EXECUTIVE SUMMARY

Our review found that implementation of frequent telework could result in substantial net savings for each of the four field offices we studied. The cost model shows net savings of about $1.3 million in the first five years, with substantial savings every year thereafter. The table below shows that each office achieves substantial cost savings.

Cumulative Savings (Negative Numbers in Parentheses)

<table>
<thead>
<tr>
<th>Field Office</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dallas</td>
<td>$(190,533)</td>
<td>$(90,660)</td>
<td>$14,880</td>
<td>$126,302</td>
<td>$243,829</td>
</tr>
<tr>
<td>Los Angeles</td>
<td>$(152,992)</td>
<td>$(40,146)</td>
<td>73,559</td>
<td>188,129</td>
<td>303,568</td>
</tr>
<tr>
<td>Miami</td>
<td>$(179,536)</td>
<td>$(43,879)</td>
<td>98,595</td>
<td>248,146</td>
<td>405,041</td>
</tr>
<tr>
<td>Washington, D.C.</td>
<td>$(46,923)</td>
<td>40,457</td>
<td>132,346</td>
<td>228,924</td>
<td>330,379</td>
</tr>
<tr>
<td>Totals</td>
<td>$(569,984)</td>
<td>(134,228)</td>
<td>319,381</td>
<td>791,501</td>
<td>1,282,818</td>
</tr>
</tbody>
</table>

Source: Clifton Gunderson LLP, EEOC Telework Cost Model, August 2002

These cost savings are calculated using the Optimum Model, whereby 85 percent of those employees well suited for telework (Investigators, Administrative Judges, and Trial Attorneys, and Mediators) telework two or more days per week, allowing more efficient use of central office space through office sharing or similar arrangements. Cost savings under the Survey Model are about one-half of those in the Optimum Model. The Survey Model uses the number of interested teleworkers as self-identified in the survey. Both models include office sharing that results in reduced space needs, thereby lowering costs for real estate and producing savings that are substantially higher than the costs to set up and maintain a frequent telework program. Cost savings for the offices in commercial space depend on implementing frequent telework when a lease expires (the Washington Field Office and Miami District Office leases expire in April 2004).

These savings, and the detailed analysis presented in this study, concern frequent telework at the four locations we visited. Therefore, the study does NOT draw conclusions or make recommendations favoring implementation of frequent telework differently from described in the study and/or at locations not covered in this study (e.g., implementing frequent telework in Detroit without purchasing necessary equipment and providing training).

Telework, also referred to in the federal government as Flexiplace, is a work arrangement in which employees perform their job duties away from their central workplace occasionally or frequently. Many private and public organizations cite telework as a method to achieve many benefits, including real estate savings, improved productivity, and increased employee satisfaction. Frequent teleworkers need not have space that is dedicated for their personal use. Therefore, we built our cost model with the assumption that each teleworker would share an existing office and would be assigned an individual workstation. Accordingly, no desk sharing is
required. This eliminates the need for frequent teleworkers to reserve a given workspace for their use (known as hotelling).

This report is the result of an Office of Inspector General (OIG) review of potential costs and benefits of frequent telework at four EEOC field offices. The primary objective was to determine if EEOC can save on infrastructure costs and achieve other benefits through extensive use of telework, while sustaining or improving mission performance.

Key questions addressing the objective included:

- What types of staff are suitable for frequent telework?
- How do lease conditions affect the cost-effectiveness of frequent telework?
- What equipment, training, and other items does staff need for productive telework?
- What are the impressions of Managers and staff on frequent telework?

The review was conducted in accordance with the applicable Generally Accepted Government Auditing Standards as published in Comptroller General's Government Auditing Standards, 1994 Revision III, and took place from October 2001 through September 2002.

Our review found:

- Administrative Judges, Investigators, Mediators, and Trial Attorneys are well suited for frequent telework
- Most Managers, Supervisors, and staff see substantial benefits for frequent telework, including providing opportunities for focused, concentrated thought, better work-life balance, monetary benefits, and reduced stress
- Many staff are concerned whether some individual staff, and the office as a whole, can meet the needs of customers and stakeholders in a frequent telework environment
- Frequent teleworkers need these items to be effective--computer with standard EEOC software, capability for good quality copying, faxing, and printing, internet service, EEOC email access, strong phone service–including long distance calling, telework training, and additional storage space
- For the two offices in commercial spaces (Washington Field Office and Miami), our project verified that timing for implementing telework is critical for cost savings. Cost analysis and expert opinion show that commercial space is prohibitively expensive to vacate before the lease expires
- Savings are significantly higher under the Optimum Model than under the Survey Model. After five years, cumulative savings for the Optimum Model are $1.3 million, which is $600,000 greater than the Survey Model savings—$0.7 million
- Annual savings are strongly negative in the first year, due to start up costs. In the second through fifth years, savings are large and steady
- Because the lease for the Headquarters building expires in 2008, and simply vacating commercial space before lease expiration is not cost effective, it would be challenging for EEOC to achieve real estate savings at its Headquarters building by simply vacating
Major conclusions and all recommendations are highlighted below. The full results of this review are described throughout the report.

CONCLUSIONS

1. Major cost savings can be achieved at each of the four offices studied, beginning in the second year of frequent telework. Major cumulative savings begin in the third year.
2. Lack of adequate training, equipment, and attention to office layout, will endanger success of a frequent telework program, and could lead to reduced productivity and decreased morale.
3. Federal office space offers greater flexibility in when to implement frequent telework to achieve cost savings.
4. Savings are maximized through use of the Optimum Model.
5. Due to the up front costs of frequent telework, and the financial advantages to beginning frequent telework near lease expiration, a nationwide pilot would not be prudent.
6. If savings estimated in the cost model could be applied to all EEOC district offices, savings would be substantial, and average about 10% of real estate costs for those offices, over a five year period.
7. Options for real estate savings through frequent telework may be possible for the Headquarters Building (e.g., subleasing parts of the building, bringing the WFO into the Headquarters building, or buying out of the lease).

RECOMMENDATIONS

Based on the conclusions, two recommendations are offered.

Recommendation 1

Consider implementing a pilot frequent telework initiative to achieve cost savings for one or more of the following offices we visited, and identified as having the potential for substantial cost savings:

- Dallas District Office
- Los Angeles District Office
- Miami District Office
- Washington Field Office

Frequent teleworking pilots should seek to maximize cost savings while minimizing financial and program risks. In order to minimize risks with implementing frequent telework, we strongly advise the following at each location that pilots/implements frequent telework:

- Conduct thorough planning
- Conduct training prior to the date frequent telework begins
- Purchase and test equipment prior to the date frequent telework begins
- Assess whether change management training is necessary
- Assess changes to productivity and morale that result from telework.
Recommendation 2

EEOC should join one or more telework organizations, such as Mid Atlantic Telework Association and Council or the International Telework Association and Council (ITAC). Benefits include access to telework experts and opportunities to network with other federal agencies engaged in telework efforts. Should EEOC wish to pursue a frequent telework program, membership may also lead to:

- Better understanding of equipment needs for teleworkers
- Heightened awareness of office culture barriers to successful implementation of frequent telework
- Learning methods for assessing success of frequent telework implementation
- Increased appreciation for how telework may enhance the human capital goals of EEOC

Two federal agencies with key telework knowledge (the Office of Personnel Management and the General Services Agency) belong to ITAC and could be helpful to EEOC’s telework efforts.

Additional detail concerning findings, conclusions, and recommendations are provided throughout this report.

Comments on the Draft Report

We received comments from senior management, mid-level managers/supervisors, and other staff in headquarters and field offices, including each of the four field offices we visited. Comments came from District Directors, Regional Attorneys, employee representatives, groups of employees, and a variety of other staff. Comments include enthusiastic endorsement for testing frequent telework, guarded endorsement, neutrality, some doubts, and grave doubts. Generally, comments from trial attorneys and supervisors of trial attorneys were negative regarding frequent telework and shared office space for trial attorneys. See Appendix E for additional information concerning comments.

The following pages contain details on items reported in the Executive Summary, including:

- Introduction
- Costs and Benefits of Frequent Telework for EEOC
- Appendices

1.0 INTRODUCTION

This section provides an overview of the study, and presents infrastructure and telework information useful in understanding the study. In addition, EEOC telework policies and practices are reviewed. Also, this section provides information on the purpose, scope, and methodology of this study.

Study Overview
This study seeks to determine if EEOC could save on infrastructure costs and achieve other benefits through extensive use of telework while sustaining or improving mission performance. Telework, also referred to in the federal government as Flexiplace, is a work arrangement in which employees perform their job duties away from their central workplace occasionally or frequently. Many private and public organizations cite telework as a method to achieve many benefits, including real estate savings, improved productivity, and increased employee satisfaction.

In addition to cost savings and more efficient use of infrastructure, greater use of telework may be an alternative to reductions in force, outsourcing, hiring freezes, and reduced opportunities for training. Telework also supports the Strategic Human Capital Management goal contained in the President’s Management Reform Agenda. Increased use of telework could also provide EEOC with an additional tool to acquire and retain the talent and leadership it needs.

