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Executive Summary

This report documents the results of the Kitsap Telework Pilot Project, a 15 month study of telework conducted by the Kitsap Regional Coordinating Council. The project was funded by a grant from the Washington State Legislature and administered by the Washington State Department of Transportation (WSDOT). Fourteen organizations and sixty employees participated in the telework portion of the project; additional organizations participated by contributing or reviewing material.

The Kitsap Telework Pilot Project received the 2009 Puget Sound Regional Council Vision 2040 Award in recognition its work toward the Vision 2040 goals to promote a more livable region through wise growth management, economic, and transportation strategies.

The project’s mandate was to provide tools to enable employers to implement telework in their organizations and to provide community leaders with guidance to promote the adoption of telework in their communities.

To address the first goal the project has produced a comprehensive online Telework Toolkit that provides information for employers, employees, and managers. Information about the toolkit and how it was constructed is discussed in this report. Readers are encouraged to explore the toolkit at www.teleworktoolkit.com.

The hands-on promotion of telework will most often occur at the community level and the Community Template, included in the report, will help local organizers launch telework efforts in their area.

A number of surveys were used during the project. Pre- and post-project surveys looked at changes in opinion about telework and lessons learned. Weekly diaries tracked on-going issues that arose as employees teleworked. The project also calculated commute mileage and CO2 emissions. Key findings from the surveys are included in the report. A separate analysis of all survey results can be downloaded from the telework website.

In the course of research and development of the toolkit a number of telework benefits were identified that are significant enough to warrant support of telework at the State level. Recommendations are organized around the six most important issues:

- Telework as a traffic mitigation strategy during highway and bridge construction: Telework offers real potential, but to be effective, outreach must begin long before construction.
• **The impact of telework in reducing greenhouse gas emissions:** Participants in the pilot project saved, on average, 32 miles of travel, 1.43 gallons of gasoline, and 27.73 pounds of CO2 each day they teleworked. Telework can make a significant contribution toward reaching the State’s climate change goals. Importantly, these are steps individuals and businesses can take to be part of the solution.

• **Preparing businesses and public agencies to continue operations in the event of a disaster:** Telework has long been known as an effective strategy in the event of many disasters, such as a pandemic, earthquake, or weather emergency like the snowstorm of 2008. Telework as part of disaster preparedness requires special preparation and testing well in advance of the event. Continuity of Operations Plans (COOP), with telework as a component, could make businesses and communities more resilient following a disaster.

• **Telework helps strengthen the business community:** Not only does telework provide a number of benefits to individual businesses, it helps create a more forward-thinking and flexible business community for the future.

• **Telework helps strengthen families and communities:** What teleworkers find most satisfying about telework is being able to spend more time with their families: being able to have dinner with the family, spend more time with their children, or attend school and community events.

• **State leadership will accelerate telework adoption:** There are many actions the state can take to move telework forward. Specific suggestions are offered, plus options to support telework outreach and maintenance of the toolkit.

The telework pilot project provides a greater understanding of telework, its benefits, and the barriers to implementation. And, the toolkit and community template developed by the project will be available to employers, employees, and communities that want to explore telework or implement a telework program. These are the tools, but tools alone will not achieve the societal benefits that telework can offer. Greater support is needed to accelerate the adoption of telework by employers. Specifically, a mechanism needs to be found to fund outreach efforts and the continued maintenance of the online toolkit. The project has received a great deal of interest from communities and organizations around the state. It is critical to build on this momentum.

The Kitsap Regional Coordinating Council and project team would like to thank the legislature, WSDOT, and all the individuals and organizations that contributed to the project.
Introduction

Traditionally, telework has fallen under the umbrella of Transportation Demand Management (TDM) strategies because it is seen as an alternative to commuting. In fact, telework intersects innovative strategies in numerous domains: transportation, environment, land use & planning, broadband infrastructure, technology, education, commerce, and economic development.

The history of telework shows its popularity rising and falling as external factors have pushed it forward as a solution to the crisis of the moment: last year it was high gas prices; this year the N1H1 flu virus. Temporary peaks and valleys aside, the trend line shows an increase in the adoption of telework. This trend is driven by factors, such as:

- Numerous benefits for employees, businesses, and the community
- The emerging virtual workplace where work commutes to the worker instead of the worker commuting to work
- Increased penetration of broadband infrastructure (every participant in the Kitsap Telework Pilot Project already had high-speed Internet in their home)
- Improved, and lower cost, distributed-work technology that addresses work capability and security, moving the functionality of the home office ever closer to traditional office

Recognizing the potential that telework can offer, The State Legislature provided grant funds, administered through the Washington State Department of Transportation (WSDOT) for the Kitsap Telework Pilot Project. The project’s core deliverables are:

- **Telework Toolkit**: an educational resource for employers who want to implement telework in their organization.
- **Telework Community Template**: a guide to communities that want to promote telework in their area.

The community template and an outline of the toolkit are presented in this report. The actual toolkit has been developed as an online resource and can be accessed at [www.teleworktoolkit.com](http://www.teleworktoolkit.com).

Washington State has been a leader in telework since the late 1980’s. The Puget Sound Telecommuting Demonstration Project in 1990 was a significant pioneering effort. Over the years there have been a number of State supported projects, of which the Kitsap Telework Pilot is the latest. Most of the forward momentum in Washington State has been from individual efforts, like enterpriseSeattle’s Commuter Challenge, the continuing work of WSU Extension to promote and assist with urban and rural telework initiatives since 1989, and telework programs in various cities and State and local...
agencies. Other states have built on the early work in Washington State to create statewide programs.

The Kitsap Telework Pilot Project has spent over a year examining the history and application of telework, both in Washington State and around the country. This research was conducted to build a knowledge base from which to construct the Telework Toolkit and Community Template. That research, plus the findings from project surveys and diaries, leads to this conclusion: Telework is an inevitable movement that will continue to grow and there are compelling reasons why it is in the interest of Washington State and its citizens to publicly support the accelerated adoption of telework.
Conducting the Pilot Project

The basic premise of the pilot project was to develop a telework toolkit, recruit organizations and employees to telework and utilize the toolkit, and then use their experience to refine the toolkit. To the extent possible, the project would also examine the use of telework centers and the use of telework as a mitigation strategy for highway construction (specifically related to the Hood Canal Bridge closure). The project would also prepare a template that could be used by communities to promote and implement telework in their area. Key areas of activity include:

Literature Review and Summarization

Reviewing the extensive body of telework literature began in the spring of 2008. Articles, or portions of articles, were organized by subject matter and used by members of the project team to prepare summaries of “best practices” in each subject area. These summaries became the foundation of the toolkit. It was never the intent of the project to create a formal academic literature review. To do so would have taken many months and a good portion of the project budget. Team members and other interested parties continued submitting relevant articles for the toolkit throughout the project.

Drafting a Telework Toolkit

Several toolkit outlines were reviewed and discussed by the project team before a draft toolkit was prepared. The toolkit was designed as an online resource rather than in print form so it could be easily accessed and so it could be continually updated.

Part of project involved preparing specific tools that could be downloaded from the toolkit. Tools include a telework policy guide, a telework employee agreement, an employee self-assessment form, a cost-benefit analysis guide, a home-office checklist, and others. These tools were developed by reviewing existing tools prepared by other organizations and from the best practices summaries. For example, over 40 telework policies were reviewed to prepare the telework policy guide.

Organization Recruitment

Throughout the summer and fall of 2008, the project team conducted an aggressive campaign to recruit organizations in Kitsap County as pilot project participants. The plan involved recruiting both small and large organizations, and organizations representing both the private and public sectors. Initially, interest was high, intensified by rising gas prices. As fall approached the economy declined, businesses entrenched, and interest in the project declined accordingly. In the end, it was impossible to obtain the exact distribution of organization types and sizes as originally planned. The majority of participating organizations are in the public sector, as are about two-thirds of the employees.
For each participating organization, the personnel involved in the project included one or more employees that would telework, the managers of those employees, and a coordinator – someone to be the project’s contact within the organization.

Recruitment efforts are documented in Exhibit “E”.

**Exploring Telework Centers**

The project scope called for the identification of potential sites in Kitsap County for one or more telework centers. The project team hoped to be able to include an operating telework center on a limited scale as part of the pilot project. Some potential sites were identified, but impossible to implement because of cost or liability issues. When a site became available later in the project schedule that didn’t have these issues, there was no interest from employers. A more detailed history of the team’s work on telework centers is included in the Telework Centers chapter of the report.

**Pilot Testing and Measurement**

Once participating organizations selected employees to telework, three surveys were administered prior to starting the pilot:

- **A commute history interview**: A telephone interview to obtain an exact description of their commute pattern, including mileage, origin and destination, modes of transportation, vehicle gas mileage, and other details about their commute. Because these participants were volunteers in a pilot project, they were willing to provide this level of detail.

- **An employee baseline survey**: This online survey included additional commute questions and assessed attitudes, opinions, concerns, and expectations concerning telework.

- **A manager baseline survey**: Similarly, managers completed an online survey that concentrated on their initial attitudes and concerns about telework.

Each Monday morning after they started teleworking employees received an email with a link to a short **Weekly Diary** that asked how many days they teleworked the previous week, reasons for not teleworking (if they didn’t), and questions about the experience, such as problems they encountered and how productive they were on their telework day(s). Diaries continued for 15 weeks of the pilot project.

At the conclusion of the project two more surveys were conducted: a follow-up survey conducted among employees and a follow-up survey among managers. These surveys were designed to see how attitudes may have changed during the course of the project and to capture lessons learned from the experience.

A written analysis of the surveys has been prepared. The primary implications of the analysis relates to the implementation and administration of telework within an organization. These “lessons learned” have been incorporated into the toolkit.
analysis, along with supporting documents can be downloaded from the toolkit at:
http://www.teleworktoolkit.com/project_surveys.html

Additionally, the project team conducted six detailed interviews with information technology managers in organizations that either had well established telework programs or were just implementing telework. Although not originally part of the research plan, these interviews were added because it became apparent during the project that there are significant technology implications when expanding telework within an organization. The interviews can be downloaded from the toolkit website at:
http://www.teleworktoolkit.com/library/IT_Manager_Interviews.pdf

Finalizing the Toolkit – Lessons Learned and Best Practices

Learning about telework didn’t stop with the initial literature review. Throughout the project additional information was acquired for the toolkit. Information came from the following sources:

- Project team members and project participants sent links to articles they found in online journals and magazines.
- Reviews by an expert panel: Individuals with telework experience who were interested in the project but couldn’t participate in any other way were asked to review sections of the toolkit and offer suggestions for improvement.
- Toolkit reviews: Each page of the toolkit included a button that users could click to offer a suggestion for improvement. Over 100 suggestions were received.
- Members of the public that read about the project (there were approximately 30 articles in newspapers or online blogs and magazines) sent in information about their experiences or links to information they thought would be helpful.
- Material contributed from other telework programs: For example, the Province of British Columbia came across the telework project and toolkit during the process of creating a provincial telework policy and have been sharing information about their program.
- Lessons learned from the telework pilot project; particularly from the weekly telework diaries and analysis of survey results.

This material was used to improve the content of the toolkit. In addition, the architecture of the toolkit was changed to provide better navigation for users.
The Telework Toolkit:  [www.teleworktoolkit.com](http://www.teleworktoolkit.com)

The telework toolkit is a central source of information on all things “telework”. It includes advice, best practices, lessons learned, and resources for anyone interested in learning about telework, or how to implement or operate a telework program.

The telework pilot project developed an online telework toolkit initially as a resource for employers participating in the project. However, it was understood that eventually the toolkit would be used as a resource for a much broader audience; individuals or employers exploring telework, and individuals, employers, organizations, and communities operating telework programs or performing telework outreach. Employers in WSDOT’s Commute Trip Reduction (CTR) and Growth and Transportation Efficiency Center (GTEC) programs could utilize the toolkit to plan and initiate or expand their own telework program. Employers not in these programs and organizations that want to promote telework for business, economic development, or environmental reasons should also be able to benefit from the toolkit, as should individuals already teleworking, freelancing, or wanting to promote telework in their organizations.

