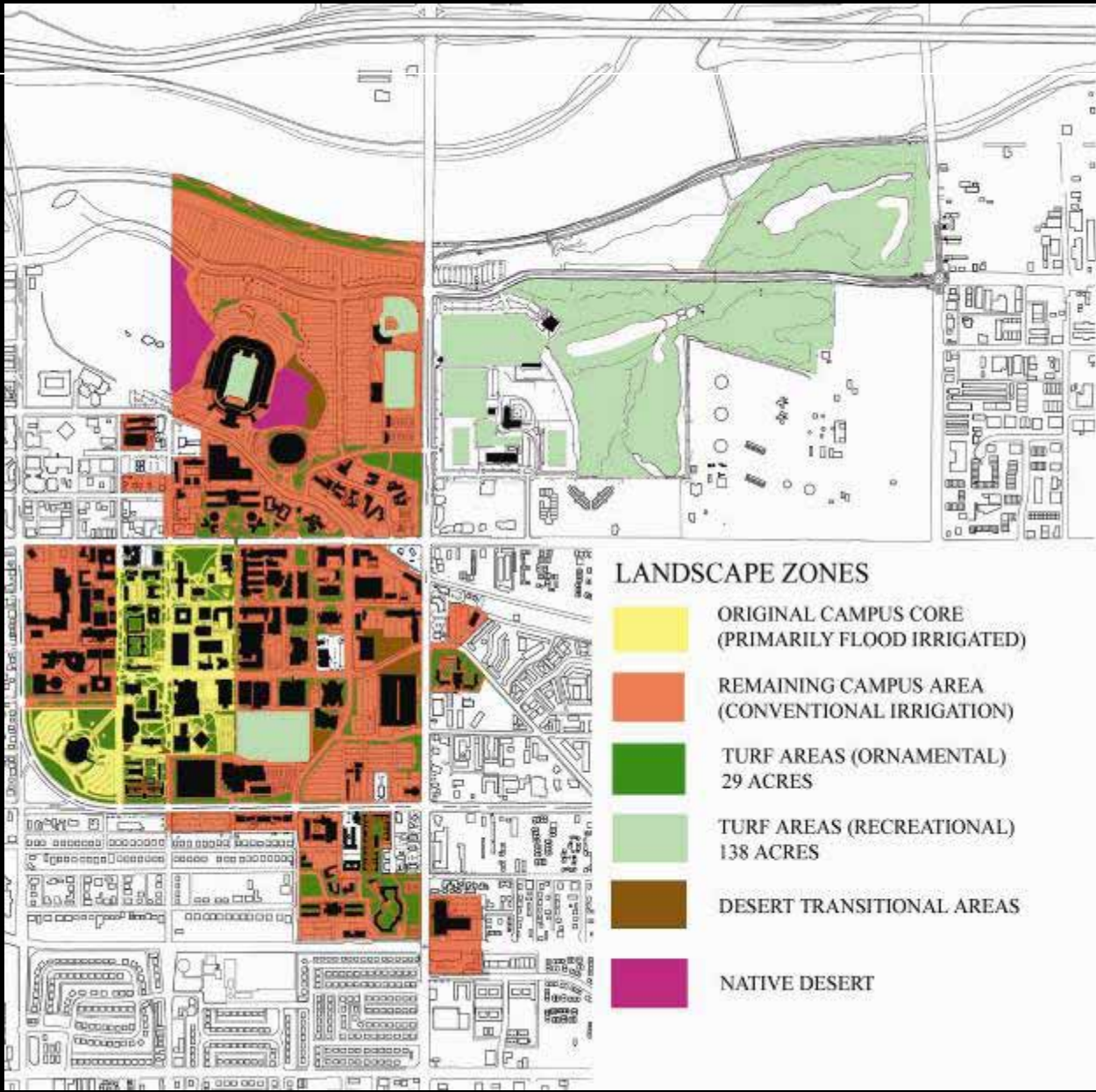


Commemorative 'Native American' Art



Technology Art

# LANDSCAPE ZONES



ASU, Old Main Lawn



Desert Transitional Space



Cady Fountain at Campus Core



Student Recreational Area

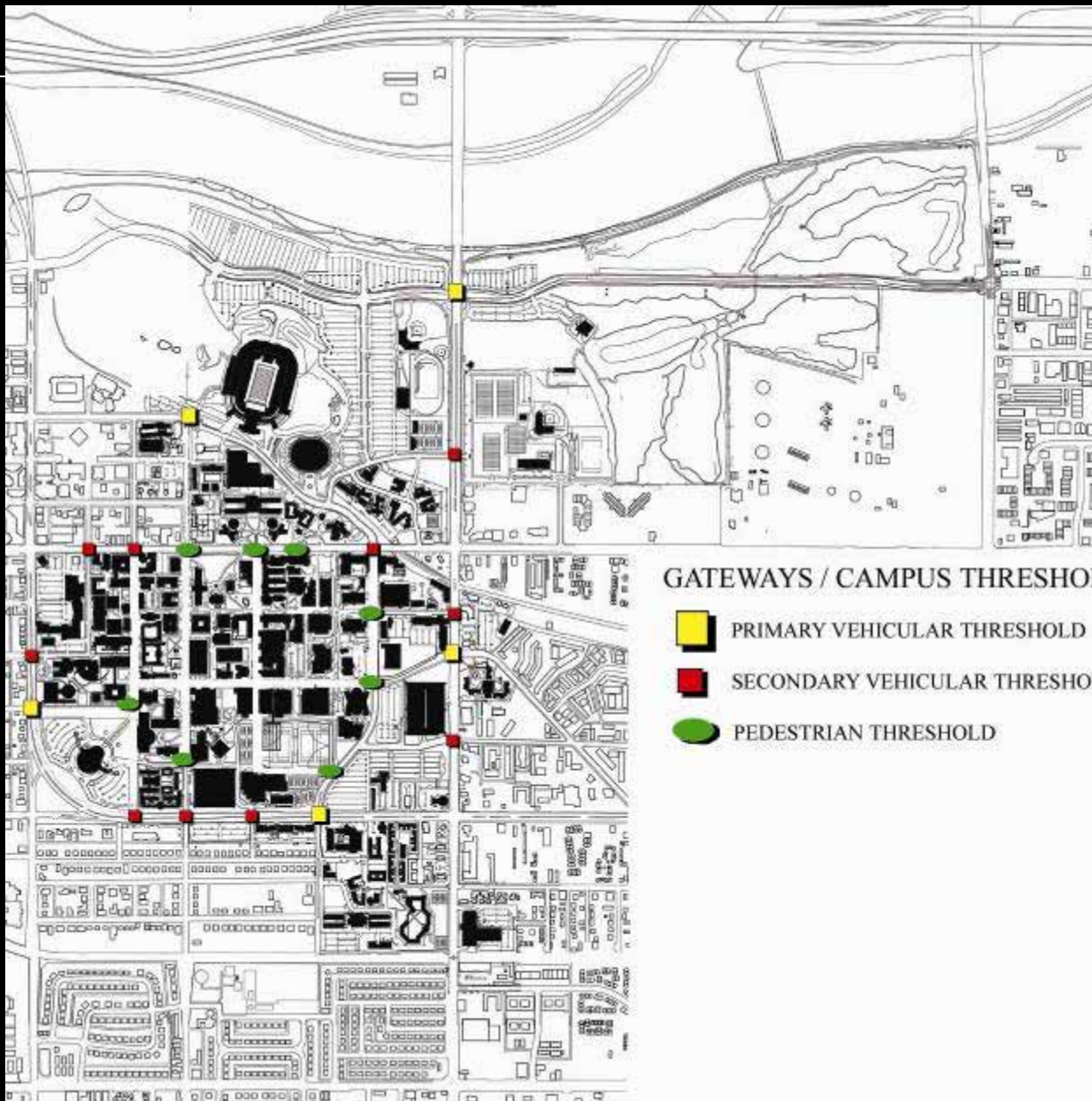


Memorial Union Plaza



ASU, Karsten Golf Course

# GATEWAYS AND THRESHOLDS



Entry Signage at Rural / Rio Salado



Secondary Vehicular Threshold