This study examines costs and benefits of implementing frequent telework in four of EEOC=s field offices (referred to henceforth as “the offices we visited”)—Dallas, Los Angeles, Miami, and the Washington Field Office (WFO). For the purposes of this study, implementation includes several critical elements, including training and equipment. In addition, this study provides general information to cost and benefit issues for frequent telework at the Headquarters building in Washington, D.C. and other EEOC facilities. This general information should not be considered a detailed analysis or recommendation concerning implementation of frequent telework in Headquarters or locations we did not visit. In the field offices we visited, that demonstrated strong potential for cost savings, OIG recommends consideration of a frequent telework effort.

1.1 BACKGROUND

1.1.1 Infrastructure Costs

Importance of Infrastructure

We define infrastructure as the non-personnel items that EEOC needs to operate. Infrastructure plays a key role in supporting Agency activities and staff recruitment and retention. For example, agency real estate is used by Agency employees as individual workspace, meeting space, and to conduct intake and other critical activities. In addition, effective information technology and telecommunications equipment is essential for Agency employees to communicate with each other efficiently, and to work with those involved in private and federal sector employment discrimination cases and other issues.

Frequent telework may have significant effects on the following infrastructure components:

- Real estate (owned or leased)
- Telecommunications
- Information technology
- Workstations
- Workstation furniture
Rental of office space and other key costs to support agency staff are a substantial portion of EEOC’s budget, about 15 percent. Real estate (rental payments to GSA) is about ten percent. Exhibit 1 shows the budget impact of selected infrastructure components.

Exhibit 1. Selected EEOC Infrastructure Costs, Fiscal Years 2001-2003

<table>
<thead>
<tr>
<th>Budget Item</th>
<th>FY 2001 Actual</th>
<th>FY 2002 Actual</th>
<th>FY 2003 Request</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Budget</td>
<td>$303.2 (100%)</td>
<td>$310.0 (100%)</td>
<td>$308.8 (100%)</td>
</tr>
<tr>
<td>Infrastructure Items*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Real Estate (GSA rent)</td>
<td>24.3 (8.0%)</td>
<td>25.2 (8.3%)</td>
<td>29.2 (9.5%)</td>
</tr>
<tr>
<td>Information Technology</td>
<td>13.8 (4.6%)</td>
<td>10.0 (2.5%)</td>
<td>11.4 (3.7%)</td>
</tr>
<tr>
<td>Telecommunications</td>
<td>3.4 (1.1%)</td>
<td>3.5 (1.1%)</td>
<td>4.2 (1.4%)</td>
</tr>
<tr>
<td>Infrastructure Subtotal*</td>
<td>$41.5 (13.7%)</td>
<td>$39.7 (11.9%)</td>
<td>$44.8 (14.5%)</td>
</tr>
</tbody>
</table>

*Not all infrastructure items are included (e.g., overhead), therefore, total infrastructure costs are higher than cited.

Source: EEOC Office of the Chief Financial Officer and Administrative Services

1.1.2 Telework

Definition

Many definitions of telework are provided in literature describing telework. The definition used for this report, is that telework is work performed on a regular basis in a location other than a principal office.

Pros and Cons of Telework

Though the number of teleworkers nationwide is growing and many advantages may accrue to employers and employees engaging in telework, telework may cause undesirable effects. Productivity gains, improved employee morale, and reduced infrastructure costs are cited as telework advantages. However, each of these benefits may or may not occur to the extent expected, unless planning and implementation are well executed. Exhibit 2 displays major advantages and disadvantages of telework, as identified in the literature. The telework cost model used in this study and the application of the model to offices we visited are covered in Chapter 2.

Exhibit 2. Advantages and Disadvantages of Telework
<table>
<thead>
<tr>
<th>ADVANTAGES</th>
<th>DISADVANTAGES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Business Costs and Productivity</strong></td>
<td><strong>Environmental</strong></td>
</tr>
<tr>
<td>- Provides opportunity to reduce real estate and related costs (e.g., payment for rent and parking spaces)</td>
<td>- None</td>
</tr>
<tr>
<td>- Allows some employees to work in a less distracting environment</td>
<td>- Risk of increased business costs (cost of outfitting employees for telework and related costs)</td>
</tr>
<tr>
<td>- Promotes use of efficient technologies</td>
<td>- Potential for some employees to try to work from a highly distracting home environment</td>
</tr>
<tr>
<td>- Reduces recruiting and training costs due to higher retention rate and the attraction of telework for many potential employees</td>
<td>- Inadequate equipment in the home/telecenter could hinder communication and productivity (e.g., lack of internet access)</td>
</tr>
<tr>
<td>- Provides employer with greater opportunity to hire productive workers who would have difficulty commuting frequently (e.g., workers who live 40-100 miles from the central office and mobility-impaired workers)</td>
<td>- Risk of increased unhappiness for those employees unable to telework</td>
</tr>
<tr>
<td>- Greater productivity from a more satisfied and experienced (due to higher retention rate) workforce</td>
<td>- Risk of comprising job productivity and effectiveness (unless employer uses prudent selection and supervision of teleworkers)</td>
</tr>
<tr>
<td>- Fewer lost work hours due to traffic jams and road conditions that cause workers to be late to work</td>
<td></td>
</tr>
<tr>
<td>- Extra work hours from marginally sick workers and parents of sick children who otherwise would take full sick days</td>
<td></td>
</tr>
<tr>
<td>- Less work disruption from emergencies</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Quality of Life Issues</strong></th>
<th><strong>Other</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>- Less time spent commuting</td>
<td>- Fewer traffic injuries and deaths</td>
</tr>
<tr>
<td>- Greater opportunities to increase family involvement - flexibility for dependent care</td>
<td>- Inadequate safeguards/firewalls could lead to reduced security of</td>
</tr>
<tr>
<td>- Increased flexibility in residence location</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Environmental</th>
<th>Quality of Life Issues</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Reduced air pollution (fewer miles driven)</td>
<td>- Risk of increased feelings of isolation (especially for those who telework frequently)</td>
<td></td>
</tr>
<tr>
<td>- Reduced land use requirements (e.g., parking lots)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Decreased use of resources (e.g., roads and buildings)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The number of teleworkers in the U.S. increased significantly in the last decade. In 1992, the U.S. Department of Transportation estimated there were two million teleworkers, or 1.6 percent of the labor force. A telework organization estimate for 2001 showed about 28 million teleworkers.

### 1.1.3 Federal Government and Telework

In April 2001, OPM reported that of the 97 federal agencies surveyed 49,680, or 2.8 percent, of their workforce teleworked on a regular basis. In an effort to encourage telework, the federal government sponsors Telecenters. These 17 centers are located in the Washington DC area, in the states of Maryland, Virginia, and West Virginia. For a fee, telecenters provide space and equipment for federal workers.

P.L.106-346, §359 states that each executive agency shall establish a telework policy for eligible employees. By April 2004, all employees must be covered by the policies. Federal agencies report progress towards the goal to OPM. Exhibit 3 displays P.L. 106-346 and other federal policies and guidance.

#### Exhibit 3. Public Law 106-346 and Other Federal Policies and Guidance

<table>
<thead>
<tr>
<th>Law or Guidance</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>P.L.106-346, §359</td>
<td>Requires executive agencies to establish telecommute program. Establishes timetable for inclusion of eligible federal workers</td>
</tr>
<tr>
<td>OPM Guidance to Heads of Executive Departments and Agencies (February 9, 2001)</td>
<td>States that current agency policies may not be in compliance with P.L.106-346, §359. States that agencies should take a fresh look at barriers to telecommuting, and remove those barriers</td>
</tr>
<tr>
<td>Public Law 104-52, §620, (31USC 1348) Authorizes federal organizations to use funds appropriated by any act to pay for telecommuting equipment and monthly charges</td>
<td></td>
</tr>
</tbody>
</table>

### 1.1.4 EEOC and Telework

The Agency’s 2002 Collective Bargaining Agreement (CBA) between EEOC management and the American Federation of Government Employees, AFL-CIO (the Union), revised EEOC's telework program created in 1996, known as the Flexiplace Program. The Program allows an employee to work at sites other than the central office under pre-approved arrangements. The
primary objective of the program, is to allow selected employees to work at alternative work sites on a regularly scheduled basis. Each field office and Headquarters office is required to participate.

The CBA cites the following as potential benefits of telework:

- Increased employee productivity
- Improved morale (reduced commuting times, increased control over his/her life)
- Improved environment (e.g., less pollution and congestion from cars)

**Telework in EEOC and the Offices We Visited**

EEOC reports that it has 474 regular teleworkers, 414 in field offices, and 60 at Headquarters. In addition, many staff from the New York District Office (NYDO) have been frequently teleworking since the September 11, 2001, attack on the World Trade Center.

Each of the four offices we visited had a substantial number of teleworkers who telework once or twice per week. Telework participation at the four subject offices we visited varies from 14 to 32 regular teleworkers in each office, with 111 of 386 employees listed as actually teleworking. Exhibit 4 shows telework statistics for each office we visited, as well as EEOC overall telework participation.

