

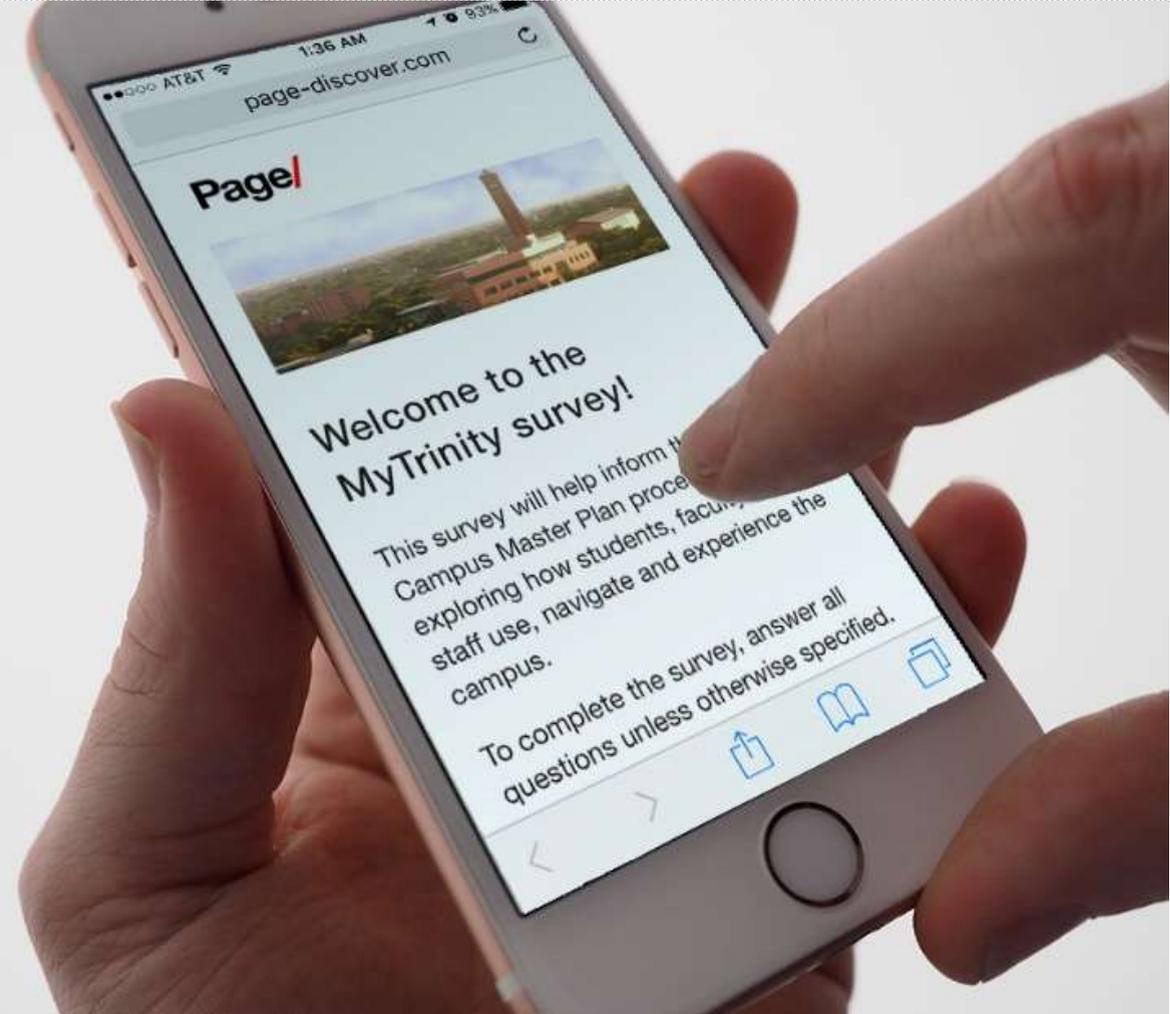
# Campus Constants, Digital Flux

Andrew Sullivan and Katharyn Hurd



# Technology in Campus Planning

## Tools We Use: Analysis



# Technology in Campus Planning

## Tools We Use: Space Planning

### ENROLLMENT, FACULTY, AND STAFF DATA (USE SLIDERS TO ADJUST GROWTH SCENARIO)

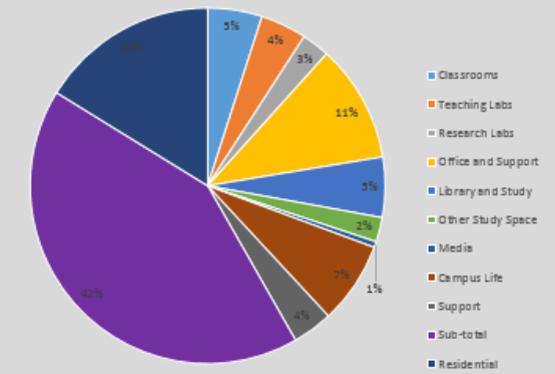
|                               | SCENARIO  |       |             |          | ENROLLMENT GROWTH<br>Change Enrollment<br>By Program |
|-------------------------------|-----------|-------|-------------|----------|--|
|                               | Headcount | FTE   | Course WSCH | Lab WSCH |  |
| <b>ACADEMIC PROGRAMS</b>      | 5,005     | 3,900 | 42,051      | 9,879    |  |
| <i>Art &amp; Technology</i>   |           |       |             |          |  |
| Undergraduate                 | 405       | 310   | 3,123       | 1,524    | 286%   |
| Graduate                      | 24        | 24    | 0           | 144      | 6%   |
| <i>Education</i>              |           |       |             |          |  |
| Undergraduate                 | 143       | 108   | 965         | 295      | 412%   |
| Graduate                      | 70        | 70    | 421         | 23       | 45%  |
| <i>Engineering</i>            |           |       |             |          |  |
| Undergraduate                 | 494       | 395   | 2,879       | 3,060    | 205%   |
| Graduate                      | 58        | 52    | 183         | 209      | 0%   |
| <i>Enterprise</i>             |           |       |             |          |  |
| Undergraduate                 | 892       | 713   | 10,229      | 369      | 184%   |
| Graduate                      | 30        | 27    | 130         | 32       | 0%   |
| <i>Field Science</i>          |           |       |             |          |  |
| Undergraduate                 | 563       | 420   | 4,400       | 1,631    | 168%   |
| Graduate                      | 80        | 72    | 238         | 97       | 0%   |
