

**Assessment of Readiness
For
Distributed Work/Telework
Program Implementation
City of Gainesville, Florida**

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Copy for:
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Director, Computer Services

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Overview

Telework Consortium

The Telework Consortium, Inc. is a Virginia incorporated 501(c) 3 whose mission is to help federal, state, and local entities plan and implement robust Distributed Work/Telework programs. Since its inception in 2001, the Telework Consortium has focused on review and analysis of available technology and networks, working in real-life situations to provide solutions that mesh with security structures and workflow requirements. The aim of these solutions is to enhance economic development opportunities, address Continuity of Operations concerns in the event of a natural or manmade disruption, reduce road congestion and costs, increase productivity, and promote work/life balance. The Telework Consortium offers, based upon its experience in successful Telework demonstrations projects in federal agencies, local governments, and private enterprise, consulting services that address appropriate telecommunications and PC technology for the remote worker, the IT and security issues inherent in a Distributed Work/Telework program, as well as workflow, human resource, and work culture issues.

City of Gainesville, Florida

Gainesville, Florida is already ahead of the national curve in that it has in place significant broadband fiber to homes and businesses and a wireless infrastructure available to its employees and citizens. Many city employees who live outside Gainesville also have access to high-speed broadband services. As one of the country's premier education centers, Gainesville is also home to a young, thriving population that is not wary of new technology.

The City Commission seeks to maximize the resources available to it. Other municipalities across the nation have demonstrated that high-speed broadband infrastructure produces economic and cultural benefits to citizens in the form of increased economic development, reduced costs, and better work/life balance. A Distributed Work/Telework program in Gainesville will not only produce definitive benefits for the City, but demonstrate to citizens, businesses, and potential newcomers that Gainesville is a desirable, vibrant, 21st-century community in which to live and work.

Distributed Work/Telework Readiness Assessment

The Gainesville City Commission, Gainesville Regional Utilities (GRU), and other government leaders have expressed an interest in deploying a Telework/Distributed Work environment within city government. Following a presentation by the Telework Consortium to the City Commission on January 23, 2006, commissioners and the mayor unanimously adopted a motion put forth by Commissioner Ed Braddy to work with the Consortium to explore telework

possibilities for Gainesville government and the larger community. Following this vote, the Telework Consortium proposed conducting an Assessment of the readiness of Gainesville to implement a Distributed Work/Telework program. The proposal was accepted, and this report is the culmination of that Assessment.

The purpose of this Assessment Report is to provide an analysis of Gainesville's current IT infrastructure; human resource policies; and management/worker environment, workflow, and culture with recommendations as to the steps needed to implement a successful Distributed Work/Telework program.

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Methodology

The Telework Consortium's methodology for conducting a Distributed Work/Telework Assessment involves an in-depth examination of the current structure and policies of the four main stakeholders in a successful program: IT, HR, management, and workers.

On May 17 and 18, 2006 representatives from the Telework Consortium came to Gainesville for a series of meetings with city government staff. Gainesville's Director of Computer Services, Les Auerbach, was instrumental in arranging the logistics of these meetings and encouraging attendance by city and GRU staff.

A total of nine sessions were held:

- One general session to review the overall goals of a Distributed Work/Telework program in Gainesville;
- One session that focused on HR policies and concerns;
- One session that focused on IT infrastructure, policies, and concerns;
- Three sessions for managers to discuss current workflow, policies, environment, culture, and concerns;
- Three sessions for end-users (those who would actually Telework) to discuss current workflow, policies, environment, culture, and concerns.

Multiple sessions were conducted for managers and workers to allow maximum attendance flexibility. Total attendance for all sessions was 48, representing a wide range of departments, as well as GRU and Gainesville Fire Rescue (GFR) personnel. Following these sessions, Telework Consortium staff members worked with key city government staff to collect additional information.

Based on the information gathered, aspects related to each area—IT, HR, Management/End-User—were rated on a scale of one to five, with one indicating a weak area in need of considerable improvement and five indicating a strong area with no need for modification. Within each of the three areas, these aspects were then weighted as to overall importance to the success of a Distributed Work/Telework program, resulting in an overall score on the one-to-five scale. Because the areas of IT and Management/End-User are so distinct between general city functions and GRU, these were rated separately.

Finally, these three scores for each were combined to produce an overall Distributed Work/Telework Program Readiness score—one for General Government (which includes GFR) and one for GRU.

The following report represents the analysis of the information gathered, the resulting scores, and recommendations.

Executive Summary

Overall, the concept of a Distributed Work/Telework program was met with enthusiasm by those participating in the Assessment, and regarded as a way to alleviate space constrictions, address Continuity of Operations concerns, increase productivity, and offer to employees a valuable benefit. In fact, there have been a number of instances of informal Telework arrangements to date within city government, with no major complications reported. The idea of creating a formal program that provides the training, tools, and guidelines to help ensure success was considered a positive and proper step for the City of Gainesville to take.

It is important to understand that implementing a Distributed Work/Telework solution in any organization is far more than replacing one piece of software with another and adding a Webcam. In a successful program, the way work is done fundamentally evolves from an Industrial Age mindset of gathering at a central location to complete tasks to an Information Age view of flexibility and goals-oriented organization. While initially disruptive as new methods replace old, this is the direction being taken by forward-thinking municipalities, agencies, and businesses, allowing them to meet current and future challenges.

In its Assessment, the Telework Consortium looked at the four stakeholders in a successful Distributed Work/Telework program—IT, Human Resources, Management, and End-Users—and evaluated multiple aspects related to each on a scale of one to five, with one indicating a weak area in need of considerable readiness improvement and five indicating a strong area with no need for modification. In analyzing the information obtained, the Telework Consortium considered GRU and General Government separately in the areas of IT and Management/End-Users, because their resources and function vary greatly from one another.