**Exhibit 4. Number of Regular Teleworkers, at Four Offices and EEOC Overall**

<table>
<thead>
<tr>
<th></th>
<th>Dallas</th>
<th>Los Angeles</th>
<th>Miami</th>
<th>WFO</th>
<th>EEOC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Employees*</td>
<td>108</td>
<td>95</td>
<td>135</td>
<td>48</td>
<td>2,886</td>
</tr>
<tr>
<td>Number Regularly Teleworking (excluding medical)</td>
<td>32</td>
<td>19</td>
<td>46</td>
<td>14</td>
<td>474</td>
</tr>
<tr>
<td>Percentage Regularly Teleworking</td>
<td>30%</td>
<td>20%</td>
<td>34%</td>
<td>29%</td>
<td>19%</td>
</tr>
</tbody>
</table>

Source: EEOC (November 2001)--this data was submitted to OPM

Note: The number of employees differs from the number cited based on our fieldwork. This is due to changes in numbers of employees between November 2001 and the fieldwork (June-July, 2002).

Survey results from the four offices we visited show that over 90% of the regular teleworkers (those who telework at least once per week) belong to one of the following positions:

- Administrative Judge
- Investigator
- Mediator
- Trial Attorney
1.2 Purpose of Review

Initial OIG objectives were to examine whether:

- The recent advent and implementation of technologies makes telecommuting, teleconferencing, and other innovations cost effective for a variety of employers
- Growth of jobs and population in the suburbs call for a fresh look at location of key infrastructure
- The creation of many low cost structures could support clients in central locations, such as suburban malls

After initial data gathering, the OIG chose to focus on telework as one tactical corridor as a means to more efficient use of infrastructure. Therefore, the primary objective of the study is to determine if increased use of telework could result in cost savings and other benefits while sustaining or improving mission performance.

Key questions to address the objective include:

- What types of staff are suitable for frequent telework?
- How do lease conditions affect the cost-effectiveness of frequent telework?
- What equipment, training, and other items does staff need to be productive frequent teleworkers?
- What are the impressions of Managers and staff on frequent telework?

While this study is not intended to recommend business process changes, effective frequent telework will bring about changes to the way teleworkers and their colleagues do business. For example, frequent teleworkers need to engage in greater use of teleconferencing than non-teleworkers. We have attempted to include the tools needed for teleworkers to work effectively.

1.3 Scope and Methodology

Scope

This report examines potential use of frequent telework (i.e., two or more days per week) by EEOC staff. A detailed review of all potential EEOC field offices regarding frequent telework issues would be resource-intensive and inefficient. Therefore, the scope of this study is a review of Agency infrastructure as it relates to telework and a detailed examination of costs and savings, as well as other telework issues, at selected field offices. We chose to assess four field offices showing strong potential cost savings characteristics such as: an existing telework program, many staff, high rent costs, and difficult commuting environment. The field offices we focused on in the study are:

- Dallas District Office
- Los Angeles District Office
- Miami District Office
- Washington Field Office
Methodology

OIG used five primary data gathering and analysis methods to achieve the objectives:

- Literature review
- Interviews of key EEOC staff and telework experts
- Focus groups (Supervisors and other staff in the four offices we visited)
- Survey of field staff in the four offices
- Telework cost model for the four offices

The OIG team conducted research and analysis of information that included:

- Definitions and history of telework
- Federal Government’s role in telework
- Costs and benefits of telework
- Private and public sector examples of telework
- Cost models of telework
- Real estate issues involved in telework

The OIG team conducted interviews with EEOC staff and non-EEOC individuals that covered the following topics:

- Impressions of the existing telework program
- Pros and cons of implementing a frequent telework program
- Real estate and lease issues
- Recruiting and retention issues
- Cost savings and other potential benefits and costs to telework programs

The focus groups and survey instruments were used to gather data from the four offices we visited. These offices were chosen based on factors including:

- Existing telework program (some EEOC offices had no telework program)
- Potential cost savings (e.g., rent per square foot, number of square feet,)
- Lease flexibility (type of lease and, as applicable, lease expiration date)
- Commuting (e.g., commute times)

The OIG team facilitated focus groups of Supervisors, Investigators, Administrative Judges, Trial Attorneys, and other staff (including Mediators), at each of the four field offices that, demographic questions and open-ended discussion questions, covered the following topics:

- Type of work performed by each major group of employees
- Type of equipment and other items necessary and/or useful for the work the employee performs
- Key telework issues (e.g., reduction of office space options)
- Pros and cons (e.g., barriers to success) of a frequent telework program
The OIG team created the survey and ensured its distribution (paper copy) to EEOC staff in the four field offices we visited. The survey questions covered the following topics:

- Demographics of respondents (e.g., job title and years with EEOC)
- Telework information (e.g., whether a teleworker and work schedule)
- Opinions about key telework issues (e.g., whether interested in frequent telework)

The response rate for the survey was 67 percent. The questionnaire was made available to all Field Office staff at each of the offices we visited. Overall, 215 responded. Exhibit 5 shows responses data by office and overall.

**Exhibit 5. Telework Questionnaire, Number and Rate of Response**

<table>
<thead>
<tr>
<th>Office</th>
<th>Number of Staff</th>
<th>Number of Responses</th>
<th>Response Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dallas</td>
<td>88</td>
<td>59</td>
<td>67%</td>
</tr>
<tr>
<td>Los Angeles</td>
<td>76</td>
<td>49</td>
<td>65%</td>
</tr>
<tr>
<td>Miami</td>
<td>104</td>
<td>72</td>
<td>69%</td>
</tr>
<tr>
<td>WFO</td>
<td>53</td>
<td>35</td>
<td>66%</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>321</strong></td>
<td><strong>215</strong></td>
<td><strong>67%</strong></td>
</tr>
</tbody>
</table>

Notes: 1. Number of staff as of June 17, 2002
2. Actual response rate may be higher than stated, given that some staff may have been on extended leave or otherwise unavailable to obtain and/or respond to the survey

The OIG team designed and built a telework cost model which was reviewed by staff from the General Services Administration (GSA). Consultants from Clifton Gunderson LLP and Futrend Corp., then helped OIG refine, populate, and run the reviewed cost model to determine if frequent use of telework could result in cost savings. The cost model in this report accounts for major costs and savings categories associated with implementing and maintaining a frequent telework program, including:

- Furniture
- Information Technology equipment and related expenses
- Real Estate
- Telecommunication equipment and services
- Telework Center fees
- Training

To properly isolate the costs and savings attributable to implementation of frequent telework our study assumed that other key, non-telework factors, would remain constant (e.g., no changes in FTE levels and general location of offices). Findings from the cost model are included in Chapter 2.

The OIG team for this study included:
The study does not include analysis of:

- Implementing frequent telework in ways not contemplated by the study and at locations we did not visit (other than general observations)
- Appropriateness of the number and location of field offices
- Workload analysis (whether EEOC offices as a whole or individually are adequately staffed)
- Real estate savings that could be achieved through non-telework means (i.e., relocating to less costly locations, eliminating private offices for all staff, and closing offices)

The evaluation was conducted in accordance with the applicable Generally Accepted Government Auditing Standards as published in Comptroller General's Government Auditing Standards, 1994 Revision III, and took place from December 2001 through September 2002.

2.0 COSTS AND BENEFITS OF FREQUENT TELEWORK FOR EEOC OFFICES

This chapter provides findings and conclusions regarding implementation of frequent telework in offices we visited and the Headquarters Building. This section presents overall results, Section 2.1 examines the key factors associated with frequent telework at EEOC, Section 2.2 assesses costs and benefits of frequent telework at each of the four offices, and Section 2.3 examines conclusions and recommendations.

Overall Results

Our cost model shows that implementation of frequent telework could result in substantial overall net savings and large savings at each office. Savings are substantial for the two offices in federal space (Dallas and Los Angeles) and for the two offices in commercial space (WFO and Miami). So that savings could be grouped and compared, the cost models assume the enactment of a frequent telework program for all four offices in the Year 2003.\(^2\) Savings are presented for the two models used in this study. The Optimum Model is calculated based on having 85% participation in frequent telework, from those staff in the four positions best suited for frequent telework. The Survey Model uses the number of interested teleworkers as self-identified in the survey. Exhibit 6 shows total savings, combining the savings of each of the four offices, for the first five years of a frequent telework program.
Exhibit 6. Cumulative Net Savings for Frequent Telework (Negative Numbers in Parentheses)

<table>
<thead>
<tr>
<th>Year</th>
<th>Savings–Optimum Model</th>
<th>Savings-Survey Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>$(570,000)</td>
<td>$(361,000)</td>
</tr>
<tr>
<td>2004</td>
<td>(134,000)</td>
<td>(110,000)</td>
</tr>
<tr>
<td>2005</td>
<td>319,000</td>
<td>152,000</td>
</tr>
<tr>
<td>2006</td>
<td>792,000</td>
<td>424,000</td>
</tr>
<tr>
<td>2007</td>
<td>1,283,000</td>
<td>708,000</td>
</tr>
</tbody>
</table>

Source: Clifton Gunderson LLP, EEOC Telework Cost Model, August 2002

To achieve these cost savings, staff would telework two or more days per week, allowing more efficient use of central office space through office sharing or similar arrangements. The office sharing would result in reduced space needs that would lead to lower costs for real estate, producing savings that are substantially higher than the costs to set up and maintain a frequent telework program. Frequent teleworking staff would be Investigators, Administrative Judges, and Trial Attorneys, and Mediators. These positions make up over one-half of field office staff and are well suited for frequent telework. Cost savings for the offices in commercial space depend on implementing frequent telework when a lease expires. The Washington Field Office and Miami leases expire in April 2004.