| <i>Health and Wellness</i>    |           |       |             |          |  |
| Undergraduate                 | 603       | 443   | 5,109       | 210      | 235%   |
| Graduate                      | 234       | 202   | 918         | 273      | 136%   |
| <i>Lab Science</i>            |           |       |             |          |  |
| Undergraduate                 | 569       | 457   | 4,615       | 1,951    | 91%  |
| Graduate                      | 30        | 27    | 142         | 61       | 0%   |
| <i>Liberal/Social Science</i> |           |       |             |          |  |
| Undergraduate                 | 758       | 551   | 8,286       | 0        | 221%   |
| Graduate                      | 0         | 0     | 0           | 0        | 0%   |
| <i>Other</i>                  |           |       |             |          |  |
| Undergraduate                 | 53        | 28    | 413         | 0        | 32%  |
| Graduate                      | 0         | 0     | 0           | 0        | 0%   |

| FACULTY*               | Tenure Track | Instructors | Adjunct | FTE |
|------------------------|--------------|-------------|---------|-----|
|                        | 95           | 118         | 115     | 327 |
| Art & Technology       | 8            | 10          | 16      | 34  |
| Education              | 4            | 5           | 21      | 30  |
| Engineering            | 10           | 13          | 9       | 32  |
| Enterprise             | 17           | 22          | 6       | 46  |
| Field Science          | 12           | 15          | 14      | 41  |
| Health and Wellness    | 16           | 20          | 27      | 63  |
| Lab Science            | 11           | 14          | 9       | 34  |
| Liberal/Social Science | 14           | 18          | 11      | 43  |
| Other                  | 1            | 1           | 3       | 5   |
|                        | Full Time    | Part Time   |         | FTE |
| STAFF                  | 141          | 69          |         | 175 |