This broad potential audience dictated two requirements for the toolkit:

- **Generic Point of View**: Most toolkits are written to serve the needs of a particular employment group, such as State Agencies and their employees. Since this toolkit is intended for individuals and for organizations of any size, both public and private, it required a generic approach that could be applied to a broad spectrum of situations. As a practical example of this, a toolkit for a State telework program might include a telework policy that would remain largely unchanged from agency to agency. This toolkit, on the other hand, provides a guide to writing a telework policy that takes the reader through the decisions they need to consider when creating a policy in order for it to be applicable to their own situation.
• **Broad Accessibility:** A decision was made early in the project to develop the toolkit as an online resource, rather than a printed manual. This was done so that anyone could easily access the toolkit, whether they were in an established program or not. The domain name [www.teleworktoolkit.com](http://www.teleworktoolkit.com) was purchased to make the toolkit easily accessible by anyone performing a search from their Internet browser. Indeed, people and organizations from across the country and from countries around the world have viewed the toolkit.

Like the toolkit itself, the domain name is generic. Organizations and programs that want to utilize the toolkit can link to it on their own websites, or provide the easy-to-remember URL (internet address).

The overriding objective was to put as much relevant information in one place as possible, so those interested in telework would not need to search the internet for the information necessary to create their own telework program. An outline of the methodology used to create the toolkit appears in Exhibit “B”.

**Toolkit Contents**

The home page of the toolkit directs users to six principal landing pages, plus the **Community Template** page, a page with information about the [Telework Pilot Project](http://www.teleworktoolkit.com), and the **Site Map** - a table of contents. Each of the principal landing pages includes navigation to additional related pages within the toolkit as well as links to relevant material on the Internet. Currently, the toolkit includes approximately 100 web pages of content. The web page format makes it relatively easy to keep the toolkit up-to-date by adding and refining information over time, if provision is made for toolkit maintenance.

An outline of toolkit contents appears in Exhibit “A”, or can be viewed by going to the site map online: [www.teleworktoolkit.com/sitemap.html](http://www.teleworktoolkit.com/sitemap.html)

**The Future of the Toolkit**

The telework toolkit is an online one-stop resource for individuals and organizations that want to learn more about telework or start a telework program. Without this central source, organizations that want to implement telework will need to search the literature themselves or hire a consultant to take them through the process.

Websites, unlike print publications, can be easily updated continually. They also require at least a minimum amount of maintenance to make sure links are still functional.

With support, the toolkit can be enhanced over time. While the toolkit is fairly comprehensive, realities of time and budget naturally placed limits on development. Possible future improvements include:
• **More detailed information for specific situations**: There are places in the toolkit where information is provided in a basic form. However, it could provide detailed information to assist those with specific information needs. This is particularly true regarding some aspects of technology – a topic that changes frequently and requires constant updating.

• **Case Histories**: Organizations that are considering telework find case histories particularly useful. However they are time-consuming to develop, and to be really useful need to be indexed in such a way that users can find the case histories most applicable to their own organization.

• **Current News**: There is a lot happening around the world that is interesting and relevant to those wanting to learn about telework or improve their telework programs. The toolkit currently includes many links to relevant articles on the Internet, but this function requires maintenance to keep it fresh and ensure links are active.

• **Social Networking**: Some teleworkers requested that the toolkit include a social networking function to allow them to contact and trade information with other teleworkers. There are some social networking telework sites, particularly in Europe. This needs to be explored to see if it offers any significant benefit.

• **Community Pages**: Any telework program anywhere can link to the toolkit as a resource. It is possible to flip this scenario and allow community-based telework programs in Washington State to build their own page on the toolkit. This too would need further study to see if it offers significant advantages to community-based programs.
Community Template

The increased adoption of telework will come about through leadership and promotion of telework to employers at the community level. The Community Template provides guidance to the local telework champions that will take on this responsibility.

Leadership:

Determine who will take responsibility, demonstrate leadership, and provide staffing resources to manage the Community Telework Program, at least during its early stages.

☑ Review the Telework Toolkit to become familiar with key concepts & topics.

☑ List organizations in the community that might be interested in promoting a Community Telework Program. Be creative! Telework’s benefits are numerous. Some examples:

- County
- City
- Library
- Transit Agency
- School District
- Broadband Provider
- Economic Development Organization
- Commute Trip Reduction Lead Agency
- Human Resources and/or IT Professional Associations
- Sustainability Groups (i.e. Sustainable Seattle)
- University and/or Community College
- Affinity Groups e.g. Bicycle Club, Leadership Training Organization, Health District or Hospital, Climate Change Action Group

☑ Write a letter or an e-mail to each of those organizations describing your interest in promoting telework throughout your community and inviting them to an Initial Exploratory Meeting to discuss how it could happen. Tips:

- Try to identify a specific person in each organization to contact. Ask them to pass forward your request to the appropriate person in their organization.
- Include the Telework Toolkit URL ([www.TeleworkToolkit.com](http://www.TeleworkToolkit.com)) and suggest they skim it to get an idea of how different organizations can utilize telework ~ what the important issues & topics are.
- Hold the Initial Exploratory Meeting at a central location with easy access.
- You or your organization may be willing/able to provide leadership for your community. Great! Then your job is to engage others with your enthusiasm and gather their ideas and knowledge. Or perhaps you can play the role of “Convener” and bring people together to identify someone else to provide
leadership. That’s good too ~ be sure to tell people that is what you are hoping to achieve in the Initial Meeting.

- A good starting point would be this Community Template, so you can together lay out what needs to be done for your community. Every community is unique.

- It may be that a small group of people from one or more organizations steps up to leadership. That could be an excellent approach ~ be sure to remind everyone involved that assigning tasks makes things happen.

- Everyone at the Initial Meeting (and others you think of later) can sign on as Community Supporters. Just be sure that you have leadership and responsibility at the core of the program.

- Plan for the Community Supporters Group to meet monthly in the beginning to provide built-in deadlines and accountability.

- Be prepared to step back in after the initial excitement wears thin to re-affirm the importance of telework to your community ~ that’s leadership.

- Can you directly influence any organization(s) to telework?

**Communication & Outreach:**

Repeated messages are necessary to “seat” your Community Telework Program in people’s awareness. Advertising experts know that the first few times someone hears your message (especially amidst today’s information clutter), they will dismiss it. But it still makes a small impression. Perhaps the fifth or fifteenth time that the decision-maker reads information about your Community Telework Program, the moment is right and it sinks in. Be prepared to tell your story over and over again. Recruit partner websites to display the Telework Toolkit link, and compose simple messages regularly for them to display on their websites and send to their e-lists (every month in the beginning is not too often). Remember that your story has two parts: (1) the benefits of telework for your community and individual organizations and (2) information about your Community Telework Program.

- Inventory potential partners’ websites. (See beginning list under Leadership, above, for ideas.)

- Compose press releases for all of the media in your community ~ newspapers, local magazines, radio and public broadcasting stations. Then send the stories to those unique communication channels for your community, such as company newsletters.

- Consider a Tweeting campaign.

- Prepare a short stand-up presentation for local organizations (service clubs, professional associations, et al) describing your Community Telework Program, and recruit a few people to be the Speakers Bureau.
Prepare a short brochure with key points from the stand-up presentation ~ hand it out at community meetings and post it on supermarket and library bulletin boards.

Determine your audience. Think about the organizations in your community...

Telework provides benefits for most organizations:

- Public sector, non-profits, private businesses
- Large, medium or small organizations
- Most likely prospects:
  - Those organizations that already have some teleworkers
  - Employees that already have broadband-speed connection to their home

Compile a written list and send a letter describing benefits and your Community Telework Program. (There may not be anything formal required to participate in your program ~ you may just be telling them about the resources available for them to explore on their own.)

Are you targeting organizations or individual teleworkers, or both? Both can be a good strategy, since many organizations’ telework programs come from eager employees. Keep in mind that there are different benefit messages for these two audiences.

What other communication channels are available to use to reach your audience(s)?

In today’s world, partnerships are the ticket to multiple messaging (it’s called “affiliation marketing”). Think about your partners and possible benefit messages ~ economic development, less congestion, buy local, go green, carbon diet, and so forth.

List all of these communication channels in a matrix, put them in related groups (so press releases and brochures with similar messages are targeted to similar groups), and contact each one once a month for three months, then once every three months for a year.

**Telework Resources**

Determine what level of resources your community can provide to organizations and individuals that wish to telework.

The Telework Toolkit is available to all. It has been tested and refined by experts and neophytes during the Pilot Project ~ it contains up-to-date information resources for teleworking, including forms & checklists to get you started, links & resources. It can be used at three general levels, each level adding additional content and reach:

- **Level 1:** Click on [www.TelemorkToolkit.com](http://www.TelemorkToolkit.com) ~ publicize the website directly and rest assured that it is useful.
• **Level 2:** Request that other organizations throughout your community provide a link to the Telework Toolkit on their websites, with a periodic message (provided by the Leadership Group) to their website visitors about the importance of telework to your community. (See beginning list under Leadership, above, for ideas.)

• **Level 3:** Develop some content on a website that is specific to your community, and provide the Telework Toolkit as a link within the website. Note that this level requires some updating and maintenance. Content ideas:
  - Map showing wi-fi hot spots and any other locations that are set up for teleworking (libraries, cafes, public buildings) — consider mapping on Google Earth
  - List of local organizations that promote teleworking to their employees
  - Community-level social networking function
  - List of Community Supporters

☑ Several publicly-funded telework programs offer training or consulting to newly-teleworking organizations. This can be in group settings (for instance, manager briefings or IT considerations) or one-on-one to an organization that is (for example) writing a telework policy. This could be provided through paid staff, telework consultants (Google “Telework Consultants”), or perhaps a consortium of Community Telework Supporters’ IT staff sharing requests for help.

☑ Primary training needs identified during the Pilot Project: **hands-on software applications training** at both manager and staff-level, for those who are teleworking and those are interacting with them.

☑ Identify Telework infrastructure in your community ~ broadband connectivity to people’s homes (it’s easier for them to telework) and places to telework such as libraries, wi-fi hot spots, telework centers. (See the Telework Toolkit for discussion of what kinds of telework centers are evolving today.)

☑ Results tracking program that legitimizes the telework program, such as certification of participating organizations (and listing on the Level 3 local website).

☑ Incentive Program(s) could include:
  - Vendor discounts for hardware & software
  - Direct financial incentives to teleworking organizations.
  - Carbon Credits for Commute Trip Reduction
Telework Surveys: Key Findings

Much of the focus of the Telework Pilot Project was directed at learning about the practice of telework from both employee and employer points of view. In addition to current literature on telework, information was collected from a number of surveys. Teleworking employees were interviewed about their commute, they completed a baseline survey about their opinions and attitudes related to telework, they completed weekly telework diaries (15 weeks), and a follow-up survey at the conclusion of the project. Managers completed two surveys: a baseline survey and follow-up survey. What follows are some of the key findings and lessons learned from these surveys.

A full report can be downloaded from the telework toolkit website at:

Additional survey information, the commute data spreadsheet, commute descriptions, data tables, and interviews with IT managers can be downloaded from the telework project survey page: http://www.teleworktoolkit.com/project_surveys.html

Below are key findings from the survey data:

The fundamental nature of telework is its mobility

Although most employees who telework do so from home most of the time, the nature of telework allows them to work almost anywhere. 55% said they would only telework from home, but the remainder mentioned a variety of locations where they may telework on occasion: coffee shops, library, bus or ferry, school, when traveling, a client’s office, and other locations.