2.1 Key Factors Affecting Frequent Telework at EEOC

We identified the following as critical factors affecting whether a frequent telework program will allow an office to maintain or improve its overall performance:

- Suitability of position/staff member for frequent telework
- Equipment and related needs
- Staff and Managers attitudes towards frequent telework

Cost and savings implications for each of these key factors are discussed in Section 2.2

2.1.1 Suitability of Positions for Frequent Telework

Different tasks are better suited than other tasks for telework. Some tasks, such as greeting and providing immediate assistance to walk-in clients, are so poorly matched with working in alternate locations that little research is needed to determine their suitability.

However, much of the work that staff performs at EEOC is well suited for frequent telework. Telework studies, results from focus groups and interviews with EEOC staff, and telework policies show that several major categories of EEOC staff perform tasks well suited for consideration of frequent telework. The major groups of staff we decided are well suited for frequent telework (“the four groups”) are:
Staff from each of the four groups performs many tasks successfully performed by teleworkers in the private or public sector. Exhibit 7 shows the type of tasks performed by the major groups of EEOC field office staff and their general suitability for telework.

We note that because one type of staff has one or more tasks that are closely tied to the central office, this does not exclude this type of staff from frequent telework. In fact, many Supervisors, paralegals and other staff may be able to successfully telework on a frequent basis. However, categories of staff not included in the group of four, require closer examination before a well-considered decision to telework frequently should be made.

**Exhibit 7. Telework Suitable Tasks and the Field Staff Performing Them**

<table>
<thead>
<tr>
<th>Tasks Well Suited for Telework</th>
<th>Field Office Staff Performing Task Frequently</th>
</tr>
</thead>
<tbody>
<tr>
<td>Requires concentration and large blocks of uninterrupted, independent time</td>
<td>Trial Attorneys, Administrative Judges, Investigators, Supervisors, Mediators</td>
</tr>
<tr>
<td>Work that has well-defined beginning and end points</td>
<td>Trial Attorneys, Administrative Judges, Investigators, Administrative/Support Staff, Supervisors, Mediators</td>
</tr>
<tr>
<td>Work that is easily portable</td>
<td>Administrative Judges, Investigators, Supervisors, Mediators</td>
</tr>
<tr>
<td>Need for specialized material or equipment is minimal</td>
<td>Trial Attorneys, Administrative Judges, Investigators, Supervisors, Mediators</td>
</tr>
<tr>
<td>Work can be done with limited unplanned face-to-face communication and minimal supervision</td>
<td>Administrative Judges, Trial Attorneys, Mediators</td>
</tr>
</tbody>
</table>

Tasks vary somewhat, but not substantially, between the same type of staff at the offices we visited. Many staff from the major groups of employees perform work that is tied closely to the central office location. Some of this work must be done at the central office. Exhibit 8 shows some major types of work that are closely tied to the central office location and the type of staff who perform this work.

**Exhibit 8. Tasks Not Well Suited to Telework and the Field Staff Performing Them**

<table>
<thead>
<tr>
<th>Task Not Well Suited for Telework</th>
<th>Field Office Staff Performing Task Frequently</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work that is not easily portable (such as some preparations for a major trial)</td>
<td>Those responsible for receiving and sending large amounts of U.S. mail and some Trial Attorneys</td>
</tr>
<tr>
<td>Work that does not have well-defined</td>
<td>None</td>
</tr>
</tbody>
</table>
### Specialized Equipment or Materials

<table>
<thead>
<tr>
<th>Description</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Those responsible for receiving and sending large amounts of U.S. mail</td>
<td>Staff involved with intake of walk-in customers (e.g., many administrative and, periodically, investigators and those who supervise these staff)</td>
</tr>
</tbody>
</table>

Note: telephone, basic personal computer related tasks, basic mailing, and faxing of one’s own work are not considered closely tied to the central workplace because of readily available and moderately priced portable technical solutions.

We also obtained information regarding the duties of other staff, including:

- Program analysts
- Paralegals
- Various administrative positions
- Reception

Generally, many of the “Other” staff have large amounts of work that is well suited for telework, as well as many responsibilities that keep them tied closely to the central office. For example, a budget analyst performs some work that has well-defined beginning and end points (review and preparation of budget documents). In addition, much work involving “Other” staff that is currently accomplished with face-to-face communication can be accomplished through use of e-mails and telephone calls. For example, a staff meeting to describe new policies could use conference-calling capabilities so that teleworkers could attend. Decisions about the suitability of “Other” staff for frequent telework could be made after an initial decision that a particular office should implement frequent telework.

### 2.1.2 Equipment and Other Needs of Frequent Teleworkers

If staff are not provided with adequate equipment, performance and morale may suffer markedly. What are the equipment needs for those staff whose work is well suited for frequent telework?

The major needs for teleworkers in the group of four (as found in the 20 focus groups and 215 Field Office questionnaires administered at the offices we visited; interviews with EEOC employees at Headquarters, the offices we visited and the New York office; and telework experts):

- Computer with standard EEOC software—non standard software creates compatibility issues and requires time consuming reformatting of text and data
- Capability for good quality copying, faxing, and printing—teleworkers and EEOC internal and external customers frequently need information in hard copy or faxed
- Internet service—many types of staff depend on the internet for research needs (e.g., access to legal research services such as Westlaw)
- EEOC email access (e-mail is critical for communicating to internal and external customers)
- Phone service—a separate phone line for business facilitates work tasks and provides additional privacy, safety and security
- Long distance service—teleworking staff consistently cited the need to frequently contact internal and external customers outside the local calling area (currently, an unmet need that negatively affected productivity for some teleworkers in the offices we visited)
- Telework training—lessons learned from public and private sector indicate the need to train all employees in a office that have teleworkers
- Storage space—frequent teleworkers may need additional secure storage space in the central office and/or at their remote work location

Central Office Needs for Frequent Teleworkers

A final need for frequent teleworkers is efficient central office space. When frequent teleworkers work in the central office, they need a workstation, adequate space, and equipment. Frequent teleworkers need not have space that is dedicated for their personal use. In hotelling, frequent teleworkers may reserve a given workspace for their use. Other teleworking programs use desk sharing, where two people share the same workstation.

We built our costs with the assumption that each teleworker would share an office, but not a workstation, with another teleworker. This assumption allows the cost model to be straightforward and reliable because it is simpler than a model including multiple types of worker space. In addition, office sharing is conducive to meeting the needs of many field office staff who frequently hold work-related telephone and in-person conversations of a private nature (office sharing assures that each office usually has only one occupant per day because frequent teleworkers can arrange their schedules to be in the office when their office mate is out, and vice versa). See section 2.1.3 for details on staff views of office space.

2.1.3 Office Culture Regarding Telework

Employee views on frequent telework are one factor in determining the ease in which a program can be successfully implemented. Our project assumes that frequent telework can be implemented at the discretion of EEOC Headquarters management, given appropriate consultations with employee groups. However, employee (staff and Managers) attitudes are a critical component for success. For example, if the program resulted in extremely poor morale or inefficient working conditions, it could negatively affect overall office performance, thereby devaluing or even negating the effectiveness of frequent telework. In addition, staff views provide vital information (such as opinions about supervising teleworkers) for the planning and training that would take place prior to implementing frequent telework.

Many staff, about 57%, indicated they are interested in teleworking at least two days per week. This provides a general indication that staff are favorably inclined towards frequent telework. Exhibit 9 shows survey results on this issue.

Exhibit 9. Staff Interest in Frequent Telework
Are You Interested in Teleworking More Or More often?

<table>
<thead>
<tr>
<th>Answer</th>
<th>Number of Respondents</th>
<th>Percentage Answered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes - 4-5 days per week</td>
<td>42</td>
<td>19.5%</td>
</tr>
<tr>
<td>Yes - 3 days per week</td>
<td>41</td>
<td>19.1%</td>
</tr>
<tr>
<td>Yes - 2 days per week</td>
<td>39</td>
<td>18.1%</td>
</tr>
<tr>
<td>Yes - 1 day per week</td>
<td>36</td>
<td>16.7%</td>
</tr>
<tr>
<td>No</td>
<td>53</td>
<td>24.7%</td>
</tr>
<tr>
<td>No Response</td>
<td>4</td>
<td>1.9%</td>
</tr>
</tbody>
</table>

Source: Telework Survey of employees from Dallas, Los Angeles, and Miami District Offices, and the WFO

We compared the answers to each survey question by office. There were only slight differences in the frequency of responses that were provided for most questions.

