

CONNECTICUT LAW REVIEW

VOLUME 42

MAY 2010

NUMBER 4

Article

Four-Day Work Weeks: Current Research and Practice

REX L. FACER II & LORI L. WADSWORTH

This Article addresses two issues relating to compressed work weeks. First, we present the findings of our research on four-day work weeks. Second, we discuss the practice of compressed work weeks, including an implementation framework and specific results from Utah's implementation of a four-day work week for state employees.

The authors' research on alternative work schedules stems from three major projects. First, the original study focused on one city using a four-day work week. Second, we conducted a national survey of municipal human resources managers seeking information on municipalities' experiences with alternative work schedules, with specific attention paid to the four-day work week. Third, we present preliminary results of employee survey data from several municipalities regarding their experiences with alternative work schedules.

The second major theme of this Article targets the practice of compressed work weeks. We briefly present a framework to guide organizations considering implementation of a compressed work week schedule. This is followed by a discussion of some of the milestones and major findings from Utah's experience with a four-day work week. These findings are the result of employee surveys, citizen surveys, and organizational performance measurement.

ARTICLE CONTENTS

I. INTRODUCTION	1033
II. RESEARCH	1035
A. INITIAL RESEARCH	1035
B. SECOND WAVE RESEARCH	1037
C. NEXT PHASE RESEARCH: EXTENDED EMPLOYEE SURVEY	1038
III. PRACTICE.....	1039
A. IMPLEMENTATION FRAMEWORK	1040
B. UTAH’S EXPERIENCE WITH A FOUR-DAY WORK WEEK	1041
IV. CONCLUSION	1046



Four-Day Work Weeks: Current Research and Practice

REX L. FACER II & LORI L. WADSWORTH*

I. INTRODUCTION

The use of a four-day work week has recently received a great deal of media interest. With increased energy costs, many organizations are looking for strategies to decrease overhead expenses. One strategy organizations have implemented is a four-day, ten-hour work week, which generally results in closing on the fifth day of a traditional work week. Potentially, this arrangement will lead to a decrease in energy costs for employers and travel costs for employees. Research suggests that there are other benefits under such a program.¹

Simultaneously, more employees are seeking greater opportunities to spend time with family and friends outside of the workplace. This increased interest results in employees who want not only a successful career, but also a successful life outside of the workplace. Balancing activities in the work and family domains creates significant challenges for today's employees. Employees are increasingly interested in programs and policies that will help them balance their work and non-work responsibilities. In response to this greater emphasis on work/life balance by employees, many organizations are looking for ways to assist their employees in attaining balance between work and family. For example, one common strategy is the use of alternative work schedules, which include flextime, job sharing, telecommuting, and compressed work weeks. Flexibility varies for each form of alternative work schedule, and each has its advantages and disadvantages.

Flextime schedules allow employees to start and finish work at times other than the traditional eight-to-five time period. Most flextime schedules have constraints on acceptable stop and start times, and organizations often require all employees to be at work for the core hours of the work day (e.g., the organization might require all employees to start

* Rex L. Facer II, Ph.D., is Associate Professor and Warren Jones Fellow of Public Finance and Management at Brigham Young University's Romney Institute of Public Management. His research focuses on alternative work schedules, budget and personnel reform, and infrastructure financing. Lori L. Wadsworth, Ph.D., is Assistant Professor in the Romney Institute of Public Management at Brigham Young University. Her research interests center on understanding the experience of individuals in balancing the interaction between work and family, specifically on social support, alternative work schedules, benefits, and mentoring.

¹ Lori L. Wadsworth, Rex L. Facer II & Chyleen A. Arbon, *Alternative Work Schedules in Local Government: Cui Bono?*, REV. PUB. PERSONNEL ADMIN. (forthcoming Dec. 2010).

their work day by 10:00 a.m. at the latest, and leave no earlier than 2:00 p.m.). Flextime is typically offered as a work/life balance option, but it also might help reduce employees' commute times and gas consumption, as they are able to commute during less congested traffic periods.

