

# A Simple Approach to Mobile



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[gis.amherstma.gov](http://gis.amherstma.gov)

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# My Goals

- I'm a local GIS Guy
- I want to make it easy for our mobile workforce to
  - Access Maps
  - Get Info
  - Solve Problems

# Does Mobile Technology *Really* Work?

- 5 Years ago: **NO**



I'm not as cool as this guy.  
You'll find him at <http://www.flickr.com/photos/29881930@N00/2086642192>



Image from the Facebook  
"I Hate Toughbooks" group.  
Exactly.

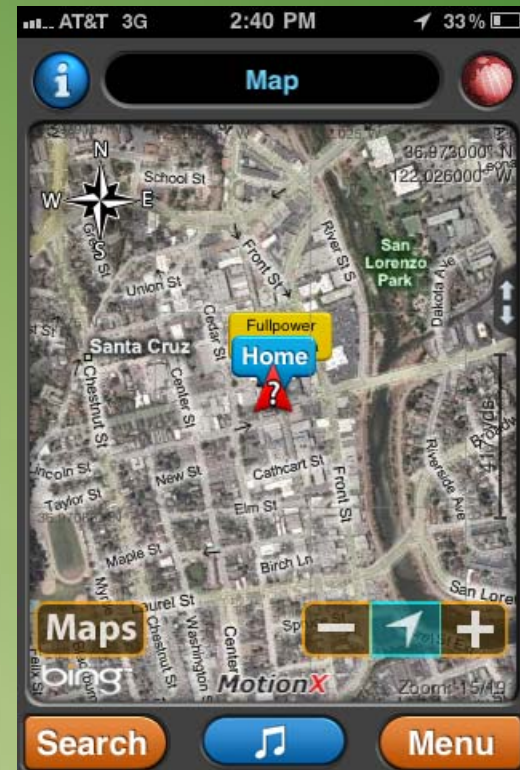
# Does Mobile Technology *Really* Work?

- 2 Years ago: **Kind of**

Consumer-based map apps become popular in smart phones



iPhone Maps App



iPhone MotionX GPS App

# Does Mobile Technology *Really* Work?

- Now:

**YES.**

- My Map.
- My Live Data.
- No Syncing.
- App Development Optional.



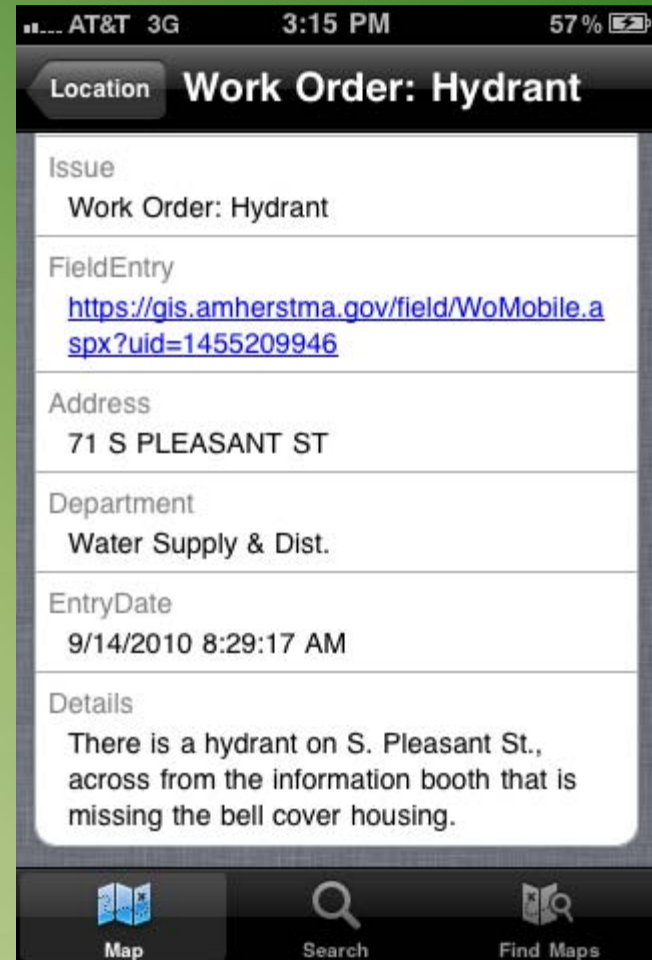
Amherst Open Work Orders Map  
on the ArcGIS iOS App

