



Esri GIS Mobile Solutions

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Technical Workshop

“If I had asked people what they wanted, they would have said ‘faster horses.’”

Henry Ford

Trend: Increase demand for location services

Pew Research Center

74% of adults use their smartphone to get directions or other information based on their current location.

Increased Demand

For authoritative mapping and
location-aware apps at work

Trend: Consumerization of IT



Devices



Social



Apps



Consumerization of IT

Trend: Named User Model



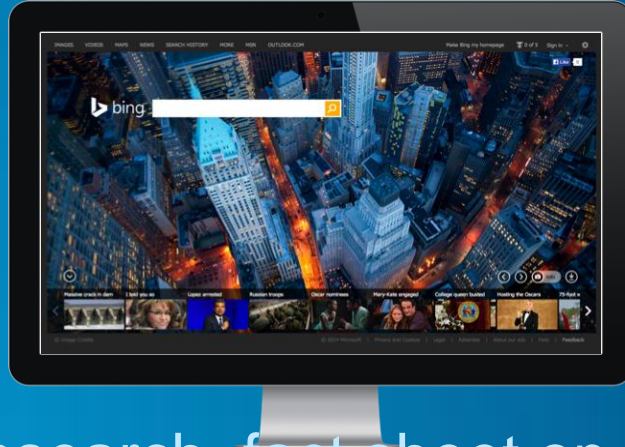
58%

Own a
Smartphone



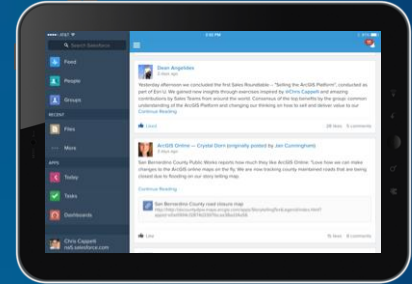
87%

Using the Internet



2.8

Devices Owned
by Knowledge
Workers



Source: Pew Research fact sheet on mobile technology

<http://www.pewinternet.org/fact-sheets/mobile-technology-fact-sheet/>

Trend: Web Browser Market Share...

Browser Statistics Month by Month

| 2012 | <u>Internet Explorer</u> | <u>Firefox</u> | <u>Chrome</u> | <u>Safari</u> | <u>Opera</u> |
|----------|--------------------------|----------------|---------------|---------------|--------------|
| March | 18.9 % | 36.3 % | 37.3 % | 4.4 % | 2.3 % |
| February | 19.5 % | 36.6 % | 36.3 % | 4.5 % | 2.3 % |
| January | 20.1 % | 37.1 % | 35.3 % | 4.3 % | 2.4 % |

http://www.w3schools.com/browsers/browsers_stats.asp

Work used to be
a place



Now, work is
everywhere



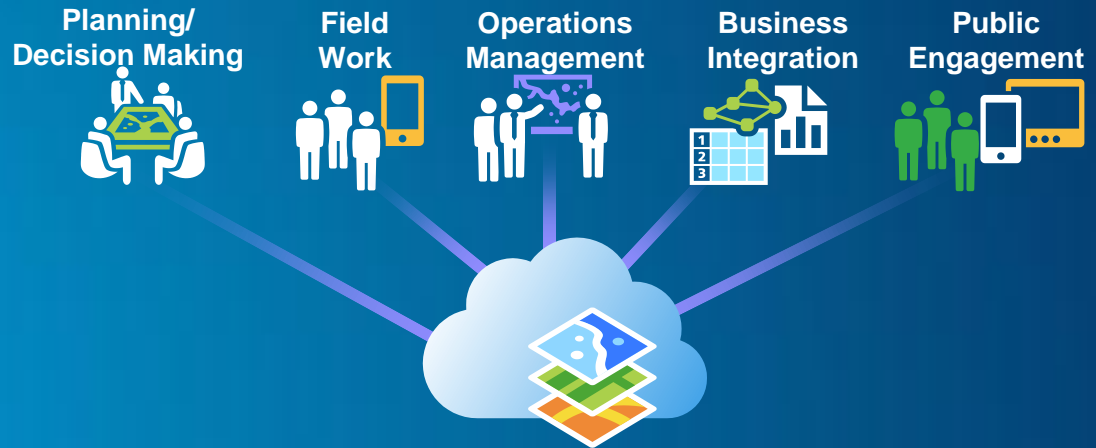
Esri GIS Mobile Solutions

- ArcPAD *(tech support , but no further development)*
- ArcGIS for Windows Mobile *(tech support , but no further development)*
- ArcGIS App for iOS and Android *(no further development)*
- ArcGIS App for Windows 8
- Collector for ArcGIS
- Explorer for ArcGIS
- ArcGIS Web Application Builder *(planned for Q4 2014)*

Foundation Apps – Compelling , focused

Integrated Within the ArcGIS Platform

- **Targets everyone in the organization**
- **Intuitive and easy to use**
- **Configurable, ready to use within your ArcGIS Organization**
- **Release updates frequently**
- **Cross-platform**
- **Cloud and on-premises**



Foundation Apps

Supporting Common Tasks

- Collection / Editing
- Viewing
- Mapping
- Analysis
- Awareness
- Communication

* Offline Use

Multiple Devices



• ... A Core Part of the Platform

What is Collector for ArcGIS?



