



## **STAFF REPORT**

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### **Update to the Technology Master Plan**

Honorable Mayor and Council Members

#### **Summary**

In February 1999, the City Council adopted a Technology Master Plan. Given the rapid changes in technology, staff felt it was appropriate to reexamine and update the Master Plan. Over the past year, staff has reviewed and reprioritized the technology needs of the organization. Staff recommends Council approve an update and reprioritization to the Technology Master Plan, as detailed in Attachment A.

#### **Background**

In 1998, the City undertook an effort to create a five-year Technology Master Plan. Consultants were interviewed to assist with the project and WISE Consulting Services was hired to lead the process. WISE prepared an extensive report based on an assessment of the City's then current systems and future technology needs as identified by staff. Staff from all departments was involved in assessing needs and developing priorities. The City Council held two study sessions in early 1999 before accepting the Master Plan on February 23, 1999.

The creation of a Master Plan was a major undertaking and led to a significant boost in the City's commitment to information services. The Master Plan called for the implementation of 20 capital projects over five years. Among the major projects called for, and since implemented, are: Police RMS/CAD/MDC systems, a new Financial Management System, and a Community Development Land Management System. The Plan also included 14 operations and maintenance issues. A summary of the 1999 Master Plan can be found in Attachment B.

## **Discussion**

Beginning in 2002, the Technology Committee, made up of representatives of all departments, began a review of the Master Plan. Staff felt it was important to review what had been accomplished, what was still planned, and to assess if the remaining projects were still the correct priorities or if new issues were higher priorities. The goal was also to extend out the Master Plan to FY 2005.

The Committee spent several months reviewing the items in the plan, updating the descriptions, and discussing other priorities for the departments. The Committee on two occasions ranked the remaining and newly proposed items. The end result was a report to the Senior Management Team. This report provides a short description of each project, the original description if appropriate (7 of the 13 items were in the Master Plan), any history, and a current cost estimate (updated in Attachment A).

Work was put on hold at that time due to the citywide budget situation. In August 2002 staff informed Council (via the Update) that we would continue to work on high priority projects identified in the existing Master Plan, but would hold off on initiating other projects until the budget situation was more clear. In 2003, funding for the Technology Plan was reduced to \$25,000 per year as part of the \$1.3 million budget reduction strategy adopted by Council.

The Technology Committee and Senior Management Team have again reviewed the proposed update to the Plan in light of the new budget limitations and did not make any substantive changes to the report or priorities. However, there are some changes from the original Master Plan due to newer priorities or some projects being funded from alternative sources. Image Management, a major project from the original Master Plan, was the highest priority and will begin in late FY 03/04, subject to Council approval of the Plan. The City Clerk's Office will implement as a pilot. However, the system has the capability to expand to other departments and become an integrated records management system that will eliminate much of the paper flow and document storage problems in the organization. Staff requested, and Council approved, moving forward with the Aerial Photography/Orthophotos project (the second ranked priority) in July 2003, and phase II is underway now. Because of workload and coordination issues, the implementation of Plan items is not always in the order they were ranked.

Before any project is implemented, additional research and cost-benefit analysis will occur. When appropriate, vendors will be asked to give demonstrations of products. It is possible that after further exploring a project, it will be determined that the benefit is not great enough to justify the cost. Or, newer, better, cheaper options may turn out to be available. Alternatively, further investigation might result in final implementation costs being higher than those noted in the attachments – but deemed to be worthwhile. The purpose of the Master Plan is to provide a

general roadmap of priorities regarding long-term technology projects that are citywide in nature. It is not intended to be a detailed plan or exact spending guide.

Funding for projects in the Master Plan comes from an internal services fund, meaning each operational unit of the organization is charged a fee that supports the funding of these projects. Funding available for the Master Plan through FY06 is \$414,900 (which includes the cut of \$25,000 per year).

As noted in the attachments, the estimated total cost of all the priorities is \$513,500. Therefore, unless some projects are delayed, cancelled or come in significantly under estimates, not all projects can be funded in the timeframe of the proposed plan. Staff recommends that the lower six ranked projects not be programmed at this time, but be kept on the list for future consideration. In fact, the need for some of these lower priority items may be eliminated when the financial system is fully implemented.

The original Master Plan was to run through FY 02/03. With the proposed update, staff recommends the Plan be extended out through FY 05/06 and be updated again in calendar 2006.

