Automated Permit Tracking Software Systems:

A Guide for Massachusetts Municipalities

Massachusetts Association of Regional Planning Agencies

June 2007

TABLE OF CONTENTS

(Cover photo: from HUD guide to electronic permitting, April 2002)

This Guide was prepared by the staff of the Pioneer Valley Planning Commission. Regional planning agencies statewide are collaborating to evaluate local permitting processes in Massachusetts, as provided for in M.G.L. Section 30, Ch. 40B. The purpose of the evaluation is to gather information to be used to inform state, regional and local policymakers to make better decisions about permitting policy. In addition, the Massachusetts Association of Regional Planning Agencies will use information gathered including statewide local permitting survey results, over a dozen focus groups involving diverse stakeholders, and the research contained in this report to develop a best practices guide to local permitting. The resource guide will be distributed to municipalities to use as a tool to make permitting more predictable, consistent, and efficient without endangering the standard of review.

The Guide's contents are provided solely for general information and convenience. While professional planning staff expended significant effort to ensure accuracy, the content is not promised or guaranteed to be correct, complete, or current. The Guide is provided on an "as is" basis and makes no representations or warranties of any kind, either express or implied. MARPA does not intend any references to entities, products, or services in the contents of the Guide to be construed as endorsements of such entities, products or services. We strongly advise any purchaser to consult with potential vendors and technical experts before purchasing or relying on any product.

INTRODUCTION

Automated permit tracking systems have the potential to streamline permitting from application intake through project completion. Along the way, the software should be able to produce status reports, and highlight any problems that should or would hold up the permitting process such as unpaid property taxes or other violations. Benefits of these systems include:

- Reduced permitting time,
- Improved record keeping and archiving of permitting decisions,
- Enhanced communication with applicants and other municipal departments, resulting in higher quality plan submissions and customer service, and
- Improved municipal staff efficiency and less duplication of effort.

There are a variety of software systems available, each with their own unique features, but all of the software programs described in this Guide offer the benefits listed above. According to interviews with planners who use automated permit tracking software every day, the key features to look for in a software system is that the application:

- ✓ **reduces municipal staff work load** and duplication of effort by being able to pull data from other city departments and existing databases;
- ✓ **allows concurrent review of application and site plans** by all necessary departments (planning, conservation commission, department of public works, fire department, etc.) and department signoffs;
- ✓ **permits on-line application**, submission of plans, and payment of permit fees;
- ✓ **is intuitive to learn**, easy to use and train new staff on;
- ✓ **is flexible and allows customization** of the application itself as well as reports; and
- ✓ **provides on-going technical support**: one interviewee noted that it may be better to subscribe to a software system that has a built in support team rather than relying on an internal municipal staff person develop a 'home grown' system for tracking permits, because that staff person may leave or be unavailable when system problems occur or updates need to be made.

KEY FEATURES of PERMIT SOFTWARE SYSTEMS

Software systems offer a range of useful features for municipal departments that help reduce demands on staff time and increase the ease of communication between departments and the public. In the list below these key features are grouped into basic, intermediate, and advanced categories. The categories reflect how frequently the features appear in the systems profiled and also how helpful they are to communities of differing permit volumes.

Below is a description of each of these features which may assist municipalities in determining which features are essential for their community given its size and permitting activity as well as which features would be additionally helpful. The software system profiles at the end of this Guide fully describe each software system and list which of these features are provided by each system.

Basic Features

Basic features are commonly offered software functions that are essential for all but the smallest of communities such as the tracking of permit and plan review application status and the ability to generate abutters lists. They are the suggested minimum requirements for any permitting software system. We have listed nine features in this category as listed below:

1. Abutters List Generation

   Generating abutters lists is a critical feature that allows staff to quickly determine which properties abut a certain parcel or parcels. Often this feature requires GIS parcel data and possibly the purchase of GIS software.

2. Adaptable Reports

   Adaptable reporting is an important feature that allows staff to create reports suited to the department's needs and populate the reports with information stored in the database. After the creation of a report template with the desired database fields and document format, staff specify which records to include. Report writers range in complexity from the very basic writers that export information as spreadsheet files to the very complex which create text documents with images.

3. Additional Government Management Modules

   Additional modules are applications that are designed to work seamlessly with the permitting software system. They can access and possibly update information stored in the system database while performing helpful tasks that the basic system is unable to perform and are typically designed for other local government agencies such as the building department or assessors office.

   For local governments interested in obtaining one software system for all their agencies, selecting a product that offers an extensive range of modules should be a priority. Typical examples of additional available modules are listed below grouped by subject domain:

   Land
   Building Permits, Inspections, and Code Enforcement Management

   Infrastructure
   Road, Pavement, Sanitary System, and Parks and Recreation Management

   Revenue
   Tax, Utility, and Property Management

   Financial
   Asset, Payroll, Budget, and Human Resource Management

   Service
   License, Service Request, and Public Health and Safety Management

   Administration
   Document Manager

4. Fee Calculation

Fee calculation is a critical feature that allows staff to easily determine fees for permitting activities based on pre-stored pricing factors.

5. GIS Capable

   GIS Capable systems may have a range of built-in GIS functions (including viewing, manipulation, and creation of GIS data) or have the ability to interface with independent commercial GIS software from vendors such as ESRI or Autodesk that can provide such functions. The ability for records within the system to be linked to GIS data is a critical feature for all but the smallest of communities.

6. Inter-Departmental Tracking

   Inter-Departmental Tracking allows staff to determine which departments have completed reviews of applications or documents and which have not. Tracking across departments is another critical feature of any permitting system. All of the software systems reviewed in the guide have an Interdepartmental Tracking feature.

7. Parcel-Based System

   Software systems differ by how they store information. Systems can be project-based or parcel-based, meaning they store information either by project or by parcel. All the data within the system is therefore attached to either a specific project or parcel. Parcel-based systems are almost always more desirable since they generally make it easier to find information after it has been entered, forming a historical record of activity at a certain parcel, and they correspond to GIS parcel data.

8. Permit Status Tracking

   Permit Status Tracking allows staff to determine the status of a permit application. It is a critical feature of any permitting system.

9. Plan Review Tracking

   Plan Review Tracking allows staff to determine the status of a plan review application. It is a critical feature of any permitting system. All of the software systems reviewed in the guide have an Interdepartmental Tracking feature.

Intermediate Features

Intermediate features less commonly appear in systems, but provide greater automation. These features, such as automated document distribution and automated task and expiry date reminders, are especially useful to mid-size communities and those with a higher volume of permitting activity. These features include:

1. Automated Document Distribution

   Automated Document Distribution allows staff to forward documents to each other without needing to leave the system. Generally this feature allows you to flag a document for another staff person, so that when they log on to the system, they are alerted that a document is awaiting their review, avoiding the need to send an email or make a phone call to notify the staff person.

2. Automated Task and Expiry Date Reminders

Automated Reminders automatically remind staff of approaching deadlines for applications or to perform specific tasks.

3. Online Application Status Checking
   Online Status Checking enables the public to check the status of their permit and plan review applications over the internet without contacting the department.

4. Problem-Flag Tracking
   Tracking of Problem-Flags allows staff to flag applications and documents which require additional attention, helping to prevent premature final approval.

5. Scalable System
   Scalability refers to the systems ability to handle additional activity or users without extensive modification. Scalable systems can grow to meet the needs of the community, making it a desirable feature for departments or communities experiencing growth. For this review, scalability is based on the sophistication of the backend database (certain databases can only hold so much information and can only handle so many requests at a time) and the maximum number of concurrent (or simultaneous) users the software vendor allows.

6. Sign-off Tracking
   Tracking of sign-offs allows staff to determine which departments or individuals have signed-off on applications or documents and which have not.

7. Web Interface
   Web Interfaces allow staff and the public to view information within the system and or submit data to the system over the internet. Many software systems with a web interface are actually entirely web-based and staff access the system online using a web browser (see Web-Based in Advanced Features).

   Local governments may have the choice of managing their system's website onsite or opting for vendor hosting. For those communities interested in web interfaces who do not have IT staff or who have overworked IT staff, vendor hosting can be a great option. It allows communities to bypass the purchase and maintenance of server software and hardware. However, communities opting for vendor hosted systems should ensure that all system data and files can be easily exported in a usable format to support possible future transitions to different systems.

Advanced Features

Advanced features are uncommon functions that are important for larger communities and those with the highest volume of permitting activity. These features, such as document annotation and online application submission, allow departments to process permits in the shortest amount of time:

1. Document Annotation
   Document Annotation allows staff to mark up (add symbols and text) and redline electronic documents (text files, spreadsheet files, PDFs, CAD files, image files, etc.) submitted for review without needing to leave the system or purchase additional software.

2. Online Application Submission
   Online Application Submission enable the public to submit permit and plan review applications over the internet. With online submission, the public enter their application information at the website and the information is directly stored in the system database, awaiting review. It allows staff to quickly focus on reviewing and responding to applications, rather than managing the time consuming process of entering applications into the system by hand.