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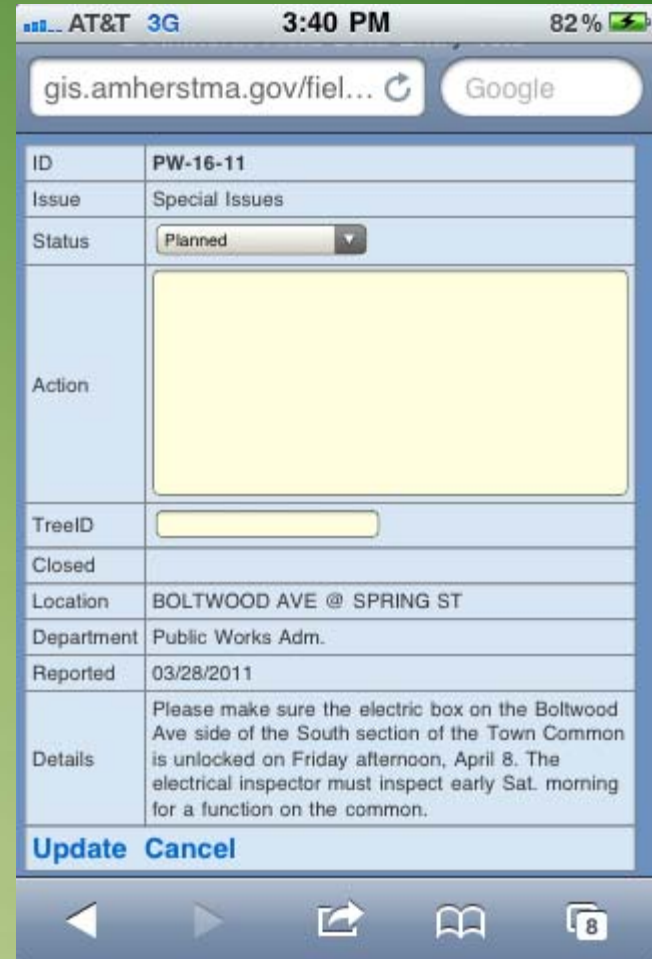
Amherst Open Work Orders Map  
on the ArcGIS iOS App

# Does Mobile Technology *Really* Work?

- Now:

**YES.**

Features linked to my own home-cooked data entry pages.



The screenshot shows a mobile browser interface with the following elements:

- Carrier: AT&T 3G
- Time: 3:40 PM
- Battery: 82%
- Address bar: gis.amherstma.gov/fiel... with a refresh icon and a Google search button.
- Form fields:
  - ID: PW-16-11
  - Issue: Special Issues
  - Status: Planned (dropdown menu)
  - Action: A large empty yellow rectangular area.
  - TreeID: A small empty input field.
  - Closed: A checkbox.
  - Location: BOLTWOOD AVE @ SPRING ST
  - Department: Public Works Adm.
  - Reported: 03/28/2011
  - Details: Please make sure the electric box on the Boltwood Ave side of the South section of the Town Common is unlocked on Friday afternoon, April 8. The electrical inspector must inspect early Sat. morning for a function on the common.
- Buttons: Update and Cancel
- Mobile navigation bar: Back, Forward, Home, and a tab icon with the number 8.

Simple & secured data entry page for closing/updating work orders.



# Finally...

- I can avoid all the things that I used to hate about mobile technology
  - Clunky interfaces
  - Using a stylus
  - Clumsy sync routines



WOW! PAINT on Windows CE!!!