### **Fiscal Impact**

No additional funds are required beyond those already budgeted by Council. Currently there are sufficient funds in account 620-4142-2142-9040 to fund the first item at the estimated costs and all the high priority items through FY06.

### **Recommendation**

Staff recommends Council approve the updated Technology Master Plan through FY 05/06 as presented in Attachment A.

### **Alternatives**

1. Revise and adopt the Master Plan
2. Request additional information or research by staff
3. Take no action at this time.

**Attachments**

- A. Memo with proposed updates to Master Plan
- B. Summary from original Master Plan

Respectfully submitted,

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Valerie Harnish  
Information Services Manager

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Daniel Rich  
Assistant City Manager

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Jere A. Kersnar  
City Manager

## Attachment A



# City Manager's Office Memo

Date: January 20, 2004  
To: SMT  
From: Valerie  
Re: **Update to the Technology Master Plan**

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In 2002, the Technology Committee reviewed and ranked items for an update to the Master Plan. The Committee's work was shared with the Senior Management Team. A decision was made to not move forward at that time due to the budget reduction discussions underway. The Council subsequently approved lowering the funding for the Tech Plan by \$25,000 per year. In addition, it was decided not to proceed with Image Management with the City Hall project about to get underway. The Committee agreed to proceed with Orthophotos.

The Technology Committee met on December 9, 2003 to review and approve the update of the Master Plan. The committee was advised that Phase 1 of the Orthophoto project was to be completed by the end of the year and that Phase II would take place in early 2004.

A discussion took place regarding the Image Management project. After clarification of the position of the SMT, the committee voiced the desire to move forward with the project, with the City Clerk's office requesting to be the pilot department. A vote was taken and passed. The committee will be making a final decision about the vendor at their February 3<sup>rd</sup> meeting. The two contenders are DMC and Laserfiche.

The following page ranks the projects and identifies the updated costs.

SMT is asked to review the priorities and gain consensus before taking the update to the City Council in February.

<b>Rank</b>	<b>Project</b>	<b>Updated Cost</b>
1.	Image Management*	\$ 99,000 a
2.	Orthophotos/Aerial Photography	\$ 43,500 b
3.	Telephone/Voice Response*	\$ 75,000 c
4.	Laptops/PDA's for Inspectors	\$ d
5.	E-Government/E-Commerce*	\$ 75,000 e
5.	Citizen Contact Tracking*	\$ f
Sub Total		\$292,500

1,	Expansion of Image Management	\$ 31,000 a
7.	Enhanced GIS	\$ 30,000
8.	Inventory/Maintenance Management*	\$ 10,000
8.	Human Resources Management Software	\$ 20,000
10.	Fleet Management*	\$ 10,000
11.	Remote Access	\$ 60,000
12.	AVL – Police Only*	\$ g
13.	AVL - Citywide	\$ 60,000
Sub Total		\$221,000

\* = in original Technology Master Plan      **TOTAL**      **\$513,500**

**FUNDS AVAILABLE thru FY06:      \$414,900**

- a Revised cost based on proposals received and implementation only for City Clerk; funding for expansion will be considered at a later date
- b Council approved this project (\$88,600 total); phase I complete, phase II to begin February 2004
- c TVR to begin FY 04/05
- d State grant received for these items (plus additional items). Expendable funds to be reimbursed
- e Date not yet determined; placeholder estimate – cost depends on extent of project
- f Will be included in Website update to begin February 2004 (funded in I.S. budget)
- g PD funded and completed 12/03

## IMAGE MANAGEMENT

Ranking: 1

Raw Score: 16

### Project Description:

All departments in the City have paper storage needs and there is an increasing need to find alternative ways to store these files. This project would entail the scanning of paper files into digital format onto a server that could be accessed through a web browser or compatible software. Successful implementation of this project would provide employees with access to files in digital format, while allowing for the reduction and relocation of the paper files, thus freeing up space for other uses. This project would also greatly enhance the ability of an employee to locate particular files in a much more effective and efficient manner, though the utilization of browser software. Storing many of the remaining paper files off site would also provide the City with the ability to preserve existing files in case of a fire or a disaster at any city owned facility. This project should be examined in the context of a comprehensive records management system.