Many Managers, Supervisors, and staff in the offices we visited see substantial benefits for frequent telework. These benefits include increased ability to focus on certain tasks and financial gains. However, many Managers are also skeptical about staff and the office as a whole meeting the needs of customers and stakeholders in a frequent telework environment. Some staff share those concerns and also have concerns regarding office space, collegiality, and management of a frequent telework program.

Staff and Managers cited many other advantages to telework, including improved quality of life, monetary advantages, increased productivity, and reduced stress. Exhibit 10 shows number and percentage of respondents identifying specific advantages of telework.

**Exhibit 10. Primary Reasons to Telework**

<table>
<thead>
<tr>
<th>What Are the Primary Reasons You Are Interested in Teleworking or Teleworking More Often?</th>
<th>Number of Respondents</th>
<th>Percentage of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avoid commuting hassle</td>
<td>139</td>
<td>64.7%</td>
</tr>
<tr>
<td>Work in an environment where it is easier to concentrate</td>
<td>116</td>
<td>54.0%</td>
</tr>
<tr>
<td>Create more time for self/family/others</td>
<td>60</td>
<td>27.9%</td>
</tr>
<tr>
<td>Save money (dry cleaning, gas, auto repairs, lunches, etc.)</td>
<td>107</td>
<td>49.8%</td>
</tr>
<tr>
<td>Reduce stress that exists at the office</td>
<td>78</td>
<td>36.3%</td>
</tr>
<tr>
<td>Have a health condition that makes telework an attractive alternative</td>
<td>25</td>
<td>11.6%</td>
</tr>
<tr>
<td>Help the environment/conserve natural resources</td>
<td>70</td>
<td>32.6%</td>
</tr>
<tr>
<td>Increase personal safety (including commuting accidents)</td>
<td>70</td>
<td>32.6%</td>
</tr>
</tbody>
</table>
More productive | 18 | 8.4%
Other | 4 | 1.9%
No response | 55 | 25.6%

Source: Telework Survey of employees from Dallas, Los Angeles, and Miami District Offices, and the WFO

To obtain a preliminary gauge as to the type of workspace that is most appealing to staff in the group of four and other staff, our survey and focus group meetings asked for opinions on smaller workspace and sharing a desk or workspace. Many staff indicated that either, or both, of these options, were reasonable. Exhibit 11 shows staff views on workspace options.

**Exhibit 11. Opinions About Smaller Workspace and Office Sharing**

<table>
<thead>
<tr>
<th>In Order to Telework More Than One Day Per Week I Would Consider</th>
<th>Number of Respondents</th>
<th>Percentage Answered</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am not interested in teleworking more than once per week</td>
<td>28</td>
<td>13.0%</td>
</tr>
<tr>
<td>Working in a smaller workspace</td>
<td>73</td>
<td>34.0%</td>
</tr>
<tr>
<td>Sharing a desk/workspace</td>
<td>44</td>
<td>20.5%</td>
</tr>
<tr>
<td>No Response</td>
<td>98</td>
<td>45.6%</td>
</tr>
</tbody>
</table>

Source: Telework Survey of employees from Dallas, Los Angeles, and Miami District Offices, and the WFO

Note: Percentage answered totals more than 100% because respondents could provide more than one response (i.e. “Working in a smaller workspace” and “Sharing a desk/workspace.”)

Some staff in focus groups strongly identified with the concept of an individual office with themselves as the only occupant, regardless of how often the office would be occupied. This viewpoint was expressed strongly by several Trial Attorneys and Administrative Judges. The following needs were presented by some of these staff as support for the existing workspace arrangement, regardless of telework frequency:

- Need for private conversation and meeting space
- Need for storage of paper files
- Private office is a factor that makes working in the federal government acceptable
- Private office shows clients and others that EEOC is successful

Managers have several other concerns about telework. Many Managers we interviewed, and Supervisors we met with in focus groups, are skeptical about the ability of many individual staff, and the office as a whole, to meet the needs of customers and stakeholders in a frequent telework environment.
Other concerns surfacing from focus groups and the survey included general unsuitability of their position for telework, accessibility of charging parties and other customers to EEOC staff, staying current with developments in the legal field (often through unplanned face-to-face interactions), privacy of EEOC staff personal information (i.e., home telephone number), and adequacy of equipment at the telework site. Employees in several field offices also cited management and supervisory issues as a major threat to successful implementation of frequent telework.

While most employees would prefer to telework frequently, some employees cited a variety of reasons they prefer not to telework more often. The four reasons with more than a five-percent response rate were:

- Position/work not suited for telework (12.6 percent of respondents to the survey)
- Lack of adequate computer and/or other equipment (7.4 percent of respondents)
- Can focus better at the office (6.5 percent of respondents)
- Cannot work at home/home is not a suitable work environment (5.1 percent of respondents)

Exhibit 12 shows number and percentage of survey respondents identifying reasons not to telework.

**Exhibit 12. Reasons Not to Telework**

<table>
<thead>
<tr>
<th>Why Would You Prefer Not To Telework More Often?</th>
<th>Number of Respondents</th>
<th>Percentage of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Telework could make Supervisor or coworkers uncomfortable</td>
<td>4</td>
<td>1.9%</td>
</tr>
<tr>
<td>Telework could hurt my career (chances for promotion, good assignments, etc.)</td>
<td>3</td>
<td>1.4%</td>
</tr>
<tr>
<td>I cannot work at home/home is not a suitable work environment</td>
<td>11</td>
<td>5.1%</td>
</tr>
<tr>
<td>I can focus better at the office</td>
<td>14</td>
<td>6.5%</td>
</tr>
<tr>
<td>I would feel isolated (socially and/or professionally)</td>
<td>8</td>
<td>3.7%</td>
</tr>
<tr>
<td>I lack of adequate computer and/or other equipment (fax and high speed internet, for example)</td>
<td>16</td>
<td>7.4%</td>
</tr>
<tr>
<td>I prefer to work in the office</td>
<td>2</td>
<td>0.9%</td>
</tr>
<tr>
<td>Position/work not suited for telework</td>
<td>27</td>
<td>12.6%</td>
</tr>
<tr>
<td>No access to internal business systems</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Need to address issues as they arise</td>
<td>2</td>
<td>0.9%</td>
</tr>
<tr>
<td>Personal privacy relating to home phone number access</td>
<td>1</td>
<td>0.5%</td>
</tr>
<tr>
<td>Customer cannot be supported adequately</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Family Issues</td>
<td>2</td>
<td>0.9%</td>
</tr>
<tr>
<td>------------------------------------------</td>
<td>------</td>
<td>------</td>
</tr>
<tr>
<td>I prefer to work a compressed schedule</td>
<td>1</td>
<td>0.5%</td>
</tr>
<tr>
<td>Additional costs to be incurred by teleworking</td>
<td>1</td>
<td>0.5%</td>
</tr>
<tr>
<td>Loss of office space/privacy</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Other - please explain</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>No Response</td>
<td>162</td>
<td>75.3%</td>
</tr>
</tbody>
</table>

Source: Telework Survey of employees from Dallas, Los Angeles, and Miami District Offices, and the WFO

In the focus groups, some employees stated that Managers and Supervisors place undue obstacles on teleworkers in the current Telework Program. Such obstacles include requirements for teleworkers (and not for other staff) to produce a daily work plan that involves only certain types of products, and to report daily on whether the plan was accomplished.

While a home office environment is often conducive for tasks requiring uninterrupted thought, frequent telework cannot be highly effective if communication between EEOC staff and customers (internal and external) is considered optional or unimportant.

2.2 Monetary Costs and Benefits of Frequent Telework

For EEOC, implementing a frequent telework program without cost savings would present major financial hurdles. First year costs for such a program in the offices we visited would be about $1.7 million. Many private sector organizations and some public sector organizations have achieved cost savings through telework implementation. Therefore, careful examination of all major costs and savings are essential to determining if EEOC should proceed with a frequent telework program. To document and calculate costs and savings associated with implementing frequent telework, the OIG developed a cost model.

2.2.1 Major Cost and Saving Categories

The major cost and benefit categories affected by adoption of a frequent telework program at the EEOC field offices we included in our cost model are:

- Information technology
- Telecommunication
- Facility/Real Estate
- Training

**Information Technology**

Replicating, to the extent practical, central office information technology capabilities for frequent teleworkers is the guiding principle we used to determine frequent teleworker needs. Frequent teleworkers should be able to conduct the bulk of their duties from their home (or a
telecenter). With this philosophy, we developed the following needs that apply to all frequent teleworkers:

- Laptop - 1 laptop per teleworker for use in both central office and at remote site
- Docking station - 1 per individual for central office use
- Standard EEOC software - already licensed software for laptop use (at no cost)
- 4 in 1 multifunction machine - a printer, fax, copier and scanner

**Telecommunication**

In order to maximize teleworker effectiveness, we decided to include costs for a FTS phone line, a telephone that is dual line, speaker-capable, and the following services:

- Caller ID
- Call number block
- Conference call
- Internet service provider (EEOC holds a contract with AT&T)

**Facility/Real Estate**

One of the benefits organizations may realize from frequent teleworking is the need for less office space, resulting in reduced real estate costs. To ensure cost accuracy and limit the number of variables in the model, we decided to employ the concept of office sharing for those employees who would be in the office less than 50 percent of the time. This means that for every two teleworkers, there will be one shared office. Each shared office will contain two workstations, including telephones. Therefore, on the occasions where both employees find themselves in the central office, each can perform their work with a minimal disruption. On occasions when both workers are present, adequate protocols and facilities will need to be available (e.g., when new lease is obtained, space may be configured so that meeting rooms better accommodate the needs of teleworkers.