A relatively strong area in readiness for both General Government and GRU is Management/End-User, which incorporates work culture, adaptability, and the level of trust between management and employees. This area can be the most difficult to improve, since it involves perception and mindset, therefore it is to Gainesville's definite advantage that this area is already so strong.

IT infrastructure readiness scores for General Government are lower than those for GRU. GRU has greater IT resources available to it, and so scored higher in this area. Although a fiscal challenge, this area is relatively easy to improve with the addition of technology and equipment.

The lower readiness score for HR is reflective of the amount of work that needs to be done in formalizing eligibility, policies, and agreements for Telework. On the positive side, this presents a relatively clean slate, as there is currently nothing in place that presents a roadblock to implementing a Distributed Work/Telework program.

Assessment Readiness Scores

General Government—

Management/End-User	3.7
IT Infrastructure	3.4
HR	2.5
Overall Score	3.2

Gainesville Regional Utilities (GRU)—

Management/End-User	4.2
IT Infrastructure	4.3
HR	2.5
Overall Score	3.7

Detailed Findings

The Telework Consortium draws a distinction between Distributed Work and Telework. Telework is conducting work from a location other than the traditional office setting of a particular department, agency, or company, whether that is from a home office, coffee shop, hotel, or other site. Distributed Work is work that is accomplished over distance by collaboration from two or more traditional business settings. This can be between two office buildings, or—in the case of inspectors, for instance—from a field location to the home office.

Within the City of Gainesville, there is a desire for both Distributed Work and Telework solutions. The Telework Consortium found that there are three distinct, though related, entities in City of Gainesville government that participated in the Assessment sessions: General Government (GG), Gainesville Fire Rescue (GFR), and Gainesville Regional Utilities (GRU). While there is overlap, what makes these entities distinct is their differing desires/requirements of Distributed Work/Telework and the resources they have available to implement a successful program. These differences are most evident among Management/End-Users and IT participants.

The General Session: Exploring the Need for a Telework Program in Gainesville

Senior managers and their representatives attending the General Session of the Assessment stressed three key areas they feel a Distributed Work/Telework program could address:

- **Lack of Office Space for Growth**
Gainesville is a growing community, and the need for city services continues to increase. While the City Government currently has space in 25 buildings around Gainesville, this will soon be insufficient. There is a reluctance to lease additional space, which would not only incur additional expense, but remove that real estate from the tax rolls. Related issues include parking and traffic. A Telework program would allow “hoteling”—more than one employee using available office space through scheduling—which would alleviate this problem.
- **Continuity of Operations**
Disruptions, both natural and manmade, can occur at any time and with little notice. Senior managers recognize the need for a comprehensive Continuity of Operations Plan (COOP) that would allow Gainesville employees to continue to meet the needs of citizens even should they be unable to get to city offices. To be comprehensive, such a plan must address long-term scenarios, such as an Avian Flu pandemic, which could prevent employees from going to offices for weeks, possibly months, at a time. A Telework program would provide the infrastructure and training to ensure that city services could continue, regardless of the location of employees.

- **Emergency Management**

Related, but not identical, to COOP, senior managers feel that a Telework/Distributed Work program could help in Emergency Management. At these times, most often in the wake of a natural disaster, roads are closed due to fallen trees and downed power lines. A Distributed Work/Telework program would equip City employees with the technology and training to more efficiently manage the emergency and provide vital services.

Senior managers also expressed concerns in implementing a Distributed Work/Telework program. Chief among these was whether IT staffing was sufficient to support Teleworkers, ensuring that data would remain secure, whether Gainesville employees would have high-speed broadband available where they live, and creating an accountability system that would measure performance. Although these concerns were voiced, the consensus was that these challenges could be met and didn't negate the need or benefits of a Distributed Work/Telework program.

Management/End-Users

General Government Score 3.7

GRU Score 4.2

The area with the most variables in a Distributed Work/Telework program is Management/End-User. This is also the area that is most subjective and in need of reinforcement during the life of the program.

Overall, Management and End-Users in Gainesville perceive Telework as a valuable tool that they would like to have available to them. In several instances, Assessment participants described situations where managers allowed employees to Telework for a period of time to address a short-term need. Some GRU programmers already work from home one day per week. In these cases, both managers and their employees reported that the system worked well, although all involved said they would prefer to have more formal policies and procedures in place before adopting a Distributed Work/Telework program long-term.

The greatest positive attribute found in this Assessment is the current working relationship between management and employees in City of Gainesville government. There is a high level of trust and confidence between these groups. This is critical to a successful Telework program—and difficult to achieve if not already in existence. Other strong attributes found in these sessions were the receptiveness to adopt new technologies, software, and procedures; a willingness to use collaborative technologies such as shared electronic folders, e-mail, and voicemail; and the readiness to explore ways current workflow and procedures could be adapted to a Telework environment.

There were also valid concerns voiced that should be addressed in implementing a Telework program.

Participants in the Management sessions considered managing employee performance as their biggest concern. While most already run their departments based on output and results rather than "I can see you therefore you must be working," there was a desire for a Telework program to include documentation outlining participation eligibility, a signed agreement defining expectations, and guidelines for performance evaluation.

Nearly all felt comfortable in having employees Telework two to three days per week, but many preferred that there be one day a week when everyone would be present to interact and exchange ideas.

Managers also expressed concerns about how employees would effectively separate work life from home life and how to ensure that employees didn't feel isolated

While recognizing the challenges, managers did not regard them as insurmountable. During the sessions, many managers named current tasks they felt could as easily be done remotely as in the office.

Managers conceded that new software and technologies, including those that include video, could alleviate many of their concerns, but felt they would need to learn more about these capabilities before feeling comfortable with them.

"You need at least one day a week when everyone is there."

"You just have to let go. You have to trust "

"You have to separate work from home so that home doesn't just become an extension of work."

