

ATTN: 2011 Achievement Awards Program Virginia Association of Counties 1207 East Main Street, Suite 300 Richmond, Va. 23219-3627

Call for Entries



### 2011 VACo Achievement Awards

Deadline: June 1, 2011

### **Application Form**

All applications must include the following information. Separate applications must be submitted for each eligible program. Deadline: June 1, 2011.

Program Information
Locality PRINCE WILLIAM COUNTY
Program Title GEOGRAPHIC INFORMATION SYSTEMS
Program Category CUSTOMER SERVICE
Population Category <u>5</u> - 100,001+
Contact Information
Name ANGELA MILLS
Title GIS DATABASE ADMINISTRATOR
Title GIS DATABASE ADMINISTRATOR  DEPT: OF INFORMATION TECHNOLOGY
Complete Mailing Address 5 COUNTY COMPLEX CT, #140 PRINCE WILLIAM, VA 22193-5308
Telephone # 703-792-6840 Fax # 703-792-7192
·
E-mail AMILLS@PWCGOV. ORG
Signature of county administrator or chief administrative officer
Name
Title
Signature*

<sup>\*</sup>Entries without this signature will not be accepted.

# USING ARCSERVER TO GIVE AN EXTREME MAKEOVER TO ONLINE MAPPING

#### 1. Overview

The County Mapper is a web application that provides current geographic information and maps to citizens, businesses and County staff. Since 1998, Prince William County GIS has given customers the ability to visualize geographic data online through this online mapping application. It has become an integral part of customer service and a foundational tool for both internal staff and the public and therefore, has gone through many changes over the past 12 years to adapt to new technologies, applications, customer types and business needs.

In July 2010, Prince William County officially released County Mapper XM, an extreme makeover from prior County Mapper releases. Written in the latest ESRI ArcServer technology, County Mapper XM was a response to many Customer demands for a single, high powered web application that answered geographic questions from the very basic search capabilities to the more complex buffering and spatial queries. Anticipating transition anxiety from loyal users, GIS staff carefully planned and executed a successful strategy for a six month transition period complete with promotion, training classes, videos and brochures, and constant communication effort. The result of this effort was that the previous release of the application was quietly taken off line without any pushback from the user community.

County Mapper XM serves the citizens, businesses and staff of Prince William County and receives approximately 46,000 hits monthly from internal and external customers. It can be accessed by visiting the URL <a href="https://www.pwcgov.org/Countymapper">www.pwcgov.org/Countymapper</a>.

#### 2. The Problem/Challenge

For more than 10 years, the County Mapper application has been a steadfast tool for Customers to view geographic information about Prince William County. As the application grew in popularity and users became more confident with its abilities, there was strong and steady feedback about what was wanted and needed from the application. Both internal and external Customers desired a single application to see necessary data in order to do County business. They wanted the data layers organized in a logical manner to avoid having to scroll and search through a long list to find what was needed.

From 2003 through 2008, Prince William County's County Mapper application used the ESRI ArcIMS technology. This application allowed users to view GIS and County Assessment information from a single interface; however, there were many drawbacks. The ArcIMS technology was quickly aging. Although its main purpose is to deliver simple, well-defined maps over the internet, the upcoming ArcServer technology offered a full range of GIS editing and more complex mapping services on the web. As new data layers were developed, users demanded that this data be available online. Providing access to upwards of 44 data layers came with a performance cost as each action, query or request required the map frame to be redrawn. The map legend displayed layers in a list which could not be maintained in alphabetical order without mass programming code being altered each time a new layer was added. This required customers to scroll through a long list to search for the layer they needed to access.

An issue facing the County's GIS staff was the demand for a single interface to serve multiple customers, who each held different requirements. The need for information and the associated skill level of users ranged from the very basic for the general citizen to the more complex for internal staff. Performing multiple layer queries was desired to help reduce the time

and effort in gathering large amounts of information about properties. The more technically savvy users began integrating copies of the maps produced by County Mapper as part of their reports and communications. Customers began asking for methods of tracking and identifying information specific to their project or properties on County Mapper.

As technology improved/migrated/???, there was a higher customer demand for geographic information to be available in real time and to have its' presentation appear seamless to the end user. Underlying database tables were only being updated on a weekly basis and were reliant on nightly scripts to transfer data from enterprise databases to the IMS servers. This was seen as a single point of failure.

#### 3. Implementation

With the underlying technology changes that had become available for online mapping systems, serving geographic information went through significant changes and improvements. Prince William County GIS Developers felt that this was the perfect time to incorporate many of the suggestions and requests for enhancements that had been received over the years from faithful users. These changes included faster performance, complex queries, a larger map canvas and more simplistic interface.