Original Technology Plan Description: A citywide Image Management system would satisfy a need of many City Department. A system to provide image scanning, storage, access, and printing capability could be used by the Police – Crime Records; City Clerk – City Documents; Human Resources – Personnel Files; Community Development – Applications, Correspondence, Plans, Permits; Public Works – Permits, Correspondence; and Finance – Time Sheets, Deposits.

We suggest a pilot project of the imaging technology be conducted in Community Development where fees can be adjusted to cover the costs, in the City Clerk's Office where the greatest public support improvements might be realized, and in Human resources where the City's risk of losing its personnel files in a fire or flood would prove disastrous. The initial application should be the imaging of Permits. If deemed cost-effective, the imaging technology should be expanded to other City Departments.

### History:

In the original Technology Master Plan. Information Services has been researching document management solutions for the past several years. The City recognizes a need for a digital archiving solution that will successfully meet the needs of all departments, thus freeing up valuable work space in existing confined facilities and improving records management techniques.

To date, staff sent out a Request for Quotation to 11 software vendors with 6 responding. The responses were reviewed by I.S. Staff and ranked according to the needs of the City. The Technology Committee reviewed the findings, and wished to participate in Vendor demonstrations of 3 of the vendors. Once the demonstrations were complete, members of the Committee conducted site visits of agencies using the different software products. The Committee met on February 3<sup>rd</sup> to make a final recommendation of their preferred software product and to scale the project back to only fund implementation for the City Clerk at this time.

Cost Estimate (February 2004): \$130,000 (Citywide)

Original Cost Estimate (1999): \$150,000

## **AERIAL PHOTOGRAPHY**

Ranking: 2  
Raw Score: 25

### Project Description:

The last time the City updated its digital basemap was in 1994. Substantial changes have occurred to the existing infrastructure of Belmont that is no longer correctly depicted on these existing CAD and GIS maps. There is a need to bring them up to date in order to accurately reflect what exists in the field and how it is depicted on various software packages that depend on such accuracy. New basemaps can be much more detailed than what we currently own. These orthophotos are extensively used within Public Works, Community Development and Police and are essential toward utilizing accurate data.

Technology Plan Description: Not in original Technology Plan...new item

### History:

The City has not updated their existing CAD and GIS basemap since 1994. It is fairly routine to update these files every 5 years. In order to properly utilize CAD and GIS maps within Community Development, Public Works, Police, Fire, and Finance it is important to obtain accurate maps. This is particularly important when these maps are linked to the existing permitting, financial and dispatch related software, which relies on accuracy to properly assess the spatial relationships between particular attributes.

This project involves on the procurement of color orthophotos at 3-inch resolution. Obtaining these maps is important in updating a new CAD and GIS basemap. Therefore, it is important to solicit a vendor who is capable of providing highly accurate color orthophotos in a compressed format that can also be used to update and create additional layering within the existing CAD and GIS basemaps.

The vendor chosen to provide the Orthophotos was Towill, Inc. The project consisted of two phases. Phase I included the color aerial photography that was completed and delivered late December 2003. Phase II, which will include updating the GIS mapping to include streets, sidewalks, curbs and gutters is set to being early February.

Final Cost (February 2004): \$88,600

Original Cost Estimate (1999): N/A

## **TELEPHONE/VOICE RESPONSE (IVR)**

Ranking: 3  
Raw Score: 36

### Project Description:

A Telephone/Voice Response system was determined by the City as having benefit in providing more efficient and effective services to the citizens of Belmont by expediting existing processes. Although this project will have the capability to be expanded to satisfy the needs of all interested departments, the Community Development Department is currently deemed as having the greatest immediate need for such a system. This need was evaluated as a result of the numerous inspection and permit requests received on a daily basis and the need to effectively handle all these requests in a timely and effective manner.

Implementation of such a system within Community Development would require that it be able to interact with existing permitting software (CRW), be able to receive inspection requests, cancel or reschedule inspections, limit inspection requests for a given day, allow users to check on an inspection request and establish a telephone tree to other numbers. Other components of the system that would need to be addressed include the development of a system capable of providing answers to general land use and zoning questions. Other information could be part of an IVR solution include allowing citizen access to zoning information, provide information on how to access the City's website, creating menu options for messages, transfer capability and scalability.

