Esri's Mobile Strategy: An Overview

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Agenda

- The ArcGIS Platform
- Esri's Strategy for Apps and Devices
- Technology Overview and Road Ahead
  - ArcPad
  - ArcGIS for Windows Mobile
  - ArcGIS app
  - Collector for ArcGIS
  - Explorer for ArcGIS
  - Web Apps
- Summary and Q&A

Mobile GIS

Extends the reach of ArcGIS from the office to the field

Key benefits

- Improve efficiency
- Increase accuracy
- Seamless flow of information
- Make more informed and timely decisions

Map infrastructure

Replace paper maps

Inspect Assets

Respond to events

Esri Strategy toward Mobility

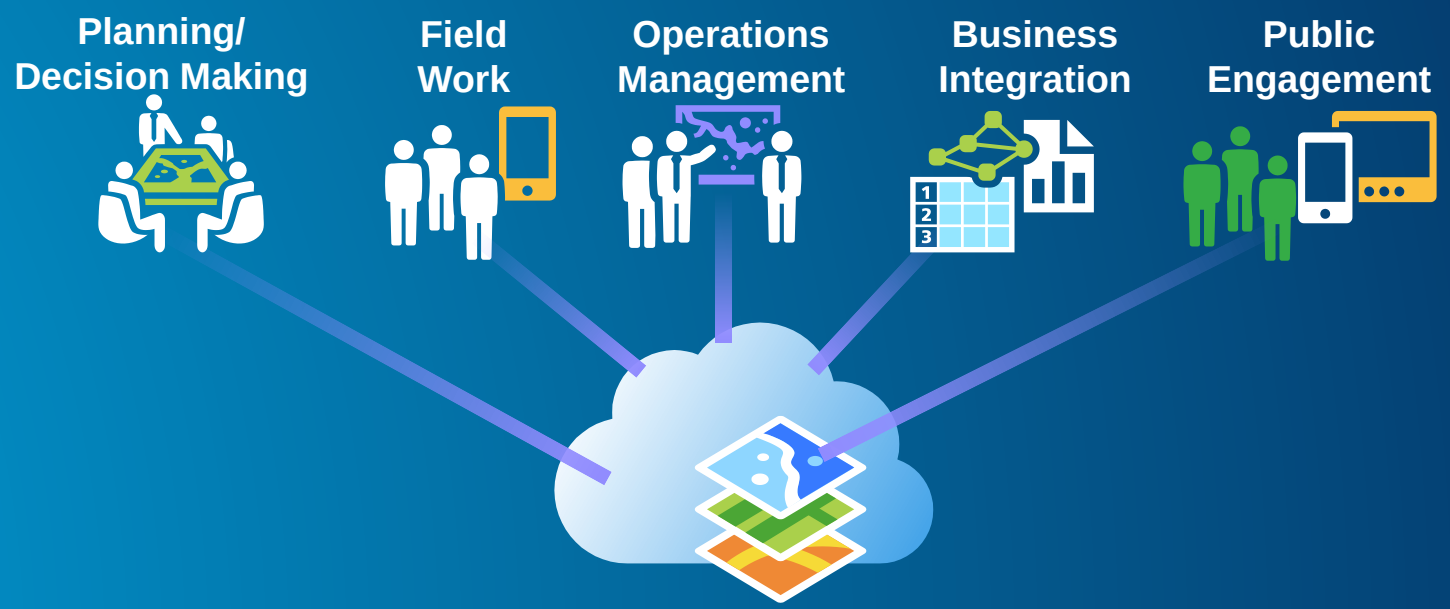
- **Extend the reach of Web GIS**
- **Platform agnostic**
- **Native apps/Web apps**
- **Developer Toolkits for partners**

