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**(301) 332-2300/Fax – (240) 632-0428**

**ATTACHMENT 4**

October 29, 2006

Town of Chapel Hill  
Attn: Flo Miller, Deputy Town Manager  
405 Martin Luther King Blvd.  
Chapel Hill, NC 27514

Dear Flo:

The enclosed Information Technology Needs Assessment proposal is submitted to clarify its objectives based on comments regarding its scope at the Council meeting on October 23, 2006. And we have also allocated additional time in the work plan to accommodate more opportunity for public participation. After reviewing both the meeting transcript and video, we offer the following.

When we reviewed the background information on Town technology interests that you sent us, we clearly noted the high degree of interest in deploying a wireless network and the identified needs this network would meet in the community. Our proposal, however, is not and was not intended to either study the additional need for a wireless network nor be a feasibility study for the deployment a wireless network. When we identify a need for wireless communication, it is relative to the delivery of municipal services, and we consider low band, high band and public safety radio frequencies, and common carriers as well as any municipal networks.

Rather, the proposal addresses the issues we discussed with you, Roger and Town IT staff in formulating its scope and thus we have not altered it. First, the Needs Assessment focuses on the technology environment, not just technology. This includes current Town services, how they are provided and delivered, and what technology is used to facilitate their delivery. Second, through our observations and in concert with discussions with Town staff and stakeholders, we identify additional services that could potentially be of value. Third, the Assessment examines how technology service delivery is supported, maintained, and managed, how various systems interact, and the demands placed on the organization and staff resources. Fourth, we note how the application of various information technology could improve the productivity and efficiency of providing both current and future services desired by the Town government its constituents, along with those we recommend. Lastly, we look at how technology in use, or not, impacts government operations.

Our recommendations are not submitted as a wish list, but alternatives for updated, enhanced or additional services. Which ones that are adopted by the community are ultimately based on the benefits each provides and local priorities. And while some may

consider the terms we used in the proposal to be outdated, it is the common nomenclature of local government.

Flo, we appreciate the opportunity to provide this feedback about our proposal.

Your truly,

A handwritten signature in black ink that reads "Jake Jacobstein". The signature is written in a cursive, slightly slanted style.

Jake Jacobstein

**PROPOSAL TO**

**TOWN OF CHAPEL HILL, NORTH CAROLINA**

**Attn: FLO MILLER, DEPUTY TOWN MANAGER  
405 MARTIN LUTHER KING BLVD.  
CHAPEL HILL, NC 27514**

**Updated OCTOBER 29, 2006**

**INFORMATION TECHNOLOGY NEEDS ASSESSMENT**

**Submitted by**

**RHJ Associates, Inc.  
5 Sterling Court  
Rockville, MD 20850  
(301) 332-2300/(240) 632-0428 (fax)**

# PROPOSAL

## INFORMATION TECHNOLOGY NEEDS ASSESSMENT

### Who We Are

RHJ Associates, Inc. (RHJA), a Delaware corporation, was established in March, 2000 as a follow-on to the discontinued public sector business unit of The Network Address, Inc. (NAI), Annapolis, Maryland to continue serving the local government community. RHJA focuses on information technology issues confronting municipal governments, is managed by Robert (“Jake”) Jacobstein, formerly Vice President of Client Services of NAI’s public sector business unit, and includes other experts in fields of technology relevant to accomplish day-to-day municipal operating objectives. Upon formation of the company, RHJA expanded its services by teaming with seasoned consultants who possess depth and breadth in virtually all areas of applying technology to government operations. RHJ associates have a minimum of ten years working experience serving the local government sector.

RHJA consultants offer a holistic set of services in addressing municipal technology needs. These services include strategic planning, needs assessment, telecommunication planning and design, including voice, data, video and multi-media, organizational development, project management, enterprise resource planning, vocational systems acquisition, and institutional network specification and development,. Collectively, RHJ associates have served hundreds of public entities by assisting them with their information technology challenges.

Address communication regarding this proposal to:

RHJ Associates, Inc.  
Attn: Jake Jacobstein  
5 Sterling Ct.  
Rockville, MD 20850  
(301) 332-2300  
(240) 632-0428 – fax  
[inquiry@rhjassociates.com](mailto:inquiry@rhjassociates.com)

RHJA has a deep and broad knowledge of technology products and services available to local governments. As a result, RHJA brings these unique values to its clients:

- We know local government. Our practice is limited to municipalities and its adjuncts and we understand how they operate, how technology can serve them, and how to optimally organize their resources to support the information technology environment. Based upon our experience, we are familiar with “best practices” as they apply to different situations.