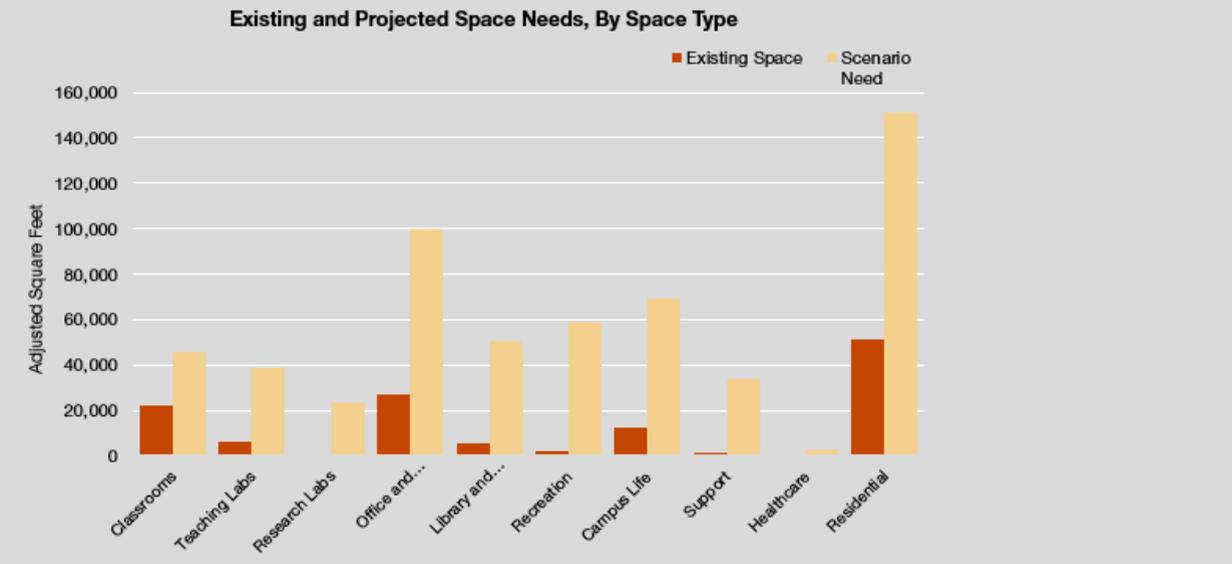
### SPACE NEEDS TABULAR RESULTS (ASF)

|                    | Existing Space | Scenario Need  | Surplus/ Deficit |
|--------------------|----------------|----------------|------------------|
| Classrooms         | 22,479         | 46,005         | 23,526           |
| Teaching Labs      | 6,351          | 39,009         | 32,658           |
| Research Labs      | 0              | 23,618         | 23,618           |
| Office and Support | 26,885         | 99,420         | 72,535           |
| Library and Study  | 5,681          | 50,762         | 45,081           |
| Other Study Space  | 0              | 20,668         | 20,668           |
| Media              | 0              | 5,000          | 5,000            |
| Campus Life        | 12,121         | 69,253         | 57,132           |
| Support            | 1,330          | 33,990         | 32,660           |
| Healthcare         | 0              | 2,570          | 2,570            |
| Sub-total          | 74,847         | 390,295        | 315,448          |
| Recreation         | 1,762          | 59,001         | 57,239           |
| Residential        | 51,198         | 150,737        | 99,539           |
| <b>Total</b>       | <b>127,807</b> | <b>600,033</b> | <b>472,226</b>   |