Job sharing is a schedule that splits one job position among two or more workers. This is also often used as a work/life balance option for valued employees who prefer shifting to part-time employment. The trade-offs include potential difficulties with communication and coordination of responsibilities² and, in some organizations, reduced benefits (e.g., medical, vacation time, sick leave, 401(k)) for employees working less than forty hours per week.

Telecommuting allows an employee to work from a remote location using computer technology.³ This schedule gives workers autonomy to more efficiently balance their work and life responsibilities. In addition, the organization might realize cost savings as a result of lower overhead at the work site. There are, however, some potential concerns about employee productivity and a decreased sense of camaraderie at work due to less face-time with employers and co-workers.

A compressed work week schedule involves working longer hours for fewer days of the week. Extending work hours limits workers' free time available on working days, but workers benefit by saving on travel time and commuting costs, along with gaining an extra day off during the week to accomplish non-work tasks. There are three common forms of compressed work weeks: (1) a "4/10" schedule (i.e., working ten-hour shifts for four days, with three days off each week); (2) a "9/80" schedule (i.e., a two-week schedule of eight, nine-hour work days, Monday through Thursday, one eight-hour Friday, and one Friday off every other week); and (3) a "3/36" schedule (i.e., working twelve-hour shifts for three days, with four days off each week). Our research suggests that the 4/10 schedule is the most commonly used type of compressed work week.⁴

Over the last several years, we have embarked on a stream of research to better understand alternative work schedules. A major impetus for this research was the use of compressed work weeks by cities. As a result of the spike in energy prices in the summer of 2008, our research gained additional traction. We have expanded our research efforts and explored

² Mohamed Branine, *Job Sharing and Equal Opportunities Under the New Public Management in Local Authorities*, 17 INT'L J. PUB. SECTOR MGMT. 136, 144-45 (2004).

³ See JACK M. NILLES, *MANAGING TELEWORK: STRATEGIES FOR MANAGING THE VIRTUAL WORKFORCE 1* (1998).

⁴ See Rex L. Facer II, Chyleen A. Arbon & Lori L. Wadsworth, *Cities Leading the Way: The Use of Alternative Work Schedules*, in THE MUNICIPAL YEAR BOOK 2009, at 32 (ICMA 2009) (presenting survey data showing that, of responding cities, 33% offer a 4/10 schedule to employees, 23% offer a 9/80 schedule, 4% offer a 3/36 schedule, and several cities offer multiple types).

large-scale implementations of alternative work schedules, such as Utah's move to a four-day work week for most of its state employees. In this Article, we first present a summary of our research results. We then discuss the practice of compressed work weeks, particularly an implementation framework and discussion of Utah's experience with the four-day work week.

II. RESEARCH

This section details our research efforts over the last several years to understand and explore alternative work schedules. Here, we address four research projects we have been working on, including initial research, second wave research, and our "next phase" research, which includes extended employee surveys, as well as an examination of the Utah experience.

A. *Initial Research*

We conducted our initial research in response to a request from a small growing community in the West. This city has a current population of nearly 30,000, having increased in population by over 170% since 1990. As the city grew, it grappled with providing services to its expanding population. In an effort to enhance service delivery and minimize costs, the city adopted a modified compressed work week schedule in 2003 for some city departments. Employees on the new schedule generally work Monday through Thursday, 7:30 a.m. to 6:00 p.m., with city offices closed on Fridays.⁵

We collected data using two surveys. The first data set was from an employee survey that explored the impact of the compressed work week on other issues, ranging from work/family issues to perceptions of employee productivity and job satisfaction. We received completed surveys from 132 full- and part-time employees.⁶ The second survey was sent to residents of the city.⁷ For this survey, we received completed and usable responses from 443 residents.⁸ Summary reports of the findings of each study follow.

⁵ Rex L. Facer II & Lori Wadsworth, *Alternative Work Schedules and Work-Family Balance*, 28 REV. PUB. PERSONNEL ADMIN. 166, 168 (2008).

⁶ *Id.*

⁷ Rex L. Facer II, Lori L. Wadsworth & Chyleen A. Arbon, *Citizen Preferences and Alternative Work Schedules: The Tale of One Western City* (Mar. 16, 2010) (unpublished manuscript, on file with authors).