3. Online Document Submission
   Online Document Submission enables the public to submit electronic documents (text files, spreadsheet files, PDFs, CAD files, image files, etc.) over the internet, often with their application information. The electronic documents are stored in the system along with other system data.

4. Online GIS Viewing
   Online GIS Viewing enables the public to view and or manipulate the community's geospatial information over the internet.

5. Online Payment
   Online Payment enable the public to pay fees with credit cards over the internet.

6. Web-Based System
   Entirely web-based systems are accessed online using a web browser. Staff perform all their tasks through the system website. Web-based systems require only minimal amounts of desktop software, often only a web browser, which often comes standard with the purchase of a desktop operating system or can be downloaded for free.

COST FACTORS and ESTIMATES

Most software applications have an initial upfront cost, training and set up costs, and annual maintenance or servicing costs. The overall cost often depends on number of concurrent licensed users and therefore larger municipalities with more staff and a higher volume of permitting activity will have to pay more for the system than a municipality with less potential concurrent users of the software. Other factors that influence the cost of the software application are:

- The degree to which the application can be customized to fit the specific needs or work flow of a municipality.
- Whether applicants can apply, pay permit fees and review permit status on line and whether application submitted on line goes directly into the system or has to be re-typed by municipal staff.
- The number and scale of other software modules that are available for the integration of other municipal departments such as the public works, revenue collection, public health and safety. Some software systems provide total integration for all functions in a municipal government.

Each software vendor has its own way of charging for its software and services. Pricing is generally calculated by the number of staff users, number of community parcels, the community population, and/or whether or not the public have online access (for some systems online access is limited to staff and the community must pay additional fess to enable public access).

Whether or not the community manages the website onsite or allows the vendor to host it offsite can also be a significant price factor. Vendor hosting in some cases lowered costs by as much as 80%. However, communities should again be warned that when opting for vendor hosted systems it is important to ensure that all system data and files can be easily exported at any time by the municipal staff in a usable format to support possible future transitions to different systems.

The ***Software Systems Pricing Table*** (following page) clarifies the cost differences between the systems evaluated based on pricing factors. It should be noted here that there may be additional costs to implementing a new permitting software system that the vendors have not included in the estimated high and low range costs listed in the following table.

Some municipalities may need to buy or upgrade their existing server in order to use the system. Additional software may also be needed to take advantage of certain program features such as ArcGIS, and the municipality may need to upgrade operating systems to at least Windows 2000. These costs are not included in the estimates given in the table, however the software system profiles that follow list the operating system and additional software requirements of each software system.

Software Systems Pricing Table

System and Vendor	Initial Cost Estimates [1] Low End		High End		Annual Cost Estimates [2]	System [3] Category
Accela Automation by Accela	$10,000	for 5 staff user licenses and 1 module with offsite Accela website hosting	$250,000	for multiple staff user licenses and all modules with onsite website management	20% of user licensing costs	advanced
CityView by Municipal Software	$85,000	for 5 staff user licenses and 1 module	$250,000	for multiple staff user licenses and all modules	20% of user licensing costs	advanced
CommunityDevelopmentPartner by GovPartner	$45,000	for a community with population of 15,000	$72,000	for a community with population of 1 million	$35,400 for population of 15,000 to $924,000 for population of 1 million	advanced
CSG Permit Manager by CS-Graphx	$15,000	for small communities	$20,000	for mid-size communities	$2,000	basic
GeoTMS by Des Lauriers Municipal Solutions, Inc	$9,000	for 1 staff user license and the permit module	$50,000	for multiple staff users licenses and all modules	% of permit fees or 15-30% of user licensing costs	intermediate
Hunter Development and Municipal Permit Tracking by Hunter GIS	$10,000	for Hunter website hosting, at least initially			$30,000 for population of 15,000-30,000 $10,000 more for public web access	advanced
Local Government Manager by Municipal Software	Cost is based on a monthly subscription fee.				$1,500 per user with 1 service $2,500 per user with 2 services $3,600 per user with 3 or more services	advanced
MGMS by Business Management Systems, Inc (BMSI)	$9,500	for 5 staff user licenses			18% of initial cost	basic
MGMS Server by Business Management Systems, Inc (BMSI)	$15,000	for 10 staff user licenses			18% of initial cost	intermediate
MUNIS by MUNIS	$6,600	for a community with 6,000 land parcels	$121,000	for a community with 200,000 land parcels	18% of initial cost	advanced
ProjectDox by Avolve Software, Subsidiary of Informative Graphics	$80,000	for unlimited staff user licenses	$240,000	for unlimited staff user licenses	20% of initial cost	basic
PTwin32 by Black Bear Systems	$1,500	for 4 staff user licenses and 1 module	$3,000	for 15 staff user licenses and 3 modules (these systems available only until Oct 2007, thereafter only $3600 high end system available)	$1,500	basic
PTwin32 MAX SQL Server by Black Bear Systems	$7,000	for 30 staff user licenses and 3 modules			$2,500	basic
Zoning Analyst by Geographic Information Services, Inc (GISi)	$2,500	for 1 staff user license	$70,400	for multiple staff user licenses	$500 - $4,600 or more	basic

1 Initial cost estimates are the estimated one-time, up-front costs associated with the set-up of the software system and may include onsite installation and staff training. They are only general estimates. The low end estimate is for the most basic system offered by the vendor and the high end estimate for the most advaned. Initial costs are generally based on combination of price factors, including the number of staff users, the number of modules, or the population of the community. For a list of pricing factors and explanations, see COST (p. 3).

2 Annual cost estimates are the yearly costs associated with system support, update, and maintenance. They are assessed annually in addition to initial costs.

3 For an explanation of system category designations - "basic," "intermediate," and "advanced," see FEATURES (p. 5-8) and ONLINE SOFTWARE SYSTEM PROFILES (p. 11).

Municipalities with Permit Tracking Software

Following is a list of Massachusetts municipalities who have been identified as currently using permit tracking software. This list includes contact information for those communities who expressed a willingness to share information. Municipalities that are interested in the experiences of other communities with a certain software system may contact these towns directly.

Software System Used	Municipality	User friendly?*	Which departments use?	Contact person	Contact #
Accela	Brookline	C	Building, Planning & Zoning, Health, Fire	Kevin Stokes	617-730-2313
	Amherst				
	Andover	B	Building, Health, Conservation, Planning, Zoning Board	Patty Dagata	978-623-8300
	Framingham			Allan Holt	508-532-5455
MGMS	Montague		Planning, Building, Health	Karen Casey	413-863-3200 x206
	Sturbridge		Building, Conservation, Planning Board, DPW	Harold Nichols	508-347-2505
	Agawam				
Full Circle	Westford	C	Building, Health, Planning, Conservation, Town Clerk, Highway	Nancy Lipa	978-692-5527 x105
PTWin32	Barre		Board of Health, Building Department	Andrea LaBoffa	978-355-2504
GeoTMS	Bellingham	C	Building, Planning	Laura Renaud	508-966-5821
	Mashpee			F. Thomas Fudala	508-539-1400 x520
	Northampton	B	Building, Planning, Liscense Commission, City Clerk	Wayne Feiden	413-587-1262
	Holyoke			Kathy Anderson	413 322-5655
	Northborough	B-	Building, Health	Louise Leo	508-393-5010
	Harwich				
	Weston	A	Building, Town Hall		
	Burlington		Building Department	Tony Fields	781-270-1645
	Boxborough	C	Building	Celina Shaw	978-263-1116 x101
	Chatham				
	Marlborough				
	Worcester				
	Wenham				
PG Govern	Amesbury			Anne Speck	978.388.8132
	Pittsfield		Building, Health, Conservation, Planning, ZBA, Fire, Clerk,Public Works	Lisa Haynes Carol Nichols	413-499-9366
MUNIS	Brockton		Building, Health, Planning		
	Leominster	B+	Building, Public Works	Stacia Venturi	978-534-7525
	Barnstable				
	Chicopee				
	Westfield			Larry Smith	413-572-6240
Permit Tech (locally written)	Stockbridge	B	Building	Ned Baldwin	413-298-3233

*Grades for user friendliness are based on an A- F grading scale & were given by the municipal contacts.

Please note— this is not an exhaustive list of all communities in the state who are using permit tracking software. This list was based on voluntary responses from municipalities to informal phone and email surveys. Unfortunately, time and resources did not permit a more exhaustive survey of all municipalities.

Many other communities use **Microsoft Excel or Access** to track activities for pending applications within individual departments, and most use Microsoft Word to create templates for applications, notices and decisions. Coupled with a geographic information system (GIS) system, some of these systems can create abutters' lists and facilitate review of geophysical characteristics that may not be clear in an application. Generally, however, such systems do not provide transparency among departments, storage of applications or plans, or reports beyond individual project applications to a specific regulatory board. A few communities, including Adams, Franklin, Grafton, Lincoln, Mansfield and Peabody have crafted Access databases designed to provide some of the features of the software reviewed in this report. For example, the Grafton Building Department program allows inspection reports to be fully digital, generates permits & notices, and provides reports on activities of the Department. Lincoln's program, in development initially for the Zoning Board of Appeals and the Conservation Commission, provides a computerized application form which shares format and information among regulatory boards, establishes deadlines & abutter lists, tracks administrative activities and, through the central server of the Town, permits officials, staff and applicants to review all material and to determine the status of every application filed for a particular location. Most of these programs are tracked by Assessor Parcel Numbers, which permits immediate linking to several data fields which exist in today's Assessors' databases.

