

**Borough of Media,  
Pennsylvania**



**Information Technology  
Strategic Plan:  
Executive Summary**

**December, 2013**

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# ICA Consulting, LLC

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December 26, 2013

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Dear Mr. Smith:

ICA Consulting, LLC is pleased to present this Executive Summary of the Information Technology Strategic Plan (the IT Strategic Plan) to the Borough of Media.

The IT Strategic Plan presents 127 findings and recommendations, organized by priority and with associated costs, regarding almost every aspect of information technology in the Borough. This Executive Summary includes the Table of Contents of the IT Strategic Plan in order to provide the reader with a full sense of the scope of that document.

We wish to thank the many elected officials, employees, volunteers, contractors and others who have contributed significantly to the development of the IT Strategic Plan.

Thank you for the opportunity to have been of service to the Borough of Media.

Very truly yours,



Sheldon S. Cohen  
Manager

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## Executive Summary

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This Information Technology Strategic Plan (the IT Strategic Plan) arose from the interest of Media's Borough Council, spurred by its Technology Committee, in taking a comprehensive view of the organization and deployment of information technology (IT) in the Borough, leading to the development of a strategic plan to guide how the Borough ought to address IT over the next three to five years.

The Borough had made some previous attempts in this direction, including a work session with Council Members and Borough staff on March 22, 2010. That effort produced a three-page list of topics, touching on many aspects of the Borough's operations and services. However, the Borough at that time lacked the organizational capacity to pursue most of the ideas identified.

Given this background, Media realized that the services of an independent consulting firm with particular expertise in IT in municipal government would be required for the Borough to make the progress it sought. As a result, Media issued an open, competitive Request for Proposal (RFP) for IT Strategic Planning Consultant in March, 2013. The Borough's RFP described the goal of the IT Strategic Plan as follows:

The purpose of this plan is to identify and define strategic goals for the Media Borough with regard to Information Technologies (IT) and its methods of information management and communications. Since no plan currently exists, this plan will serve as a baseline for future strategic efforts.

Following the receipt and evaluation of proposals from consultants, Media selected ICA Consulting, LLC of Andover, Massachusetts to carry out the IT Strategic Plan.

In looking at IT in Media, this IT Strategic Plan takes a business-like approach and considers what any other high-performance organization with a \$10-million budget and 70 full- and part-time employees would need to do in order to survive and prosper in a competitive environment.

The ultimate goal of this IT Strategic Plan, then, was to make a set of recommendations, phased for implementation by priority, which would both (a) position Media strategically to maintain and enhance its established, high quality of life and public services, and (b) constitute fiscally prudent investments for Media's future.

The findings and recommendations which this IT Strategic Plan presents are derived from a comprehensive assessment of Media's *functional requirements*--what the Borough does now or expects to be doing in the foreseeable future. One must look at the full range of Media's functions as a whole, not in separate parts. This view must be based on the concept of *functional integration*--how IT should be supporting the different things that Media does with respect to policy-making, management and operations.

Moreover, one needs to anticipate how Media's use of IT may change over time. Responsible policy-making, management and operations require that Media anticipate these changes as well as possible and organize the IT function to be flexible and adaptable to these changes.

In the course of this engagement, the consultant met on numerous occasions with various groups and individuals from every department in Media, interviewing 38 individuals in Media as well as vendors currently or prospectively serving Media. This process resulted in full and frank discussion between the consultant and the Borough, mainly through the Council's Technology Committee and the Borough Manager. All aspects of this IT Strategic Plan have been reviewed and discussed thoroughly with the Technology Committee as well as participating staff and officials.

Consistent with Media's RFP for this engagement, this IT Strategic Plan organizes its 127 recommendations by priority into two phases:

- **Phase I**--those which are most critical today and potentially beneficial to the Borough, calling for action by the Borough as soon as possible in 2014 and extending through 2015. These focus on the following, basic actions among others:
  - (a) Putting in place an organizational resource to guide and advise the Borough in IT generally and the implementation and management of its applications in particular.
  - (b) Defining a new approach to the management of IT-related projects.
  - (c) Considering on a case-by-case basis the strategic ramifications of deploying applications either in a server-based environment in the Borough Hall or using "cloud" services.
  - (d) Emphasizing annual training in the use of the Borough's applications for all ranks of Media's personnel, including active participation in vendors' user-groups.
  - (e) Considering the procurement and implementation of a new financial and payroll system.
  - (f) Providing broad, secure, departmental access to applications generally, vastly enhancing productivity throughout the Borough by making full use of the applications' capabilities.
  - (g) Undertaking the careful reengineering of business processes throughout the Borough, tied to the new approach to deployment of applications just mentioned.
  - (h) Addressing a wide range of issues in networking and communications from connectivity for the Department of Public Works (DPW) and Fire Company to the feasibility of wireless services in the Central Business District (CBD). This includes examining the possibility of piggybacking on the County's fiber-optic infrastructure.
  - (i) Updating the Borough's hardware inventory and establishing a systematic program for periodic replacement, tied to the Borough's Capital improvement Program (CIP).
- **Phase II**--those actions on which Media should focus beginning in 2016 after it has been successful in meeting the goals and objectives of Phase I. As examples, these include:
  - (a) Providing editable forms on the Web for people applying for permits and land-related actions.
  - (b) Enabling citizens' reporting of criminal activity by means of the Web.
  - (c) Offering mobile applications for people seeking parking spaces.

These priorities are influenced mainly by two factors: (1) risk and (2) impact. This is the main reason why Phase I includes such things as: (a) establishing a new approach to planning for and managing IT; (b) expanding the deployment of several applications with secure, decentralized access by the Borough's staff and other agencies in order to achieve huge gains in efficiency and effectiveness throughout the Borough; and (c) undertaking a systematic approach to business process reengineering (BPR), tied to the strategy for deployment of applications.