Primary Vehicular Threshold



Pedestrian Threshold

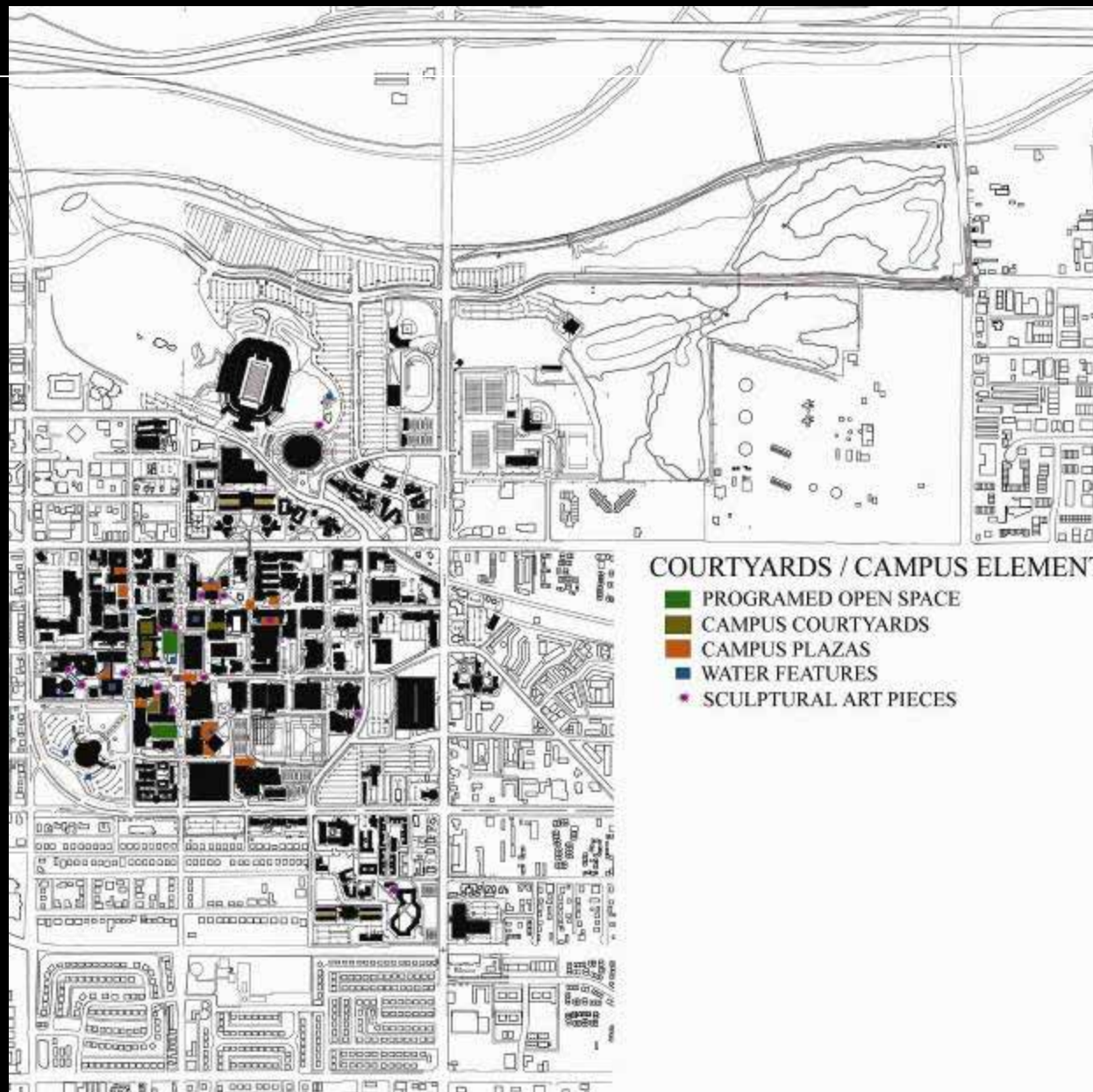


Primary Vehicular Threshold



Pedestrian Bridge, Crosswalk over University

# LANDSCAPE ELEMENTS



**COURTYARDS / CAMPUS ELEMENT**

- PROGRAMMED OPEN SPACE
- CAMPUS COURTYARDS
- CAMPUS PLAZAS
- WATER FEATURES
- SCULPTURAL ART PIECES



Programmable Open Space, Hayden Library



Nelson Fine Arts Plaza



Dixie Gammage Hall Courtyard (Secret Garden)