While local systems reviewed to date do not have the depth of tools needed for a complete permit tracking program, communities with limited resources and limited regulatory activity might find such a system helpful. MARPA intends to encourage improvement and sharing of such systems within the planning and regulatory professionals in the Commonwealth.

CONCLUSION

Selecting a permitting software system is a challenging task. The decision involves choosing both a vendor and a system to match the anticipated needs of your department, your local government, and your community for over a decade or more. Due to the significant financial investment, taking the time to fully understand the range of options available before choosing a system is more than justified. There are certain guidelines that will help to focus the selection process.

1. **Establish a time frame of use and an anticipated number of staff users.** How long do you anticipate using the system and how many staff users will need training and system access? Given the time it takes for staff users to learn a new system, the difficulty of migrating data (moving data from one system to another), and the substantial expenditure involved in acquiring a new system, a time frame of at least ten years is the recommended minimum length of time.

   Consider working with another department or a group of departments to select a system that will work for both, the group, or even the local government as a whole.

The promise of one system - one system with all the information, one system to learn, one system to manage - may help raise wider support for the substantial investment, while spreading the costs over multiple departments.

2. **Determine the features and services that are essential for the operation of your department and for other departments using the system within the time frame of use.** What features and services will you need in the next decade or more? Also determine the features that are desirable, but not critical. Use the list of features from the 'KEY FEATURES' section of this Guide to help you decide.

3. **Determine which systems currently offer all of your essential features and services.** The system profiles which follow after **page 14**, list which of the features described in this Guide each of the systems offer. Some vendors promise functionality and services that they may not actually be able to deliver when you want them. Purchasing a product that already has your essential features from a vendor that already has the experience providing your essential services saves frustration later. Also, keep in mind that it is in your best interest to choose a vendor whose business model matches the needs of your local government. A vendor, who is dedicated to delivering a standardized, slowly changing product to small communities with a low volume of permitting activity, will most likely struggle to meet the needs of other communities who are outside of their primary customer base. So a larger community with a high volume of permitting activity that was interested in having the latest features and is under pressure to constantly improve their permitting times would need to look elsewhere.

   Additionally, it is all too easy to misunderstand how a vendor represents their product's features, so the purchaser must take extra care to determine that the system actually works how he or she anticipates. Take advantage of the opportunity to see and interact with system demos. Almost every vendor provides them. Any vendor who will not take the time or answer your detailed questions thoroughly and promptly will most likely prove a liability in some form or another at a later date.

4. **Determine which systems and vendors allow easy transitions to other systems.** Make sure that you can retain control of your data at all times. Having the ability to export all the data within the system in a usable and meaningful electronic format or having control of a widely available commercial backend database (such as Microsoft Access, Microsoft SQL Server, Oracle, IBM Informix, Corel Paradox, MySQL, PostgreSQL, etc.), gives you the freedom to transition to a different software system if the need should arise.

5. **Request multiple product cost estimates from the vendors on your list and multiple references to other local government users of their products and services.** One cost estimate should be based on a system that offers only your essential features. Additional estimates should include all essential features and different combinations of your desired features. Speak directly with other local government users about their experiences with the vendor and the product, including:
   - cost
   - set-up and training
   - staff user experience

- public user experience (if applicable)
- product support
- impact on inter-departmental communication
- impact on communication with the public
- impact on their permitting process

You can use the table of Massachusetts municipalities currently using permit tracking software **on page 9** to begin.

6. **After talking with other local government users and receiving cost estimates, eliminate vendor-systems with negative evaluations or unreasonable costs.**

7. **Choose a vendor-system combination that provides all the essential features and services and as many of the desirable features for the most reasonable price.**

SOFTWARE SYSTEMS PROFILES

The software systems profiled here are grouped below by the level of functionality offered by their combined features. **Basic Systems** may or may not provide the minimum suggested functions, the Basic Features listed previously, for permitting software systems. **Intermediate Systems** have almost all of the Basic Features, as well as important Intermediate Features, such as system scalability. **Advanced Systems** typically have all of the Basic Features, many of the Intermediate Features, while still offering many Advanced Features.

Basic Systems

CSG Permit Manager | CS-Graphx
MGMS | Business Management Systems, Inc.
ProjectDox | Avolve Software, Subsidiary of Informative Graphics
PTWin32 | Black Bear Systems
PTWin32 MAX SQL Server | Black Bear Systems
Zoning Analyst | Geographic Information Services, Inc.

Intermediate Systems

GeoTMS | Des Lauriers Muniocipal Solutions, Inc.
MGMS Server | Business Management Systems, Inc.

Advanced Systems

Accela Automation | Accela
CityView | Municipal Software
Community Development Partner | GovPartner
Hunter Development and Municipal Permit Tracking | Hunter GIS
Local Government Manager | Municipal Software
MUNIS | MUNIS

Profile Definitions

Most of the terms in the attached profiles are self explanatory or described in the notes at the bottom of the page. However, here are a few definitions of the terms in the "System Details" box of each profile:

Maximum # of Concurent Users: The maximum number of municipal staff who can be using the permitting system at any one time.

System Basis: Systems can be project-based or parcel-based, meaning they store information either by project or by parcel. All the data within the system is therefore attached to either a specific project or parcel.

Degree of Customization of System: This is the degree to which the software system can be tailored by the software vendor to meet the unique needs of the municipality—
high (everything is adaptable: software application, interface and reports), medium (many fields and reports can be adapted), low (a few fields and reports).

Legacy Database Interface: A 'legacy database' is any inherited database that has been in use in the municipality for several years or more. A legacy database interface creates a communication link between the inherited database and the new permit tracking database. In this way the new system can communicate with the old system and share information. Some of the software vendors listed here can provide this capability.

Legacy Database Conversion: Some software vendors provide a service which can remove all of the useable data from the old permit tracking system and transfer it entirely to the new permit tracking system.

PLEASE NOTE: In-depth, phone interviews have been conducted with vendor representatives in order to thoroughly understand product features and obtain general pricing estimates as presented here. Generally this information could not be effectively determined solely from reviewing vendor websites. All information is reported as represented by the vendor sales representatives that were interviewed. Due to time and resource restraints (as well as some uncooperative vendors) we were not able to include all available permit tracking software systems. The profiles shown here do however show a range of options, many of which are already being used by a few Massachusetts municipalities.

SYSTEM PROFILES

Accela Automation

VENDOR

Accela
established 1979

www.accela.com
info@accela.com
888.722.2352
contact Cici Arabian

DESCRIPTION

Community Size [1]	small to large
Permitting Volume [2]	high
System Category [3]	advanced
Price Range [4]	medium to high

Accela Automation is a highly automated, customizable, scalable, entirely web-based zoning and planning application suite, offering integration with a wide selection of other government management modules and add-ons. Staff access the system online. Communities can manage the system onsite or opt for Accela's hosting services. Notable features include automated task reminders, sign-off tracking, inter-departmental document forwarding, electronic document annotation, and abutters list generation.

Accela add-ons provide additional functionality. Accela GIS enables GIS analysis, while Accela Citizen Access allows the public to submit permit and plan review applications and associated electronic documents, make payments, check application status, and view GIS information online (with Accela GIS).

MODULES

Planning and Zoning Module Name(s):
Land Management

Additional Government Management Modules:

yes	land
yes	infrastructure
no	revenue
yes	financial
yes	service
yes	administration

SYSTEM DETAILS

Desktop Operating System Requirements:
Windows 2000 or XP

unlimited	Maximum No of Concurrent Users
*	System Basis
high	Degree of Customization of System
*	Legacy Database Interface
yes	Legacy Database Conversion

System Architecture Options:
onsite web portal
hosted web portal

Backend Databases:
Microsoft SQL Server
Oracle

ADDITIONAL REQUIREMENTS

Additional Software Required:
Microsoft SQL Server or Oracle (server)
Microsoft Internet Explorer (web browser)

* no response from vendor
... upcoming release

1 A population of less than 20,000 is considered a small community, 20,000-30,000 a mid-size community, and greater than 30,000 a large community.
2 Low volume systems were designed for the needs of small communities, medium volume for mid-size communities, and high volume for large.
3 For an explanation of system category designations, see FEATURES (p. 5-8) and ONLINE SOFTWARE SYSTEM PROFILES (p. 11).
4 Price range is based on initial and annual costs. Low is less than $10,000 in initial and annual costs. Medium is between $10,000 and $50,000, while high is greater than $50,000.