"You need to be engaged in this so that you're prepared in case of a pandemic."

"It's worked beautifully short-term. I don't see why, with the proper planning, it wouldn't be just as good long-term "

End-Users have fewer concerns about a Telework program. There is an overall level of trust that they would not be "forgotten" or overlooked for promotion or plum assignments just because they would not always be visible in the office. There is also a confidence that procedure, training, and technology requirements, where currently lacking, would be sufficiently addressed.

"I'm open to the challenge [of learning new tools]."

"Coming back from maternity leave it was like I was never gone, because when I came back I didn't have to get caught up [after participating in short-term Telework]."

"I liked my home to be my refuge—but that was my old job, which was stressful. My new job isn't stressful, so I'd like to work from home."

"Bring it on!"

Of the departments that participated, only the law department felt that a Telework solution was out of the question. They also voiced concern that legal aspects of having people work from home, such as Workers Comp, be addressed as policies are devised

"The lawyers are old school. It [Telework] wouldn't work for us. You have to be there when the judge calls "

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The greatest challenge to the Management/End User aspect of implementing a Distributed Work/Telework program is closely related to IT issues. This challenge is the availability of sufficient and appropriate hardware and software for off-site use by Teleworkers, as well as IT software support. Because GRU has resources beyond those available to General Government, its score for Management/End-User was higher than that for General Government.

Management/End-User Solution Requirement Differences

While there was consensus among General Government, GRU, and GFR Management/End-User participants regarding the overall benefits of and concerns regarding a Distributed Work/Telework solution, the three groups have very distinct solution requirements.

General Government participants need to communicate verbally and in writing, and conduct document collaboration and file sharing in both real time and asynchronously. At the same time, it's important that they have a video component, in order to communicate effectively and alleviate isolation concerns. Their requirements are for a robust Telework solution, allowing End-Users to work from home or other remote locations, freeing up office space and fulfilling the requirements of a Continuity of Operations Plan.

GRU employees need the ability to check their trouble calls before leaving home, to avoid the now-common situation of driving to the office, only to have to turn around and retrace their steps to go to locations they passed on their commute. Time will also be saved and productivity increased if GRU End-Users can remotely fill out and submit trouble reports as well as access electronic files. GRU's requirements are for a Distributed Work Solution that is extremely mobile.

Gainesville Fire Rescue has a workforce that is distributed over a wide geographic area, with a need for frequent communication. Currently, this involves GFR personnel driving to various fire stations or City Hall for meetings. A Distributed Work solution with video, audio, and whiteboard would allow greater participation in these meetings while eliminating the time and expense of physically driving to them. It would also allow for emergency response planning with Fire Rescue departments in other municipalities, promoting richer and more frequent interaction.

A fourth group was represented at one of the sessions by Ed Braddy—the City Commissioners. Based on work by the Telework Consortium with other municipalities, we suggested that City Commissioners could use a Distributed Work solution—similar to that proposed for GFR—to better communicate with City Hall personnel, constituents, and personnel who may be occasionally deployed to Tallahassee. This was greeted positively by Mr. Braddy.

IT Infrastructure

General Government Score	3.4
GRU Score	4.3

There is a significant difference in the resources available to the General Government and GRU IT departments, resulting in substantially differing Assessment scores.

What the departments have in common is an openness to implementing a Distributed Work/Telework program in the City of Gainesville. In particular, the Director of Computer Services on the General Government side, Les Auerbach, has dedicated a great deal of time and effort during the past few months in working with the Telework Consortium to provide information and suggestions for implementation of a program. It has been the Telework

Consortium's past experience that a reluctant IT department can seriously derail Distributed Work/Telework efforts. Clearly, this is not the case in Gainesville.

General Government

Areas of strength for General Government's IT include the current network infrastructure, firewall, and remote office connectivity. The current VPN, which allows remote computer access, is adequate if a hosted Telework solution is deployed. The existing 8MB pipe to the public Internet is sufficient for current needs, but may need to be increased or supplemented as the Telework program grows. The availability of broadband connectivity to End-Users' homes also does not appear to be an issue. The current PBX, while lacking some advanced functionality, allows call forwarding, providing a seamless transition of phone calls and eliminates any need for Teleworkers to give out their home numbers.

The greatest IT challenge to implementing a Telework program in Gainesville General Government is the deployment of adequate PCs. While employees have been allowed to use personally owned PCs during informal Telework in the past, it is the feeling of both the Telework Consortium and the General Government IT department that support, security, and proper configuration can only be maintained if Teleworkers are required to only use City-owned PCs for remote work.

Currently, General Government replaces PCs on a seven-year cycle. Technology is advancing at such a pace that the older machines currently in service do not meet the minimum standards necessary to run applications required by Teleworkers. Also, at this time only five percent of General Government's current PCs are laptops. Mobility—and therefore Continuity of Operations—is best served if employees can take their work with them, should events dictate an evacuation.

Another concern for General Government's IT participants is the ability of the current staff to adequately support Teleworkers. As with any new program implementation, unforeseen issues could arise that may overtax the department. IT participants felt policies would need to be put in place that would level set expectations as to hours of help desk support.

For all the challenges present, IT participants were very positive about the prospect of a Distributed Work/Telework program in General Government.

"If we don't already have the pieces in place—from a technical point of view—we're pretty darn close."

Gainesville Regional Utilities

Because it has its own revenue stream, GRU does not face the same challenges as the General Government IT department. It scored a 5 in most categories, including Current Network Infrastructure, VPN, Firewall, and IT Support Staff. Other strong areas include the availability of laptop PCs that meet or exceed minimum specifications required for Telework applications and the availability of broadband connectivity to employees' homes.