44 per cent of this IT Strategic Plan's recommendations, or 56 of the 127 total, involve no appropriation of funds: they call for no-cost decisions involving policy or administration. Where this IT Strategic Plan recommends new investment by Media, this should have immediate benefit to the staff's productivity and the quality of services delivered by Media to its residents, taxpayers and visitors.

Media now must emphasize *functional integration* in its approach to information technology. This should provide substantially greater support for decision-making in Media regarding policy, management and operations. Media needs to leverage the sound technological base it has established, most significantly in the area of application software, in order to achieve this higher level of integration.

This IT Strategic Plan begins by looking at the current profile of IT in Media, which may be summarized as follows:

- 3 servers which supports all applications in the Borough and Microsoft Active Directory.
- 12 PC's in the Borough Hall.
- 11 PC's in the Police Department.
- 8 PC's in the Fire Department.
- 1 PC in the Department of Public Works (DPW).
- Applications from four commercial-off-the-shelf (COTS) software vendors used by different departments for functions including:
  - The Integrated Financial Management System (IFMS) from Applied Micro Systems, LTD.
  - Land Records from GeoDecisions.
  - Police Records Management System (RMS) from Informant Technologies, Inc.
  - Enterprise Content Management System (ECMS) from Laserfiche.
- Microsoft Office hosted in the cloud by Microsoft.
- Payroll done on a remote service-bureau basis by PrimePay.
- Citizen Services done on a hosted basis by PublicStuff.
- No wide area network (WAN) outside the Borough Hall.
- No connectivity to (1) the DPW or (2) Fire Company, both of which are located remote from the Borough Hall.
- No IT personnel, with most hands-on technical support provided by a contractor, Computer & Network Paramedics, Inc. (CNP).

This IT Strategic Plan does not attempt to address every technology now on the market or which may become available in the future. Instead, it focuses on those information technologies which now or in the future should have the greatest benefit to Media's policy-making, management and operations.

Most important, Media has an exceptionally capable and dedicated group of employees throughout its various departments. As one employee described his colleagues, “They’re a caring group--they try to do everything for everybody.” The staff is doing their very best under frequently difficult circumstances resulting from an inadequate level of IT-based support. Nothing in this IT Strategic Plan is intended in any way to be critical of the staff. Rather, this IT Strategic Plan applauds their dedication to the Borough and the high quality of their work. While Media has much to do in implementing the recommendations of this IT Strategic Plan, Media’s staff has shown a high level of interest in IT and in making the effort required to implement new and better systems.

Media as a municipal government is also characterized by the range of its active stakeholders. These include, among others, its elected and appointed officials, employees, volunteers, residents, taxpayers, business community, civic organizations and related public agencies. The recommendations which this IT Strategic Plan makes, especially in connection with the deployment of applications, should provide much better information for all of these parties in their respective roles in the Borough.

It is important to make certain observations about the organization and scope of this IT Strategic Plan.

- It emphasizes the practical business value of IT to the Borough, not being enamored of IT for its own sake but considering first its value to economy and efficiency in the Borough on as broad a basis as possible.
- It recognizes the interdependence of the topics with which it is concerned. The major issues of organization, staffing, technology and financing are all closely related: all share the same origin in scale.
- It concerns itself with function, not organizational unit. Thus, for example, it addresses the Financial Management function, not the offices of the Borough Accountant, Treasurer or Tax Collector.
- It applies wherever possible the widely recognized principle of *best practice*. This looks at how various aspects of IT in Media, from the training of its end-user personnel to its deployment of applications and infrastructure, compare with the state of the art among comparable local governments in the United States. Among other things, this insight draws from: (1) the publications and information provided by such leading professional organizations as the International City/County Management Association (ICMA); and (2) the experience of the consultant in more than 180 public agencies in Pennsylvania and across the United States.
- It applies the concept of *strategic positioning*. This means that Media should take actions in such areas as policy-making and procurement which establish the foundation for the Borough to function both in the short and longer terms as a high-performance organization. Strategic positioning for Media also considers changes which may occur in its environment such as the impact of growth, advances in technology, or statutory, regulatory or judicial factors. Strategic positioning is often characterized as “buy smart, not cheap.”

- While it speaks generally about IT in the Borough, the Police Department differs quite dramatically in the extent and sophistication of its deployment of IT from all other Borough offices. This is based both on: (1) its status as Media's local law-enforcement agency, subject to specific regulation by the U.S. Government and the Commonwealth of Pennsylvania in a way very different from any other Borough department; and (2) its having its own dedicated IT personnel.
- It has not included vendor-related tasks such as the evaluation of a particular firm's products or services. Where the consultant has had interaction with current or prospective vendors, this has been for the purpose of determining costs, technical or functional issues related to a given vendor's products or services, not due diligence.
- It considers Media's unusual characteristics, mainly revolving around:
  - (a) Its very small area of 0.75 square miles.
  - (b) Its resident-population of 5,400 with a density of approximately 7,300 per square mile and its daytime-population density of approximately 33,000 per square mile.
  - (c) Its role as both the County seat for Delaware County and a major commercial and entertainment destination for the region, causing Media's population to expand from approximately 5,400 residents to an estimated 25,000 during the day.
  - (d) Related to the preceding item (c), its hosting about 1,600 attorneys' offices, 65 restaurants, 18 banks and other facilities; this combination makes Media's downtown look like what one would find in a prosperous suburb of 30,000 or 40,000.
- No mention of any vendor by ICA Consulting, LLC is intended or implied to create any endorsement or criticism.

