

## Issue Brief

# Collaborative Community Development:

Using ECM to connect planning, mapping and asset management

### Government is Reliant on Information, Shared Broadly

One of the primary responsibilities of local governments is to oversee planning and assets that are fundamental to a region's functioning and development. Constituents are reliant upon local government to do the best job possible in maintaining public infrastructure assets and expanding growth in ways beneficial for the greater community. However, the operation of these governmental functions can be complicated and time consuming.

Asset management, planning and development, and maintenance of public works and other constituent services, require extensive record keeping and information administration. These responsibilities are often divided across a number of different departments, and a significant range of documents and information (e.g., records, plans, permits) must be stored, retrieved, edited or updated for these purposes. For example, new building construction requires getting the land, submitting multiple plan sets and obtaining permitting that would take a developer to multiple departments and require the production, submittal, revision and re-submittal of plans — a potentially lengthy process that must be completed before a shovel ever touches the ground.

Information must also be stored for use by various departments in the development, inspection or maintenance of an asset over time. Take the new building construction example: Records are needed should the building be renovated, sold or have its use changed. Alternatively, public works departments provide oversight for public assets across broad areas, like all of the fire hydrants in a city. The plotting of the location for each hydrant, as well as the data maintained on their upkeep, can involve multiple data systems, a work order system, paper files and GIS maps. These important processes involve extensive record keeping and maintenance, with a need for sizable information repositories to be available for numerous users over long periods of time. Historically, this has been done with hard copy documentation, demanding time, cost and effort to maintain.

### The Hard Copy Hardships

When information is stored in paper files, or when large plan sets and maps are stored in disparate data systems, it presents certain barriers to efficient and effective processes and responses. Hard copies take up a significant amount of physical space to store and are cumbersome to use. Documents in this form have to be physically moved from person to person, creating the possibility for documents to be lost or delayed. There is a greater chance for errors



as well when a hard copy document is shared, edited and updated, and it is difficult to know which version is the most current.

Moving these paper-driven processes to a digital document management system is a first step toward eliminating errors and improving efficiency. Documents can be stored without taking up physical space and edited by multiple users simultaneously. For example, building plans in digital form can undergo reviews by electrical and structural, accessibility, plumbing and other code requirements all at the same time. Similarly, maintenance of public assets and infrastructure can be plotted digitally in GIS programs, allowing for spatial and informational documentation of their upkeep.

However, even if governmental departments implement document management systems, they do not create efficiencies across departments and processes when the systems cannot be integrated into a cohesive, enterprise-wide document

management strategy. An enterprise content management (ECM) strategy across governmental departments and processes is the key to impactful change in government operations.

## **ECM Creates a Solid Foundation**

ECM allows governments to connect documents, data systems and process automation for asset management, GIS and planning activities that create and maintain their communities. The use of these documents and the processes that address these areas span departments and purposes. Using a system that connects all of these areas and systems creates a comprehensive foundation to manage the planning, creation and development of communities and their infrastructure.

## **Benefits of an ECM System**

The benefits of an ECM system to local governments in their asset management, public works, plan review and GIS responsibilities are multi-faceted; namely, ECM improves both collaboration and services.

### ***Enhanced Collaboration Across Users and Over Time***

ECM allows multiple users to access plans and information at the same time. For example, when reviewing building plans, it permits different reviewers to provide feedback simultaneously and to see those revisions and mark-ups in real time. An ECM system can store information, comments and revisions in a single, central repository so multiple sets of documents, plans and data don't need to be submitted. It also keeps track of revisions to ensure the most up-to-date version is used. Without ECM, numerous copies of plans must be submitted and distributed to various reviewers, and when revisions are made, entirely new sets of plans have to be copied and re-distributed, resulting in an expensive process of reproduction, and the potential for version confusion. ECM alleviates both of these problems while creating a solution that enhances collaboration.

It is easier to manage an asset over time with ECM, from conception and building to maintenance and repair. It provides a common repository for documents and data, which connects to GIS, asset management, service requests, work orders and building permitting. It then integrates with custom pieces, GIS applications, permitting, inspection, agenda management and even accounting software across systems and departments.

When a local government supports a single system rather than many disparate systems that do not integrate, costs for maintenance and training are reduced, and synergy across personnel and departments is created. In Horry County, S.C., this came true following years of frustrating processes moving paper among 57 departments across 1,200 square miles. With the integration of ECM software solutions, employees no longer have to wait days for documents to travel through inter-office mail. They now download

needed information immediately from their own desktop computer. The result has been reduced costs and increased efficiency, allowing the county government to better serve constituents.

### ***Improved Services through Better Data Storage, Responsiveness to Constituents and Communication from the Field***

Not only does ECM improve collaboration with a single repository of digital information, but automation also assists in initiating additional services. Using ECM plan review solutions, the review, revisions, routing and supporting documentation for buildings, subdivisions and other planning processes are stored together. With a dashboard to view the progress of reviews and real-time collaboration and mark-up tools to speed up the decision and plan approval process, it becomes possible to offer better and faster services, even with staff reductions.

Another ECM solution can be implemented to improve citizen engagement. Many local governments now offer a 3-1-1 constituent feedback service, allowing citizens to request services, report problems or get information by phone or the Web. It is intended to make government more accessible to citizens; however, limitations in resources and staffing can prevent these inquiries from being answered or responded to in a timely manner. ECM workflow management software helps by integrating these inquiries and requests directly into the workflow of staff, ensuring appropriate attention is given to constituent requests and enhancing governmental responsiveness.

ECM also improves communication from staff in the field. An ECM solution can offer field access to documents (e.g. relating to code violations or ticketing) via mobile devices, allowing for faster services, and greater efficiencies by cutting back on personnel responsibilities in document management. For example, in Georgia's Cobb County, building inspectors and enforcement officers used to go out in the field with clipboards and paper files, updating records in hard copy as they conducted code enforcement inspections. At times, they would phone their updates into a clerk in the office, who would transcribe the information and enter it into the office recording system – a timely process, vulnerable to errors, that also took away office employee time from serving constituents. Since the county connected its community development solution with ECM, these same inspectors and enforcement officers now use electronic tablets and a remote Internet connection to make updates directly from the field, bypassing the need for a clerk in the office to transcribe and update.

Local government departments collaborate for multiple purposes and digital document management systems improve efficiencies and effectiveness. But to realize the greatest efficiencies, local governments should implement a comprehensive ECM system that works across departments, adding seamless integration and improved communication, while providing even more gains for local governments and their constituents.

# **HYLAND SOFTWARE**

One of the world's largest independent ECM software vendors, Hyland Software is the developer of OnBase. An award-winning suite of document and process management solutions, OnBase has a proven record of solving problems resulting from time consuming, costly and error plagued manual tasks. Available on-premises or as software as a service (SaaS), OnBase installs quickly, cost effectively and is designed to grow with organizations. Today, people at more than 10,500 organizations in 67 countries have the time to do the things that really add value thanks to OnBase. For these and other successes in its 20 year history, Hyland Software is a Leader in the Gartner Magic Quadrant for Enterprise Content Management, 2011. For more information, visit <http://www.hyland.com> and <http://www.hyland.com/government>.