# What has made the difference?

- Apple, Google & Microsoft have learned how to make mobile GUIs that are easy to use
- Data Plans
- Bandwidth-Optimized Tiled Map Services



5/16/2011



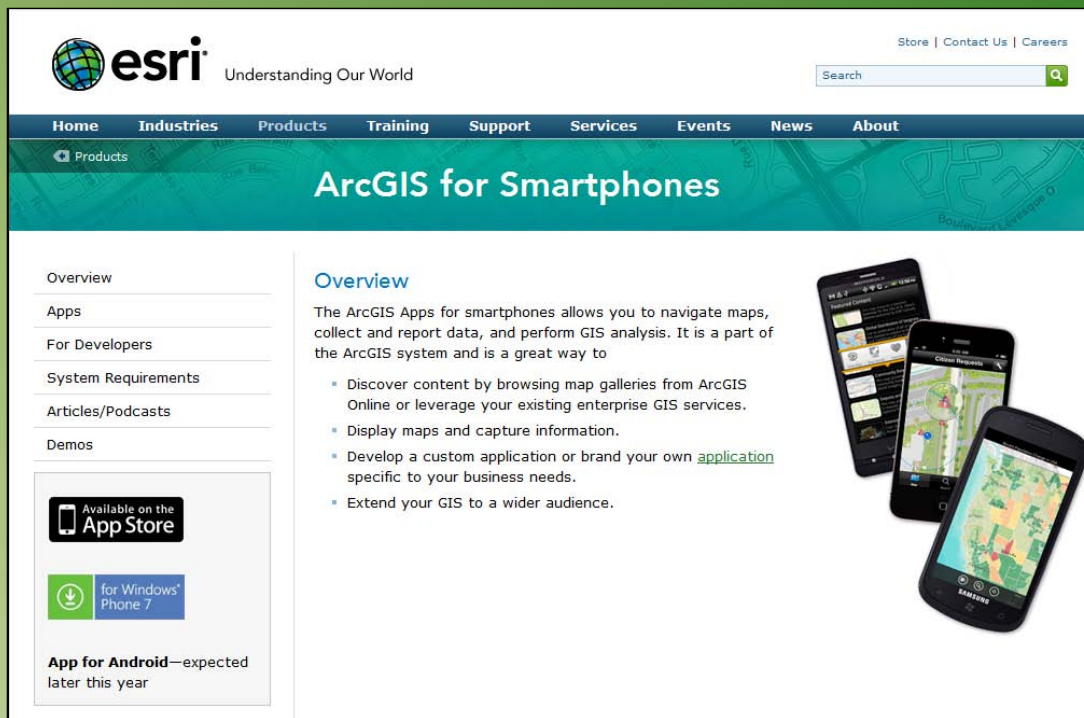
Spring NEARC 2011 - Lightning Lunch



10

# What has made the difference?

- ArcGIS for Smartphones
  - iOS, Windows Phone & Android (soon)
  - Free
  - Integrated with ArcGIS.com
  - Simple

