Using Geographic Data in Higher Education Advocacy

CAIR Conference 2018 | Anaheim, CA

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Using Geographic Data in Higher Education Advocacy

GUIDING QUESTIONS

What is geographic data (geodata)?

What makes geodata valuable?

What makes geodata valuable to the University of California?

How does the University of California use geodata in advocacy?

Questions / Discussion
What is geodata?

Geodata consists of two basic components:

• spatial data (the where: a location)

• attribute data (the what: a program and all attributes of the program)

Geodata sometimes includes:

• temporal data (the when)

takeaway: if a data record has an address or X,Y coordinate—it is geodata
What is **spatial** geodata?

Spatial data is the locational information describing where phenomena exist.

- **point data** (a program site)
  - represented by an X,Y coordinate (latitude and longitude)

- **line data** (a campus commuter route)
  - is a series of X,Y coordinates all next to each other

- **area data** (a congressional district)
  - is line data that forms a closed polygon

**takeaway:** a data record can be made geodata by appending location
What is attribute and temporal geodata?

• the program site (point)
  • attributes: name, category, type, number of participants
  • temporal: when it was founded, when it will sunset, when it meets

• the campus commuter route (line)
  • attributes: name, mode, direction
  • temporal: time, duration

• the congressional district (area)
  • attributes: name, population, total area
  • temporal: voting schedule, redistricting timeline

takeaway: attribute data is all aspects of what is at or in the spatial data
What makes geodata valuable?

Geodata establishes context of space and creates place.

takeaway: geodata adds a human scale and relatability to any data
What makes geodata valuable?

Maps are a powerful tool for disseminating data and storytelling:

• maps are an invitation (their graphic nature pulls one in)
• maps are democratic (all types of learners have an entry point)
• maps are personal (they allow one to “find” themselves)
• maps carry authority (they are believable and can be verifiable)

takeaway: geodata is data that can be mapped
What makes geodata valuable?

Maps have limitations:

• maps are an invitation (their graphic nature pulls one in)
• maps are democratic (all types of learners have an entry point)
• maps are personal (they allow one to “find” themselves)
• maps carry authority (they are believable and can be verifiable)

takeaway: mapping takes careful consideration
What makes geodata valuable to the University of California?

UC is interested in demonstrating fulfillment of the institutional mission of teaching, research and public service

• to government

• to the public

takeaway: maps are an effective advocacy tool
How does the University of California use geodata?

Employing maps across multiple channels with a common goal:

• static maps

• interactive dashboard maps

• a hybrid static/interactive map application

**takeaway:** maps are effective in many formats
LEARNING

How does the University of California use geodata?

static map in an infographic

Demonstrates UC’s commitment to intersegmental transfers.

Audience:
- community college students
- community college counselors
- the media
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LEARNING

How does the University of California use geodata?

**Static map** as a poster

UC President’s immediate office

Demonstrates the economic impact on the state of UC’s research activities.

**Audience:**
- local governments
- state legislators
- general public
- the media
LEARNING

How does the University of California use geodata?

**static maps**

UC Accountability Report

Demonstrates UC’s consistent local enrollment numbers.

Audience:
- campus communities
- state legislators
- families
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**LEARNING**

How does the University of California use geodata?

- **Static maps**
- **Layers of temporal data**

<table>
<thead>
<tr>
<th>Location</th>
<th>Fall 2017</th>
<th>Fall 2016</th>
<th>Fall 2015</th>
<th>Fall 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Davis</td>
<td>33%</td>
<td>33%</td>
<td>33%</td>
<td></td>
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<tr>
<td>Irvine</td>
<td>71%</td>
<td>72%</td>
<td>72%</td>
<td>69%</td>
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</table>
LEARNING

How does the University of California use geodata?

static maps
UC Accountability Report

Visualizes UC alumni employment by industry across the state.