Collector for ArcGIS



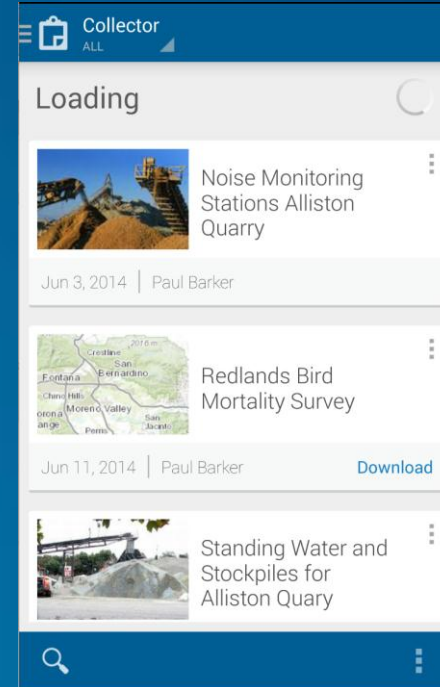
- Mobile app targets field workflow needs
- Collect and update data
 - Using your location or the map
 - Fill out forms
 - Capture media (pictures, videos)
 - Additional tools to help your field workforce
- Types of use
 - Collect asset locations and status
 - Ground-truth their GIS data
 - Make observations/conduct surveys
 - Replace paper-based forms/process



What can you do ?



- Open maps shared to you for data collection
- Collect and update features
- Copy features to save time
- Measure lengths and area
- Get directions
- Switch between basemaps
- Search features and places
- Record where you went



Publishing data



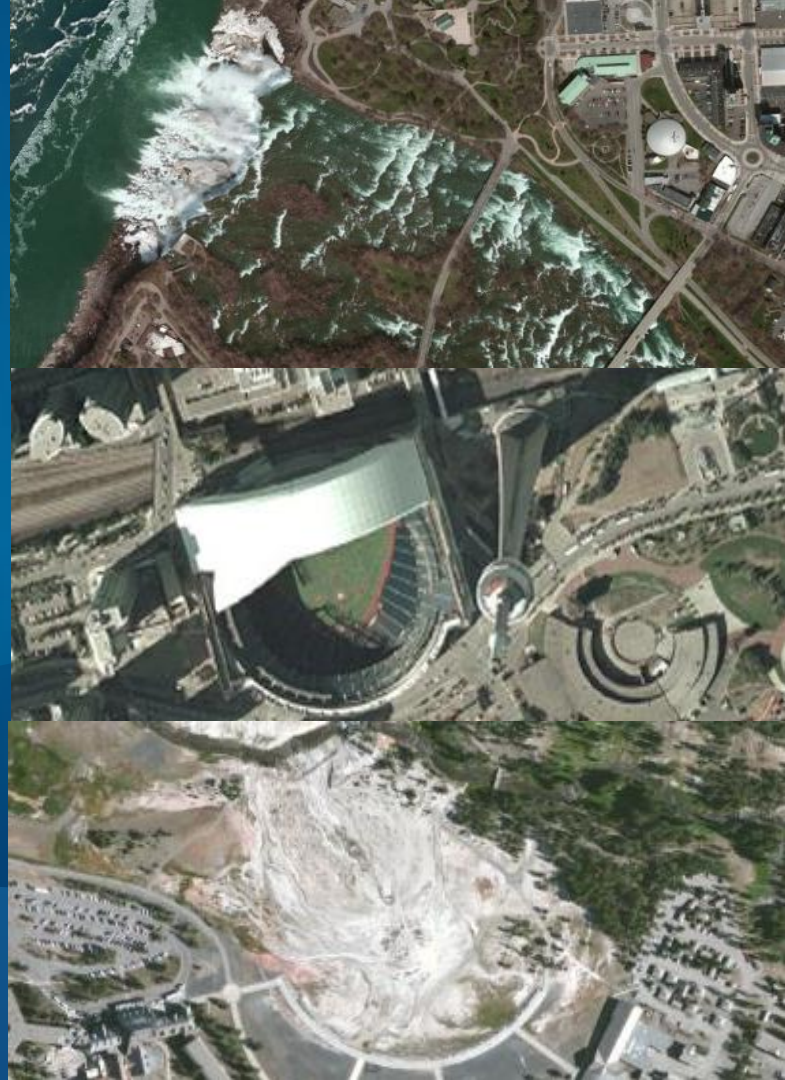
- **Offline data needs to have full editing capabilities and sync enabled**
 - Disable editing at the webmap level if you have layers for read only access
- **Tips: leverage domains, subtypes, default values, scale ranges etc.**
- **Choose symbology for the end user**