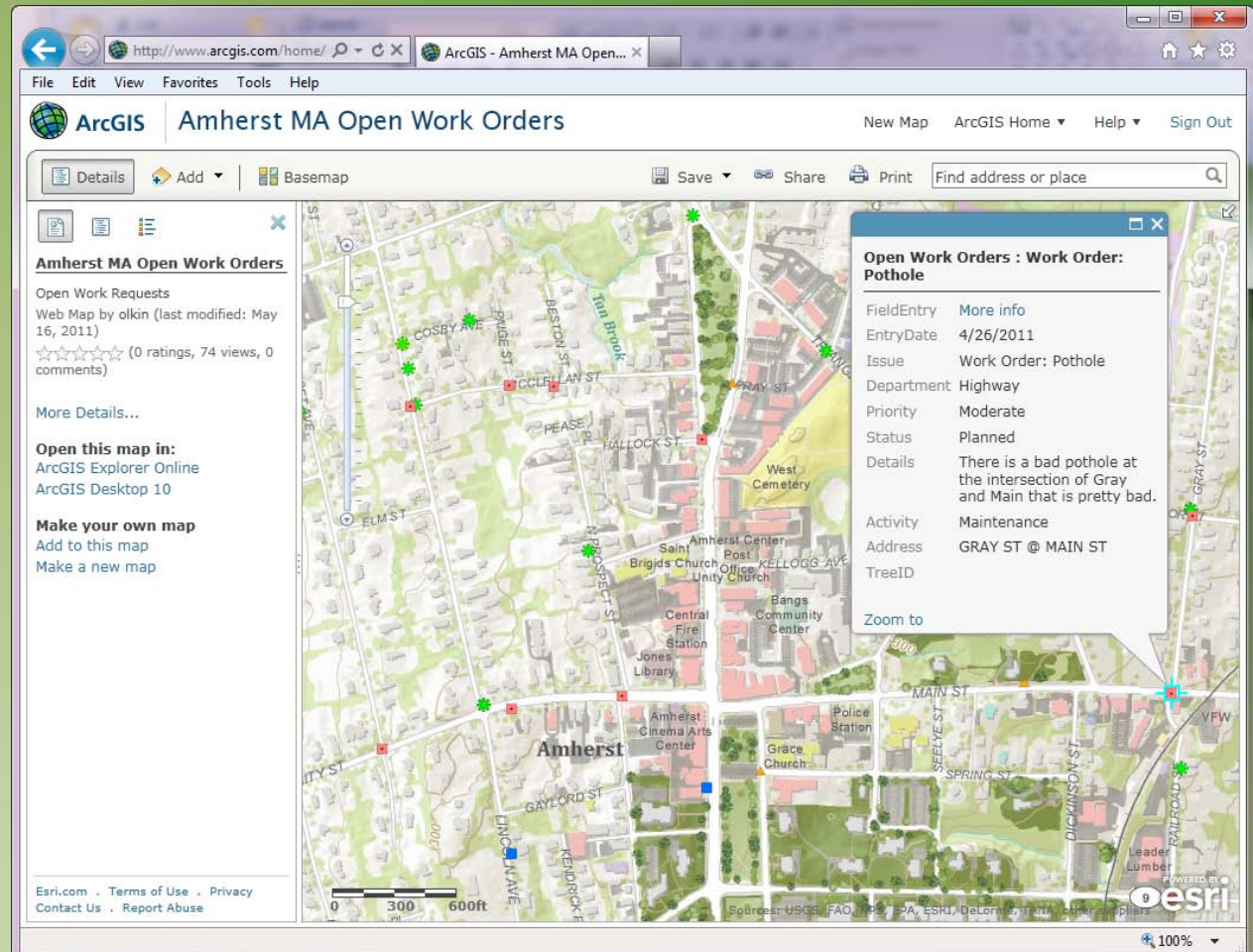


The screenshot shows the Esri website's product page for ArcGIS for Smartphones. The page features the Esri logo and tagline 'Understanding Our World' at the top. A navigation menu includes Home, Industries, Products, Training, Support, Services, Events, News, and About. A search bar is located in the top right corner. The main heading is 'ArcGIS for Smartphones'. Below this, there is an 'Overview' section with a list of bullet points: 'Discover content by browsing map galleries from ArcGIS Online or leverage your existing enterprise GIS services.', 'Display maps and capture information.', 'Develop a custom application or brand your own application specific to your business needs.', and 'Extend your GIS to a wider audience.' To the right of the text is an image of three smartphones displaying the ArcGIS application interface. On the left side of the page, there is a sidebar with links for Overview, Apps, For Developers, System Requirements, Articles/Podcasts, and Demos. Below these links are buttons for 'Available on the App Store' and 'for Windows Phone 7'. At the bottom of the sidebar, it says 'App for Android—expected later this year'.