The areas requiring attention on the GRU side are related to Continuity of Operations planning and the use of personally owned equipment by home workers. The COOP issues are works-in-progress: the implementation of a 4.9Ghz wireless network that would provide a secure wireless network for employee use and facilities to provide data redundancy, currently being established.

"From an IT perspective, I think we have the technical issues worked out [for Telework]."

Human Resources 2.5

Although GRU has its own Organizational Development Department and the police department has a personnel unit that assists in its hirings, the City of Gainesville Human Resources (HR) department oversees the services related to compensation, labor negotiations, labor relations, pensions, hiring, and general training for all aspects of city government. As such, it falls to HR, led by Human Resources Director Tom Motes, to create the policies and administrative structure that is critical to a successful Distributed Work/Telework program

Based on information obtained during the HR session, there are few modifications that need to be made to current policies in order to allow a robust Distributed Work/Telework program. While there are five unions, none of the related contracts have stipulations that would hinder or prevent implementation of a Distributed Work/Telework program. Current policies requiring clarification and, perhaps, some modification are those related to stipulating breaks for hourly workers, Fair Labor Standards, and Workers' Compensation. Should any modifications to these or other policies be deemed necessary, the City of Gainesville is locally autonomous and can make adjustments to accommodate current or future needs.

The greatest readiness challenge facing HR in implementation of a Distributed Work/Telework program is the creation of the necessary policies and agreements, as well as Telework eligibility, accountability, and performance measurement tools. A policy addressing remote access has been drafted Les Auerbach's IT group during the past few months, but has not been finalized.

To date, departments have largely defined their own policies for informal Telework, indicating again the extremely positive aspect of trust that currently exists between management and employees. All Session participants agreed, however, that formal documentation should be created. This will not only guide successful implementation of a Distributed Work/Telework program, but help to level set expectations on all sides.

"We have a strong entitlement mindset among our workers."

"We need an accountability system. We're not good at that now."

"Our law department is risk-averse."

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Recommendations

The overall receptiveness on the part of City of Gainesville leadership as well as management and staff to Distributed Work/Telework indicates that such a program has a high probability of success. As with any venture, proper planning is key. The Telework Consortium has found a phased implementation approach to Distributed Work/Telework to be the most successful. Our recommendations to the City of Gainesville apply this strategy.

- Create an internal Telework Task Force which includes representatives from the four stakeholders: IT, HR, Management, End-Users.
- Identify department or group within City of Gainesville government appropriate for a Telework Phase 1 program.
- Identify department or group within City of Gainesville government appropriate for a concurrent Distributed Work Phase 1 program.
- Select technology and collaboration tools that will meet Phase 1 needs.
- Conduct information-gathering sessions to understand mission, workflow, and culture requirements of Phase 1 groups.
- Develop timeline, budget, objectives, and measurements for Phase 1.
- Identify and upgrade network infrastructure and computing resources that currently do not meet minimum specifications for robust Distributed Work/Telework.
- Implement redundancy solution to support critical network services to provide Continuity of Operations in case of an emergency situation.
- Create HR policies, agreements, eligibility requirements, and accountability and performance measurement tools.
- Implement six-month Distributed Work/Telework Phase 1 as planned.
- At end of six-month period, analyze data collected from Phase 1 participants and support staff.
- Develop training program encompassing all aspects of teleworking, including network access and security, as well as the tools and technologies selected.
- Integrate lessons learned from Phase 1 into a broader Distributed Work/Telework program, following a similar implementation scheme.

Conclusion

The Telework Consortium thanks the Gainesville City Commissioners, Mayor, and Management for the opportunity to work with you to explore the possibility of a Distributed Work/Telework program in your municipality. We believe such a program would produce tremendous benefits for your employees and citizens and demonstrate Gainesville as a leader in the areas of innovation, economic development, continuity of operations, and work/life balance.

We welcome the opportunity to work with you further to attain your goals.

Appendices

The following pages include:

Appendix A — Assessment Ratings

These tables provide a detailed breakout of the Assessment ratings by Stakeholder (IT, HR, Management/End-User). As mentioned in the Detailed Findings, ratings for IT and Management/End-Users were analyzed separately for General Government and GRU because of the differences in resource availability for these two entities.

Appendix B — Assessment Ratings Weighting

Because not all areas rated are equally important to successful Distributed Work/Telework implementation, a weighted system was used to devise the final rating score for IT, HR, and Management/End-User. Appendix B illustrates the weighting employed.

Appendix C — Assessment Sessions Descriptions

This overview describing the Assessment sessions was provided to City of Gainesville during the scheduling phase.

Appendix A

Assessment Ratings

Possible Rating: 1 – 5

1 = Lack of Readiness

5 = Strength

Human Resources — General Government/GRU

	Rating	Observations
Policies		
Union Contracts: The extent to which current union contracts may need to be modified to allow union members to Telework.	3	Based on discussions with HR personnel, little modification is required, but recommend additional wording to address breaks for hourly workers.
Telework Policies: Existence of formal documentation of current Telework Policy.	2	Recommend creation and adoption of formal Telework policy that addresses all aspects of a worker's involvement in a Telework program.
Fair Labor Standards: The extent to which Current Fair Labor Standards regarding overtime are geared toward in-office work.	3	Recommend addressing this issue directly in formal Telework Policy document
Telework Program Eligibility: the extent to which Telework Program eligibility criteria have been identified and documented.	2	Recommend creation of evaluation criteria and forms for workers, managers, and HR personnel to level set participation expectations and identify those most likely to be successful in a Telework environment.
Telework Agreement: The extent to which a Telework Agreement between Manager and Employee has been formalized.	2	Recommend creation of a formal Telework agreement that would be signed by the employee and his/her manager.