Making the map



- **Only show the fields that the end user needs**
- **Turn off tools the user won't use to do their job (measure, basemap etc)**
- **Use scale dependency to hide read only layers till they're needed**
- **Side load basemaps to device to save time**

Collector for ArcGIS Demo



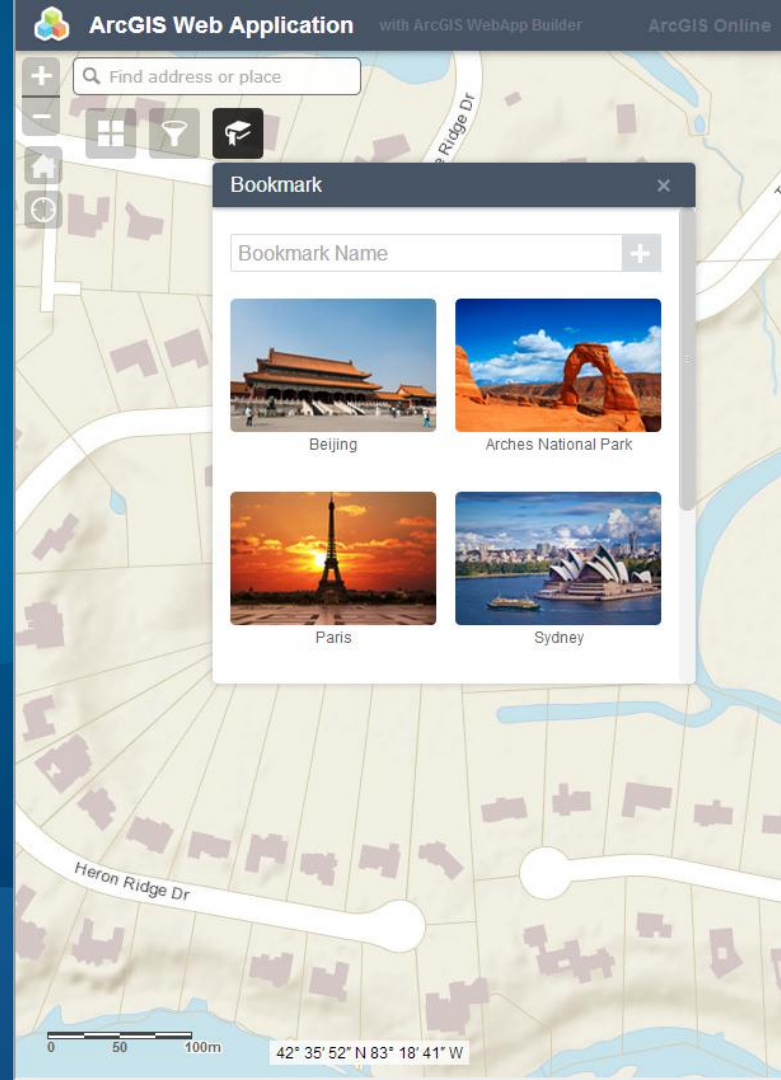
Whats next?



- **More tools for planning field work (pre-planned)**
 - Prepare your data in advance
 - Pre package multiple areas
 - Fine grained sync control
- **Smarter data collection forms**
 - Auto field population
 - Inherited attributes
 - Related tables
- **Editing of versioned data**
- **Integration of more sensors**
- **Full support for editor tracking and ownership**



What is ArcGIS WebApp Builder ?



A Response

to the requests by many customers

HTML5/no plugin

Configurable apps

Mobile web apps

Less programming



Take Advantage of modern HTML/JavaScript technologies

Pure HTML/JavaScript

Responsive UI for Devices

Supports both 2D and 3D



For Developers

GUI Builder

Out of Box Widgets

Create Custom Widget

Create Custom Theme



WebApp Builder *Demo*



Themes



Map



Widgets



Attributes

Preload Widgets

Widget Pool



Coordinate



Geocoder



HeaderCon...



HomeButton



MyLocation



OverviewMap



Scalebar



BasemapG...