- We are neutral. We work with government administration, management staff, and stakeholders to formulate the alternatives that we believe are most suitable for the purposes. Thus, we are able to arbitrate competing internal ideas, if any, with those we bring.
- We know technology. Legacy, contemporary and emerging. We invest in remaining current on technology including institutional networking, municipal management systems, geographic information systems, physical, data and network security, telecommunications and telephony, and technology and data architectures and infrastructures.
- We are your advocates and agents. RHJA Consultants neither sell, service, support nor install products nor do we represent any vendors who do. Our biases are strictly towards what is best for the government at-large. This eliminates the potential for conflicts of interest between us and you.
- We are outreaching. To the extent feasible, we seek ways to maximize collaboration among area local governments from loosely coupled work teams to formal inter-local agreements.
- Who you see is who you get. Only the personnel identified in this proposal are assigned to this project as the need for their skills arise. They do all on-site and off-site work.

The associates that are included in this proposal are highly qualified to address local government information technology issues. Collectively, they bring unparalleled resources to the Town. Our capabilities encompass:

- Needs assessments and management reviews. Surveys, interviews, and a careful technology and organizational review often reveal concerns and issues that can be addressed by strategic technology planning and organizational development. Such an assessment provides the occasion to establish effective goals, reset priorities, and make forward-looking budget revisions in support of effective change.
- Strategic planning. We plan for technology integration by providing a schema for present and future acquisitions, and personnel staffing, based on industry standards and organizational principles specific to information technology functions. The plan strives to leverage current technology investments with prospective purchases through a combination of standards and solid management practices.
- Organizational development. We conduct internal skills inventories and compare and contrast available skills with those needed to achieve technology objectives. We consider roles, responsibilities, authorities and accountabilities in the daily operating environment and develop "best fit" technology management structures

which include position descriptions, resource requirements, training, project management disciplines, provision of services, and reporting relationships. The result is the implementation of sound technology governance practices based the municipal culture and prior investments.

- Municipal management systems. Our familiarity with a broad range of municipal applications enables us to guide governments through a cradle-to-crave acquisition process. We assist in identifying products that “fit” by ranking, evaluating, and recommending vendor offerings and negotiating contractual terms and conditions as part of the competitive procurement process.
- Hiring support to municipal managers. We have experience in designing position descriptions for information technology staff, including directors and managers, and guiding hiring personnel through the employment process.
- Technical architectures. We design and develop enterprise technology architectures and infrastructures including the deployment and usage of institutional networks, voice, data and video integration, data management/database systems and hardware/software integration. And of equal importance, strategies for supporting these technologies.
- Telecommunications law. We have an acquired working knowledge of federal telecommunication regulation and policies through our work with communities in utility and cable-tv franchise development, renewal, negotiation, management and revenue enhancement from both the technical and legal perspectives. (We team with Miller & Van Eaton P.L.L.C. to perform any necessary reviews and subsequent document and ordinance development if the client is in need of legal services).
- Institutional networks. We design I-Nets for communities to enable government enterprise telecommunications facilities.

In addition to direct government consulting, our associates have provided executive education to municipal managers and elected officials for ICMA, the Innovations Group, published on various topics concerning technology in the local government environment, and hosted a seminar for the Oklahoma Municipal Power Authority on development and deployment of local government enterprise telecommunications services. RHJA also presented a workshop on Strategic Technology Planning at the North Carolina City and County Management Seminar.

One publication, *The Municipal Computer Systems Handbook*, provides a practical how-to approach for local government officials. Another on *Transforming Information Services: New Roles, New Strategies*, published by the International City Management Association (ICMA), offers a view of how to plan, organize and manage technology in today’s operating environment. This publication is directly relevant to our credentials and qualifications to assist Chapel Hill.

## **Overview and Purpose**

RHJ Associates, Inc. assists local governments in defining, planning and evolving their Information Technology to improve productivity and delivery of services for Town operations and public stakeholders alike. Depending on the goals of the government, this occurs in one or two phases. The first phase is always a Needs Assessment. This assessment presents a holistic picture of the technology environment and provides a basis for determining future courses of action. A common outcome is the subsequent development of a Strategic Technology Plan.

The second phase is the development of this plan. Using the Needs Assessment as foundation, RHJA works with government management, staff and other appropriate stakeholders to create a blueprint to guide future information technology endeavors over the next five years. Components of the plan identify what resources are necessary to implement the plan, key technology initiatives, a recommended implementation sequence, and an environment conducive for facilitating the management of technology within the municipality.

