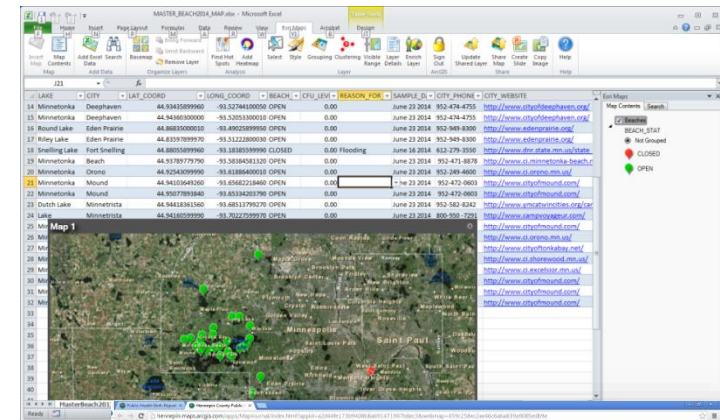# Inform, Promote, and Assess Public Health Using ArcGIS Online

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Hennepin County, Minnesota

Presentation Outline:
1. Purpose Statement
2. ArcGIS Online at Hennepin County
3. ArcGIS Online and Health Related Businesses
4. ArcGIS Online Demonstrations
5. Lessons Learned
6. Questions and Answers (time permitting)

Purpose Statement:

Provide a high-level overview of what is involved with implementing ArcGIS Online, as well as how it could benefit public health by illustrating efforts and applications at Hennepin County.

Introduction of ArcGIS Online at Hennepin County

- Two large group presentations with demos
- Collected feedback from groups & online survey
- Published recommendations for the GIS Office & report for the GIS Steering Committee

Main Findings:

- Hennepin County should have one ArcGIS Online organization.
- Creation of an administrator's group
  - Representatives from LOB (lines of business) & GIS Office
  - Group oversees ArcGIS Online site, licenses, monitor credit usage, and review applications.

An implementation strategy is important!

Findings, recommendations, and additional research within our report helped:

- Guide implementation
- Define an ArcGIS Online model for Hennepin County
- Define user roles and responsibilities
- Manage and maintain our organization
- Identify data resources, storage, & metadata
- Document issues and the review process
- Promote County branding and web standards

See handout for some of the specific recommendations…
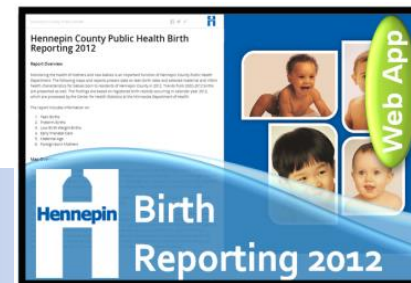
ArcGIS Online for Health Related Lines of Business

- Human Services and Public Health Department (10 users)
- Metropolitan Health Plan (0 users)
- NorthPoint Health and Wellness Clinic (1 user)
- Hennepin County Medical Center (1 user)
- Hennepin Health (1 user)
- Hennepin County Medical Examiner's Office (1)

…with hopes to double these numbers in the next few months.

Draft Strategy: group topics, define focus, identify tools.

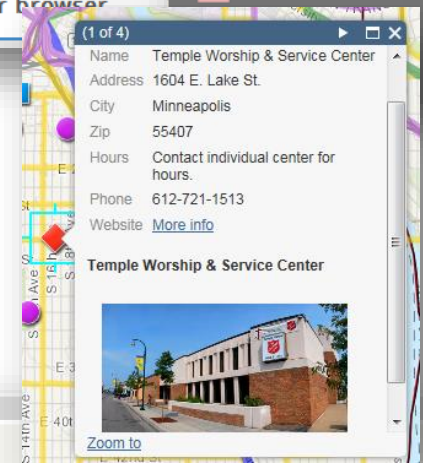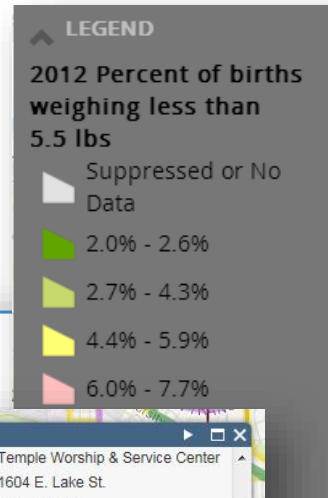| Category	Focus	Tools	Example
Decision Making Audience – internal leadership, county staff, community partners, state agencies, & clinic networks	Data intensive, possible analysis, program specific, for planning & project purposes	Story Map Journal, Compare, & Time Aware Templates. Spatial Analysis & Maps for Office	2012 Birth Report Application (Story Map Journal)
Health Support Network Audience – county residents, county support staff, & community partners	Simple, easy to use, grouped health themes, services & resources	Basic Viewer, Classic Viewer, and Story Map Tour Templates	Healthy Eating Farmers' Markets Application (Classic Viewer)
Public Notification Audience – county residents & county support staff	Timely, specific, event focus, assist with client inquiries	Maps for Office, Local Perspective & Public Information Templates	Beach Monitoring Application (Maps for Office)

A few considerations for ArcGIS Online...