GIS staff performed extensive research for best practices with the current ESRI ArcServer technology and began development in February 2009. Using ArcServer 9.3.1 and the Javascript API, both the internal/external interfaces went through a dramatic change. The user interface incorporated multiple ways to navigate using slider bars, rubber banding, overview maps, and directional arrows similar to those found in Google Maps. Developers were able to increase the size of the map canvas up to 30% by relocating the data layer window to a tabular dropdown menu where layers were grouped based on their business use for optimal organization.

Displaying data was made easier as layers could be turned on and off simply by checking a box which did not require the entire map to be redrawn as in previous releases. GIS staff took advantage of map caching services to improve performance when drawing and querying data a more rapid response to panning and zooming. Finally, the addition of a tool that gave the ability to set the transparency level offered more powerful visual analysis as multiple polygon layers could be viewed simultaneously.

Additional improvements in functionality were made when identifying property and layer information. Previously, users could only display information from a single layer. With County Mapper XM, the *Identify* tool allowed users to select and return information from multiple layers in a single query. Keeping time saving in mind, developers also added a handy new tool under the Map Tools tab. The *Show Parcel Info* tool let users display a property's GPIN and address information in a call out box just by placing the cursor over a property, similar to a tool tip.

While much of the search functionality remained the same, County Mapper XM provided quick and easy access to Prince William County geographic data that can be critical to business decisions. The application provides URL links to multiple databases and applications within the County such as LandRover, Parcel History Tree, FEMA documentation and land development information, where applicable. Its flexible interface offers the user the ability to save custom extents and layers; add printable text and graphics to create dynamic maps and pass information to Google Street view and Driving Directions.

County Mapper XM was released as beta for internal staff in Sept 2009. County employees who were regular users of the system were encouraged to provide comments while modifications continued and network security strategies were implemented for public release. With all feedback incorporated, County Mapper XM was officially released to the public in July 2010. A

conscious decision was made to run both the ArcIMS and the ArcServer versions of County Mapper for a period of 6 months, giving users plenty of time to get used to the new release before the ArcIMS version was shut down. The goal was to have the previous release turned off by January 2011 and have it go quietly away without interruption to the GIS user community.

Prince William County GIS staff kicked off the release of County Mapper XM by placing announcements on the department's internet webpage, creating a promotion segment on the County's cable news show and displaying announcements on multimedia boards. Serving as the feature article in the County's Development Community newsletter, The Alliance, helped to introduce County Mapper XM to a large customer base.

Recognizing that transition may be difficult for some, training classes for both internal staff and the public were created and offered. There were eight 2-hour training sessions held and more than three hundred attendees, seventy-eight of who were public citizens and/or members of the business community. These seminars were held twice a month over a four month period and contained not only a demonstration but handouts to include a "Survival Guide" with tips and tricks, help documentation and a FAQ page. All of these training materials were also downloadable from the web. Private tutorial sessions were also held at the request of some large companies, professional organizations and VIP users. After the initial four month training period, Prince William County Communications Department helped GIS staff to create several YouTube training videos for new users and refresher sessions.

The ESRI Javascript API lacked some of the printing capabilities that existed inherently with ArcIMS. Not wanting to take functionality away, Prince William County hired ESRI to develop some custom code for cut/paste functionality and enhanced printing capabilities. This included

PDF creation, custom printing of graphics and page layout, as well as cut and paste ability.

#### 4. Financing and Staffing

Environmental Systems Research Institute (ESRI) is the County's GIS software vendor and is the industry leader for serving maps and geographic information on the web. Their COTS did not provide all of the desired functionality and display capabilities that were being requested by users. Prince William County used an in-house GIS Application Developer to create, test, debug and deploy the custom application with assistance from ESRI Professional Services to perform coding for complex printing solutions. No additional hardware or software purchases were required. Prince William County's GIS Database Administrator had previous training experience and was asked to create training and marketing materials. The cost breakdown is as follows:

- GIS Application Developers \$67,500
  - o 32 weeks of design and development 75% of time dedicated to project
  - o 7 wks of enhancement design, development deployment, 50% time dedicated.
- GIS Database Administrator \$5,700
  - Marketing and training
  - o 13 classes at 3 hours a piece
  - o 16 hours for training material development
  - o 8 hours for video preparation and development
- ESRI Contractor \$23,000 for 120 hours

#### 5. Program Results

County Staff and the Public have been using County Mapper XM for almost a year. The transition has been smooth and straightforward. The largest issue faced by GIS staff was introducing long time users to the new system. As with all new technology, there can be some apprehension of change even when the process has been improved. Prince William County

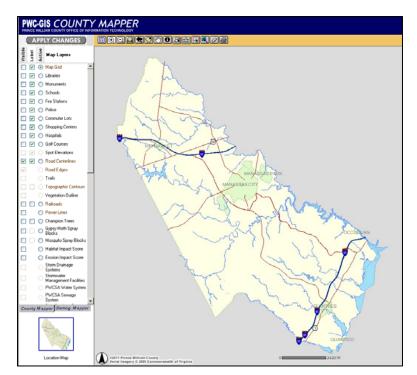
recognized that there was a learning curve and the training sessions helped to increase their skills and ease of use. On January 3, 2011, six months after County Mapper XM went public; the previous release of County Mapper was quietly taken offline without any pushback from the user community.