This proposal to Chapel Hill is for the Needs Assessment only.

## **Scope of Work**

### **Engagement Objectives**

- Examine the Town's information technology "environment" encompassing resources, organization, management, services, governance, as well as technology assets.
- Assess the scope of the Town's information technology for depth, breadth, potential and cost effectiveness in facilitating government operations and delivering municipal services.
- Identify issues that impact the operation, organization, deployment and usage of Town information technology.
- Assess the information technology needs of the Town at-large (enterprise) and systems in each of its departments (vocational).
- Prepare a SWOT (strengths, weaknesses, opportunity and threats) analysis of the Town's technology environment.

## **Needs Assessment**

When conducting Needs Assessments, RHJA examines the technology environment holistically. This includes operational and community factors as well as technology itself.

In our assessment of technology, we delineate between two distinct areas. Enterprise technology, which serves the entire organization. And vocational technology, which relates to the current capabilities and future needs of municipal management systems for Chapel Hill's departments.

### Key Assessment Considerations

Throughout the assessment phase, the following guide RHJA during the discovery process.

- **Priorities.** What important areas of operations and public services would benefit from investment in contemporary technology.
- **Standards, Policies and Procedures.** A review of standards, policies and procedures present and absent in the Town.
- **Integration Requirements.** Identification of critical inter-system communication and interdisciplinary data access and security needs.
- **Training.** Understanding current staff technical literacy skills on enterprise and vocational systems.
- **Customer Satisfaction.** Understanding the philosophy for managing and satisfying "customer" expectations including issues of service levels, reliability and the appropriateness of customer solutions.
- **Organizational Dynamics.** Understanding how technology is championed, how technology issues are communicated and how initiatives are qualified and pursued. This includes determining how technology projects are managed and what the various participation and expectation levels are for the interested and involved parties.
- **Internal Operations.** Understanding both formal IT functions and otherwise and considers tactical planning and service delivery.
- **Architecture.** An understanding of the Town's technology architecture which includes:
  - ◆ Wide area networking among distant facilities.
  - ◆ Local and campus area networking for facilities within appropriate proximity.
  - ◆ Intranet, Internet and Extranet deployment and usage.
  - ◆ Wireless technologies; voice, data, 700/800 MHz, Mobile data terminals, Wi-Fi, PDAs, and commercial offerings.
  - ◆ Multi-media, integrated networking to encompass distance learning (officer training), voice, data, audio, video and image. (Digital object architecture.)



- ◆ Document management (paperless office).
  - ◆ Voice systems to include RBOC/LEC and premise equipment, as appropriate, voice mail systems, integrated voice response units and unattended switchboard operations.
  - ◆ System integration needs among hardware and software platforms.
  - ◆ Data warehousing and data repositories.
  - ◆ Application systems, both bought and built.
- **Infrastructure.** Consideration of the existing infrastructure that supports and enables current and strategic technology needs of the Town and provides tele-communications capabilities both within the Town and to external sources.
  - **Security.** Cyber, enterprise and application security along with associated security policies and procedures.
  - **Systems Inventory:** Consideration of departmental systems for useful life spans, and suitability for departmental needs while conforming to Chapel Hill's technology architecture. RHJA identifies systems at risk.
  - **Cost Effectiveness:** This includes past expenditures, current vendor contracts and maintenance agreements in the context of "total cost of ownership" (TCO).

### Enterprise Technology Needs Assessment Tasks

- Interviews of key personnel, service providers, and stakeholders to understand perceived plans, direction and vision.
- Review of past and current technology plans. Review of recent and planned technology implementations for functional effectiveness and consistency.
- Examination of the Town's methodology for introducing new technology and providing on-going support. This review focuses on the management and labor support demands surrounding the initial deployment of technology and its maintenance throughout its useful life. Roles of each "interested" organizational entity are also considered as they relate to expectations of the performance, deliverable features, upgrades, cost structure, and maintenance and support of the technology.
- Examination of information systems policies, procedures and service delivery mechanisms. Understanding user expectations of current, planned and future technologies.
- Review of the current organizational assignment of responsibilities and authorities relative to the management of technology within Chapel Hill. Review of current and

previous budgets for technology expenditures, including acquisition policies and procedures, staff, training and support.