Cady Mall Fountain



Business School Student Plaza

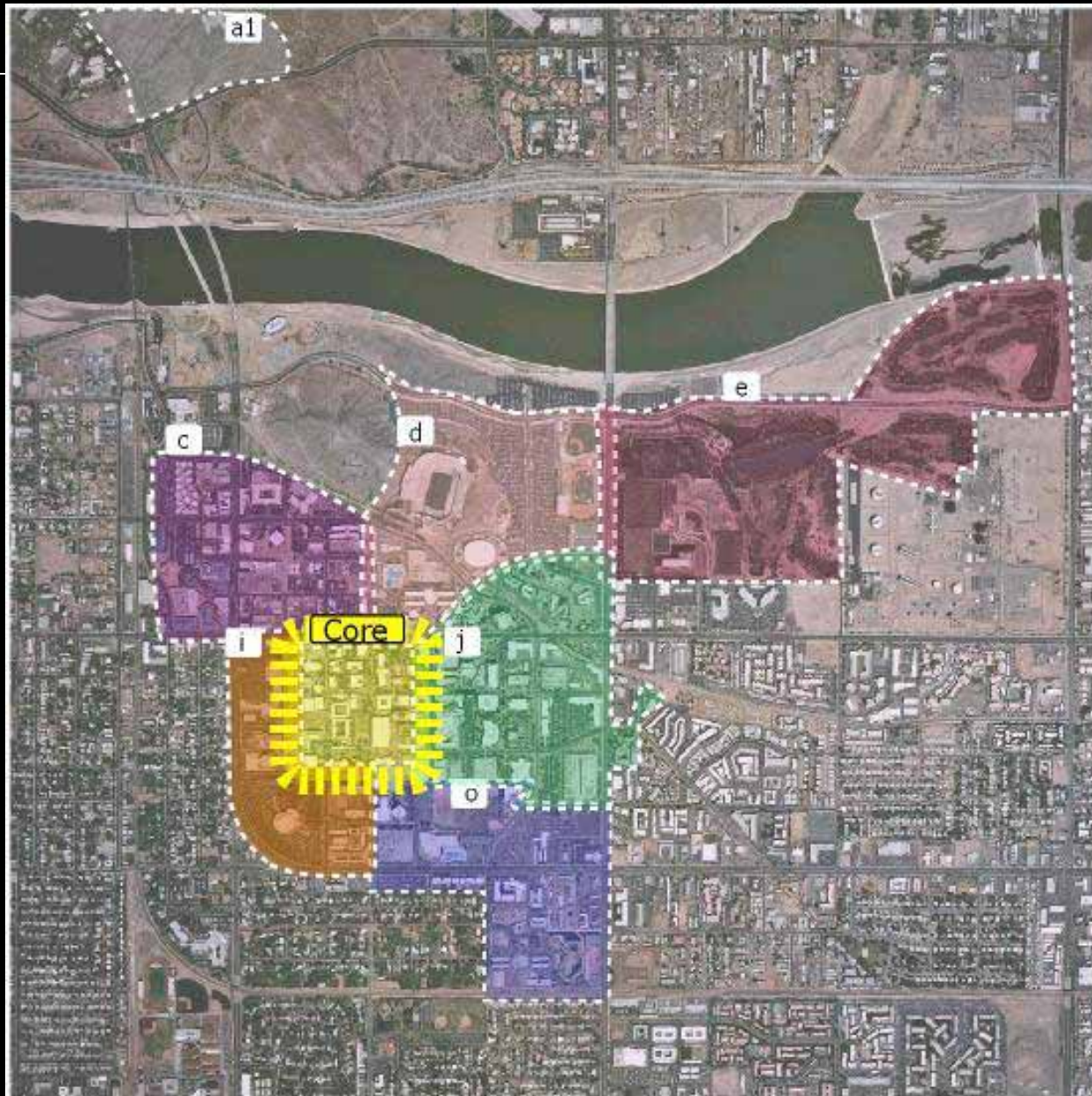


Sculptural Art Pieces

# UNIVERSITY DISTRICTS



# UNIVERSITY DISTRICTS



**a1** Desert Garden District

**c** Tempe District

**d** Sun Devil District

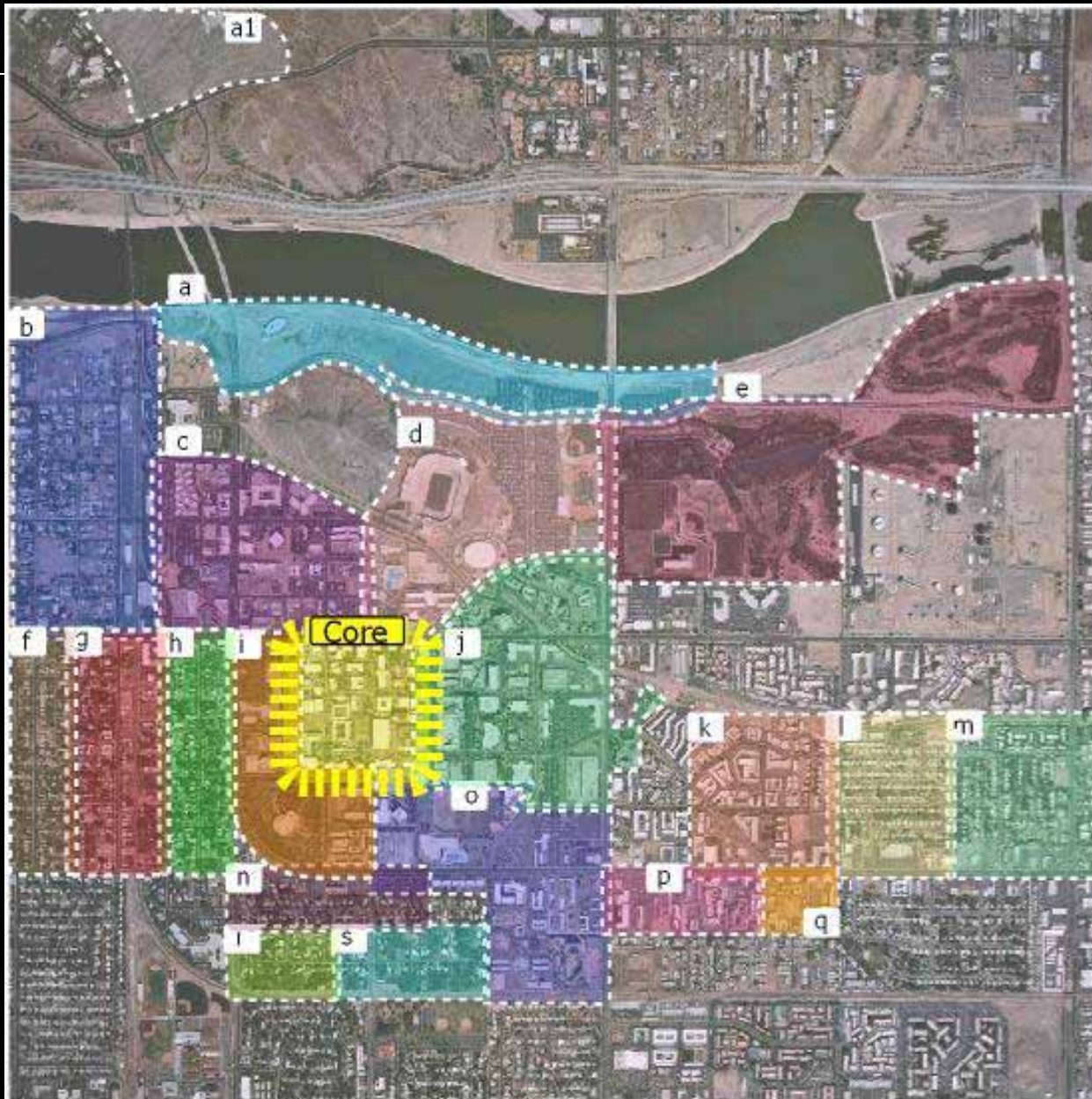
**e** Karsten Green District

**i** Artspace District

**j** Science Learning

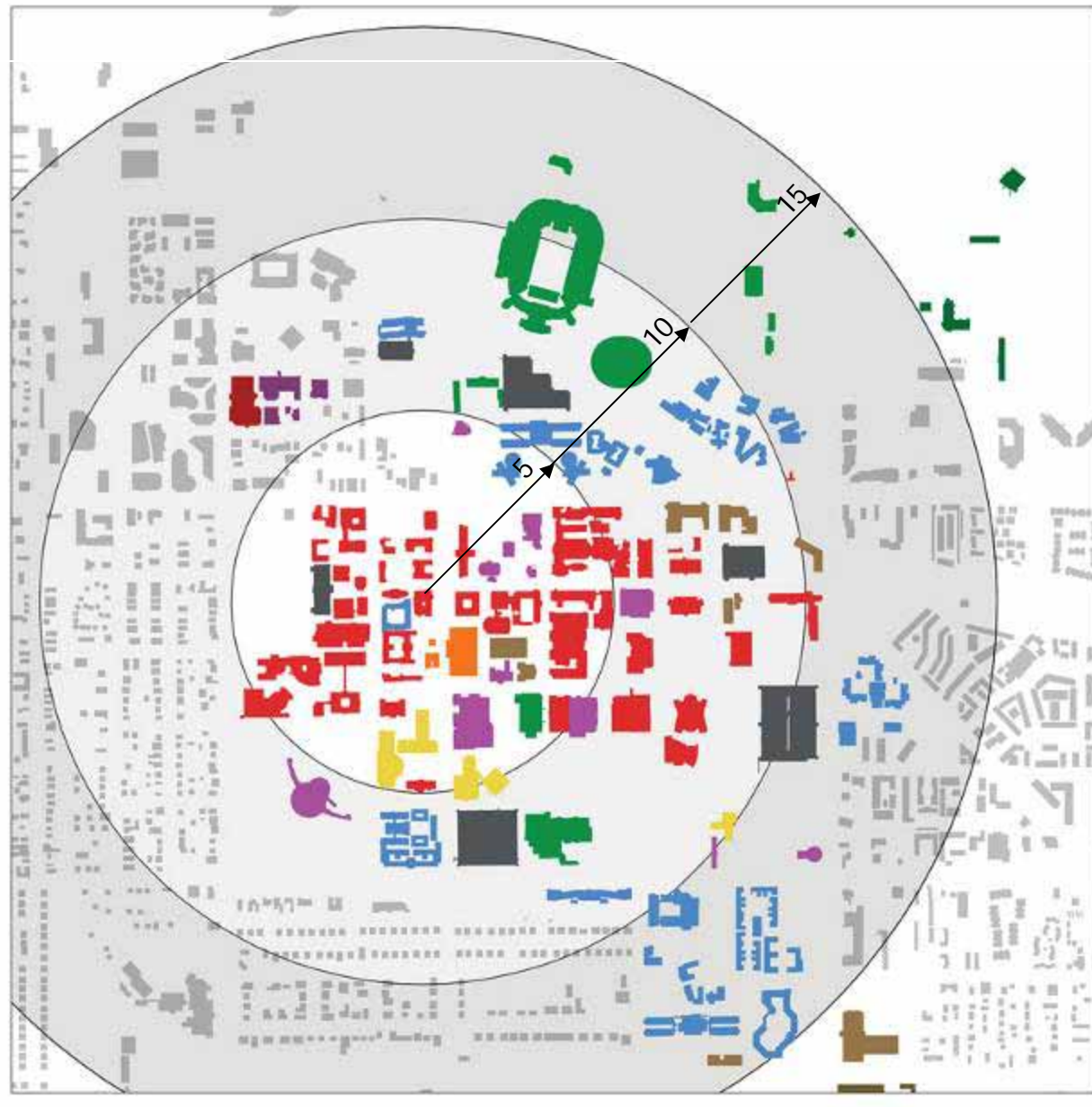
**o** Sun Set District

# NEIGHBORHOODS



- a1** Desert Garden District
- a** Rio Salado District
- b** Riverside District
- c** Tempe District
- d** Sun Devil District
- e** Karsten Green District
- f** Mitchell Park West
- g** Mitchell Park East
- h** Maple Ash District
- i** Artspace District
- j** Science Learning
- k** University Heights
- l** Alegre Community
- m** Escalante District
- n** University Park
- o** Sun Set District
- p** Jen Tilly Terrace
- q** Hudson Manor District
- r** University Estates
- s** Daley Park District

