# 2015 Achievement Awards Virginia Association of Counties

# **APPLICATION FORM**

All applications must include the following information. Separate applications must be submitted for each eligible program. **Deadline: June 1, 2015.** Please include this application form with electronic entry.

PROGRAM INFORMATION
Locality: Prince William County, Virginia
Program Title: A GIS Centric Development Management System
Program Category: Community and Economic Development
CONTACT INFORMATION
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# **Summary**

Prince William County recognized that their current permitting system, Tidemark Advantage, was reaching end of life and couldn't keep up with the demanding changes of the County's business requirements from the residential and commercial developers. In November 2014, Prince William County completed implementation of a new Development Management System for Permitting and Land Management Solutions using EnerGov (Tyler Technologies). This solution helped the development management functions in the County to transition from a geo-enabled to fully geo-centric workflows with GIS at the heart of the solution. The County partnered with EnerGov to build a new "Impact" solution to address impact conditions associated with development. This new approach improved operational efficiencies for the County by allowing staff to visualize new patterns of activity and improve tracking and accountability.

### Overview

Prince William County was in need of replacing and converting its current system, Tidemark Advantage™ to the next generation of development management systems to help promote faster customer service and improve access to projects and activities and take advantage of new features and potential improvements to current processes based on technology. The current system lacked the ability to easily integrate with other systems such as GIS, Real Estate Assessments, Finance, Records Management and Document Management Systems. It had limited application security and audit capabilities for our transparent government model.

Failure to upgrade the aging system to a newer technology posed high levels of risk that included the following: Property History and Address Changes were limited or non-existent, limited Commercial Development Project Management support, limited management of licenses and regulatory requirements and limited or non-existent workflow and gatekeepers for inspections and impact

conditions (aka Proffers). The lack of integration with other enterprise systems resulted in a high level of inconsistencies and discrepancies in data between systems. Additionally, development review times were excessive due to the amount of cross-agency communication causing delays or missed information that could result in financial impacts for the customer and the County.

The overall impacts resulted in extensive manual research and processes which were required by staff to resolve conflicts, implement workarounds and prevent data and financial losses to the County. Several homegrown customized applications or third party systems were implemented to automate these processes and reduce these impacts, which made upgrading or customizations to improve processes nearly impossible. It was critical for citizens and customers who had engaged in the development process to have access to their information outside of business hours.

The County's long term vision was to have a system that provides customers 24/7 access to their project information, more online functionality, workflow efficiencies, and support the project and partnership approach. This new system would be the first step in achieving these goals by putting some of the building blocks into place. Establishing a system that was GIS centric and project management oriented would help provide a solid foundation for future efficiencies.

## The Problem or Need for the Program

Prince William County recognized that their current permitting system, Tidemark Advantage, was reaching end of life and couldn't keep up with the demanding changes of the County's business requirements from the residential and commercial developers. Failure to upgrade the aging system, Tidemark Advantage, to a newer technology posed high levels of risk that included the following:

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Project Management support, limited management of licenses and regulatory requirements and limited or non-existent workflow and gatekeepers for inspections and impact conditions (aka Proffers). The lack

of integration with other enterprise systems resulted in a high level of inconsistencies and discrepancies in data between systems. Additionally, development review times were excessive due to the amount of cross-agency communication causing delays or missed information that could result in financial impacts for the customer and the County. Issues also existed with the County's development services web presence and inspections programs. Because different vendors were used to build each these application over different time spans, the inspections routing and IVR (Interactive Voice Response) scheduling system did not allow for upgrades or modifications without vendor involvement. Often this resulted in extended timelines and high costs to the County.

# **Description of the Program**

Prince William County chose the EnerGov software solution (Tyler Technologies) to implement their new Development Management System (DMS). The system was designed and configured to use with the development agencies in the County that include Building Development, Environmental Services, the Fire Marshal's Office, Geographic Information Systems, Land Development, Neighborhood Services, Planning, Transportation, and Zoning. Each of the agencies involved were represented on the core implementation team that partnered with the Tyler staff to design, build and configure the entire system.

Having identified the gaps and risks associated with the current system, the project team worked with the vendor to develop and overall improvement plan that would provide better customer service in multiple areas that are utilized in the development process:

Provide support for the Commercial Development industry by implementing a system that
had used a project management and partnership approach.

- <u>Transparency for tracking approval and activities within a project</u> by creating a single
   customer ePortal to track their activities, apply for permits and approvals without having to
   go to multiple independent applications.
- <u>Streamline processes to avoid delays and redundant tasks</u> by having customizable workflows that reduce the risk of manual workarounds and erroneous data entry. It ensures that the appropriate business plan is utilized. Customers receive consistent answers.
- <u>Integrate with other systems</u> that feed into the system to avoid inconsistencies and provide consistent responses from staff. The foundational piece to this would be the integration with the County's enterprise ESRI geodatabase.
- <u>Provide ability to do research</u> of historical data programmatically versus significant manual resources from staff and tracks issues with property which new owners may not be aware.