The ArcGIS Platform

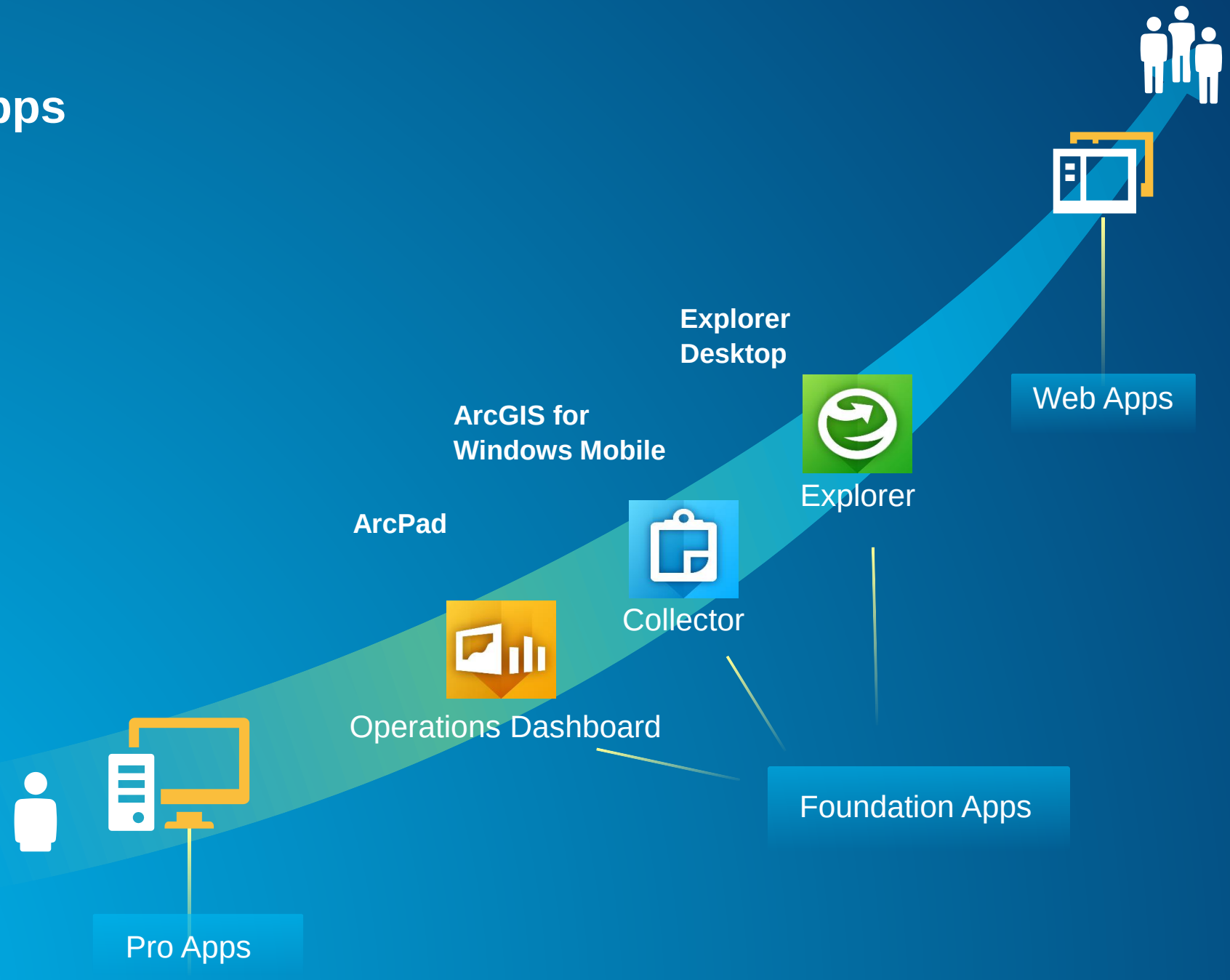
Available in the Cloud . . .
. . . and On-Premises

Esri's Mobile Strategy

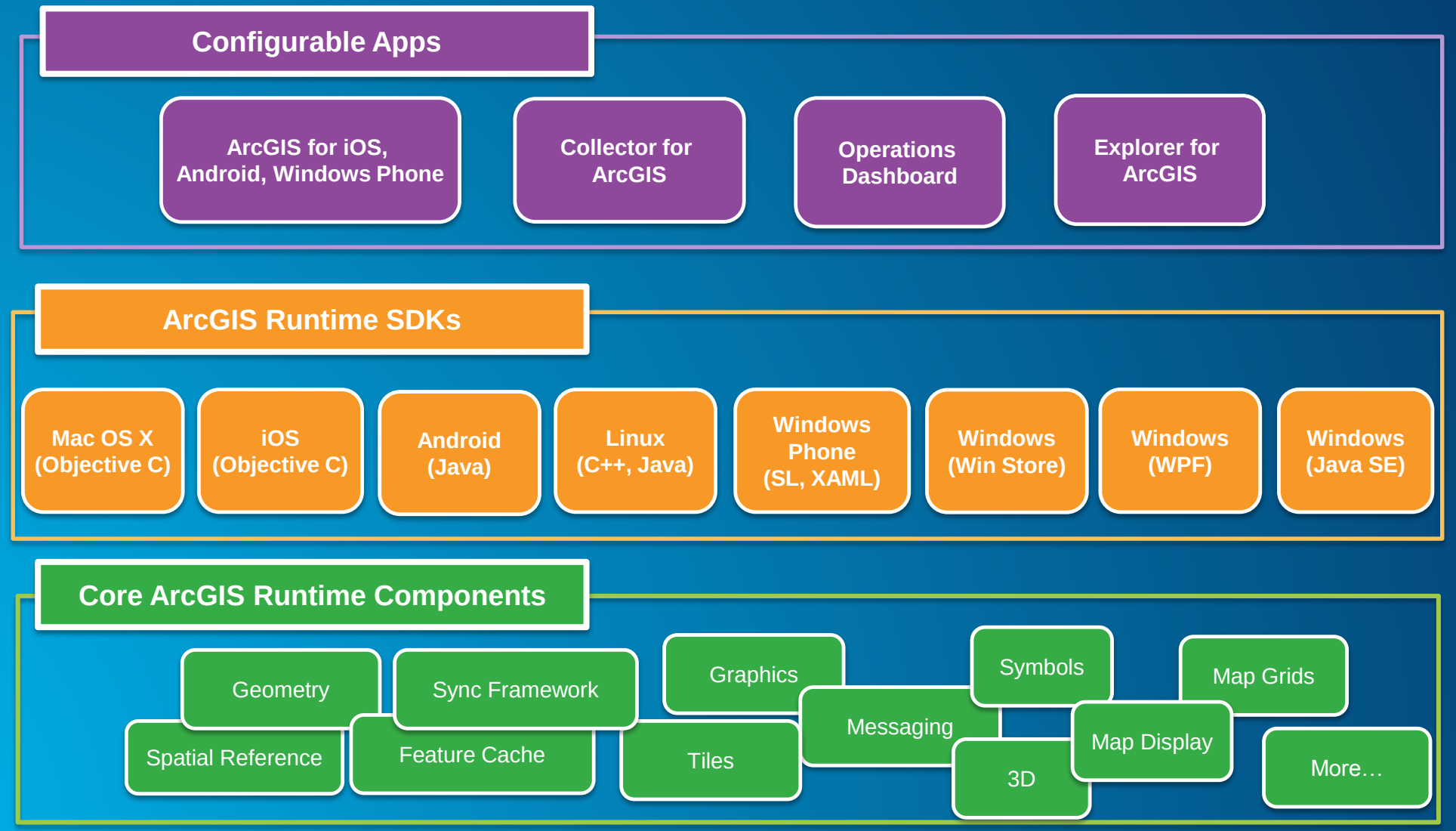
- Supports everyone in the organization
- Focused on a specific customer need
- Configurable, ready to use within your ArcGIS Organization
- Cross-platform
- Release updates frequently