# BUILDING USE



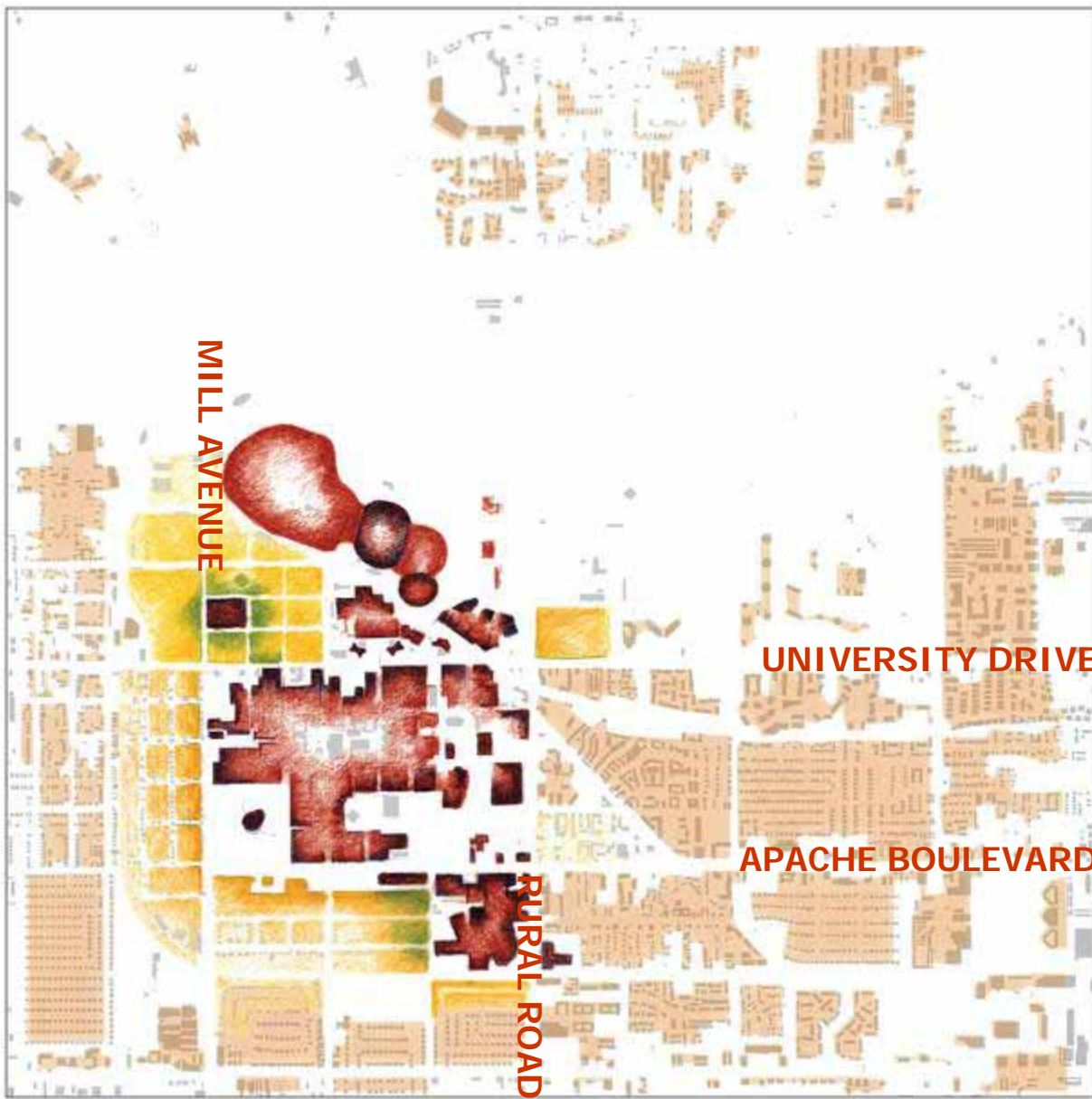


## Neighborhood Issues



Campus Edge

Neighborhood Edge



- 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

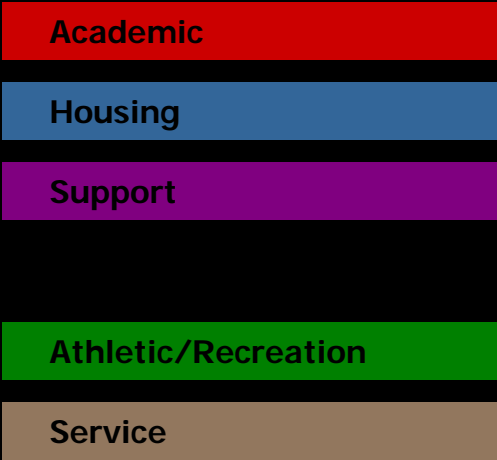
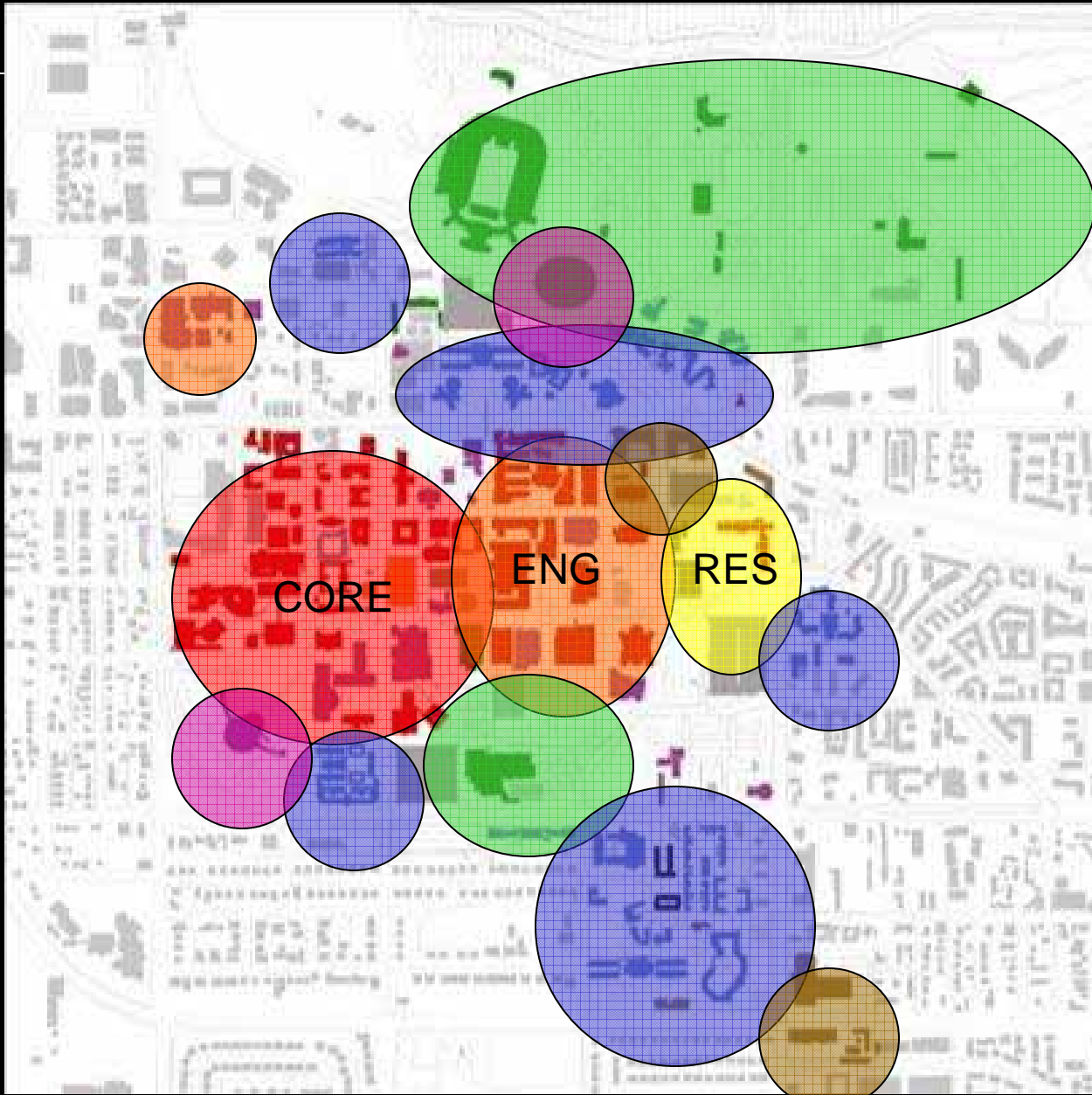
# EDGE CONDITIONS



