

Federal GIS Conference

February 9–10, 2015 | Washington, DC



Web AppBuilder for ArcGIS: An Overview

Gary Sheppard | Solution Engineer | Esri

Daniel Weber | NGA

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ArcGIS Web Applications

Easy to
Build

Easy to
Use

Easy to
Share

Easy to
Reuse



Web AppBuilder for ArcGIS

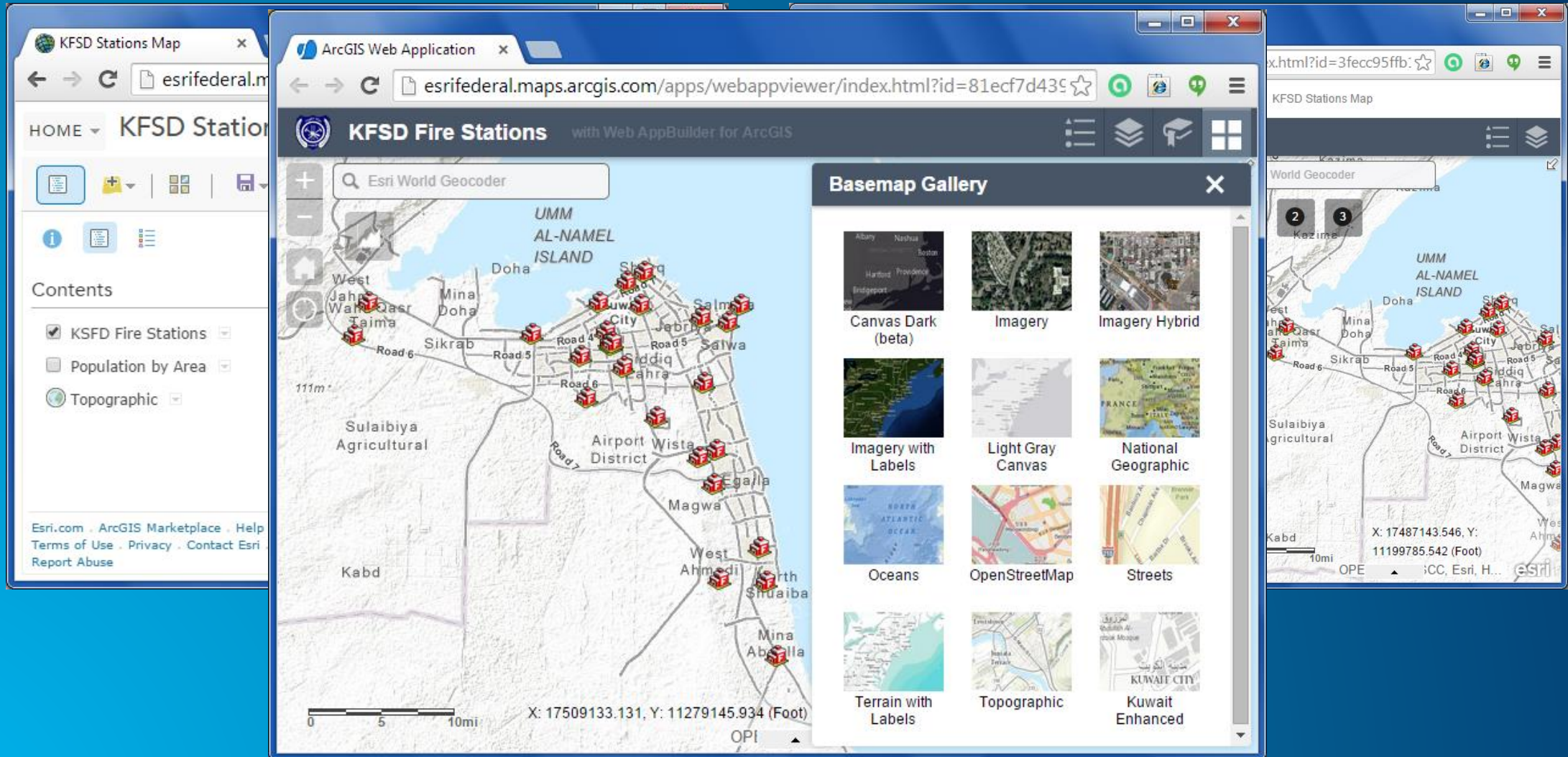


Web Application Templates

ArcGIS Web Apps

Demo

Web AppBuilder for ArcGIS



Benefits of Web AppBuilder for ArcGIS

- Produces apps for any device
- Leverages ArcGIS platform
 - ArcGIS Online
 - Portal for ArcGIS
- Provides built-in widgets and themes
- Allows developers to extend widgets and themes
- Lets you create and share web app templates

First Look at Web AppBuilder

- Make a web map
- Make it into an app with Web AppBuilder
- Explore Web AppBuilder in detail



Where do I get Web AppBuilder?