Commuters in rural & suburban areas also contribute to the CO2 problem

Study participants who live and work in Kitsap County tend to drive the entire commute to work, and most drive alone. This contrasts with the few study participants who live and work on the Seattle side of the water and are more likely to use transit. Kitsap workers are also more likely to say they need the car for their job. Suburban and rural areas, where people use their cars more, and where it is more difficult to provide transit, should not be left out of climate change debate or CO2 reduction strategies.

Telework saves money

Telework does have costs for employees. They spend on setting up the home office, on equipment and software, some increased energy cost, telephone costs, and office supplies. On the whole, however, they come out ahead due to savings on gas and auto maintenance, meals, and in some cases, child care costs. In the pilot project the net savings ranged widely from $5 to $800 a month depending on expenses, savings, and frequency of telework. Employers also have costs and savings, although these were not investigated as part of the pilot project. Potential savings for employers include office
space, energy costs, and expenses related to parking and public transportation. Employers are also realizing some savings from the costs absorbed by teleworkers.

**Telework has a positive impact on families & communities**

Telework offers employees a range of benefits – most related to time saved and greater schedule flexibility. By the end of the telework project, 79% of the employees said having more schedule flexibility was either “important” or “extremely important” to them. Time saved and greater flexibility means individuals can spend more time with their families, be home when children arrive from school, be able to have dinner with the family, or be able to attend community events in the evening. Employees specifically mentioned these benefits and many more.

**Managing relationships with coworkers is an important issue for teleworkers**

Employees’ biggest concerns about telework revolve around coworkers who don’t telework. By the end of the project, one third of the teleworkers said they were concerned about feeling resentment by coworkers who don’t telework. A third also were concerned that they wouldn’t be there (in the office) when coworkers needed their help.

**Maintaining team continuity is an important issue for managers**

There are two aspects to this concern; one has to do with team spirit and one with the productivity that comes from teamwork. 23% of the managers are “very concerned” and 32% are “somewhat concerned” that non-teleworking employees will resent teleworkers – a source of friction in the office. This conflict is probably an inevitable part of the growing pains of the culture change that comes when an organization begins supporting telework. Managers are also concerned about how “teamwork” occurs when the team isn’t all in the same room: 5% are “very concerned” and 50% are “somewhat concerned”. This concern abated a little during the course of the project, but by the end, 15% said it continued to be a concern; 30% said it was a concern that could be resolved. Employees too are worried that they will not always be included in team efforts, especially impromptu meetings. The use of collaborative tools can eliminate some of these issues. Some managers also make greater use of team-building events that include teleworkers.

**Telework is productive work**

Teleworkers believe they are more productive on telework days. Averaged over 15 weeks, 40% say they are more productive; 54% say they are just as productive; only 6% think they are less productive on telework days. 73% of managers agree that telework increases productivity. Managers and employees agree the increased productivity is a result of being able to concentrate on work because there are fewer distractions at home than at the office.
Successful telework requires the right technology

When teleworkers in the pilot project had problems it was usually related to technology. Finding the right technology solutions and getting the kinks out of the system are part of the implementation curve of a telework program. Technology doesn’t have to be expensive for occasional telework or for infrequent telework. However, as many managers pointed out, frequent regular telework requires more durable and more interactive technology. When employers adopt telework more aggressively, they will need to scale-up technology so teleworkers have the same capability at home that they have at the office.

Accelerated telework imposes greater demands on IT and requires a more tech-savvy workforce

Employers who want to significantly increase telework may find it puts a strain on their IT department. Small employers without an IT department may need to seek outside help to find the technology solutions that work best for them. Employers with IT departments may need to provide more tech support than before. Increasing the technology skills of employees can alleviate this problem. One manager said they have always hired self-starters, but now will also look for employees with some technical knowledge. For existing telework employees, training may provide the answer: 28% said they would like to receive training on collaboration tools; 19% on troubleshooting tech problems; 15% on internet and remote working skills.

When a telework program is accelerated, selecting suitable employees may become more difficult

When managers selected employees to participate in the telework pilot project, they naturally selected those best suited for this type of work; those with telework experience, reliable, independent, responsible employees who could manage their time well and work independently. This is exactly the profile of a “suitable teleworker” recommended in the literature and in the telework toolkit. When a telework program is expanded to include more employees, employers may find it more difficult to select employees that already meet this profile. Since selecting unsuitable employees for telework could harm the organization and hamper productivity, employers may need to institute appropriate training for those that want to telework. Employers may also want to consider telework skills when recruiting and hiring new employees.

As telework increases, so does the need for communication

The more frequently a person works away from the office, the more they need tools to communicate and collaborate with coworkers, their manager, and with clients. While all teleworkers use the telephone and email, the use of other tools, like instant messaging (IM), telephone conferencing, web conferencing, and video conferencing is much higher among those that telework most of the time. For example, among all study
participants, 45% use IM and 15% use video conferencing, while among frequent teleworkers 80% use IM and 50% use video conferencing. This is another example of the increased technology demand required by telework.

**Managers value telework as a way to promote concentration**

Managers in the telework project strongly feel that telework is useful to help employees concentrate on difficult tasks; nearly 90% say so. Many employees say the same thing. This is how telework is often utilized. Some managers see the telework day as the equivalent of being able to “close the office door” – a signal to others to not disturb the employee who is concentrating on difficult work. This perception is fostered, at least somewhat, when telework is limited to one day a week or less. Frequent teleworkers, who need to be just as accessible to coworkers when working at home as when working in the office, can still “close the door” by notifying their coworkers of days and times when they need to work undisturbed.

**Scheduling telework is difficult in small organizations**

Some employees in the project were unable to telework as often as originally scheduled. In small organizations, particularly in those that deal face-to-face with customers or the public, it is difficult to have too many employees out of the office at the same time. Employees are often asked to give up their telework day to cover for another employee or work on a special project. However, there is more involved here than just the size of the organization. Some employees in small organizations never had to reduce their telework schedule; in fact, some were able to increase it. (See next item)

**A commitment to telework involves a shift in thinking**

A second factor that impacts whether or not teleworkers can maintain their schedule is the commitment of the organization to regular telework, as opposed to occasionally taking work home. Some employers view telework as something special they can occasionally do for their employees or as a way for employees to concentrate on a project. Employers who have regular teleworkers with established schedules have a different perspective. In the pilot project, it was the employees who were already teleworking the least who were most likely to be asked to give up their telework day. Teleworkers who regularly telework several days a week were never asked to give up a telework day. For them, telework is just the way they work. If an organization commits to accelerating their telework program there is a corresponding shift in thinking that needs to occur – from thinking of telework as outside the norm to thinking of it as just one of the ways work gets done.
Employees indicate a high level of satisfaction with telework

Each week during the project employees were asked how satisfied they were with telework at this point in time. Average results for the 15 weeks: 78% “very satisfied”, 21% “mostly satisfied”, 1% “undecided”. None of the teleworkers were dissatisfied.

Telework is good for employee morale

Over 80% of the managers agree that telework increases employee morale: 46% “agree strongly”; 36% “agree some”. It’s safe to say that teleworkers would agree as well. It is unknown how non-teleworking coworkers feel as they were not surveyed. However, the attitudes of coworkers are of concern to both managers and teleworkers.

Employees don’t want to telework all the time

Even if organizations adopt an aggressive approach to telework it is unlikely that all employees will telework frequently. Although 50% of the teleworkers said they really only need to be in the office one day a week or less, only 21% want to telework that often. When asked how many days a week they would like to telework, 28% said their preference was to telework one day a week; 28% want to telework 2 days a week; 23% said 3 days; 6% said 4 days; 15% want to telework full time.

Most participating managers have a positive opinion of telework

At the beginning of the project, 70% of the managers said they thought telework was a “good idea”; 26% said it was “worth a try”. At the end of the project, 83% said their opinion was unchanged, but 11% said their opinion was more positive than before. Only one manager had a more negative opinion – that manager was concerned about some employees using telework as a way to become less engaged in organization.

In the literature, managers are often criticized for their resistance to telework. This idea could not be adequately tested in the pilot study because pilot participants were all volunteers and it is more likely for volunteers to have a positive outlook. A few employees in the project did report resistance by their managers, but it was just as likely for employees to say it was the fault of top management “saying” they support telework but not actually doing so. One of the realities is that organizations that support telework do so along a continuum from marginal support to aggressive support. In many organizations, telework isn’t formally supported to the extent of having a telework policy and actively encouraging telework. Instead, telework is allowed, but it is individual champions (managers or employees) who provide momentum.
Systemic changes required to accelerate telework

Managers were posed the problem of how to radically increase telework in their organizations. Their ideas and concerns indicate the kind of systemic changes that would need to occur in an organization for aggressive acceleration of telework:

- **Support of top management**: Telework at this level would require total support from the top.
- **Providing service to customers or members**: Many of the small organizations in the pilot project need employees on site to provide face-to-face service. Employees would need to be cross-trained to cover for each other. Possibly some services could be provided online. And possibly over time some customers and members will make greater use of online services.
- **Moving paper**: For some organizations, it is essential to move paper documents between employees or between employee and customer. Examples mentioned by managers include forms that must be signed or witnessed, and when employees work with print media that cannot be displayed online. One manager suggested using couriers to move documents.
- **Cost versus benefit**: Management would have to see that the investment required in technology and retooling the culture would pay off.
- **Strengthening technology**: Most managers are very aware that their organization would have to invest in the appropriate technology infrastructure and collaborative tools to implement telework on a large scale.
- **Changes in hiring practices**: Greater priority in hiring employees with telework experience or strong technology skills.
- **Compensating teleworkers**: When the employee works from home most of the time, the home office becomes the principle place of business. As such, the employer has a greater obligation to provide the necessities of the workplace. Employees themselves now assume some of those costs. It is uncertain that they would be willing to do so if teleworking full time.
- **Culture change**: aside from the change in direction from top management, there will also be changes for managers and employees. Managers will need to develop progress-oriented work programs so employees are accountable for their work regardless of where it occurs. Managers, along with employees, will have to find ways to create team interaction. For employees, there needs to be an understanding that even though teleworking provides a sense of autonomy, they are still part of an organization and they need to also be working to move the organization forward.
Telework Centers

A telework center is an office facility, typically located in the suburban area of a major city, where employees can work instead of making the long commute into the city center. Telework centers typically host workers from multiple employers; either from public agencies (most common) or private companies. Occasionally, individuals may choose to work from a telework center on their own.

The primary function of a telework center is to reduce commute time for employees. When telework centers originally began appearing in the 1990’s, broadband connections to residential areas were not as common as today so employees working from a telework center could experience the same kind of network connection they would have at work. Today, with broadband in the home, this feature is less compelling, although most centers do provide very high-quality connectivity. Telework centers also provide services and amenities not available in the home, such as copy machines, fax machines, printers, video conferencing facilities, and tech support. Telework centers typically do not house enough workers to make a significant impact on traffic reduction, although there have been ideas floated for much larger facilities.

Today, telework centers are primarily marketed to individuals (and through them to their employers) as an alternative to working at home. This is appealing to teleworkers who don’t have a suitable work environment at home or who prefer to work in an office environment around other people.

A closely related concept is Satellite Centers. Sometimes the two terms are used interchangeably, but most commonly a satellite center is operated by one entity for the use of its employees, whereas a telework center has workers from various employers.

History

The idea of telework centers has been around for at least 20 years. One was pilot tested as part of the Puget Sound Telecommuting Demonstration Project (1990-1992) by the Washington State Energy Office. That center was located in the Northgate area, north of Seattle. It closed when the project ended.

Also in the 1990’s the State of California opened about 40 telework centers, but most if not all closed once subsidies were removed.