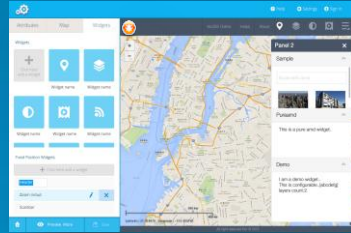
Bookmark



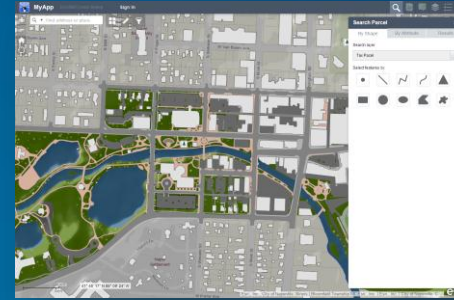
Query

Make Ready to Use Apps –OR– App Templates

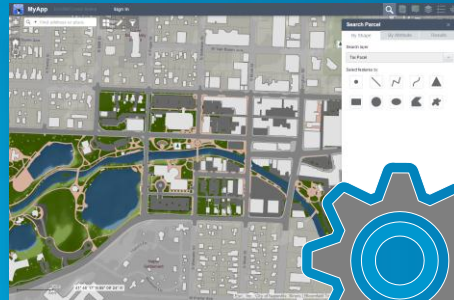
Builder



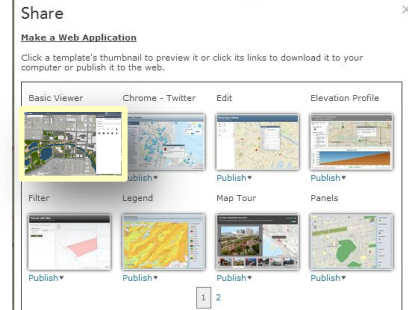
Ready to use app



App template



ArcGIS Portal/Online



- **Supported platforms?**

IE 9+, Firefox, Chrome, and Safari 3+

- **Is AWAB a supported product?**

Yes

- **Does AWAB work with Portal?**

AWAB can rely 100% on Portal for ArcGIS, independent of ArcGIS Online.

3D Coming.....



What is Explorer for ArcGIS?

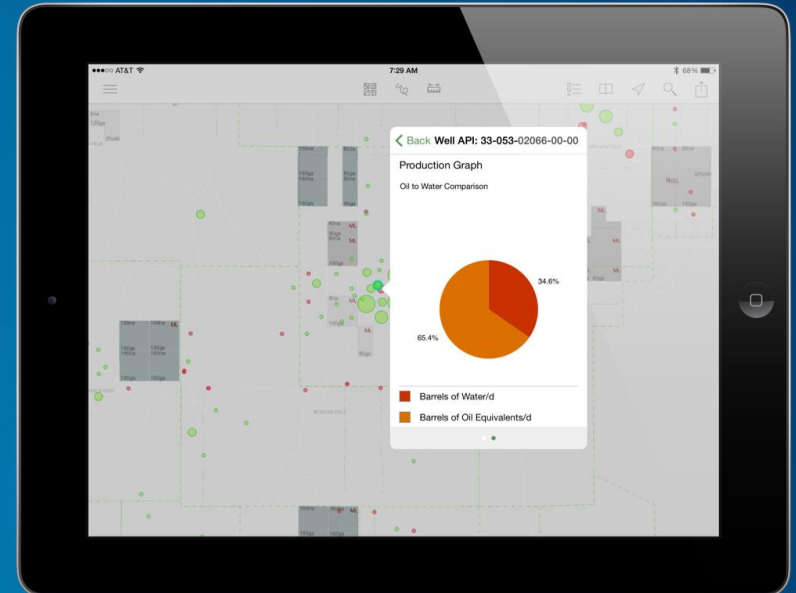
Powered by Web Maps

- A native app
 - Discover maps in your organization
 - View information about your assets
 - Collaborate with others
 - Share maps
 - Brief stakeholders



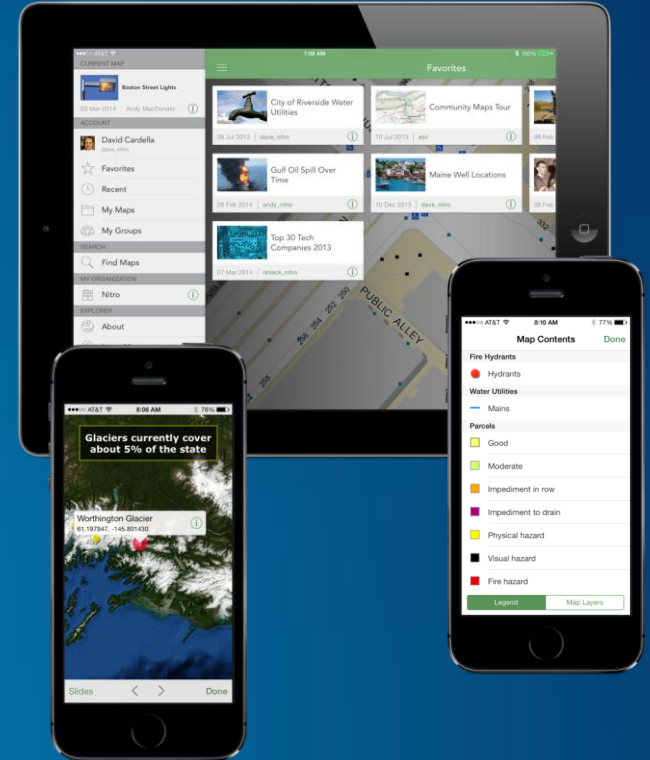
Who is Explorer for?