This IT Strategic Plan followed a careful, systematic approach in addressing the full scope of work of this engagement. Key tasks here included:

- Conducting a Project Organizational Conference by telephone with the Technology Committee and Borough Manager on August 27, 2013. This meeting was held to establish a common understanding of the specifics of the project plan and assure that all parties had clear agreement on the conduct of the project.
- Presenting a Project Workshop on the afternoon of Tuesday, September 10, 2013, attended by 14 Borough personnel from different offices. This session was offered in order to engage the staff by having them understand why the IT Strategic Plan was being done, how it would proceed, what their role in the process would be and how the IT Strategic Plan might ultimately affect their work with the Borough of Media. The Project Workshop sought to (1) establish a sense of common purpose and interdependence in the use of IT, (2) share a common base of knowledge about the current state of the art in IT in local government, and (3) spur thinking among Media's staff about ways in which they could make more effective use of IT in their work.
- Reviewing various documents which provided background information related to the scope of the IT Strategic Plan. This included such things as: (1) audits and management letters; (2) operating

and capital budgets; (3) requests for funding related to IT; (4) detailed expenditure reports; (5) existing contracts with vendors of IT systems and services; and (6) internal documents in Media's files. These documents provided background which was important throughout the course of the IT Strategic Plan.

- Distributing, both in hard copy and electronically, and explaining a set of seven inventory forms, given to each department as "homework" at the Project Workshop and later reviewed during the departmental interviews. These inventory forms were a key part of the effort to establish as complete and accurate a baseline of all deployed hardware, software, services, networks and all other information-technology assets. The Borough's IT-support contractor, Computer & Network Paramedics, Inc. (CNP), helped substantially in this and other tasks.
- Interviewing 38 personnel from every office, various agencies in the Borough and contractors. These interviews used a standard approach and were critical to understanding: (1) the current state of deployment of IT in the Borough; and (2) what ideas the staff and others had regarding opportunities for how the enhanced deployment of IT could support the goal of increasing the efficiency and effectiveness of policy-making, management and operations--public services--in Media.
- Meeting with the Council's Technology Committee and IT Strategic Planning Advisory Committee on October 10, 2013 to take a broad view of issues in IT in the Borough.
- Meeting with the Council's Technology Committee and IT Strategic Planning Advisory Committee on November 21, 2013 to review the initial draft of the IT Strategic Plan, which had been provided to the Borough one week earlier. This meeting provided an important opportunity for ICA Consulting to present the basis for the findings and recommendations of the IT Strategic Plan and for the Committees to provide input for incorporation into the final work product.
- Meeting with key members of the Borough's staff on November 21, 2013 to get their review and comment on the draft of the IT Strategic Plan.
- Finalizing the IT Strategic Plan as a result of the November 21, 2013 review meeting and preparing it for final presentation to the full Borough Council and staff on December 5, 2013.

This process resulted in full and frank discussion. All aspects of this IT Strategic Plan have been reviewed and discussed thoroughly with the participants. As well, each of these tasks contributed significantly to the development of the IT Strategic Plan.

Recommendations for funds are presented on the basis of a five-year lifecycle. This combines all costs for all recommendations into a single framework by phase, producing an average annual cost over five years. In this way, Media can make well informed decisions regarding the fiscal impact of each prospective investment.

While this IT Strategic Plan makes specific recommendations for funding, one is obliged to be conservative in expectations regarding the availability of funds from the U.S. Government, the Commonwealth or other sources. Media should make every possible effort to secure intergovernmental and extra-governmental funding while recognizing the well-known fiscal constraints facing the State and Federal governments.

This IT Strategic Plan suggests a major transition from the current way that Media organizes and manages IT. This big change also presents significant challenges. For example:

- The Borough should engage a contractor to act as implementation consultant, providing advice on key topics, such as IT strategy and the deployment of applications. No one person on the staff in Media has specific responsibility for IT. While such a position existed once, it was eliminated in 2012. Since that time, CNP has assisted the Borough in technical issues. However, critical strategic and applications-oriented capacity does not now exist and has continuing, adverse impact on the performance of the Borough, notwithstanding the outstanding efforts of the staff to do their very best under the current circumstances.
- The staff of the Borough--Media's end-users--must be engaged formally in the management and deployment of IT in a way that they have never previously been. This should occur in an integrated, two-pronged approach: (1) having a Borough-wide end-user Information Services (IS) Committee, facilitated by the Borough Manager; and (2) having a set of specialized subcommittees in such areas as Financial Management and Land Records, which operate as part of the IS Committee. All of these groups should meet monthly with formal agendas and minutes.
- Media needs to be thinking in new and different ways about how it uses IT to identify the quantity and evaluate the quality of the services it delivers. Thus, this IT Strategic Plan recommends, among other things, a well organized, full view of the deployment of the PublicStuff mobile application for civic connection. This could help in identifying needs for services in Media and enhancing the ability of the Borough's agencies to respond, with subsequent reporting and analysis of the number, type and cost of services Media provides.
- Business process improvement must be a major focus in offices throughout the Borough. The enhanced deployment of applications which this IT Strategic Plan recommends for functions ranging from Financial Management and Payroll to Land Records and Public Works presents an enormous opportunity to enhance how almost every office in Media does its work on a daily basis. Gradual implementation of these changes, office by office, is required so that Media's personnel can adapt as easily and successfully as possible to new, different and better ways of doing their work.

To a large extent, having IT contribute well to the efficiency and effectiveness of public services in Media will depend on the interest, understanding and support of its key elected and appointed officials. They are the ones who ultimately must bring to the Borough's voters a clear sense of how IT should be supporting Media as part of a fiscally prudent approach to Borough government.