<http://www.esri.com/software/arcgis/smartphones/>

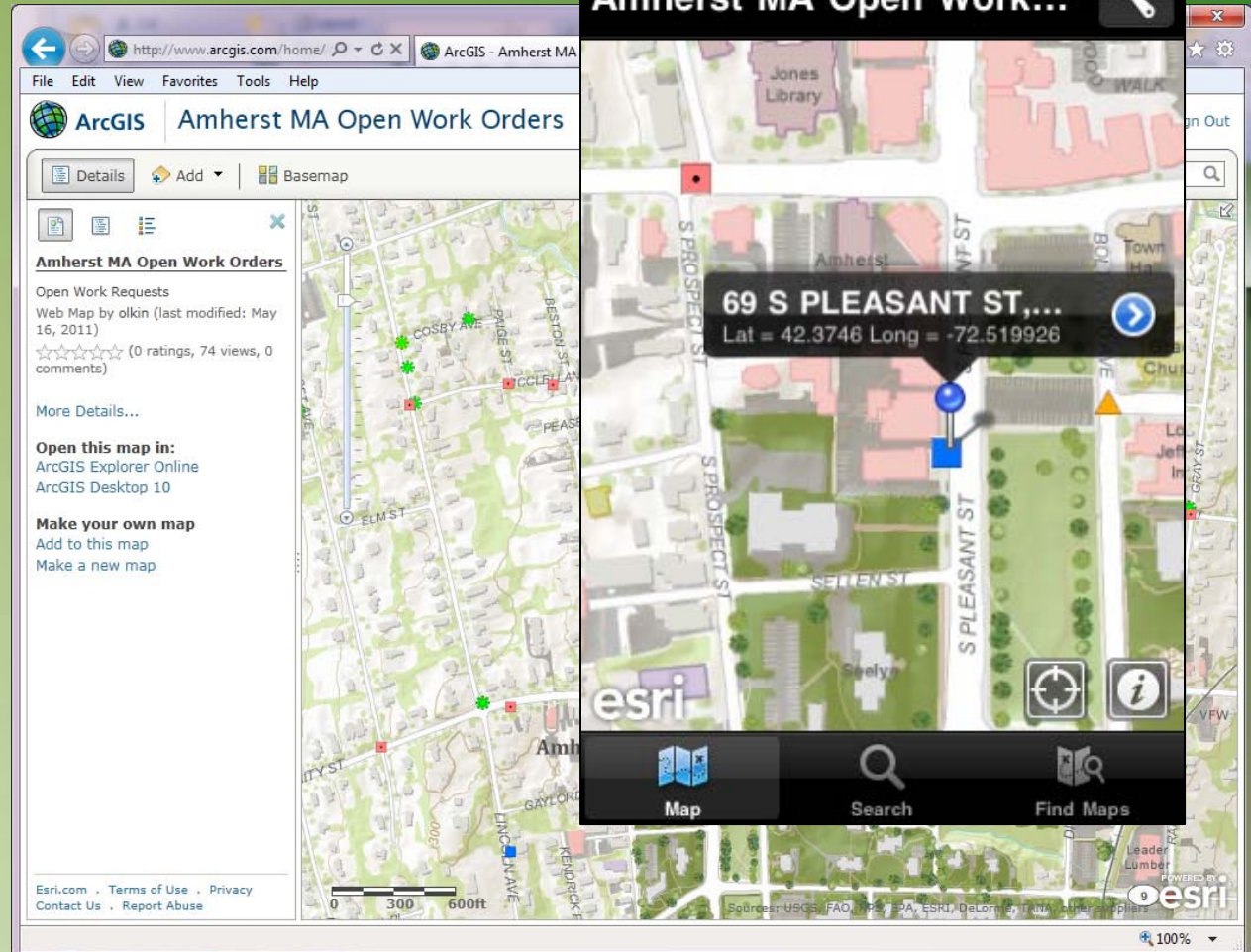
# Simplest way to make a mobile map

- Publish an ArcGIS Server map service
- Author a map in ArcGIS.com
  - Optionally, secure it.