⁸ *Id.*

1. *Employee Survey*⁹

Nearly 80% of the employee respondents “reported a positive experience with the 4/10 work week (78.5% either strongly agreed or agreed).” Nearly two-thirds “reported that they agreed (15.8%) or strongly agreed (46.7%) that, as a result of the 4/10 work week, they were more productive at their job.” A strong majority of employees reported that they believed that “citizen access had improved (63.9% agreed or strongly agreed). Finally, very few employees reported that childcare arrangements were more difficult under the 4/10 work week (2.7% agreed or strongly agreed).” In addition, “employees working the 4/10 schedule reported lower levels of work-family conflict” and higher levels of job satisfaction, as compared to employees working a traditional schedule. This last finding is particularly important to organizations, as previous research has shown that work/family conflict is related to decreased productivity, increased absenteeism, and increased turnover.¹⁰

2. *Citizen Survey*¹¹

To assess the strength of resident preferences, we asked several questions about which hours of operation residents preferred. For example, when asked if the 4/10 schedule made it easier to access city services, 33% of respondents agreed or strongly agreed, 33.5% indicated that they were neutral, and 33.5% disagreed or strongly disagreed. When asked if they preferred the 4/10 schedule, again about one-third (35%) of respondents agreed or strongly agreed. A slightly higher portion of respondents indicated a strong preference for a traditional schedule (44.1% agreed or strongly agreed). Interestingly, about the same portion of residents (43.7%) indicated that it is important to conduct business with the city before and after their work day. These results highlight a mixed pattern of responses, which underscores the challenge of providing services to citizens with mixed preference sets or expectations.

Residents with more positive attitudes toward the 4/10 work schedule had higher evaluations of the city’s services as measured by eight different service scales. For five of the eight scales, these differences were statistically significant—the largest difference was for the “Employee Evaluation Scale.” On average, respondents with positive views of the 4/10 work week evaluated employees 0.26 points higher in their evaluations ($p = 0.004$) on a five-point scale. The other four significant differences were for the evaluation of the quality of life in the community,

⁹ A complete report of the findings are available in Facer & Wadsworth, *supra* note 5, at 168–76.

¹⁰ Jennifer L. Glass & Sarah Beth Estes, *The Family Responsive Workplace*, 23 ANN. REV. SOC. 289, 296 (1997).

¹¹ A more detailed summary of the survey results can be found in Facer, Wadsworth & Arbon, *Citizens Preferences*, *supra* note 7.

the services management scale, drug and crime prevention, and public works.

B. *Second Wave Research*¹²

Our second wave of research sought to understand the prevalence of alternative work schedules and the benefits and drawbacks, especially from the organization's perspective. Focusing on municipalities, we drew a random sample of cities with populations over 25,000, which we used to conduct a phone survey. Responses were specifically collected from the human resources ("HR") professional with the best understanding of alternative work schedules in their organization—this was generally the HR director—and we collected responses from a total of 151 cities.

More than half (56.3%) of all cities surveyed reported offering some type of alternative work schedule to their employees. The most common type of alternative schedule reported by responding cities was the use of compressed work weeks, with nearly half of all cities (46.4%) indicating that they offer them to at least some of their employees. The 4/10 schedule was the most common type of compressed schedule reported by respondents. The next most common alternative work schedule offered was flextime, with over one-third (34.4%) of responding cities offering this type of schedule. The other three options—job sharing, telecommuting, and other types of alternative work schedules—were offered by less than 10% of cities. Interestingly, many organizations offered more than one type of alternative work schedule to their employees.

Nearly half of the respondents (48.2%) indicated that improving employee morale was an important factor in deciding to offer an alternative work schedule. The second most commonly cited factor was to support employee work/life balance (45.9%). These factors were typically seen as benefits to the employee, rather than to the organization. The next most frequently cited factors, however, all benefit the organization: increasing productivity (43.5%); extending business hours (40%); reducing costs (31%); decreasing absenteeism (29%); and increasing the ability to attract talented employees (28%).