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### KEY FINDINGS AND RECOMMENDATIONS OF THE IT STRATEGIC PLAN

The paragraphs which follow in this Executive Summary present key findings and recommendations of this IT Strategic Plan. They respond to the nature of Media's business as a \$10-million corporation with 70 employees.

1. This IT Strategic Plan is very sensitive to practical, fiscal impact and makes only those recommendations which have a direct, concrete impact on improving economy and efficiency.
2. The Borough's end-users must be directly involved on an on-going basis through a new Information Services (IS) Committee with several subcommittees focused on particular areas such as Financial Management and Land Records. The Borough Manager and contractors must work hand-in-glove with the IS Committee and its subcommittees in order to be sure that issues are identified on a timely basis, coherent plans are developed, appropriate resources are applied and implementation proceeds successfully. The IS Committee and its subcommittees must keep formal agendas and minutes with monthly reports to the Borough Manager for subsequent transmittal to the Council.
3. Media needs to establish the required capacity to plan, manage and deploy IT efficiently and effectively by putting in place a contractual resource, which this IT Strategic Plan identifies as the implementation consultant, to guide and advise the Borough regarding IT generally and the implementation of its applications in particular. No such resource exists today and its absence is having adverse consequence for the Borough, notwithstanding the very best efforts of the Borough's staff. The relatively small scale and scope of the Borough's operations make the hiring of staff infeasible.
4. The Borough should define a new approach to the management of IT-related projects. This involves primarily formalizing this process in writing with a project plan which should not be more than two pages, identifying critical elements such as:
  - The purpose of the project--why it is being undertaken.
  - The goal of the project--what it is intended to achieve.
  - The identification of a project manager among the Borough's staff.
  - The identification of personnel from various offices who will comprise the project team.
  - The noting of risks or concerns from the outset of the project which will require ongoing attention.
  - The schedule for execution of the project, identifying specific tasks, responsibilities and timetable with special attention to dependencies among tasks in the execution of the project.
  - The approach to in-process continuous evaluation and reporting to the Borough Manager and Council.
  - The role of the vendor(s) involved in the project.
  - Who will monitor costs related to the project.
  - How the project will be evaluated at its conclusion with special attention to lessons learned that can contribute to enhancing the success of future projects.

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5. Media needs to become much more knowledgeable about the capabilities of its current commercial-off-the-shelf (COTS) applications. Each of the Borough's COTS vendors should be asked to come to Media and provide an all-day presentation of their products, both those now licensed and in use in Media as well as those (1) not yet licensed or (2) licensed but not in use. Personnel from all of the Borough's departments and the implementation consultant should attend these sessions in order to be sure that Media has the broadest and deepest view possible of how its COTS systems might be deployed to the Borough's greatest advantage.
  6. Media needs to make several, highly focused investments in application software as a critical part of enhancing economy and efficiency in the Borough. These investments include among others:
    - Procuring and implementing a new Integrated Financial Management System, commonly known as Enterprise Resource Planning or "ERP", including Payroll.
    - Implementing additional modules of the GeoPlan Land Records application which have been licensed but not yet deployed by the Borough.
    - Migrating Laserfiche from the obsoleted version now installed to the current product known as Avante.
    - Adding a small number of high-impact modules for the Informant Police Records Management System (RMS).

In almost all of these cases except Informant in the Police Department, this involves procuring additional seats for more users to support the benefits in productivity from decentralization. Associated with this is also funding for ample training of the Borough's personnel.

7. Media should consider fully the strategic and fiscal ramifications of deploying applications either in a server-based environment in the Borough Hall or using "cloud" services, also known as Software as a Service or "SaaS". The presence of the cloud option presents a very different set of choices from what the Borough had 10 to 15 years ago when it procured and implemented its present server-based applications. This choice should be fact-based, not driven by a pro-cloud or anti-cloud ideology.
8. The Borough ought to emphasize ongoing training in the use of its applications for all ranks of personnel by funding active participation in vendors' user-groups. Training has been recognized for several decades as a critical factor in organizations' obtaining the greatest value possible from their investment in IT.
9. Media should give serious consideration to the procurement and implementation of a new enterprise-wide financial system. Over the next five years, Media will manage more than \$50-million; over the next 10 years this rises to more than \$100-million. The Borough needs to be sure that it has a financial-management system in place which provides this kind of longer-term solution.

10. Payroll should be brought in house from the present service bureau. Using this kind of service bureau has two, key disadvantages. First, over a five- to 10-year horizon, it is not cost-effective. Second, it causes needlessly time-consuming work for the Borough Accountant in every pay cycle, requiring him to undertake work which would not be necessary with an integrated Payroll application.
11. Media should consider using PublicStuff as its core product for Citizen Services, replacing this module of GeoPlan. The capabilities of PublicStuff in the breadth and depth of information it maintains as well as its reporting and analysis appear to be much stronger than what GeoPlan offers.
12. Providing broad, secure, departmental access to applications generally should increase productivity throughout the Borough. This includes in particular the Integrated Financial Management System, Laserfiche and GeoPlan.
13. The enhanced deployment of its application systems throughout the Borough presents an ideal opportunity for Media to undertake a wide-ranging and careful reengineering of business processes.

This work requires careful planning by Media's staff and the full cooperation of the respective vendors.

14. The Borough should address a wide range of issues in networking and communications, ranging from connectivity for the Department of Public Works and Fire Company to the feasibility of wireless services in the Central Business District (CBD).
15. The Borough's operating and capital budgets ought to establish a systematic program for periodic replacement of hardware and upgrading of software, tied to the Borough's Capital Improvement Program (CIP) and following the practice of strategic positioning, or "buy smart, not cheap," which this IT Strategic Plan recommends.
16. The procurement of IT-related assets should follow environmentally sound "Green IT" principles wherever possible.
17. The Borough ought to continue to work closely with its IT-services vendor, CNP, to be sure that all systems and services are deployed optimally and cost-effectively.
18. Media should commit as policy to a level of effort for funding of IT.