The initial project was to take place during an 18-24 month period but was extended to 36 months to ensure the most productive results at implementation.

The County used more than 80 subject matter experts were included, forming multiple sub-teams responsible for putting workflows and activities through rigorous and intensive testing to identify configuration issues that must be fixed. They developed and deployed training and outreach to staff and the community prior to going live on November 12, 2014. Other team members worked on finalizing system configuration, data conversion, reports and data integrity strategies.

The focus of the DMS was to have an enterprise application that is fully integrated with the County's Geographic Information System (GIS) and support the development processes for permitting, plan review, inspections, code enforcement, project/case management and other development activities.

PWC purchased and implemented a large number of modules and features available with the EnerGov solution in order to streamline the County's development review and regulatory land management processes. The following modules were implemented in phase one: Permit, Plan, Project, IVR (Interactive Voice Response), Business License, Impact Management, Object Management, ePortal (Citizens Access Portal), iGWorkforce (Inspections), Code Enforcement and Request Management.

This system supports over 350 county users and a 24/7 customer portal. It was PWC's vision to enhance how they engaged citizens and customers through automation as well as improve its business processes in regards to land and building development.

The Prince William County Development Management Systems serves both public and county staff.

Public users are comprised of Contractors, Tradesmen, Citizens, Homeowners, as well as Development

Professionals through the use the ePortal website and the IVR (Interactive Voice Response) at

www.pwcgov.org/eportal. The ePortal site offers the ability to perform many development process

services 24x7x365. This includes the ability to track projects and permits, ability to perform online

payment of fees and invoices and ability to schedule inspections or find their inspection status by phone

or online services.

Internal users include Prince William County staff in all development services agencies and many additional agencies such as Public Safety, Assessors or County Attorney who are 'read-only' users. This system is critical to county development staff in order to enforce the regulatory process of land and building development. It eliminated manual workarounds for many business procedures and reduced the potential of missed collection of proffer/impact fees. The new DMS provides a means of

Another benefit is that workflows are now intelligent and easily configurable by County staff without requiring vendor intervention or costly customizations. This has greatly reduced the time to implement efficiencies in business processes. Now when a software upgrade or patch is to be implemented, there is no longer a need to coordinate with multiple vendors and can cut the implementation time significantly.

Team members worked closely with staff to develop a set of detailed business requirements, many which spanned across agencies. The outcome was that these agencies were able to recognize unity among department processes and work towards cohesiveness within the overall development process for the future. This process carried forward even farther when training started. Many of the different counters met and reviewed their business processes revealing some areas that would have conflicted after the system rolled out. This gave staff the opportunity to correct the inconsistencies and have a better understanding of the other development counter processes and procedures. Today, many of the collaborative teams continue to meet and discuss issues between the groups and work together on solutions.

The migration to this new system forced development staff to abandon work habits that relied on older technology or had not enforcement parameters. With the workflow management and the ability to force georules, staff increased their knowledge of how the correct business process and gained a better understanding of the underlying processes and their impact on the other development counters.

Quantitative impacts included increased time savings for staff in their daily activities. One example would be that when staff log into the system they see a custom dashboard displaying all of their cases. They can be sorted and display without having to go to multiple screens or modules and perform individual queries to find out what is on their task lists or due that day. (Customer) dashboard of all cases. With the GIS Integration, users have the ability to perform research on property history and

track permits, as well as use georule and spatial queries to identify when and where impact condition apply to a property and mitigates the potential of missing collection of monetary impact fees.

The new system has far more qualitative impacts than quantitative. The increase quality of the data that comes from being integrated with the enterprise GIS greatly enhances the accuracy of processed work. Permits and cases cannot be associated with inactive or incorrect addresses reducing the potential of data entry errors. The new system is far more granular than the previous system. EnerGov has audit tracking/logging of every change made to a record. System administrator can limit the cases, buttons, or lists that a user can see and/or execute commands on. It can determine what documents a user can see, even down to who can issue money from the till.

### **Worthiness of the Award**

Prince William County is worthy of this award because the collaborative efforts between the vendor, Tyler Technologies and County staff, to design, develop, test, train and implement a true multi-agency enterprise system and meets all of the designated criteria for this award. EnerGov filled the gaps that existed by the previous system, Tidemark and improved our web presence for customers to view and track project information. We improved the administration for these services with increased security and audit capabilities and direct integration with the County GIS. Staff clearly increased their knowledge of the business processes through training classes, custom training videos and departmental training classes. The ePortal gives transparency to County projects and permit issuance. It is the Prince William County culture to have a partnership approach with our customers to make educated decisions in our community. We feel that EnerGov is worthy of this awards because it is an enterprise application that is fully integrated with the County's Geographic Information System (GIS) and supports the development processes that govern permitting, plan review, inspections, case management and more. The system

contains workflow efficiencies, is mobile enabled and streamlines the ability to partner with our customers and community.