The HR directors reported that the most common organizational benefits from alternative work schedules were improved employee morale (64% of respondents), improved work/family balance (54%), improved customer service (46%), and increased employee productivity (41%). In addition, they reported cost savings for the city due to decreased overtime and overhead costs. Several HR directors suggested that offering

¹² A complete discussion of this research will appear in Wadsworth, Facer & Arbon, *Alternative Work Schedules*, *supra* note 1.

alternative work schedule options decreased absenteeism and improved their ability to attract talented employees.

HR directors also reported organizational drawbacks to alternative work schedules. The most frequently reported drawback was difficulty with scheduling, particularly with meetings between those who work a 4/10 schedule and those who were on the traditional schedule (39%). The next most frequently cited drawback was decreased face-time for the employee (24%). The other drawbacks reported—decreased morale and productivity, increased absenteeism, customer service complaints, and cost—were each reported by fewer than 10% of the HR directors. These drawbacks suggest that managing schedules and career opportunities for employees will be important factors to address as organizations offer and manage alternative work schedule options.

C. *Next Phase Research: Extended Employee Survey*

Following up on the first two studies, we decided we needed to better understand how employees were impacted by an alternative work schedule. To do this, we seized two different opportunities. First, with Utah's foray into the four-day work week, we had the opportunity to help design surveys on employee perceptions of their work schedules. Data collection occurred at three different time periods. The first survey responses were collected about one month prior to the start of the four-day work week, the second survey occurred three months after implementation, and the third survey was administered nine months post-implementation. We present details of the Utah surveys later in this Article.¹³

The second opportunity spun off of our survey of municipal HR directors. Each respondent was asked if he or she would be willing to participate in a follow-up study of their employees. In addition to those who indicated that they would be willing to participate, we also invited other organizations to participate in the Extended Employee Survey ("EES"). To date, the EES has collected responses from more than 1300 employees of cities in a total of five states.

Preliminary findings from the EES highlight findings similar to our earlier research. EES respondents work both traditional and alternative schedules. Fifty-four percent are on an alternative work schedule, with the 4/10 being the most common (43% of respondents).¹⁴

In order to examine the impact and experience of employees on an alternative work schedule, we compared their responses with those on a

¹³ See *infra* Part III.B.

¹⁴ These findings are the preliminary results of an unpublished study being conducted by the authors. We are currently collecting data for this project, and therefore have not begun the writing process.

traditional work schedule. First, we looked at job satisfaction. This scale included five items measuring levels of satisfaction based on job, pay and benefits, and the organization, as well as employees' turnover intentions and whether their job contributed to a better community. For all five items, those employees on an alternative work schedule reported higher positive levels of job satisfaction.

Second, we compared responses regarding work/family balance for employees working a traditional schedule with those on an alternative work schedule. The scale included five items to measure satisfaction with work/family balance. Again, levels of work/family balance were higher for those on alternative work schedules.

In order to measure employee perception of alternative work schedules, we asked those on such a schedule to comment about their overall satisfaction with it. Over 80% responded that their experiences with an alternative work schedule were positive. Nearly 70% indicated that, as a result of their schedule, they are more productive at work. In addition, 60% believed that alternative work schedules improve a citizen's access to government services.

Because one of the concerns about alternative work schedules is difficulty with scheduling, we also asked employees about potential inefficiencies in coordinating schedules and found that less than 15% of respondents experienced such problems. Finally, over 90% of these respondents would recommend alternative work schedules to other employees or employers.

Our next area of interest was how an alternative work schedules impact employees. We asked employees about their time and experiences, both inside and outside the workplace. Employees reported that they were absent less often and worked less overtime. In addition, they spent more time with family and friends, exercised more often, had more time to work on projects, and were better able to manage their errands, all due to an alternative work schedule. One surprising finding was that employees reported that they did not eat out more often, but actually ate dinner together as a family more frequently. Lastly, we found that alternative work schedules do not seem to affect levels of volunteering.