For purposes of the cost model, it was decided that an office sharing concept would be employed whereby Alternative Dispute Resolution Mediators, Administrative Judges, Trial Attorneys and Investigators who telework 3 or more days a week, or 2 days a week with 5-4-9 or 4-10 schedule would share an office. Exhibit 13 shows a typical office we visited and a representative office after frequent telework is implemented.

**Exhibit 13. Current and Shared Office Set Up**

CURRENT OFFICE SET UP (similar to many offices we visited)
OIG believes that other positions and/or individuals in other positions may be well-suited for telework. Therefore, as appropriate, offices could include other types of staff and/or individuals in a frequent telework program, thereby increasing savings resulting from reduced real estate costs. For the two offices in commercial spaces (WFO and Miami), our project verified that timing for implementing telework is critical for cost savings. Cost analysis and expert opinion show commercial space is prohibitively expensive to vacate before the lease expires. Therefore, the cost model for commercial space assumes that the telework program begins with a new lease. Leases for the WFO and the Miami offices expire in April 2004.

Training

We obtained estimates of costs required to educate employees on how to be productive in a remote setting while working away from the central office. Training costs also include courses for non-teleworkers, Supervisors, and Managers.
Total Costs

We calculated the amounts for each cost category described above. Exhibit 14 shows the combined costs (of offices we visited) for each category required for successful implementation of frequent telework.


<table>
<thead>
<tr>
<th>Category</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information Technology</td>
<td>$413,400</td>
</tr>
<tr>
<td>Telecommunication</td>
<td>$706,889</td>
</tr>
<tr>
<td>Facility/Real Estate</td>
<td>$452,572</td>
</tr>
<tr>
<td>Training</td>
<td>$162,150</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$1,735,011</strong></td>
</tr>
</tbody>
</table>

Source: Clifton Gunderson LLP, EEOC Telework Cost Model, and August 2002

Savings Not Quantified in the Model

Savings in recruitment/retention costs, a major potential monetary benefit of frequent telework, is not included in the cost model because we did not identify reliable data showing those benefits of frequent telework in this area. However, given that telework is highly valued by many employees, we believe there will be substantial cost savings in the retention/recruitment area. For example, it costs about $7,000 to recruit an employee, so if each of the four field offices retained one staff person each year due to the frequent telework program, $28,000 in savings would accrue to EEOC annually. This figure does not include training that is provided to new employees, and lost productivity until the new employee is as productive as the employee he/she replaced.

There will also be savings from reduced costs for transit subsidies. Beginning in FY 2003, all qualified employees in the offices we visited will be eligible for subsidies. Savings will accrue as a result of frequent telework because some frequent teleworkers will not receive a subsidy, or will receive a lesser subsidy, because they would incur lower transit costs. However, we did not estimate savings because the data cannot accurately project the number or the amount of reduced subsidies.

Costs Not Quantified in the Model

In addition to telework training, change management workshops may be needed. These workshops help to shift office culture and provide employees, including management and supervisors, with information and tools to successfully manage change in the workplace.
Reasonable accommodation items may be needed for a small number of staff. Currently, several staff in Dallas, Los Angeles, and Miami may have special needs. Items that these, or other staff, could need include:

- Special keyboard
- Software that translates text into audio (i.e., The Dragon "naturally speaking" program)
- Large and/or high resolution computer monitor

Additional protection of data contained on laptop computers may be useful. In particular, encryption technology could be advisable. Encryption software limits access to sensitive data. For example, encryption software can prevent a thief from accessing confidential interview information stored on a teleworker’s laptop computer.

Some frequent teleworkers will require more, or fewer, resources than those allocated to the teleworkers in the cost model. For example, some Trial Attorneys may need a laser printer in order to expedite delivery of documents to the courts or law firms, while some staff may not need the additional storage provided by the two lateral file cabinets included in the cost model. Given the considerable cost savings projected for each district office we visited, and that some teleworkers will not require all items budgeted to them in the cost model, we believe that additional costs to accommodate individuals will not have a major impact on cost savings.

**Other Assumptions and Features of the Cost Model**

The cost model includes no changes to Headquarters infrastructure backbone, and no acquisition of central office scanners and accompanying resources to reduce the need to access paper files. To maximize teleworker productivity, central office scanners and staff to make documents available in electronic format would be helpful, though they are not essential. Because such acquisitions are not core to implementing telework in a small number of pilot offices, they are not included.

**2.2.2 Results From the Cost Model**

The results from the cost models show large cumulative net savings, about $1.3 million for the Optimum Model. Annual net savings are strongly negative in the first year, due to start up costs. In the second through fifth year, savings are substantial and steady. The models also show that savings are significantly higher under the Optimum Model, than using the Survey Model. An analysis of cumulative cost savings shows that costs outweigh savings for the first two years, then savings rapidly accumulate. Savings will continue to accrue beyond five years, but for display purposes, only the first five years of savings are shown. Exhibit 15 shows cumulative savings for each office and in total.

**Exhibit 15. Cumulative Savings for Each Office and in Total**
Exhibit 16 shows Cumulative savings under the Optimum Model are significantly higher than under the Survey Model.

Exhibit 16. Cumulative Savings Under the Optimum and Survey Model

<table>
<thead>
<tr>
<th>Office and Model</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dallas Optimum</td>
<td>$(190,533)</td>
<td>$(90,660)</td>
<td>$14,880</td>
<td>$126,302</td>
<td>$243,829</td>
</tr>
<tr>
<td>Dallas Survey</td>
<td>(117,347)</td>
<td>(65,511)</td>
<td>(10,640)</td>
<td>47,383</td>
<td>108,676</td>
</tr>
<tr>
<td>Los Angeles Optimum</td>
<td>(152,992)</td>
<td>(40,146)</td>
<td>73,559</td>
<td>188,129</td>
<td>303,568</td>
</tr>
<tr>
<td>Los Angeles Survey</td>
<td>(95,597)</td>
<td>(22,677)</td>
<td>50,799</td>
<td>124,835</td>
<td>199,434</td>
</tr>
<tr>
<td>Miami Optimum</td>
<td>(179,536)</td>
<td>(43,879)</td>
<td>98,595</td>
<td>248,146</td>
<td>405,041</td>
</tr>
<tr>
<td>Miami Survey</td>
<td>(118,488)</td>
<td>(27,087)</td>
<td>68,858</td>
<td>169,520</td>
<td>275,080</td>
</tr>
<tr>
<td>WFO Optimum</td>
<td>(46,923)</td>
<td>40,457</td>
<td>132,346</td>
<td>228,924</td>
<td>330,379</td>
</tr>
<tr>
<td>WFO Survey</td>
<td>(29,624)</td>
<td>5,719</td>
<td>43,112</td>
<td>82,636</td>
<td>124,376</td>
</tr>
<tr>
<td>Cumulative Savings Optimum</td>
<td>(569,984)</td>
<td>(134,228)</td>
<td>319,381</td>
<td>791,501</td>
<td>1,282,818</td>
</tr>
<tr>
<td>Cumulative Savings Survey</td>
<td>(361,056)</td>
<td>(109,557)</td>
<td>152,129</td>
<td>424,374</td>
<td>707,566</td>
</tr>
</tbody>
</table>

Source: Clifton Gunderson LLP, EEOC Telework Cost Model, August 2002
After five years, cumulative savings for the Optimum Model are $600,000 greater than the Survey Model savings, ($1.3 million, compared to $0.7 million). We note that start up costs for the Survey Model are lower, which explains the lower loss/higher savings in years 1-3.

The savings in each model are linked closely to levels of participation. The Survey Model projects about 50% of those in well-suited job categories will telework, while the Optimum Model is set at 85%. This means that of the total staff, well less than one-half would frequently telework under the Survey Model, and about one-half would frequently telework under the Optimum Model. Exhibit 17 and 18 provide an illustration and table of the number and percentage of staff who would frequently telework.