In 2007 a study was conducted in Michigan with the aim of determining how telework centers could be used to promote economic development in West Michigan. Although the study was completed, the public/private partnership that would carry the project forward fell apart when financing wasn’t forthcoming from the private investors.
The only known well established telework centers are those operated by the General Services Administration (GSA) and their partners (community colleges, government contractors). There are 14 of these centers in operation now (originally there were more), located in suburban communities circling the Washington DC metro area. The construction was subsidized by the Federal Government at a cost ranging from $250,000 to $1,000,000 per unit. It is believed that they continue to be subsidized, although no figures are available. These centers were originally built for government employees, but now accept employees from private firms. They charge $40 to $62 per user daily.

**Pilot Project**

The scope of work for the Telework Pilot Project specified that the project identify and recruit suitable locations in Kitsap County for telework centers. Substantial efforts were made to establish a telework center as part of the project. Beginning in June of 2008, team members began contacting individuals and companies across Kitsap County to identify suitable locations. A few locations were identified but in each case there were barriers to actually establishing a telework center. Although property owners were amenable to the property being used for this purpose, the lease was more than could be supported by the project budget. In other cases there were liability issues.

The team also explored opening a telework center in Jefferson County that could be used by employees during the Hood Canal Bridge closure. Washington State University Extension in Port Hadlock (Jefferson County) has a fully furnished computer learning center and office space that was available for telework during the bridge closure. Project team members attended a meeting of local business leaders and a Jefferson County Chamber of Commerce lunch to promote the idea. Articles appeared in several local publications. In addition, flyers were posted in Jefferson County businesses. Nevertheless, there was no interest from the community.

A final, and more promising, possibility occurred fairly late in the project timeframe when the project team was contacted by Metrovation, a property development firm located in Bellevue, Washington that owns two Kitsap County properties in Bremerton. Metrovation’s two King County properties, Crossroads Mall in Bellevue, and Towne Centre Mall in Lake Forest Park both have large common areas that are frequently used by teleworkers. Metrovation is interested in expanding the telework possibilities in their future Bremerton development, Harborside Commons.

One of the buildings that Metrovation owns in downtown Bremerton has space available that would be ideal as a telework center, and the company was eager for the Pilot Project to use the space to test the concept. Metrovation was willing to make the space available at a rate within the project budget. Project team members met with Metrovation representatives on three occasions to discuss the arrangements. The team handed out flyers on the Bremerton ferry and articles about the telework center appeared in the Kitsap Sun, but no useful inquiries were forthcoming.
New Models

More recently there have been attempts to create work locations marketed as telework centers that are really a combination of entrepreneurial start-up space, small business space, and a telework location. These are all private initiatives. It remains to be seen if they will be profitable. A new privately owned telework center has recently opened in Felton, California (near Santa Cruz, south of Silicon Valley). This is a true telework center that rents cubicles or offices by the day, week, month, or on a drop-in basis. They offer a large menu of amenities, all billed on a per-use basis, except to those that purchase a membership. This facility opened its doors in May 2009, so it is too early to know if it will be successful.

Final Thoughts about Telework Centers

The telework center concept is attractive in many ways, but also has serious problems that may explain why it has not caught on. Its primary benefit is to the teleworker, not to the employer. The teleworker gets a shorter commute, but the employer has to pay for it and most are not willing to do so. The exception may be Satellite Centers owned by large corporations for their own employees. Some companies would prefer to pay their employees to work rather than sit in traffic, but this is essentially the same as opening a branch office. The second problem with telework centers is that they don’t remove enough cars from the road to have a significant impact on traffic or a corresponding reduction in greenhouse gases. The third problem is that telework centers tend to survive only when subsidized.

It may be that a new successful model will emerge out of the continued attempts to create telework centers. This may be a retail model along the lines of the one that just opened in Felton, or it may be a hybrid center that offers a number of services and amenities of which telework space is one. There has been discussion of combining telework facilities with day care, after school programs, adult education, libraries, and other services. This is essentially a community center where teleworkers can find space to work, which is not much different from what Metrovation has created at Crossroads Mall in Bellevue.

Many home-based teleworkers occasionally like to get out of the house and be around other people. They might utilize such a facility, much the same way they currently use coffee shops, as a place to work part of the time. Offering services they don’t have at home, such as copy machines, video conferencing, and meeting spaces, would enhance the appeal. As more people move from working in the office full time to teleworking at least part time, the demand for alternate places to work could grow. However, this is far different from the traditional telework center, such as those operated by GSA. It remains to be seen if a telework center model will emerge that is economically sustainable.
Recommendations

A great deal was learned during the course of the project that can benefit employers, managers of teleworkers, and employees that are interest in learning more about telework or involved in telework programs. Advice and recommendations to employers and employees is contained in the toolkit. The recommendations included in this report deal with the broader implications of telework that will be of interest to policy makers and to agencies that may promote or support telework efforts.

Reduction of Traffic Congestion and Supporting Highway and Bridge Construction Mitigation

Telework has always been promoted as one of several effective commute reduction strategies because it removes vehicles from the road entirely. Telework is particularly attractive because, unlike the construction of HOV lanes, bike lanes, walking paths, or rail lines, it requires virtually no infrastructure cost. The problem isn’t a lack of willing participants. Commute Trip Reduction (CTR) survey data from 2007 shows that 36% of the employees in CTR programs would like to telework one or more days a week, yet less than 5% actually do so\(^1\). The challenge is moving more employers toward acceptance and commitment.

Telework as a truly effective traffic reduction strategy occurs when there is a broad-based adoption of telework. It would be much easier for employers to ramp up telework during construction projects than to implement telework programs from scratch in response to a construction project.

Recommendations:

1. For telework to be an effective component in a mitigation strategy a strong outreach program is required; one that involves multiple approaches and messages. Once employers agree to use telework during a road or bridge closure they will need time to implement telework in their organizations. Implementation involves making telework policy decisions, selecting employees, and technology considerations. This cannot be done quickly; at least 18 months should be allowed.

2. Conduct research on the effectiveness of telework as a component of highway or bridge construction mitigation strategies in other parts of the country.

\(^1\) As reported in *Washington Employee Interest in Telework: An Untapped Potential*, a DRAFT working paper prepared by Bill Gillis, PhD, WSU Extension Economist (May 2008)
3. Develop estimates of how many vehicles need to be eliminated from the commute to achieve the desired impact. For example, in the case of the Hood Canal Bridge project, ferry transportation was required when the bridge was closed. How many reduced vehicle trips would have been required to reduce the cost of ferry and bus service? Having such a goal will increase the effectiveness of telework outreach in these situations.

4. In a mitigation scenario, consideration could be given to the use of incentives to accelerate adoption and the use of consultants to work with businesses for speedier implementation.

5. For construction mitigation purposes, there would need to be a monitoring or coordinating function to ensure progress is being made (i.e., that employers are on track to start teleworking on time) and that telework days are staggered so telework isn’t just concentrated on Mondays and Fridays.

Reducing Greenhouse Gas Emissions

Governor Gregoire’s Executive Order 09-05, dated May 21, 2009 calls for WSDOT to work with the State’s four major regional transportation planning councils to develop and adopt regional transportation plans that will “… provide people with additional transportation alternatives and choices, reduce greenhouse gases and achieve statutory benchmarks to reduce annual per capita vehicle miles traveled.” Telework is one of a number of commute alternatives that has real potential to reduce greenhouse gases. Nothing is more effective at reducing greenhouse gases from the transportation sector than keeping the car in the garage.

Efforts to reduce greenhouse gases are by necessity wide spread, touching on every aspect of society. Naturally, much of the focus has been on auto emissions; specifically the reduction of carbon dioxide (CO2). People in suburban and rural areas that don’t have traffic congestion or visible air pollution may not see themselves as playing much of a role in CO2 reduction. There needs to be some realignment in this perspective. The damage to the ozone layer from greenhouse gases occurs regardless of where the gases originate.

The infrastructure and policies dealing with air quality have been focused in urban areas where the problem is most severe and where reduction efforts can have the greatest impact. WSDOT’s Commute Trip Reduction (CTR) Program deals with larger employers (mostly in urban areas), and Growth and Transportation Efficiency Center (GTEC) Program focuses on urban areas, as do the regional transportation planning councils (Puget Sound, Spokane, Southwest Washington, and Thurston). While urban areas are where the greatest impact can be realized, CO2 reduction efforts must involve
businesses, organizations, and citizens across the State. There is a “personal responsibility” component to any CO2 solution.

The 60 individual employees who participated in the Kitsap Telework Pilot Project saved, on average, 32 miles of travel, 1.43 gallons of gasoline, and 27.73 pounds of CO2 each day they teleworked. These averages are based on all participants, including those that used transit for most or all of their commute. While it is impossible to use figures from the Kitsap project to accurately project savings across the State, or even across Kitsap County, it does provide a theoretical place to start.

According to estimates from the US Census there are approximately 106,658 employees in Kitsap County (age 16 and over) who work in civilian jobs. According to 2007 CTR Data approximately 4.8% of the employees in CTR programs (statewide) currently telework at least one day a week, and of course some of these employees telework more than once a week. It is not difficult to imagine reaching a goal of 10% of the workforce teleworking one day a week on average.

In Kitsap County, 10% equals 10,666 employees. That number of people teleworking one day a week would save 6,450 metric tons (14,219,654 pounds) of CO2 over the course of a year. As an example, 6,450 metric tons is equivalent to the CO2 emissions produced by the total energy consumption of 1,127 non-energy efficient homes in the Bremerton Washington 98337 zip code for a full year.

| Miles Saved | 10,666 employees X 48 days X 32 miles per day = 16,382,976 miles |
| Fuel Saved  | 10,666 employees X 48 days X 1.43 gallons per day = 732,114.24 gallons |

The Commonwealth of Virginia has set a goal of 20% of the Commonwealth’s workforce – all workers, not just State employees - teleworking at least one day a week by 2010.

As an example, 6,450 metric tons is equivalent to the CO2 emissions produced by the total energy consumption of 1,127 non-energy efficient homes in the Bremerton Washington 98337 zip code for a full year.

1 As reported in Washington Employee Interest in Telework: An Untapped Potential, a DRAFT working paper prepared by Bill Gillis, PhD, WSU Extension Economist (May 2008)

2 US Census Fact Finder 2005-2007 3 year estimates for Kitsap County

3 The figure “6450 metric tons” is calculated based on average gasoline use for all participants in the study, not just those living and working in Kitsap County.

The metric ton/pound savings are provided by using the EPA Greenhouse Gas Equivalencies Calculator located on the EPA website: http://www.epa.gov/energy/resources/calculator.html.

4 Energy equivalency for the 98337 zip code was calculated using the Lawrence Berkeley National Laboratory Home Energy Saver Calculator: http://hes.lbl.gov/hes/vh.shtml

5 Based on an assumption of 240 working days per year for the average employee. Teleworking one day a week would be 20%, or 48 days.
An Interesting Finding:
Participants in the telework pilot project that both lived and worked in Kitsap County had far higher CO2 emissions attributed to their work commute than did those that lived and worked in King County. This is because the Kitsap participants all drove the entire distance between home and work (none used transit), while the King County participants almost all used transit for their commute (driving was mostly limited to driving to the Park & Ride lot).

The number of participating King County workers was too small to permit any reliable conclusions from this comparison, however, the result is interesting and illustrates that outside of large metro areas, transit, for a variety of reasons, may be used less frequently for the commute. It also illustrates that while there may be fewer people living outside metro areas, they may individually be contributing substantially to the greenhouse gas problem.