- Everyone in the organization
 - Executives and managers, policy makers, knowledge workers
- Search for assets
- Get information about your data
- Use your data in meaningful ways
 - Location of assets in relation to each other



What Can you Do with Explorer?

- Explore and Discover Maps
- Use the map
 - Current location, measure, get information, measure
 - Personalize your experience
- Share maps
- Brief stakeholders
- Collaborate



Explore and Discover Maps

- “Try Explorer”
- Favorites
 - Most important maps used on a regular basis
- Navigate for maps
 - My Map, Recent, Groups



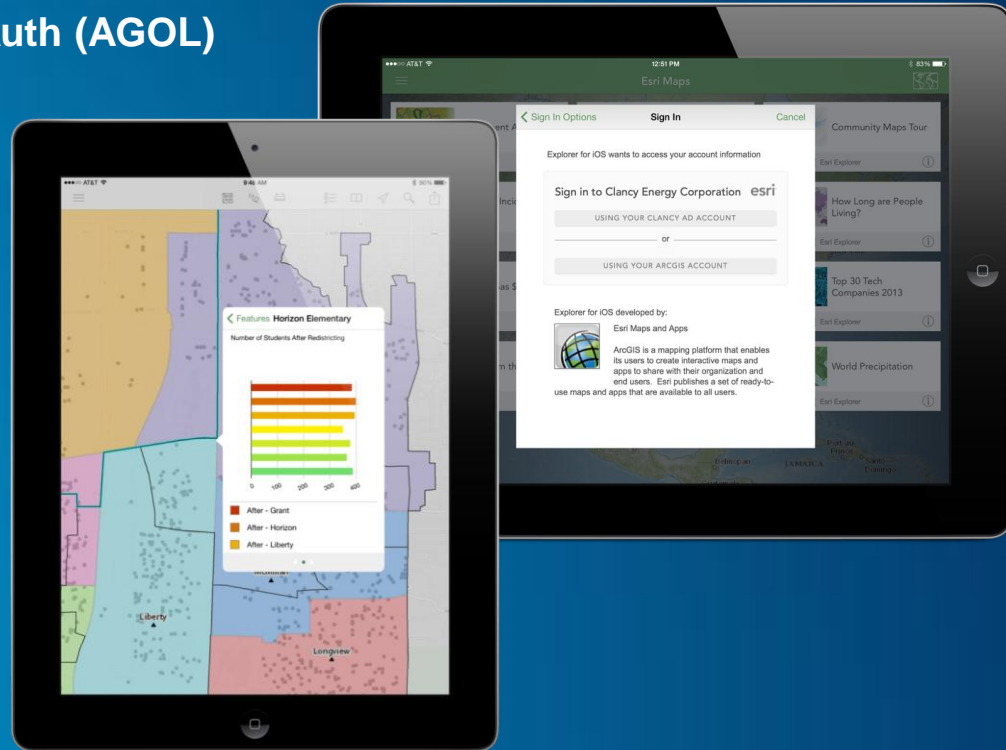
Explore and Discover Maps

- Search for maps
 - In the org, OGOL, by owner
- Map details
 - Map meta data (author description, tags)
 - Add to favorites
 - Share