- User Activity Issues
- Data Communication
- Suppression Rules
- Data Timeliness
- Audience & Promotion
- Permission & Security
- Web Standards & Browsers

LEGEND

2012 Percent of births weighing less than 5.5 lbs

- Suppressed or No Data
- 2.0% - 2.6%
- 2.7% - 4.3%
- 4.4% - 5.9%
- 6.0% - 7.7%

An error has occurred
This application is not supported in Internet Explorer before version 9. **Please update your browser**

(1 of 4)
Name	Temple Worship & Service Center
Address	1604 E. Lake St.
City	Minneapolis
Zip	55407
Hours	Contact individual center for hours.
Phone	612-721-1513
Website	More info

Temple Worship & Service Center

Zoom to

Beach open or closed? Check new Hennepin website

A day at the beach could come with fewer surprises now that Hennepin County has launched a website where users can determine whether more than two dozen public beaches in the county are open or closed.

The website displays a map with colored balloons — green if the beaches are open, red if they're closed. A click on any of the balloons opens a

box listing the name and location of the beach, its status, what lake it's on and links to further information.

When beaches are closed it's usually due to bacteria contamination from human or animal feces, said Duane Hudson, program manager for the county's environmental health department. That can commonly come from swimmers themselves, kids in dirty diapers, ducks and geese, storm runoff or boaters who don't properly dispose of waste, Hudson said.

The county tests water quality at 31 beaches weekly, and those results determine when a beach might be closed.

The beaches mapped on the website are operated by a range of public agencies. Minneapolis and Three Rivers Park District beaches are not included, but Hudson said he hopes to add them.

Hudson believes the maps will be useful when a beach is known by its location but by several different names. The website is at http://tinyurl.com/qdm84y8.

BILL McAULIFFE

436.84
Analytics - Usage

- GeoEnrichment (21.61 credits)
- Simple Routes (1.4 credits)
- Spatial Analysis (14.39 credits)
- Closest Facility Routes (1 credits)
- Geocodes (256.44 credits)
- Service Areas (142 credits)

Tap chart slice or legend text for additional credit and usage details.

To fully utilize ArcGIS Online web applications…

1. **Implement a data stewardship strategy**
   - Work with LOBs to schedule data updates, check hyperlinks, change contact info or seasonal hours
2. **Expand feature attribute information**
   - Include homepage & graphics URLs, contact info and multi-year data within feature attribute tables
3. **Improve spatially accuracy**
   - To accommodate image basemaps & location services
4. **Create workflow processes**
   - Excel data update and push processes, for peer review and browser tests, and internal web standards review

Our ArcGIS Online applications include:

- Cool Options
- Healthy Eating
- Food Shelves - internal
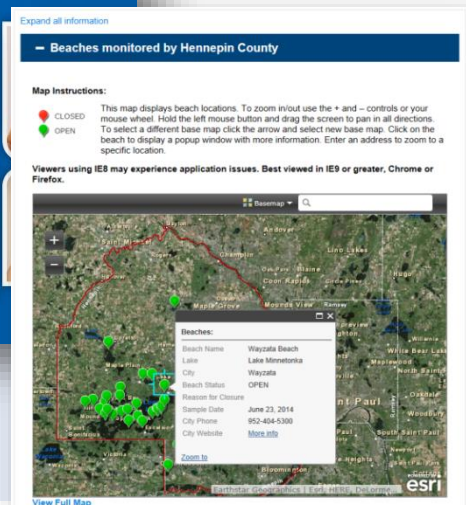- Senior Living – internal

Plus these discussed today…

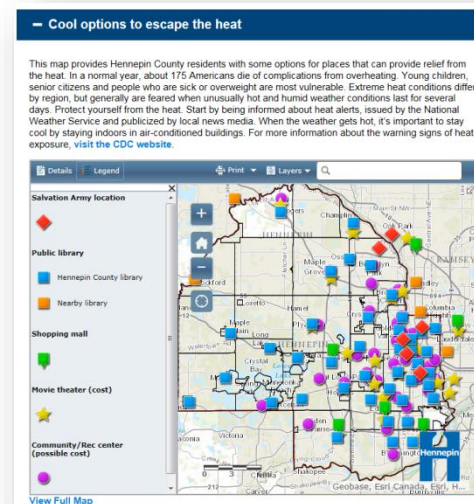**2012 Birth Reporting**

Story Map Journal format

Beach Monitoring

Maps for Office format

Previous birth records were organized into PDF reports and listed under the Public Health Data website. By using the ArcGIS Online Story Map Journal template we can now create applications that contain...