Technology Plan Description: The City needs improved telephone systems to provide better service to the public. The voice response feature can provide interactive computer response to the caller for many different requests (e.g. inspection requests, facility availability, etc.) We recommend this technology be pilot tested in Community Development for recording inspection requests and providing telephone confirmations of assigned dates and times. It should be noted that the Internet could also be used to provide similar access to those businesses, which would prefer to contact the City in this manner.

### History:

Included within the 5-Year Technology Plan

Cost Estimate (May 2002): \$75,000

Original Cost Estimate (1999): \$5,000

## LAPTOPS/PDA'S FOR INSPECTORS

Ranking: 4  
Raw Score: 38

### Project Description:

Building Division inspectors currently expend a considerable amount of time entering and re-entering information regarding projects and inspections. Building and project inspections can be delayed while project notes are being written and then subsequently transcribed. There will be more time available for inspectors, either in the field or at the public counter, by developing an electronic link between the field and the main project computer. Public Works and the Planning and Building Divisions would benefit from this technology.

The purchase of Personal Digital Assistants (PDA's) is suggested for building inspectors, the code enforcement officer and public works inspectors. This tool would eliminate the redundant entry of information (building inspectors write the same information 3-4 times now) and reduce errors and inaccuracies from the time consuming process.

This technology would save approximately four hours per day total of inspectors' time and will improve customer service. This tool would utilize and expand the abilities of the CRW tracking system for Building, Planning and Public Works projects. It would also be beneficial for Parks and Recreation and possibly Police. The proposed system would include PDA's, portable printers, docking ports, and associated CRW and GIS software. Additional training on CRW would be needed to implement this project.

Technology Plan Description: Not in original Technology Plan

### History:

Community Development has been attempting to fully utilize the CRW system to enter information and remove the duplication of work. CRW has the ability to allow inspectors to enter information once into a PDA and then transfer the information into the CRW record keeping system. Utilization of PDA's is one of the major recommendations made by Management Partners Incorporated, as part of the assessment of the development review process.

Management Partners determined that up to four hours a day of inspectors' time would be saved by providing the Inspectors with PDAs. These savings of man-hours would inspectors to use this time for improved customer service.

Cost Estimate (2002): \$40,000

Original Cost Estimate (1999): N/A

## **E-GOVERNMENT**

Ranking: 5  
Raw Score: 46

### Project Description:

The City of Belmont has been looking at ways to conduct business more efficiently with its citizens through the utilization of online governmental services, otherwise known as e-government. Currently there are a number of vendors that have developed unique software to help local governments fulfill these desires. These software packages are customizable and would provide citizens with access to governmental information and services 24 hours a day, 7 days a week through the Web. A number of different e-government services are possible, such as submitting and issuing permits online, business licenses, room reservations, etc.

Technology Plan Description: Definition: An Internet-based payment system that saves time and money while satisfying business needs for disbursement of information.

The City Recreation Department utilizes a Class Registration system from RecWare. Because the registration application has been successful, the Department would like to procure the Facility Scheduling application also from RecWare. The Facility Scheduling system will prevent double booking of facilities and the related follow up required for correction of errors. Included in this project are applications, software license fees, installation, existing file conversion and staff training.

### History:

Included within the 5-Year Technology Plan

Cost Estimate (May 2002): \$75,000

Original Cost Estimate (1999): \$5,000

## **CITIZEN CONTACT TRACKING**

Ranking: 5  
Raw Score: 46

### Project Description:

Citizen Contact Tracking software can greatly enhance customer contact tracking and management by tracking citizen complaints/compliments/comments from initial contact through formal resolution. The software can also serve as a valuable management tool by tracking the time and steps required for resolution. Software can also be used through the World Wide Web, thus complimenting any e-government solution, should the City follow such a route.

Technology Plan Description: Software is available for the management of citizen requests, suggestions and complaints. The system would be available for access by all departments and would operate in the following manner: the call would be logged into the computer, the call's classification would assign the call to the department, the department would take appropriate action, and the computer would automatically generate letters describing the status and/or action taken to the original caller. A status/inquiry module would be available to the departments, City Manager and City Council.

### History:

Originally, the City of Belmont had no way to track complaints/compliments/comments and requests, except through paperwork. The City has developed a process within Microsoft Access to track this data so that all customer "service requests" are properly tracked, but it is limited in its capabilities.

This component will now be included in the Website redesign for minimal cost.