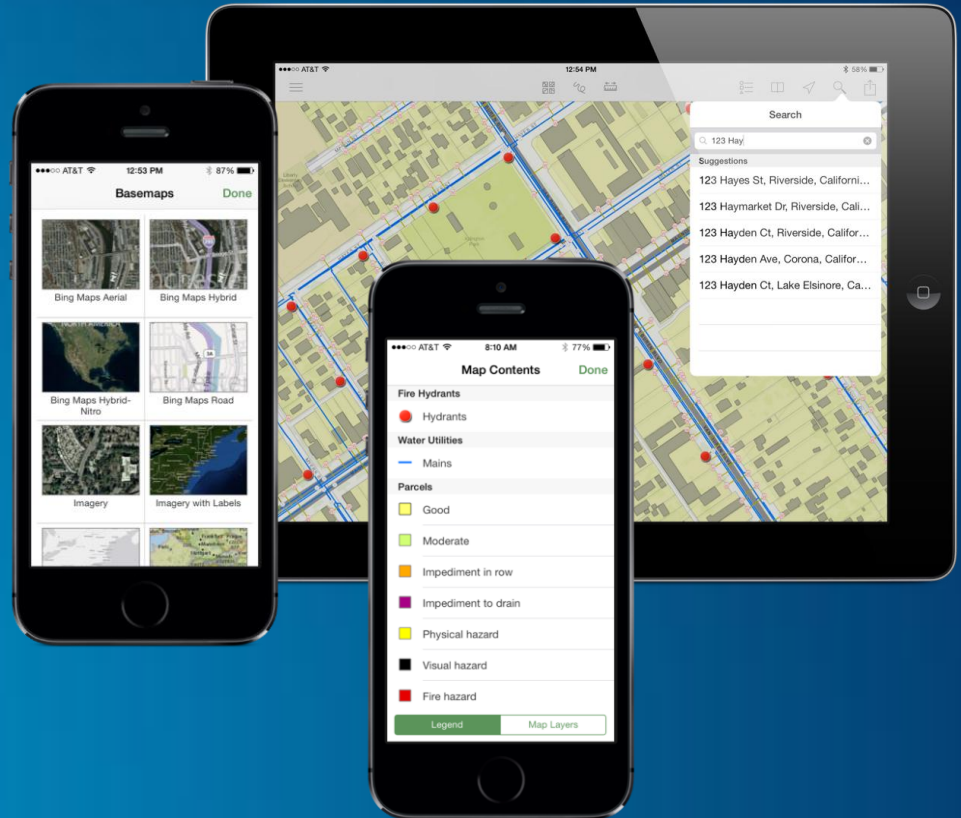
Using the map

- Support for Enterprise logins and OAuth (AGOL)
- Display current location
- Rotate map
- Get distance and area
- View details about a feature
 - Support for all popup media types



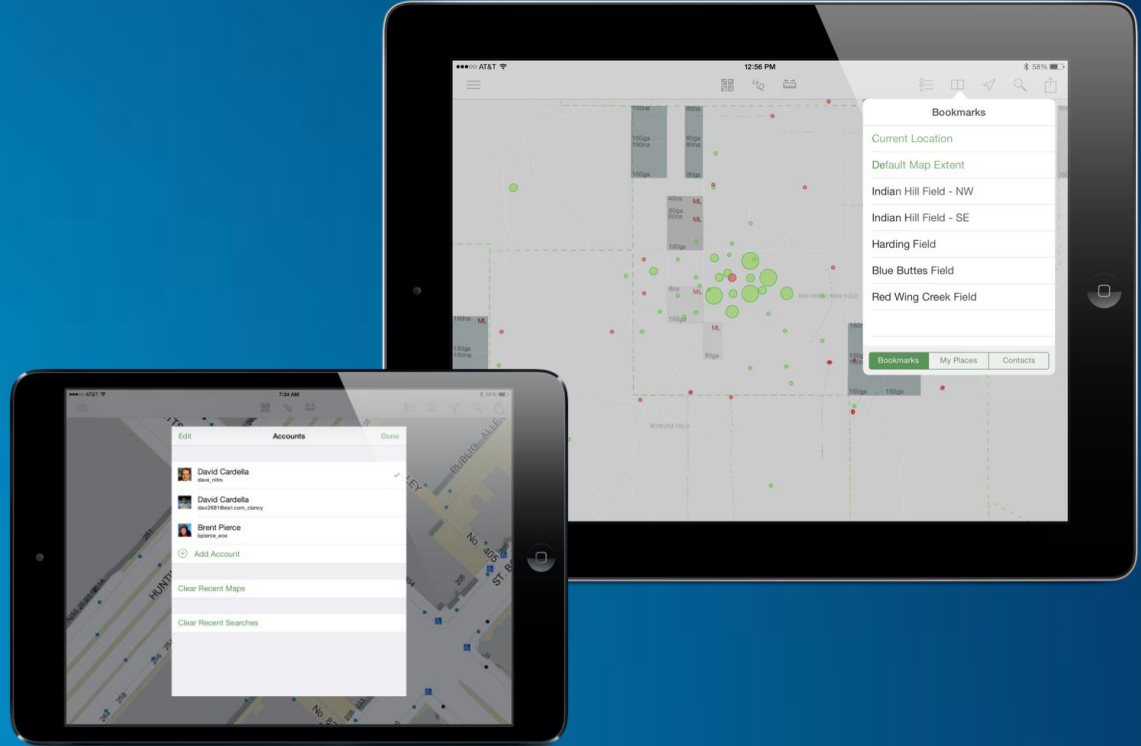
Using the map

- Change the basemap
- Change the visibility of map layers
- Enhanced Search
 - Place finding
 - Suggestions
 - Map coordinates
 - Features in the map