III. PRACTICE

The study of compressed work weeks provides an opportunity for research and practice to influence each other. During the process of data collection and research, we discovered that there is little recent research on compressed work weeks¹⁵ and few organizations assess their own

¹⁵ See generally Robert C. Bird, *The Four-Day Work Week: Old Lessons, New Questions*, 42 CONN. L. REV. 1059 (2010).

experiences with alternative work schedules. This section presents application of research to practice. First, we present a framework for implementing a compressed work week. We then discuss Utah's experience in implementing a four-day work week for most of its state workforce.

A. *Implementation Framework*

Implementation is often the most challenging aspect to any organizational change. Based on our research, we believe there are five key issues that need to be addressed before a successful work schedule change can take place: people, purpose, process, perceptions, and performance.¹⁶

Before making a decision to move to a compressed work week schedule, managers should identify key *people* within their organizations in order to determine if and how this change may affect them. People may be divided into internal stakeholders, including employees and managers, and external stakeholders, including customers and clients, suppliers, unions, and other impacted organizations.

Establishing the *purpose* of the compressed work week schedule is a critical, though often not articulated, step for organizations. The purpose should be used as a guideline for each step of the decisionmaking process to ensure that the program is fulfilling the established goals.

We also recommend careful consideration about the *process* of changing to a compressed work week schedule. Encouraging employee participation and input will help to alleviate potential concerns prior to implementation and will likely lead to positive attitudes toward the compressed work week.¹⁷ Employee involvement will become particularly important if the purpose of the change is directly related to employee satisfaction and morale. In all instances, input from employees will enhance the organization's ability to make a smooth transition to a compressed work week schedule. If possible, organizations should allow for flexibility with individual employees, as many employees might need additional time to make the necessary adjustments for such a change (e.g., childcare, elder care, and transportation schedules).

In addition to considering the type of decisionmaking process an organization will use, an organization must confront substantive policy

¹⁶ Details of the implementation framework are presented in full in Chyleen A. Arbon, Rex L. Facer II & Lori L. Wadsworth, *Compressed Workweeks—Strategies for Successful Implementation*, PUB. PERSONNEL MGMT. (forthcoming 2010).

¹⁷ See Janina C. Latack and Lawrence W. Foster, *Implementation of Compressed Work Schedules: Participation and Job Redesign as Critical Factors for Employee Acceptance*, 38 PERSONNEL PSYCHOL. 75, 88 (1985) (noting the interrelationship between employee participation and alternative work schedule endorsement).

issues in determining how they will implement a compressed work week. When an organization prepares to transition to a compressed work week, several key HR policy issues should be considered, including overtime hours, vacation and sick leave, holiday pay, and training.

Organizations should carefully consider the *perceptions* of the stakeholders involved. Not only is it important to think about these people, but we believe it is even more important to assess their perceptions. An organization might do this through surveys, focus groups, or employee quality groups. Additionally, it might be beneficial to set up a pilot program to allow time for employee and organizational evaluations.

Finally, considerations of *performance* must be evaluated. Unfortunately, few organizations track performance in a systematic way. What an organization decides to monitor will largely depend on the specific purpose(s) for changing to a compressed work week. For example, an organization may choose to track absenteeism, turnover, and overtime levels through HR statistics, or productivity may be measured through performance evaluations and employee monitoring.

B. Utah's Experience with a Four-Day Work Week

In many ways, Utah has successfully navigated these implementation issues in its move to a four-day work week for state employees. In late June 2008, Governor Jon Huntsman announced that Utah would implement a mandatory four-day work week for state workers, effective August 4, 2008.¹⁸ This program would cover nearly 18,000 of the state's 25,000 employees.¹⁹ While the program would start in just over a month, Governor Huntsman recognized that there would need to be adjustments along the way. Specifically, he stated, "We can study this for another 6 months or we can do it, and figure it out as we go."²⁰

Accordingly, Utah started to work on figuring it out. Governor Huntsman argued that shifting to a four-day work week would allow Utah to address four key challenges: rising energy costs (gas was at an all-time high in the summer of 2008); the state's poor air quality; improving service delivery to the citizenry; and recruiting and retaining employees.²¹ In

¹⁸ Larry Copeland, *Most State Workers in Utah Shifting to 4-Day Week*, USA TODAY, June 30, 2008, at 2A; see also STATE OF UTAH, WORKING 4 UTAH, INITIATIVE PERFORMANCE REPORT, FINAL 3-4 (2009), available at http://www.dhrm.utah.gov/Working4Utah_FinalReport_Dec2009.pdf [hereinafter FINAL PERFORMANCE REPORT].