SYSTEM PROFILES

Accela Automation

COST

Initial Cost Range:

Basic End	$10,000 for 5 staff user licenses and 1 module with offsite Accela website hosting
High End	$250,000 for multiple staff user licenses and all modules with onsite website management

Annual Cost:

20% of user licensing costs

Purchase Options:

user license

FEATURES

Basic Features Available

- Abutters List Generation (GIS Required)
- Adaptable Reports
- Additional Government Management Modules
- Fee Calculation
- GIS Capable (GIS Required, Accela GIS Option)
- Inter-Departmental Tracking
- Parcel-Based System*
- Permit Status Tracking
- Plan Review Tracking

Intermediate Features Available

- Automated Document Distribution
- Automated Task and Expiration Date Reminders
- Online Application Status Checking
- Problem Flag Tracking
- Scalable System
- Sign-off Tracking
- Web Interface (Accela Citizen Access Required)

Advanced Features Available

- Document Annotation
- Online Application Submission
- Online Document Submission
- Online GIS Viewing (Accela GIS Required)
- Online Payment
- Web-Based System

* no response from vendor
... upcoming release

SYSTEM PROFILES

CityView

VENDOR

Municipal Software
established 1982

www.municipalsoftware.com
cityview@municipalsoftware.com
800.665.5648
contact Steve Favalaro

DESCRIPTION

Community Size [1]	small to large
Permitting Volume [2]	high
System Category [3]	advanced
Price Range [4]	high

CityView is a highly automated, customizable, scalable, entirely web-based planning application suite, offering integration with a wide selection of other pre-built modules. Local governments manage the system onsite and staff access the system online. Although it lacks inter-departmental document forwarding and electronic document annotation, it does have many other notable features including automated task reminders, sign-off tracking, and abutters list generation. It can also be parcel or project-based to suit the needs of the community.

CityView also can also be made accessible online to the public. Customers can submit permit and plan review applications and associated electronic documents, make payments, check application status, and view GIS information online without the purchase of GIS software.

Communities interested in additional customization have two options. They can create applications with additional features through CityView Application Builder or use Municipal Software's custom development services.

MODULES

Planning and Zoning Module Name(s):

Pre-Built Planning
Pre-Built Permits & Inspections

Additional Government Management Modules:

yes	land
yes	infrastructure
yes	revenue
yes	financial
yes	service
yes	administration

SYSTEM DETAILS

Desktop Operating System Requirements:

Windows 2000, XP (recommended), or Vista

unlimited	Maximum No of Concurrent Users
project or parcel	System Basis
high	Degree of Customization of System
yes	Legacy Database Interface
yes	Legacy Database Conversion

System Architecture Options:

file server

Backend Databases:

Microsoft SQL Server
Microsoft Access
Oracle

ADDITIONAL REQUIREMENTS

Additional Software Required:

a web browser
ESRI ArcGIS

* no response from vendor
... upcoming release

1 A population of less than 20,000 is considered a small community, 20,000-30,000 a mid-size community, and greater than 30,000 a large community.

2 Low volume systems were designed for the needs of small communities, medium volume for mid-size communities, and high volume for large.

3 For an explanation of system category designations, see FEATURES (p. 5-8) and ONLINE SOFTWARE SYSTEM PROFILES (p. 11).

4 Price range is based on initial and annual costs. Low is less than $10,000 in initial and annual costs. Medium is between $10,000 and $50,000, while high is greater than $50,000.

SYSTEM PROFILES

CityView

COST

Initial Cost Range:

Basic End $85,000
for 5 staff user licenses and 1 module

High End $250,000
for multiple staff user licenses and all modules

Annual Cost:

20% of user licensing costs

Purchase Options:

user license

FEATURES

Basic Features Available

- Abutters List Generation
- Adaptable Reports
- Additional Government Management Modules
- Fee Calculation
- GIS Capable (GIS Required)
- Inter-Departmental Tracking
- Parcel-Based System
- Permit Status Tracking
- Plan Review Tracking

Intermediate Features Available

- Automated Task and Expiration Date Reminders
- Online Application Status Checking
- Problem Flag Tracking
- Scalable System
- Sign-off Tracking
- Web Interface

Advanced Features Available

- Online Application Submission
- Online Document Submission
- Online GIS Viewing (GIS Required)
- Online Payment
- Web-Based System

* no response from vendor
... upcoming release

SYSTEM PROFILES

CommunityDevelopmentPartner

VENDOR

GovPartner
established 1999

www.govpartner.com
info@govpartner.com
888.256.5777
contact Nicky Scoville

DESCRIPTION

Community Size [1]	small to large
Permitting Volume [2]	high
System Category [3]	advanced
Price Range [4]	high

Communty Development Partner is a highly automated, customizable, scalable, entirely web-based planning application suite, offering integration with other government management modules. It was originally developed by the City of Sunnyvale in California and is currently marketed and supported by GovPartner. Communities can manage the system onsite or opt for GovPartner's hosting services. Notable features include automated task reminders, sign-off tracking, inter-departmental document forwarding, electronic document annotation, and abutters list generation.

Adding Public Portal, a GovPartner module, provides public web-access. Public Portal allows customers to submit permit and plan review applications and associated electronic documents, make payments, check application status, and view GIS information online with the Community Development GIS module.

MODULES

Planning and Zoning Module Name(s):

Planning and Zoning
Permitting

Additional Government Management Modules:

yes	land
yes	infrastructure
no	revenue
no	financial
yes	service
no	administration

SYSTEM DETAILS

Desktop Operating System Requirements:

Windows 2000

unlimited	Maximum No of Concurrent Users
parcel	System Basis
*	Degree of Customization of System
*	Legacy Database Interface
yes	Legacy Database Conversion

System Architecture Options:

client server
onsite web portal
hosted web portal

Backend Databases:

Microsoft SQL Server

ADDITIONAL REQUIREMENTS

Additional Software Required:

Microsoft SQL Server if onsite (server)
a web browser
ESRI Arc GIS?

* no response from vendor
... upcoming release

1 A population of less than 20,000 is considered a small community, 20,000-30,000 a mid-size community, and greater than 30,000 a large community.

2 Low volume systems were designed for the needs of small communities, medium volume for mid-size communities, and high volume for large.

3 For an explanation of system category designations, see FEATURES (p. 5-8) and ONLINE SOFTWARE SYSTEM PROFILES (p. 11).

4 Price range is based on initial and annual costs. Low is less than $10,000 in initial and annual costs. Medium is between $10,000 and $50,000, while high is greater than $50,000.

SYSTEM PROFILES

CommunityDevelopmentPartner

COST

Initial Cost Range:

Basic End $45,000
for a community with population of 15,000

High End $72,000
for a community with population of 1 million

Annual Cost:

$35,400 for population of 15,000
to $924,000 for population of 1 million

Purchase Options:
purchase

FEATURES

Basic Features Available

- Abutters List Generation*
- Adaptable Reports
- Additional Government Management Modules
- Fee Calculation
- GIS Capable
- Inter-Departmental Tracking
- Parcel-Based System
- Permit Status Tracking
- Plan Review Tracking

Intermediate Features Available

- Automated Document Distribution
- Automated Task and Expiration Date Reminders
- Online Application Status Checking
- Problem Flag Tracking
- Scalable System
- Sign-off Tracking
- Web Interface (GovPartner Public Portal Required)

Advanced Features Available

- Online Application Submission
- Online Document Submission
- Online GIS Viewing (CommunityDevelopmentPartner GIS Required)
- Online Payment
- Web-Based System

* no response from vendor
... upcoming release

SYSTEM PROFILES

CSG Permit Manager with CSG Parcel Map

VENDOR

CS-Graphx
established 1995

www.cs-graphx.com
cork@cs-graphx.com
570.629.5784
contact Corky Shunk

DESCRIPTION

Community Size [1]	small to mid-size
Permitting Volume [2]	medium
System Category [3]	basic
Price Range [4]	medium

CSG Permit Manager with CSG Parcel Map (a GIS viewer) is a moderately affordable automated zoning and planning system, geared toward smaller communities of 1,000-16,000 parcels. As such, it does not offer much in the way of customization, scalability (6 user maximum), or additional module integration. It does, however, offer valuable intermeditate features, including automated task reminders and abutters list generation without the need to purchase GIS software.

MODULES

Planning and Zoning Module Name(s):
CSG Permit Manager

Additional Government Management Modules:

no	land
no	infrastructure
no	revenue
no	financial
no	service
no	administration

SYSTEM DETAILS

Desktop Operating System Requirements:
Windows 95, 98, ME, 2000, NT 4.0, XP

6	Maximum No of Concurrent Users
parcel	System Basis
low	Degree of Customization of System
yes	Legacy Database Interface
yes	Legacy Database Conversion

System Architecture Options:
file server

Backend Databases:
Microsoft Access

ADDITIONAL REQUIREMENTS

Additional Software Required:
Microsoft Word (mail merge)

* no response from vendor
... upcoming release

1 A population of less than 20,000 is considered a small community, 20,000-30,000 a mid-size community, and greater than 30,000 a large community.
2 Low volume systems were designed for the needs of small communities, medium volume for mid-size communities, and high volume for large.
3 For an explanation of system category designations, see FEATURES (p. 5-8) and ONLINE SOFTWARE SYSTEM PROFILES (p. 11).
4 Price range is based on initial and annual costs. Low is less than $10,000 in initial and annual costs. Medium is between $10,000 and $50,000, while high is greater than $50,000.

