

# Preparing for GIS in 2012

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# Objectives

1. Highlight technologies, trends, phenomena you need to know about to evaluate the future of GIS
2. Indicate some of the methods of discovering and evaluating those techs, trends, phenoms
3. Give you one topic that you can consider your homework for further research

# Topics

1. HTML5
2. Fusion Tables
3. NoSQL
4. Learning
5. Communicating

# HTML5

- The next HTML (not quite done yet...)
- Got new stuff in it
- Most browsers support it (save pre-version 9 Internet Explorer)



<http://www.w3c.org/html/logo>

# HTML5

“At first, we used Adobe Flash as the output format. Flash delivered great performance, but had two major problems: it’s not a web standard and it isn’t properly supported on all devices.”

<http://www.giscloud.com/blog/gis-cloud-starts-html5-mapping-revolution>



# HTML5

- no raster cache of map tiles (still might use tiles, but now the data in them is vector)
- cross platform automagically (assuming the browser supports all its goodies)
- local caching (for off line use of apps, so long as you have the data local)

<http://www.giscloud.com/blog/gis-cloud-starts-html5-mapping-revolution>



# HTML5

The screenshot displays the GIS Cloud beta web application interface. The top navigation bar includes the 'GIS Cloud beta' logo, a 'Home' button, and tabs for 'Map', 'Layer', 'Edit', 'Select', 'Analysis', and 'Tools'. On the right side of the top bar, there are links for 'Give Us Your Feedback', 'User Manual', 'Free Sign Up', and 'Sign In'. Below the navigation bar is a toolbar with icons for 'New Map', 'Map Properties', 'Refresh', 'Duplicate Map', 'Delete Map', 'Add Layer', 'Share or Publish', and 'Export'. A search bar is located to the right of the toolbar, with a 'Tweet' button showing 4 tweets and a 'Like' button. The main map area shows a detailed view of the Ohio University campus, with various buildings labeled such as 'Facilities Shops 1 - Main Trades', 'Ryans Annex', 'Treadley Hall', 'James Hall', 'Convocation Center', 'Kornacker Research Center', 'Ridges Building 26', 'Ridges Building 22', 'Podan Tower', 'Picher House', 'Chubb Hall', 'Ellis Hall', 'Gordy Hall', 'Seigfried Hall', 'Road Hall', 'South Green Fieldhouse', 'Cady House', 'Smith House', and 'Hoover House'. The map is overlaid with a yellow and green color scheme. The left sidebar shows a layer list with 'test (17455)', 'campus\_building (250)', 'campus\_elev (14)', 'campus\_parking (187)', and 'Basemap'. The bottom of the map area has a 'Data' tab and a 'GIS Cloud HTML5' watermark.

<http://www.giscloud.com/map/17010/ohio-universitybeta>

HTML



# HTML5

- Bing
- Slideshare
- Pandora
- Facebook (rumor - this week!)

“My newsreader is filled with Company X ditches Flash for HTML5.”



# Google Fusion Tables

Google Fusion Tables is a modern data management and publishing web application that makes it easy to host, manage, collaborate on, visualize, and publish data tables online.

<http://www.google.com/fusiontables/public/tour/index.html>

# Google Fusion Tables

- Table driven
- Cloud hosted
- Easily embeddable
- Basemaps provided
- Simple enough for non-GIS folks

<http://www.google.com/fusiontables/public/tour/index.html>

# Google Fusion Tables

**EDUC 308**

Cities, Suburbs, and Schools Project at Trinity College, Hartford CT

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## How to map with Google Fusion Tables (exercise 4)

**Recent Posts**

<http://commons.trincoll.edu/cssp/how-to-section/map-google-fusion-tables/>

# NoSQL



# NoSQL

Yes:

## Not SQL

## Not Only SQL

No:

## AntiSQL



# NoSQL

## NoSQL Distinguishing Characteristics:

may not require fixed table schemas

usually avoid join operations

typically scale horizontally



# NoSQL

What is it good for?  
Lots of reading and writing  
demands!