# Simplest way to make a mobile map

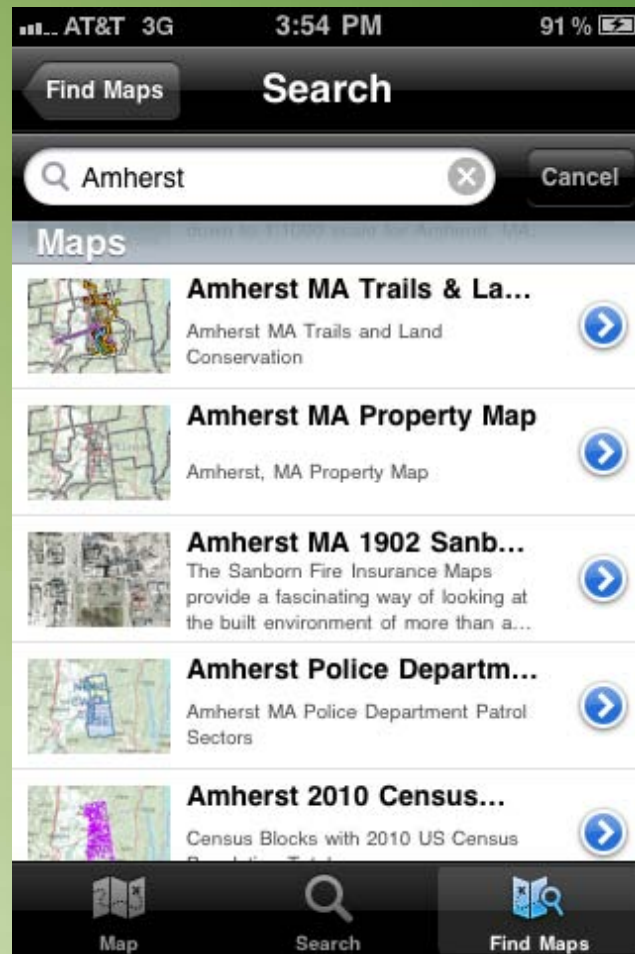
- Voila, it's in your phone or tablet.



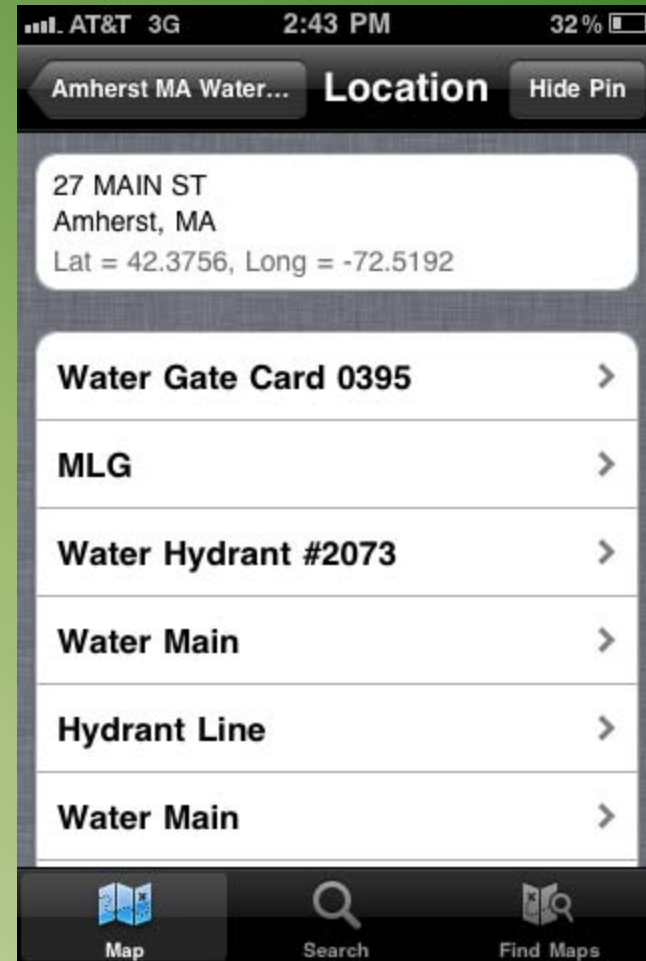
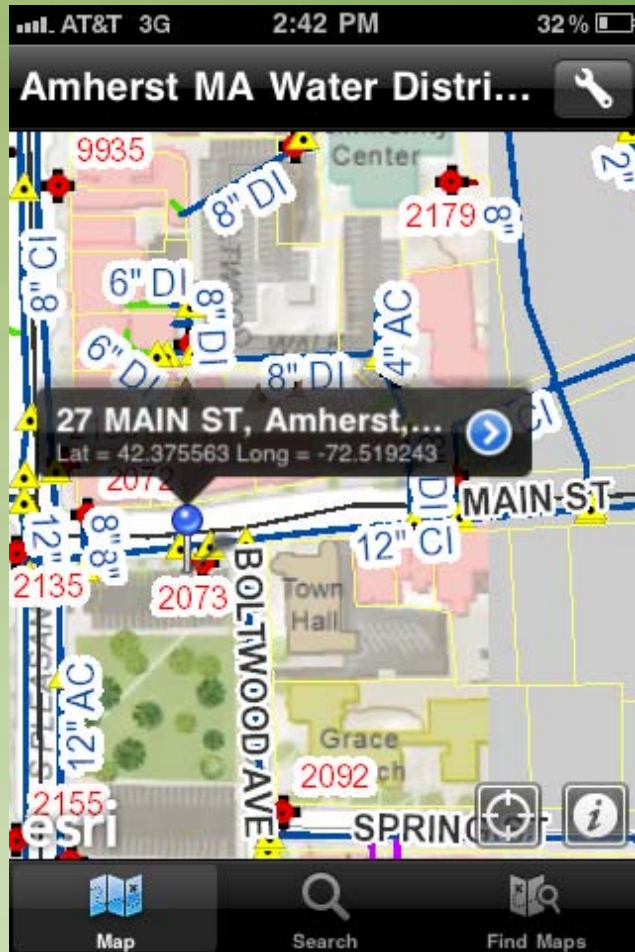
# Yes, but...is Map Caching Necessary?