Side Panel

Embedded text, hyperlinks, charts, images, video, websites, and interactions with the main stage panel.
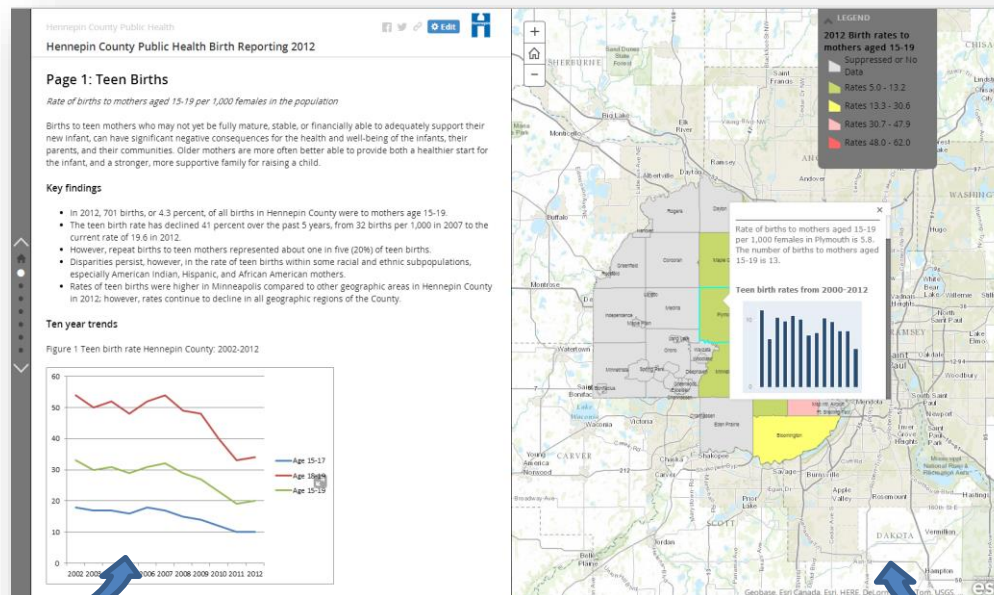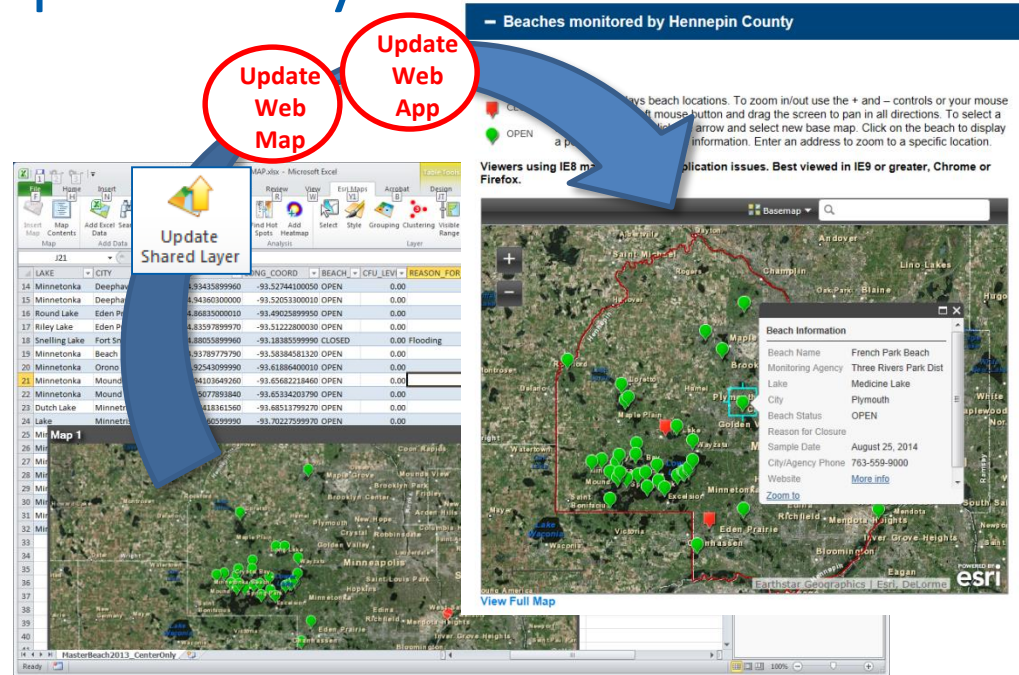

Main Stage

Interactive maps with thematic data, informative narrations, charts, site pictures, hyperlinks, and much more...

The Environmental Health unit tests water quality for 31 beaches in Hennepin County.

2013 Web Page Update
3 staff involved (EH, GIS, IT)
24 hour turn-around to host PDF map

2014 Web Page Update
1 staff involved (EH)
24 minute turn-around to host web map

*Just don't change
the table structure…*

Zen and the Art of ArcGIS Online Implementation…

1. *Organization is everything*
2. *Try to stay ahead of the excitement*
3. *Be restrictive and flexible*
4. *Assign the responsibility to everyone*
5. *Design to inform not irritate*
6. *Strive to be trusted not trashed*
7. *Be aware of credits but not afraid of credits*
8. *Revisit, revise, or retire*

See handout for a more detailed (less Zen) description…

Questions or Discussion?

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Hennepin County HSPHD Environmental Health

Dave Johnson and Amy K Leite-Bennett

Hennepin County HSPHD Public Health

And the Hennepin County GIS Office