- Examination of telecommunications and systems hardware, software and network documentation, policies, procedures and standards.
- Evaluation of the Town's position and usage relative to exploiting Internet and IntraNet services and providing public access to its information.
- Examination of the technology infrastructure support and review of current telecommunications topologies and implementations, inter-system connectivity and connectivity to vendors, suppliers and other external sources.
- Examination of the Town's institutional networking capabilities, capacity and prospective needs.
- Determination of the level of current technology integration. This includes the wired technologies of voice, fax, data and video, Internet and IntraNet, wireless technologies consisting of cellular, personal communications (PDAs) devices, mobile offices and data terminals, and central and distributed computing systems.

### Vocational Technology Needs Assessment Tasks

We examine the presence, absence, integration and need for a full range of systems applicable to the Town's operation. Depending on the specific government, these may include:

- **Administration:** Agenda Development and Distribution, Citizen Communication Tracking, Public Access and Electronic Commerce (e-gov), and Code Book Development and Maintenance.
- **Finance:** General Ledger, Budget, Payroll, Accounts Payable, Cash Receipts, Business License, Purchasing, Utility Billing/Customer Relationship Management, and Fixed Assets.
- **Human Resources:** Personnel Records Management, Employee Relations, Applicant Tracking, and Benefits Administration and Enrollment.
- **Assessor:** Tax Roll Maintenance, Billing, Collection and Mass Appraisal Systems (CAMA).
- **Board of Elections:** Voter Registration, Poll Staffing, Scheduling, and Management, and Vote Recognition/Counting Systems.
- **Public Safety:** Computer Aided Dispatch, Records Management, Emergency Communications (E-911), Emergency Management, Reverse 911, Mobile Data

Terminals, Video Arraignment, Correctional Systems, Automated Fingerprinting, Fire Science and Management, and Automatic Vehicle Location.

- **Public Works:** Traffic Control, Streets Maintenance, Fleet Management, Utility Management Systems, Inventory Control/Asset Management, Warehouse Management, Outage Management, and Work Order Processing.
- **Parks and Recreation:** Scheduling, Registration, Park Maintenance, Golf Course and Cemetery Management, and Civic Communication.
- **Planning, Inspections and Engineering:** Code Enforcement, Permitting, Inspections, Land Use, Environmental Health, Computer Aided Design, and Geographic Information Systems (GIS).
- **Social Services:** Income Maintenance, Medicare, Protective Services, Adoption and Child Support.
- **Transportation:** Fare Collection and Management, Staff and Fleet Scheduling, AVL, Fleet Management and Route Modeling.
- **Health:** Patient and Clinic Management Systems including paperless patient records.
- **Criminal Justice/Court Services:** Warrants, Court Scheduling and Docket Management, Case Management, and Fees, Fines and Restitution Tracking and Accounting.
- **Public Schools:** Finance and Accounting, Student Management Systems, Technology Support, Distance Learning and Technology Labs.
- **Libraries:** Library Management Systems.
- **“Electronic City Hall”:** Integration of the above into e-government addressing the issues of security, access, policies, procedures, workflow and payment/collections.

### Deliverables

- An assessment report which identifies the state of the enterprise and vocational technology environments in Chapel Hill including a presentation and discussion of data gathered during the assessment phase.
- Meetings with Town management, staff and other stakeholders to review, discuss and vet the drafts and final documents.

## **Project Approach**

Jake Jacobstein and Carl Moore will do the on-site work. Other team members may conduct research depending on the topic and needs. Jake Jacobstein will manage the engagement for RHJA and Chapel Hill will assign a project manager to represent Chapel Hill regarding the day-to-day issues involved in completing the work. The Town project manager must be empowered to provide relevant written materials, schedule and commit Town personnel time to meet with the RHJA consultants, and arbitrate internal differences as they relate to feedback to RHJA. The project schedule will be tailored to accommodate both Town and RHJA alike. We will gather data regarding the Town's environment from the sources identified collectively by the Town and RHJA as a result of the engagement process. Specifically, RHJA will learn about the existing Town technology, policies and procedures, standards, organization, staffing, challenges and priorities.

In conjunction with RHJA, Chapel Hill will identify a comprehensive list of appropriate management, staff and external parties to provide the input that RHJA seeks. RHJA obtains its data through a combination of questionnaires, one-on-one interviews, department meetings, focus groups, site visits, and documentation review. During the engagement, RHJA will submit drafts of its findings and final deliverables for the Town's review. The Town is expected to respond in writing with corrections, concerns, comments and/or approval. In some cases, RHJA will not be able to proceed with the project until these documents are returned by Chapel Hill. RHJA will review the comments with the Town and include updates to the documents as part of the drafting process. Two to three draft cycles are usually sufficient.