ArcGIS Apps


Explorer
Desktop
ArcGIS for
Windows Mobile
ArcPad
Explorer
Collector
Operations Dashboard
Web Apps
Foundation Apps
Pro Apps

Device Platform Strategy



ArcPad

ArcPad

- Full-featured Mobile GIS app
- Ad-hoc data collection projects
- High accuracy GPS
- Configurable
- ArcGIS Desktop/ArcGIS Online used for packaging, deployment
- Custom forms
- Fully disconnected
- Users typically need training

ArcGIS for Windows Mobile

ArcGIS for Windows Mobile

Ready-to-use field GIS apps

- Rapid deployment of maps, apps and project
- Task-based, workflow driven user experience
- Disconnected
- Synchronization of data between field and office
- Focused mobile applications
- High accuracy data collection
- Users have little GIS training
- Scalable to large field workforce

ArcGIS for Windows Mobile

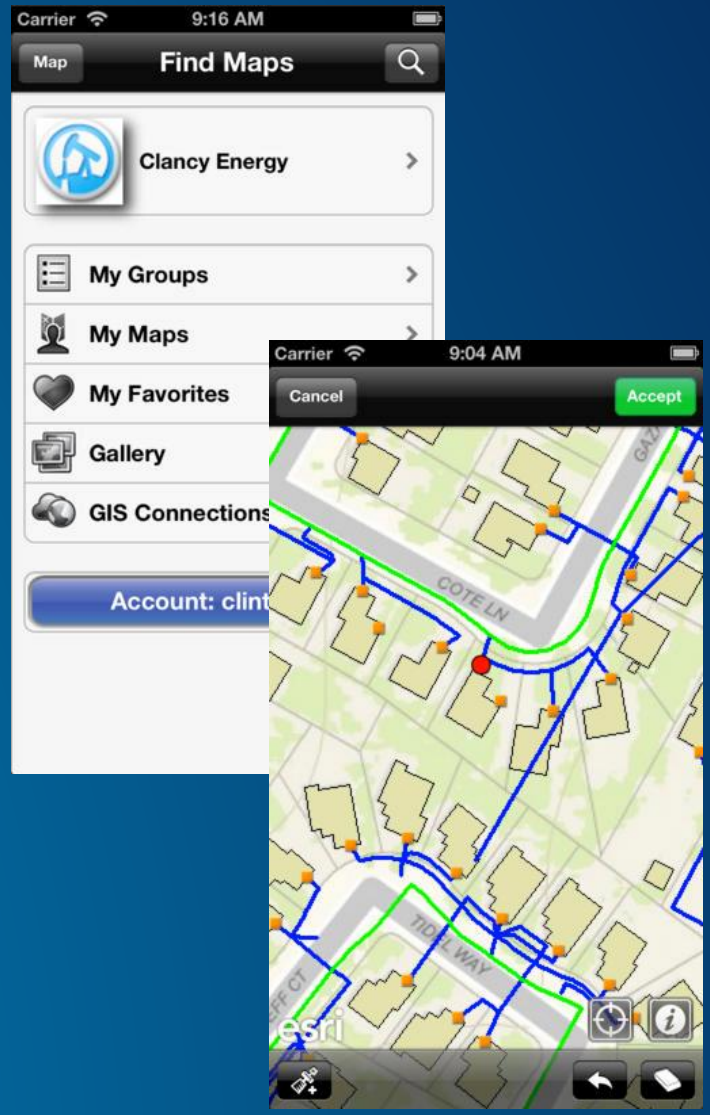
- Deliver GIS capabilities from centralized servers to mobile devices
- Enable field staff to perform:
  - Mapping
  - Spatial query
  - Sketching
  - GPS Integration
  - GIS Editing

ArcGIS for Smartphones/Tablets

ArcGIS App

- **First Esri app for smartphones/tablets**
- **Available on all platforms (Windows/Android/iOS)**
- **Extends your GIS from the office to the field**

- **Capabilities:**
  - Browse content from ArcGIS Online
  - Collect/edit/update features
  - Search, identify, measure, query your data
  - Share maps
  - NO offline capabilities