Wide Streets  
Inconsistent Landscape  
Lack Hierarchy  
Buildings as Barrier



LAND USE



# EXISTING PARKING STUDY



- Surface Parking
- Parking Structures
- Parking Structures under construction

Total existing spaces: 20,319

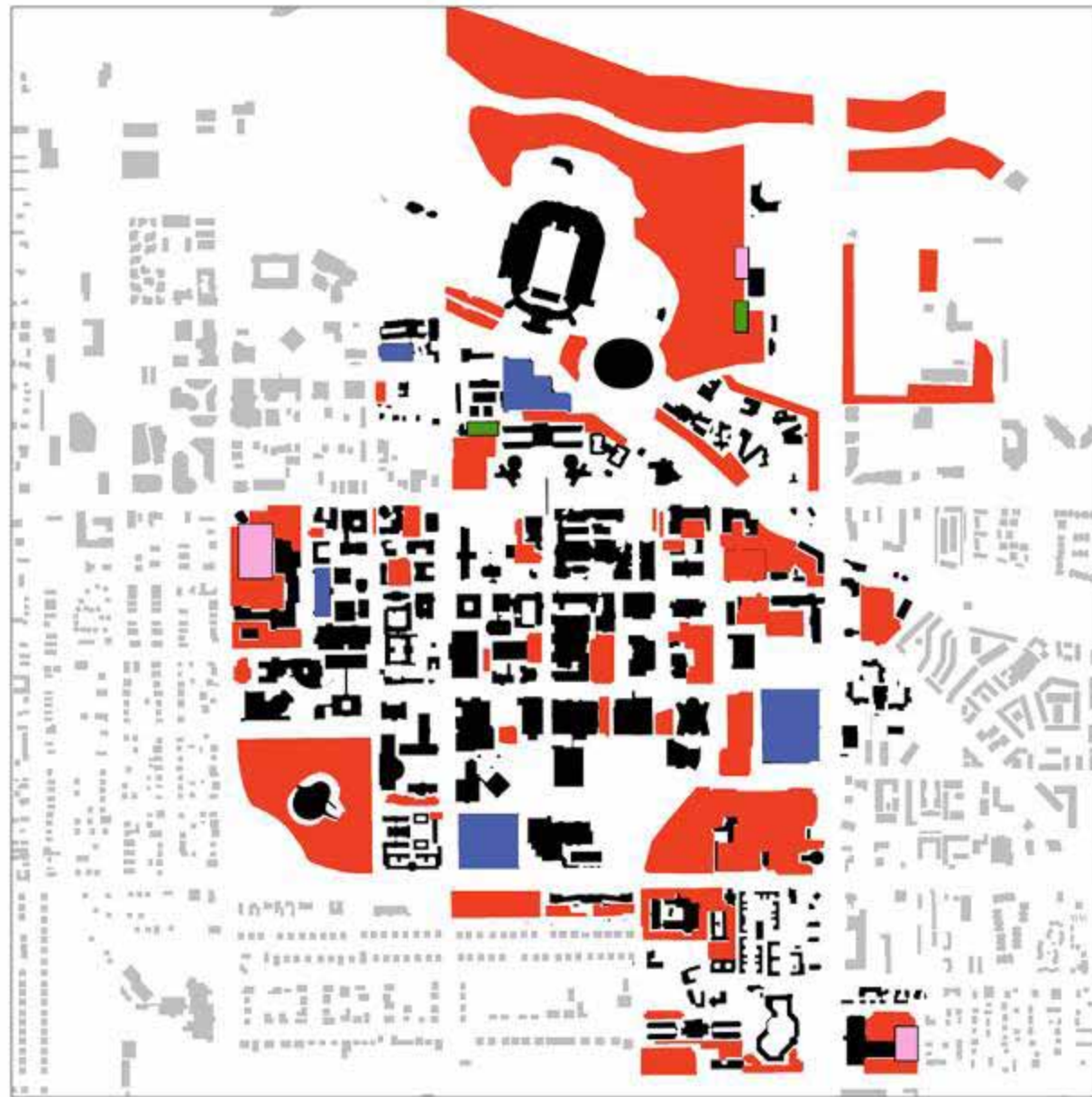
Surface parking:  
12,787 (almost 6,000 in perimeter Lot 59, including 1,500 temporary spaces)

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

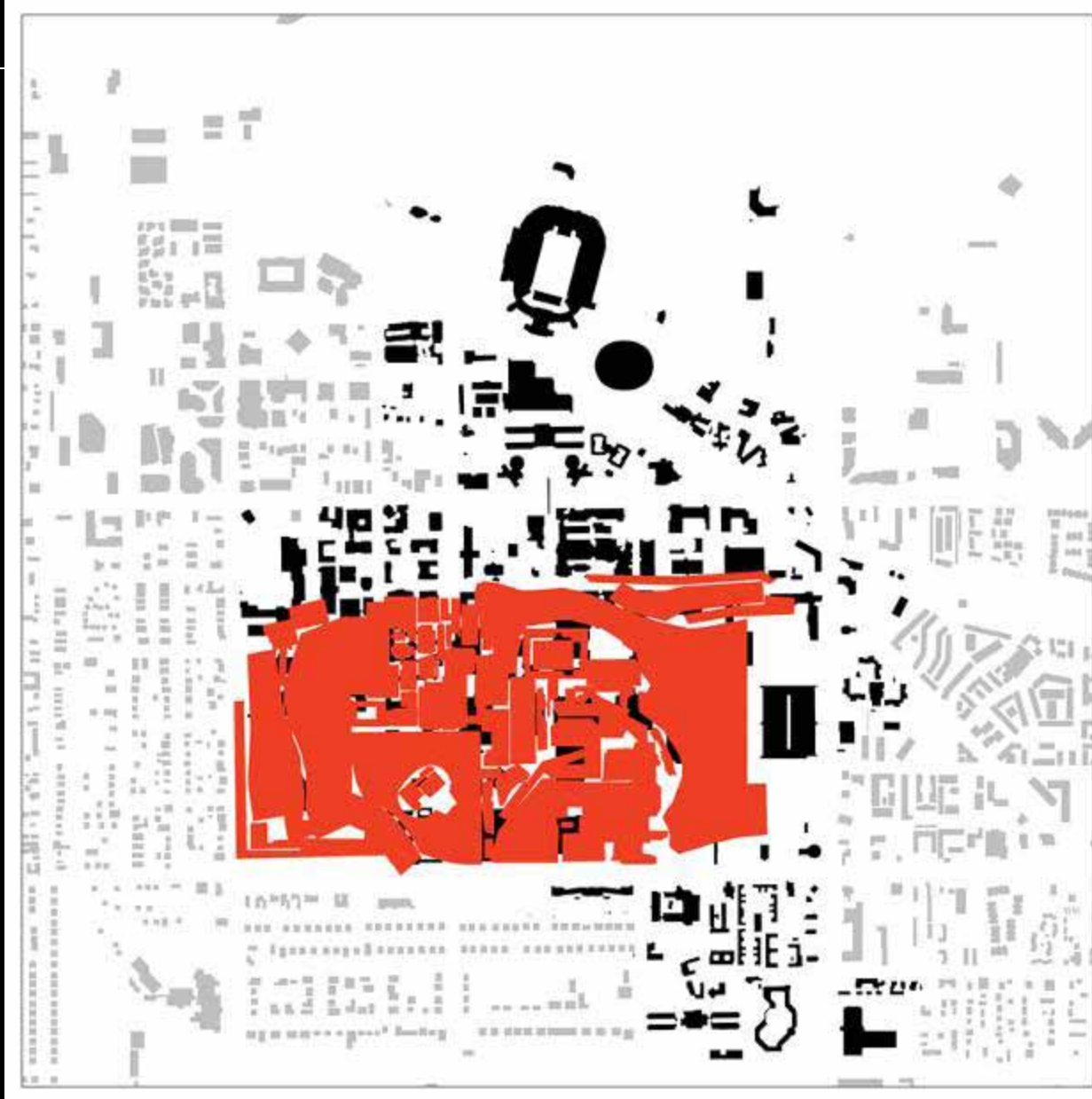
- Planned Parking Structures
- 7B on Lot 59N: 1,500 (Net 900)
- University Services Building: Net 400
- Arts and Business Center: 1,600 (Net 0 for ASU use)