Assessment Ratings

Possible Rating: 1 – 5

1 = Lack of Readiness

5 = Strength

Management/End-Users — General Government

	Rating	Observations
Management		
Employee management: The extent to which people are managed based on outputs and results	4	No action required at this time. Based on interview sessions, it appears that most of the managers are currently (at least informally) managing by results.
Performance criteria: The extent to which performance is measured and tracked using objective criteria	3	Recommend updating personnel performance process to incorporate measurable objectives.
Performance evaluation: The degree to which people are evaluated based on meeting previously agreed-upon targets and expectations.	3	Recommend formalizing Telework agreement between manager and employee.
Trust: The level of confidence and trust the manager has in the people he/she manages.	5	No action required. Based on the interview sessions, both managers and employees appear to have a very high level of trust in each other.
Management Style: The amount of managing normally performed without direct observation of activities (managing by watching results, not by watching workers).	4	No action required at this time. The management style of those managers interviewed appears to be based on results and encourages employee independence.
Communications		
Communication Processes: The effectiveness of the organization's communications processes	4	No action required at this time. Communications procedures within and between departments appear sufficient to support remote workers at this time.
Communication Responses: The time it takes for people to respond to communicated messages.	4	No action required at this time. Response time to phone calls and electronic messages appears adequate to support remote workers at this time.
Communication Style: The extent to which people are kept "in the loop" via informal or face-to-face communication	4	No action required at this time. Based on interviews it appears that much of the interoffice communication is based on email and phone communications with minimal information passed strictly via face-to-face meetings.
Employee Independence: The ability people have to operate without daily face-to-face meetings.	4	No action required at this time. Most departments appear to have routinely scheduled meetings.

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	Rating	Observations
Communication Technology: Willingness to utilize electronic communications such as e-mail, shared folders, voice mail or other collaborative technologies.	5	No action required. According to employee interviews most of the employees are already using multiple types of collaborative technologies in their daily work activities
Technology		
Technology comfort level: The level of proficiency the personnel has with current technology	4	No action required at this time. Most of the employees expressed comfort in their level of proficiency in the use of technology require by their jobs.
Off-site Hardware Support: The availability of technical support resources when they are needed	2	Recommend use of only COG owned equipment which can be installed, configured, monitored and supported by COG staff Encourage use of remote desktop software applications to aid in diagnosis and correction of problems.
Off-site Hardware: The availability of appropriate hardware to be used by off-site personnel.	1	Recommend use of only COG owned equipment which can be installed, configured, monitored and supported by COG staff.
Off-site Internet access: The availability of appropriate Internet access to be used by off-site personnel.	4	No action required at this time. Most employees were aware of the availability of high speed Internet access to their homes.
Financial resources: The availability of resources to purchase appropriate hardware to be used by off-site personnel.	3	Recommend each Department identify financial resources that can be used to purchase appropriate hardware and software to be used by off-site personnel.
Technology Flexibility: The level of receptiveness to software and new technology in general	5	No action required. Based on responses to employee interviews, most employees seemed very willing to use new applications to support their remote work.
Specific Job Functions		
Personnel adaptability: The extent to which the people/team aspect of this job is adaptable to the telecommuting environment.	5	No action required. Managers interviewed were able to identify ways in which procedures, functions and meetings could be adapted to fit a telecommuting environment.
Tasks and Processes: The extent to which key tasks and processes can be performed outside of the traditional office.	4	No action required at this time. Most of the managers expressed confidence in identifying aspects of the targeted positions that would adapt well to off-site work.
Position Qualification: Documentation of which positions and tasks qualify for off-site work.	2	Recommend formal documentation of which positions and tasks within a position qualify for off-site work.
Data Access: The extent to which needed information can be accessed, sent, or received from outside the office, with the proper technology.	4	No action required at this time. The current solution (VPN) is adequate for the current informal Telework support and should be adequate to support Phase 1 of a formal Telework program implementation.
Off-site software support: The extent to which support requirements can be fulfilled when the job/function is being performed remotely.	2	Recommend documentation of the procedure to be used when off-site support is required to successfully perform off-site tasks

	Rating	Observations
Employee Absence Impact: The impact to which the absence of the employee would add additional strain to other employees	3	This will have to be evaluated on a case by case basis, especially in small offices. To minimize the adverse impact, we recommend that the procedure to be used when employees are off-site be fully documented to minimize the adverse impact.
Continuity of Operations		
Essential Personnel: The extent to which continuity of operations can be maintained in the event of a disaster (pandemic, natural or terrorism)	3	Recommend that all essential personnel be assigned a government-owned and configured laptop with wireless capability. All essential personnel should be trained on accessing network resources during an emergency.
Non-Essential Personnel: The extent to which continuity of operations can be maintained in the event of a disaster (pandemic, natural or terrorism).	2	Recommend that all non-essential personnel be trained on proper procedures and an application to be used in accessing network resources during an emergency.

TELEWORK

Assessment Ratings

Possible Rating: 1 – 5

1 = Lack of Readiness

5 = Strength

Management/End-Users — GRU

	Rating	Observations
Management		
Employee management: The extent to which people are managed based on outputs and results	4	No action required at this time. Based on interview sessions, it appears that most of the managers are currently (at least informally) managing by results.
Performance criteria: The extent to which performance is measured and tracked using objective criteria	3	Recommend updating personnel performance process to incorporate measurable objectives.
Performance evaluation: The degree to which people are evaluated based on meeting previously agreed-upon targets and expectations.	3	Recommend formalizing Telework agreement between manager and employee.
Trust: The level of confidence and trust the manager has in the people he/she manages.	5	No action required. Based on the interview sessions, both managers and employees appear to have a very high level of trust in each other.
Management Style: The amount of managing normally performed without direct observation of activities (managing by watching results, not by watching workers).	4	No action required at this time. The management style of those managers interviewed appears to be based on results and encourages employee independence
Communications		
Communication Processes: The effectiveness of the organization's communications processes.	4	No action required at this time. Communications procedures within and between departments appear sufficient to support remote workers at this time.
Communication Responses: The time it takes for people to respond to communicated messages.	4	No action required at this time. Response time to phone calls and electronic messages appears adequate to support remote workers at this time.
Communication Style: The extent to which people are kept "in the loop" via informal or face-to-face communication.	4	No action required at this time. Based on interviews it appears that much of the interoffice communication is based on email and phone communications with minimal information passed strictly via face-to-face meetings.
Employee Independence: The ability people have to operate without daily face-to-face meetings.	4	No action required at this time. Most departments appear to have routinely scheduled meetings.