The “green” app

Collector for ArcGIS

Collector for ArcGIS

- **COTS mobile app targets field workflow needs**

- **Field Data Collection**
  - Use your GPS location or the map
  - Fill out forms
  - Find places and get directions
  - Measure lengths and areas
  - Capture media (pictures, videos)
  - Download maps to your device

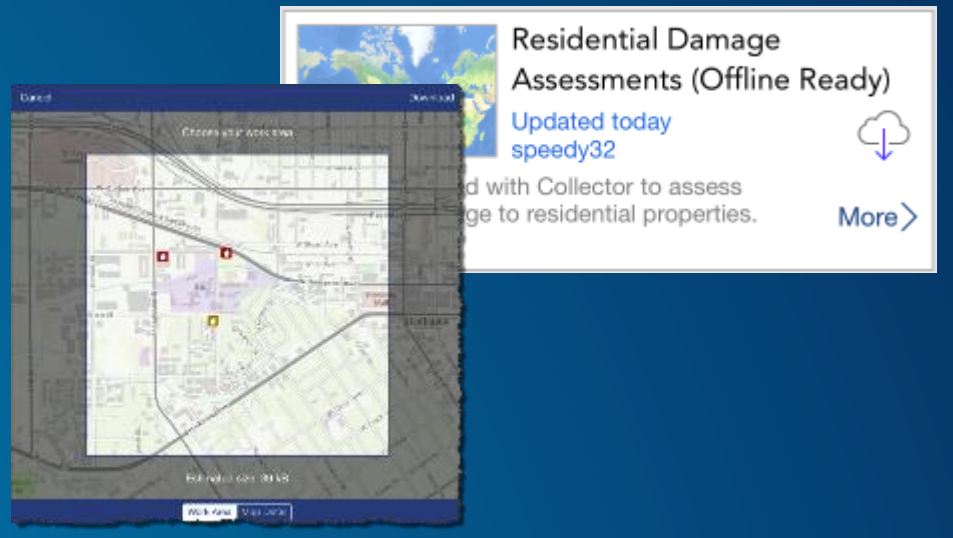
- **What you can use it for:**
  - Collect asset locations and status
  - Ground-truth GIS data
  - Make observations/conduct surveys
  - Replace paper-based forms/processes

Collector for ArcGIS

General Workflow:

1. • Create feature layer to receive edits (e.g. inspection points)
2. • Publish feature layer as a service (e.g. hosted in ArcGIS Online, or via ArcGIS Server)
3. • Create a web map that contains the editable service (and others)
4. • Share the web map with the user(s) who will edit
5. • Users access and use the map on their device

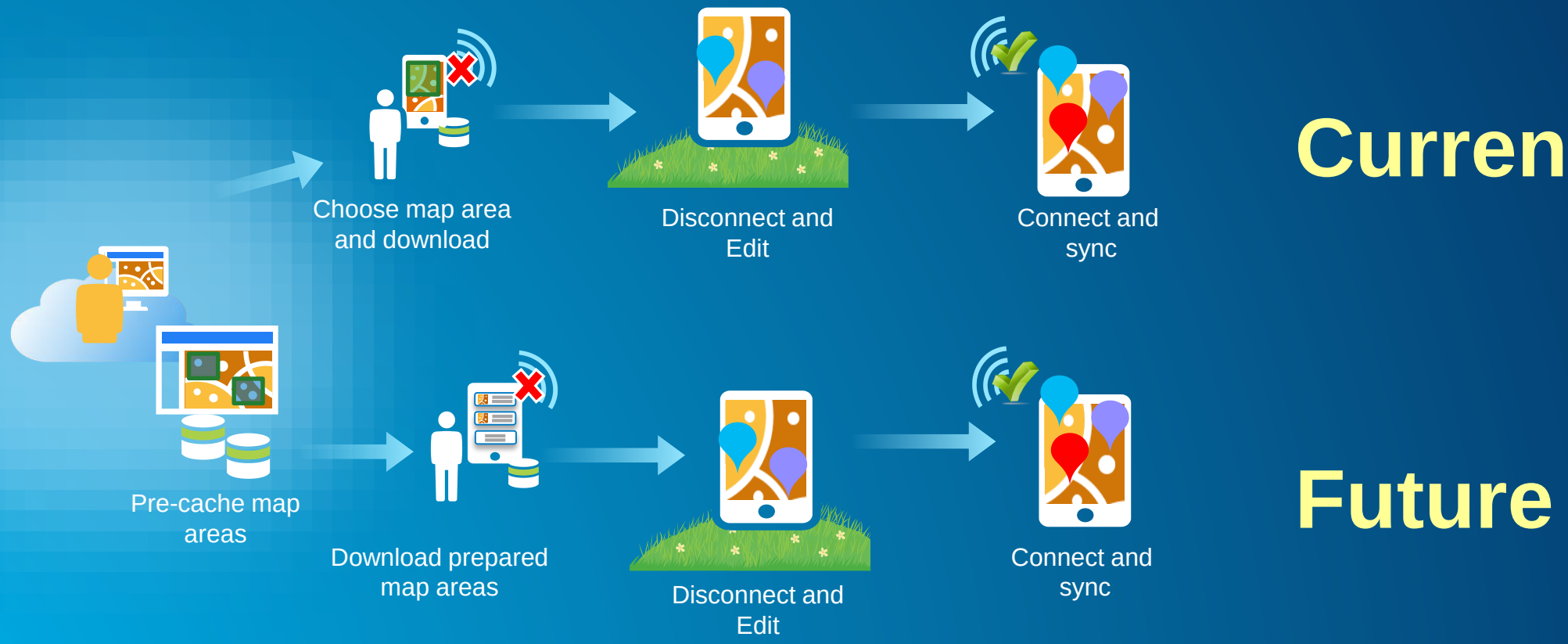
Working Offline with Collector



- **Field user can take their map offline and...**
  - View and interact with map
  - Measure distances and areas
  - View popups and media
  - Collect and update features
  - Synchronize changes between field and office