¹⁹ FINAL PERFORMANCE REPORT, *supra* note 18, at 19; STATE OF UTAH, DEP'T OF HUMAN RES. MGMT., WORKFORCE PROFILE REPORT, EXECUTIVE SUMMARY: FISCAL YEAR 2009, available at <http://www.dhrm.utah.gov/forms/wfp/2009WorkforceProfile.pdf>.

²⁰ Presentation slides, Jeff Herring, Executive Director, State of Utah Dep't of Hum. Res. Mgmt., Emerging Issues in the State Government Work Force (Sept. 23, 2009), available at <http://www.nga.org/Files/pdf/090923webcastemergingworkforceslides.pdf>.

²¹ FINAL PERFORMANCE REPORT, *supra* note 18, at 3.

order to meet these four key challenges, Utah established a four-fold purpose of the compressed work week schedule focusing on energy, environment, extended service, and the employees themselves.

During July 2008, departments were charged with assessing how this change would affect their operations and their staff. Specifically, they were tasked with identifying any exemptions from the four-day work schedule for essential services and locations. Departments were charged with the task of developing strategies to maximize the four goals of the new schedule. Additionally, departments had the responsibility to spell out the efforts they would make to mitigate the impact on their employees and to ensure agency productivity. Finally, departments were asked to develop a strategy to communicate the change to their customers and monitor the schedule's impact.²²

As a result of these early efforts, the governor recognized that the 4/10 schedule might provide undue hardships on some members of the workforce. In order to allow flexibility, a process for exemptions was provided. Individuals who were granted exemptions were provided an off-site work location for their Friday work, and, initially, the new schedule was designed as a one-year pilot. Buildings would be shut down on Fridays for most state agencies, excluding essential services such as corrections and public safety. Utah also had to make some initial adjustments to holiday and leave policies, as a holiday would no longer be eight hours, but ten. For the duration of the pilot, the State moved from eleven holidays (eighty-eight hours) to nine holidays (ninety hours). Nonetheless, it was clear this was an issue that would need to be addressed further.²³

As appropriate for its pilot program, Utah was committed to evaluating the change and allowing the acquired information to shape the final decision. In order to make those evaluations, the State conducted three rounds of employee surveys. The first survey occurred prior to the start of the new schedule in an effort to help identify any major challenges. The second and third surveys occurred three months and nine months after implementation of the new schedule, respectively. In the midst of the new schedule, Governor Huntsman was nominated and confirmed as the Ambassador to China, and Lieutenant Governor Gary Herbert became Utah's new governor. As a result of this change, the pilot was extended to give Governor Herbert sufficient time to make his assessment of the compressed work week schedule.

As part of this assessment, we conducted surveys of local government leaders and the general citizenry. Both surveys provided support for the

²² See generally STATE OF UTAH, WORKING 4 UTAH, INITIATIVE PERFORMANCE REPORT, BASELINE DRAFT (2008), available at <http://www.utah.gov/governor/docs/Working4UtahReport.pdf>.

²³ *Id.*

compressed work week schedule. Accordingly, Governor Herbert announced on December 2, 2009, that the four-day work schedule would become permanent, albeit with some minor modifications. From the survey results, citizens indicated that they wanted Friday access to the Division of Motor Vehicles (“DMV”) and the Driver License Division. As a result, one centrally located office now provides services on Fridays. Governor Herbert noted, “Our top priority is to provide the best possible customer service to Utah citizens Utahns have told us they like the extra hours in the morning and evening, but that they also need access to these two areas of state government on Fridays, and we’ve listened.”²⁴

The remainder of this Article presents a summary of Utah’s evaluation efforts. Because Utah had carefully considered its purpose prior to implementation, it was able to focus its evaluation on the four-fold purpose of the program—energy, environment, extended service, and employees.