TELEWORK

	Rating	Observations
Communication Technology: Willingness to utilize electronic communications such as e-mail, shared folders, voice mail or other collaborative technologies.	5	No action required. According to employee interviews most of the employees are already using multiple types of collaborative technologies in their daily work activities.
Technology		
Technology comfort level: The level of proficiency the personnel has with current technology	4	No action required at this time. Most of the employees expressed comfort in their level of proficiency in the use of technology require by their jobs.
Off-site Hardware Support: The availability of technical support resources when they are needed.	4	No action required at this time. GRU IT staff is currently supporting technical needs 24/7 and doesn't foresee issues with off-site support.
Off-site Hardware: The availability of appropriate hardware to be used by off-site personnel.	3	Recommend use of only COG owned equipment which can be installed, configured, monitored and supported by COG staff.
Off-site Internet access: The availability of appropriate Internet access to be used by off-site personnel.	4	No action required at this time. Most employees were aware of the availability of high speed Internet access to their homes
Financial resources: The availability of resources to purchase appropriate hardware to be used by off-site personnel.	4	No action required at this time. GRU is currently on a three-year replacement cycle The current systems in place meet or exceed minimum system requirements.
Technology Flexibility: The level of receptiveness to software and new technology in general	5	No action required. Based on responses to employee interviews, most employees seemed very willing to use new applications to support their remote work.
Specific Job Functions		
Personnel adaptability: The extent to which the people/team aspect of this job is adaptable to the telecommuting environment.	5	No action required. Managers interviewed were able to identify ways in which procedures, functions and meetings could be adapted to fit a telecommuting environment.
Tasks and Processes: The extent to which key tasks and processes can be performed outside of the traditional office.	4	No action required at this time. Most of the managers expressed confidence in identifying aspects of the targeted positions that would adapt well to off-site work.
Position Qualification: Documentation of which positions and tasks qualify for off-site work.	2	Recommend formal documentation of which positions and tasks within a position qualify for off-site work
Data Access: The extent to which needed information can be accessed, sent, or received from outside the office, with the proper technology.	4	No action required at this time. The current solution (VPN) is adequate for the current informal Telework support and should be adequate to support Phase 1 of a formal Telework program implementation.
Off-site software support: The extent to which support requirements can be fulfilled when the job/function is being performed remotely.	4	Recommend documentation of the procedure to be used when off-site support is required to successfully perform off-site tasks

	Rating	Observations
Employee Absence Impact: The impact to which the absence of the employee would add additional strain to other employees.	3	This will have to be evaluated on a case by case basis, especially in small offices. To minimize the adverse impact, we recommend that the procedure to be used when employees are off-site be fully documented to minimize the adverse impact.
Continuity of Operations		
Essential Personnel: The extent to which continuity of operations can be maintained in the event of a disaster (pandemic, natural or terrorism)	4	No action required at this time. Future consideration should be given to assigning to all essential personnel a government-owned and configured laptop with wireless capability. All essential personnel should be trained in accessing network resources during an emergency.
Non-Essential Personnel: The extent to which continuity of operations can be maintained in the event of a disaster (pandemic, natural or terrorism).	2	Recommend that all non-essential personnel be trained on proper procedures and an application to be used in accessing network resources during an emergency.

Assessment Ratings

Possible Rating: 1 – 5

1 = Lack of Readiness

5 = Strength

IT & Network Infrastructure — General Government

	Rating	Observations
Infrastructure		
Current Network Infrastructure: The ability of the current network infrastructure to support remote workers.	5	No Action Required - (MESH) The connectivity between the remote sites and the City Government facility is sufficient to handle the data transfer for a Telework solution.
Current computing resource Infrastructure: The ability of the currently deployed computing hardware to meet minimum specifications required to run applications required by remote workers	2	The current hardware that is implemented with in the organization falls slightly below (Processor, RAM) the desired specs. However, these devices may work but with less than optimal performance. If possible, the machines not meeting minimal specs should be phased out and new/refurbished higher end machines should be distributed.
PBX: The ability of the current PBX to support or interface with telecommunications equipment of the remote workers	3	The current PBX, though it lacks some functionality of a newer model, would be sufficient to allow for call forwarding to a specified number, therefore creating a seamless transition to the remote worker's location.
VPN. The ability of the current VPN solution to support needs of the remote workers	4	No Action Required at this time – Current VPN implantation will be adequate if using a hosted solution. If non-hosted, than the limited ports that currently exist on the Concentrator may be filled to capacity as the program grows. If pursuing an in house solution, this would need to be upgraded.
Firewall: The ability of the current firewall configuration to modified as required by collaborative software applications necessary for remote workers while still maintaining strict network security.	5	No Action Required - VPN solution does not go through the firewall. There is only one firewall and it configurable via Java interface and command line only with limited personnel with security permission to modify. All collaborative software will be evaluated to ensure no threat to a secure network will occur due to their use.
Current Internet connection: The ability of the current implementation to supply adequate bandwidth to support needs of both internal government workers and remote workers, taking in to account increased data transfer and conferencing needs.	4	No Action Required at this time - The current 8MB pipe to the public Internet is sufficient; however this may need to increase for larger groups of mobile workers. As the program grows, this pipe should be monitored to avoid saturation