SYSTEM PROFILES

CSG Permit Manager with CSG Parcel Map

COST

Initial Cost Range:

Basic End $15,000
for small communities

High End $20,000
for mid-size communities

Annual Cost:
$2,000

Purchase Options:
purchase

FEATURES

Basic Features Available

- Abutters List Generation (GIS Included)
- Adaptable Reports (Uses Microsoft Excel)
- Fee Calculation
- GIS Capable
- Inter-Departmental Tracking
- Parcel-Based System
- Permit Status Tracking
- Plan Review Tracking

Intermediate Features Available

- Automated Task and Expiration Date Reminders

* no response from vendor
... upcoming release

SYSTEM PROFILES

GeoTMS

VENDOR

Des Lauriers Municipal Solutions, Inc
established 1996

www.geotms.com
info@geotms.com
888.443.6867
contact Mark Durfee

DESCRIPTION

Community Size [1]	small to mid-size
Permitting Volume [2]	medium
System Category [3]	intermediate
Price Range [4]	medium to high

GeoTMS is a scalable system developed primarily for land management, offering integration with a selection of government management modules. It does not allow extensive customization, nor does it include automated task reminders or adaptable reporting. It does, however, offer valuable intermediate and advanced features, such as abutters list generation (purchase of GIS software required) and electronic document redlining.

An online module, GeoTMS Web, is also available. It provides public web-access to permit and inspection status.

MODULES

Planning and Zoning Module Name(s):

Planning Board
Zoning Board of Appeals

Additional Government Management Modules:

yes	land
no	infrastructure
no	revenue
no	financial
yes	service
yes	administration

SYSTEM DETAILS

Desktop Operating System Requirements:

Windows 2000 or XP Professional for desktop version
no requirements for server version

30	Maximum No of Concurrent Users
parcel	System Basis
low	Degree of Customization of System
no	Legacy Database Interface
yes	Legacy Database Conversion

System Architecture Options:

desktop
client server
onsite web portal

Backend Databases:

Microsoft Access

ADDITIONAL REQUIREMENTS

Additional Software Required:

Microsoft Word (mail merge)
Microsoft Excel (data export)
ESRI ArcGIS

* no response from vendor
... upcoming release

1 A population of less than 20,000 is considered a small community, 20,000-30,000 a mid-size community, and greater than 30,000 a large community.

2 Low volume systems were designed for the needs of small communities, medium volume for mid-size communities, and high volume for large.

3 For an explanation of system category designations, see FEATURES (p. 5-8) and ONLINE SOFTWARE SYSTEM PROFILES (p. 11).

4 Price range is based on initial and annual costs. Low is less than $10,000 in initial and annual costs. Medium is between $10,000 and $50,000, while high is greater than $50,000.

SYSTEM PROFILES

GeoTMS

COST

Initial Cost Range:

Basic End $9,000
for 1 staff user license and the permit module

High End $50,000
for multiple staff users licenses and all modules

Annual Cost:

% of permit fees or 15-30% of user licensing costs

Purchase Options:

purchase
user license
lease
permit fees

FEATURES

Basic Features Available

Abutters List Generation (GIS Required)
Additional Government Management Modules
Fee Calculation
GIS Capable (GIS Required)
Inter-Departmental Tracking
Parcel-Based System
Permit Status Tracking
Plan Review Tracking

Intermediate Features Available

Online Application Status Checking (Review of Building Permits Only)
Scalable System
Sign-off Tracking (GeoTMS Sign-off Required)
Web Interface (GeoTMS Web Required)

Advanced Features Available

Document Annotation (Redlining Only)

* no response from vendor
... upcoming release

SYSTEM PROFILES

Hunter Development and Municipal Permit Tracking on the Autodesk MapGuide Enterprise Platform

VENDOR

Hunter GIS
established 1985

www.hunter-gis.com
gisinfo@hunter-gis.com
905.607.4120
contact Garry Hunter

DESCRIPTION

Community Size [1]	small to large
Permitting Volume [2]	high
System Category [3]	advanced
Price Range [4]	high

Hunter Development Tracking and Municipal Permit Tracking together form a highly automated, customizable, scalable, entirely web-based zoning and planning GIS system, offering integration with a wide selection of other government management applications. Staff access the system online. Communities can manage the system onsite or opt for Hunter GIS's hosting services. Notable features include automated task reminders, sign-off tracking, inter-departmental document forwarding, redlining of electronic documents, and abutters list generation.

The web site can also be made open to the public. With this option, customers can submit permit and plan review applications and associated electronic documents, check their application status, and view GIS information online. An online payment feature is not available.

Hunter Development Tracking and Municipal Permit Tracking are extensions of the Autodesk MapGuide Enterprise platform. Hunter GIS is an Authorized Autodesk Developer and also offers additional services such as parcel and zoning map updating.

MODULES

Planning and Zoning Module Name(s):

Development Tracking
Municipal Permit Tracking

Additional Government Management Modules:

yes	land
yes	infrastructure
yes	revenue
no	financial
yes	service
yes	administration

SYSTEM DETAILS

Desktop Operating System Requirements:

none

unlimited	Maximum No of Concurrent Users
parcel	System Basis
high	Degree of Customization of System
no	Legacy Database Interface
yes	Legacy Database Conversion

System Architecture Options:

client server
onsite web portal
hosted web portal

Backend Databases:

Microsoft SQL Server
Microsoft Access
Oracle

ADDITIONAL REQUIREMENTS

Additional Software Required:

a web browser
a server if onsite

* no response from vendor
... upcoming release

1 A population of less than 20,000 is considered a small community, 20,000-30,000 a mid-size community, and greater than 30,000 a large community.

2 Low volume systems were designed for the needs of small communities, medium volume for mid-size communities, and high volume for large.

3 For an explanation of system category designations, see FEATURES (p. 5-8) and ONLINE SOFTWARE SYSTEM PROFILES (p. 11).

4 Price range is based on initial and annual costs. Low is less than $10,000 in initial and annual costs. Medium is between $10,000 and $50,000, while high is greater than $50,000.

SYSTEM PROFILES

Hunter Development and Municipal Permit Tracking on the Autodesk MapGuide Enterprise Platform

COST

Initial Cost Range:

Basic End $10,000
for Hunter website hosting, at least initially

High End

Annual Cost:

$30,000 for population of 15,000-30,000
$10,000 more for public web access

Purchase Options:
purchase

FEATURES

Basic Features Available

- Abutters List Generation
- Adaptable Reports
- Additional Government Management Modules
- Fee Calculation
- GIS Capable (GIS Included)
- Inter-Departmental Tracking
- Parcel-Based System
- Permit Status Tracking
- Plan Review Tracking

Intermediate Features Available

- Automated Document Distribution
- Automated Task and Expiration Date Reminders
- Online Application Status Checking
- Problem Flag Tracking
- Scalable System
- Sign-off Tracking
- Web Interface

Advanced Features Available

- Document Annotation (Redlining Only)
- Online Application Submission
- Online Document Submission
- Online GIS Viewing (GIS Included)
- Web-Based System

* no response from vendor
... upcoming release

SYSTEM PROFILES

Local Government Manager on Salesforce.com's Apex Platform

VENDOR

Municipal Software
established 1982

www.municipalsoftware.com
cityview@municipalsoftware.com
800.665.5647
contact Robert Bennett

DESCRIPTION

Community Size [1]	small to mid-size
Permitting Volume [2]	medium
System Category [3]	advanced
Price Range [4]	low to high

Local Government Manager is an automated, customizable, scalable, entirely web-based planning system, geared toward municipalities with less than 25,000 residents and offering integration with a wide selection of other government management applications. Hosting services are provided by Salesforce.com and staff access the system online. Onsite management is not available. Although it lacks electronic document annotation, it does have many other notable features including simple self-customization, automated task reminders, sign-off tracking, and abutters list generation without the need to purchase GIS software. It can also be parcel or project-based to suit the needs of the community.

Public web-access is also available. With this option, customers can submit permit and plan review applications and associated electronic documents, and check their application status. Public online viewing of GIS information is not available.

Local Government Manager is an application designed by Municipal Software on the Salesforce.com Apex platform. Salesforce.com is a on-demand Customer Relationship Management Service Provider, which specializes in delivering web-based, enterprise applications. Municipal Software is a Salesforce.com Partner.