In addition to meetings with department directors and staff to discuss specific vocational issues, RHJA may request periodic on-site review meetings with various Town stakeholders during the assessment development. These meetings aid in gathering details and promote alignment with legal requirements, priorities, and Town policies.

Throughout the engagement, RHJA will work with Town personnel to maintain continuity, consistency and the proper focus on the project. RHJA will meet with the Town's management and staff, review the organization's capabilities, facilities and internal operations, and assess service levels against operational needs, current agreements and customer expectations. RHJA estimates it will need 40 hours of Town management personnel time and 160 hours of Town staff time throughout the estimated three month engagement. These hours are considered part of the Town's commitment to RHJA and the project if RHJA is awarded this engagement.

## **Timeline**

We have included a project plan with dates as Appendix A. It is our experience that the times necessary for a productive dialog with stakeholders, as well as to produce quality and accurate assessments of sufficient and appropriate detail, do not fit in the interval

between project award and a March, 2007 budget deadline. Furthermore, we have observed that throwing more resources at this kind of project is not productive in accelerating the schedule. We recognize, however, the Town's need to include plan costs in its fiscal year 2008 budget and we can accommodate this request in one of two ways as we expect to be far enough along in the Assessment to:

- Provide the Town with an amount to include in the budget to be designated for non-specific technology expenditures; and/or,
- Identify specific enabling technology projects that will likely start in FY2008 and estimate the project amounts.

This is not only practical, but viable based on our planning model. The initial focus of plan implementation is on building the governance structure, developing standards, policies and procedures and aligning the organization with plan objectives. Initial plan expenses are virtually always in the area of infrastructure improvements which can easily be identified in the early parts of the needs assessment.

### **Proposal Details**

RHJ Associates, Inc. offers the following information specific to this proposal:

- Out-of-pocket travel, postage, telephone and production expenses are charged at actual cost and invoiced monthly as incurred. Mileage is charged at the current IRS permissible rate.
- RHJA proposes a fixed fee for this project of \$32,280 and estimated travel and administrative expenses of \$7,875.00.
- Proposed project payment schedule:
  - ◆ 30% due upon completion of the first Needs Assessment visit.
  - ◆ 40% due upon submission of the first Needs Assessment draft.
  - ◆ 30% due on submission of the completed Assessment.

Additionally, RHJA is available to assist the Town with out-of-scope services at the rate of \$150.00 per hour plus out-of-pocket expenses. Travel time is bill at fifty percent.

As a standard practice, when we are able to combine visits to Chapel with those to other NC clients, expenses are pro-rated. In these cases, there is no charge for travel time.

## Client References

### Front Royal, Virginia

The Town of Front Royal engaged RHJA to develop a strategic technology plan in 2001 that encompassed all Town departments and operations. The plan was updated in 2004. RHJA assisted the Town in achieving the following plan objectives:

- Developing and implementing enterprise technology standards.
- Project management of construction of the Town's fiber optic institutional network. The Lord Fairfax Regional Planning Commission and Warren County Administration buildings were included in the network.
- Replacement of disparate telephone systems with new tandem systems that serve all Town facilities including the deployment of Voice over IP technology to remote locations. Prior telephone service operating expenditures covered the five year cost of the replacement system and services.

Contact Rick Anzolut, former Town Manager for a reference. (804) 520-9265.

### Falls Church, Virginia

RHJA has been consulting with The City of Falls Church and the Falls Church Public School System since 1999. Our first task was the development of the City's strategic technology plan that included the School System under an enterprise technology umbrella. This plan, completed in 2000, provided the blueprint for subsequent technology deployments which continue to the present time. RHJA assisted Falls Church in accomplishing the following plan items:

- **Institutional Network.** RHJA managed the project that brought the Falls Church proprietary fiber optic network into operation. The network serves five school facilities, City Hall and the main fire station. RHJA is currently involved with the City in constructing additional fiber for the network and exploring a public-private partnership for a citywide Wi-Fi system.
- **Integrated Voice Systems.** RHJA led the acquisition of additional telephony equipment that combined the Schools and the City on one voice network enabling an inter-office dial plan and saving \$50,000+ in annual communications expenses.
- **Systems Integration.** Accommodation of a new Computer Aided Dispatch System, including mobile data terminals, and a new finance system which is used by both the City and Public Schools. RHJA is currently assisting the City with acquisition of a Reverse 9-1-1 system.