# EXISTING PARKING STUDY



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**

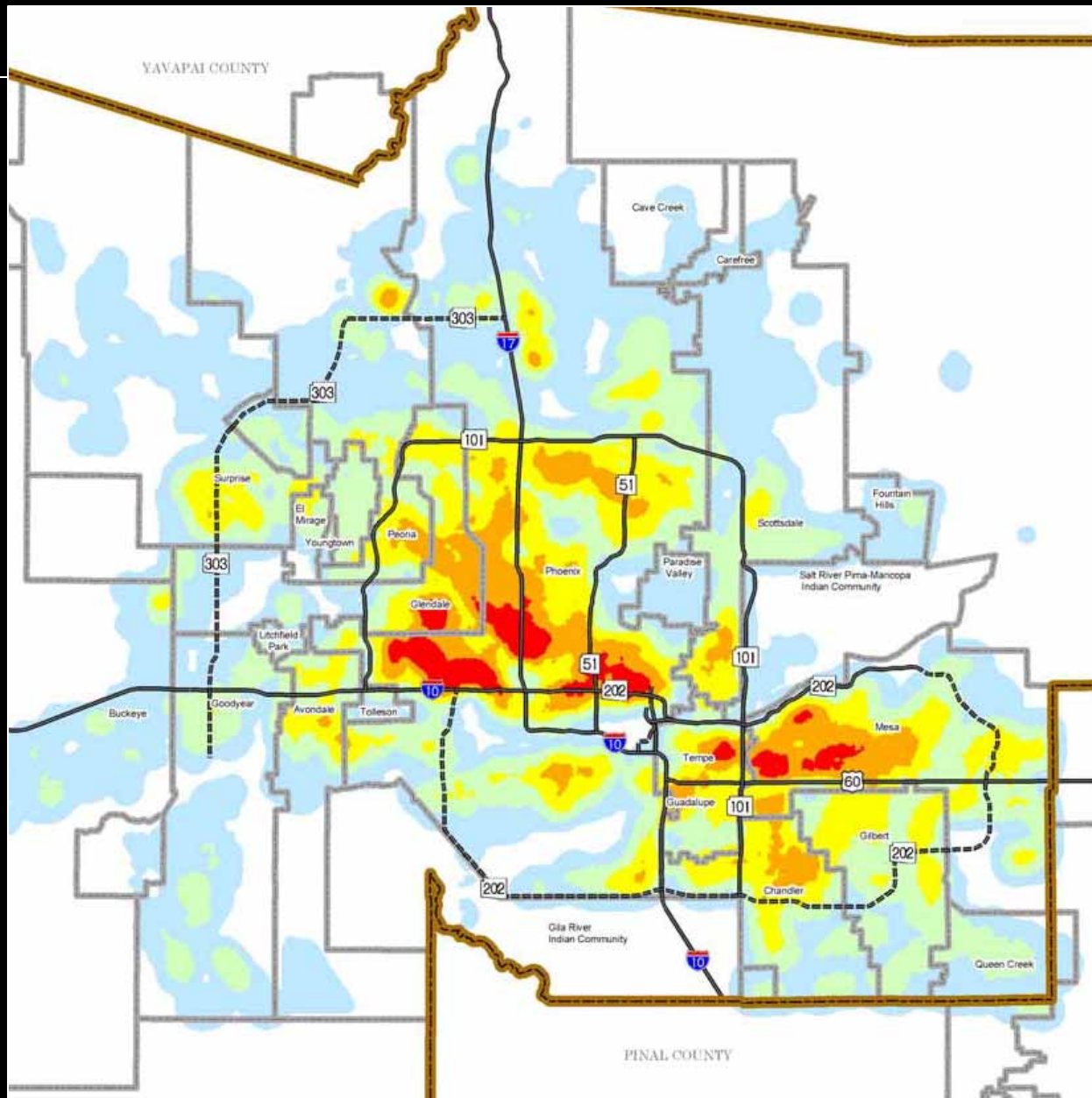
# THE COST OF PARKING

- 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

## REGIONAL TRANSPORTATION



- 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

# Creating a Transit Accessible, Park-Once Campus



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

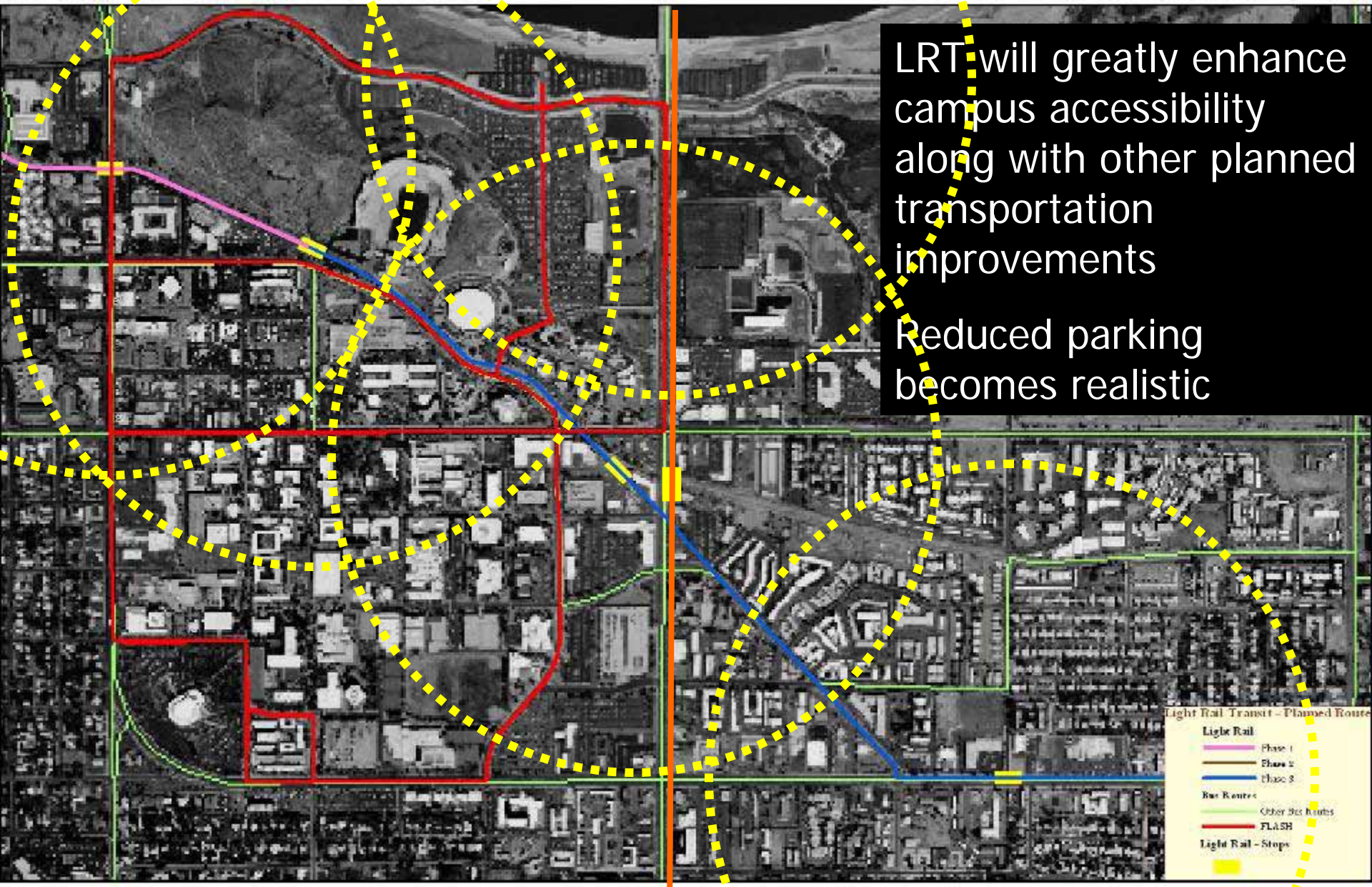
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- Cheaper to fund alternatives than build parking  
(Stanford added 2 mill SF without more traffic by paying employees not to drive and improving transit and bikes)
- Cornell decreased cars on campus by 26% in 1 year
- Sale of SOV permits dropped by 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 LINE