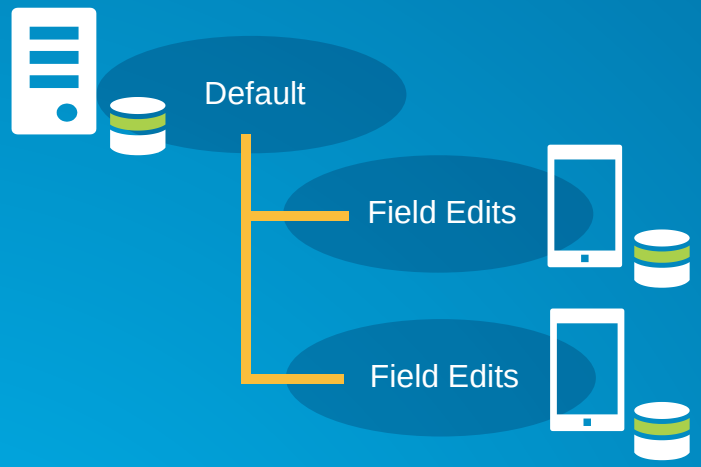
- **Preparing your data for offline use**
  - ArcGIS Server 10.2.2 (or later) or hosted feature layers
  - Feature Layers must have ‘sync’ operation enabled
  - Tiled Map Services (on-premises/hosted) – enable export tiles

Working Offline with Collector

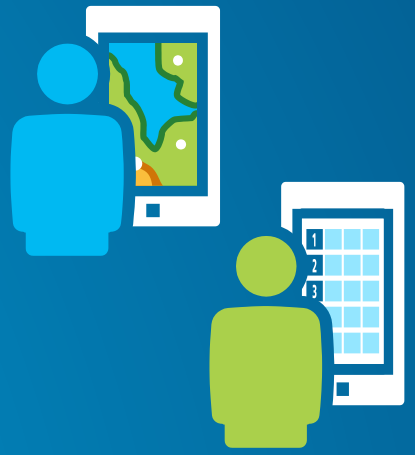


What's Coming Next with Collector for ArcGIS

- 10.3



Versioned Editing
(offline)

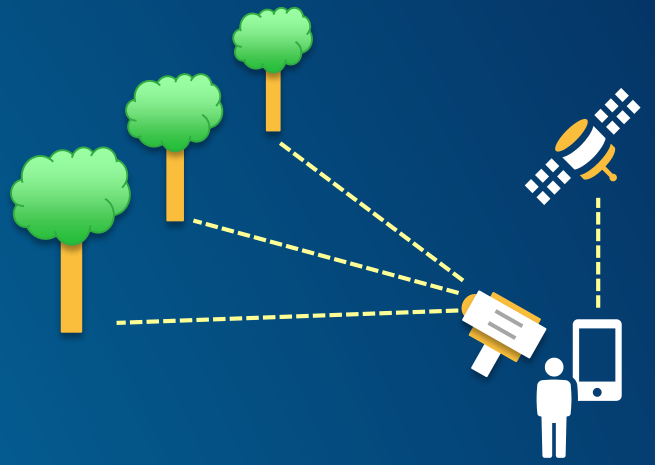


Editing Controls

Related Tables

What's Coming Later with Collector for ArcGIS

- Beyond 10.3:
  - Custom "smart" forms
  - Advanced collection methods
  - Vector basemaps
  - Feature editing tools (reshape, extend, etc.)
  - Windows platform

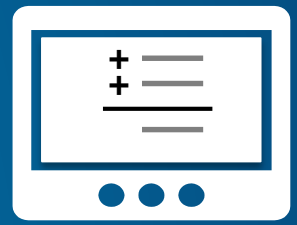


Laser Range Finders

Custom Forms

Grouping

Conditional Logic



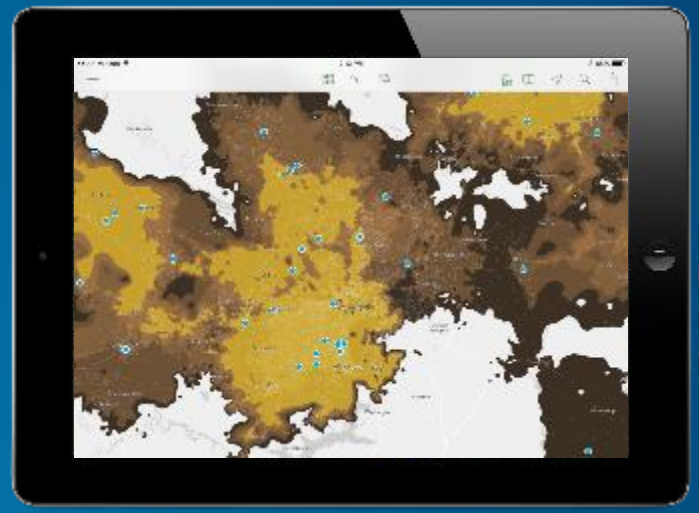
Equations

Demo: Collector for ArcGIS

Explorer for ArcGIS

Explorer for ArcGIS

- **New cross platform app for devices**
  - Phones, Tablets
  - iOS, OS X
- **What you can do:**
  - Discover and Use Maps
  - Search, Explore data
  - Present, Share and Collaborate with Maps