Original Cost Estimate (1999): \$25,000

## ENHANCED GEOGRAPHIC INFORMATION SYSTEMS

Ranking: 7  
Raw Score: 63

### Project Description:

The City recently implemented a citywide Geographic Information System (GIS) that is currently being utilized within many departments for various uses. A GIS has the capability to tie various types of data to geographical data so patterns of spatial relationships may be seen on a map. The ability to tie various types of databases to a GIS has immense possibilities in providing enhanced services and savings.

The City has the opportunity to purchase additional software components capable of further enhancing the utilization of the citywide GIS. These components greatly add flexibility and processing power to the user and can lead to further efficiencies and savings. Examples of additional software enhancements include some of the following products capable of working with our existing GIS software:

- ArcPad GIS: GIS, GPS and orthophoto software for portable PDA's
- 3D Analyst: 3-D GIS Software for Public Works and Community Development
- ArcSDE: Software capable of linking CRW, Cayenta and Alliance to GIS
- Spatial Analyst: Software capable of depicting spatial relationships on a map. Particularly useful for Police and Community Development.
- Geostatistical Analyst: GIS Software capable of depicting geostatistical relationships.
- Business Analyst: GIS Software capable of identifying ideal locations for business/public facilities based on a number of variables obtain from existing data

This package would necessitate the purchase of one high-resolution color printer capable of printing at 1200 dpi with automatic duplexing. This would fulfill the needs of all departments in providing high quality reproductions of maps and graphics for various projects, presentations, reports and brochures. Currently, the City does not have the capability to produce high quality graphics in large quantities for such purposes.

Technology Plan Description: Not in Technology Plan...new item

### History:

This is a new item raised during Technology Committee discussions that have gained support within Community Development in the need to show spatial relationships as it pertains to planning issues. Interest has also been generated within Parks for its GPS capability, and within the City Manager's office to enhance existing GIS uses.

Cost Estimate (2002): \$30,000

Original Cost Estimate (1999): N/A

## INVENTORY/MAINTENANCE MANAGEMENT

Ranking: 8  
Raw Score: 64

### Project Description:

The procurement of an inventory/maintenance management system would allow the City of Belmont to better track costs as they relate to existing assets within each department. This system should have the ability to interact with existing financial software in order to be cost effective and productive so that all assets can be properly categorized and accounted.

Technology Plan Description: An Inventory/Maintenance Management System can be used in Public Works and in Parks and Recreation to track costs of equipment, materials and personnel related to infrastructure inspection and maintenance projects. If possible, the Inventory and Maintenance Management Systems should be integrated with each other and with the City's Payroll and Financial Systems for cost accounting purposes.

### History:

Included within the 5-Year Technology Plan

Cost Estimate (2002): \$10,000

Original Cost Estimate (1999): \$50,000

## **HUMAN RESOURCES MANAGEMENT SOFTWARE**

Ranking: 8  
Raw Score: 64

### Project Description:

Human Resources has a need to purchase a system that would allow them to track and produce reports on Human Resources issues including insurance coverage, COBRA, workers compensation claims and cases, completed and scheduled training, salary reviews due, performance reviews due, EEO and Citizenship Reporting Organizational Reports and I-9 verification.

The purchase of a Human Resources System and a Applicant Tracking System would allow the Department to more efficiently track candidates in the process, automatically generate letters (response, rejection, offer letters), produce cost of hire and EEO reports and streamline follow-up with applicants.

Technology Plan Description: Not in Technology Plan...new item  
May be included in the Citywide financial system.

### History:

Human Resources currently does not have a sophisticated way to electronically track information as it relates to Applicant Tracking and Human Resources information. By acquiring this kind of software, the department would be able to automate most of the current procedures, which would increase the efficiency in which these tasks are completed. Also, it would give the department the ability to produce reports on benefits, recruitment, training etc., which currently does not exist.

Cost Estimate (2002): \$20,000

Original Cost Estimate (1999): N/A

## **FLEET MANAGEMENT**

Ranking: 10  
Raw Score: 68

### Project Description:

The City could benefit from software capable of tracking vehicle maintenance records, including mileage, routine maintenance scheduling, and asset management. Ideally, this type of software would have the capability to interact with existing financial software, adding more functionality as an asset management system solution. Such software would ensure that all vehicles are properly maintained and would assist in the reduction of additional maintenance costs, increased fuel efficiencies and reliability of our existing vehicle fleet.