There is another way that telework reduces greenhouse gas emissions. For years there has been speculation that workers use less energy at home than they do when working at the office. Many have assumed that the energy savings an employer was experiencing were just being transferred to the employee. Sun Microsystems, which has had a successful telework program for a decade (56% of their employees telework or participate in another flexible work program), equipped their teleworkers’ workstations at home and at work with kilowatt-hour monitors. They found that workers used an average of 64 watts of energy per hour at home compared with 130 watts of energy per hour at work. The Sun study concluded, however, that this savings is dwarfed by what employees save by not commuting. At Sun, 98% of the employee’s work-related carbon footprint is attributed to the commute. 6

Recommendations:

1. Telework can be a powerful asset in the State’s efforts to meet the greenhouse gases reduction targets outlined in Executive Order 09-05 and every effort should be made to promote telework to employers and in state agencies.

2. Outreach to employers should emphasize that telework is one way that employers can help meet CO2 reduction goals and help themselves and their employees at the same time: a win-win-win situation.

3. Greenhouse reduction strategies (including telework) should not ignore suburban and rural areas.

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6 The following links provide more information about the Sun Microsystems study:

Sun’s Open Work Energy Measurement Study White Paper (17 pages):

Sun Press Release about the Study (1 page):
http://www.sun.com/aboutsun/pr/2008-06/sunflash.20080609.2.xml

News article (3 pages):
Emergency Preparedness

Disasters small or large can happen at any time and when they do happen, it is too late to plan. That’s why advance disaster planning, or Continuity of Operations Plans (COOP), is so important. Telework is being increasingly recognized as an important element of COOP. Federal agencies are required to have COOP plans and telework is specifically mentioned as a planning option. Because of this, Federal agencies have moved forward with COOP planning more aggressively than have most local governments or businesses. However, the General Accounting Office (GAO) has reported that while many agencies have telework policies, there is inadequate preparation to implement telework in a disaster.

The push for Federal disaster planning followed the 911 disaster with increasing realization that the Federal Government can’t respond to emergencies itself if it is crippled by a disaster. In the aftermath of hurricane Katrina, even agencies that had COOP plans in place were handicapped because employees – even those whose homes were unaffected – could not get to their assigned locations. It should be noted that telework, at least initially, was sometimes hampered by disabled communications systems. Lessons are learned from each disaster, and since Katrina, there has been increased realization that each type of disaster has its own planning requirements. Emergency operations in some cases must occur over long periods of time. With the recent N1H1 Flu outbreak, the focus has turned on how to provide continuity during a pandemic. Telework is ideally suited to this type of emergency because it keeps workers at home. The Centers for Disease Control has discussed telework as a way to minimize exposure to the virus.

Two examples in Washington State where telework could have made a difference are the snowstorm of 2008 and the Nisqually earthquake of 2001. During the snowstorm, many roads were impassible and people couldn’t get to work, however they could have worked from home. During the earthquake, the problem was that people couldn’t get inside because the buildings were unsafe, sometimes for many weeks. Some businesses never recovered from the Nisqually quake.

Telework can make a difference in Continuity of Operations if well thought out and tested in advance.

Recommendations:

1. Like using telework for highway construction mitigation, lead time and advance planning are required. Telework can’t be successfully implemented in significant scale during a disaster unless plans are in place and tested. Such planning requires decisions about who will telework, technology, data security, and data access – possibly including accessing off-site data storage. Employers
will also need to test bandwidth capacity to see how many employees can work off-site in an emergency. Some federal agencies have telework “fire-drills”, to test how well telework “works” in the event of a disaster.

2. Incorporate telework in the State’s own COOP and in the disaster planning materials on the Washington Military Department Emergency Management Division website. Encourage Counties and Cities to do the same.

3. In addition to providing access to the telework toolkit, develop additional guidelines on how and when telework is a feasible response to a disaster, including recommendations about readiness testing.

Economic Benefits and a Stronger Business Community

In addition to being better able to function in the aftermath of disasters or during commute interruptions during highway or bridge construction, telework provides a number of economic benefits to businesses. The adoption of telework by the business community will help strengthen Washington position in the new economy*.

Reduced Employee Recruitment Costs: Studies have shown higher job satisfaction among teleworkers than among non-teleworkers. Satisfaction comes from greater schedule flexibility and having more time with their families, reduced transportation cost, and a greater sense of being trusted by their manager. Teleworkers also indicate a greater sense of accomplishment because they can better concentrate on difficult projects when away from office distractions. In the pilot project surveys, 80% of the managers agree that telework increases worker morale. All of this leads to improved employee retention. The cost of recruiting, replacing, and training employees is a major expense for employers. Improved retention is a significant economic benefit.

Increased Productivity: Productivity is a perennial concern to businesses. Teleworkers consistently say they are more productive when working from home. Managers tend to agree. In the pilot project surveys, 40% of the teleworkers say they are “more productive”, 54% say they are “just as productive”, and only 6% say they are “less productive” when teleworking. 65% of the managers agree that telework increases worker productivity.

Employees and managers are most likely to say this productivity occurs because there are fewer distractions at home, but there have been studies that indicate additional possibilities: Some of the time that employees save by not commuting may be spent on work. Teleworkers may also be more productive because they have more positive

feelings toward their employer. There is some indication that teleworkers use fewer sick days; whether this is because they work from home when not feeling well enough to come into the office, or because they are less likely to be exposed to contagions, is not known.

**Reduced Overhead:** It was impossible to examine overhead costs and savings attributed to telework within the timeframe and scope of the pilot project, but there have been numerous studies that show savings for employers from reduced real estate costs, energy reduction, less furniture and equipment, and a reduced need for parking and commute reimbursement. Because there are also costs associated with telework, individual organizations will need to conduct a cost-benefit analysis to determine how telework will impact their own bottom line. Employers that can implement telework on a large enough scale to achieve a reduced real estate footprint have the best chance of seeing substantial savings.

**Increased Competitiveness:** Telework represents a shift in the work paradigm from workers commuting to work to one where work commutes to workers. This is possible because of the convergence of today’s technologies: personal and mobile computing and communications, web-based software, and increased bandwidth. Increasingly, it doesn’t matter where the worker is physically or geographically located.

This new way of operating offers potential opportunity for economic development in rural areas, it gives businesses a broader geographic reach when recruiting talent, and it provides greater opportunity to those who for various reasons cannot easily commute. Businesses and workers are required to become more technologically adept and nimble. In the pilot project surveys, comments from employees, managers, and IT directors indicate that as the number of teleworkers increases there must be a corresponding increase in technology and technical skills. This in turn, makes businesses more competitive in today’s economic environment.

**Recommendations:**

1. Telework outreach to employers should stress the economic benefits inherent in the implementation of telework. Although the telework toolkit includes much of this information (addressing benefits and concerns of employers and providing a cost-benefit analysis guide), there should be a printed brochure or workbook that employers can take away from telework presentations. In addition to listing benefits, this collateral piece should discuss the conditions under which worker productivity, financial savings, and competitiveness are achieved. Employers need realistic information before making the decision to implement telework on a broad scale.

2. As more businesses implement telework, they will be looking for employees that already have the skills needed to be effective teleworkers. Although many
of these skills, both personal and technical, are discussed in the toolkit, there is an opportunity for a more precise organization and quantification of this information to provide guidance to educational institutions that could develop training and retraining programs.

Stronger Families and Communities

Telework literature talks about the societal benefit of telework, stating that the greater community is strengthened by a range of benefits to individuals and business; many of which have been discussed in the preceding pages. What was discovered in the Telework Pilot Project is something more personal. When asked what they liked about telework, participants mentioned saving commute time and being able to get more work accomplished from home. However, when asked what it is about telework that gives them the most satisfaction, participants mention being able to have more time with their families. Examples include:

- Being there when children get home from school
- Being home in time to eat dinner with the family
- Being able to prepare a home-cooked meal instead of picking up take-out
- Being able to attend school events
- Neighborhoods are safer when there are people home during the day
- Being able to attend community events on telework days, since they get home too late on normal commute days do this

Teleworkers place extremely high value on this family time. It not only improves people’s lives, but also has a compound positive effect on neighborhoods and communities. Additionally, while the telework literature often states that “telework is not a substitute for child care”, there were several participants in the pilot study that did care for young children while working from home – with the blessing of their employer. Some employees did have to juggle their schedules somewhat in order to accomplish this, but were grateful to their employer for the opportunity.

Recommendations:

While there are no specific recommendations regarding this benefit, there are two observations:

1. Having more time with the family and in the community must have a beneficial effect, and as more and more people telework, the effect will be strengthened, improving society as a whole.

2. It appears that some teleworkers like to alter their work schedule on telework days by either starting work earlier than normal or by taking some time off in the afternoon and then working again later in the evening in order to be
available when children get home from school. While most managers appear to be sensitive to workers’ needs for schedule flexibility, teleworkers need to coordinate schedules carefully with managers in order to provide necessary availability to coworkers, clients, and their manager.

State Telework Leadership

The State can play a critical role in accelerating the adoption of telework. Supporting outreach efforts and ongoing maintenance of the telework toolkit are most important. In the case of highway construction mitigation and emergency preparedness, the more employers there are with functioning telework programs, the better prepared communities will be to meet these challenges when the time comes. In terms of environmental goals, the sooner more employees are regularly teleworking, the sooner telework can have a positive impact on CO2 reduction. Support is needed to accomplish these goals. In terms of funding, there are four models to consider:

- A competitive Community Grant Model.
- US Census Model – providing minimal grants to communities to cover hard costs.
- Use early-planning highway/bridge construction mitigation funds as a catalyst for developing a community-wide telework program. Keep in mind that employers need significant lead time (at least 18 months) prior to construction.
- Individual community programs can fundraise.

Below are eight recommendations for State support of telework:

Recommendations

1. **Provide support for the Telework Toolkit:** The online toolkit is the primary resource for information about telework. Support will be required to maintain it and continue development. At a minimum, keep the toolkit as a publicly-owned website and retain the current domain name (TeleworkToolkit.com) which is easily located through web searches. All websites have a shelf-life and eventually links within the toolkit will need to be removed or upgraded. As it is, the toolkit could probably exist with minimum maintenance for a couple of years.

   A slightly more moderate level of support would provide funds to maintain links within the toolkit (deleting, repairing or replacing broken links) and continually reviewing literature to add new links to relevant information. Moderate support would also provide for a modest level of solicitation to improve the toolkit. This taps into the network of telework champions that will provide input regarding useful links, articles, and studies they discover.
Full support for the toolkit would provide for enhancements and upgrades, such as those suggested on page 11 of this report, and would actively solicit input and suggestions from toolkit users.

2. **Support telework outreach efforts**: Outreach means working within communities to encourage adoption of telework. Outreach will be required to achieve adoption of telework by a significant number of employers. Outreach does not have to be done by a State Agency; it could be done by supporting grass-roots telework programs within communities. Three levels of support are suggested:

   **Minimal New Resources & Leadership (Lowest Support Level)**

   The minimum level of support provides limited outreach by targeting public and private organizations already interested in telework and providing them with the Telework Toolkit, which includes the Community Template.

   Make the toolkit available to organizations throughout Washington and encourage them to provide a link to the toolkit for their members and customers. Although this approach doesn’t include the follow-through of a more systematic outreach plan, it can be assumed that some champions will emerge from these contacts to help push telework forward. Possible contacts include:

   - Appropriate Washington State Agencies: Transportation, Energy, Environment, etc.
   - Every CTR employer and GTEC organization
   - All Counties, through the Washington Association of Counties
   - All Cities, through the Association of Washington Cities
   - All Economic Development Organizations
   - All Chambers of Commerce
   - All Regional Planning Organizations
   - All Transportation Planning Organizations
   - All Transit Districts
   - Human Resources Directors, through HR Associations
   - Information Technology Directors, through IT Associations
   - Telework Associations, such as Telework Exchange and Telcoa, which are frequent sources of information about telework.

   Any outreach effort could potentially generate inquiries that require personnel not available using this minimal approach. To reduce this possibility, outreach to organizations (at the minimal level) should be “closed-ended” in nature.
Moderate New Resources & Leadership (Moderate Support Level)

This level of support is a modestly stepped-up plan to expand outreach beyond the organizations listed above, targeting communities with repeated messages. It is the repeated messages that plant information more firmly in peoples’ minds and move them to action.