Non-Residential asf per student: 115  
E & G asf per student: 73



### SPACE NEEDS GRAPHICAL RESULTS (ASF)



# Flexible, Active, and Interdisciplinary Learning Environments

Trinity University and University of Houston



# Redefining the Library

Lorain County Community College, Atlanta University Center, Duke University

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# Smart Buildings

De Anza College



# Technology's Impact on Health

## Studies of Negative Effects

### Heavy Technology Use Linked to Fatigue, Stress and Depression in Young Adults

08/02/2012 01:50 pm ET | Updated Oct 02, 2012

#### Digital device use leads to eye strain, even in kids

Nanci Hellmich, USA TODAY 7 a.m. EST January 25, 2014

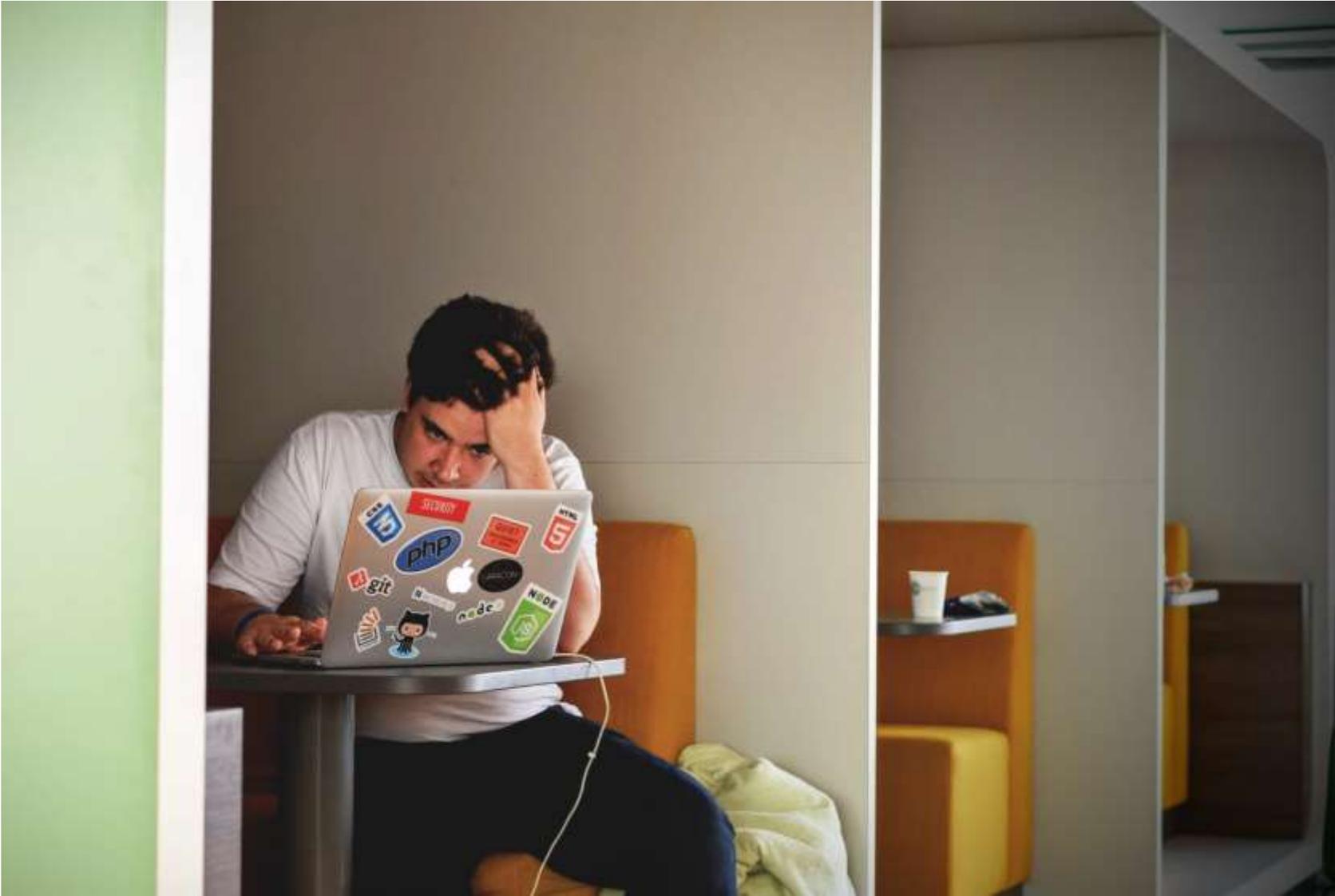
Exposure to blue light at night, emitted by electronics and energy-efficient lightbulbs, harmful to your health.

Psychology Today Find a Therapist Topics Get Help Magazine

### A New Link Between Depression and Social Media Use

The most frequent social media users are more depressed. Why? Like 121

Posted Aug 02, 2016



# Technology's Impact on Health

## Studies of Negative Effects

Study links mobile device addiction to depression and anxiety

MAR 2, 2016 9:30 AM | BY SARAH BANDUCCI | NEWS BUREAU INTERN | 217-333-5802 | LIFE SCIENCES

How the Internet is Changing Your Brain

BUSINESS INSIDER CAREERS  
**How Modern Technology Is Destroying Your Posture At Work**

Max Nisen | Feb. 25, 2013, 5:08 PM | 76,912 | 5



### Study: Internet Addicts Suffer Withdrawal Symptoms Like Drug Users

Obsessive internet users can undergo 'comedowns' similar to those experienced by people using ecstasy, researchers say.