For more than 10 years, progressive local governments have been spending about 3 to 4 per cent of total budget on IT. Media currently spends about 0.6 per cent. In part, this lower level of current expenditure is explained by the fact that Media is not a full-service municipality: it does not provide various services ranging from water and wastewater utilities to public-safety

dispatching, library services and property appraisal, which are sometimes done by other local governments around the United States.

Implementing all of the Phase I recommendations of this IT Strategic Plan would increase Media's spending on IT to approximately 2 per cent, still well below the national norm of 3 to 4 per cent.

19. Media should be sure that its Web site is evolving to meet the Borough's needs. Among other things, this should include:
  - Looking to the IS Committee to provide ongoing advice regarding the deployment of the Web site.
  - Providing editable forms for customers in such areas as land use and various types of applications and permits.
  - Implementing a wide range of links as appropriate for various functions.
  - Comparing Media's Web site on a regular basis with those of other local governments regionally and nationally who are recognized for excellence in this area.
20. Geographic Information Systems (GIS) does not have substantial value to Media and does not call for any investment of consequence. This is a function mainly of (a) Media's very small area of 0.75 square miles and (b) its not having any municipal utilities such as owning its own water or wastewater system.

At the same time, the availability of products like Google Maps, now provided at no cost by PublicStuff, or GeoPlan's MapView may have the potential to provide the Borough with useful capabilities in this area.
21. Media should maintain Microsoft Office as the core of its office environment. This recommendation is driven mainly by the potential importance of integrating Office with various COTS applications in workflow and otherwise.
22. While social media has an increasingly important role in local government, Media's ability to integrate social media into its environment is hampered by (1) the overwhelming backlog of demands it has in other areas of IT as well as (2) the limited number of staff to process the likely large, new stream of input.
23. Standards need to be established across-the-board for all IT resources.

Media today has no formal standards for any component of its IT environment. As one example, the Borough has personal computers (PC's) of various manufacturer, model, configuration and software. This may lead to issues in support for the contractor and productivity for end-users.

The IS Committee should take the lead in this process, incorporating an annual review of standards as part of the budgetary process.

24. Media needs to rationalize its management of hardware. This includes:

- Having the IS Committee establish and update standards as part of the Borough's annual budgetary process.
- Replacing 20 per cent of its hardware inventory every year as an integral part of the Borough's Capital Improvement Program (CIP).

25. Media should undertake an ongoing review of the deployment of the PublicStuff application as part of clarifying its strategy for the Citizen Services function.

26. The Borough should address several fundamental issues in system management including:

- Establishing a Business Continuity/Disaster Recovery (BC/DR) plan.
- Revising its user-policy for IT at least annually.
- Addressing the use of uninterruptible power supplies (UPS).

27. The Borough ought to undertake discussions with Delaware County about various IT-related issues. This responds to the concerns which several departments have raised in connection with different services from the County.

28. All procurement of goods and services related to this IT Strategic Plan must be carried out in conformity with Pennsylvania law and regulation.

The Borough should be looking at the possibility of using the Commonwealth's blanket contracts for IT-related goods and services through the program known as COSTARS.

29. This IT Strategic Plan will continue to have its greatest value to the Borough if it is viewed and acted upon on a continuing basis in concert with Media's Comprehensive Plan and other efforts of strategic import to the Borough.

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In the end, this IT Strategic Plan tries to provide Media with a clear vision of how information technology could be serving the Borough better, understanding where the greatest opportunities are for IT to help Media fulfill its goals and priorities.

Implementing the recommendations of this IT Strategic Plan will require the full commitment of personnel at all ranks throughout the Borough. Media's Borough Council and Borough Manager will need to provide both (a) funding on a fiscally prudent basis and (b) visible political leadership in this effort.

**Table 20: Implementation Plan by Phase: Cost and Non-Cost**

Section	Description	Cost (Y/N)	One-Time Cost	Annual Cost	5-Year Average
<b>Phase I Recommendations</b>					
<b>Section Four: IT Organization</b>					
1	3.C.1 Organize Information Services Committee/subcommittees.	N	\$0	\$0	\$0
2	3.C.2 Engage implementation consultant.	Y	\$40,000	\$25,000	\$33,000
3	3.C.3 Define formalized approach to IT project management.	N	\$0	\$0	\$0
4	3.C.4 Continue the technical-support services of CNP.	N	\$0	\$0	\$0
5	3.C.5 Undertake annual updating of <i>IT Strategic Plan</i> .	N	\$0	\$0	\$0
6	3.C.6 Emphasize business analysis.	N	\$0	\$0	\$0
7	3.C.7 Understand organizational impact of server or cloud decisions.	N	\$0	\$0	\$0
8	3.C.8 Pay special attention to IT info from prof'l associations.	N	\$0	\$0	\$0
9	3.C.9 Understand impact of adopted standards on IT organization.	N	\$0	\$0	\$0
10	3.C.10 Understand required IT staffing: employment or contract.	Y	?	?	?