Support activities that increase awareness of the toolkit with a minimum investment of time and money; examples include:

- Write press releases
- Prepare a simple brochure or telework fact sheet that can be downloaded rather than printed
- Write a few articles that can be used in association and organization newsletters
- Make a few presentations
- Identify a “convener” in each community (possibly the CTR agency) that can arrange a meeting of potentially interested organizations and major employers to discuss starting a community-wide telework program as outlined in the Community Template. The Telework Toolkit and Community Template are the information resource for this early effort. The convener organization is responsible for initiating the discussion, but may not be the organization that eventually administers a community telework program.

Accelerated Telework Adoption through Resources & Leadership (Highest Support Level)

Develop a more aggressive outreach program that targets organizations and communities with a stronger set of resources. This is the quickest way to begin realizing significant benefits from telework such as CO2 reduction and advanced preparation for highway and bridge construction mitigation.

An accelerated approach includes support for contacting employers directly and making presentations at events. Promotion materials, brochures, flyers, posters and presentation materials are required.

Outreach should include more aggressive telework program support as part of the CTR, GTEC, and Climate Change programs.

A program at this level could be administered from a central source or could be community-based. It could also be community based, but coordinated from a central source.
In addition to supporting outreach, support can be provided to identify and determine the feasibility of additional resources to accelerate telework adoption: Some ideas that can be researched or pilot-tested include:

- The long-term benefit of using one-on-one consultants to help employers develop, implement, and sustain a telework program. This service could be offered free or at cost. Many of the large telework programs in other areas of the country provide this service.
- A point system recognition program for CO2 reduction that is similar to the Envirostar program that recognizes organizations for their reduction of hazardous waste. CO2 reduction from telework would earn points.
- Incentives for telework participation: one possibility is cash or zero-interest loans for telework equipment.
- Development and operation of a Telework Speaker’s Bureau.
- Development of a Washington Telework brand and logo for consistent imaging and messaging that could be used by all State Agencies and by community programs. (Similar to the branding used by the Washington State Lottery).
- Identify the specific telework skill set that will enhance employment opportunities. CEOs, Managers, and IT Managers may have different ideas about what is important.

3. **Greater emphasis on telework at State Agencies:** The telework movement gains momentum when the State leads the way by encouraging telework by State employees. This could be accomplished following the Federal model of setting target goals for each agency. If greenhouse gas reduction is the goal, target reduction levels could be set for each agency (adjusted for each agency’s unique work). Increasing the number of employees that telework would help agencies meet their CO2 reduction goals.

4. **Update Executive Order 01-03:** This executive order issued in 2001 calls for a strong telework and flexwork program to reduce traffic congestion and improve quality of life. Consider updating the executive order to bring it in line with current CTR and Climate Change goals. The executive order should also contain language that ties it to the Washington State performance measurement goals (GMAP) with annual reporting to agency directors.

5. **Greater awareness of the impact of policy language on telework:** Give consideration to how policy language may unintentionally inhibit telework or other commute-reduction activities. One example brought to the attention of the project team is language that allows special district commissioners to attend
meetings and vote by video conference. However, to be compensated for attending they must attend in person, which discourages virtual attendance.

6. **Consider legislation to enable greater access to publically-owned broadband.**

7. **Consider the creation of a State Telework Coordinator:** Both the State and local community telework programs could benefit by having a central source that coordinates on telework issues across agencies. Activates could include:

   - Provide guidance to a community that is starting a telework program.
   - Collect and maintain data on individual community programs, track success, and provide reporting to the Legislature.
   - Interact with, and advise, State Departments, Department programs (like CTR or GTEC), or Regional Transportation and Planning Councils on telework issues.
   - Represent Washington State when interacting with Federal agencies and when exploring opportunities for Federal funding of telework efforts.

8. **Fund additional research:** Four suggestions

   - In coordination with educational institutions, survey employers concerning the specific skills employers are looking for in teleworkers. Develop guidance for educational institutions in curriculum and program development to better prepare employees for telework and telework management.
   - Research the effectiveness of telework used in other states as a mitigation strategy during highway and bridge construction projects.
   - Investigate the effectiveness of telework consultants to help businesses more effectively and quickly implement telework programs.
   - Preliminary research during the Telework Pilot Project raises doubts about the economic viability of telework centers. More research is needed to see if there is a successful and sustainable public or public/private model. If demand for telework centers does exist, it may be filled by the private sector. Publically supported telework centers should be evaluated for their benefit to the community compared with other commute reduction strategies.
Exhibits

A. Toolkit Contents

The toolkit home page (www.teleworktoolkit.com) directs users to six principal landing pages, plus the Community Template page, and a page with information about the Telework Pilot Project, and the Site Map - a table of contents. The six principal landing pages include navigation to additional related pages which are briefly described below.

See the site map (www.teleworktoolkit.com/sitemap.html) for a complete outline.

About Telework – basic introductory information

- **What is Telework?** Introduces and defines the types of telework.
- **Benefits of Telework:** the potential benefits for employees, employers, and the community.
- **Telework Q & A:** answers basic questions about telework posed by employees and employers.

For Teleworkers – information aimed at individuals

- **Exploring Telework:** provides information for employees who are considering applying for telework, including a Telework Self-Assessment Form.
- **Mastering Telework:** includes tips for telework success and information about setting up a home office.

For Managers – a manual for those who manage teleworkers

- **The Reasons for Telework:** explains why organizations are implementing telework and why managers should get on board.
- **Tips for Telework Managers:** is advice and lessons learned.
- **Evaluating a Request:** helps managers decide how to evaluate and approve an employee’s request to telework.
- **Denying a Request:** provides advice on how and when to say no.
- **Terminating an Agreement:** discusses what to do when telework doesn’t work for an individual employee.
For Organizations – *information for management and the telework program team*

- **Management Concerns:** addresses, Security, Productivity, Program Costs & Savings and other issues typically of concern to management when exploring telework, or exploring an expansion of telework.
- **Building a Telework Program:** steps through the process of building and operating a telework program; from putting together a team, creating a telework policy, dealing with legal and workplace issues, and making decisions about equipment and training.

Technology – *about the relationship between technology and telework*

- **Data Access:** discusses the decision process related to providing teleworkers with electronic access to organization data.
- **Infrastructure:** understanding bandwidth and infrastructure needs related to telework and making infrastructure scalable.
- **IT Security:** discusses tools to protect the network in a distributed work environment.
- **Equipment & Tools:** an overview of the many tools available to facilitate telework and collaborative working.
- **IT Support:** considering the impact of telework on IT support.

Resources – *material to help and inform teleworkers and organizations*

- **Telework Organizations:** organizations that promote telework.
- **Programs & Toolkits:** telework programs and telework toolkits found on the Internet.
- **Telework Policies:** the telework policy guide and sample policies.
- **Telework Agreements:** the telework agreement template and sample agreements.
- **Guides & Forms:** various guides and forms that can be used or serve as examples for employers offering telework.
- **Telework Training:** links to information about training and to online training offered by other organizations.
- **Authors & Articles:** sources for further reading about telework.
- **Interesting Sites:** other websites about, or related to, telework.
B. Toolkit Methodology

The development of the Telework Toolkit occurred in five distinct stages:

A Review of Telework Programs and Materials

There are thousands, if not tens of thousands of sources for information about telework. The goal was to review the most established sources and then look for the most current material. This began with a review of the pioneering telework efforts in Washington State, specifically work by the Washington State Energy Office and Washington State University (WSU) Cooperative Extension Energy Program. Most of this work is from the 1990’s, but much of the information is still relevant.

Major Federal sources included the US Government’s telework program for Federal employees (www.telework.gov) as well as information about the telework centers operated by the General Services Administration (GSA).

State programs that were reviewed include: Commonwealth of Virginia, North Carolina, Oregon Department of Energy – Transportation, Arizona, and Connecticut.

Regional programs included: Denver Council of Governments and City of Vancouver, Washington.

Hundreds of articles, studies, white papers, and vendor sites were reviewed, particularly to identify new trends in telework and telework technology. See Exhibit “B” for a list of some of the major sources that were reviewed.

Drafting Toolkit Content

Members of the Techno-Tools & Telework Workgroup (The T3 Team) prepared rough drafts on various toolkit topics: Benefits of Telework, Telework Policies, Technology, etc, which formed the basis of the toolkit web pages.

Creating an Online Toolkit

Written material was organized by topic and transferred to web pages in time to be utilized by teleworkers and managers participating in the Telework Pilot Project. Two-thirds of the teleworkers and 84% of the managers used the toolkit.

Toolkit Review

Each page of the toolkit included a button that if clicked would open a page to write comments or suggestions about that page. Members of the ‘Expert Panel’, teleworkers, and managers offered comments. Since the toolkit was online and available to anyone, it is possible that comments were also provided by individuals with no connection to the pilot project. Well over 100 comments and suggestions were received.
Toolkit Revision

Additions and corrections have been made to the toolkit throughout the course of the pilot project. These changes were made based on information received from reviewers, project members, and other interested parties. Some individuals have made substantial contributions. In addition, information from the weekly diaries completed by teleworkers, and information from the teleworker and manager surveys, was used to improve toolkit pages.

A new version of the toolkit was launched once the teleworkers had completed their participation in the pilot project. The new version includes improved organization and improved navigation across the site and within sections and pages.
C. Major Toolkit Information Sources

**Puget Sound Telecommuting Demonstration**, conducted by the Washington State Energy Office (1990-1992): a demonstration project with 25 public and private organizations and 280 part-time teleworkers. This project also included the testing of a telework center, located in Seattle’s Northgate area.

**Telecommuting: An Alternate Route to Work** (Revised 1997) is a printed step-by-step guide prepared by Washington State University (WSU) Cooperative Extension Energy Program. This guide is based on information learned through the Puget Sound Telecommuting Demonstration. Although technology has changed, most of this guide is highly relevant today.

**Commuter Challenge**, an initiative of enterpriseSeattle, has been providing telework assistance for a number of years. Their website is a useful resource for any organization considering telework.

**Various Reports**: There have been various efforts over the years to either promote telework or to study the feasibility or impact of telework. A number of these in support of telework

**Other Telework Programs, Toolkits, & Organizations:**

- [Telwork.gov](#) The US Government’s telework program.
- [GSA Telework Portal](#) The US General Services Administration's telework program. GSA operates a number of telework centers in the Washington DC metro area: Here’s the link to [GSA's telework centers webpage](#).
- [Clean Air Partners](#) Telework Toolkit.
- [National Institutes of Health](#) NIH’s telework program.
- [Telework Exchange](#) A public/private association that promotes telework, primarily among federal agencies. Their [news page](#) is constantly updated with articles from around the country.
- [Commuter Challenge](#), an initiative of enterpriseSeattle works to reduce the number of vehicles on the roads through the development of programs with public and private partners. The Telework page on their website offers advice, case studies, and a number of tools, including a cost/benefit analysis workbook.
- [The Clean Air Campaign](#) A Georgia non-profit organization that works to promote clean air through a variety of programs. They offer telework assistance program for Georgia businesses who want to create a telework program.
- [Oregon's Dept of Energy-Transportation](#) This toolkit is aimed at all employers in Oregon who want to implement telework. It includes a number of tools, a sample policy and agreement, and a step by step guide to set up a program.
- [telework! va](#) The Commonwealth of Virginia's telework program, designed to encourage employers across the Commonwealth to offer telework. It includes guidance for teleworkers and managers, including e-learning tools.
- **Telecommute Connecticut** A state-wide telework program offering assistance to employers who want to set up a telework program. The site includes a number of tools and resources for both employers and employees.

- **Telework Arizona** The telework program for Arizona, aimed primarily at increasing telework among state employees. Non-state employees can also use the site.