Tablets

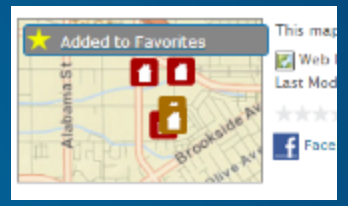
Phones

Demo:
Explorer for ArcGIS

Discover Maps

A Personalized Experience for Working with Maps

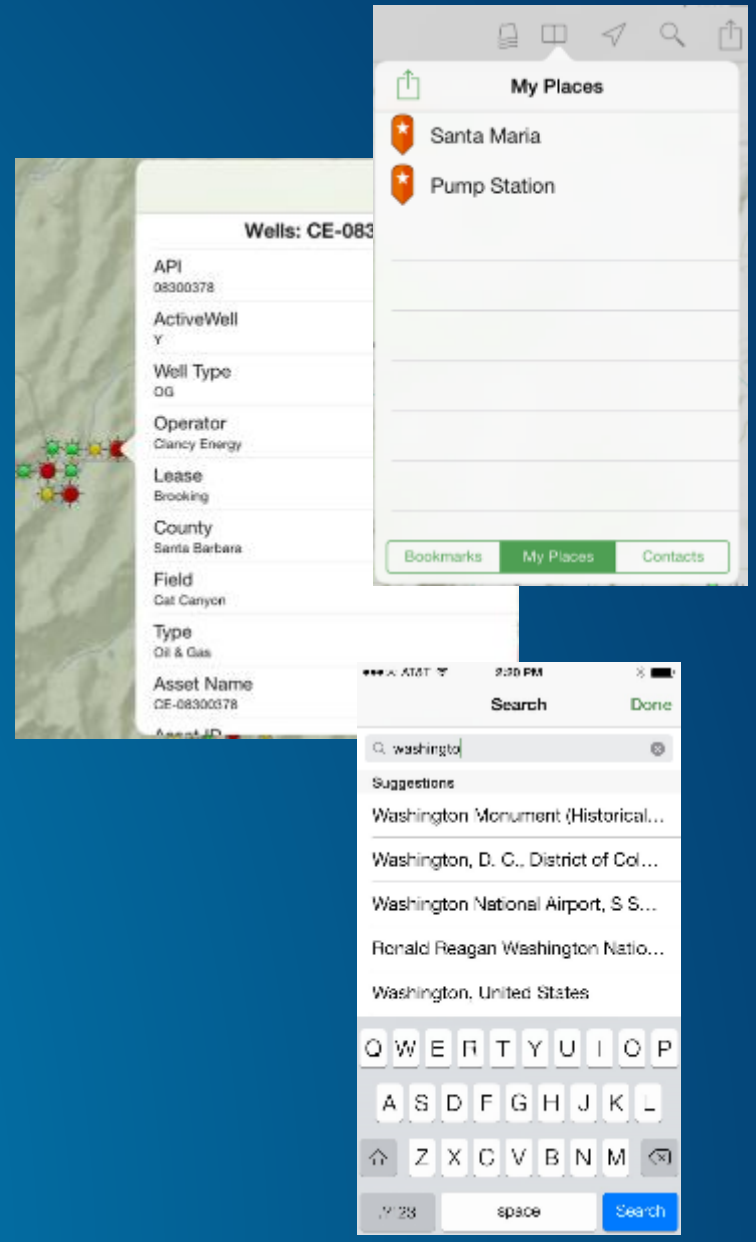
- **Use the maps you work with every day**
  - Favorites
  - My Maps
  - My Groups
  - Recently used
- **Search for Maps within your organization**
  - Featured and newest maps
- **Map Information**
  - View map details
  - Add maps to your favorites



Use and Search the Map

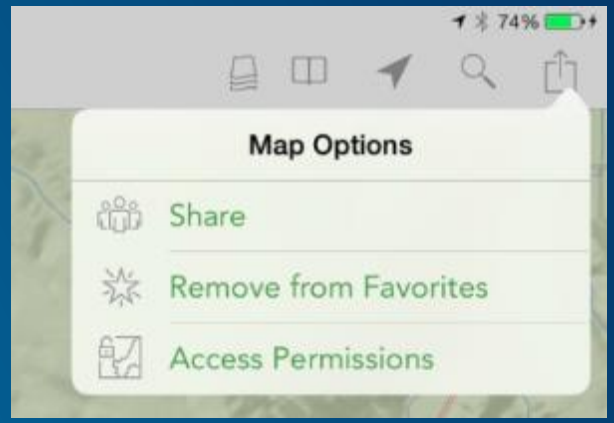
- **Key features for using maps**
  - Display Current Location
  - Measure Distances and Areas
  - View Feature Details
  - Change basemaps, turn layers on/off
  - Bookmarks, My Places, Contacts