LRT will greatly enhance campus accessibility along with other planned transportation improvements

Reduced parking becomes realistic



Light Rail Transit - Planned Routes

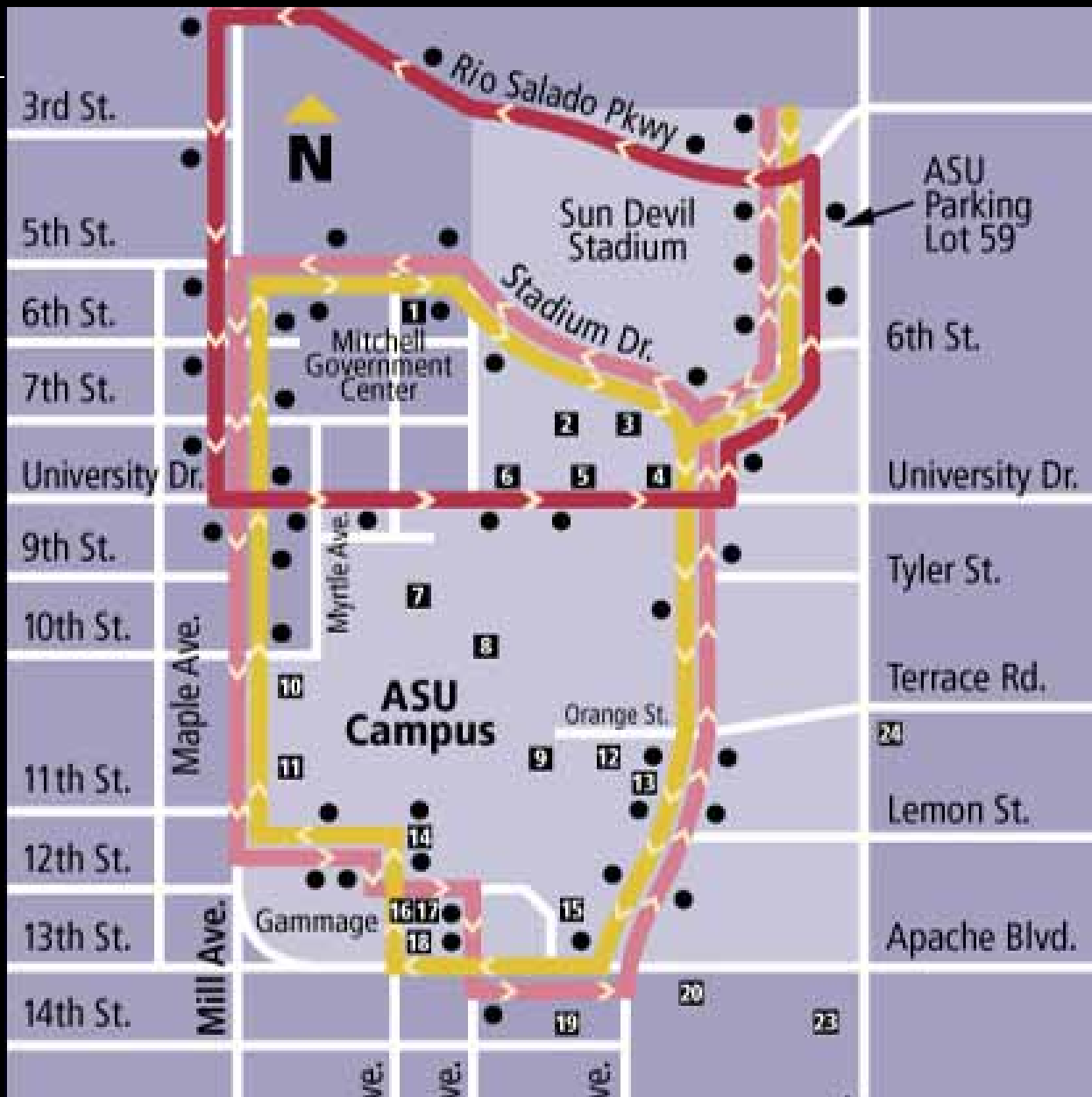






- Extensive local bus service with planned service improvements
- Transit pass costs more than Access A & B decals No incentive to use transit
- *Introduce Transit fee for unlimited transit pass?*

# FLASH



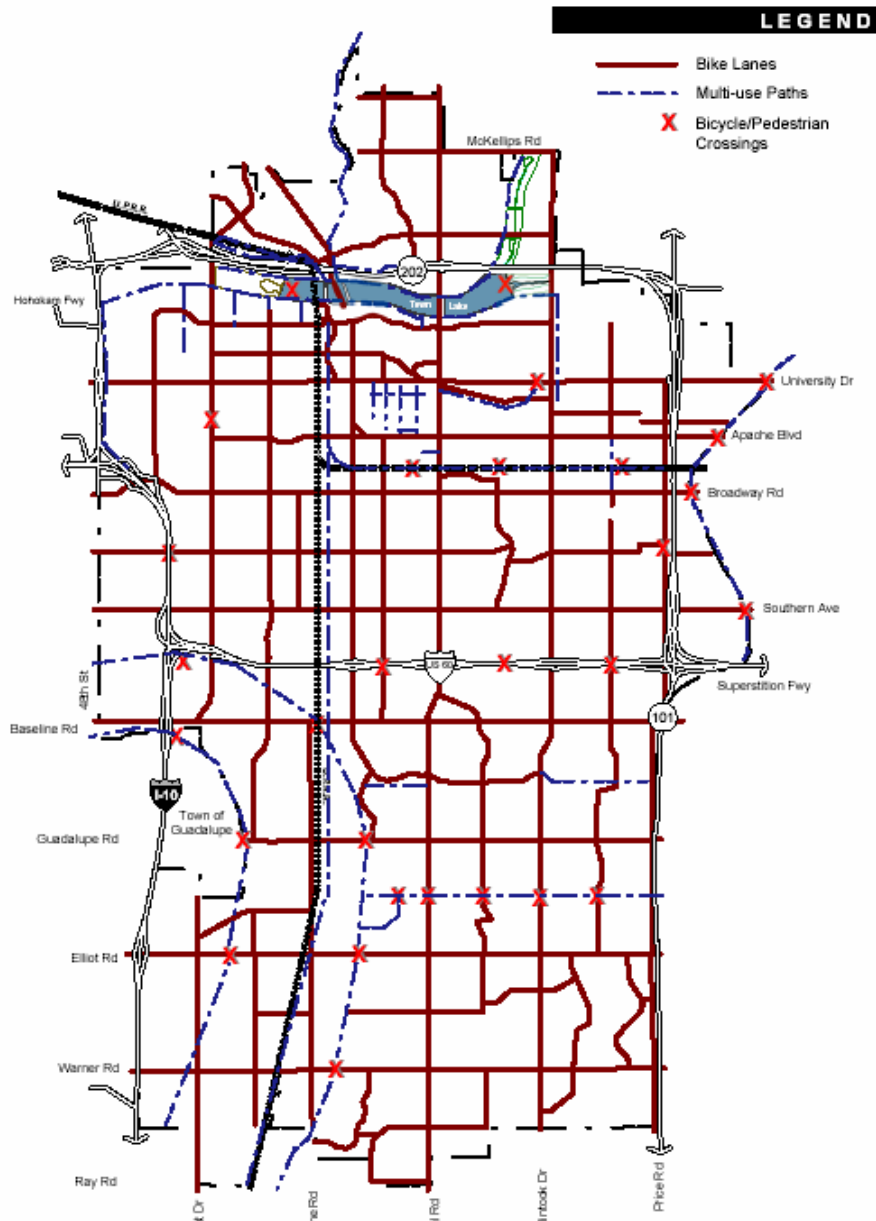
- Carries up to 140,000 riders per month (typically 100,000+)
- Scheduled to run every 10 minutes in each direction
- Service slowed by traffic and lights
- Neighborhood FLASH serves Tempe community
- *Should it penetrate campus more?*
- *What other locations should be served?*

# BICYCLES



- High level of bicycle usage:
  - 15,000 bicycle trips per day
  - 11,800 bicycle spaces
- Bicycle lanes and shared use paths