- **Cable TV Franchising.** RHJA has led the negotiations between the City and Verizon on developing a franchise agreement. This includes legal counsel under the RHJA contract.
- **Middle School Construction.** RHJA was a member of the construction project team and was responsible for the design, specification and the oversight of installation of voice, video and data physical infrastructure and equipment.

Contact Dan McKeever, City Manager for a reference. (703) 248-5004.

### **Burke County, North Carolina**

RHJA worked with Burke County from 1999 through 2004. Our initial assignment was to develop a strategic plan and subsequent assignments were directed at implementation of plan components. RHJA assisted Burke County in accomplishing the following:

- Management of the design, specification and installation of Burke County's fiber optic institutional network. This network serves The Burke County Sheriff's Office, Emergency Communications and Operations, The Morganton Police Department, County Administration, Public Works, Social Services and the Health Department.
- Acquisition and deployment of a new Computer Aided Dispatch system for the Sheriff, Morganton PD and Emergency Communications.
- Replacement of Bell South provided Centrex/ESSX telephone facilities with an integrated phone system that improved service and reduced costs by \$6,000 per month.

Contact Ron George, former County Administrator for a reference. (828) 437-8863.

#### **Other relevant references:**

Chatham County, NC  
Frederick County, MD  
Myrtle Beach, SC  
Town of Culpeper and Culpeper County, VA

Reidsville, NC  
Fayetteville, NC  
Goldsboro, NC  
Laurinburg, NC

## **RHJA Consultants**

### **R. H. (“Jake”) Jacobstein**

Mr. Jacobstein has worked in excess of twenty-five years in the information technology field in commercial, local government and academic environments, including 21 years in telephony and data communications. From 1996 through February, 2000, Mr. Jacobstein, as Vice President of Client Services for the Network Address, Inc., was responsible for the company’s public sector consulting practice. In this role, he served over forty municipal governments, public school systems, special districts and independent authorities by developing technology needs assessments, strategic planning and acquiring municipal management systems. His expertise lies in the areas of planning, organizational development, telecommunications planning and design, institutional networks, voice and data networking, and enterprise resource systems management. Over the last several years, Mr. Jacobstein has given seminars on Technology Planning on behalf of the Innovation Groups to its members and co-authored an article for the International City Management Association (ICMA) on *PLANNING AND ORGANIZING INFORMATION TECHNOLOGY SERVICES*.

Prior to joining the Network Address, Inc., Mr. Jacobstein was Vice President of Technology Services for the Pentagon Federal Credit Union, Director of Information Systems for John Hopkins University Hospital and Director of Systems and Networking for Bank One. During his career, he has managed staffs of eighty, annual budgets to \$20 million dollars and multi-year, multi-million dollar technology projects. He has managed large scale tandem data centers for the banking and health care industries, national and international wide area networks serving commercial and military customers and as the Director of Information Resources for the International City Management Association (ICMA) RC, provided technology services to support over four hundred local government members.

Mr. Jacobstein developed his first strategic technology plan for Bank One in 1981 and subsequently developed others while at ICMA-RC and Johns Hopkins. His technical experience includes platforms of all scales from Mainframes to mid-range to client/server systems. His networking career has evolved through four generations of data communications technology and has been actively deploying telephone solutions since 1982.

Mr. Jacobstein received his B.S. in Mathematics from the University of Buffalo and his M.B.A., with distinction, from The Ohio State University. He is a member of the Beta Gamma Sigma honor society.



## **Carl V. Moore**

Mr. Moore has over twenty years of experience in the local government information technology arena. Carl has been consulting since his retirement in 2000 as Chief Technology Office (CTO) and Director of Inter-agency Information Technology (IIT) for Frederick County, Maryland. In his role as CTO, Carl had responsibility for the County's computers, data network, telephone operations, and municipal computer applications. Additionally, IIT provided enterprise network services for the Frederick County Public Schools, Frederick County Community College, County Sheriff and Public Libraries.

During his eighteen year tenure with the County, Mr. Moore oversaw the specification and development of the County's information systems including the financial (general ledger, payables, fixed assets, budget, payroll), human resources, public safety, tax assessment and collection, public works and planning and engineering systems. More recently Carl oversaw the replacement of the County's Hewlett-Packard legacy municipal management systems and applications with client/server technology. The new systems were implemented to leverage the new, high speed networking capabilities available to staff countywide. This included deployment of the PeopleSoft financial and human resource suite of enterprise resource planning systems.