TELEWORK

	Rating	Observations
Remote office connectivity to City Government: The ability of the internal network configuration to support a distributed workforce.	5	No Action Required - The current lines that are implemented between satellite offices and the central office are adequate. Most sites connect back via T1s and fiber links.
IT Support Staff: The availability of current support staff to handle additional support needs required by remote workers in addition to in-house personnel	2	As with any implementation, there may be un-foreseen issues that arise. Currently the COG Government IT department is working with a minimal support staff. With the addition of requiring them to support off-site employees, this department may become over burdened.
Laptops: The availability of mobile computing devices for use by remote workers.	3	Based on the information collected during the interview, some laptops meeting the required specs are available, although not in sufficient numbers to support all remote workers.
Broadband to homes: The availability of high speed Internet connections to remote offices/homes of off-site employees.	4	No Action Required at this time - Currently many of the employees have broadband to their homes or it is available.
Continuity of operations The ability for remote workers to still access corporate LAN in the event of a catastrophic event.	2	Currently access to the VPN is limited. In the event of a catastrophic event adequate access to network resources may not be available
Data Redundancy: Having multiple servers geographically dispersed that synchronize data to each other, so that data is not lost in the event of a failure	2	The GRU is currently in the process of establishing 2 new secure facilities to house servers. Some data is currently being replicated to a secure facility. New process for data replication to be completed by 7/31/06. Once the secured hardened facilities are completed and procedures and data flow have been streamlined, this scoring will be a 5.
Specific Job Functions		
Remote Support (Funk and Windows Remote Desktop) The availability of appropriate software to aid in support of remote workers.	4	No Action Required at this time - These remote access packages are robust and work well over the internal LAN as well as over the public Internet.
City owned computing resource support: Ability to deploy and support COG hardware for use by remote workers.	2	Deploying city-owned assets would remove much of the burden of remote user support, as the systems would basically mirror each other (ghosting). If possible, all systems are standardized including hardware. This is not always an option as technology changes very quickly. There would be a need to train these people on how to obtain the WAN address and port forwarding so a remote technician could connect.

11/11/06

	Rating	Observations
<p>Employee owned PC support (different hardware, multitude of configurations) Ability to maintain a secure and virus free internal network while allowing access from employee owned PC's</p>	<p>1</p>	<p>If the city of Gainesville is to utilize employee owned assets to perform any job functions, then administration and control must be implemented. Not only would there be a need to train these people on how to obtain the WAN address and port forwarding so a remote technician could connect, but to be informed of the potential threats that could affect their connectivity, but also the potential to infect their computer or the corporate network. Setting standards for home routers and configuration would help minimize site visits or personal machines being supported by COG staff.</p>

Assessment Ratings

Possible Rating: 1 — 5

1 = Lack of Readiness

5 = Strength

IT & Network Infrastructure — GRU

	Rating	Observations
Infrastructure		
Current Network Infrastructure: The ability of the current network infrastructure to support remote workers	5	(MESH) The connectivity between the GRU and the City Government facility is sufficient to handle the data transfer for a Telework solution.
Current computing resource Infrastructure: The ability of the currently deployed computing hardware to meet minimum specifications required to run applications required by remote workers.	5	The machines currently deployed with in the GRU meet or exceed the requirements needed to implement a functional Telework solution.
PBX: The ability of the current PBX to support or interface with telecommunications equipment of the remote workers.	5	The current PBX in place will handle call forwarding which allows for a seamless communication transfer to the mobile workers location.
VPN. The ability of the current VPN solution to support needs of the remote workers	5	GRU has its own IPSec VPN solution The mobile worker can connect via Windows Remote Desktop connector This will help ensure virus do not integrate onto the local network.
Firewall: The ability of the current firewall configuration to modified as required by collaborative software applications necessary for remote workers while still maintaining strict network security	5	VPN solution does not go through the firewall. There is only one firewall and it configurable via Java interface and command line only with limited personnel with security permission to modify. All collaborative software will be evaluated to ensure no threat to a secure network will occur due to their use.
Current Internet connection: The ability of the current implementation to supply adequate bandwidth to support needs of both internal government workers and remote workers, taking in to account increased data transfer and conferencing needs.	5	The current 10MB pipe to the public Internet is sufficient; however this may need to increase for larger groups of mobile workers. As the program grows, this pipe should be monitored to avoid saturation. If needed, bandwidth could be increased to 100Mbps.
Remote office connectivity to City Government: The ability of the internal network configuration to support a distributed workforce.	5	The current lines that are implemented between satellite offices and the central office are adequate. The transport sizes are from 100Mbps to 1Gbps.

	Rating	Observations
IT Support Staff: The availability of current support staff to handle additional support needs required by remote workers in addition to in-house personnel.	5	The GRU has an adequate staff to maintain internal and remote issues if they arise
Laptops: The availability of mobile computing devices for use by remote workers.	4	Based on the information collected during the interview, these laptops meet or exceed the specifications for a Telework solution.
Broadband to homes: The availability of high speed Internet connections to remote offices/homes of off-site employees.	4	Currently many of the employees have broadband to their homes or it is available
Continuity of operations The ability for remote workers to still access corporate LAN in the event of a catastrophic event	2	Funding has been requested to begin building a GRU-owned and operated, exclusive 4.9Ghz wireless network. Once the wireless network is implemented, this scoring will be a 5.
Data Redundancy: Having multiple servers geographically dispersed that synchronize data to each other, so that data is not lost in the event of a failure	2	The GRU is currently in the process of establishing 2 new secure facilities to house servers. Some data is currently being replicated to a secure facility. New process for data replication to be completed by 7/31/06. Once the secured hardened facilities are completed and procedures and data flow have been streamlined, this scoring will be a 5.
Specific Job Functions		
Remote Support (Funk and Windows Remote Desktop) The availability of appropriate software to aid in support of remote workers.	4	These remote access packages are robust and work well over the internal LAN as well as over the public Internet
City-owned computing resource support: Ability to deploy and support COG hardware for use by remote workers	2	Deploying city owned assets would remove much of the burden of remote user support, as the systems would basically mirror each other (ghosting). If possible, all systems are standardized including hardware. This is not always an option as technology changes very quickly. There would be a need to train these people on how to obtain the WAN address and port forwarding so a remote technician could connect.