**Table 20: Implementation Plan by Phase: Cost and Non-Cost (Cont.)**

Section	Description	Cost (Y/N)	One-Time Cost	Annual Cost	5-Year Average	
<b>Section Five: Application Systems and Business Process</b>						
11	4.C.1	Learn more about current COTS applications.	N	\$0	\$0	
12	4.C.2	Invest for impact on economy and efficiency.	Y	Included	Included	
13	4.C.3	Evaluate appropriateness of cloud computing case by case.	N	\$0	\$0	
14	4.C.4	Budget for new applications as server-based.	Y	Included	Included	
15	4.C.5	Eliminate/Minimize Excel, Access, QuickBooks, etc.	Y	Included	Included	
16	4.C.6	Consult with leading users of COTS applications.	N	\$0	\$0	
<b>Section Five: Application Systems and Business Process C-1. Financial Management</b>						
17	4.C-1.1	Consider carefully the replacement of the AMS system.	Y	\$90,000	\$9,000	\$27,000
18	4.C-1.2	Upgrade server for more use and users.	Y	Included	Included	Included
19	4.C-1.3	Develop written plan: phased implementation, decentralization.	Y	\$0	\$0	\$0
20	4.C-1.4	Undertake complete reengineering of Accounts Payable.	Y	Included	Included	Included
21	4.C-1.5	Give all departments secure, decentralized access to IFMS.	Y	Included	Included	Included
22	4.C-1.6	Review the Cash Receipts process.	Y	Included	Included	Included

**Table 20: Implementation Plan by Phase: Cost and Non-Cost (Cont.)**

Section	Description	Cost (Y/N)	One-Time Cost	Annual Cost	5-Year Average
23	4-C-1.7 Review the Accounts Receivable process.	Y	Included	Included	Included
24	4-C-1.8 Review the use of IT in Budget Preparation.	Y	Included	Included	Included
25	4-C-1.9 Emphasize training in the best practice of the IFMS.	Y	Included	Included	Included
26	4-C-1.10 Eliminate/Minimize Excel, Access, QuickBooks, etc.	Y	Included	Included	Included
<b>C-2. Payroll/Human Resources</b>					
27	4-C-2.1 Bring Payroll in-house as part of the IFMS.	Y	Included	Included	Included
28	4-C-2.2 Undertake complete reengineering of the Payroll process.	N	\$0	\$0	\$0
29	4-C-2.3 Maximize participation in direct deposit.	N	\$0	\$0	\$0
<b>C-3. Public Safety</b>					
30	4-C-3.1 Make more complete use of Informant Police applications.	Y	\$16,896	\$660	\$4,039
31	4-C-3.2 Give Fire Chief access to Borough's network and systems.	Y	?	?	?
32	4-C-3.3 Address age and performance of Police MCT's.	?	?	?	?
33	4-C-3.4 No need for Fire MCT's.	N	\$0	\$0	\$0
34	4-C-3.5 No need for GIS in Police or Fire.	N	\$0	\$0	\$0
35	4-C-3.6 Provide 2 days of refresher training from Informant.	Y	\$2,800	\$0	\$560

**Table 20: Implementation Plan by Phase: Cost and Non-Cost (Cont.)**

Section	Description	Cost (Y/N)	One-Time Cost	Annual Cost	5-Year Average
36	4-C-3.8 Have Police and Fire review information from GeoPlan.	Y	Included	Include	Included
37	4-C-3.9 Install same operating system for all Police and Fire PC's.	Y	?	?	?
38	4-C-3.10 Discuss Police Department's concerns with Delaware County.	?	?	?	?
39	4-C-3.11 Work with Informant to identify a Report Generator.	Y	?	?	?
40	4-C-3.12 Provide police with access to Parking Permit application.	N	\$0	\$0	\$0
41	4-C-3.13 Have State Court notify Media of restraining orders.	N	\$0	\$0	\$0
42	4-C-3.14 Monitor implementation of QuickTicket application.	N	\$0	\$0	\$0
<b>C-4. Land Records</b>					
43	4-C-4.1 Make most complete use possible of GeoPlan.	Y	Included	Included	Included
44	4-C-4.2 Review use in production of all GeoPlan modules.	Y	Included	Include	Included
45	4-C-4.4 Resolve issues in data integrity with Delaware County.	N	\$0	\$0	\$0
46	4-C-4.5 Integrate Borough Engineer's as-builts.	N	\$0	\$0	\$0
47	4-C-4.8 Eliminate/Minimize use of Excel, etc.	N	\$0	\$0	\$0
48	4-C-4.9 Incorporate attachments with all records.	N	\$0	\$0	\$0
49	4-C-4.10 Maintain schedules on GeoPlan.	N	\$0	\$0	\$0

**Table 20: Implementation Plan by Phase: Cost and Non-Cost (Cont.)**

Section	Description	Cost (Y/N)	One-Time Cost	Annual Cost	5-Year Average
50	4-C-4.12 Procure 3 new GeoPlan licenses for DPW, Fire & Police.	Y	\$1,500	\$0	\$300
51	4-C-4.13 Exploit GeoPlan Map View.	N	\$0	\$0	\$0
52	4-C-4.14 Learn GeoPlan's Report Generator.	N	\$0	\$0	\$0
53	4-C-4.15 Budget funds for GeoPlan training and consulting.	Y	\$2,000	\$0	\$400
54	4-C-4.16 Pursue read-only CAMA access with Delaware County.	Y	?	?	?
<b>C-5. Web Services</b>					
55	4-C-5.1 Continue to enhance Web site.	N	\$0	\$0	\$0
<b>C-6. Geographic Information Systems</b>					
56	4-C-6.1 Do not pursue GIS actively.	N	\$0	\$0	\$0
57	4-C-6.2 Monitor GIS info available from other agencies.	Y	?	?	?
58	4-C-6.3 Make best possible use of GeoPlan's Map View.	N	\$0	\$0	\$0
59	4-C-6.4 Become knowledgeable about mapping in PublicStaff.	?	?	?	?
60	4-C-6.5 Become knowledgeable about mapping in Informant.	?	?	?	?
<b>C-7. Work/Service Management</b>					
61	4-C-7.1 Provide DPW with appropriate IT.	Y	\$4,000	\$1,000	\$1,800
62	4-C-7.2 Decide on best means of connectivity for DPW.	Y	?	?	?
63	4-C-7.3 Implement GeoPlan's Road Maintenance module.	Y	Included	Included	Included