By Ollie John | Feb. 19, 2013



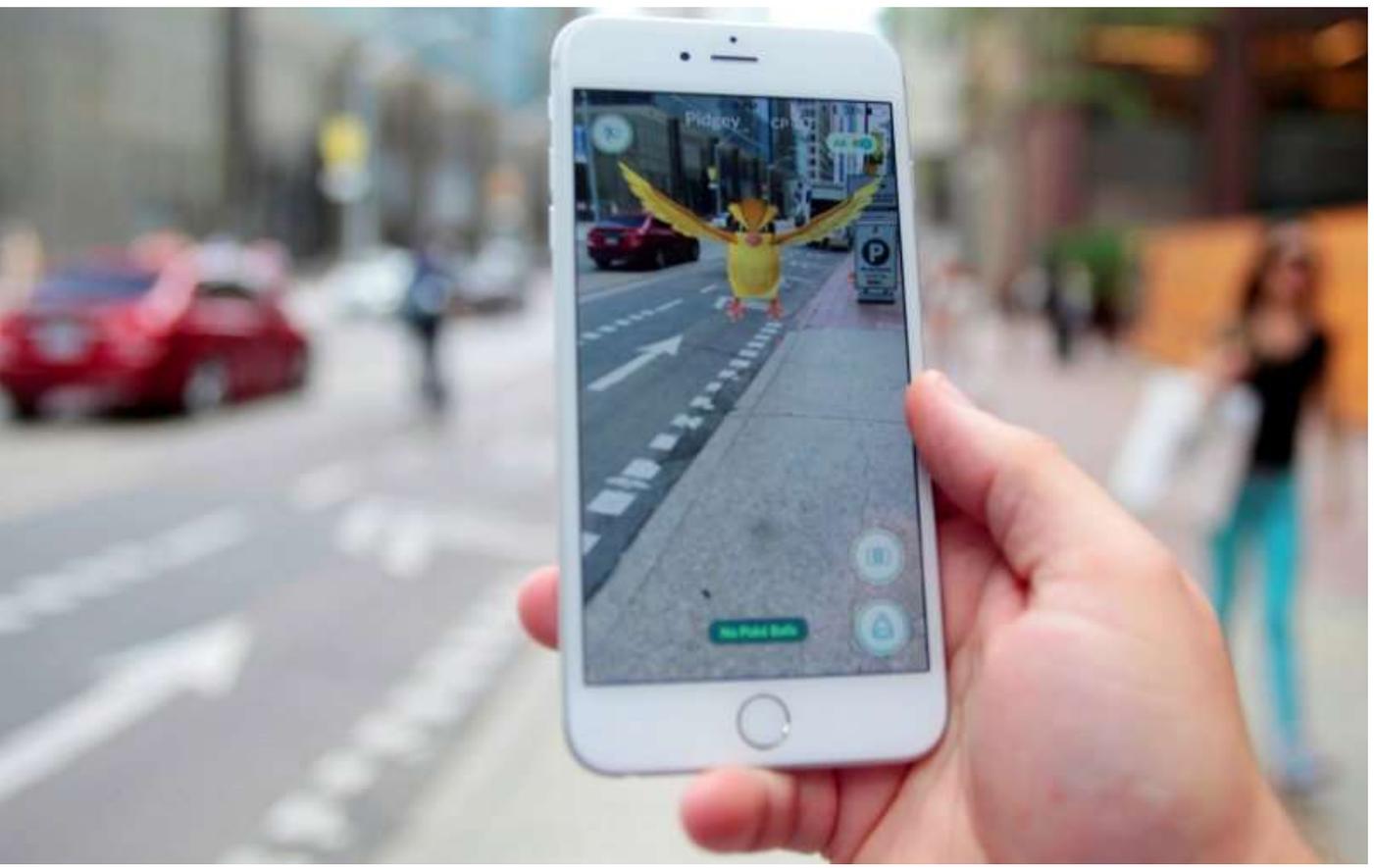
# Mobile Devices on Campus

## Safety Concerns



# Mobile Devices on Campus

New Ways to Engage



# Landscape as Antidote

## Benefits of Outdoor Environment Engagement

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- Improve physical fitness
- Improve vision
- Reduce ADHD symptoms
- Enhance critical thinking and creativity
- Improve academic performance
- Decrease stress
- Improve mood
- Increase social behavior
- Boost immunity