With the Extreme Makeover of the County Mapper application, individuals and organizations now have access to powerful analysis tools, a familiar and flexible user interface and improved performance. It is one stop mapping that provides visibility and creditability to Prince William County and the business decisions that are made with this interactive tool.

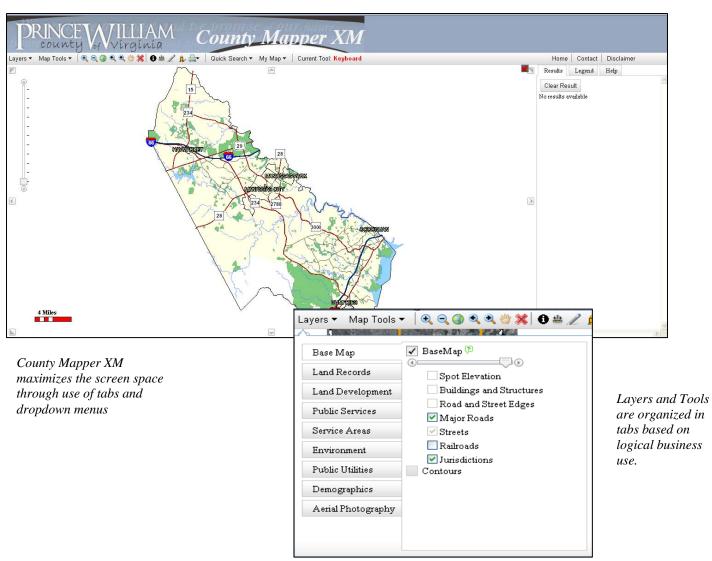
#### 6. Award Criteria

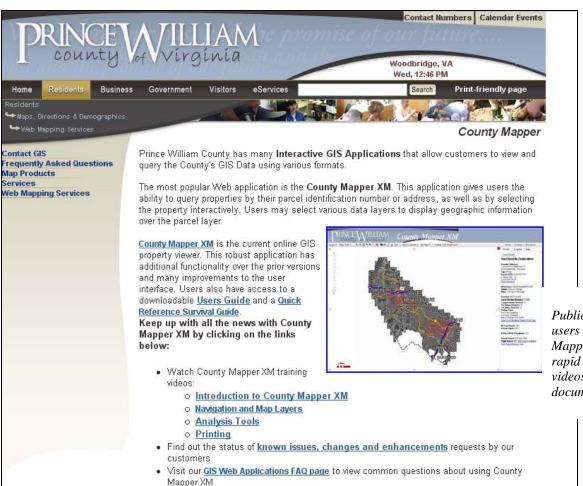
Prince William County is a model for other jurisdictions that wish to reduce the maintenance of multiple applications and help answer many questions in a single, one-stop spot. GIS staff listened carefully to needs of their diverse Customer base and leveraged technology to create an innovative way to deliver online mapping services. The amount of information available and the complexity of the underlying functionality appear seamlessly within a simplistic interface.

Prince William County Citizens, businesses and staff have become highly dependent on County Mapper XM in the course of their daily routine. It has enhanced the creditability and usability of GIS data and County business decisions and is depended upon as one of the most efficient, easy and cost effective means to access geographic information that is necessary for community development, human services, public safety and the general government.



Previous release of County Mapper had limitations to the layer display, query options and map canvas size



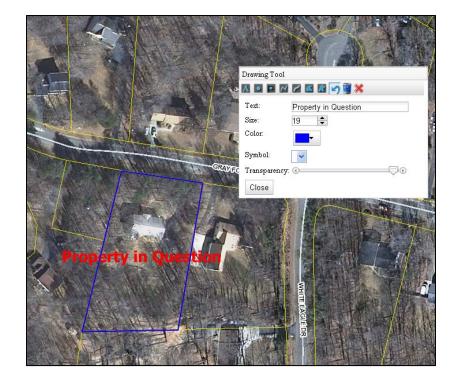


Important points to note when using County Mapper Applications:

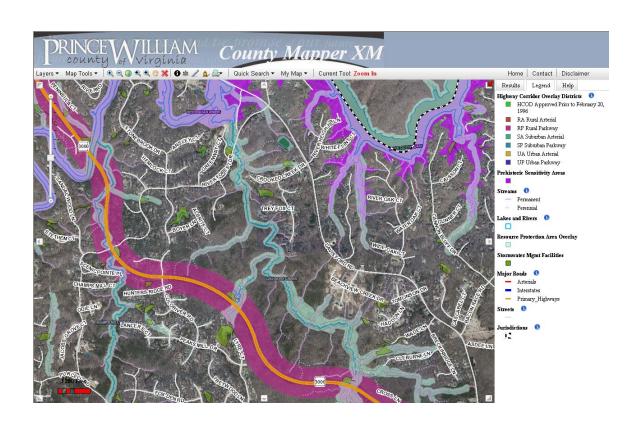
Public facing web page keeps users informed about County Mapper XM. Links appear for rapid access to training videos on Youtube.com, help documentation and FAQs.