MODULES

Planning and Zoning Module Name(s):

Planning
Permits and Inspections

Additional Government Management Modules:

yes	land
no	infrastructure
no	revenue
no	financial
yes	service
no	administration

SYSTEM DETAILS

Desktop Operating System Requirements:

none

unlimited	Maximum No of Concurrent Users
project or parcel	System Basis
high	Degree of Customization of System
yes	Legacy Database Interface
yes	Legacy Database Conversion

System Architecture Options:

hosted web portal

Backend Databases:

Oracle

ADDITIONAL REQUIREMENTS

Additional Software Required:

a web browser
ESRI ArcGIS

* no response from vendor
... upcoming release

1 A population of less than 20,000 is considered a small community, 20,000-30,000 a mid-size community, and greater than 30,000 a large community.

2 Low volume systems were designed for the needs of small communities, medium volume for mid-size communities, and high volume for large.

3 For an explanation of system category designations, see FEATURES (p. 5-8) and ONLINE SOFTWARE SYSTEM PROFILES (p. 11).

4 Price range is based on initial and annual costs. Low is less than $10,000 in initial and annual costs. Medium is between $10,000 and $50,000, while high is greater than $50,000.

SYSTEM PROFILES

Local Government Manager on Salesforce.com's Apex Platform

COST

Initial Cost Range:		Annual Cost:
Basic End	Cost is based on a monthly subscription fee.	$1,500 per user with 1 service $2,500 per user with 2 services $3,600 per user with 3 or more services
High End		

Purchase Options:
user license

FEATURES

Basic Features Available

- Abutters List Generation
- Adaptable Reports
- Additional Government Management Modules
- Fee Calculation
- GIS Capable (GIS Required)
- Inter-Departmental Tracking
- Parcel-Based System
- Permit Status Tracking
- Plan Review Tracking

Intermediate Features Available

- Automated Document Distribution
- Automated Task and Expiration Date Reminders
- Online Application Status Checking
- Problem Flag Tracking
- Scalable System
- Sign-off Tracking
- Web Interface

Advanced Features Available

- Online Application Submission
- Online Document Submission
- Online Payment
- Web-Based System

* no response from vendor
... upcoming release

SYSTEM PROFILES

Municipal Geographic Management Sytem (MGMS)

VENDOR

Business Management Systems, Inc (BMSI)
established 1982

www.bmsi-fund.com
bmsi@bmsi-fund.com
800.603.5578
contact Bruce Perlo

DESCRIPTION

Community Size [1]	small
Permitting Volume [2]	low
System Category [3]	basic
Price Range [4]	low

Municipal Geographic Management Sytem (MGMS) is a highly automated, customizable, application suite, offering integration with a selection of government management modules and add-ons. Notable features include automated task and sign-off reminders, inter-departmental document forwarding, and abutters list generation (purchase of GIS software required). A desktop and a scalable, server version are available.

An electronic document manager, BMSI EasyFile, is available as an add-on. It supports annotation of electronic documents, document scanning, and full-text searching.

MODULES

Planning and Zoning Module Name(s):
MGMS

Additional Government Management Modules:

yes	land
no	infrastructure
yes	revenue
yes	financial
no	service
yes	administration

SYSTEM DETAILS

Desktop Operating System Requirements:
Windows 98, 2000, NT

5	Maximum No of Concurrent Users
parcel	System Basis
high	Degree of Customization of System
*	Legacy Database Interface
yes	Legacy Database Conversion

System Architecture Options:
desktop

Backend Databases:
Microsoft Access

ADDITIONAL REQUIREMENTS

Additional Software Required:
ESRI ArcGIS

* no response from vendor
... upcoming release

1 A population of less than 20,000 is considered a small community, 20,000-30,000 a mid-size community, and greater than 30,000 a large community.
2 Low volume systems were designed for the needs of small communities, medium volume for mid-size communities, and high volume for large.
3 For an explanation of system category designations, see FEATURES (p. 5-8) and ONLINE SOFTWARE SYSTEM PROFILES (p. 11).
4 Price range is based on initial and annual costs. Low is less than $10,000 in initial and annual costs. Medium is between $10,000 and $50,000, while high is greater than $50,000.

SYSTEM PROFILES

Municipal Geographic Management Sytem (MGMS)

COST

Initial Cost Range:

Basic End $9,500
for 5 staff user licenses

High End

Annual Cost:

18% of initial cost

Purchase Options:

purchase
user license
lease
permit fees

FEATURES

Basic Features Available

Abutters List Generation (GIS Required)
Adaptable Reports
Additional Government Management Modules
Fee Calculation
GIS Capable (GIS Required)
Inter-Departmental Tracking
Parcel-Based System
Permit Status Tracking
Plan Review Tracking

Intermediate Features Available

Automated Document Distribution
Automated Task and Expiration Date Reminders
Problem Flag Tracking
Sign-off Tracking

Advanced Features Available

Document Annotation (Uses BMSI EasyFile)

* no response from vendor
... upcoming release

SYSTEM PROFILES

Municipal Geographic Management Sytem (MGMS) Server

VENDOR

Business Management Systems, Inc (BMSI)
established 1982

www.bmsi-fund.com
bmsi@bmsi-fund.com
800.603.5579
contact Bruce Perlo

DESCRIPTION

Community Size [1]	mid-size
Permitting Volume [2]	medium
System Category [3]	intermediate
Price Range [4]	medium

Municipal Geographic Management Sytem (MGMS) is a highly automated, customizable, application suite, offering integration with a selection of government management modules and add-ons. Notable features include automated task and sign-off reminders, inter-departmental document forwarding, and abutters list generation (purchase of GIS software required). A desktop and a scalable, server version are available.

An electronic document manager, BMSI EasyFile, is available as an add-on. It supports annotation of electronic documents, document scanning, and full-text searching.

MODULES

Planning and Zoning Module Name(s):
MGMS

Additional Government Management Modules:

yes	land
no	infrastructure
yes	revenue
yes	financial
no	service
yes	administration

SYSTEM DETAILS

Desktop Operating System Requirements:
Windows 98, 2000, NT

unlimited	Maximum No of Concurrent Users
parcel	System Basis
high	Degree of Customization of System
*	Legacy Database Interface
yes	Legacy Database Conversion

System Architecture Options:
client server

Backend Databases:
Microsoft SQL Server

ADDITIONAL REQUIREMENTS

Additional Software Required:
Microsoft SQL Server (server)
Novell NetWare
ESRI ArcGIS

* no response from vendor
... upcoming release

1 A population of less than 20,000 is considered a small community, 20,000-30,000 a mid-size community, and greater than 30,000 a large community.
2 Low volume systems were designed for the needs of small communities, medium volume for mid-size communities, and high volume for large.
3 For an explanation of system category designations, see FEATURES (p. 5-8) and ONLINE SOFTWARE SYSTEM PROFILES (p. 11).
4 Price range is based on initial and annual costs. Low is less than $10,000 in initial and annual costs. Medium is between $10,000 and $50,000, while high is greater than $50,000.

SYSTEM PROFILES

Municipal Geographic Management Sytem (MGMS) Server

COST

Initial Cost Range:

Basic End $15,000
for 10 staff user licenses

High End

Annual Cost:

18% of initial cost

Purchase Options:

purchase
user license
lease
permit fees

FEATURES

Basic Features Available

Abutters List Generation (GIS Required)
Adaptable Reports
Additional Government Management Modules
Fee Calculation
GIS Capable (GIS Required)
Inter-Departmental Tracking
Parcel-Based System
Permit Status Tracking
Plan Review Tracking

Intermediate Features Available

Automated Document Distribution (Uses BMSI EasyFile)
Automated Task and Expiration Date Reminders
Problem Flag Tracking
Scalable System
Sign-off Tracking

* no response from vendor
... upcoming release

SYSTEM PROFILES

MUNIS

VENDOR

MUNIS
established 1982

www.tyler-munis.com
info@tylertech.com
508.366.4200
contact Christine Lyden

DESCRIPTION

Community Size [1]	small to large
Permitting Volume [2]	high
System Category [3]	advanced
Price Range [4]	low to high

MUNIS Permits and Code Enforcement is an automated, customizable, scalable, entirely web-based land management suite, offering integration with an extensive range of other government management modules. Local governments can manage the system onsite or opt for MUNIS's hosting services. Although it lacks electronic document annotation, it includes many notable features such as automated task reminders, sign-off tracking, inter-departmental document forwarding, and abutters list generation (purchase of GIS software required).

The MUNIS system can also be made accessible to the public, enabling submission of permit and plan review applications, application status checks, and GIS viewing online (purchase of GIS software required). Online electronic document submission and online payment features are not available.

MODULES

Planning and Zoning Module Name(s):

MUNIS Permits and Code Enforcement

Additional Government Management Modules:

yes	land
yes	infrastructure
yes	revenue
yes	financial
yes	service
yes	administration

SYSTEM DETAILS

Desktop Operating System Requirements:

Windows 98, 2000, XP

unlimited	Maximum No of Concurrent Users
parcel	System Basis
high	Degree of Customization of System
no	Legacy Database Interface
yes	Legacy Database Conversion

System Architecture Options:

desktop
file server
client server
onsite web portal
hosted web portal

Backend Databases:

Microsoft SQL Server
Oracle
IBM Informix

ADDITIONAL REQUIREMENTS

Additional Software Required:

UNIX Server, Linux Server, or Windows Server 2003 (server)
a web browser
ESRI Arc GIS

* no response from vendor
... upcoming release

1 A population of less than 20,000 is considered a small community, 20,000-30,000 a mid-size community, and greater than 30,000 a large community.

