

GARP 0317: Cookbook 24 September 2012

Data and Maps (Part 1)

Overview

1. Cool Sites!
2. Data and Maps
3. Who are we?
4. MainStreet GIS
5. Let's get Data!



1) Cool Sites!

Depiction

<http://www.depiction.com/>



Depiction lets you create your own dynamic maps by importing free data and imagery into a series of 'revealers', adding your own data, and creating interactions between your map elements. 30-day free trial, otherwise \$199, 50 percent discount for non-profit and education

An alternative to ESRI?

Surging Seas

<http://sealevel.climatecentral.org/surgingseas/>

2) Data and Maps

Below is the summary of our discussion last week

2.1) What's the Point?

- To SHOW OFF = show that WSU is cutting-edge and a place you want to come to for your education
- To present information and to make it readily available
- Use new available technology
- Marketing for the university
- Show the audience what Westfield has to offer as a university and as a community
- To attract prospective students

2.2) Who's the Audience?

On-campus

- Public safety
- Current students
- Res Life (break-down of students living in each dorm)
- Facilities and Operations
- Athletics
- Faculty
- Administrators and staff

Off-campus

- Commuters
- Prospective students and their parents - experience the campus before even visiting!
- International students
- Local businesses
- Visitors to campus for events, food, etc.

- Emergency services
- The taxpayers to see how and where their money is being spent (map the growth of the campus, new buildings and additions, etc.)

2.3) Maps and Data Needed

Do we simply need a series of location maps: Massachusetts, Westfield, campus?

Campus Buildings

- Building footprints
- Location of doors and exits
- Attribute data: # of floors, building use, departments, hazards, elevators, # of rooms, elevators, fire suppression, etc.

Campus Infrastructure

- Fire hydrants
- Steam lines
- Call boxes
- Benches
- Pay phones
- Trash cans and type
- Recycling bins and type
- Dumpsters
- Bike racks
- Lights
- Wifi zones
- Signs

Campus Transportation

- Parking (number of spaces, decal information)
- Real-time parking availability in Commuter Lot
- Bus routes and schedules
- Directions to campus
- Shuttle stops and schedule
- Drive time polygons

Campus Services and Recreation

- Places to eat with linked menus
- Trails of Stanley Park & cool spots there
- Best places to study on-campus
- Student clubs
- Wellness Center and gyms (with schedules)
- Fields: volleyball, basketball, improvised

Academics

- Wetland trail for ENV5
- Internship sites for CJ, etc.

Surrounding Community

- Locations where Owl Bucks are accepted
- Star ratings and cost for local restaurants
- Distance buffers around campus
- Restaurants, retail, gas stations, pharmacies
- Clubs, bars, liquor stores
- Sporting venues

Students

- International students - countries!
- Where do our students go to study abroad?
- Map the hometowns of our students

For Visitors

- Map of event locations with schedule
- Athletic facilities

Other

- List/links of all relevant MassGIS data?
- Data tables
- Geotagged photographs with place markers for a virtual tour?

Considerations

Maps vs. Data

What are maps and what data layers?

Multiple Users / Overlap

- Some maps and data layers (e.g. recycle bins, etc.) are only of interest to some user groups.
- Other maps and data layers (e.g. parking, etc.) would be of interests to many users.

TMI!

Is this too much – can we realistically do all this?

Or, is it better to limit the scope and expand in the future?

Scales!

Building to campus to city to region to state to country to globe!

How do we combine these different scales?

One or Many?

One map with dozens of layers?

Several maps with fewer layers each?

One Web GIS for all, or one Web GIS each?

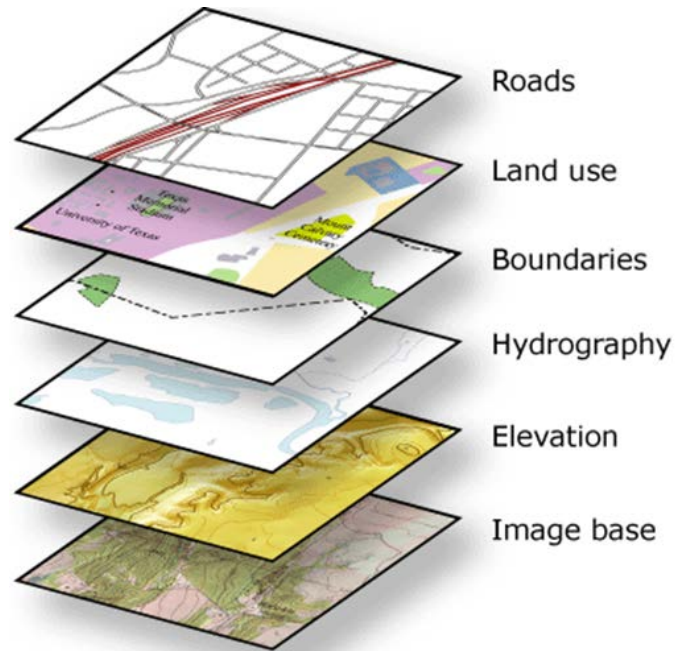
➔ ***How do we address that?***

The user, in theory, should be able to interactively combine whatever data layers he/she wants

➔ **Create their own mashups of data!**

Plus, the user should be able to interact with the maps and data.

Plus, ideally the user should be able to add his or her own additional content.



3) Who are We?

We are the GIS Consulting firm _____ (insert a cool name!).

We were hired by Westfield State to create their Web GIS. The WSU folks really have no idea what a Web GIS is or what it can do for them – but there is a new federal law requiring every college and university to have one.

Our client is Westfield State University and we need to work with various departments on-campus to ensure the Web GIS meets their needs and to collect the needed data.

However:

- People have no idea what a Web GIS is.
- People have no real interest in it!
- People are already super-busy with their day-to-day jobs.

What do we need?

- We need an online GIS environment = ArcGIS Online
- We need an online collaboration tool to exchange ideas, data, information, text, etc.
- All team members need a blog or website to document their work.

Please sign-up using your Westfield State Email account!

<https://www.yammer.com/>



4) MainStreet GIS

<http://www.mainstreetgis.com/>



Explore the website!

Create and maintain a professional presentation!

Your blog or website is your online resume – a place where you can show-off your skills and experience. That's a huge advantage when applying for internships, jobs, or graduate school.

- No typos!
- No broken links!
- No bad maps with mistakes!
- Create good postings with good explanations and discussions of your maps.

5) Let's get Data!

GPS mapping is fun, but can be tedious, illegal, and even dangerous!

Do whatever is most effective!

1. Sometimes you can 'see' what you are mapping in Google Earth or ArcGIS Online – get the latitude and longitude that way!
2. Sometimes you can't use a GPS effectively – print map, mark locations, and digitize on-screen. Or, use a tablet or smartphone.
3. Sometimes a GPS is the way to go – make sure you also take photographs, collect attribute data, and take good notes!

Savage Chickens

by Doug Savage