To support the diverse geography of County employees, Carl completed the installation of a fiber optic institutional network among County, Public School and Community College buildings. This included installation and activation of a new County wide telephone system and multi-media network that handled voice, video, audio and data networking over the County's fiber backbone.

Carl began his career as a high school teacher and Associate Professor at Harford Community College in Maryland. He served as Chairman of Computer Services Directors for West Virginia Network for Educational Tele-computing (WVNET) and was instrumental in the selection and deployment of computer hardware and networking for WVNET universities and colleges under the central Board of Regents Governing Board for Higher Education.

Mr. Moore received his BS in Business Administration from Shippensburg State University, Shippensburg, PA, his MS in Mathematics from Towson State University, Maryland and his ABD in Higher Education Administration from the University of West Virginia, Morgantown, WV.

## Michael Freeman

Mr. Freeman focuses on providing high value management consulting services to local governments. Mr. Freeman has served as the Regional Manager for HDR's Management Consulting Group responsible for the Rocky Mountain region of the United States. Mr. Freeman also was the national practice leader for the firm's business planning and e-Communities programs. Mr. Freeman works with top municipal officials and their staff on a variety of projects and programs that enhance a government's competitive position, operations, and management structures. As a former City Manager and top manager in public organizations in Colorado and Oregon, Mr. Freeman has a thorough understanding of local government functions. Mr. Freeman has been providing consulting services to local governments over the past five years on a variety of projects including community technology assessments, business planning, management studies, asset management, strategic plans, economic competitiveness studies, privatization studies, and consolidation of governmental functions.

More recently, Mr. Freeman was working with the Innovation Groups of Tampa, FL to develop and facilitate a national program on e-Government strategic planning.

In Ashland, OR, Mr. Freeman focused heavily on making organizational, management, technological and other changes to improve services. Areas of expertise include strategic planning, management assessments, technology, organizational development and long-range financial planning. Mr. Freeman managed the planning and construction of a municipally owned fiber optic network offering cable TV and high-speed Internet services for businesses and residents. Mr. Freeman held various positions in Thornton, CO, the last being Administrative Services Director.

With his in-depth understanding of municipal application systems, Mr. Freeman developed a methodology and roadmap for local governments to pursue to create a plan for integrating the Internet into their mix of services and programs. Mr. Freeman has worked with more than seventy local governments in development of their e-Government programs. In assisting local governments with their community technology e-gov assessments, Mike uses a guide developed by the Computer Systems Policy Project ([www.cspp.org](http://www.cspp.org)). This assessment tool was prepared to help cities, counties, regions and states position themselves to be more competitive to attract high-tech jobs and reap the benefits of a community that is technology enabled.

Mr. Freeman received his BA from the University of North Carolina, Chapel Hill and his Masters of Public Administration from George Washington University. He is a member of ICMA and served on the Innovation Groups Board of Directors and the League of Oregon Cities Tax and Finance Committee.