**Table 20: Implementation Plan by Phase: Cost and Non-Cost (Cont.)**

Section	Description	Cost (Y/N)	One-Time Cost	Annual Cost	5-Year Average	
<b>C-8. Office Systems and Collaboration</b>						
64	4-C-8.1	Have approach for enterprise deployment of Laserfiche.	Y	\$28,072	\$6,148	\$11,762
65	4-C-8.2	Budget 2 days of BPR consulting with Laserfiche.	Y	\$4,000	\$0	\$800
66	4-C-8.3	Procure Audit Trail module with Laserfiche.	Y	Included	Included	Included
67	4-C-8.4	Do not pursue cloud offering from Laserfiche.	N	\$0	\$0	\$0
68	4-C-8.5	Procure dedicated server for Laserfiche.	Y	Included	Included	Included
69	4-C-8.6	Terminate use of Dropbox.	N	\$0	\$0	\$0
70	4-C-8.8	Extend remote connectivity for Borough officials.	Y	?	?	?
<b>C-9. Executive Administration and Records Management</b>						
71	4-C-9.1	Purchase speech-recognition software for Admin. Secretary.	Y	\$749	\$0	\$150
72	4-C-9.2	Identify others who could use speech-recognition software.	Y	?	?	?
73	4-C-9.3	Review move toward Paperless Council.	Y	?	?	?
74	4-C-9.4	Have IS Committee review record-retention requirements.	Y	?	?	?
<b>C-10. Citizen Services</b>						
75	4-C-10.1	Do ongoing review of deployment of PublicStuff.	Y	?	?	?

**Table 20: Implementation Plan by Phase: Cost and Non-Cost (Cont.)**

Section	Description	Cost (Y/N)	One-Time Cost	Annual Cost	5-Year Average
<b>C-11. Community and Economic Development</b>					
76	4.C-11.1 Take careful approach to CBD wireless feasibility.	Y	\$70,000	\$0	\$14,000
77	4.C-11.2 Pursue talks with other agencies re: infrastructure.	Y	?	?	?
<b>C-12. Other</b>					
78	4.C-12.1 Wait to address social media.	Y	?	?	?
79	4.C-12.2 Define strategy for ongoing training of end-users.	N	\$0	\$0	\$0
80	4.C-12.3 Fund training and user-groups.	Y	\$0	\$18,800	\$18,800
81	4.C-12.4 Budget for independent professional procurement services.	Y	\$25,000	\$0	\$5,000
<b>Section Five: Hardware</b>					
82	5.C.1 Establish standards for all hardware.	N	\$0	\$0	\$0
83	5.C.2 Have Borough Manger enforce standards.	N	\$0	\$0	\$0
84	5.C.3 Replace 20 per cent of hardware every year in CIP.	Y	Included	Included	Included
85	5.C.4 Take full advantage of wireless in Borough Hall.	Y	\$1,800	\$300	\$660
86	5.C.7 Provide multifunction printer for third floor	N	\$0	\$0	\$0

**Table 20: Implementation Plan by Phase: Cost and Non-Cost (Cont.)**

Section	Description	Cost (Y/N)	One-Time Cost	Annual Cost	5-Year Average
<b>Section Six: System Management</b>					
87	6.C.1	Have system management reflect strategic choices.	N	\$0	\$0
88	6.C.2	Have IS Committee oversee system management.	N	\$0	\$0
89	6.C.3	Test backup periodically.	?	?	?
90	6.C.4	Have Business Continuity/Disaster Recovery (BC/DR) plan.	N	\$0	\$0
91	6.C.5	Assure system security for all systems at all levels.	N	\$0	\$0
92	6.C.6	Review and revise user-policy.	N	\$0	\$0
93	6.C.7	Address use of uninterruptible power supply (UPS) systems.	Y	\$1,000	\$0
94	6.C.8	Proceed cautiously in examining virtualization.	Y	?	?
95	6.C.9	Follow environmentally sound Green IT principles.	N	\$0	\$0
96	6.C.10	Stay current with versions of COTS applications.	Y	Included	Included
<b>Section Seven: Financial Management of IT</b>					
97	7.C.1	Review the classification of expenditures for IT.	N	\$0	\$0
98	7.C.2	Consider setting up a departmental code for IT.	N	\$0	\$0
99	7.C.3	Commit to a specific level of effort for financial support of IT.	N	\$0	\$0
100	7.C.4	Refashion how CIP presents IT-related requests.	N	\$0	\$0

**Table 20: Implementation Plan by Phase: Cost and Non-Cost (Cont.)**

Section	Description	Cost (Y/N)	One-Time Cost	Annual Cost	5-Year Average
101	Establish replacement cycle for hardware as part of CIP.	Y	\$0	\$14,880	\$14,880
102	Establish replacement cycle for software as part of CIP.	Y	\$0	\$10,000	\$10,000
103	Avoid chargebacks to user-agencies.	N	\$0	\$0	\$0
<b>Section Eight: Summary of Recommendations</b>					
104	8.B.1 Have a clear sense of direct and indirect benefits from IT.	N	\$0	\$0	\$0
105	8.B.2 Establish specific criteria for evaluating IT requests.	N	\$0	\$0	\$0
106	8.B.3 Be aware of factors influencing IT implementation.	N	\$0	\$0	\$0
107	8.B.4 Apply strategic positioning in all IT decision-making.	N	\$0	\$0	\$0
108	8.C.1 Proceed in 2 phases in implementing recommendations.	N	\$0	\$0	\$0
109	8.C.2 Undertake formal planning and reporting on implementation.	N	\$0	\$0	\$0
110	8.C.3 Review all options for financing of recommendations.	N	\$0	\$0	\$0
111	8.C.4 Follow best practice in procurement of IT.	N	\$0	\$0	\$0
112	8.C.5 Undertake active monitoring and updating of system plans.	Y	\$0	\$5,000	\$5,000
113	8.C.6 Explore interlocal cooperation in IT.	N	\$0	\$0	\$0
<b>Phase I- Total Recommended</b>			<b>\$287,817</b>	<b>\$90,788</b>	<b>\$148,351</b>