**Exhibit 17. Percentage and Number of Frequent Teleworkers, Dallas**

Percentage and Number of Frequent Teleworkers, Dallas, *Optimal Model* (Total Staff=88)

---

**Exhibit 18. Percentage and Number of Frequent Teleworkers, Dallas, *Survey Model* (Total Staff=88)**

---
Exhibit 18. Percentage and Number of Frequent Teleworkers for Dallas, Los Angeles, Miami, and the Washington, DC Field Office

<table>
<thead>
<tr>
<th>Survey Model</th>
<th>Dallas</th>
<th>Los Angeles</th>
<th>Miami</th>
<th>WFO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Well Suited, Interested, Will Telework</td>
<td>31</td>
<td>21</td>
<td>31</td>
<td>12</td>
</tr>
<tr>
<td>Well Suited, Interested, Will Not Telework*</td>
<td>5</td>
<td>4</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>Well Suited, Not Interested, Will Not Telework</td>
<td>29</td>
<td>15</td>
<td>20</td>
<td>11</td>
</tr>
<tr>
<td>Not Well Suited, Will Not Telework</td>
<td>23</td>
<td>36</td>
<td>47</td>
<td>28</td>
</tr>
<tr>
<td><strong>Total Staff, Both Models</strong></td>
<td><strong>88</strong></td>
<td><strong>76</strong></td>
<td><strong>104</strong></td>
<td><strong>53</strong></td>
</tr>
</tbody>
</table>

Optimum Model

<table>
<thead>
<tr>
<th></th>
<th>Dallas</th>
<th>Los Angeles</th>
<th>Miami</th>
<th>WFO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Well Suited, Will Telework</td>
<td>55</td>
<td>34</td>
<td>48</td>
<td>21</td>
</tr>
<tr>
<td>Well Suited, Will Not Telework*</td>
<td>10</td>
<td>6</td>
<td>9</td>
<td>4</td>
</tr>
<tr>
<td>Not Well Suited, Will Not Telework</td>
<td>23</td>
<td>36</td>
<td>47</td>
<td>28</td>
</tr>
<tr>
<td><strong>Total Staff, Both Models</strong></td>
<td><strong>88</strong></td>
<td><strong>76</strong></td>
<td><strong>104</strong></td>
<td><strong>53</strong></td>
</tr>
</tbody>
</table>

*These are staff who are new to the agency or have another characteristic that makes them less than well-suited for frequent telework.

Year by year savings analysis show that net savings are negative in 2003 and then positive, significant, and steady in years 2004-2007. Exhibit 19 shows expected annual cost savings due to frequent telework, for the Optimum Model.

Exhibit 19. Annual Net Cost Savings Due to Frequent Telework, Optimum Model (Negative Numbers in Parentheses)

<table>
<thead>
<tr>
<th></th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dallas</td>
<td>$(190,533)</td>
<td>$99,874</td>
<td>$105,540</td>
<td>$111,422</td>
<td>$117,527</td>
<td>$243,829</td>
</tr>
<tr>
<td>Los Angeles</td>
<td>(152,992)</td>
<td>112,846</td>
<td>113,705</td>
<td>114,570</td>
<td>115,439</td>
<td>303,568</td>
</tr>
<tr>
<td>Miami</td>
<td>(179,536)</td>
<td>135,657</td>
<td>142,474</td>
<td>149,551</td>
<td>156,896</td>
<td>405,041</td>
</tr>
<tr>
<td>WFO</td>
<td>(46,923)</td>
<td>87,379</td>
<td>91,889</td>
<td>96,578</td>
<td>101,454</td>
<td>330,379</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>$(569,984)</td>
<td>$435,756</td>
<td>$453,609</td>
<td>$472,120</td>
<td>$491,316</td>
<td>$1,282,818</td>
</tr>
</tbody>
</table>

Source: Clifton Gunderson LLP, EEOC Telework Cost Model, and August 2002

Flexibility of Participation Rate and Savings

Implementation of frequent telework could occur at any savings/participation levels. The Survey and Optimum are simply two points along a continuum of savings/participation. The best
savings/participation target can be determined by weighing budget and other considerations, and reassessing targets based on the results from any pilot programs that would take place. Exhibit 20 shows cumulative five-year savings of the four offices we visited should frequent telework take place.

Exhibit 20. The Continuum of Savings Under Frequent Telework

2.2.3 Potential Savings at Other Field Locations and EEOC Headquarters

If the savings cited above are realized and could then be produced in a similar manner at other EEOC field offices, savings would be large, given that in 2002 the District Offices and WFO real estate costs were about $21 million. Without thorough testing of frequent telework at one or more than one of the locations we visited, it is difficult to determine if other locations could realize substantial savings and other benefits without high risk of reduction in product quality and morale.

EEOC Headquarters faces a unique set of circumstances, given that it is the largest piece of EEOC real estate and the lease does not expire until 2008. The examination of vacating commercial space before lease expiration shows that it would present an extreme challenge for EEOC to achieve real estate savings at its Headquarters building by simply vacating.

However, other options for real estate savings through frequent telework are possible for the Headquarters Building including:

- Subleasing large amounts of contiguous space
- Bringing the WFO into the Headquarters building
- Buying out of the lease

Therefore, if frequent telework were adopted and proved successful, implementation at other field offices and the headquarters building would need to closely manage lease related issues. However, for field offices in federal buildings, vacating is less costly in the short term, and could be performed according to EEOC needs, given EEOC consults with GSA as appropriate.

2.3 Conclusions and Recommendations

Conclusions

1. Escalating real estate costs for EEOC illustrate the importance of focusing on ways to more effectively manage its infrastructure.
2. Much of the work of Trial Attorneys, Administrative Judges, Investigators, and Mediators is well suited for frequent telework.
3. Many Managers and Supervisors believe that a significant number of staff may not produce as much work product or be able to provide services as effectively if they telework frequently.
4. Staff, Managers, and Supervisors share concerns for ensuring that EEOC conducts business efficiently if greater telework is implemented (e.g., assuring high-quality intake processes).
5. Lack of adequate training, equipment, and attention to office layout, will endanger success of a frequent telework program, and could lead to reduced productivity and decreased morale.
6. Major cost savings can be achieved at each of the offices we visited, beginning in the second year of frequent telework. Major cumulative savings begin in the third year.
7. Federal office space offers greater flexibility in when to implement frequent telework to achieve cost savings.
8. Savings are maximized through use of the Optimum Model.
9. Due to the up front costs of frequent telework, and the financial advantages to beginning frequent telework near lease expiration, piloting at all district offices immediately would not be prudent.
10. If savings estimated in the cost model could be applied to all EEOC district offices, savings would be substantial, and average about 10% of real estate costs for those offices, over a five year period.
11. Options for real estate savings through frequent telework may be possible for the Headquarters Building (e.g., subleasing parts of the building, bringing the WFO into the Headquarters building, or buying out of the lease).

Recommendations

1. Consider implementing a pilot frequent teleworking effort to achieve cost savings for the following offices:

   - Dallas District Office
Frequent teleworking at each of the offices we visited should seek to maximize cost savings while minimizing financial and program risks. In order to minimize risks with implementing frequent telework, we strongly advise the following at each location that pilots/implements frequent telework:

- Conduct thorough planning
- Conduct training prior to the date frequent telework begins
- Purchase and test equipment prior to the date frequent telework begins
- Assess whether change management training is necessary
- Assess changes to productivity and morale that result from telework. In these efforts, it is critical to gather data over extended periods of time and for a large number of staff, in order to produce reliable and meaningful data.

2. EEOC should join one or more telework organizations, such as Mid Atlantic Telework Association Council and International Telework Association Council (ITAC). Benefits include access to telework experts and opportunities to network with other federal agencies engaged in telework efforts. Should EEOC wish to pursue a frequent telework program, membership may also lead to:

- Better understanding of equipment needs for teleworkers
- Heightened awareness of office culture barriers to successful implementation of frequent telework
- Learning methods for assessing success of frequent telework implementation
- Increased appreciation for how telework may enhance the human capital goals of EEOC

Two federal agencies with key telework knowledge (the Office of Personnel Management and the General Services Agency) belong to ITAC and could be helpful to EEOC’s telework efforts. GSA possesses policy expertise and is devoting resources to support agencies engaged in innovative workplace activities, including frequent telework. For example, GSA’s Workplace 20-20 program will provide planning, implementation expertise, and evaluation services to selected federal agencies that strive to create better workplaces. OPM may also be helpful, particularly in tracking telework developments government wide and in individual federal agencies.