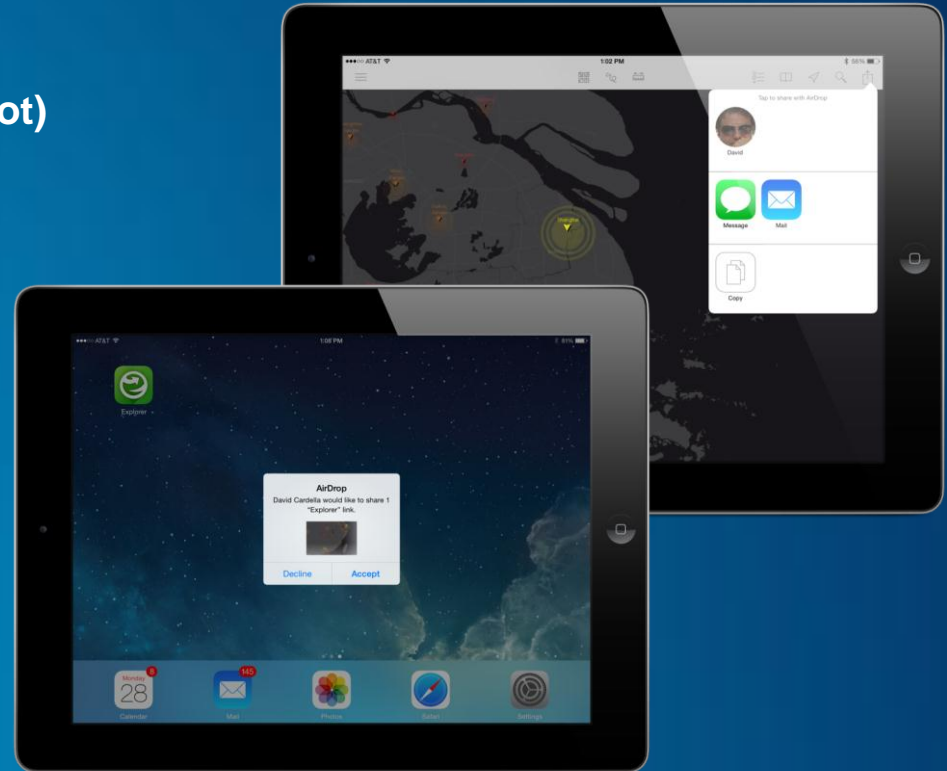
Using the map

- **Bookmarks**
 - Authored in the map
- **Personalize your experience**
 - My Places (device specific)
 - Device contacts
 - Multiple Accounts