How to get Web AppBuilder

- **Hosted edition**
 - ArcGIS Online
 - Portal for ArcGIS 10.3 (December 2014)
- **Developer edition (separate download)**
 - <http://developers.arcgis.com>
 - Current release is 1.0 (December 2014)

Hosted edition vs. developer edition

Hosted edition

- **Runs in ArcGIS Online or Portal for ArcGIS**
- **Ready-to-use themes**
- **Ready-to-use widgets**
- **Integrates with hosting Portal (ArcGIS Online or on-premises)**

Developer edition

- **Runs on a machine of your choice**
 - **Node.js web server**
- **Ready-to-use and custom themes**
- **Ready-to-use and custom widgets**
- **Integrates with Portal of your choice (ArcGIS Online or on-premises)**

Custom Themes and Widgets

Demo

Create a Web App Template

Demo

Sharing Web Apps

- **Search** and discover in ArcGIS (Online or Portal)
- **Send** link via email, SMS, IM, social media, etc.
- **Stand up** apps in your environment

Web AppBuilder provides **flexible** app sharing

GEOINT App Store and AOSP Concept

Daniel Weber, Shana Simmons, and Matthew Kost
National Geospatial-Intelligence Agency



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GEOINT App Store and Application Operations Services Provider (AOSP) Concept

ESRI FEDUC
9-10 February 2015



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NGA Has a *Bold* Vision

Putting the Power of GEOINT in Your Hands



Provide online,
on-demand access
to our GEOINT
knowledge

Broaden and deepen
our analytic
expertise to produce
new value

"We will continue to deliver to our varied customer set what they need, when they need it, how they need it. But we have to be thinking about the future. We have to be continually pushing ourselves so that we do remain at the forefront."

– Letitia A. Long, Director, NGA



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Xperience Mission

X will guide NGA in providing a superior customer experience. Its mission is to lead the agency in establishing and sustaining the most efficient and effective online delivery system possible for providing easy access to GEOINT content, knowledge, and related services.

As part of the Xperience Mission, our goal to define, implement, and manage the NGA GEOINT App Store, to identify/promote the standards for GEOINT applications (web/mobile) and acquire new apps (web/mobile).

Capabilities Implementation (XDC) Division:

Designs, discover and exploit innovative business opportunities within the NSG, ASG and Commercial sector to ensure NGA customers receive value-added products and services.

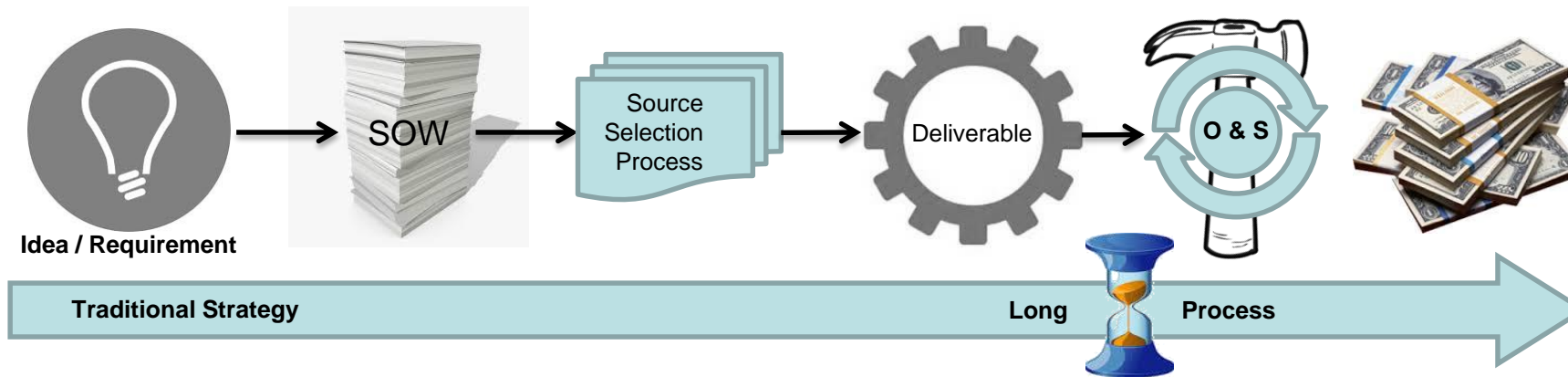


We will define all the Apps needed, but develop only those we have to, pay for only those we use, and control the user experience for any we endorse.