**APPENDIX A: FREQUENTLY ASKED QUESTIONS**

<table>
<thead>
<tr>
<th>QUESTION</th>
<th>ANSWER</th>
</tr>
</thead>
<tbody>
<tr>
<td>#1. Does the study recommend that all EEOC offices should adopt frequent telework?</td>
<td>No. The study recommends that EEOC consider trying telework (piloting) at one or more of the four locations we studied (Dallas, Los Angeles, Miami and the Washington D.C., Field Office), see page 33. The study makes no</td>
</tr>
</tbody>
</table>
recommendations regarding the local and area offices reporting to these offices (e.g., Tampa) or other district offices (e.g., New York and St. Louis). The report notes risks associated with implementation at other locations, see page 31.

| #2. If a frequent telework program begins, will it be mandatory? | It depends on whether the desired savings can be reached via voluntary participation and how EEOC wishes to proceed. Our study assumes that EEOC management could, after proper interaction with employee representatives, implement a program mandating a high participation rate. |
| #3. How was it determined that trial attorneys could successfully telework frequently? | Several sources of information were used in determining that most trial attorneys could work two or more days away from the central office. Analysis of telework studies, interviews, surveys, and focus groups comprised of district office trial attorneys, show that trial attorneys are well-suited for frequent telework. However, trial attorneys, to be productive teleworkers, need the proper support, including computer and telecommunications equipment. |
| #4. If some staff do not have a suitable work area, or have other conditions that make their homes unsuited for frequent telework, how can they be expected to telework? | They are not expected to telework. The different levels of cost savings included in the assessment (see Exhibit 20, page 30) correspond to different numbers/proportions of staff teleworking. In addition to staff with unsuitable home workspaces, new staff and those in a variety of other situations would not be expected to telework. The optimum model described in the study projects that 15 percent of staff in a job category that is well suited for frequent telework fall into one of these groups. The actual percentage of staff who fall into one of these groups will vary by office. |
| #5. If staff need to come to the office unexpectedly, can they do so in a frequent telework program? | Yes, they can and they should. Frequent telework, as contemplated in this study, does not require rigid adherence to a schedule. In fact, flexibility on the part of both managers and staff is necessary for frequent telework to succeed. The teleworker should report to the central office whenever the teleworker and/or her supervisor deem it necessary to be in the office for all or part of a day normally designated for telework. Likewise, a day normally designated for central office work could, upon mutual agreement, become a telework day. |
| #6. If my office is already cramped, is there room for someone else? | It depends. A typical office, in the locations we visited, is large enough so that two workstations and filing cabinets for each teleworker could be accommodated. Also, inefficient furnishings may need to be replaced. This office-sharing configuration is preferred by many over an open floor plan (e.g. cubes) or a situation with no dedicated offices (i.e., |
#7. *I need my privacy, how much can I expect under frequent telework?*

Quite a bit. One advantage of working from home, for many EEOC staff, is more privacy and decreased distractions versus the central office. In the central office, each teleworker would be expected to coordinate with his office partner to ensure as little overlap as possible. In most cases, shared offices would be occupied by two people one or zero times per week.

#8. *Would the existing EEOC telework program change?*

Parameters for participation would change. For example, the type of staff and number of days frequent telework is permitted. Changes to other major aspects, such as management of teleworkers compared to other workers, should also be examined. The existing program is described in the 2002 Collective Bargaining Agreement.

## APPENDIX B: Acronym List

- **CFO** Chief Financial Officer
- **FY** Fiscal Year
- **GAO** U.S. General Accounting Office
- **GPRA** Government Performance and Results Act
- **GSA** General Services Administration
- **IG** Inspector General
- **OIG** Office of Inspector General
- **OMB** Office of Management and Budget
- **OPM** Office of Personnel Management
- **ORIP** Office of Research, Information and Planning
- **WFO** Washington Field Office

## Appendix C: Federal Government and Telework

This appendix contains information on the involvement of the federal government in telework, including telework and infrastructure related legislation. In 1934, the National Credit Union Administration employed examiners who conducted examinations at credit union sites and
completed their reports from home. Several federal government agencies experimented with telework in the 1980s. At this time, the National Institutes of Health, Department of the Army, and Environmental Protection Agency began telework programs, often referred to as Flexiplace.

Federal telework gained popularity in the 1990s in light of concerns about the federal workforce, particularly the ability to attract and retain highly skilled workers. In 1990, a task force that included OPM and GSA approved government wide Flexiplace, to be conducted by agencies on a one-year pilot basis. By 1993 about 700 federal employees were Flexiplace participants. In the 1990s, as Flexiplace participation increased, the federal government encouraged telework through an executive memorandum and partnerships with the private sector. Also, in 1996, the President’s Management Council began promoting telework. By 1998, about 1% of the federal workplace were teleworkers, less than half of the federal government’s goal and far below the 8-11% of the US workforce.

A November 2001 study by the Office of Personnel Management placed the number of federal teleworkers (combined regular and infrequent teleworkers) at 74,487, a 39.5 percent increase from April 2001. Even with this increase, federal teleworkers are only 4.2 percent of workers at 63 agencies providing telework data. Recent initiatives, some adopted after the terrorist attack of September 11, 2001, may result in significant increases in federal teleworkers. For example, the Department of Defense announced a telework policy that encourages all eligible department civil service employees to telecommute regularly (at least once every two weeks). EEOC is one of 13 agencies with telework utilization rate of over 20 percent.

GSA and OPM offer a variety of resources to assist federal organizations interested in telework. The Office of Personnel Management and the General Services Administration are also lead agencies for the federal teleworking initiative. The GSA Governmentwide Telework Team serves as the nexus for policy development, outreach, and collaborative partnerships to further the advancement of telework throughout the federal government. The Telework Team provides a variety of services such as:

- develops policy concerning the alternative workplace
- promotes telework to and networks with federal, private, and other customers
- offers technical support, consultation, research, and development to its customers.

We note that GSA has made its staff available to us throughout this project, and that GSA has expressed interest in assisting EEOC, should EEOC decide to implement frequent telework

Federal Policies and Guidance Related to Telework

<table>
<thead>
<tr>
<th>INFRASTRUCTURE</th>
<th>TELEWORK</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Executive Order 12072 - Federal Space Management Requires federal agencies to give priority to the Centralized Community Business Area when locating federal facilities in urban areas.</td>
<td>5. Public Law 106-346, Section 359 instructs federal agencies (1) to remove telework barriers and increase actual participation, (2) to establish telework eligibility criteria, and (3) to allow telework for those employees who meet criteria.</td>
</tr>
<tr>
<td>Appendix D: Sources of Additional Telework Information</td>
<td></td>
</tr>
<tr>
<td>---------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>The following publications and websites provide links to information and organizations concerned with telework and infrastructure issues.</td>
<td></td>
</tr>
</tbody>
</table>

**Federal Government Information Sources**

Joint GSA and OPM telework website http://www.telework.gov This site also includes links to federal telework programs and telework publications including *Expert Consensus on Recommended Practices for Telework Program*. This document provides effective practices for establishing successful telework programs.

**Telework Organizations**
Appendix E: Summary Of Comments On The Draft Report

We received comments from senior management, managers/supervisors, and other staff in headquarters and field offices, including each of the four field offices we visited and many of those we did not visit. Comments came from District Directors, Regional Attorneys, employee representatives, groups of employees, and a variety of other staff. Many of the comments from trial attorneys and supervisors of trial attorneys are generally negative regarding frequent telework and shared office space for trial attorneys.

Comments from others include enthusiastic endorsement for testing frequent telework, guarded endorsement, neutrality, some doubts, and grave doubts. The OIG appreciates the time and effort that were devoted to critiquing the study.

Many comments addressed conditions at offices other than the four offices we visited (e.g., office size in Chicago and commuting conditions in New York City). Our study and its recommendations focused on the four offices. Therefore, conditions in locations other than the four offices we visited do not effect analysis or conclusions about the four offices we visited. The table below summarizes the comments and refers readers to sections of the report relevant to each topic.

Summary of Comments on the Draft Report

<table>
<thead>
<tr>
<th>Subject Matter</th>
<th>Summary Of Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Shared office environment</td>
<td>• Many comments stated that attorneys, notably Trial Attorneys, need a private office. Reasons included room for work materials, the need for private meeting/conversation space, and poor morale in a shared office environment</td>
</tr>
<tr>
<td>2. Frequent telework environment</td>
<td>• Many comments stated trial attorneys are not suitable for frequent telework. Reasons included need for frequent personal interaction with colleagues, the unpredictability of the type of work performed on a given day, lack of clerical support, access to case documents, access to research materials</td>
</tr>
</tbody>
</table>
- Several comments agreed with the findings in this report that found trial attorneys, administrative judges, mediators and investigators are well-suited for telework.
- Several comments stated mediators are not suitable for frequent telework (these comments did not state why this would be the case)
- One comment stated that paralegals should be included in the well-suited for frequent telework category
- Several comments indicated that socialization/socializing is a critical component of a successful workplace and that frequent telework would harm that component

### 3. Equipment and other support
- Several comments stressed the need for high quality equipment and IT support for frequent teleworkers
- Several comments asserted that many employees’ homes do not have adequate space and other conditions necessary to provide a suitable work environment

### 4. Office culture
- Several comments indicated frequent telework’s success will depend heavily on changing office culture (e.g., relying on observation of employees to assess and promote productivity) through training

### 5. Mandatory and voluntary telework
- Several comments stated frequent telework should be strictly voluntary

### 6. Other
- Several comments included concerns about tax liability and other legal issues

---

**Footnotes**

1 We chose to assess four field offices exhibiting strong potential cost savings, as demonstrated by characteristics such as: an existing telework program, at least 40 staff, high rent costs, and difficult commuting environment.

2 For the purposes of the models, it was assumed that the commercial leases ended in 2003 and that for the federal owned buildings, office space would be reduced and returned to GSA in 2003.

3 We note that a 2002 study, conducted by Booz Allen Hamilton at the request of Congress, found that while some technology barriers exist, there is no single information technology barrier preventing or impeding telework implementation[0]. The study states that as telework programs expand several issues may become critical, including performance of legacy client-server applications and protection and security of agency information. We did not perform analysis of these issues because such costs are not applicable for a frequent telework program at four offices.