**Table 20: Implementation Plan by Phase: Cost and Non-Cost (Cont.)**

Section	Description	Cost (Y/N)	One-Time Cost	Annual Cost	5-Year Average	
<b>Less Funds Programmed or Appropriated</b>						
	--AMS Annual Support.		\$0	\$2,925	\$2,925	
	--PrimePay Payroll Service Bureau.		\$0	\$5,355	\$5,355	
	<b>Total Funds Programmed or Appropriated</b>		\$0	\$8,280	\$8,280	
	<b>Net New Phase I Funds Recommended</b>		\$287,817	\$82,508	\$140,071	
<b>Phase II Recommendations</b>						
<b>C-1. Financial Management</b>						
114	4-C-1.11	Consider accepting payments by credit card.	Y	?	?	?
<b>Phase II Recommendations C-2. Payroll/Human Resources</b>						
115	4-C-2.4	Review and revise all position specifications for IT KSA's.	N	\$0	\$0	\$0
116	4-C-2.5	Include IT in all employees' orientation.	N	\$0	\$0	\$0
<b>C-3. Public Safety</b>						
117	4-C-3.7	Implement citizen crime reporting over the Web.	Y	\$2,500	\$500	\$1,000
118	4-C-3.15	Consider implementation of license-plate readers, etc.	Y	?	?	?

**Table 20: Implementation Plan by Phase: Cost and Non-Cost (Cont.)**

Section	Description	Cost (Y/N)	One-Time Cost	Annual Cost	5-Year Average
<b>C-4. Land Records</b>					
119	4.C-4.3 Consider regional procurement of Land Records system.	Y	?	?	?
120	4.C-4.6 Provide editable Land Records forms on Web site.	Y	?	?	?
121	4.C-4.7 Emphasize mobile capabilities in Land Records.	Y	?	?	?
122	4.C-4.11 Enable customers to schedule appointments on-line.	Y	?	?	?
<b>C-7. Work/Service Management</b>					
123	4.C-7.4 Investigate Route Optimization application.	Y	?	?	?
<b>C-8. Office Systems and Collaboration</b>					
124	4.C-8.7 Consider having related agencies use Laserfiche.	Y	?	?	?
<b>C-11. Community and Economic Development</b>					
125	4.C-11.3 Look into mobile applications for parking.	Y	?		
<b>Section Five: Hardware</b>					
126	5.C.5 Review need for specialized hardware, e.g., color plotter.	Y	\$6,000	\$750	\$1,950
127	5.C.6 Provide Shade Tree Commission with laptop/tablet.	Y	\$750	\$0	\$150
	<b>Phase II - Total Recommended</b>		<b>\$9,250</b>	<b>\$1,250</b>	<b>\$3,100</b>

**Appendix A  
Interviewees**

## Interviewees

	Department	Name	Position
1	Mayor	Robert McMahon	Mayor
2	Borough Council	Paul Robinson	Council Member
3		Dr. Eric Stein	Technology Committee
4		Kent Davidson	Technology Committee
5	Borough Manager	Jeffrey Smith	Borough Manager
6		Karen Repino	Executive Assistant
7		Marianne States	Customer Service Specialist
8		Peggy Steuber	Bookkeeper/Records Clerk
9		Karen Taussig-Lux	Grants Administrator
10		Joanne Tipping	Administrative Secretary
11	Accountant	Blane Jordan	Borough Accountant
12	Board of Health	William Taylor	Health Officer
13	Code Enforcement	Jim Jeffery	Code Enforcement Director
14	Environmental Adv. Comm.	Walt Cressler	Chair
15	Fire Company	Ed Gibson	Chief
16	Media Business Authority	Various	Members and Mr. Khan
17	Planning Commission	Kevin Matson	Chair
18	Police	Martin Wusinich	Chief
19		Richard Johnson	Lieutenant
20		Matthew Egan	Sergeant & IT Officer
21		Keith Prorock	Sergeant
22		Steven Longbottom	Patrol Officer
23		Debbie Bromley	Secretary

**Interviewees**  
(Continued)

	<b>Department</b>	<b>Name</b>	<b>Position</b>
24	Public Works	Ralph DeRosa	Director
25		Lewis Simpson	Foreman
26		Thomas Durnell	Laborer PT
27		Mike Green	Laborer I
28		Kevin O'Connor	Laborer II
29		Chris Lambert	Highway Laborer
30	Recreation	Paula Tenaro	Office Manager
31	Shade Tree Commission	Katherine LoRusso	Chair
32	Tax Collector	Robert Dimond	
33	Treasurer	Peter Williamson	
	<b>OTHER</b>		
34	Technical Support	Travis Ehst	President, CNP
35	Borough Engineer	Robert Johnston, PE	Gilmore & Associates, Inc.
36	Independent Auditor	George Feio, CPA	Peterson, Feio & Co.
37	Media-Upper Providence Library	Marie Sciocchetti	President, Board of Trustees
38		Brandi Grosso	Director