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Traditional Contracting Strategy



NGA tasks its development contractors to develop specific apps under various contracts.....

- Inefficient
- Costly (Operations, Sustainment and Enhancements)
- Does not capitalize on innovative technologies
- Not agile (rapid technological cycle)
- Does not leverage the diverse development community

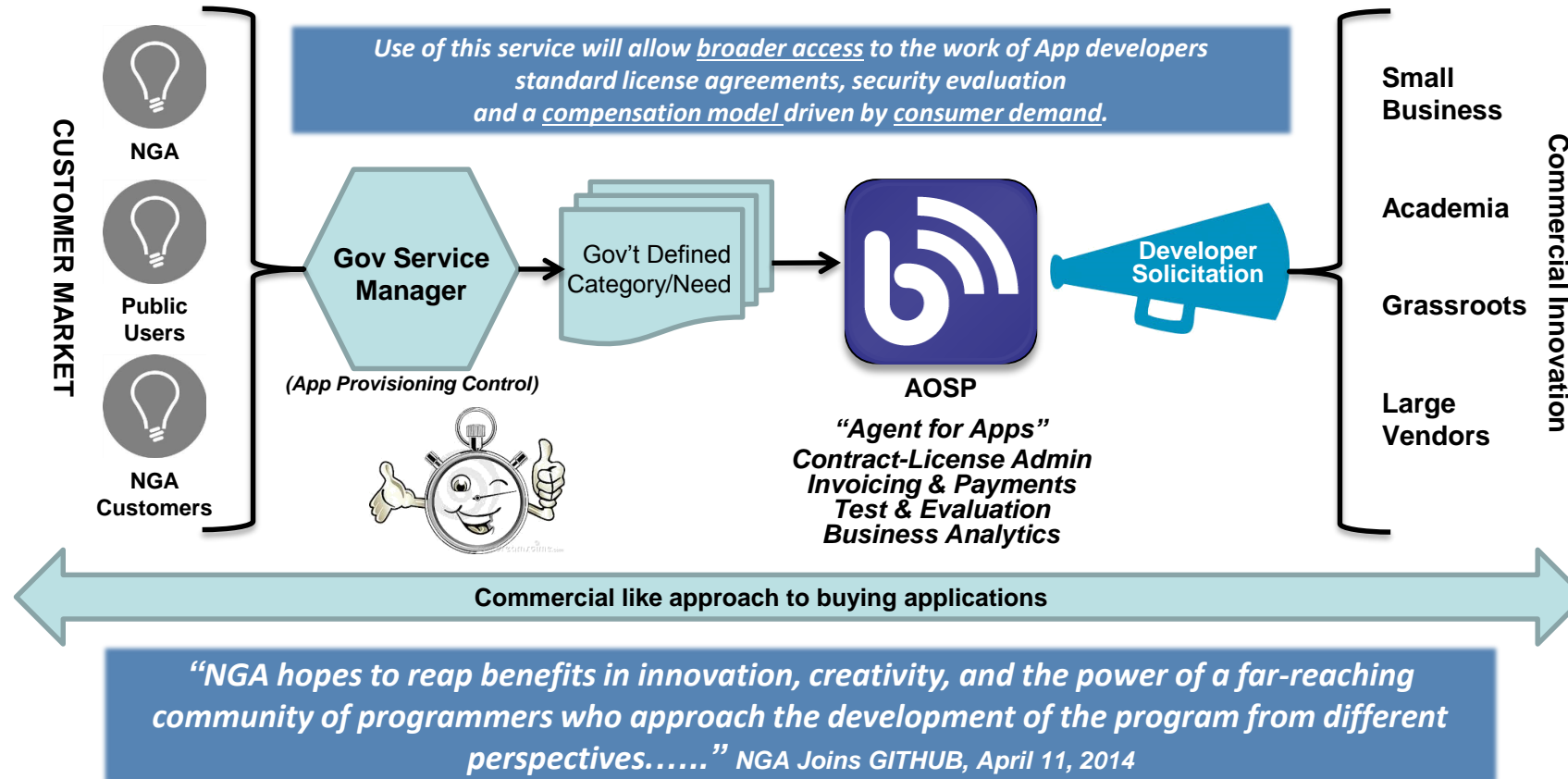




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Application Operations Services Provider (AOSP) Program