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	Rating	Observations
<p>Employee-owned PC support (different hardware, multitude of configurations). Ability to maintain a secure and virus free internal network while allowing access from employee owned PC's</p>	2	<p>If the city of Gainesville is to utilize employee owned assets to perform any job functions, then administration and control must be implemented. Not only would there be a need to train these people on how to obtain the WAN address and port forwarding so a remote technician could connect, but to be informed of the potential threats that could affect their connectivity, but also the potential to infect their computer or the corporate network. Setting standards for home routers and configuration would help minimize site visits or personal machines being supported by GRU staff.</p>

Appendix B

Assessment Ratings Weighting

General Government (GG) and Gainesville Regional Utilities (GRU)

Management / End User -			
Employee Management	4	2	8
Performance Criteria	3	2	6
Performance evaluation	3	2	6
Trust	5	3	15
Management Style	4	3	12
Communication Processes	4	1	4
Communication Responses	4	1	4
Communication Style	4	2	8
Employee Independence	4	3	12
Communication Technology	5	3	15
Technology comfort level	4	2	8
Offsite Hardware Support	2	3	6
Off-site Hardware	1	3	3
Off-site Internet access	4	3	12
Financial resources	3	3	9
Technology Flexibility	5	3	15
Personnel adaptability	5	3	15
Tasks and Processes	4	3	12
Position Qualification	2	1	2
Data Access	4	3	12
Off-site software support	2	3	6
Employee Absence Impact	3	2	6
Essential Personnel	3	3	9
Non-essential Personnel	2	2	4
Mgmt/End User Score		GG	3.7
IT			
Current Network Infrastructure	5	3	15
Current computing resource infrastructure	2	3	6
PBX	3	1	3
VPN	4	3	12
Firewall	5	3	15
Current Internet connection	4	3	12
Remote office connectivity to City Government	5	1	5
IT Support Staff	2	3	6
Laptops	3	2	6
Broadband to home	4	2	8
Continuity of Operations	2	3	6
Data Redundancy	2	3	6
Remote Support	4	3	12
City owned computing resource support	2	2	4
Employee owned PC support	1	3	3
IT Score		GG	3.4
Human Resources			
Union Contracts	3	3	9
Telework Policies	2	2	4
Fair Labor Standards	3	3	9
Telework Program Eligibility	2	2	4
Telework Agreement	2	2	4
		GG/GRU	2.5

	4	2	8
	3	2	6
	3	2	6
	5	3	15
	4	3	12
	4	1	4
	4	1	4
	4	2	8
	4	3	12
	5	3	15
	4	2	8
	4	3	12
	3	3	9
	4	3	12
	4	3	12
	5	3	15
	5	3	15
	4	3	12
	2	1	2
	4	3	12
	4	3	12
	3	2	6
	4	3	12
	2	2	4
		GRU	4.2
	5	3	15
	5	3	15
	5	1	5
	5	3	15
	5	3	15
	5	3	15
	5	1	5
	5	3	15
	4	2	8
	4	2	8
	2	3	6
	2	3	6
	4	3	12
	2	2	4
	2	3	6
		GRU	4.3

Overall Scores:

General Government:

3.2

Gainesville Regional Utilities:

3.7

TELEWORK

Appendix C

Assessment Sessions Descriptions

Assessment Sessions

The heart of the Assessment of Distributed Work/Telework Program Implementation for City of Gainesville, Florida that the Telework Consortium is conducting for Gainesville involves in-person sessions with key stakeholders in your organization. These are:

IT personnel
 HR personnel
 Managers
 Workers

We plan to hold one session for IT personnel, including those at GRU, one session to speak with those in your Human Resources department, three sessions for managers, and three sessions for workers.

General Session (45 minutes)

This session opens the two days of onsite work. Here we would like to speak with those who are key decision makers in whether or not a robust Distributed Work/Telework program would be implemented in Gainesville to learn more about their perceptions, expectations, goals, and concerns.

IT Session (one hour)

The IT session should include all those who can tell us about how your IT is currently set up, including security, networks, hardware, and software. Because GRU is key to the implementation and success of a Distributed Work/Telework program in Gainesville, it is important that they be involved in this session as well.

Human Resources (45 minutes)

In this session, we would like to speak with those in your HR department who can cast light on current policies and procedures related to employment with the City of Gainesville. This would include union stipulations (if unions are a factor), and related municipal, state, and federal regulations as they pertain to HR policies.

Managers (45 minutes)

Management is critical to the successful implementation of any Distributed Work/Telework program. We would like to speak to as many managers as possible whose departments may be involved in such a program. We offer three sessions, to allow as much flexibility as possible in attending one. The sessions will discuss their current workflow, interaction within their department and with other departments, as well as interaction they may have with the public or outside organizations. We will delve into their perceptions of a Distributed Work/Telework program and their goals and concerns.

Workers (45 minutes)

No Distributed Work/Telework program can be successful without the involvement of the people who do the work on a day-to-day basis. We would like to speak with at least one or two employees in each of the departments that may be involved in this program. As with the managers, we would like to get their input in how they work within their department, between departments, and with the public and outside agencies. We want to learn about their perceptions, goals, and concerns regarding Distributed Work/Telework. As with managers, we will offer three sessions, providing maximum flexibility in attending one of them.