## **APPENDIX A PROJECT PLAN**

**Town of Chapel Hill, NC  
Information Technology Needs Assesment**

ID	Task Name	Duration	Start	Finish	Predecessors	Resource Names
1	<b>Project Awarded</b>	<b>103 days</b>	<b>Mon 11/20/06</b>	<b>Wed 4/11/07</b>		
2	Planned Start	5 days	Mon 11/20/06	Fri 11/24/06		
3	Issue PO	0 days	Mon 11/20/06	Mon 11/20/06		Town
4	Identify Project Manager	0 days	Mon 11/20/06	Mon 11/20/06	3	Town
5	<b>Needs Assessment</b>	<b>103 days</b>	<b>Mon 11/20/06</b>	<b>Wed 4/11/07</b>		
6	<b>Preparation</b>	<b>5 days</b>	<b>Mon 11/20/06</b>	<b>Fri 11/24/06</b>		
7	Develop Management Interview List	5 days	Mon 11/20/06	Fri 11/24/06	2SS	Town
8	Develop Focus Group Interview Lists	5 days	Mon 11/20/06	Fri 11/24/06	7SS	Town
9	Develop site visit list	5 days	Mon 11/20/06	Fri 11/24/06	7SS	Town
10	Identify Documentation sources	5 days	Mon 11/20/06	Fri 11/24/06	7SS	Town
11	Request initial documentations	1 day	Mon 11/20/06	Mon 11/20/06	7SS	RHJA
12	Submit Questionnaire	1 day	Mon 11/20/06	Mon 11/20/06	7SS	RHJA
13	<b>Scheduling</b>	<b>5 days</b>	<b>Mon 11/20/06</b>	<b>Fri 11/24/06</b>		
14	Schedule Management Interviews	5 days	Mon 11/20/06	Fri 11/24/06	7SS	Town,RHJA
15	Schedule Focus Groups	5 days	Mon 11/20/06	Fri 11/24/06	14SS	Town,RHJA
16	Schedule site visits	5 days	Mon 11/20/06	Fri 11/24/06	14SS	Town,RHJA
17	<b>Documentation</b>	<b>11 days</b>	<b>Mon 11/20/06</b>	<b>Mon 12/4/06</b>		
18	Gather Documentation	5 days	Mon 11/20/06	Fri 11/24/06	7SS	Town
19	Answer Questionnaires	5 days	Mon 11/20/06	Fri 11/24/06	18SS	Town
20	Deliver Documentation	2 days	Mon 11/27/06	Tue 11/28/06	19	Town
21	Review Documentation	4 days	Wed 11/29/06	Mon 12/4/06	20	RHJA
22	<b>On-site, Initial Visit</b>	<b>4 days</b>	<b>Mon 12/11/06</b>	<b>Thu 12/14/06</b>		
23	Kickoff Meeting	1 day	Mon 12/11/06	Mon 12/11/06		Town,RHJA
24	Conduct one-on-one interviews	4 days	Mon 12/11/06	Thu 12/14/06	16,23SS	Town,RHJA
25	Conduct focus groups	4 days	Mon 12/11/06	Thu 12/14/06	24SS	Town,RHJA
26	Conduct site visits	4 days	Mon 12/11/06	Thu 12/14/06	24SS	Town,RHJA
27	Conduct Stakeholder Meetins	4 days	Mon 12/11/06	Thu 12/14/06	24SS	Town,RHJA
28	Round One Complete	0 days	Thu 12/14/06	Thu 12/14/06	26	
29	Review notes and documentation	5 days	Fri 12/15/06	Thu 12/21/06	28	RHJA
30	Obtain additional information	5 days	Fri 12/22/06	Thu 12/28/06	29	Town,RHJA
31	Schedule Follow-up Visit	5 days	Fri 12/22/06	Thu 12/28/06	30SS	Town,RHJA
32	Schedule Open Meetings	5 days	Fri 12/22/06	Thu 12/28/06	30SS	Town
33	<b>Second On-site Visit</b>	<b>2 days</b>	<b>Fri 1/12/07</b>	<b>Mon 1/15/07</b>		
34	Conduct meetings/interviews	2 days	Fri 1/12/07	Mon 1/15/07	30FS+2 wks	Town,RHJA
35	Meet with designated stakeholders	2 days	Fri 1/12/07	Mon 1/15/07	34SS	Town,RHJA
36	Round Two Complete	0 days	Mon 1/15/07	Mon 1/15/07	34	
37	<b>Assessment Report</b>	<b>62 days</b>	<b>Tue 1/16/07</b>	<b>Wed 4/11/07</b>		
38	Develop Needs Assessment Draft Report	3 wks	Tue 1/16/07	Mon 2/5/07	36	RHJA
39	Submit budget input	0 days	Mon 2/5/07	Mon 2/5/07	38	RHJA
40	Submit Draft Report	0 days	Mon 2/5/07	Mon 2/5/07	39	RHJA
41	Review draft and comment	2 wks	Tue 2/6/07	Mon 2/19/07	40	Town
42	Meet to discuss draft	1 day	Tue 2/20/07	Tue 2/20/07	41	Town,RHJA
43	Update and submit final draft	2 wks	Wed 2/21/07	Tue 3/6/07	42	RHJA
44	Review draft and comment	1 wk	Wed 3/7/07	Tue 3/13/07	43	Town
45	Issue Final Assessment Report	2 wks	Wed 3/14/07	Tue 3/27/07	44	RHJA

**Town of Chapel Hill, NC  
Information Technology Needs Assessment**

ID	Task Name	Duration	Start	Finish	Predecessors	Resource Names
46	Present Assessment	1 day	Wed 4/11/07	Wed 4/11/07	45FS+2 wks	RHJA
47	<b>End Needs Assessment</b>	0 days	Wed 4/11/07	Wed 4/11/07	46	
48	Project Complete	0 days	Wed 4/11/07	Wed 4/11/07	47	