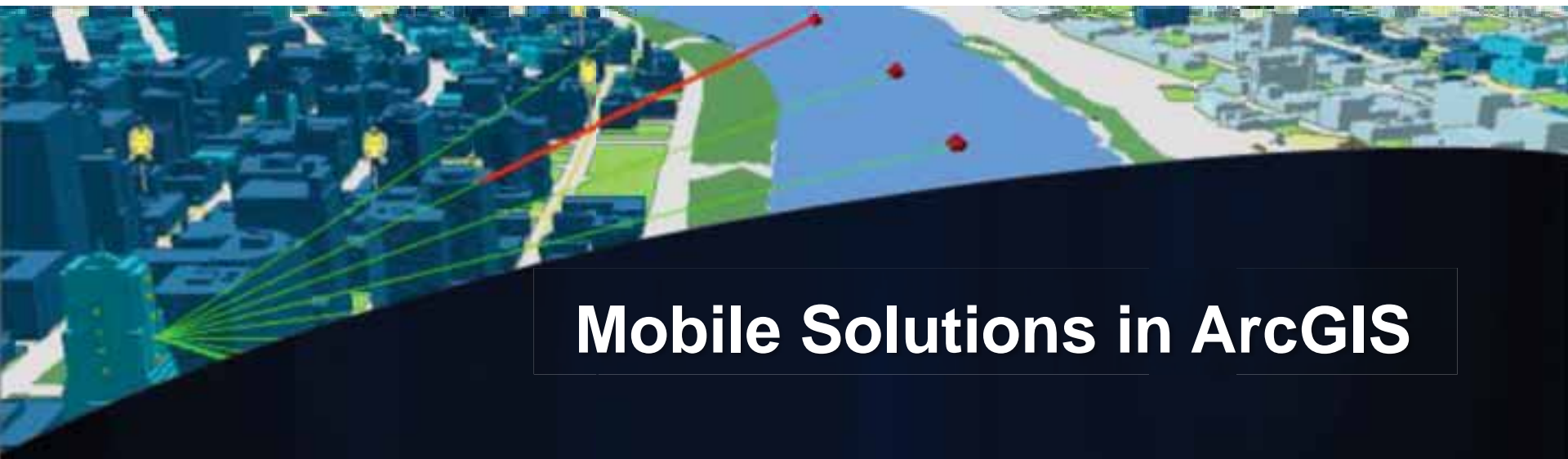


Esri | California • Hawaii • Nevada
Regional User Group Conference

February 23–24, 2011 • Esri • Redlands, CA



Mobile Solutions in ArcGIS

Justin Fan



Agenda

- **Introducing Mobile GIS**
- **Esri Mobile GIS solutions**
- **Selecting the right Mobile GIS solution**
- **Resources**
- **Q&A**

Introducing Mobile GIS

What is Mobile GIS?

Extends the reach of ArcGIS from the office to the field

- **With a Mobile GIS solution you can**
 - Carry your maps to the field
 - Collect and update geographic Information
 - Track and geo-collaborate



What are the Benefits of Mobile GIS?

- Replaces paper based workflows
- Improve efficiency and accuracy of field operations
- Rapid data collection and seamless data integration
- Helps to make informed and timely decisions