1. Results

a. Energy

To assess energy consumption,²⁵ Utah monitored the 125 largest state buildings that were on the 4/10 schedule. The State evaluated one year’s worth of energy data from August 15, 2008, to August 15, 2009, and then made adjustments to normalize the data for unseasonal weather. Prior to normalizing the data, it appeared that there was a 12% reduction in energy consumption. After normalizing the data, however, the overall energy use reduction fell to 10.5%. Specifically, electricity consumption was down by 6%, and natural gas consumption was down by 16.5%. Overall, the State reduced energy spending by \$502,000.²⁶

Utah had initially hoped to save \$3 million on its energy expenditures. This goal assumed an energy reduction of 20% and that high energy prices from the summer of 2008 would continue. Fortunately, energy prices dropped, but this resulted in reduced savings. Also, the State did not anticipate that some buildings would stay open to accommodate offices that were shared by employees still on traditional schedules, nor did it consider that there were several lab areas with sensitive equipment that required constant temperature control. The final factor that affected energy consumption was that many employees were leaving lights and computers on over the long weekend. During the middle of the implementation, this

²⁴ Press Release, Gary R. Herbert, Governor of the State of Utah, Governor Extends Four-Day Workweek, Extends Services in Targeted Areas (Dec. 2, 2009), available at http://www.dhrm.utah.gov/Working4Utah_PressRelease.pdf.

²⁵ For a more detailed report of the impact on energy consumption and costs, see FINAL PERFORMANCE REPORT, *supra* note 18, at 4–9.

²⁶ *Id.* at 3.

was recognized, and the State began to encourage employees to turn off lights and computers when they left the office every Thursday.²⁷

b. Environment

Utah's highly concentrated population along the Wasatch Front, a narrow area of approximately 100 miles, creates significant challenges to air quality. This is one of the reasons that the environment, specifically air quality, was included as a purpose of the Utah program. As a result of the decreased energy consumption, the State reports that it decreased carbon emission by 4546 metric tons, and reduced other greenhouse emissions by 8000 metric tons annually. By changing commuting patterns, Utah has reduced annual gasoline consumption by an estimated 744,000 gallons. Finally, Utah has experienced a reduction of three million miles traveled by the fleet of state vehicles, resulting in a savings of \$1.4 million.²⁸

c. Extended Service

Measuring the impact and benefits of extended service is perhaps the most challenging of the program's purposes. Data from the Utah program, however, highlight the benefits of extended service. For example, wait time at the DMV is down from 11.4 minutes to 7.3 minutes, without sacrificing customer satisfaction. The Central Region of Workforce Services reported that 826 people per week were served in extended hours. It is important to note that this was occurring while there was a 10% increase in unemployment insurance filings. Most telling, however, were the results from a statewide poll. Sixty-six percent of respondents indicated that Utah should continue the 4/10 schedule, while 20% indicated the program should be discontinued. Only 4% of respondents indicated that extended hours of service Monday through Thursday were bad for Utah. Seventy-three percent of respondents indicated that the 4/10 schedule was able to meet their needs. Almost 80% of respondents indicated that the 4/10 program did not impact them or their family, while 72% of respondents indicated that the 4/10 work schedule was a good way for the State to save money.²⁹

d. Employees

In the third round of data collection, employees were asked about their work schedule preferences via the following question: "Do you want to continue with the four day/ten hour work schedule or go back to your schedule prior to the Working 4 Utah initiative?" In response, state employees expressed very strong support for the new schedule, with 82%

²⁷ *Id.* at 3–15.

²⁸ *Id.* at 19.

