



MAKING APPS MEANINGFUL FOR LOCAL GOVERNMENT:

**Lessons Learned from the Esri-ICMA Executive
White Boarding Exercises**



In 2013, ICMA teamed up with its longtime Strategic Partner Esri, the premiere geographic information system (GIS) software solution, to begin a dialogue about what local government executives and staff need in apps, dashboards, and other smart tools to deliver services more efficiently and engage with their citizens more effectively. Since that time, ICMA and Esri have cohosted a number of White Boarding Exercises to learn more about the technology needs of local government officials.

What is a White Boarding Exercise?

When professionals want to work out the answers to a design challenge, they often take to a white board—just like teachers use in school—to map out possible solutions. The intent of a White Boarding Exercise is to capture the ideas of all the participants to answer design challenges. Small groups of about twelve to fifteen carefully selected local government executives from across the country, representing communities large (Montgomery County, MD) and small (Hickman, NE), spend a day in a think tank environment, where they learn about emerging technology trends and discuss the needs of their organizations.

“I like the mechanics of this meeting. . . . This is productive.”

—**Enrique Martinez**,
city manager, City of Redlands, CA

What Do Local Government Executives Want from Apps?

According to the Pew Research Internet Project undertaken in January 2014, nearly 90% of all American adults own a cell phone and 58% have a smartphone. With the growing popularity of e-readers, tablets, and two-in-ones (laptop/tablets), the number of available apps will also likely increase.

When apps first burst on the technology scene, those for local governments were usually custom-built by developers and programmers. However, the success of those first apps largely depended on the local government savvy of the developer. Some developers understood how local governments operate and could work with existing legacy systems to generate the reports needed, but many did not.

A lack of communication and interaction between local government professionals and web developers still exists to some degree, and local government professionals need to use some type of readiness assessment to define the needs of their specific communities. But on a broader scale, participants in the White Boarding Exercise offered the following ideas about what they want from apps:

Service Delivery

- More savvy and strategic use of technology
- Better understanding of budget implications and effective decision making
- Ability to “rightsize” local government using technology
- Scalable solutions that can be adopted by both large and small communities
- Tools for managing and archiving data
- Ability to share services among local governments as solutions are brought online

Citizen and Community Engagement

- Improved communication with citizens
- An understanding of services that citizens need beyond traditional infrastructure
- Better understanding of key business drivers in the community
- Partnership opportunities with the private sector
- Open government and greater transparency in operations

Community Resilience

- Understanding of the “big picture”

- Modeling the physical impacts of climate change
- Identification of social equity concerns and the ability to work with low-income communities
- Cost-benefit analysis the needs of the individual

“As we [local government managers] move forward to address the issues of climate change and adapt to new conditions, we must educate ourselves and our elected officials on to the need to invest in GIS as a tool to effectuate solutions.”

—Lee Feldman,
city manager, City of Fort Lauderdale, FL, and
chair, ICMA Sustainability Advisory Committee

Characteristics of Great Apps and Tools

When launching a new local government system that will be widely used by citizens or staff, it’s critical to have a well-designed app. There are many different opinions on what goes into making a great app or other technology tool. Below is a list of characteristics that exercise participants suggested managers consider before making an investment.

- Is easy to use, easy to navigate within, and quick
- Makes a customized profile available for user
- Provides smooth integration with back-end systems
- Can use readily available data and not create redundant data
- Requires low-energy consumption
- Is highly visual and intuitive
- Functions on different platforms (desktop, laptop, tablet, smart phone, etc.)
- Autopopulates fields whenever possible
- Provides seamless connections for citizen users
- Automates paper processes, increasing overall productivity
- Operates in real time
- Provides an easily defined return on investment (ROI)

- Is useful for two-way communications with staff and citizens
- Uses underlying data standards
- Is entertaining and fun to use
- Makes data input and retrieval easy
- Is readable for older citizens
- Exports information easily into another form, such as a text or a table.

Risks and Concerns Associated with App Selection and Implementation

- High costs
- Staff ability to provide support
- Obsolescence over time
- Lack of sponsorship within the organization
- Lack of clear need
- Difficulty in transitioning to them
- Longer and costlier implementation than anticipated
- Lack of resources to maintain them over time
- Ability of citizens to adapt
- Need to educate new elected officials
- Lack of a master data plan
- Inaccuracy of both existing and new data

Needed Apps as Identified by Local Governments

Participants identified these priority apps from literally hundreds of ideas developed during the course of the White Boarding Exercises:

“I see a cultural shift in our organization, where people are trying to figure out how what they do in engineering impacts water or human rights and then determine how we can better serve the citizen. Using GIS tools and mapping is a great opportunity for us to figure out how that’s going to happen.”

—Cori Burbach,
sustainability coordinator, City of Dubuque, Iowa

- Ability to mine social media
- Matching employers with employees in the community
- Advertising and promoting the community
- Supporting technology startup companies
- Being prepared: planning for community resilience
- Customizing dashboards for local government employees
- Using games to demonstrate snow pack impact
- Tracking use of parks and recreation facilities
- Predicting the impact of a new housing development

To learn more about making apps meaningful for local governments, check out www.icma.org/localgovtechalliance.