Technology Plan Description: City staff has developed a Microsoft Access system to track vehicles and related maintenance. More functionality (e.g. electronic fuel pump interface, cross-reference of parts to vehicles, etc.) would be available from a vendor provided application. While not a high priority, we recommend City staff at least evaluate available PC and other software packages to determine if the additional functionality offered would justify their procurement. Procuring this application from the same vendor as the financial, purchasing, inventory, and payroll applications should provide better assurance that the applications will be integrated.

### History:

Included within the 5-Year Technology Plan  
May be included in Citywide financial system.

Cost Estimate (2002): \$10,000

Original Cost Estimate (1999): \$10,000

## REMOTE ACCESS

Ranking: 11  
Raw Score: 83

### Project Description:

The project would allow employees to be able to access the network and its applications from remote locations, such as home or offsite. Implementation of this project would be dependent upon the creation of a new workplace policy as well as the procurement of specific remote access software. Cost for such a system is \$30,000 for a server, \$7,500 for a router and \$750 per user. The cost below assumes that up to 30 employees who perform office work will have remote access. Some limited remote access is possible with existing technology, but is limited to a maximum of 5 users before significant hardware and software upgrades are needed. The approximate cost to accommodate a maximum of 5 new users with existing technology is \$7,500. If a significant number of employees were to be allowed remote access, there would be additional staffing needs by I.S. due to the support requirements.

Technology Plan Description: Not in Technology Plan...new item

### History:

The deployment of a VPN or other solution to accommodate remote access to the City's basic processing applications will give employees the ability to work from off-site locations (for example, while attending training, conferences, or from home) in order to better and more quickly respond to management's needs and their customers' needs, as well as consider alternative work schedules. Remote access can enhance the needs of a changing workforce who strive to balance the demands of their employer, the needs of their customers, and concerns for improved quality of life.

Cost Estimate (2002): \$60,000

Original Cost Estimate (1999): N/A

## **AUTOMATIC VEHICLE LOCATION – POLICE ONLY**

Ranking: 12  
Raw Score: 87

### Project Description:

Automatic Vehicle Location (AVL) Software allows Police Dispatch to visually see on a monitor where each patrol vehicle is located at any given time through a GPS unit currently installed on each patrol vehicle. AVL is designed to assist the dispatcher in selecting a responder to an emergency call and will result in improved response times as well as increase officer safety. AVL also has the ability to notify the dispatcher if sirens have been activated, speed of the patrol car is high and/or if the mounted shotgun has been deployed. It is an effective tool in providing directions, particularly if such a solution is implemented countywide. AVL information can also be used to determine if additional backup is necessary or to locate an officer who is unable to maintain radio contact due to extenuating circumstances. The software can also be loaded into the laptop computers in each patrol vehicle to show officer location during an emergency situation. This project can be implemented either as a local solution or a regional solution. The effectiveness of AVL is substantially enhanced as the area it serves increases.

Technology Plan Description: The ideal Police Dispatching System would include Automatic Vehicle Locator (AVL) capability using a Global Positioning System (GPS) so that dispatchers can quickly and easily identify the location of all service units and dispatch the closest available unit to the call for service scene. Such systems not only result in improved call response and customer service, but also increase officer safety by ensuring any non-responsive unit can be quickly located in a possible emergency situation.

The AVL technology envisioned could be installed in all City vehicles as warranted to facilitate location and dispatch of inspectors code enforcement personnel, Public Works repair crews, Parks and Recreation maintenance personnel, etc.

### History:

Belmont has implemented a number of upgrades to their existing CAD/RMS system designed to decrease emergency response time and enhance citizen and officer safety. This included the upgrading of the existing CAD/RMS system, mounting of laptop computers and wireless modems with GPS capability within each patrol vehicle and the creation of a citywide GIS. Installation of AVL software would utilize all these tools by providing the dispatch center with valuable location data that can greatly assist during an emergency situation. Purchase of the appropriate AVL software would complete the technology upgrades and effectively bridge the gap between the hardware purchased and the level of operation envisioned within the original 5-Year Technology Plan. MOU or other Human Resources related issues would need to be explored and resolved prior to implementation.