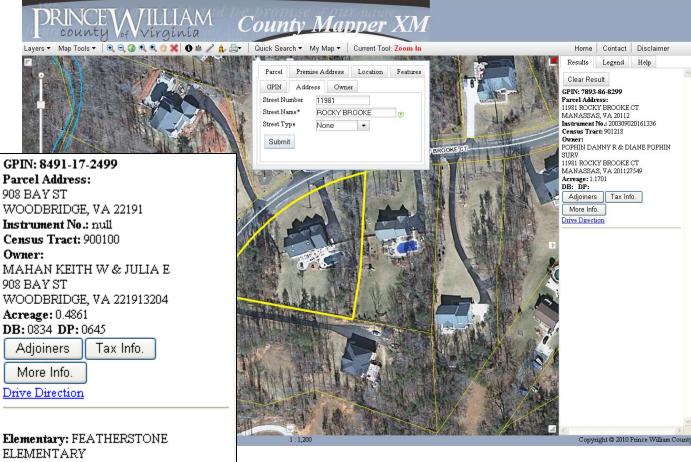


The Parcel Info Tool gives users a quick and easy way to display GPIN and Address information without performing a full parcel query.



Giving the user the ability to annotate maps, the custom drawing tool adds value by allowing the user to add graphics to their map display and print result.





Users can access a large variety of information about a single property with a single query. The application offers multiple ways to query

geographic locations.

Elementary: FEATHERSTONE ELEMENTARY Middle: Rippon Middle High: Freedom High

Precinct: POTOMAC VIEW

Local Election District: WOODBRIDGE

Congressional District: 11 VA Senate District: 36 VA House District: 52 Voting Place:

Potomac View Elementary School

14601 Lamar Road Woodbridge, VA 22191

View Local Election District Web Page

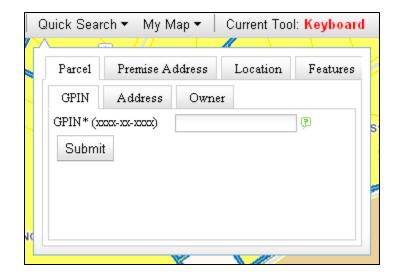
Subdivision: BAYSIDE PARK

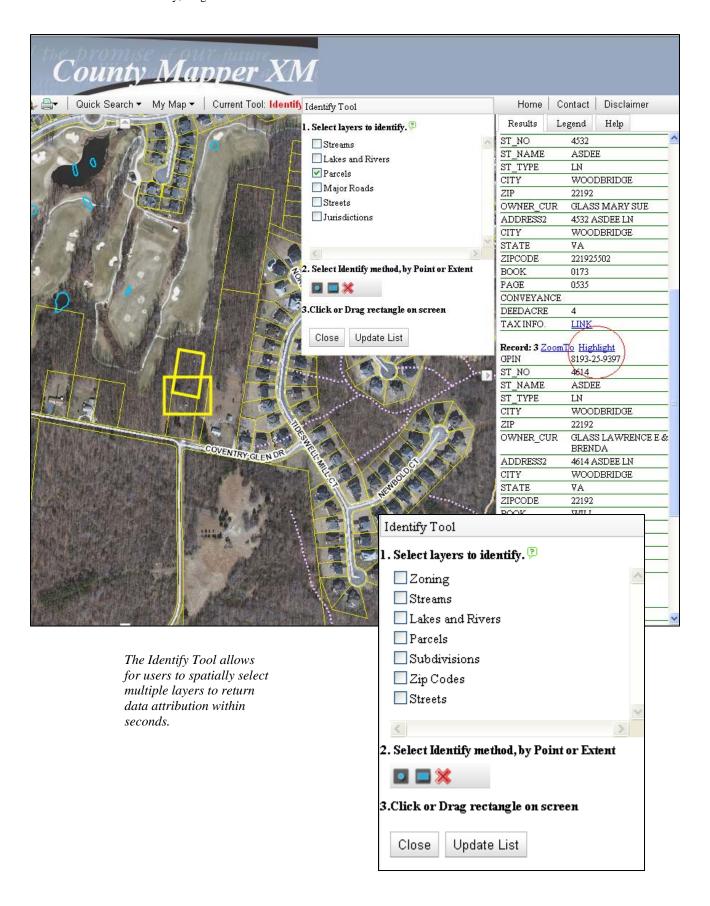
RPA on Parcel: YES Private Septic: NO

FEMA 100YR Floodplain: YES View Elevation Certificate

Parent Parcel: No parent parcel available Child Parcel: No child parcel available