ArcGIS is a Complete System



Frequently Asked Questions about Mobile GIS

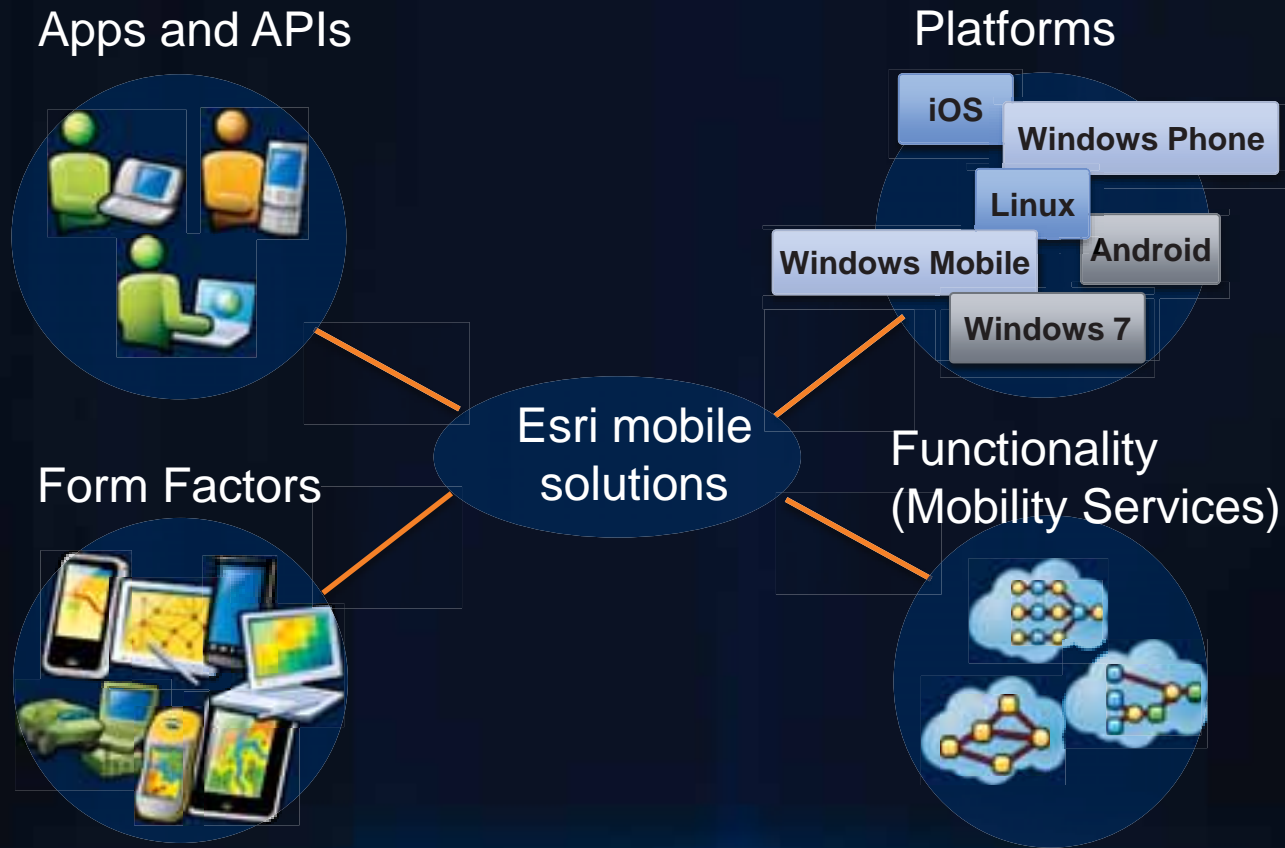
- **Should I choose ArcPad or ArcGIS Mobile?**
- **Should I pick ArcGIS for Smartphones instead?**
- **Which Smartphone ArcGIS application is right for me?**
- ...

Esri's Mobile GIS Solutions

- **Professional data collection**
 - ArcGIS Mobile
 - ArcPad
 - ArcGIS Engine
- **ArcGIS for smartphones/devices**
 - iOS
 - Windows Phone
 - Android
 - Blackberry (BP solutions)
- **Mobile Web applications**



Esri Mobile Technologies



Professional Data Collection

ArcGIS Mobile 10

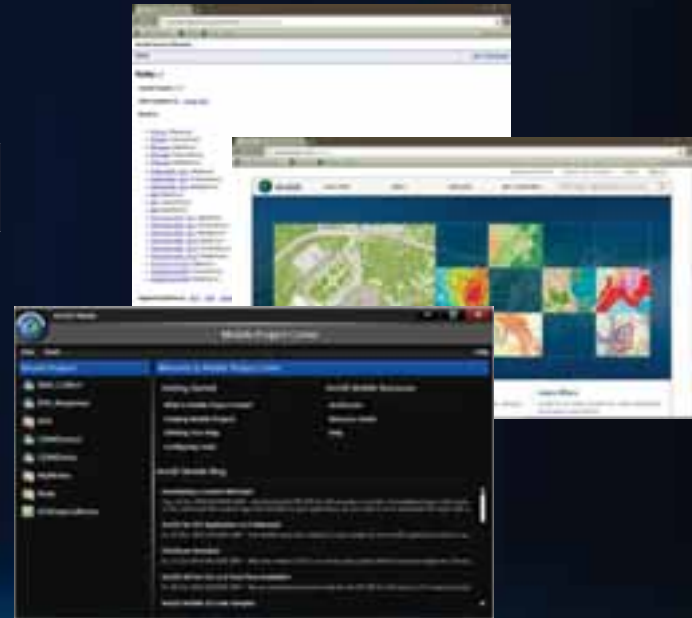
ArcGIS Mobile

- **Ready-to-deploy applications**
- **Task-based, workflow driven user experience**
- **Synchronization of data between field and office**
- **Sometimes connected workflow**
- **.NET software development kit (SDK)**
- **Desktop configuration and provisioning tools**



Mobile Project Center

- **Create & manage ArcGIS Mobile applications**
- **Publish and share maps & content**
 - Local
 - On-premise server
 - Cloud (ArcGIS.com)
- **Provision applications and data to field devices**