- Desirable, yes. Necessary, no.
- We generally don't cache our maps.
  - Dynamic content, constantly changing.
- Basemaps are cached

# Some of our maps

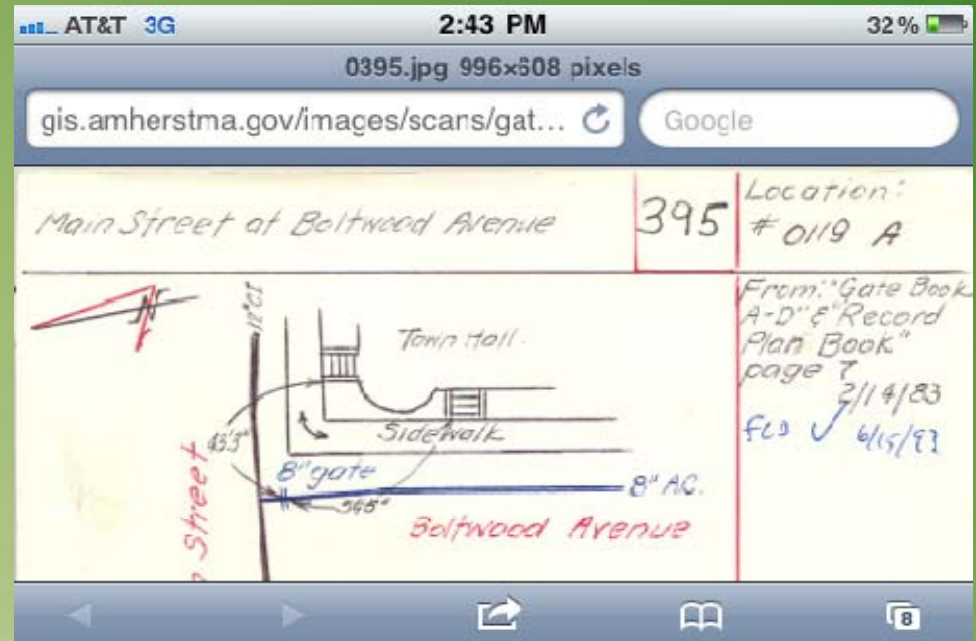


# Utilities & Associated Documents