- Efficient (lower cost with faster delivery)
- Cost savings (not paying for development, maintenance, etc.)
- Commercial-like model for compensation (validated through metrics and business intelligence)
- Capitalizes on innovative technologies, does not limit the development community
- Agile (provides flexibility to solicit new ideas and decommission unused solutions)
- Decision driven by data (metrics used to validate decision and gain efficiencies)



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Vendor Compensation Model(s)

NOW

- Per download
- Provisioning controls based on download/ratings

Future

- Usage
- Time connected
- NGA Data accessed/manipulated/viewed
- User feedback.
- In app advertising
- In app upgrade purchases
- Fully integrated Business Intelligence to drive decisions



Through AOSP's innovative compensation approach we hope to energize all levels of the development community and achieve significant cost savings by only paying for finished software versus the associated development costs.





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NGA GEOINT App Store (3 Domains)

The image displays three overlapping screenshots of the GEOINT App Store interface. The leftmost screenshot is a desktop view showing a navigation sidebar with filters for 'Product Type' (Android, Desktop, iOS, Web), 'Agency' (Air Force, DigitalGlobe, DOI, NASA, NGA), and 'Category' (Communication/Collaboration). The main content area features a 'Featured' section with 'Aviator Apps' and a list of 'All' apps, including 'Aero App (iOS)' with 10140 views and 4134 downloads. The middle screenshot is a mobile app view showing a 'Native Apps: 11' banner, a 'Reviews' section, and an 'App Details' view for 'Aero App (iOS)' (Version 1.3.1412) which is already installed. The rightmost screenshot shows a grid of app cards with 'Install' or 'Open' buttons, including 'DICE' (Version 1.0), 'EQUIS (iOS)' (Version 2.2.5), 'Foster's Asam' (Version 1.0), 'EOSDIS Worldview' (Version 0.4.3), 'Foster's Cookbook', and 'Gadget Blog 2 : 14:30'.

Customer experience upgrades, increased filtering capability and business analytics



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How many ways can our data be exploited?

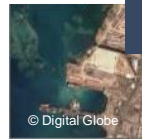
Remotely Sensed Data



Panchromatic



Infrared



Multispectral



Hyperspectral



Radar



Foundation Data



Land

- Feature Data
- Vegetation
- Terrain
- Maps
- Controlled Imagery



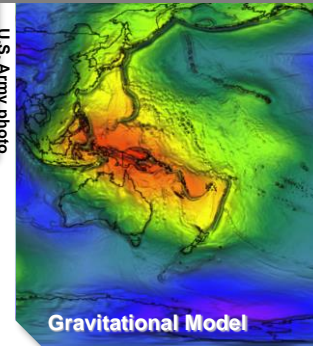
Sea

- Safety of Navigation
- Maritime Information
- Maritime Surveys
- Charts
- Notice to Mariners



Air

- Safety of Navigation
- Aeronautical Information
- Aeronautical Surveys
- FLIPS
- Charts
- Vertical Obstructions



Science

- GPS
- Photography
- Gravity
- Coordinate Systems



Research

- Human Geography
- Geographic Names
- Open Source
- Maritime and Land Boundaries



DoD Aeronautical Application- Aero

Replicated the success of commercial industry within the commercial aviation community

- EFB one of fifteen known mobile pilots ongoing within DoD today.
- GOAL: To provide a free solution to view NGA's suite of FLIP products with the goal of reducing our customers reliance on our hardcopy products
- Currently supports in excess of 25,000 iPads and Android devices across the DoD (AMC/AFSOC)
- AMC estimates \$500,000 in annual savings due to increased fuel efficiency alone.



"...NGA produces in excess of 10,000,00 books and charts annually at a cost of approximately \$25,000,000 for printing and distribution..." NGA FY-2012



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NGA GEOINT App Stores

JWICS – <https://apps.nga.ic.gov>

SIPR – <https://apps.nga.smil.mil>

WWW – <https://apps.nga.mil>





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**Don't forget to complete
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Print your customized Certificate of Attendance!

Printing stations located on L St. Bridge, next to registration

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GIS Solutions EXPO, Hall D

Monday, 12:30pm – 6:30pm

Tuesday, 10:45 AM–4:00 PM

- Exhibitors
- Hands-On Learning Lab
- Technical & Extended Support
- Demo Theater
- Esri Showcase

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Networking Reception:

National Museum of American History

Tuesday, 6:30 PM–9:30 PM
Bus Pickup located on L Street

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Interested in diving deeper into Esri technology?

Add a day to your Fed GIS experience and register to attend the Esri DevSummit Washington DC. Stop by the registration counter to sign up.