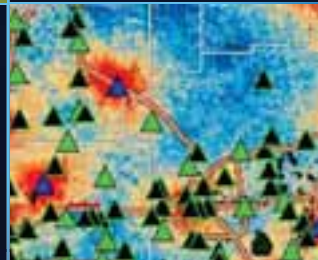
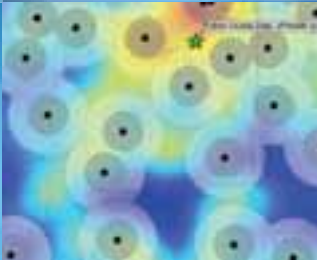


ArcGIS Mobile Workflow – Server



Fulton County Dept. of Health and Wellness

Mobile Project Center Demo

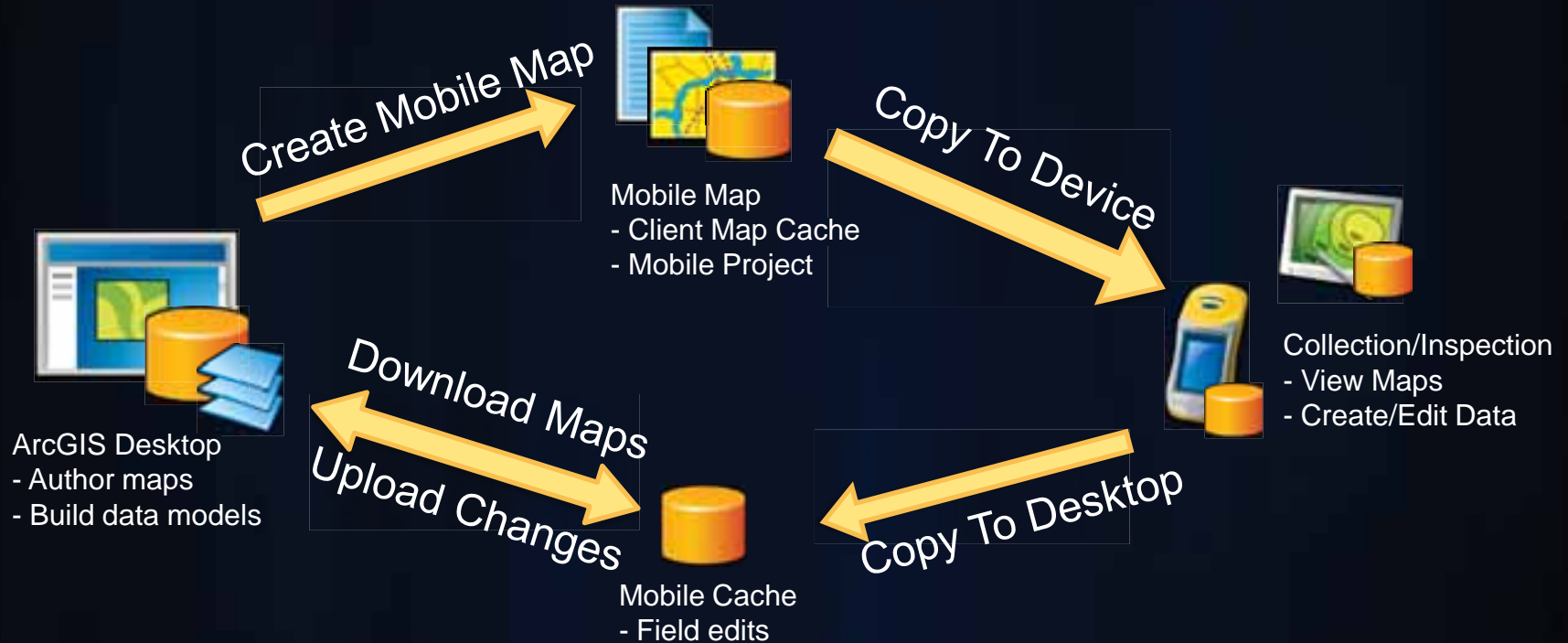


Leverage ArcGIS Desktop (New at 10 Release)

- **Deploy a single copy of ArcGIS Mobile**
- **Mobile GP tools:**
 - **Create & deploy caches to mobile devices**
 - **Sync field edits on the desktop (MXD)**
- **Purchased in 5-pack bundles**

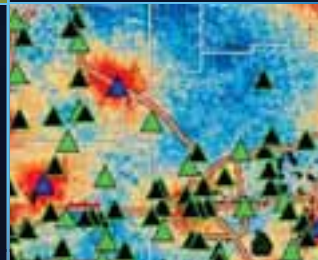
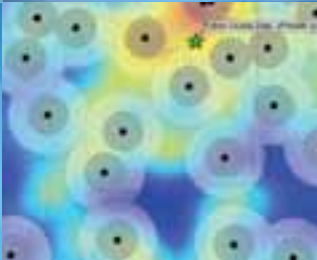