View Parcel History Tree





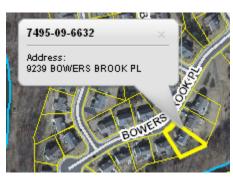
# Survival Guide For CMXM

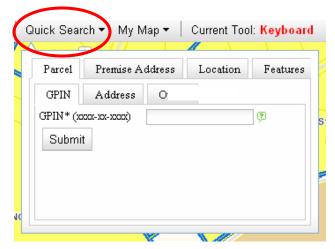
This document will give users quick reference to using County Mapper XM. For complete detail, users should reference the Help Document within the County Mapper application or search our County Mapper FAQ page.

### **QUERYING AND ACCESSING DATA AND LAYERS**

**Tip:** To **open the Layers or Map Tools Menus**, simply click on the title to open the dropdown box. **To hide the menu again, click on the menu title again.** Users can also click off the menu in the map canvas to hide the box but **be careful!!** If you have an active tool, such as zoom, the map will react to that active tool.

**Tip:** Show Parcel Info gives you parcel/address in a tool tip window. To turn it on click the Map Tools dropdown menu and select Show Parcel Info. Roll your cursor over the parcel to have the information displayed. To turn off this feature, go back to Map Tools dropdown and select Clear Parcel Info.





**Tip:** Use **QUICK SEARCH to display parcel data** in the most organized fashion. Parcels can be searched by GPIN number or Address. **Using this feature is where the MORE INFO button and TAX INFO button will be shown.** 

**Tip:** If you search on an **address under the parcel tab and it returns no results**, try searching under the premise address. Premise addresses are used when there are multi-tenant spaces, typically with unit numbers assigned.

**Tip:** Only **search using Premise Address when you are searching for a multi-tenant property** such as commercial space or apartment complexes. Not ideal for searching parcels and does not contain links to other databases

**Tip:** Results tab is where information is displayed about the GPIN or address entered. **Several buttons offer additional information.** These buttons are only accessible from the Quick Search

**ADJOINERS** display the owners name and address for any property that touches the property queried.

**TAX INFO** links to the Real Estate Assessments site to display further tax information.

**MORE INFO** button gives tons of additional information about a property. It is only accessible when searching for parcel from thru Quick Search.

**Tip:** To view **Elevation Certificates or FEMA letters of Map Amendments**, the user must click on MORE INFO. If an elevation certificate exists then a link will be visible. If no link is visible, then PWC does not have the certificate.



GPIN: 8491-17-2499 Parcel Address: 908 BAYST WOODBRIDGE, VA 22191 Instrument No.: null Census Tract: 900100 Owner: MAHAN KEITH W & JULIA E 908 BAYST WOODBRIDGE, VA 221913204 Agreage: 0.4861 DB: 0834 DP: 0645 Adjoiners Tax Info. More Info. Orive Direction Elementary: FEATHERSTONE ELEMENTARY Middle: Rippon Middle High: Freedom High Precinct: POTOMAC VIEW Local Election District: WOODBRIDGE Congressional District: 11 VA Senate District: 36 VA House District: 52 Voting Place: Potomac View Elementary School 14601 Lamar Road Woodbridge, VA 22191 View Local Election District Web Page Subdivision: BAYSIDE PARK RPA on Parcel: YES Private Septic: NO FEMA 100YR Floodplain: YES View Elevation Certificate Parent Parcel: No parent parcel available Child Parcel: No child parcel available

**Tip:** Layers are organized by business use. Just check the box to turn a layer on or off. Gray box means you need to zoom in more before layer becomes available.

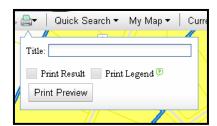
View Parcel History Tree

**Tip:** Use the Transparency Tool to lighten shading on shaded polygon layer. Transparency tool only controls the shading for that individual tab. Each tab may have different levels of transparency for a customized look.