# Functions of the Campus Landscape

Historically and Today

**CEREMONY**



**SOCIAL  
INTERACTION**



**RESTORE**

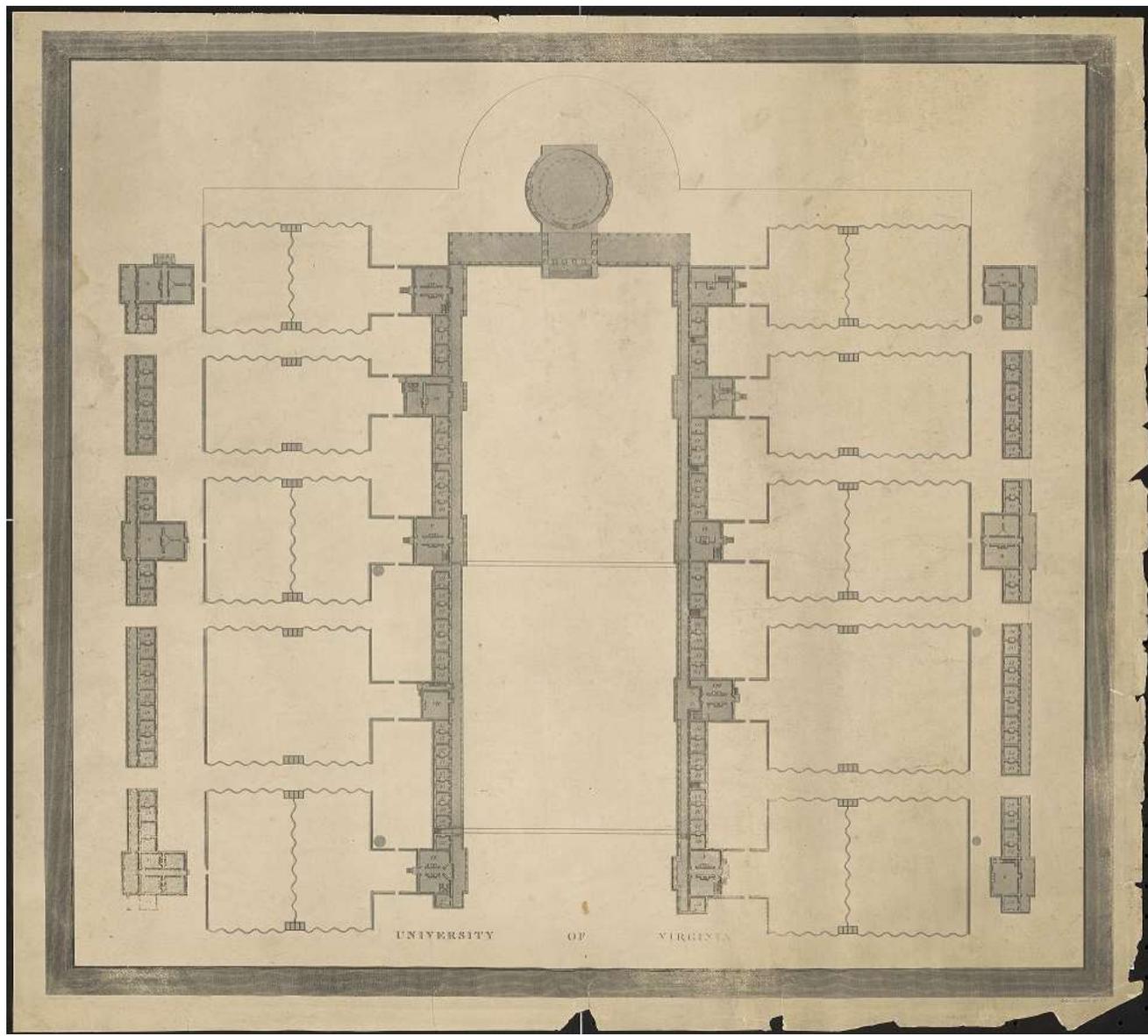


**PLAY**



# Historic Campus Lawn

University of Virginia