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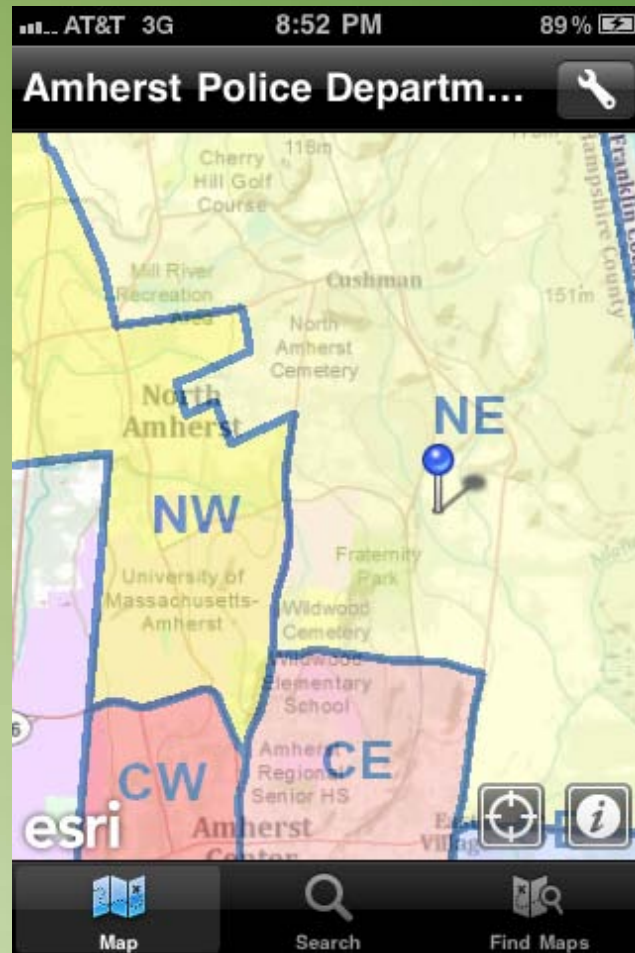


Gate Card

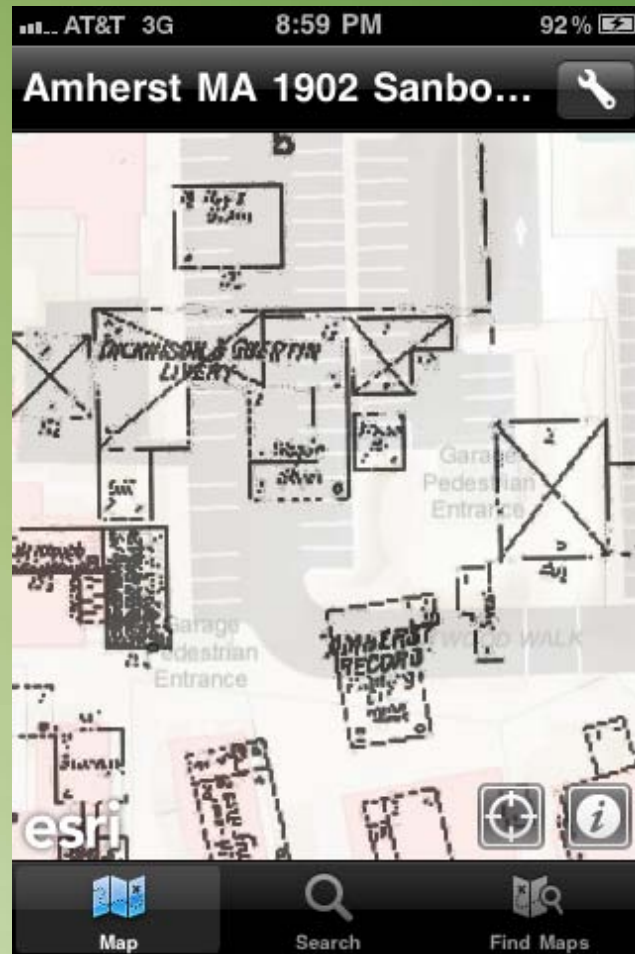
# Trails & Land Conservation



# Police Districts



# 1902 Sanborn Fire Insurance Map



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