- **State of Florida** Telework Program for State Employees.

- **Denver Telework Toolkit** Provided by the Denver Regional Council of Governments as part of their "Ride Arrangers" program.

- **Telework.gov** The official website of the Federal Government's telework program.

- **TeleWork.com** Telecommuting and Telework Resources.

- **The Telework Coalition** A non-profit association that promotes telework. Telcoa's website is crowded with news, reports, information from vendors, and other telework material.

- World at Work ([worldatwork.org](http://worldatwork.org)) is a Human Resources support organization that strongly supports telework; viewing it as one component of a total benefits package to motivate and retain high-value employees. World at Work has a telework advisory group that maintains a separate website [http://www.workingfromanywhere.org](http://www.workingfromanywhere.org) that publishes studies and reports about telework.

- **The Canadian Telework Association** A non-profit association that promotes telework in Canada. Their website contains links to a wide range of articles on all things related to telework.

- **The Euro-Telework Project** Euro-Telework has been supported by the European Commission, DG Employment and Social Affairs, under the European Social Fund (art.6).
D. Telework Policies Reviewed

Below is a partial list of the telework policies that were reviewed in preparation of the *Guide to Writing a Telework Policy* that appears in the Telework Toolkit.

- State of Arizona Department of Administration
- State of California Employee Telework Policy
- State of Florida Employee Telework Policy
- State of Minnesota Employee Telework Policy
- State of North Carolina Employee Telework Policy
- Oregon Department of Energy Sample Policy
- Commonwealth of Virginia Employee Policy
- Washington State Department of Ecology
- Washington State Department of Employment Security
- Washington State Department of Health
- Washington State Department of Information Services
- Washington State Department of Licensing
- Washington State Lottery
- Washington State Office of Administration of the Courts
- Washington State Department of Social and Health Services
- Washington State Department of Transportation
- Washington Utilities & Transportation Commission
- Commuter Challenge Sample Policy
- Denver Council of Governments Sample Policy
- US Bureau of Land Management
- National Oceanic and Atmospheric Administration
- Kitsap County Employees Telework Policy
- Kitsap County Health District
- Kitsap Regional Library
- City of Mercer Island
- City of Seattle
- Seattle Housing Authority
- City of Vancouver Washington
- Community Colleges of Spokane
- Eastern Oregon University
- Oregon University System
- University of Washington
- Eberle Vivian
- Fred Hutchinson Cancer Research Center
- Microsoft
- Premera Blue Cross / Blue Shield
- Ross & Associates
- Russell Investments
- Washington Dental / Delta Dental
- Zenith Administrators
E. Recruitment Activities

Orientation Sessions, Presentations, Events:

- Orientation Sessions held in North, Central Kitsap County (Poulsbo, Silverdale) and, Jefferson County (Port Townsend). *September, 2008*
- Booth at West Sound Technology Association (WSTA) Annual Conference, *September, 2008*
- Presentation at Cascadia’s Annual TransTech Conference, *September, 2008*
- Chamber of Commerce lunches: Kingston, Poulsbo, Bainbridge Island, Silverdale, Bremerton, Port Orchard, Port Townsend. Attended, distributed materials, made announcement re: recruiting businesses, *November 2008*
- Participation in Puget Sound Regional Council’s Telework Roundtable to solicit Puget Sound Corridor jurisdictions, *November, 2008*

Mail-Out of Individual letters:

Within Kitsap County, and one-to-one follow-up to *all*:

- Commute Trip Reduction Organizations
- Public and Non-Profit Agencies and Jurisdictions
- 100 largest Private Sector Employers (from Kitsap Economic Development Alliance database)
- State Agencies with offices in Kitsap County
- Kitsap Regional Coordinating Council Members and Partner Agencies

One-to-one and Special Contacts:

- One-to-one contact with specific organizations, ongoing *September, 2008, to January, 2009*
- Direct contact with Navy Region Northwest, *November 2008*
- Contact with Gig Harbor Chamber of Commerce, *December 2008*
- Contact with American Society of Civil Engineers, Kitsap Chapter, *December 2008*
- Direct contact with Microsoft, ongoing *September, 2008 to March, 2009*
Marketing Materials:

- **Web-page on Kitsap Regional Coordinating Council Website:**
  Information about the project (sponsor, aims, and timeline) and resources such as a Toolkit mock-up, recruitment materials, and information on Telework.

- **Orientation Packets:**
  Distributed at presentations, orientation sessions and meetings during the recruitment period. Packet included information about telework and its benefits, the project and participation.

- **Posters & Flyers encouraging participation:**
  - On all Kitsap WSF Vessels and in Terminals
  - In coffee shops, stores, bulletin boards, restaurants in near Kitsap Ferry Terminals

- **Tri-fold brochures with information on the Pilot:**
  - Distributed at Chambers of Commerce lunches, available at Chamber Offices, and mailed out with all individual letters

- **Leaflets distributed to Kitsap Ferry Commuters:**
  Distributed leaflets to commuters on peak morning-rush-hour ferry routes, with additional information available on request, and brochures for interested parties. Specific notice to a Bremerton Commuters re: possible Telework Center in Bremerton.
  - Kingston – Edmonds (06:25), (07:05), December 4, 2008
  - Bainbridge – Seattle (07:05), (07:55), December 5, 2008
  - Bremerton – Seattle (06:20), (07:20), December 8, 2008
  - Southworth – Fauntleroy – Vashon (06:05), December 9, 2008

Specific Action Re: Bremerton Telework Center:

- Leaflets distributed on Bremerton-Seattle peak rush hour morning ferries to solicit interest in Bremerton Telework Center, December 8, 2008
- Kitsap Sun Article, December 8, 2008

Specific Action Re: Jefferson County:

- Flyers posted in Port Townsend businesses
- E-mailing to all Port Townsend Chamber of Commerce Members
- Article in Port Townsend Chamber of Commerce Newsletter, January 2009
- Port Angeles Peninsula Daily News, November 17, 2008
- Full page article Port Townsend Food Coop Newsletter, December, 2008

Download Materials:

F. Telework Project Press Coverage

Kitsap Sun, Monday, February 4, 2008  


Central Kitsap Reporter, April 30, 2008  

Port Orchard Independent, April 30, 2008  


Kitsap Sun Article, September 14, 2008  

North Kitsap Herald, September 17, 2008  


Kitsap Business Journal, November 8 2008  

Port Angeles Peninsula Daily News, November 17, 2008  
http://www.peninsuladailynews.com/article/20081117/news/311179991

Kitsap Sun Article, December 8, 2008  

Port Townsend Food Coop Newsletter, December, 2008  

North Kitsap Herald, January 3, 2009  

Kitsap Sun Article, February 7, 2009  

Kitsap Sun Article, February 10, 2009  

Kitsap Sun Article, March 23, 2009  

Kitsap Sun Article, April 11, 2009  

Kitsap Peninsula Business Journal, August 4, 2009  
http://kpbj.com/headlines/2009-08-04_local_businesses_take_telecommuting_for_a_virtual_ride
Online Coverage:

KEDA website, *October, 2008*

Cascadia website, *September, 2008*
http://www.cascadiaprospectus.org/2008/09/kitsap_county_developing_commo.php

Hood Canal Bridge Closure Mitigation Newsletter, *November, 2008*

The Teleworker *March, 2009*
*Telework Toolkit Enables Major Telework Push in Washington State*
http://www.teleworkexchange.com/teleworker-03-09e.asp

Port Orchard Chamber of Commerce

Kitsap Sun article on the Cascadia Site:
http://www.discovery.org/a/7161

SellaCommute – a blog:

Mentioned on Senator Rockefeller’s Campaign page:

Link on UW Professor Krumme’s Blog:
http://faculty.washington.edu/krumme/telcom/commuting.html

WA High Speed Strategy Work Group:
http://dis.wa.gov/hiswg/materials.htm

Prosperity Blog:
http://prosperityblog.wordpress.com/2008/09/19/out-performing-the-market-partial-explanation/
G. Survey Questionnaires, Data Tables, and Supporting Documents

**Teleworker Commute Interview Form**: this is the form used when interviewing teleworkers at the beginning of the project. There are three versions of the form. Versions, 2 and 3 are subsets of Version 1. All three use the same front page.


**Employee Online Survey Questionnaire Screen Shots**:


**Weekly Diary Screen Shots**:


**Manager Online Questionnaire Screen Shots**:

- **Baseline Survey**: [http://www.teleworktoolkit.com/library/ManagerBaselineScreenShots.pdf](http://www.teleworktoolkit.com/library/ManagerBaselineScreenShots.pdf)
- **Follow-up Survey**: [http://www.teleworktoolkit.com/library/ManagerFollowupScreenShots.pdf](http://www.teleworktoolkit.com/library/ManagerFollowupScreenShots.pdf)

**Survey Data Tables & Supporting Documents**:

- **Commute Data Spreadsheet (Excel)**: [http://www.teleworktoolkit.com/library/Commute_Spreadsheet(Final).xls](http://www.teleworktoolkit.com/library/Commute_Spreadsheet(Final).xls)
- **Teleworker Database**: (Results from Baseline & Follow-up Surveys) [http://www.teleworktoolkit.com/library/TeleworkerDatabase.pdf](http://www.teleworktoolkit.com/library/TeleworkerDatabase.pdf)
- **Manager Database**: (Results from Baseline & Follow-up Surveys) [http://www.teleworktoolkit.com/library/ManagerDatabase.pdf](http://www.teleworktoolkit.com/library/ManagerDatabase.pdf)
- **Interviews with Information Technology Managers**: [http://www.teleworktoolkit.com/library/IT_Manager_Interviews.pdf](http://www.teleworktoolkit.com/library/IT_Manager_Interviews.pdf)
Codebooks:

- **Manager Baseline Survey Codebook**: [http://www.teleworktoolkit.com/library/ManagerBaselineCodebook.pdf](http://www.teleworktoolkit.com/library/ManagerBaselineCodebook.pdf)
- **Manager Follow-up Survey Codebook**: [http://www.teleworktoolkit.com/library/ManagerFollowupCodebook.pdf](http://www.teleworktoolkit.com/library/ManagerFollowupCodebook.pdf)
H. Participating Organizations

Central Kitsap Fire and Rescue

CKRF currently has 193 members helping in their mission to preserve and protect life, property and the environment in Central Kitsap County. 99 of CKFR’s employees are full-time career; 5 are elected officials; and are 89 volunteers. Around 7% of those employees could be identified as having primarily “desk” jobs, although some administrative personnel also respond to emergencies.

Two CKFR employees from the Administrative Department, and their managers, participated in the Pilot Project. One of the employees was already a regular teleworker, but the other teleworked only for the duration of the Pilot. CKFR participated in the pilot to advocate and support efforts to expand telework in Kitsap County. There are no current plans to expand telework opportunities at CKFR.

City of Poulsbo

The city of Poulsbo has 96 employees, 13 are management and around 55% are desk jobs. Senior Elected Officials at the City felt that the opportunity to explore telework as part of a Pilot Project would benefit the City. Three City employees and two managers participated in the Pilot. Participating employees included the City Planning Director, who was involved during the Hood Canal Bridge closure, a City Clerk and manager, and a Public Works employee and manager.

New technology was put into place to aid virtualization, including a VTC (Video Tele Conference) link for the Planning Director to ‘virtually’ attend City Council Meetings as well as staff level meetings. Some of teleworks biggest barriers, technology and the perceived need to physically ‘be’ at work, were addressed at the City of Poulsbo through their participation in the Pilot. The necessary technological tools are now in place and the City’s telework experience is perceived as a success. Although no expansion of telework, nor the implementation of a Program, are anticipated immediately, it is felt that the experience has opened the doors for future opportunity.

Kitsap Credit Union

As a financial services provider for people who live and work in Washington State, KCU offers members financial products and services through a network of branch locations in Kitsap, Mason, and Pierce Counties, global online and ATM access, and a full-service contact center.