²⁹ *Id.* at 9–12.

of the employees answering that they preferred to remain on the 4/10 work schedule.³⁰

The pre-implementation survey results suggest that employees were concerned about potential problems with childcare and public transportation. The final survey suggests that childcare and transportation were less of a problem than originally anticipated. Specifically, 20% of employees in the initial survey predicted problems with childcare, and 14% expected difficulties with public transportation. In the final survey, only 9% experienced problems with childcare due to the 4/10 work schedule, and only 8% reported a negative impact on public transportation, both down significantly from the anticipated negative impact.³¹

Analysis of the survey results shows that the 4/10 work schedule reduced commuting costs for employees. This finding provides support for recent research finding that compressed work week schedules significantly reduce participants' total commute time, thereby increasing employees' personal time to devote to household activities, or sleep.³² This decrease in commute time is clearly due to one fewer day of commuting.³³ Less obvious, the decrease in travel time can also be attributed to the fact that employees are commuting during non-peak traffic hours.³⁴ This decrease in commute time is clearly a benefit to the employees, yet also serves as a societal benefit due to reduced traffic congestion.

Reducing long commute times may provide concrete benefits for organizations, as research shows that longer commutes yield more stress, more health problems, more absenteeism, more tardiness, and lower performance.³⁵ Furthermore, both federal government environmental regulations such as the Clean Air Act, and various state laws, are becoming increasingly strict. Thus, many employers are often required to reduce employee commuting, as cities that implement compressed work weeks cite a reduction in employee commuting as one of the primary purposes of such programs.³⁶

In addition to employee satisfaction with the work schedule and decreased commuting time, the Utah research found important organizational benefits related to employees. For example, paid overtime decreased, providing significant savings to the State. Specifically, the

³⁰ *Id.* at 18.

³¹ *Id.* at 17.

³² See Marloe B. Sundo & Satoshi Fujii, *The Effects of a Compressed Working Week on Commuters' Daily Activity Patterns*, 39 TRANSP. RES. (Part A) 835, 846 (2005).

³³ See Rudy Hung, *An Annotated Bibliography of Compressed Workweeks*, INT'L J. MANPOWER, July 1996, at 43, 44.

³⁴ See Sundo & Fujii, *supra* note 32, at 846.

³⁵ See Giovanni Costa et al., *Commuting—A Further Stress Factor for Working People: Evidence from the European Community*, 60 INT'L ARCHIVES OCCUPATIONAL & ENVTL. HEALTH 371, 373–75 (1988).

³⁶ Wadsworth, Facer & Arbon, *Alternative Work Schedules*, *supra* note 1.

Department of Human Resource Management reported a reduction of 160,926 hours during the pilot program, a decrease of thirty percent that they estimate to be equivalent to approximately \$4.1 million.³⁷ Other organizational benefits reported include decreased turnover,³⁸ leave usage, and absenteeism.³⁹

IV. CONCLUSION

While the consequences of fiscal stress and the demand for greater work/family balance might provide the impetus for organizations to consider adopting alternative work schedules, there are other significant benefits and potential drawbacks that organizations should also consider. Organizations should think carefully about their implementation strategy to maximize benefits and minimize drawbacks. Of course, this will require careful planning to understand the implications of these and other organizational arrangements.

In this Article, we have presented the findings from our research on alternative work schedules, particularly compressed work weeks. Most of the research suggests greater benefits than drawbacks for individuals, as well as organizations. Clearly, there is a need for additional research in this area to further explore the impact of compressed work weeks.

We have also presented information regarding the practice of compressed work weeks. Our framework suggests the five key areas—people, purpose, process, perceptions, and performance—as vital elements of a successful implementation of an alternative work schedule. A careful consideration of each of these areas will aid in both the planning and implementation process.

Ultimately, organizations, even very large ones, can successfully change work schedules. Utah is an example of one such organization. A summary of its experience in making this change suggests that employees, citizens, and the State all report generally positive feedback about the 4/10 work week, and favor continuing with this schedule in the future.

³⁷ In order to assess paid overtime usage, the State of Utah compared the amount of paid overtime with previous years. For more detail regarding overtime, see FINAL PERFORMANCE REPORT, *supra* note 18, at 17.

³⁸ *Id.* at 16–17. Indeed, external factors might play a part in the decrease in turnover, particularly due to difficult economic times.

³⁹ *Id.* at 3.