# BICYCLES

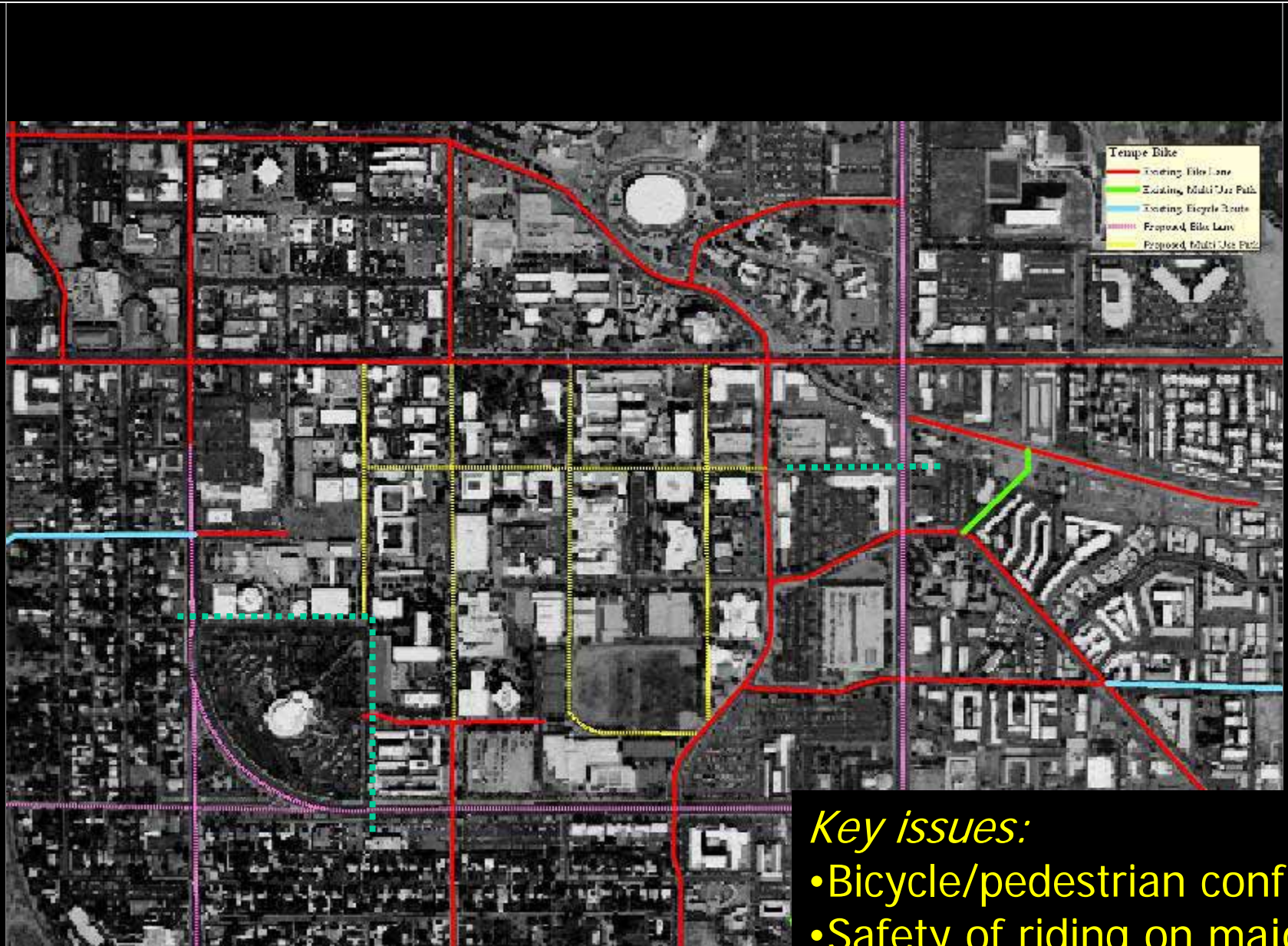
- University and the City committed to improving bicycle network



# CITY OF TEMPE EXISTING BICYCLES ROUTES



# CITY OF TEMPE PROPOSED BICYCLES ROUTES



## *Key issues:*

- Bicycle/pedestrian conflicts
- Safety of riding on major roads

# PEDESTRIAN MALLS



## Key Issues

- Conflicts between multiple users
- Major concern to handicapped persons



# CIRCULATION PEDESTRIAN



**Pedestrian Circulation**

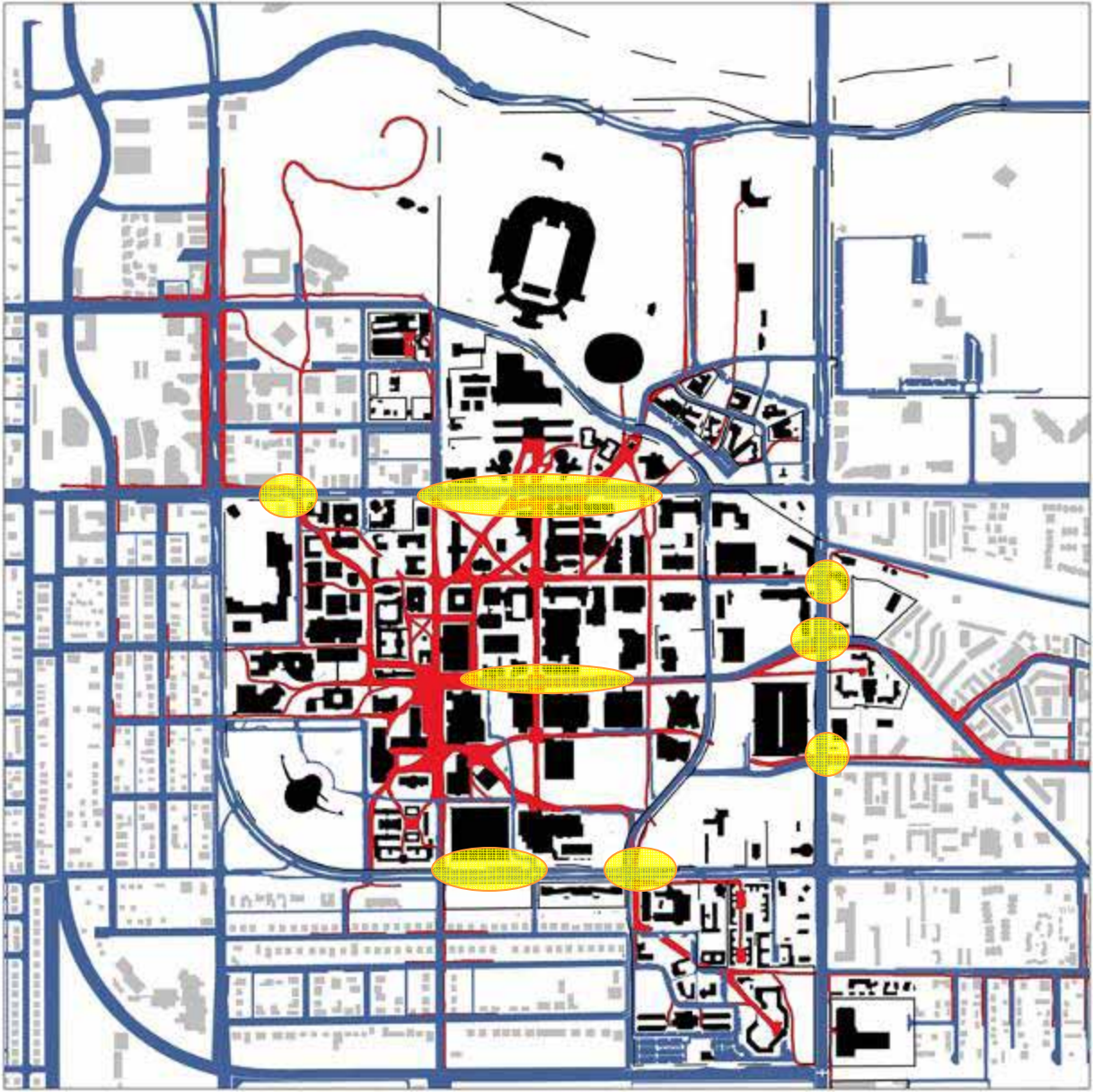




# CIRCULATION



- Vehicular Circulation
- Pedestrian Circulation
- Auto-Ped Comflicts



## UNIVERSITY DR.



- 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



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