- **Search the map for**
  - Places/addresses
  - Features
  - Locations by coordinate notation
  - Search suggestions

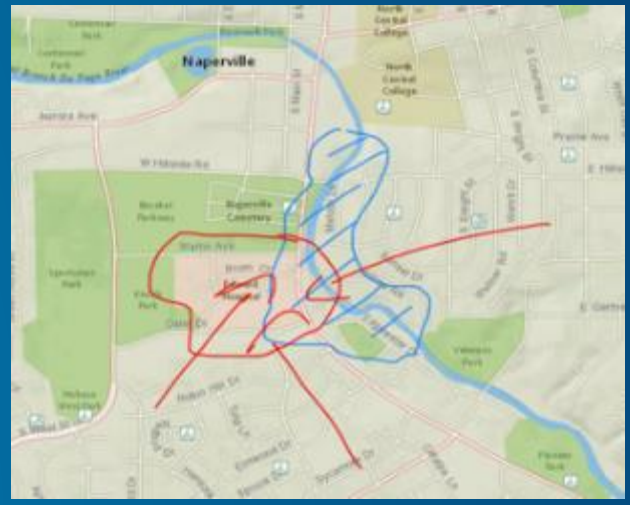


Share and Collaborate

- **Share maps**
  - Within your organization (groups, everyone)
  - Directly with others (Email, Text Message, AirDrop)



- **Collaborate**
  - Optimize the map view
  - Sketch on the map
  - View presentations



What's Coming with Explorer for ArcGIS

- **More platforms…**
  - Android (December 2014)
  - Windows (Q2 2015)
- **Considerations**
  - Create maps and layers
  - Offline capabilities
  - Template-based feature editing – Simple point, line, poly editing
  - Analysis tools

What's Coming with Explorer for ArcGIS

	Phone		Tablet		Desktop	
Work with ArcGIS Online	✔	✔	✔	✔	✔	✔
Work with Portal for ArcGIS	✔	✔	✔	✔	✔	✔
View maps	✔	✔	✔	✔	✔	✔
Author maps			✔	✔	✔	✔
Search data	✔	✔	✔	✔	✔	✔
Edit data			✔	✔		✔
Support non-spatial data (related tables)	✔	✔	✔	✔	✔	✔
Work offline	✔	✔	✔	✔	✔	✔
3D	✔	✔	✔	✔	✔	✔
Perform analysis	✔	✔	✔	✔	✔	✔

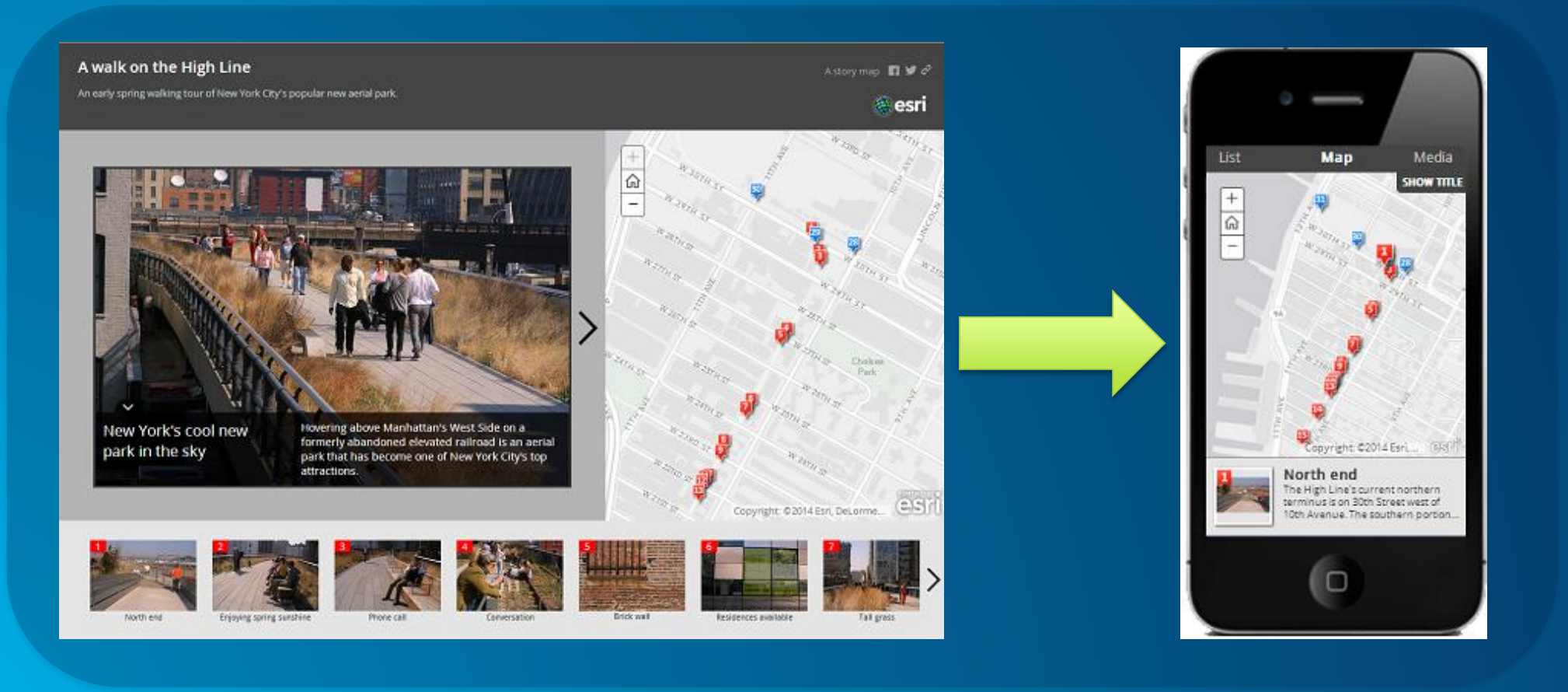
Functionality by platform
✔ released, ✔ in development, ✔ later
Blank cells indicate unplanned functionality.
Support for Windows Phone and Windows Store is currently not planned.