# Historic Gardens

University of Virginia

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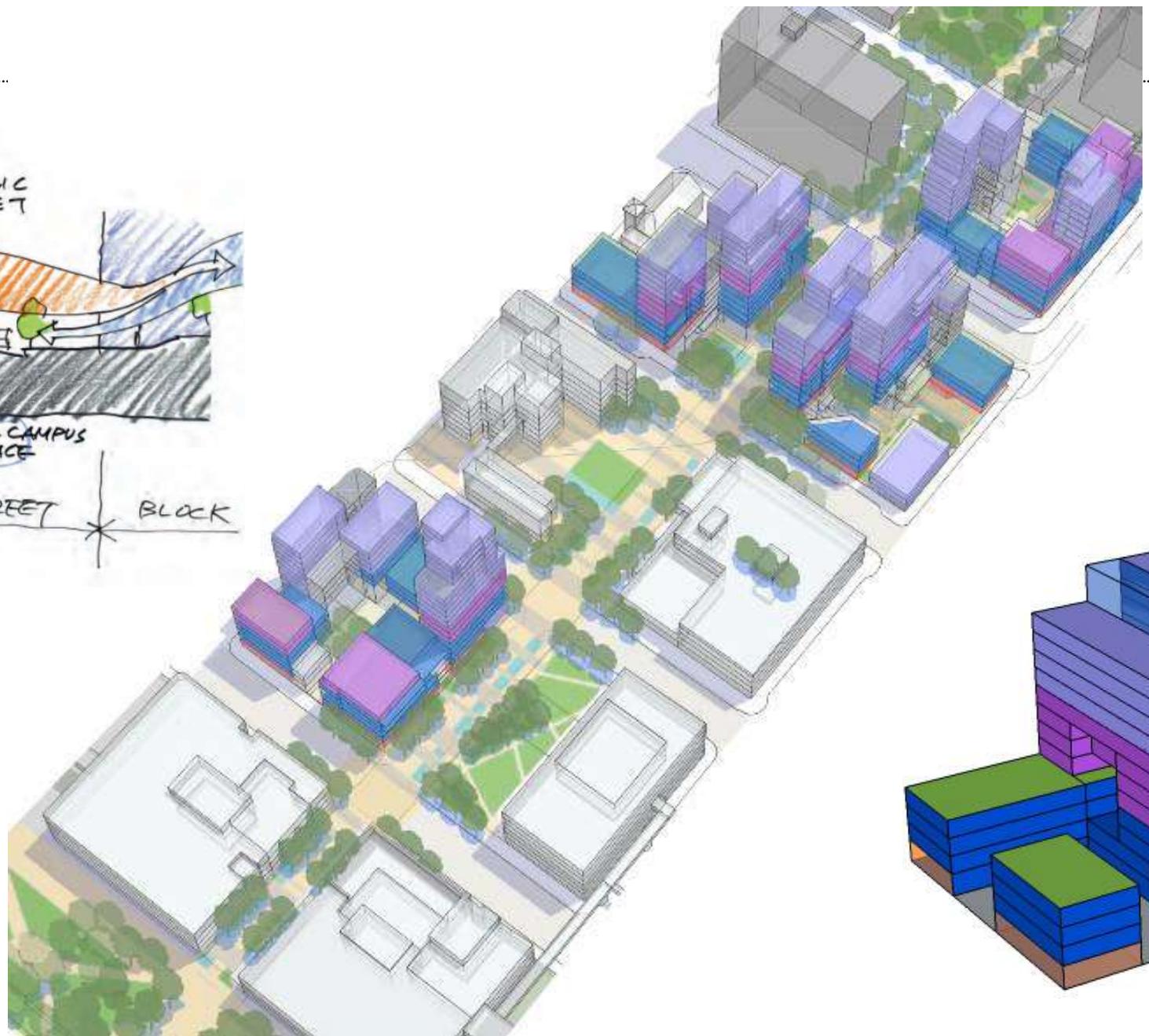
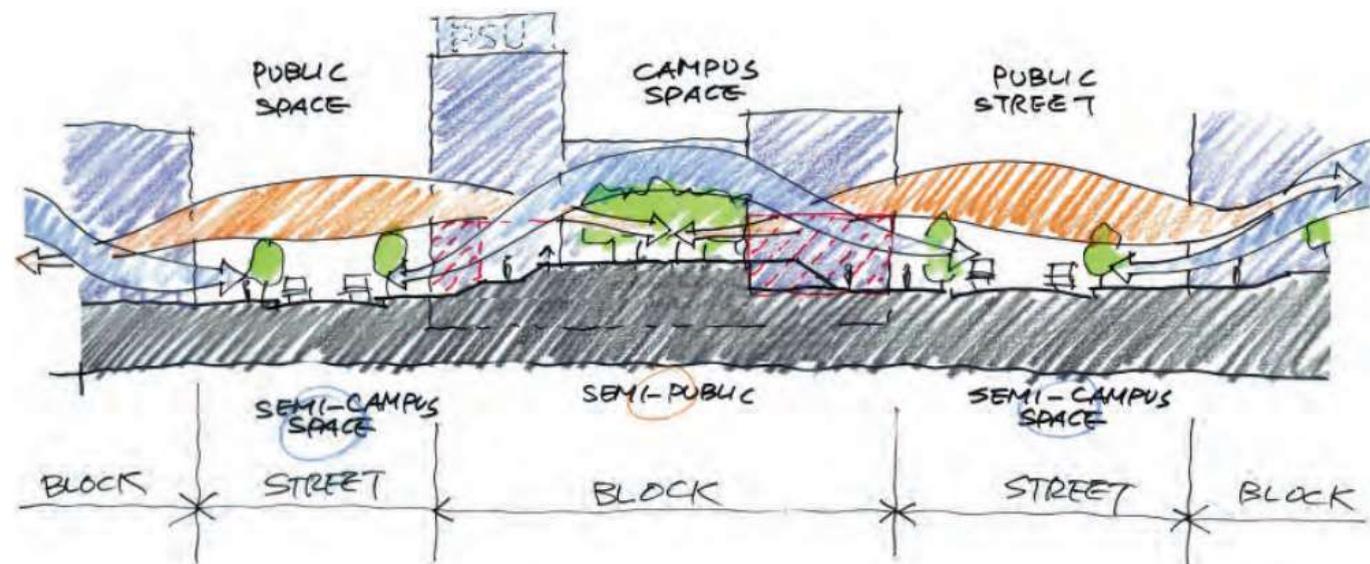
# South Lawn Today