PD AVL's Funded by Police Department and completed December 2003

Original Cost Estimate (1999): \$50,000 (estimate was for both police and citywide AVL)

## **AUTOMATIC VEHICLE LOCATION – NON-POLICE VEHICLES**

Ranking: 13  
Raw Score: 95

### Project Description:

Automatic Vehicle Locator (AVL) Software would allow the City of Belmont to visually see on a GIS map where each department's vehicle is located at any given time through the installation of a wireless GPS unit on the trunk of each vehicle. The purpose of using an AVL system within each department is to assist in locating existing equipment in the field and identifying the closest responder to a particular incident. If utilized properly, AVL will decrease response time of service vehicles and could provide cost savings. AVL can also be utilized to track vehicle mileage and determine if a vehicle is in need of maintenance.

Technology Plan Description: The ideal system would include Automatic Vehicle Locator (AVL) capability using a Global Positioning System (GPS) so that dispatchers can quickly and easily identify the location of all service units and dispatch the closest available unit to the call for service scene. Such systems not only result in improved call response and customer service, but also increase... safety by ensuring any non-responsive unit can be quickly located in a possible emergency situation.

The AVL technology envisioned could be installed in all City vehicles as warranted to facilitate location and dispatch of inspectors code enforcement personnel, Public Works repair crews, Parks and Recreation maintenance personnel, etc.

### History:

Included within the 5-Year Technology Plan (with Police)

Cost Estimate (2002): \$60,000

Original Cost Estimate (1999): \$50,000 (estimate was for both police and citywide AVL)

**Attachment B**

CITY OF BELMONT - TECHNOLOGY COSTS (\$000) - BEST CASE

<b>PROJECT - CAPITAL PROJECT COSTS</b>	1998-99	1999-00	2000-01	2001-02	2002-03	<b>TOTAL</b>
Implement Police RMS/CAD/MDC System	606					606
Procure/Implement New Financial Management System	29	121	50			200
Procure/Implement Comm. Dev. Land Management System	30	30				60
Procure/Implement a Facility Scheduling System	10					10
Expand Licensed Users for the Class Registration System	5					5
Procure/Implement New Business License System	20	20				40
Procure/Implement New Human Resources/Payroll System	30	30				60
Develop a Comprehensive I.T. Disaster Recovery Plan		20				20
Procure/Implement City-Wide Management Systems		50	50	50		150
Procure/Implement Engin. Contract/Project Mgmt. System		5				5
Procure Necessary Tols/Develop/Implement New GIS		15				15
Pilot Test Kiosks in City Hall and Elsewhere Thru-Out City		5	5	10		20
Provide Improved Telephone/Voice Response Systems			5			
Provide for Electronic Commerce			5			
Procure/Implement Citizen Contact Tracking Systems			25			
Provide Support for Telecommuting and Disaster Response			10			
Utilize Police Facilities to Provide City MDC Capabilities				20		20
Implement an AVL System for Police/Other City Vehicles				50		50
Procure/Implement a Fleet Maintenance Management System				10		10
Procure/Implement Inventory/Maintenance Mgmt. Systems					50	50
<b>CAPITAL PROJECT COSTS: TOTALS</b>	730	296	150	140	50	1366
<b>PROJECT - OPERATIONS AND MAINTENANCE COSTS</b>	1998-99	1999-00	2000-01	2001-02	2002-03	
Current IT Staffing Salaries and Fringe Benefits	61	75	75	75	75	361
Provide Responsive "Help Desk" Support/Training Staff		65	65	65	65	260
IT Administrative Support Costs	22	22	22	22	22	110
Computer Usage Charge	25	25	25	25	25	125
Equipment Purchase Costs	12					12
Upgrade WAN Servers/Hubs to Support Image Mgmt/GIS		15	15	15	15	60
Equipment Maintenance/Repair Costs	31	41	41	41	41	195
Software License Fees and Maintenance	4	40	75	75	75	269
Implement Existing SFG Purch., Time-Sheet, etc. Capabilities	10					10
Expand Internet Use to Improve Access to City Systems	5					5
Telephone Costs	17	17	17	17	17	85
IT Training Costs	3					3
Develop/Implement Employee Education/Training Program		15	15	15	15	60
Provide Additional Training to Dept. Tech. Coordinators		5	5	5	5	20
<b>OPERATIONS AND MAINTENANCE COST TOTALS</b>	190	430	355	355	355	1575