2 Low volume systems were designed for the needs of small communities, medium volume for mid-size communities, and high volume for large.

3 For an explanation of system category designations, see FEATURES (p. 5-8) and ONLINE SOFTWARE SYSTEM PROFILES (p. 11).

4 Price range is based on initial and annual costs. Low is less than $10,000 in initial and annual costs. Medium is between $10,000 and $50,000, while high is greater than $50,000.

SYSTEM PROFILES

MUNIS

COST

Initial Cost Range:

Basic End $6,600
for a community with 6,000 land parcels

High End $121,000
for a community with 200,000 land parcels

Annual Cost:
18% of initial cost

Purchase Options:
purchase

FEATURES

Basic Features Available

- Abutters List Generation (GIS Required)
- Adaptable Reports
- Additional Government Management Modules
- Fee Calculation
- GIS Capable (GIS Required)
- Inter-Departmental Tracking
- Parcel-Based System
- Permit Status Tracking
- Plan Review Tracking

Intermediate Features Available

- Automated Document Distribution
- Automated Task and Expiration Date Reminders
- Online Application Status Checking
- Problem Flag Tracking
- Scalable System
- Sign-off Tracking
- Web Interface

Advanced Features Available

- Online Application Submission
- Online GIS Viewing (GIS Required)
- Web-Based System

* no response from vendor
... upcoming release

SYSTEM PROFILES

ProjectDox

VENDOR

Avolve Software, Subsidiary of Informative Graphics
established 1990

www.projectdox.com
info@avolvesoftware.com
602.482.8334
contact Cindy Bernstein

DESCRIPTION

Community Size [1]	small to large
Permitting Volume [2]	high
System Category [3]	basic
Price Range [4]	high

ProjectDox is a highly automated, customizable, scalable, entirely web-based, communication and collaboration system, designed solely for plan and project review. Staff access the system online. ProjectDox does not track permitting and is project-based, rather than parcel-based. Accordingly, it lacks important features such as abutters list generation, fee calculation, and GIS viewing (GIS information viewing to be integrated in Fall 2007 release). A community would need to purchase an additional system for permit management. It does, however, offer advanced plan review tracking features, including automated task reminders, sign-off tracking, inter-departmental document forwarding, and electronic document annotation with the Brava! Viewing Markup Tool.

ProjectDox also can be made accessible to the public. However, the system does not allow the public to apply for plan review online. It requires staff to process the application independently and then create a password account for the applicant. The applicant can then, using the password, go online to submit electronic documents and check his or her application status. Online GIS viewing (to be integrated in Fall 2007 release) and online payment features are not available.

MODULES

Planning and Zoning Module Name(s):

ProjectDox (plan review only)

Additional Government Management Modules:

no	land
no	infrastructure
no	revenue
no	financial
no	service
yes	administration

SYSTEM DETAILS

Desktop Operating System Requirements:

none

unlimited	Maximum No of Concurrent Users
project	System Basis
high	Degree of Customization of System
yes	Legacy Database Interface
no	Legacy Database Conversion

System Architecture Options:

client server
onsite web portal

Backend Databases:

Microsoft SQL Server

ADDITIONAL REQUIREMENTS

Additional Software Required:

Microsoft SQL Server
a web browser

* no response from vendor
... upcoming release

1 A population of less than 20,000 is considered a small community, 20,000-30,000 a mid-size community, and greater than 30,000 a large community.

2 Low volume systems were designed for the needs of small communities, medium volume for mid-size communities, and high volume for large.

3 For an explanation of system category designations, see FEATURES (p. 5-8) and ONLINE SOFTWARE SYSTEM PROFILES (p. 11).

4 Price range is based on initial and annual costs. Low is less than $10,000 in initial and annual costs. Medium is between $10,000 and $50,000, while high is greater than $50,000.

SYSTEM PROFILES

ProjectDox

COST

Initial Cost Range:

Basic End $80,000
for unlimited staff user licenses

High End $240,000
for unlimited staff user licenses

Annual Cost:
20% of initial cost

Purchase Options:
purchase

FEATURES

Basic Features Available

- Adaptable Reports
- Additional Government Management Modules
- Inter-Departmental Tracking (Plan Review and Projects Only)
- Plan Review Tracking

Intermediate Features Available

- Automated Document Distribution
- Automated Task and Expiration Date Reminders
- Online Application Status Checking (Plan Review Only)
- Scalable System
- Sign-off Tracking
- Web Interface

Advanced Features Available

- Document Annotation (Uses Brava! Viewing MarkUp Tool)
- Online Document Submission
- Online GIS Viewing ... (Fall 2007 Release)
- Web-Based System

* no response from vendor
... upcoming release

SYSTEM PROFILES

PTwin32

VENDOR

Black Bear Systems
established 1991

www.blackbearsystems.com
info@blackbearsystems.com
800.439.1305
contact Serenity Lombard

DESCRIPTION

Community Size [1]	small
Permitting Volume [2]	low
System Category [3]	basic
Price Range [4]	low

PTWin32 is an affordable, moderately customizable system, geared primarily toward land management. While PTWin32 is not parcel-based and lacks features such as automated task reminders and abutters list generation, it offers basic permit and plan review tracking features at an economical price. Both a desktop and scalable, server versions are available. In October 2007, Black Bear Systems plans to release its latest product, URSA Desktop, at $3600 and the PTwin32 1 module system at $1500 will no longer be available.

In August 2007, a hosted web service, PermitConnect, will be available. It will allow the public to check the status of permit and plan review applications online.

In September 2007, Black Bear plans to release URSA, its newest system, which will replace PTWin32. It will include enhanced features, including automated task reminders and report generation with Crystal Reports. Black Bear promises to support for PTWin32 will continue until 2010.

MODULES

Planning and Zoning Module Name(s):

Permits

Additional Government Management Modules:

yes	land
no	infrastructure
no	revenue
no	financial
yes	service
no	administration

SYSTEM DETAILS

Desktop Operating System Requirements:

Windows 95, 98, 2000, NT, or XP

4	Maximum No of Concurrent Users
project	System Basis
medium	Degree of Customization of System
no	Legacy Database Interface
yes	Legacy Database Conversion

System Architecture Options:

file server
onsite web portal

Backend Databases:

Corel Paradox

ADDITIONAL REQUIREMENTS

Additional Software Required:

Paradox (table manipulation)

* no response from vendor
... upcoming release

1 A population of less than 20,000 is considered a small community, 20,000-30,000 a mid-size community, and greater than 30,000 a large community.

2 Low volume systems were designed for the needs of small communities, medium volume for mid-size communities, and high volume for large.

3 For an explanation of system category designations, see FEATURES (p. 5-8) and ONLINE SOFTWARE SYSTEM PROFILES (p. 11).

4 Price range is based on initial and annual costs. Low is less than $10,000 in initial and annual costs. Medium is between $10,000 and $50,000, while high is greater than $50,000.

SYSTEM PROFILES

PTwin32

COST

Initial Cost Range:

Basic End $1,500
for 4 staff user licenses and 1 module

High End $3,000
for 15 staff user licenses and 3 modules

Annual Cost:

$1,500

(these systems available only until Oct 2007, thereafter only $3600 high end system available)

Purchase Options:
user license

FEATURES

Basic Features Available

- Adaptable Reports (Uses RBPro and AdHoc)
- Additional Government Management Modules
- Fee Calculation
- GIS Capable
- Inter-Departmental Tracking
- Permit Status Tracking
- Plan Review Tracking

Intermediate Features Available

- Online Application Status Checking ...
- Sign-off Tracking
- Web Interface ... (Aug 2007 PermitConnect Required)

* no response from vendor
... upcoming release

SYSTEM PROFILES

PTwin32 MAX SQL Server

VENDOR

Black Bear Systems
established 1991

www.blackbearsystems.com
info@blackbearsystems.com
800.439.1306
contact Serenity Lombard

DESCRIPTION

Community Size [1]	mid-size
Permitting Volume [2]	medium
System Category [3]	basic
Price Range [4]	low

PTWin32 is an affordable, moderately customizable system, geared primarily toward land management. While PTWin32 is not parcel-based and lacks features such as automated task reminders and abutters list generation, it offers basic permit and plan review tracking features at an economical price. Both a desktop and scalable, server versions are available. In October 2007, Black Bear Systems plans to release its latest product, URSA Server, at the same price as PTwin32 MAX SQL Server.

In August 2007, a hosted web service, PermitConnect, will be available. It will allow the public to check the status of permit and plan review applications online.