### **PRINTING**

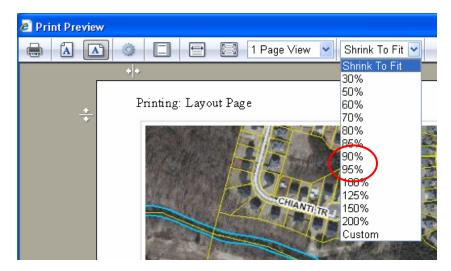
**Tip:** Printing can be tricky! Use the printer icon to do <u>ALL</u> printing to print, click on the printer icon. Users can decide if they wish to add a title, print search results or the legend by checking boxes or click on Print Preview. You must have the legend loaded or have feature results present to select these

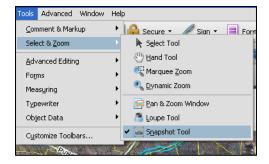


options. **Remember to turn off your popup blockers!!** If printing is attempted without going through the printer icon, map image will appear incomplete when printed.

**Tip: Printing to PDF** requires that the user have Adobe Professional or a 3<sup>rd</sup> party PDF converter (e.g. PrimoPDF) installed on their machine. Depending on the user's security settings with their internet browser, printing to PDF with Adobe may cause errors. If this occurs, users should use the alternative PDF converter.

**Tip:** To get **optimal page size when printing**. From Printing Layout window, go to File>Print Preview and change **printer settings to landscape**. If you cannot see the image, change the view to 90%. These options may be different depending on your personal printer settings.

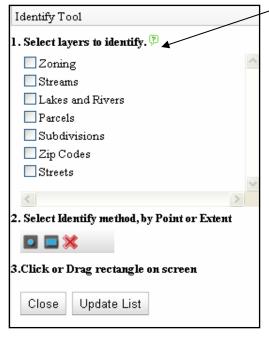




**Tip:** To cut and paste the map image you MUST print to PDF first. Open the PDF and under Tools>Select & Zoom select the **SnapShot Tool**. Define the area to copy (make sure to include the disclaimer!). **The tool** automatically copies the selected area and can be pasted into email or other document formats.

**Tip:** The references for the Legend only stays active for approximately 10 minutes after the legend is loaded. When the reference has been lost, the user will see a **white box with a red X where the legend symbol would be**. Avoid loading legend until you are ready to print, otherwise users must completely exit the application and re-enter to rebuild the legend links.

#### **IDENTIFYING LAYER INFORAMTION**



**Tip:** Use **IDENTIFY Tool** to get information about data layers other than parcels. You **MUST have the layer turned on in the Layers menu** for it to show up in the list of layers available for identifying.

**Tip:** Always work menu boxes from TOP to BOTTOM. Don't do step 2 before you do step 1.

**Tip:** Tool Menus do not minimize but can be moved around by click on the gray area at the top of the bar. Remember, if you close the box, you close the tool!

**Tip:** Information displayed from Identify Tool is pulling information from within the actual GIS layer. It is not formatted with additional information from other databases. *Parcel information is best displayed when property is searched and displayed under QUICK SEARCH.* 

### **TOOLS AND SETTINGS**

**Tip:** Current Tool tells which tool is currently active and will happen when you click the map document window. Keyboard means control is the mouse

Current Tool: Keyboard

**Tip:** When using the **Measure Tool, remember to CLICK ONCE to start drawing and CLICK TWICE to end the drawing**. Measurement will be displayed when the line has been completed. A single click will also allow you to change direction at corners.

Tip: When drawing graphics with the redline tool , select button first and then set size and color before adding the graphic.

Text is added with single click, lines start with a single click and end with a double click. Transparency needs to be set prior to drawing a polygon graphic. The trashcan clears all graphics and the undo clears the last graphic.

Tip: To avoid oversized dialog boxes, Screen resolution should

**Tip:** To avoid **oversized dialog boxes, Screen resolution** should be set to 1280x1024

### **FAQs about GIS Web Applications**

#### COUNTY MAPPER XM

Why is the old version of County Mapper going away?

How much longer will the old version still be available to use?

Why do I have to print from through the printer icon? Why can't I just go to File>Print?

Why can't I control the zoom in and out at very small intervals?

Will I get the same results if I search by Premise Address versus Parcel Address?

Why doesn't the Identify button display results for parcels in a formatted layout like the

old version of County Mapper?

Why does the image not print out?

Why can't I keep my saved settings under MyMap?

I can't get the measure tool to draw anything?

Why doesn't my layer show up in the list when using Identify?

Do I have to enter a title when printing?

What happened to the Legend with all the symbols?

How can I cut and paste the map into an email or document?

How do I link to the Real Estate Assessments data?

How do I find Adjoiner information for my property?

What does the More Info button do?

Why are the dialog boxes so big and I must use the scroll bars for viewing?

Why does the map react if I just simply click on it? I didn't tell it to do anything.

Why do I see a blank document when I look at print preview?

How can I find the location of different data layers?

How do I use the transparency tool bar?

Why can I not change the transparency for aerial imagery?

What does that big red X mean?

What is the parcel history tree link about?

How come I cannot change the transparency on a shaded graphic that I just added with

the redlining tool?

How do I unselect features or clear the highlights on a property?

How do I search for a subdivision?