# NoSQL

## What about geo?

- Some have it in the box
- Others need an extension
- Still others just “cram” geo data in there



# NoSQL

How will you use them?

You may already be!

- Google Fusion Tables
- SimpleGeo API
- Google App Engine

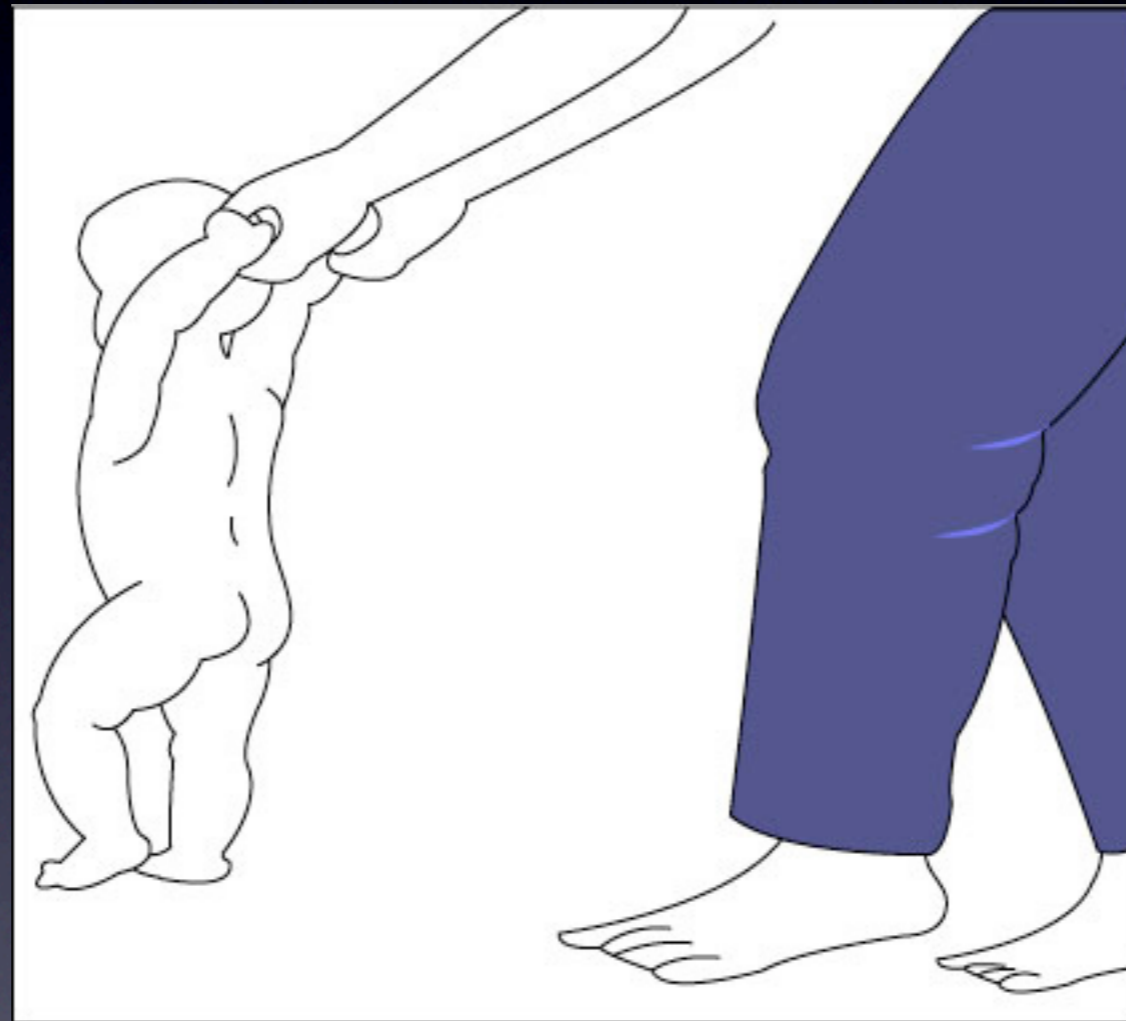


# NoSQL

# ORACLE



# Learning Has Changed



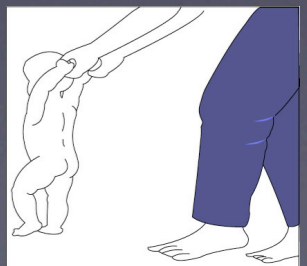
<http://www.flickr.com/photos/mitopencourseware/4494689580/>



Illustration courtesy of MIT OpenCourseWare.

# Learning Expectations Have Changed

- Student
- Instructor
- Employer



# Communications



<http://www.flickr.com/photos/windsordi/5398124363/>

# Communications

- Amount of broadcast geo content is up!
- It's 24/7!
- A lot of it is relevant!
- A lot of it is two-way!
- You have more control than ever!



# Communications

## Control is Better than Ever

- Search/filtering
- Delivery tools/formatting
- Hardware
- Modes (audio/video/etc.)
- Fusion



# Communications

**ADD GADGETS**

- ▶ **Home** ▾
- ▶ **Twitter Stuff**
- ▶ **Personal Stuff**
- ▶ **DM MyNews**

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Gadget shares  
Updates  
Friends

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**Enable chat**

**Gary's Bloggage**

- ⊕ [Farewell Ovi Maps, Hello Nokia Maps \(On iOS And Android Too\)](#)
- ⊕ [Farewell Yahoo! Maps API, Hello Nokia Maps API](#)
- ⊕ [WP Biographia In The Real World](#)

**ReadWriteWeb**

- ⊕ [New Bill Would Allow Robo-Calls to Mobile Phones](#)
- ⊕ [Fly Along Your Google Maps Route in 3D](#)
- ⊕ [Pantheon Brings Drupal to the Cloud on Rackspace](#)

**Planet Geospatial**

- ⊕ [Vizzuality Takes a Creative Approach to Mapping Environmental Change](#)