ArcGIS Mobile Workflow – Desktop



Fulton County Dept. of Health and Community Services

Mobile Desktop Workflow Demo



ArcGIS Mobile SDK

- **Microsoft .NET SDK**
 - **Extend field applications**
 - **Create focused Mobile GIS applications**
 - **Embed ArcGIS into existing line of business applications**
- **Download from Customer Care Portal**
- **Help and samples at ArcGIS Mobile Resource Center**



ArcPad

ArcPad 10

- **Mobile lightweight GIS application**
 - **Focused on field data collection**
 - **Targets GIS professional in the field**
 - **Synced with ArcGIS 10 release**



ArcPad 10 Key Features

- **Supports ArcGIS Online & Bing Maps**
- **Focused on ease of use (forms for related tables, Quick Capture Toolbar)**
- **Professional GPS/GIS data collection workflow**

ArcGIS for iOS

ArcGIS for iOS

- Application
- API



ArcGIS for iOS Application

- **Esri's first iOS application**
- **Universal Application:**
 - iPad
 - iPhone
 - iPod Touch
- **Works with maps:**
 - ArcGIS Online
 - On-premise content server
- **Free download on Apple's App Store**



ArcGIS API for iOS

- **Native objective C API**
- **Build focused mobile mapping applications**
 - **Embed GIS into an existing applications**
- **Download from Esri Resource Center**



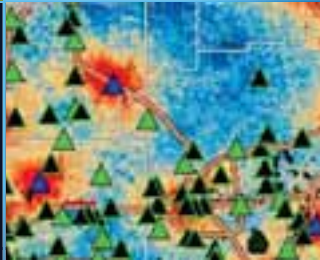
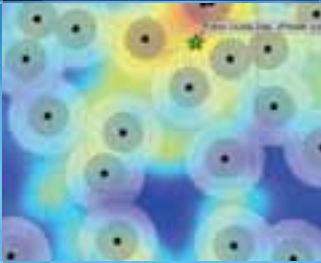
Who is it for?

- **Existing ArcGIS users**
 - **Consumers of enterprise GIS**
 - **Consumers of Community Mapping**
 - **GIS developers**
 - **Esri business partners**
- **iOS Community**
 - **iOS users**
 - **iOS Developers**



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iOS Demo



ArcGIS API for iOS Capabilities

- **Maps**

- Supports multiple map projections
- Dynamic and cached (tiled) map services, Bing and Open Street Map

- **Graphics**

- Sketch graphics on map canvas
- Create pop-ups

- **Tasks**

- Query, identify, find GIS features
- Collect GIS features
- Locate/geocode addresses

ArcGIS for Windows Phone

ArcGIS for Windows Phone

- **Application**

- 1.0 released

- Available from the Zune Marketplace

- Similar to ArcGIS for iOS

- **ArcGIS API for Windows Phone**

- 2.1 released

- Available from the Esri Resource Center



ArcGIS API for Windows Phone

- Silverlight development using VS 2010
- ArcGIS for Windows Phone Resource Center
 - Download API
 - Concepts and reference doc
 - Forums, blog, code gallery



ArcGIS for Android

ArcGIS for Android

- **Application**
 - In development
 - Built on the API
 - Similar functionalities as iOS app
 - Android Marketplaces
- **API**
 - Public beta



ArcGIS API for Android

- **Java**
- **ArcGIS for Android Resource Center**
 - **Download API**
 - **Concepts and reference documentations**
 - **Forums, blogs, and code gallery**



Mobile Web Applications

Mobile Web Applications

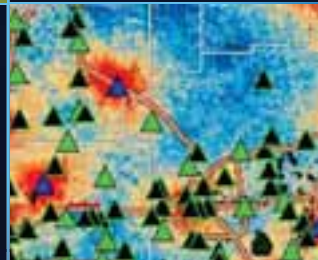
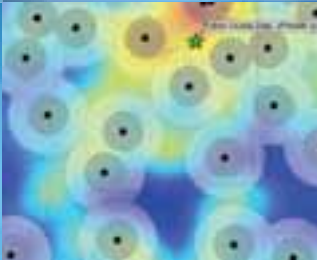
ArcGIS API for JavaScript

- **Mobile web apps built using HTML 5**
- **Designed to run on mobile devices**
 - **Compact build**
- **Runs on many mobile devices**



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Mobile Web Application Demo



Selecting the Right Mobile GIS Solution



Resources

- **ArcGIS Resource Center for Mobile**
 - <http://resources.arcgis.com/content/mobilegis/about>
 - **Video for ArcGIS Desktop and Mobile:**
<http://resources.arcgis.com/gallery/video/arcgis-mobile/details?entryID=85FA839A-1422-2418-882A-E1148D3DE858>
 - **Video for ArcGIS Mobile Project Center:**
<http://resources.arcgis.com/gallery/video/arcgis-mobile/details?entryID=86018768-1422-2418-8853-3213B5F47918>
- **ArcGIS.com**

Questions?





esri