University of Virginia

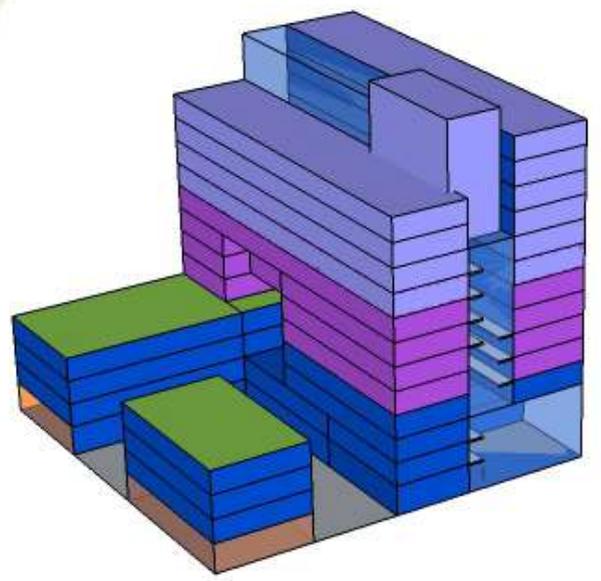


# Urban Campus Landscape

Portland State University



-  *Private business*
-  *Research space*
-  *Academic space*
-  *Shared space*



# Urban Campus Landscape

Portland State University



# Landscape's Role in the Research Campus

Berkeley Global Campus at Richmond Bay



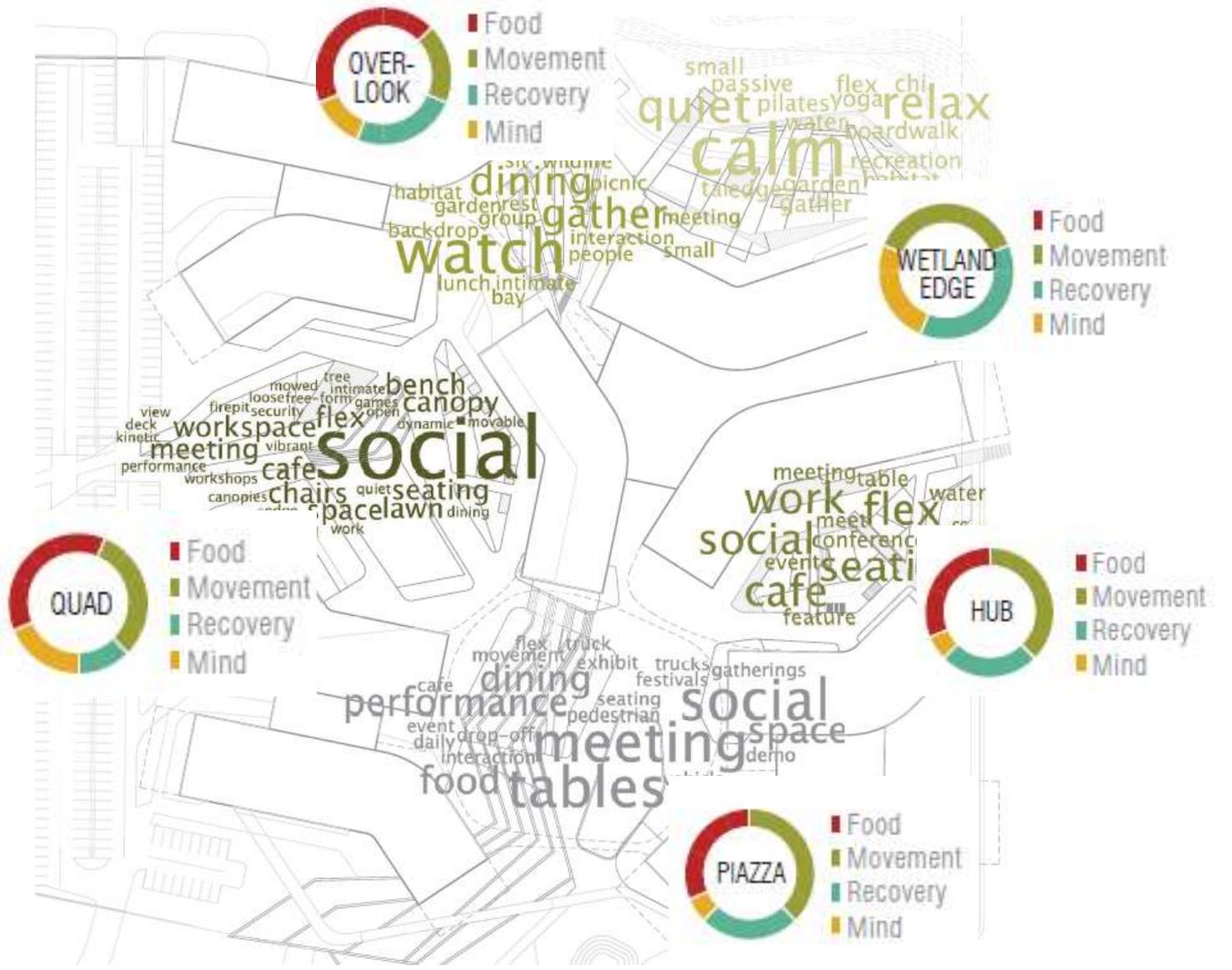
# Landscape's Role in the Tech Campus

## Facebook Roof Garden



# Landscape's Role in the Tech Campus

## Bay View Tech Campus



# Landscape's Role in the Tech Campus

## Bay View Tech Campus