Why do I need to copy the disclaimer when cutting and pasting images into emails and

documents?

Why does printing results with scroll give me problems?

My question isn't shown on the list

#### Why is the old version of County Mapper going away?

Because the underlying technology used to build the previous online mapping system has gone through significant changes and improvements, the computer hardware and software used to provide the previous version will no long be available or supported by our software vendor.

#### How much longer will the old version still be available to use?

The previous release of County Mapper will be available to use until January 1, 2011.

## Why do I have to print from through the printer icon? Why can't I just go to File>Print?

Because the image that you are viewing from the initial PWC Mapper window is actually referring a virtual image on the server, you must go through the printer icon to "capture" the image. On the printing dropdown box, select Print Preview and you will be taken to a Printing: Layout Page. If this page fails to appear, make sure that you have allowed for popup from our site. From the Printing: Layout Page your map is now available for printing. If you do not go through the printer icon to the layout page and print from the PWC Mapper window, there will be missing data on your printed page.

#### Why can't I control the zoom in and out at very small intervals?

To improve performance, data layers are "cached" for faster data retrieval. Caches are built at set scales and cannot be dynamic. When users zoom in or out, the zoom level will adjust to the closest cached scale. Scale caches are built at 1:300, 1:600, 1:1200, 1:2400, 1:4800, 1:9600, 1:19200, 1:38400, 1:76800, 1:153600, 1:307200 with a relative scale range of 20 feet to 4 miles.

#### Will I get the same results if I search by Premise Address versus Parcel Address?

No. Premise Address and Parcel Address searches are very different. Links for Adjoiners/More Info/Tax Info are not available for premise address searches. These options are only available on parcel address or GPIN searches. That is because premise addresses are associate to a POINT rather than an AREA, which is the case with parcel.

Parcel addresses are assigned to a single piece of land. Premise addresses are assigned to buildings and/or units that are located on parcel of land. In cases where the parcel of land contains a single structure that is owner-occupied, the parcel address and the premise address will be the same. In cases where many structures are located on the same parcel (e.g. apartments or business complexes), the premise address will be different than the parcel address. It is recommended to always search by parcel address first and then search by premise address.

# Why doesn't the Identify button display results for parcels in a formatted layout like the old version of County Mapper?

Because County Mapper XM gives the user the ability to identify multiple layers, formatting must be generic to account for the variety of information displayed. The information displayed through the identify tool is displayed as it exists in the raw GIS data. This method allows for users to view all feature attributes. If a user wishes to view the details of a single property, it is recommended to use the Quick Search Function.

#### Why does the image not print out?

Because the image that you are viewing from the initial PWC Mapper window is actually referring a virtual image on the server, you must go through the printer icon to "capture" the image. On the printing dropdown box, select Print Preview and you will be taken to a Printing: Layout Page. If this page fails to appear, make sure that you have allowed for popup from our site. From the Printing: Layout Page your map is now available for printing. If you do not go through the printer icon to the layout page and print from the PWC Mapper window, there will be missing data on your printed page.

#### Why can't I keep my saved settings under MyMap?

Saving extents and layers under MyMap requires that the user's internet browser accepts "cookies". If a cookie is removed, then the saved extent is also removed. Failure to save extents are typically a result of when the internet browser setting is turned off for accepting cookies or the user cleans out the temporary internet files nightly.

#### I can't get the measure tool to draw anything?

When using the measure tool, users should use a SINGLE click to start a line or change direction of a line and should use a DOUBLE click to end the line. If a user double clicks to start a line, the tool interprets that as the start and stop point being the same location and nothing will be drawn on the screen.

#### Why doesn't my layer show up in the list when using Identify?

For a layer to show up in the Identify layer list, it must be turned on and visible. Go to the Layers tab and verify that the box is check. If not, check the box to turn the layer on, go back to the Identify dialog box and click Update List. The layer should now be shown in the list.

#### Do I have to enter a title when printing?

No, entering a title is optional. You are also not required to print Results or the Legend. However, if you wish to print the Results you must a feature selected and information displayed in the Results Tab, otherwise this checkbox will not be available to be selected. The Legend must be loaded for this option to be available. Users can load the legend by clicking on the Legend tab and selecting Load.

#### What happened to the Legend with all the symbols? Why can I see it?

To increase performance, the legend is not loaded by default. A user has the option of turning the legend on by clicking on the Legend tab on the right side of the screen and clicking the Load Legend button. Once the legend is loaded, it becomes available for printing and will update dynamically as layers are turning on and off.