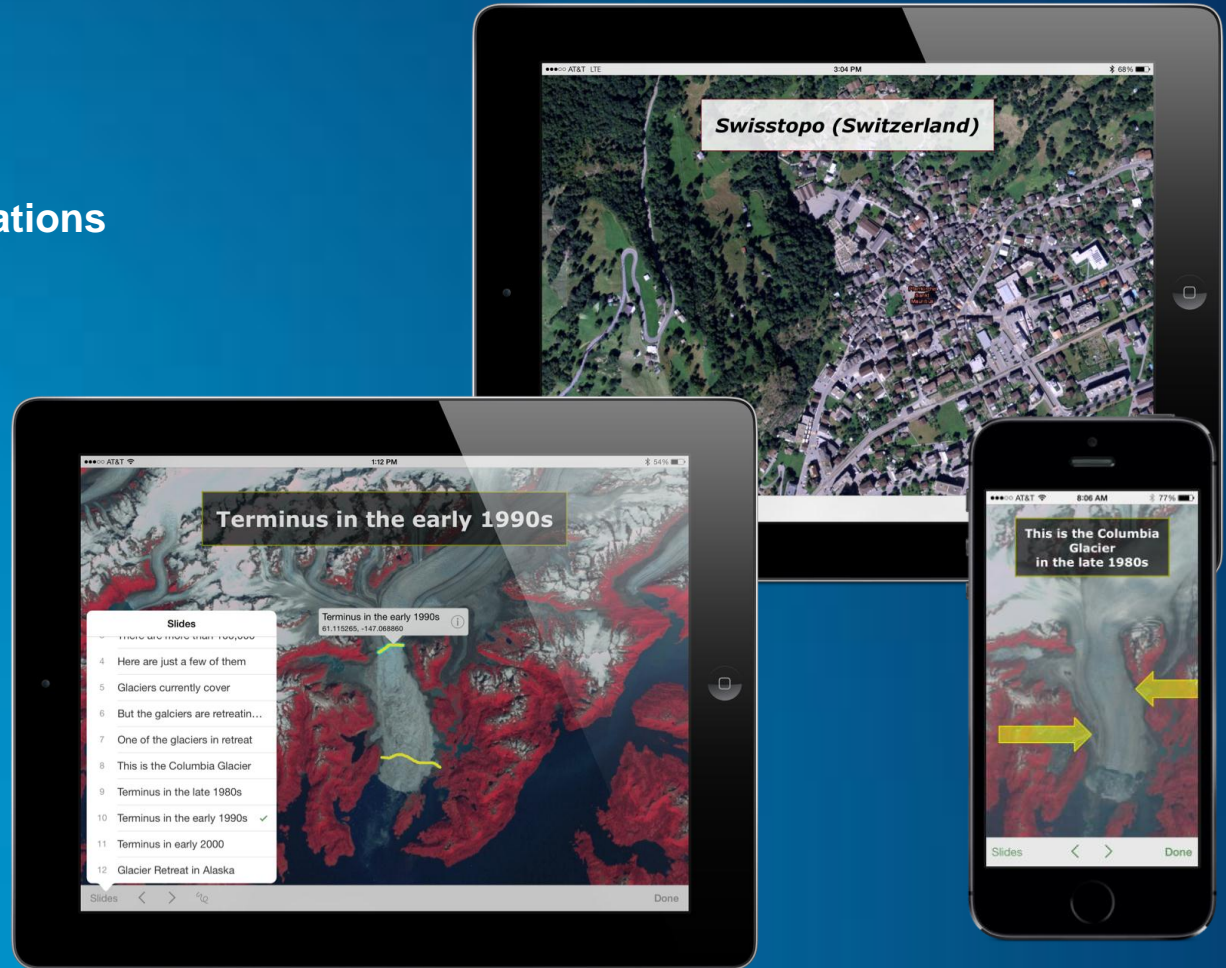
Sharing the map

- Share map link or Map image (screenshot)
- Air drop (iOS only)
- Email, Text message
- Copy and paste, Save image of Map
- Change map permissions
 - Org only, groups, everyone



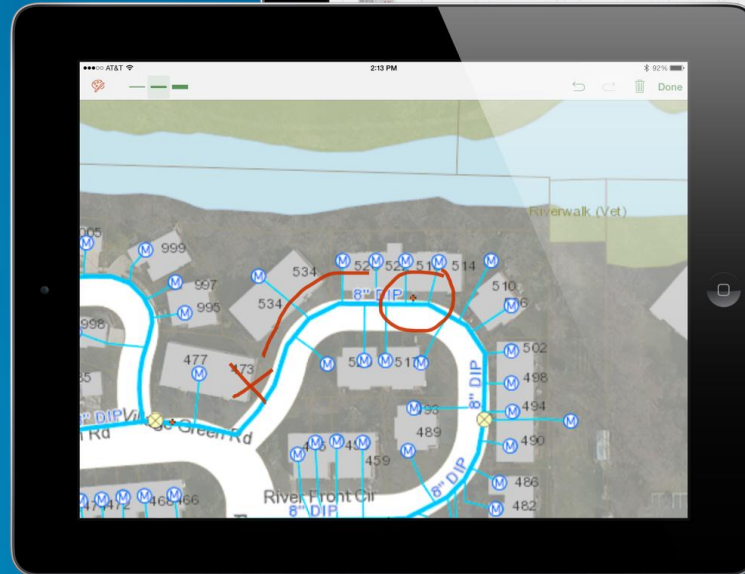
Brief Stakeholders

- Playback map presentations
 - Navigate slides
 - Interact with live map
 - View popups
 - Sketch



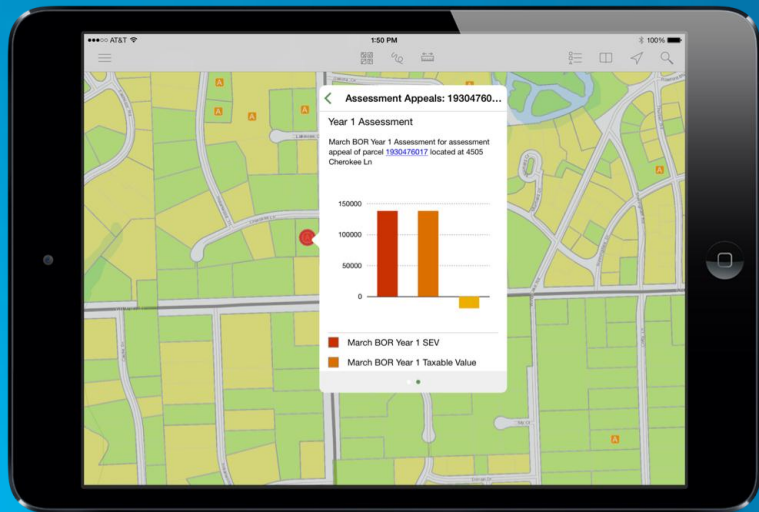
Collaborate

- Sketch on the map
 - Choose pen thickness
 - Choose pen color
 - Undo/redo
 - Share with other explorer users



Release Plan

- Initial release
 - iOS (iPhone and iPad)
 - Late April/Early May



- Future releases
 - More platforms (Android, Mac and Windows)
 - Web map creation/editing
 - Time aware maps
 - Offline map usage
 - 3D
 - Template-based feature editing
 - Directions
 - Analysis



Understanding our world.