In September 2007, Black Bear plans to release URSA, its newest system, which will replace PTWin32. It will include enhanced features, including automated task reminders and report generation with Crystal Reports. Black Bear promises to support for PTWin32 will continue until 2010.

MODULES

Planning and Zoning Module Name(s):

Permits

Additional Government Management Modules:

yes	land
no	infrastructure
no	revenue
no	financial
yes	service
no	administration

SYSTEM DETAILS

Desktop Operating System Requirements:

Windows 95, 98, 2000, NT, or XP

30+	Maximum No of Concurrent Users
project	System Basis
medium	Degree of Customization of System
no	Legacy Database Interface
yes	Legacy Database Conversion

System Architecture Options:

client server
onsite web portal

Backend Databases:

Microsoft SQL Server

ADDITIONAL REQUIREMENTS

Additional Software Required:

Microsoft SQL Server

* no response from vendor
... upcoming release

1 A population of less than 20,000 is considered a small community, 20,000-30,000 a mid-size community, and greater than 30,000 a large community.

2 Low volume systems were designed for the needs of small communities, medium volume for mid-size communities, and high volume for large.

3 For an explanation of system category designations, see FEATURES (p. 5-8) and ONLINE SOFTWARE SYSTEM PROFILES (p. 11).

4 Price range is based on initial and annual costs. Low is less than $10,000 in initial and annual costs. Medium is between $10,000 and $50,000, while high is greater than $50,000.

SYSTEM PROFILES

PTwin32 MAX SQL Server

COST

Initial Cost Range:		Annual Cost:
Basic End	$7,000 for 30 staff user licenses and 3 modules	$2,500
High End		

Purchase Options:
user license

FEATURES

Basic Features Available

- Adaptable Reports (Uses RBPro and AdHoc)
- Additional Government Management Modules
- Fee Calculation
- GIS Capable
- Inter-Departmental Tracking
- Permit Status Tracking
- Plan Review Tracking

Intermediate Features Available

- Online Application Status Checking ...
- Scalable System
- Sign-off Tracking
- Web Interface ... (Aug 2007 PermitConnect Required)

* no response from vendor
... upcoming release

SYSTEM PROFILES

Zoning Analyst with BuildOut Simulator on the ArcGIS Platform

VENDOR

Geographic Information Services, Inc (GISi)
established 1991

www.gis-services.com
sales@gis-services.com
205.941.0442
contact Kevin Stuart

DESCRIPTION

Community Size [1]	small to large
Permitting Volume [2]	high
System Category [3]	basic
Price Range [4]	low to high

Zoning Analyst with BuildOut Simulator is a scalable, GIS-based system developed primarily for planning and zoning. It does not allow extensive customization or offer additional government management modules, nor does it include automated task reminders or fee calculation. It does, however, offer valuable intermediate and advanced features, such as abutters list generation, adaptable reporting with Crystal Reports, and a build-out simulator which models growth based on zoning standards.

Zoning Analyst with BuildOut Simulator are extensions of the ESRI ArcGIS platform. ESRI ArcView is required to operate the extension applications. Geographic Information Services, the creator of Zoning Analyst, is an officially recognized ESRI Business Partner.

MODULES

Planning and Zoning Module Name(s):
Zoning Analyst with BuildOut Simulator

Additional Government Management Modules:

no	land
no	infrastructure
no	revenue
no	financial
no	service
no	administration

SYSTEM DETAILS

Desktop Operating System Requirements:
Windows 2000, XP Professional

25	Maximum No of Concurrent Users
parcel	System Basis
low	Degree of Customization of System
yes	Legacy Database Interface
yes	Legacy Database Conversion

System Architecture Options:
file server

Backend Databases:
Microsoft SQL Server
Microsoft Access
Oracle

ADDITIONAL REQUIREMENTS

Additional Software Required:
at least ESRI ArcGIS ArcView

* no response from vendor
... upcoming release

1 A population of less than 20,000 is considered a small community, 20,000-30,000 a mid-size community, and greater than 30,000 a large community.
2 Low volume systems were designed for the needs of small communities, medium volume for mid-size communities, and high volume for large.
3 For an explanation of system category designations, see FEATURES (p. 5-8) and ONLINE SOFTWARE SYSTEM PROFILES (p. 11).
4 Price range is based on initial and annual costs. Low is less than $10,000 in initial and annual costs. Medium is between $10,000 and $50,000, while high is greater than $50,000.

SYSTEM PROFILES

Zoning Analyst with BuildOut Simulator on the ArcGIS Platform

COST

Initial Cost Range:

Basic End $2,500
for 1 staff user license

High End $70,400
for multiple staff user licenses

Annual Cost:

$500 - $4,600 or more

Purchase Options:

user license

FEATURES

Basic Features Available

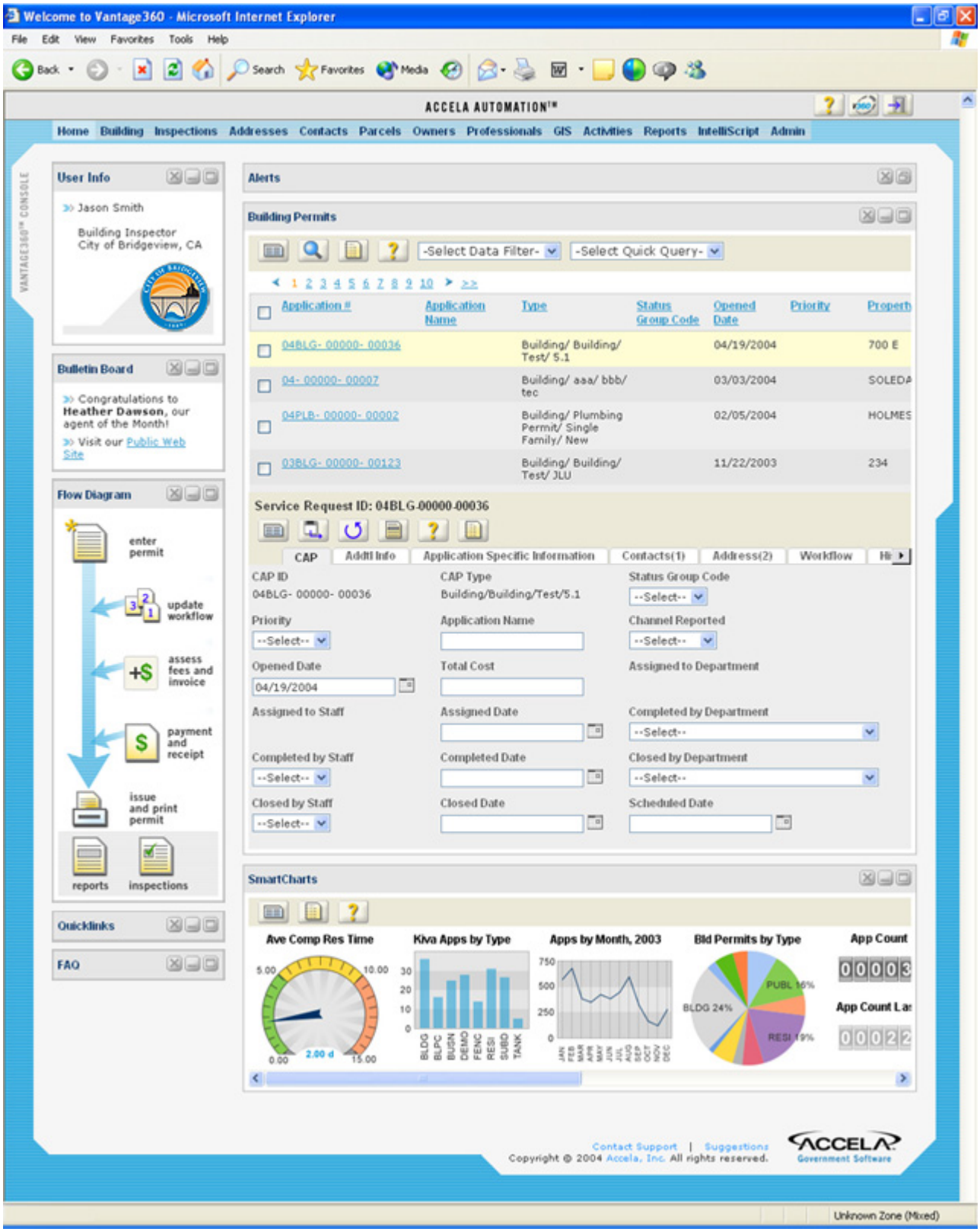
- Abutters List Generation (GIS Required)
- Adaptable Reports (Uses Crystal Reports)
- GIS Capable (GIS Required)
- Inter-Departmental Tracking
- Parcel-Based System
- Permit Status Tracking
- Plan Review Tracking

Intermediate Features Available

- Scalable System
- Sign-off Tracking

* no response from vendor
... upcoming release

Appendix A: Example of Software Computer Screen



PLEASE NOTE: This is just an example of what one vendor's home screen looks like, it is not in any way intended as an endorsement of one vendor over another.