#### How can I cut and paste the map into an email or document?

The cut and paste functionality is not inherent to the County Mapper XM printing functionality. GIS is working to improve this, however, a workaround can be used with the following methodology:

- 1. Print map as PDF
- 2. Open PDF in viewer
- 3. In PDF viewer, select Tools>Select & Zoom> Snapshot Tool
- 4. Use snapshot tool to define area to copy (don't forget the disclaimer!)
- 5. Snapshot tool automatically copies to clipboard
- 6. Go to email or file document and select Paste

#### How do I link to the Real Estate Assessments data?

Links to the Real Estate Assessments data are only available when searching a parcel. A link can be found when using the Identify tool on the parcel layer. The Tax Info button that is shown in the Results tab when locating a parcel with Quick Search will also provide this information. When activating the link, a new window will popup and users will be taken to the Land Rover application. Please ensure that popup blockers are turned off to use this feature.

#### How do I find Adjoiner information for my property?

Adjoiner information is only available when searching for a Parcel using Quick Search. When selecting the Adjoiner button, links will appear in the Results tab that display the Owner and Address information of all properties that TOUCH the selected parcel. Users may hover their mouse of the word HIGHLIGHT to show which parcel the link belongs to on the map.

#### What does the More Info button do?

The More Info button does just that – provide more information about the selected property. It is only available when a parcel is searched using Quick Search. More Info displays school district information, voting district information, subdivision and environmental information, as well as links to other databases if available.

#### Why are the dialog boxes so big and I must use the scroll bars for viewing?

County Mapper XM was designed to be displayed using the standard computer resolution of 1280x1024, therefore, that is the optimal resolution setting recommended. If a user has a smaller setting to display larger icons, the dialog boxes will be enlarged with scroll bars.

#### Why does the map react if I just simply click on it? I didn't tell it to do anything.

When a user clicks on the map canvas (map image) and it does something unexpected, always check the Current Tool on the County Mapper XM toolbar to see which tool is active. Often time a user will unknowingly have the zoom tool active. To deactive any tool and return control back to the mouse, click the red X located on the County Mapper XM toolbar next to the Pan tool.

#### Why do I see a blank document when I look at print preview in landscape?

Depending on the user's personal printer settings and paper margins, some users may have to change their page size to 90% to allow for the entire image to print out.

#### How can I find the location of different data layers to turn them on and off?

Data layers are listed under the Layers Menu and are organized based on their business use. There are 9 "tabs" or categories that are shown in the dropdown menu. Each tab has a collection of layers associated with that category. Next to each layer name, a box can be checked to turn the layer's visibility on or off.

#### How do I use the transparency tool bar?

The transparency tool bar controls the shading level of a layer on the map. The shading can be made heavier or lighter by sliding the transparency bar. The transparency only controls all the layers within that tab but is independent from other tabs. For example, transparency levels can be made heavy for Land Development and very light for Environmental. This allows the user to customize the map appearance to their individual need.

#### Why can I not change the transparency for aerial imagery?

Aerial imagery is the always the base layer in which all other layers are overlaid. Think of it as the bottom piece of bread in a sandwich. It cannot be made transparent because there is nothing underneath the aerial imagery to view.

#### What does that big red X mean?

The red X is the deactive button. It restores the selection tools back to the default settings and returns the control to the computer mouse.

#### What is the parcel history tree link about?

The parcel history tree application is a tool that quickly displays the parent-child relationship for a GPIN. It is meant as a tool and guideline to assist in parcel research, however, it is not all inclusive prior to the year 2000 and does not provide lineage for properties created prior to 1994 when the GPIN numbers were first established.

# How come I cannot change the transparency on a shaded graphic that I just added with the redlining tool?

Users must set the transparency level prior to drawing the shaded graphic. Once the graphic has been drawn, the transparency level cannot be changed.

#### How do I unselect features or clear the highlights on a property?

There are two ways to clear the highlight. In the Results tab, click the Clear Results button or under Map Tools menu, select Clear Search Graphics.

#### How do I search for a subdivision?

Users can locate subdivision by clicking on Quick Search and select the Features Tab. In the dropdown box under Select Layer, select Subdivisions. Subdivision names can be selected through the Select Options dropdown box or the user may begin typing in the subdivision name. The Select Options box will narrow the results as the user types the desired name.

# Why do I need to copy the disclaimer when cutting and pasting images into emails and documents?

Prince William County asks that when using a PWC map, either paper or electronically, to present the image with the disclaimer attached to avoid confusion or misrepresentation and ensure that the recipient understands that it is for display purposes only and is not to be used or construed as a legal instrument.

# Results don't fully print when I have multiple features selected. What's with the scroll bar and where is my information?

This is a bug in the printing functionality with County Mapper XM. Prince William County GIS Developers are working to resolve the issue. There is no workaround at this time.

#### My question isn't shown on the list

If your question is not shown in the FAQs, please contact GIS staff at 703-792-6840 or email <a href="mailto:pwcmaps@pwcgov.org">pwcmaps@pwcgov.org</a> with your comments or questions.