- ⊕ [Searching For Missing Portland GIS Pro, Mark Bosworth @findMarkB](#)
- ⊕ [Getting the GeoJSON band back together](#)

**Pogue's Posts**

- ⊕ [The Glory of Sweep Panorama](#)
- ⊕ [Parsing Netflix's 'Apology'](#)
- ⊕ [Internet Memes 101: A Guide to Online Wackiness](#)

**Search Engine Watch - Latest**

- ⊕ [Bing Adds Airport Maps for 42 U.S. Hubs](#)
- ⊕ [Google Hypes Black Eyed Peas Google+ Hangout on Homepage](#)
- ⊕ [Google+ Is Google Itself, Says Google VP](#)

**CNET News.com**

- ⊕ [Dad attacks son after dying in Call of Duty](#)
- ⊕ [Linux programmer Reiser requests new murder trial](#)
- ⊕ [AT&T lashes back at Sprint, Cellular South](#)



# Homework

Discover/Catalog/Evaluate HTML5 GIS clients.

Learn/Explore/Use Fusion Tables

Keep up on the NoSQL News

Plan to learn something new (related to your job) via a method new to you

Build a geo news dashboard for yourself or your corporate news watcher

# Homework

Are any of these new technologies the right ones for your organization? How/when will they be rolled in?

How will you use the new skills you learn to help the company and/or further your career?

How will you act on the news you find on this dashboard? Share it? Reply to it? Converse about it? Research it?

# Others That Didn't Make the Cut

- Deprecation (software/APIs)
- The rise of “infographics”
- Tablets
- The return of service + data
- Desktop GIS continues to contract
- Hadoop
- Node.js

# Thanks!

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[apb.directionsmag.com](http://apb.directionsmag.com)

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