Audience:
• Undergraduates
• industry groups
LEARNING
How does the University of California use geodata?

static maps

diffuse distribution

Higher education
44,816 alumni in California

Health care
48,057 alumni in California
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**LEARNING**

How does the University of California use geodata?

**interactive dashboard maps**

**UC Information Center**

Shows the origin schools of UC’s California Community College transfer students.

**Audience:**
- community college students
- community college counselors
- families
How does the University of California use geodata?

interactive dashboard maps

UC Information Center

Shows the distribution of UC’s annual sponsored research grants and contracts.

Audience:
• state and federal legislators
• international governments
• research professionals
• corporations
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LEARNING

How does the University of California use geodata?

A hybrid static/interactive map application

UC in California: Impact Beyond Campus Borders
UC’s systemwide governmental advocacy tool

Audience:
- Campus government relations professionals
- state and federal legislators
- general public
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ADVOCACY

University of California, Irvine, Community and Government Relations
Using Geographic Data in Higher Education Advocacy

**ADVOCACY**

What is Community and Government Relations?
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ADVOCACY

Government Relations Objectives

• Develop and maintain relationships with legislators/elected officials and their staff.

• Communicate higher education issues to public policy makers and how they impact the system and campus

• Deliver accurate, timely and relevant information to internal & external stakeholders, advocates and elected officials

• Develop & mobilize grassroots and grasstop advocates

• Utilize strategic intelligence to stay “In Front” of issues

• Serve as a resource to legislators for campus resources
# Using Geographic Data in Higher Education Advocacy

## ADVOCACY

### UC in your District

### UNIVERSITY OF CALIFORNIA IN YOUR DISTRICT

**Congressional District 46**

- **Lou Correa**

**362 UC Community Programs in Your District**

- Agriculture, Environment and Natural Resources - 1
- Health Services/Nutrition - 38
- K-12 Student Services - 149
- Community College Student Services - 10
- Teacher Professional Development - 130
- University Extension - 9
- Community and Social Services - 11
- Cultural Resources and Arts - 11
- Public Policy - 3

**1 UC Medical Center & Hospital in Your District**

- UC Irvine Medical Center

### UNIVERSITY OF CALIFORNIA IN YOUR DISTRICT

<table>
<thead>
<tr>
<th>Program</th>
<th>Congressional District 46</th>
<th>UC Systemwide</th>
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<tbody>
<tr>
<td>Students, Fall 2016</td>
<td>2,810</td>
<td>270,110</td>
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<tr>
<td>Undergraduates</td>
<td>2,810</td>
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<tr>
<td>Veterans</td>
<td>24</td>
<td>1,680</td>
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<tr>
<td>Undergraduate Applicants for Fall 2017</td>
<td>2,690</td>
<td>216,320</td>
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<td>Freshmen Applicants</td>
<td>2,150</td>
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<td>Alumni in CA</td>
<td>12,100</td>
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<td>Employees in CA</td>
<td>3,520</td>
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<td>Payroll in CA</td>
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<td>Retains in CA</td>
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<td>Medical Center Outpatient Visitors</td>
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<td>State and Federal Funding for Student Aid</td>
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<td>Cal Grant Recipients</td>
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<td>73,580</td>
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<td>Cal Grant Amount</td>
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<td>Pell Grant Recipients</td>
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<td>Pell Grant Amount</td>
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<td>Federal Loan Recipients</td>
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<td>Federal Loan Amount</td>
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<td>Federal Project Funding for UC</td>
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<td>National Institutes of Health</td>
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<td>National Science Foundation</td>
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<td>Department of Agriculture</td>
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<td>Other Agencies</td>
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<tr>
<td>Research Employees</td>
<td>280</td>
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<td>Research Payroll</td>
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<td>Startups</td>
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<td>Technology Licenses</td>
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**NOTE:** Data current as of Fall 2017, map published 11/16/2017

If you have any questions, please contact UC Federal Government Relations at (714) 568-5300.
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**QUESTIONS**

What questions do you have?

Please evaluate and comment on our presentation on the CAIR app.