Supported Platforms and Esri Apps

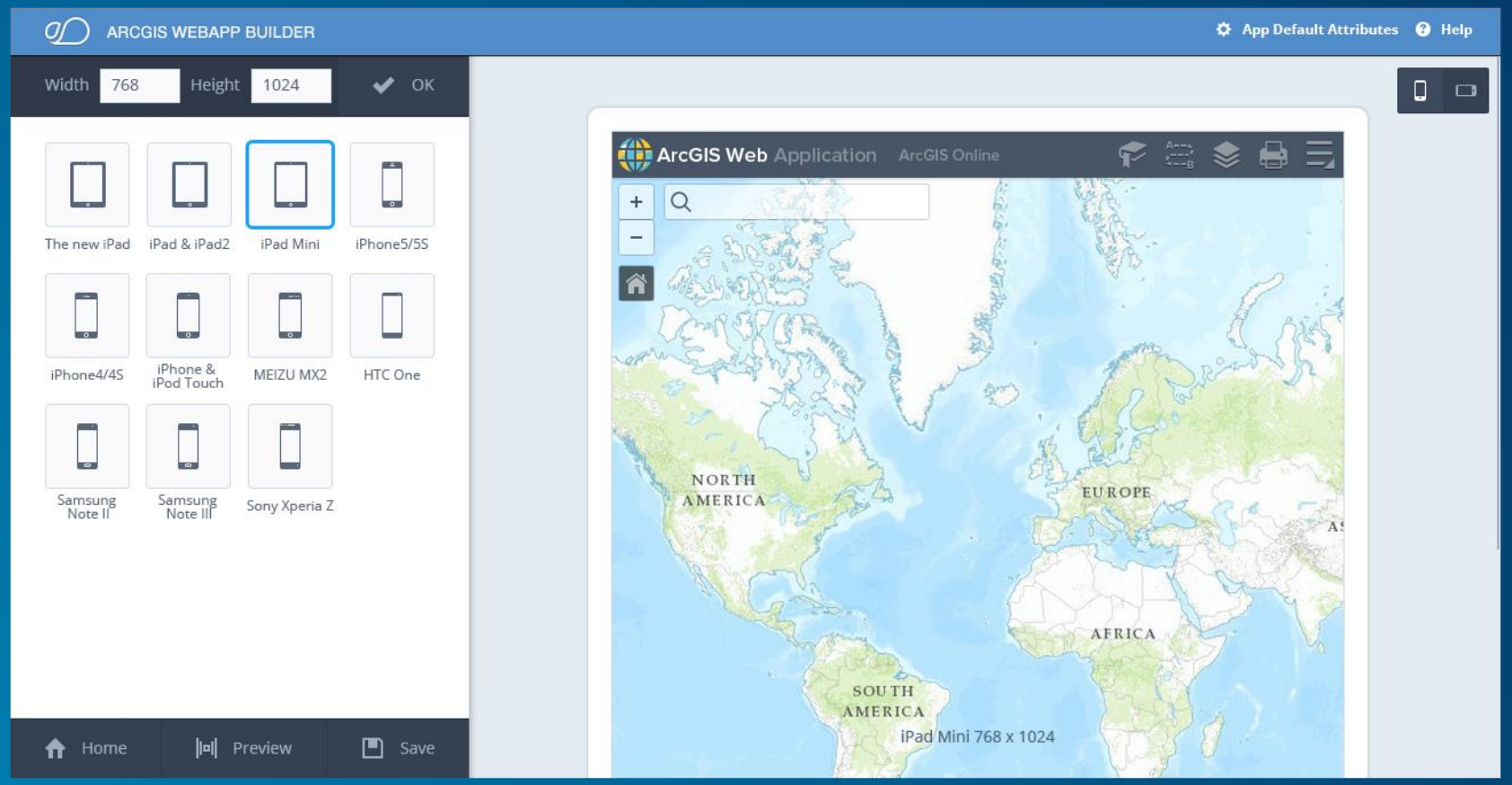
	Windows Mobile	Windows (XP,7,8)	Windows Phone	Android	iOS	OS X (Mac)
ArcPad	x	x				
ArcGIS for Windows Mobile	x	x				
ArcGIS for Smartphones /Tablets			x	x	x	
Collector for ArcGIS		x coming*	x coming	x	x	
Explorer for ArcGIS		x coming		x coming	x	x

Web Apps

Responsive Design



Web AppBuilder



Questions?

Understanding our world.