There are 297 employees at Kitsap Credit Union, around 95% of which have office type jobs, although only 15% of jobs are not customer-facing. Three employees from the Human Resource and Dealer Finance Departments, plus their managers, took part in the Pilot. Two of the participating employees work from home two days a week and the other works at home full-time. Kitsap Credit Union has an established telework program, which they used their participation in the Telework Pilot Project to assess. Through their evaluation they became aware of the disconnect felt by teleworking employees, and are currently looking at different ways to remedy this, such as regular conference calls between teleworking employees and their managers. There are no
immediate plans to increase telework at the Kitsap Credit Union while the issue raised through the pilot is addressed.

**Kitsap Home Builders Association**

KHBA represents the construction and development industry in Kitsap County. Of the organization’s six employees, three participated in the Pilot Project; one each in the Government Affairs and Member Services departments, plus an Administrative Coordinator.

KHBA chose to participate in the Pilot to support the expansion of telework in Kitsap County; to encourage and offer additional support to specific employees to begin teleworking and accessing their server remotely; and to understand more about the issues that surround telework for both employees and management, with the hope of informing and enhancing their own telework experiences.

All six of KHBA’s employees have a desk and computer and work at least a portion of their duties in the office, with several being out of the office to attend regular meetings. During the Pilot Project, staff used telework to save time and emissions by circumventing the need to go to the central office either before or after meetings. The Home Builders Association plans to use telework on an ad-hoc basis after the project, based on specific projects and opportunities.

**Kitsap Peninsula Visitor & Convention Bureau**

The Bureau’s mission is to create positive economic growth and development on the Kitsap Peninsula by effectively marketing the area as a desirable visitor destination. The mission of the Kitsap Peninsula Visitor & Convention Bureau (VCB) is to create positive economic growth and development on the Kitsap Peninsula by effectively marketing the area as a desirable visitor destination. VCB’s participation in the pilot coincided with their lease expiring and their plans to move into a smaller space and conduct more work virtually. Already, a significant amount of work occurs out of the office.

One of the exciting aspects of VCB’s participation in the pilot was witnessing their progress toward a more virtual work environment; purchasing laptops and blackberries for employees and a virtual phone attendant system. Their plan was for most work to occur out of the office, either in the field or at home, but to constantly be connected and accessible regardless of work location. It was anticipated that the physical office would have limited use; particularly since it was smaller than the old office and for most employees involved a longer commute.

Near the end of the pilot project, participation was halted why the VCB Board of Directors reevaluated the move toward virtualization. Employees hope to be able to increase telework once outstanding issues are resolved.

**Kitsap Regional Library**

KRL is a mid-size rural library district serving Kitsap County, with; 9 community library, events and learning locations through the county; online access to library materials and services; a traveling bookmobile; outreach services for the homebound and youth.
Around 17% of KRL’s 177 employees (79 full-time, 98 part-time) have office type jobs. Two of KRL’s employees, and two managers were active participants in the Telework Pilot Project. One of those employees works in facilities and specifically requested to work from home part of the time because of the long distance between her home and workplace. The second teleworking employee works in the IT department. Both employees work on special projects, which demand more focus, on their work at home days.

KRL was not new to telework at the start of the Pilot. However, they formalized a Telework Policy at the start of the Pilot, and Teleworking employees worked from home more consistently: which is anticipated to continue. KRL will increase telework opportunities through specific employee requests only in the near future. Susan Whitford, Director of Technology and Facilities at KRL, and their Telework Pilot Project Coordinator, says; “Telework is a great option, and although it doesn’t work for everyone, we feel it is valuable for organizations to be open to its possibility. The same work style and environment don’t fit everyone: it is in the employer’s best interests to provide the tools and environment for employees to be as productive as possible. And let’s not forget the environmental benefits of Telework.”

**Kitsap Transit**

Kitsap Transit provides basic local bus and passenger ferry transportation in and around Kitsap County. They have 367 employees ~ 25% of which have office type jobs. Three employees, all in the Services Development department, and one manager, participated in the Pilot Project.

As the CTR Administrator for Kitsap County, Kitsap Transit hoped that their participation would help direct and encourage their Employee Transportation Coordinators, as well as emphasize the importance of CTR plans. As an agency, they are hoping to update and improve their current telework policy. There is the possibility of increased telework in the future at Kitsap Transit.

**McClure Consulting**

A consulting firm that provides intergovernmental facilitation and coordination services. McClure Consulting has 7 employees, all of whom have office type jobs. Before participating in the Pilot, Staff teleworked periodically but there was no thought behind making it effective for Teleworkers or the organization. Two Project Coordinators (one had to leave after the first week) and their manager participated in the Project.

Participating in the Pilot Project created an opportunity to develop policies, procedures and IT support. The organization anticipates more virtualization in the future as several staff positions are part time and lend themselves to teleworking. The structure of McClure Consulting’s work means that meetings outside the office create gaps in the day that virtual-connectivity can help to best use. Telework’s inherent flexibility is acknowledged by McClure Consulting’s Office Manager and Telework Pilot Project Coordinator, Laura Gronnvoll; “Having a Telework Policy in place means that we can attract excellent personnel who have odd schedules and situations.”
Microsoft Corporation

Microsoft has a total of 39,000 employees and contractors in the Seattle/Redmond area. Over 50 of their employees who live in either Kitsap or Jefferson County were recruited to voluntarily participate in the Kitsap Telework Pilot Project.

Microsoft participated in the project as an advocate of the benefits of telework to both employees and the environment. As one of Washington State’s largest employers, Microsoft is also involved with the WSDOT Commute Trip Reduction (CTR) Program. Employees, from Microsoft’s Seattle, Redmond, Bellevue and Issaquah locations, participated in the project on several levels, based on their personal telework experience. Those experiences range from occasional teleworking to working remotely every day, with most employees teleworking on average 1 to 2 days per week. Most have teleworked for over a year, although some were just about to begin working from home at the start of the project. Over 20 Microsoft employees shared their experiences through weekly Telework Diaries, over a 2 month period.

Most Microsoft participants also expressed knowledge of HR, tools and hardware as they relate to telework. Some reviewed specific parts of the Telework Toolkit. All 50+ Microsoft Employees were asked to review all parts of the Telework Toolkit throughout the Telework Pilot Project.

Municipal Research and Services Center

MRSC independently advises Local Governance by; maintaining an extensive library at its Seattle Office; holding trainings; releasing regular publications; and answering over 7,000 web- and phone-based enquiries per year. 14 of the organization’s 27 employees, from IT, Library and Administrative departments, and the Policy and Legal teams, participated in the Telework Pilot Project. All 27 of MRSC’s employees have desk type jobs, with just 2 to 3 employees needing access to the library.

MRSC adopted its first Telework Policy around 1999, and used the Pilot’s Telework Toolkit as a resource in the extension of its Telework Policy, which specifically increases employee’s opportunity to telework from 1 to 2 days per week. The new policy came into effect in March, 2009. Telework Pilot Project Coordinator, Richard Yukobousky, says: “On any given mid-weekday, when most telework occurs, around a quarter of staff are away from the office, which makes it so the office feels lacking in spirit some days. The question, ‘who are we if we are not here?’ has arisen during the expansion of our Telework Policy. “We need to get a handle on internal concerns regarding culture; collaboration and ergonomic correctness before expanding the Telework Program at MRSC.” Processes, including monthly activity reports, rebates on home office furniture and ‘random’ inspections of teleworker home-office set-up, have been put in place to address these concerns.

Olympic College

OC is a Community College and higher education institution with locations in North and South Kitsap County and Mason County. The College has a mix of full- and part-time employees, totaling approximately 1,100. Many of the employees are faculty or direct student support; around 25% has office type jobs. A total of seven employees, from a variety of departments (HR Services, Office of President, Institutional Development,
Communications, Continuing Education, IT and Facilities) and six managers, participated in the Pilot.

Linda Yerger, Olympic College Human Resources Director and Telework Pilot Project Coordinator for the College, says of their participation in the Pilot; “We were discussing telework and working on a policy at the time we heard about the project. The Human Resources Department was asking a lot of the same questions that are discussed within the Telework Toolkit.”

Olympic College anticipates more technology and virtualization in the future since many of their classes are now taught online. The technology is in place which enables employees to connect to the College network from home, but many of the roles within the College require face-to-face customer service.

**Olympic Printer Resources**

This business employs 10 people recycling and re-manufacturing, and selling and delivering, printer cartridges. They also service and repair machines and provide IT services. With clients all around Kitsap County and beyond, and employees from outside of Kitsap, it was natural choice to offer a more flexible work arrangement. Five of the company’s 10 employees have desk jobs, two of whom participated in the pilot project. As a telework advocate, the business owner chose to take part in the Pilot to support the study.

**South Kitsap School District**

A Public School District with approximately 1200 employees. Approximately 10% have “desk-only” jobs, meaning they don’t have playground duty or health room or other location specific tasks. Three employees participated in the Pilot; one manager and two data specialists. SKSD used the Pilot as an opportunity to build a flexible working environment. They plan to continue with telework, although there is limited possibility for expansion of telework given relatively small number of desk-only jobs.

**Wet Apple Media**

Wet Apple publishes several newspapers and magazines, designs for print- and web-based media and is a pre-press production house. Telework was a part of their business culture before they began participating in the Pilot Project, but through their involvement they hoped to learn about better telework practices that the organization could adopt. This spurred the development of their first Telework Policy. Of the eight employees, all have desk jobs, and two took part in the Pilot. Wet Apple does not foresee an increase of telework in their immediate future as their company structure currently has limited opportunity for adoption. However, telework does play a part in the larger vision for the company.
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Project Team:

- **Mary McClure**, Project Director
  Kitsap Regional Coordinating Council & Principal, McClure Consulting

- **Brad Rucker**, Project Manager
  Kitsap Regional Coordinating Council & Principal, Essential Surveys

- **Annie Eissler**, Technology Consultant
  Kitsap Regional Coordinating Council & VP – Client Services, Mixtur Interactive

- **Monica L. Babine**, Project Advisor
  Senior Associate for Telework, Division of Governmental Studies & Services
  WSU Extension & College of Liberal Arts

- **Vicky Clarke**, Recruiting & Participant Coordinator
  Kitsap Regional Coordinating Council

Telework Advisory Team:

- **Craig Adams**, Application Services Manager, Information Services
  Kitsap County

- **Lindsay Bailey**, CTR Administrator
  Kitsap Transit

- **Tricia Clement**, CTR Administrator
  Kitsap Transit

- **Kathy Cocus**, Director of Business Development
  Kitsap Economic Development Alliance

- **David Jones**, Telecom Marketing Manager
  Kitsap Public Utility District

- **Casey Kanzler**, GTEC Programs Manager
  Washington State Department of Transportation

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  City of Bainbridge Island

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  City of Poulsbo

- **Tim Treacher**, Information Services Manager
  City of Poulsbo

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  Kitsap Regional Library
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  Carol Westby  

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  Madeline Conrath  
  Kerry Grindinger  
  Nicole Peterson  
  Shane Spiese  
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  ... and a few individuals who prefer to remain anonymous

**Known Toolkit Reviewers & Contributors**

- **Jay Bell**, Kitsap Credit Union
- **Al Bergstein**, Microsoft
- **Brendan Black**, D&C Associates
- **Levi Black**, D&C Associates
- **Mike Brady**, WA State Department of Social & Health Services
- **Shawn Brennan**, Kitsap Credit Union
- **Lori Colby**, Microsoft
- **Guy Cook**, vDomainHosting
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- **Kathy Leotta**, Washington State Department of Transportation
- **Shirley Lindberg**, Perkins Coie
- **Dave Lowry**, Harrington Health
- **Derry Lyons**, South Kitsap School District
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